# Clackamas County Alternate Work Week Pilot Project 

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Portland State
University

Executive
Leadership Institute

## [CLACKAMAS COUNTY Alternate work week PILOT PROJECT]

FINAL REPORT

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## Executive Summary

## Introduction

In November 2008, Clackamas County, Oregon began a one-year pilot program: switching employees to an alternate four-day work week, with 10-hour workdays (typically 7:00 a.m. to 6:00 p.m., Monday through Thursday). About 828 of Clackamas County's 1,800 employees were affected by the program, which does not extend to emergency service providers.

This report summarizes the evaluation of Clackamas County's alternate work week pilot project based on the data collected between November 2008 and July 2009. The evaluation of the alternate work week pilot project focused on assessing the impact of the alternate work week on the following key areas:

1. Customer service and citizen reaction
2. County operations outcomes
3. Employee experience

Conclusions are drawn based on data collected by:

- Customer traffic tally by individual departments,
- Citizen survey conducted by the Gilmore Research Group,
- A customer comment card collected in key departments,
- Four focus-group discussions conducted in January and February of 2009,
- Four employee surveys, conducted in November 2008, April, July, and August of 2009
- Employee Services
- Office of Sustainability
- Facilities Management
- Fleet Services

The following section of this report provides a detailed summary of the findings.

## Key Findings

## 1. Customer service and citizen reaction

The level of customer service has stayed the same: Out of 426 total customer comment cards collected, approximately half of them noted their access to County services remained the same. County employees also perceived that the level of customer service remained the same. Those who used County services during the extended hours reported the level of service had improved, and those who did not
use County services during the extended hours reported the level of service had decreased.

The majority of the citizens seem satisfied with the alternate work week: Approximately 60 percent of the 401 citizens who responded to the citizen survey reported they consider the alternate work week a good idea. Most favor the schedule change due to its cost savings, improved quality of life for County employees, and its implications to reduce fuel costs and protect the environment. It should be noted, however, that approximately 19 percent of citizens said the alternate work week is a bad idea, and cited "inconvenient hours" as the reason.

## 2. County operations outcomes

The alternate work week has saved money: During the alternate work week evaluation period, the County saw a reduction in employees' use of overtime and comp time. The use of electricity, fleet fuel, and janitorial services was also reduced. All of these elements create a combined savings of $\$ 580,338$ per year. However, there was an increase in vacation and sick time usage, resulting in increased costs of $\$ 124,210$. Subtracting the increased costs from the total savings shows an estimate of annualized decrease in costs by approximately $\$ 456,000$. It should be noted that some of the cost changes may due to the change in economy.

The alternate work week may have reduced energy usage: The alternate work week pilot project may have contributed to the County's overall decrease in energy consumption. The County has seen a reduction in electricity, natural gas, and fleet fuel usage. Also, by eliminating one day of commuting, the estimated effect is the same as removing

The alternate work week saves money, may reduce energy usage, and has benefits for hiring new employees. 91 personal cars from the road for an entire year.

The alternate work week has been generally positive for hiring and has had no negative impact on retention: Most people who applied for positions at the County knew about the alternate work week. While approximately half of the applicants said the alternate work week did not affect their decision to apply for a job, they also noted that the alternate work week makes employment at the County more attractive. No one resigned from the County reporting the alternate work week as the reason.

## 3. Employee experience

Overall, the experience has been positive for County employees: More than 70 percent of County employees who work the alternate schedule reported that it has
been a positive experience and they would like to keep it. Many employees had to make some life adjustments to make the schedule work, but most willingly accepted the challenges in order to obtain the three-day weekend. Nonrepresented employees, who are mostly managers, noted that staff morale remained the same or increased after the start of the alternate work week.

A slightly higher percentage of represented employees favor the alternate work week than non-represented employees: There is a small difference between represented and non-represented employees in their approval of the alternate work week. However, the majority of both groups favor the alternate schedule. Non-represented employees, who work in departments where there are employees who work both the alternate work week and a standard schedule report a higher

## Employees enjoy the alternate work week, but some struggle with health effects and child care arrangements.

level of dissatisfaction with the alternate work week.

Employees on the alternate work week have had a more positive experience than employees on a standard schedule: In general, employees who work the alternate schedule tend to evaluate the schedule positively in comparison to those who work a standard work week. Managers of units with employees on both the alternate work week and standard schedule (mixed schedule) reported the least favorable attitudes toward the alternate work week.

Overall, County employees consider the alternate work week good for work/life balance: On average, County employees reported that the alternate work week is good for their family life. Employees who remained on standard schedule, however, were more likely to report that an alternate work week was less desirable for their work/life balance.

Alternate work week employees have experienced health impacts: Some employees who are on the alternate work week noted that lifestyle changes (e.g., longer work hours, change in eating patterns) affected their health negatively. Those who managed to maintain their eating habits and restructure their daily routines reported improved health.

Child and elder care has been difficult for employees to arrange: Employees with child care and elder care needs seemed to have a harder time making arrangements right after switching to alternate work schedule. However, they
indicated they would rather not switch back to the standard schedule now that they have made new arrangements.

## Conclusion

Overall, the alternate work week schedule has gained general support from the customers and citizens of the County. Furthermore, the alternate work week has achieved cost savings and contributed to reducing greenhouse gas emissions. A majority of employees who worked the alternate work week also favored the new schedule.

Some customers, however, voiced their concerns about the inconvenience of losing access to County services on Fridays. Some employees, such as those who have child care and elder care needs struggled making adjustments. Having some departments on different schedules, and having departments with a mixed schedule (some employees on alternate work week and some on standard work week) posed a challenge. In general, standard schedule employees and managers, especially those who supervise units with mixed schedules, expressed dissatisfaction with the alternate work week.

The results of the study suggests that if the County decides to continue with the alternate work week after the pilot project, it is important for the County to demonstrate their commitment to provide a high level of service to the community. Furthermore, the County should clearly communicate to the customers and citizens about which services are available during the extended hours and which services are not available on Fridays. Also, special consideration should be given to both standard schedule employees and managers to assist them in adapting to the schedule. Failure to address concerns and discontent among the employees and managers on standard or mixed schedules may contribute to a decline in productivity and morale among these groups.

However, if the County chooses to discontinue the alternate work week, administrators may see a decrease in employee morale, as well as frustration among employees who need to rearrange child care. The County may need to anticipate an adjustment period and an increase in requests for flexible scheduling.

## 1. IMPACT ON CUSTOMER SERVICE/CITIZEN REACTION

An important aspect of assessing the overall impact of the alternate work week was to determine how it affected customer service and opinions of Clackamas County citizens on the alternate work week (AWW) ${ }^{1}$. The effect on customer service was examined by: (1) collection of customer comment cards in key County departments, and (2) tallying the frequency of customer phone calls and visits during the extended hours of 7:00 to 8:00 a.m. and 5:00 to 6:00 p.m. Gilmore Research Services, conducted a phone survey of Clackamas County citizens to assess their general reaction to the alternate work week. In addition, the employee surveys asked respondents about their perception of customer service and citizen access to County services.

### 1.1. Customer Comment Cards

Clackamas County created a customer comment card asking the following questions:
$>$ What County services do customers use?
$>$ Are customers using the services during the extended hours?
$>$ How has access to services changed since the County adopted the alternate work week?

The customer comment cards were placed at key departments for four weeks (June 22-July 16). During those weeks, a total of 426 cards were collected. Fifty three percent of the respondents reported using the extended hours, approximately 10 percentage points higher than the percentage of those who did not use the hours. The following chart shows customer's responses regarding the use of extended hours.

[^0]

Do you use County services during the extended hours of 7 to 8 a.m. and 5 to 6 p.m.?

Approximately half (51 percent) of those who completed comment cards reported that their access to County services had remained the same. Twenty eight percent of the respondents noted that County services had increased, which was nine percentage points more than the percentage of people who reported that access to the County decreased.

The following chart shows how customers responded regarding the level of access to County services.


Do you feel your access to County services has increased, decreased, or remained the same since the County changed to the alternate work week?

The chart above illustrates that a majority of people who reported that access to County service levels increased were those who used the extended hours. On the other hand, most of the people who reported that access to County service decreased were those who did not use the extended hours.

## By Department and Department-Type Analysis

County departments can be categorized into three types: (1) departments that provide "Development Services" such as assessing property value, attaining building permits, providing inspections; (2) departments that provide "Community Services" such as health services, economic assistance services, and family services; and (3) departments that primarily provide internal services to the County.
"Development Services" include Assessment and Taxation (A\&T), County Surveyor, Department of Transportation and Development (DTD), and Water Environmental Services (WES). "Community Services" include Business and Community Services (BCS), Department of Human Services (DHS), Family Services and Housing Authority (HA).
"Other" includes commissioners, Corrections, County Clerk, Department of Employee Services (DES), Facilities, Family Court, Juvenile, Public and Government Affairs (PGA), and Technical Services (TS). Departments categorized as "Other":
(1) primarily conduct internal County services (DES, Facilities, TS), (2) do not serve a great number of customers (Family Court, Juvenile, and PGA), or (3) are not on the alternate work schedule (Corrections, Clerk).

Customers were asked to list which departments they visited while at the Clackamas County offices. The following table displays the departments visited, along with the number and percentage of customers who reported visiting each department. Customer responses on extended hour usage and access to services seem to vary depending on department.

| Departmental Breakdown of Respondents |  |  |  |
| :---: | :---: | :---: | :---: |
| Department Category | Department | Total Respondents | Percentage Respondents |
| Development Services | Assessment and Taxation | 47 | 10\% |
|  | County <br> Surveyor | 25 | 6\% |
|  | Transportation and Development | 99 | 22\% |
|  | Water Environmental Services | 8 | 2\% |
| Development Services Total |  | 179 | 40\% |
| Community Services | Business and Community Services | 9 | 2\% |
|  | Human Services | 86 | 19\% |
|  | Family Services | 4 | 1\% |
|  | Housing Authority | 18 | 4\% |
| Community Services Total |  | 117 | 26\% |
| Other | Commissioners | 1 | <1\% |
|  | Corrections | 1 | <1\% |
|  | County Clerk | 7 | 2\% |
|  | Employee Services | 3 | <1\% |
|  | Facilities | 6 | 1\% |
|  | Family Court | 11 | 2\% |
|  | Juvenile | 7 | 2\% |
|  | Public and Government Affairs | 1 | <1\% |
|  | Technical Services | 1 | <1\% |
| Other Total |  | 38 | 8\% |
| None listed |  | 119 | 26\% |
| Total |  | 453 | 100\% |

Forty percent of the customer card respondents noted that they came to use Development Services departments with most visiting Department of Transportation and Development. Of those who reported utilizing Community Services, the department accessed the most was Department of Human Services (19 percent of all respondents).

The use of extended hours was examined for Development Services departments and Community Services departments.


Do you use County services during the extended hours of 7 to 8 a.m. and 5 to 6 p.m.?

A majority (68 percent) of respondents who visited Development Services departments reported using the extended hours. Assessment \& Taxation and Department of Transportation and Development were the two departments that had a larger proportion of respondents that reported using services during extended hours.


Do you use County services during the extended hours of 7 to 8 a.m. and 5 to 6 p.m.?
In contrast, a majority of respondents (59 percent) who used Community Services departments said they did not use County services during the extended hours. The Housing Authority (HA), however, was an exception. Of people who used Housing Authority services, more customers accessed these services during the extended hours. This may indicate that many Housing Authority customers have 9:00 to 5:00 jobs, and as one of the customer comment respondent noted, the alternate work week "makes it easier to come in without missing too much work."

Three quarters of respondents who accessed Development Services reported that access had either "Remained the same" or "Increased." Only a quarter of respondents reported that access had decreased. The proportion of respondents who reported their access had increased was highest in Assessment and Taxation.


Do you feel that your access to County services has increased, decreased, or remained the same after the County switched to the alternate work week?

The majority ( 87 percent) of respondents who visited Community Services departments said their access to County services had either "Remained the same" (65 percent) or "Increased" (22 percent). Only 13 percent reported their access had decreased. This pattern is consistent with Development Services departments.


Do you feel that your access to County services has increased, decreased, or remained the same after the County switched to the alternate work week?

Those who accessed Development Services reported a higher usage of the extended hours ( 68 percent for Development Services vs. 41 percent for Community Services.) However, a higher percentage of the customers who
accessed Development Services departments reported that access to services has decreased since the adoption of the alternate schedule ( 25 percent for Development Services departments vs. 13 percent for Community Services departments). Those who indicated that the level of services had decreased typically noted inconvenience as the reason. For example, one respondent who utilized Department of Transportation and Development services wrote that the alternate schedule is, "Very inconvenient - reduces my ability to get work done when the office is closed on Friday." A majority of the customers who visited Community Services department (65 percent) reported that access to services had remained the same.

Open-ended comments on the customer comment card were coded and categorized as positive, negative or neutral. A list of comments can be found in the appendix. The majority ( 66 percent) of customer's open-end comments were positive in nature, although 29 percent were negative. Many of the negative responses, focused on the lack of availability to building services on Fridays when contractors, builders, and other similar industries maintain traditional business hours. Many people noted that this inconvenience hindered the building process. Most of those who responded positively were grateful that the County is taking measures to use taxpayer dollars efficiently. Many comments suggested that the transition to an alternative work week would be easier for customers if more services were available online.

## Customer Comment Card Summary

In the customer comment card, customers were asked whether they use County services during the extended hours, and how their access to services has changed since the County adopted the alternate schedule. Across all departments, the majority ( 55 percent) of customers reported having used County services during the extended hours. When broken down into categories, the analysis showed that a majority of Development Service customers reported using the extended hours. A majority of the Community Services customers reported they did not use the extended hours.

Overall, roughly half ( 52 percent) of respondents noted no change in the level of access to County services. Those who sought Development Services were much more likely than those seeking Community Services to report that access to services had decreased. However, a majority from both categories said that access to services had "Increased" or "Remained the Same," with a smaller percentage of respondents reporting that access had "decreased."

### 1.2. Extended Hours Usage Tally

In addition to the customer comment card, customers' use of County services during the extended hours of 7:00 to 8:00 a.m. and 5:00 to 6:00 pm, were measured by having department track the number of calls and walk-ins they received during those hours. For a point of comparison, County departments also tracked customer traffic during the hours of 8:00 to 9:00 a.m. and 4:00 to 5:00 pm (standard work hours). Information was collected for one week, from June 22 to 25, 2009.


The total number of customers using County services during the extended hours for the sample time period was 1,064 , while the total number using the services during traditional business hours (8:00 to 9:00 am, and 4:00 to 5:00 pm) was 2,415. In other words, during the four hours time period that the data was collected, approximately 30 percent of the customers accessed County services during the extended hours and 70 percent of customers accessed the service during the standard hours.

### 1.3 Citizen Survey

In July 2008, Clackamas County commissioned The Gilmore Research Group to conduct a citizen survey to determine if they would support a change to the fourday work week. The results of that survey indicated a majority of citizens supported the move prior to the new schedule being implemented. In July 2009, Gilmore conducted a follow-up survey to determine how citizens felt after the shift to the alternate work week. The survey focused on the following questions:
> How have citizens been impacted by the shift
$>$ How do citizens feel about the shift (i.e., was it a good or bad idea)
$>$ Whether or not the citizens find the new schedule to be more convenient
$>$ Whether Friday closure has negatively impacted citizens
$>$ Whether there is current support for a four-day work week in order to increase the sustainability practices of the County

Gilmore randomly selected residents of the County and conducted 401 phone interviews between June 29 and July 12, 2009. All respondents live in Clackamas County, were at least 18 years of age, and did not work for the County. Sixty-eight percent of those surveyed have lived in the County for more than 10 years. Nearly all (98 percent) of those interviewed have lived in the County for at least one year. The average age of respondents was 54 , and quotas were in place to ensure approximately equal representation across age groups. Over half (55 percent) of respondents were women.

Gilmore asked residents whether they believe the shift to be a good or bad idea.


Generally speaking, do you think the change to a four-day work week was a good idea or a bad idea?

In the 2009 survey, over half (56 percent) of citizens reported they thought the shift to an alternate schedule was a good idea, while 19 percent thought it was a bad idea. The 2009 survey showed a greater percentage of respondents who were unsure ( 24 percent compared to 15 percent in 2008), corresponding with a decrease in those who believed the alternate work week to be a good idea and bad idea. Excluding those who said they were unsure (only comparing those who said the idea was good or bad), 75 percent believed the shift to be a good idea in the

2009 survey. This is similar to the 2008 survey, where 74 percent of respondents believed the new schedule would be a good idea.

According to the 2009 survey results, respondents who think the shift is a good idea are more likely to:
$>$ Have not used County services even once since the shift was made (81 percent)
$>$ Report the longer hours make it more convenient to access County services (63 percent vs. 18 percent of those who think the shift was a bad idea)
$>$ Report no inconveniences due to Friday closures ( 96 percent vs. 60 percent of those who think the shift is a bad idea)
$>$ Support the shift to the alternate schedule for sustainability purposes (93 percent vs. 24 percent of those who think the shift is a bad idea)

Twenty-two percent of respondents cited cost savings to the County as a reason for supporting the schedule change. As represented in the comment by one respondent: "I like the four day work week because it saves the [County] money on energy that would have been spent on a Friday." Among those who cited employee benefit as the reason the alternate work week is a good idea (19 percent), one said "I think it's more efficient in terms of both the worker's time and they don't have to travel to and from the office too much. And I'm sure it's better for them and their family life to have three off-days and four days on."

Respondents who think the shift is a bad idea are more likely to:
> Have visited the County offices since the shift was made ( 34 percent vs. 19 percent for those who think the change is a good idea)
$>$ Report the longer hours make no difference in the convenience of accessing County services ( 74 percent vs. 34 percent)
$>$ Report that they have been inconvenienced due to Friday closures (40 percent vs. 4 percent)
> Favor keeping offices open the traditional five-day business week rather than keep the alternate work week for sustainability purposes ( 73 percent vs. 5 percent)

The majority (60 percent) of those who think the alternate work week is a bad idea cited inconvenient hours as the reason. One respondent said the schedule is a bad idea because "it limits access to County services by one day a week." This is especially true for those seeking building services or permits. Another respondent noted: "As a contractor trying to deal with the permit center without inspection on Friday, or permit centers open on Fridays is, I would say, inconvenient."

## Citizen Access to County Services

Approximately one-fifth (22 percent) of those surveyed reported they have visited County departments or used County services since the schedule shifted to the alternate work week in November 2008. Citizens were divided on whether or not the alternate schedule made visiting County offices more convenient; 49 percent reported the hours were more convenient and 47 percent said the change made no difference.

A majority of citizens overall ( 87 percent) reported no inconvenience due to Friday closure. Among those who have visited County departments since the schedule was changed, 64 percent reported they experienced no inconvenience due to Friday closure. Respondents who live in rural areas were more likely to report they have been inconvenienced by Friday closures (17 percent of rural respondents vs. seven percent of suburban respondents). Furthermore, respondents who reported they access County services at least once per month were more likely to say they have been inconvenienced due to Friday closures ( 29 percent vs. seven percent for those who contact the County less often).

### 1.4. Employee Perception on Customer Service and Citizen Reaction

The County employee surveys asked respondents to assess how customer service and citizen access has changed since the adoption of the alternate work week. A total of four County employee surveys were administered throughout the duration of the alternate work week pilot project. A description of these surveys is found in the Employee Experience section, and the text of the surveys can be found in the appendix. Three of these surveys were administered to the entire County employee population (General Employee Surveys Phase I through Phase III), while one was limited to the non-represented employees (Non-Represented Survey).

Overall, employees believe citizen access to County services has remained the same, only dipping slightly in Phase II, but rising up to a similar level in Phase III. The chart below depicts these changes.

# Citizen Access to County Services 

## Employee Perception



Has the citizen access to County services increase or decreased after the County adopted the alternate work week?

The Non-Represented Survey asked respondents to assess how customers reacted to the alternate schedule Responses were rated on a 1 to 5 point scale (1=Very Negative to 5=Very Positive). About 48 percent of non-represented employees reported customer reaction to be neutral, while another 27 percent reported customer reaction to the alternate work week to be positive. About 16 percent of non-represented employees reported that customer reaction was negative.


Has the citizen access to County services increased or decreased after the County adopted the alternate work week?

### 1.5. Summary

Citizens, customers, and clients generally either accept the alternate work week or have no strong feelings about the schedule. In customer comment cards, customers reported they used County services during the extended hours and that, for the most part, access to County services remained the same after the implementation of the alternate work week.

The extended hours tally showed there are an average of 1,000 customers per week that use County services during the hours of 7:00 to 8:00 a.m. and 5:00 to 6:00 p.m. This amount, however, represents less than half of the number of clients that use services during more regular business hours of 8:00 to 9:00 a.m. and 4:00 to 5:00 p.m.

The Gilmore Research Group concluded that the majority of Clackamas County residents are satisfied with the move to a four-day work week. Most favored the change due to cost savings for the County and improved quality of life for its employees. According to Gilmore, "There is continued widespread support for the change as a policy measure to reduce fuel costs and protect the environment."

Though there is overall support for the alternate schedule, Gilmore noted there is continued discontent among those who utilize County services most often, especially those who seek County permits or access to social services.

Finally, the employee survey indicated that employees perceive citizen access to County services has remained the same or increased under the alternate work week.

## 2. IMPACT ON COUNTY OPERATIONS

### 2.1. Cost Savings

When the alternate work week was introduced, the County expected to realize the highest cost savings in the areas of building energy usage and fleet fuel consumption. While these areas have seen some cost savings, there are additional areas that have seen substantial savings in costs, including employee overtime and comp time, contractor's overtime to test alarm systems, and costs for janitorial services. However, costs increased in the areas of vacation and sick time usage. The table below shows the potential annual cost savings for the identified categories. Each category is then discussed individually.


### 2.1.1. Employee Overtime and Comp Time

An unexpected area of savings has emerged in the reduction of employee overtime. The Department of Employee Services (DES) compiled overtime and comp time data for 13 pay periods from February 22 to August 8, of 2008 and 2009. In 2008, the County used 6,908 hours of overtime, which resulted in $\$ 275,771$ of overtime payments. However, in 2009, the County only used 4,739 hours of overtime, which resulted in $\$ 195,992$ of overtime payments. This means the County reduced overtime payment by $\$ 79,779$ for a six month time period after it switched to alternate work week. By multiplying this savings by two, the annual estimated overtime savings is $\$ 159,558$.

Including comp time in the cost savings related to human resources provides a more complete picture of the alternate work week expenditures. DES provided a comparison of the comp time for the same study period used for overtime. In the 13 pay periods studied for 2008, County employees used 8,768 hours of comp time, which represents a cost of $\$ 316,362$. County employees used only 5,107 hours of comp time in 2009, which cost the County $\$ 202,786$. The difference in comp time payment between 2008 and 2009 is to $\$ 113,576$. Multiplying this annual savings by two shows an annual comp time savings estimate of $\$ 227,152$.

The estimate of annualized cost saving accomplished with the reduction of overtime and comp time is approximately $\$ 386,711$. This reduction represents about a 33 percent difference in overtime and comp time payment by the County since the alternate work week began.

It should be noted that the Roads Maintenance Department uses the most overtime and comp time because of their need to be available during times of severe weather. The estimated cost savings figure for overtime and comp time includes the Roads Maintenance Department, and does not control for the seasonal impact of 2008 and 2009. However, even without the Roads Maintenance Department, the County saved 2,913 hours of overtime and 2,705 hours of comp time, for a total estimated annual savings of $\$ 192,408$.

### 2.1.2. Contractor's Overtime

The County's Facilities Management Department reported that the County is now able to test their alarms on Fridays, as opposed to Saturdays as they had to do before the AWW. These alarms must be tested when employees are not in the buildings, and they can now be tested on Fridays. Changing to the alternate work week resulted in avoiding overtime costs incurred if the test is conducted on a Saturday. Overtime cost is $\$ 325$ for each test, and the testing is rotated among buildings every quarter to ensure all alarm systems are tested annually. According to Facilities Management, this would mean a possible savings of $\$ 1,296$ or more every year in contractor overtime costs.

### 2.1.3. Janitorial Services

The shift to an alternate work week resulted in having janitorial services conducted only four times per week. According to the Facilities Division, the Juvenile building reduced the monthly costs by $\$ 165$ per month. The Data Center reduced the monthly costs by $\$ 101$ per month. The Data Center Annex reduced monthly costs by $\$ 103$ per month. PSB saved $\$ 2,498$ per month. The DSB did not have any historical data on janitorial service. As a result, the annual savings for the above four buildings could be as much as $\$ 34,404$.

### 2.1.4. Electricity and Fleet Fuel

The fluctuation of electricity and fuel prices makes it harder to identify the actual cost savings that result from the alternate work week. Similarly, the economic downturn made it difficult to calculate savings because workloads were reduced for some staff and there was a reduction in work-related trips. Given that, by closing certain departments on Fridays, the County has seen a reduction in electricity and fleet fuel usage (specifics of energy savings and its implications to sustainability will be discussed in more detail later in this report).

Overall, the County has realized a reduction of $54,734 \mathrm{kWh}$ of electricity per month by closing all or part of buildings used by County employees who work on the alternate work week. Applying the average cost per kWh (\$0.085), estimated cost savings due to the reduction in electricity is $\$ 4,652$ per month, or $\$ 55,828$ per year.

Fuel use by the County's fleet of vehicles also decreased during the alternate work week pilot project. Fuel usage data from November 2008 to July 2009 showed a combined decrease of 22,689 gallons of gasoline from the year prior. Using average gasoline price of $\$ 3$, the County has saved $\$ 68,067$ over the nine month evaluation period, and could potentially save $\$ 102,100$ per year.

### 2.1.5. Increase in Vacation and Sick Time Costs

Vacation and sick time usage was compared between November 2007 to July 2008 and November 2008 to August 2009. Vacation time usage decreased by 1,676 hours, which represents a small increase in costs at $\$ 6,552$ annually. The increased cost is attributed to higher hourly wages given over the time periods studied due to cost of living and merit increases. Sick time increased by 1,738 hours, which represents a cost of $\$ 117,658$ annually.

### 2.1.6. Summary

Overall, the County's estimated savings during the alternate work week pilot project is more than $\$ 456,000$. These savings are due to human resources, building maintenance, and energy cost reductions. While there is a small increase in costs for vacation and sick leave, the savings from employee overtime and comp time, as well as energy cost savings outweigh the cost increases.

### 2.2. Impacts on Energy Use and Sustainability

### 2.2.1. Energy Use

The power, natural gas, and fleet fuel use were examined to assess the impact of the alternate work week on energy use. The relatively short length of the study period, and the relatively ambiguous nature of the energy data, makes analysis of potential energy savings from the alternate work week challenging. The energy data from the previous year was used to approximate what energy use might have been during the pilot phase.

Energy trends for buildings on the alternate work week were compared with other County buildings. The buildings were divided into three subcategories: (1) those with employees on the alternate work week, (2) those with employees on the standard work schedule, and (3) those that are open 24 hours a day. While none of the alternate work week buildings were completely closed on Fridays, this actually gives a more accurate representation of the expected energy savings if the pilot program were continued, as employees would still have access buildings on Fridays to complete work.

It is also important to note that one of the alternate work week buildings studied, Public Services Building, is an energy-efficient LEED certified building which houses a large portion of the departments studied on the alternate work week. Most of the buildings on the standard schedule are quite different in age and overall energy efficiency, thus the cross-comparisons have limited value, but still help to place the alternate work week results in a larger context. A final point to consider is the continuing efforts of Facilities Maintenance to increase awareness of energy conservation. A more detailed explanation of the program can be found in the "Other Factors" section.

## Electricity

Electricity usage was compared for 39 buildings in Clackamas County: eight buildings on a $24 / 7$ schedule; 27 buildings on the standard work week; and four buildings on the alternate work week. The comparison periods were from November 2007 to June 2008 ("Pre-Pilot period") and November 2008 to June 2009 ("Pilot period").


The chart above represents total monthly kilowatt hour usage for the three building types before and during the pilot project. Buildings on the alternate work week and buildings that operate $24 / 7$ had similar usage levels before and during the pilot project, while buildings on the standard work week actually experienced a decrease in energy use during the pilot period, despite the fact that they were not participating. During the pilot period, buildings open 24/7 were either above or equal to their kilowatt hour usage from the pre-pilot period up until April, when they started using less energy than they did in the pre-pilot period. Likewise, during the pilot period, buildings on the alternate work week schedule generally used less electricity than they did during the pre-pilot period, up until April, when they started using more energy.


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The chart above represents the percentage change in electricity use from the previous year.
> Throughout the pilot project: Buildings on the alternate work week saw an average of a 5 percent decrease in electricity usage (a change of -42,224 kWh).
> Buildings on the standard schedule experienced an 11 percent decrease in electricity usage (a change of -407,449 kWh).
$>$ Buildings operating $24 / 7$ saw a 0.65 percent increase in electricity usage (a change of $11,804 \mathrm{kWh}$ ).
> Overall, all buildings studied saw a 6 percent decrease in electricity usage (a change of $-437,868 \mathrm{kWh}$ ).

## Natural Gas

An identical analysis of natural gas usage was compared for 32 buildings in Clackamas County: eight buildings on a $24 / 7$ schedule; 21 buildings on the standard work week; and three buildings on the alternate work week. The comparison periods for the Pre-Pilot and Pilot intervals are from November to May (one month shy of the electricity data).

The chart below shows the total natural gas usage by building type, from the PrePilot and Pilot periods. Again, buildings on the alternate work week and buildings operating $24 / 7$ have similar usage levels, whereas buildings remaining on the standard work schedule saw a consistent decrease in their natural gas usage. Interesting to note, the electricity and natural gas usage for buildings on the alternate work week are mirror opposites of each other: buildings on the alternate work week schedule saw a general increase in their natural gas usage, up until April, when they experienced a decrease.



The chart above represents the percentage change in natural gas usage from the previous year.

During the pilot project period:
> Buildings on the alternate work week schedule saw an average 10 percent increase in their natural gas usage (a change of 3,240 therms).
$>$ Buildings on the standard work schedule experienced an average 15 percent decrease in their natural gas usage (a change of -19,329 therms).
$>$ Buildings operating 24/7 experienced an average eight percent decrease in their natural gas usage (a change of -8256 therms).
$>$ Overall, all buildings studied experienced an average of a 10 percent decrease in their natural gas usage (a change of $-24,345$ therms).

## Electricity/natural gas usage comparisons

To better understand total energy usage, a comparison of electricity and natural gas usage was broken down by season. Colder winter months were grouped together (November through February) and milder spring months were grouped together (March through May). The following graphs depict the difference in electricity and natural gas usage by season for each type of building, as a percentage from the pre-pilot (e.g., a bar totaling -10 percent means buildings used 10 percent less energy during the pilot period than they did during the pre-pilot).



Generally, during the pilot period buildings on the standard work week saw greater total conservation of energy in spring months than winter months. Overall, buildings on the standard work week saw a decrease in both electricity and natural gas usage. During the pilot period, buildings on the alternate work week, however, showed nearly identical decreases in their electricity usage during colder winter months as buildings on the standard schedule, but were the only group to increase their natural gas usage. During the spring months, buildings on the alternate work week saw a systematic decrease in total energy use, but the decrease was less than buildings on the standard schedule. Buildings operating 24/7 used less natural gas than the previous year for all months, but simultaneously increased their electricity usage for all months.

Overall, buildings on the alternate work week used less electricity than they did the previous year. These changes, however, are either the same or smaller than the energy savings of the buildings on the standard work week. Overall, natural gas usage for buildings on the alternate work week increased, while it decreased for buildings on the standard work week.

This is not to say that the alternate work week buildings are not conserving energy on Fridays. The graph below shows the total and average electricity usage by day (during the Pilot period) for three buildings: Public Services Building (PSB), Development Services Building (DSB), and the County Courthouse. Both PSB and DSB are highly energy efficient LEED certified buildings with employees on the alternate work week. ${ }^{2}$ The County Courthouse is on a standard work schedule, but is not LEED certified.

[^1]

As shown, both PSB and DSB experience a drop in kilowatt hour usage on Fridays, whereas the Courthouse maintains a similar level of electricity usage for all five days of the work week. Although buildings on the alternate work week are indeed conserving electricity on Fridays, the monthly data suggests that most of the electricity conserved on Fridays is being dispersed to the remaining four work days. As previously mentioned, there is also reason to believe that energy savings on Fridays do not reflect that which would be expected under a true alternate work week, because the alternate work week buildings were frequently used on Fridays for meetings, and not all staff were excluded from the buildings on Fridays. Despite this fact, these are the actual savings the County can anticipate if they continue on the alternate work week.

## Fleet fuel

Fleet fuel usage from 34 work units was compared between the pre-pilot period (November 2007 to July 2008) and the pilot period (November 2008 to July 2009). Road Maintenance was excluded from the analysis to control for the unusually high fuel usage during December 2008 due to severe weather conditions. Of the 33 remaining work units included in the analysis, 10 maintained the standard work schedule, 19 moved to the alternate schedule, and four had a mix of employees on the alternate schedule and standard schedule.

## Average Monthly Change in Fuel Use



The 10 units on a standard work schedule increased their monthly average fuel usage by 38 gallons during the pilot project. On the other hand, the average monthly fuel usage for the four units on a mixed schedule and the 19 units on the alternate work week schedule decreased by 122 gallons and 127 gallons, respectively.

For the pilot period, the total fuel usage of units on the alternate work week and on a mixed schedule decreased by a total of 26,109 gallons of gasoline. This represents a reduction of 230.02 metric tons of carbon. ${ }^{3}$ Units not on the alternative work schedule increased their fuel usage by 3,420 gallons, representing an increase of 30.13 metric tons of carbon. The overall net influence of switching to the alternate work week meant that the County reduced its carbon emissions by 260 metric tons of carbon over the pilot period. The fuel saved during the pilot period represents the equivalent of removing 48 cars from the road for an entire year.

## Summary

The analysis of the alternative work week impact on energy use suggests:
$>$ Although buildings on the alternate work week show decreases in electricity use, these changes are equal to or less than the decreases of buildings on the standard work week. This may be because the buildings on a standard work week are older and much more inefficient, and therefore have more room to improve. Overall, no electricity savings greater than savings that all buildings experienced can be verified for the alternate work week.

[^2]$>$ During colder months, buildings on the alternate work week actually had greater natural gas usage than they did the previous year. During milder months, buildings on the alternate work week experienced conservation in natural gas, but these changes were less than the decreases of all other buildings. The alternate work week does not seem to decrease the overall natural gas usage.
> The alternate work week schedule seems to decrease the overall fleet fuel usage.

### 2.2.2. Commuting Pattern

One of the goals of the alternate work week is to reduce the carbon footprint made by the County by reducing the amount of trips employees take to and from work on day each week. To evaluate this environmental sustainability component, employees were asked to evaluate their driving patterns, both in commuting to work and on weekends. The answers to these questions gave us some insight into how County employees use their vehicles.

## Length of commute

Employees switching to the alternate work week were asked to estimate how many miles they commute to and from work. The average round-trip distances reported in the Phases I, II and III surveys were 29.84 miles, 24.92 miles, and 24.05 miles, respectively. A random sample of employees' actual driving distances (using mapping tools) yielded a result of 26.5 miles, which corresponds with the aggregated driving distances reported in the surveys. The relocation of hundreds of employees from the Sunnybrook Service Center in Clackamas to the Development Services Building in Oregon City explains most of the decrease in average reported commute length in Phase II and III compared to Phase I.

Round-trip mileage was identified based on responses from the surveys. It appears the round-trip commute time decreased by about eight minutes.

|  | Phase I |  | Phase II |  | Phase III |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | $N$ | Mean | $N$ | Mean | $N$ |
| Round-Trip <br> Mileage | 29.84 | 709 | 24.92 | 760 | 24.05 | 652 |
| Round-Trip <br> Commute Time | 56.13 <br> mins. |  |  |  |  |  |

Many focus group participants said the decrease in commute time can be attributed to less traffic because they avoided the morning and evening rush hours. This trend is represented by one participant's comment: "On a 10-hour day, I can get to work in about eight or nine minutes, where it will take me almost a half hour to drive the exact same route if I have to be at work at 7:30 a.m." Other participants commented about how arriving on a standard schedule put them in direct traffic competition with school bus routes and school zones that require 20 mph after 7:00 a.m. By coming in prior to 7:00 a.m., employees report they miss the school zones and the school busses.

Some focus group participants said the traffic in the evening is more congested than the traffic in the morning, making the commute time difficult to estimate. The Phase II and III surveys also asked employees to estimate their commute times to and from work separately, and to indicate how much their commute time has changed. Based on the responses from the surveys, it appears the commute in the evening takes about 2.5 minutes longer than the commute in the morning.

|  | Phase II |  | Phase III |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Mean | $N$ | Mean | $N$ |
| Commute Time TO Work | 23.80 mins. | 759 | 22.65 | 654 |
| Commute Time FROM Work | 26.05 mins. | 759 | 25.37 | 653 |

## Commuting method

Employees were also asked about their commuting methods to determine if the alternate work week has changed their commuting behaviors.

The Phase I survey indicated that employees anticipated changing their commuting methods as a result of the alternate work week. The Phase I question asked, "If you are switching to the alternate work week, how do you anticipate the change will

[^3]affect your commuting habits?" Of the 645 people who answered this question, about 81 percent said they anticipated the alternate work week would not change their commute habits. For the remaining 19 percent, most people expected to use more carpooling or more transit.


If you are switching to the alternate work week, how do you anticipate the switch will affect your commuting habits?

In the Phase II and III surveys, employees were asked to describe their commuting methods using two indicators: (1) By describing their short term commute (one week before the survey was administered), and (2) By describing their long term changes.

## Method 1 - Describing commute methods of the previous week:

During Phase II, respondents on the alternate work week reported nearly identical usage of transportation methods compared to Phase I. However, during Phase III, the use of single occupancy vehicles (SOV) dropped 4.5 percent and more motorcycling, carpooling, walking, and bicycling were used. It is important to note that the Phase III survey was conducted during the summer months, while Phase I and II surveys were conducted during winter and spring months. The following graph depicts these changes.


How did you travel to work during the last work week?
As contrasted with employees on the alternate work week, although employees on the standard schedule showed a consistent use of carpooling over the pilot period, they also showed similar increases in the use of busing and walking and less use of single occupancy vehicles during Phase III. This suggests the warmer weather during this phase might be more of an influence in changing commuting behavior than the alternate work week.


How did you travel to work during the last work week?

## Method 2 - Overall Changes in Commuting Habits

Reported overall commuting habits changed slightly during the alternate work week, with an overall increase in alternatives to single occupancy vehicles. In the Phase II and III surveys, employees were asked to indicate if they used certain commuting options more, about the same, or less after the implementation of the alternate work week. About 76 percent of employees on the alternate work week said their commute did not change. The remaining 24 percent of employees on the alternate work week reported increases in the use of carpooling and telecommuting, while reporting an overall decrease in the use of driving alone/motorcycling, transit use, and bicycling.

Although the majority of respondent reported their habits did not change, of those who did change their habits, driving alone/motorcycling and telecommuting were the two most influenced options. Between those who reported driving more and driving less, there was a net decrease of two percent in driving alone. Correspondingly, between those who reported telecommuting more and telecommuting less, there was a net increase of two percent. The remaining three types of commuting options (carpooling, transit, and bicycling) experienced less than a one percent change in use $(0.72,0.16$, and 0.52 percentage points, respectively). The chart below depicts the average number of responses for each category from the Phase II and III surveys.


## Driving pattern on off-days

Employees on the alternate work week were asked to estimate how many miles they drive on their off-days. Immediately after the switch, the reported number of total miles driven increased about eight miles, but the average number of miles per off-day decreased by about five miles per day (by adding one extra day to the weekend). Then, during Phase III, the total number of miles driven on off-days dropped to about 36 miles, meaning an average total decrease of about 12 miles per day since the switch to the alternate work week.

|  | Phase I |  | Phase II |  | Phase III |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | $N$ | Mean | $N$ | Mean | $N$ |
| Number of Miles <br> Driven on Off-days | 47.99 | 658 | 56.10 | 691 | 35.77 | 604 |
| Average Miles <br> Per Day | 24.0 (2 days) |  | 18.7 (3 days) | 11.92 (3 days) |  |  |

To obtain a clearer image of how employees drove on Fridays, in the Phase III survey employees on the alternate work week were asked to estimate the number of miles they drove on Fridays. A total of 571 employees responded, reporting an average of 18.8 miles driven on Fridays. Several respondents noted that they reserve their Fridays to do errands, attend appointments, or to stay home and do housework.

In the focus groups, employees reported they use the extra day off to run errands. One participant said, "From talking to employees that are on the four-day work week, you know they're out doing errands and running around on Fridays. It's not like they stay home on Friday, or if they stay home one day on a weekend." Another said in the context of driving on off-days, "How does it net out at the end of the year? Have you driven more or have you driven less? I couldn't tell you myself right now. It seems like I'm driving a lot."

One of the County's priorities is to remove cars from the road for one day a week to improve sustainability. Therefore, it is vital to know if employees are driving more or less on their off-days during the alternate work week. During Phase I, alternate work week employees were asked if they expected that they would drive more, less, or the same on their off-days. During Phase II and III alternate work week employees were asked if they have actually driven more, less, or the same after the switch. A total of 97 percent of employees switching to the alternate work week expected to drive the same or less on their off-days after the switch. On the contrary, some employees reported during the pilot project that they drove more than they had expected. Despite this fact, the net totals reveal that overall,
employees are driving less on their off-days. These responses are depicted on the following chart.


If you switched to the alternate work week, have you driven more or less on your off-days?

## Individual fuel consumption

To analyze the impacts on sustainability, the yearly fuel consumption for commuting to work was calculated and the figures for consumption before the pilot project (Phase I) and during the pilot project (Phase II and III) are listed below. To calculate changes in individual fuel consumption, the distance obtained from the random sample, 26.5 miles, was used as a constant. Of the 828 employees on the alternate work week, 55 were part-time employees. These employees were excluded because it was difficult to determine how the new schedule affected the number of days they commuted to work. These calculations are based on the remaining 773 full-time employees on the alternate work week Also, because Phase II and III had different proportions of single occupancy vehicle (SOV) use and carpool use, two different yearly approximations are reported below.

| Fuel Consumption Changes for the $\mathbf{7 7 3}$ Employees on the AWW |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Number of Daily <br> Car Trips <br> (SOV + Carpool) | Weekly Consumption | Estimated Yearly <br> Consumption |
| Phase I (Pre-AWW) | 711 | 4,718 gallons/week | 235,939 gallons |
| Phase II | 714 | 3,792 gallons/week | 189,590 gallons |
| Phase III | 683 | 3,629 gallons/week | 181,446 gallons |
| Difference between Phase I and Phase II |  |  |  |
| Difference between Phase I and Phase III |  |  |  |
|  | $-46,349$ |  |  |
|  | $-54,493$ |  |  |

The Phase II survey captured the commuting patterns of alternate work week employees five months after they switched to the shorter week. The Phase III survey was conducted approximately 8.5 months after the start of the program and during the summer months. Thus, the slight increase in estimated annual fuel use from Phase II to Phase III could be either because employees had more time to seek out more efficient modes of transportation or because the warmer months entice more employees to use alternative commuting methods (e.g., bicycling, walking). By averaging the responses from these two surveys, we estimate that the amount of fuel saved each year by switching to the alternate work week is 50,421 gallons.

Saving 50,421 gallons of fuel is equivalent to 444 metric tons of carbon, or removing 81 cars from the road for an entire year. ${ }^{5}$

## Individual fuel cost savings

Over the course of the pilot period, agreement grew among employees that they would realize cost savings. Each of the three general employee surveys asked respondents to evaluate whether the alternate work week would lower their spending on fuel. This question was based on a graded scale (1=Strongly Disagree to $5=$ Strongly Agree). In the Phase I survey, employees were asked if they anticipated an alternate work week would save in fuel cost, while the Phase II and III surveys asked employees if they actually saw any fuel cost savings. In the Phase I survey, the responses were divided: 43.5 percent either disagreed or strongly disagreed with the statement while 47.5 percent either agreed or strongly agreed. However, in both the Phase II and III surveys, employees responded they agreed the alternate work week has saved on fuel costs for commuting to work.

[^4]

An alternate work week has saved fuel costs for commuting to and from work.

When the alternate work week was introduced, the nation had just experienced the most expensive gasoline prices ever. During Phase I, the price of gasoline in Oregon was approximately $\$ 2.60$ per gallon, but had been as high as $\$ 3.70$ in the two months prior to the start of the program. In January 2009, the price of gas dropped to $\$ 1.60$ per gallon before it rose back to an average price of about $\$ 2.20$ per gallon when the Phase II survey was conducted. During the summer months, in the weeks before the Phase III survey, the average price of gasoline was about $\$ 2.75$ per gallon. ${ }^{6}$ The dramatic drop in gasoline prices must be kept in mind when reviewing these changes.

## Summary

The alternate work week appears to save employees both in commuting time and fuel expenditures. Overall, employees switching to the alternate work week reported slightly quicker commute times by about eight minutes, likely due to a combination of avoiding rush hour traffic in the morning and evening, and a decrease in commute distance for some employees due to the relocation of some departments at the beginning of the pilot phase.

The alternate work week has not affected the way most employees commute to work. However, some changes occurred in the following areas: less driving alone/motorcycling and more telecommuting.

[^5]On Fridays, employees reported driving an average of 18.8 miles, even though they reported a total drop in miles driven over the entire weekend.

The estimated individual fuel consumption for an entire year on the alternate work week is estimated to be about 50,421 gallons less than the estimated consumption on a standard work week (based on 773 employees). This would be the same as taking 91 cars off the road for an entire year.

Employees also report that they see a savings on their transportation fuel costs. The declining cost of gasoline, however, is likely a major contributor to the savings.

### 2.3. Impact on Human Resource Operation

The alternate work week has impacted the human resources of the County. As well as the decrease in overtime, comp time, vacation, and sick leave usage noted in the cost savings section, additional evaluations examined: opinions of applicants for County positions, Americans with Disabilities and Family/Medical Leave Act considerations, exit interviews, and reasons why employees requested a schedule change around the time that the alternate work week was implemented.

### 2.3.1. Applicant Survey and Exit Interviews

The Department of Employee Services collected data from County job applicants from November 4, 2008 to August 5, 2009 to determine if the alternate work week makes potential employment at the County more attractive. Most people who applied for positions at the County know about the alternate work week. More applicants ( 52 percent) said the alternate work week did not affect their decision to apply for the job. However, 47 percent indicated the alternate work week made the position more attractive. In general, most people applying for positions at the County said the alternate work week makes employment at the County more attractive.

Exit interviews indicated that no employees resigned because of the move to the four-day workweek. Only two employees who participated in the exit interviews during the pilot period mentioned the alternate schedule in a negative way (both employees were being involuntarily transferred to state employment). A third employee stated she advocates for the four-day work week.

### 2.3.2. Schedule Change Requests

Before implementing the alternate work week, the County gave employees the opportunity to request a schedule adjustment if other activities interfered with the 7:00 a.m. to 6:00 p.m. work schedule.

To determine what factors influenced requests for schedule changes requests, 227 schedule change request forms were analyzed for the period from September 9, 2008 to February 19, 2009. The data collected from the forms included: the reason for the request; requested schedule (including special lunch arrangements); whether or not the request was approved and the corresponding date; and department.

The following chart shows the main reasons why employees asked for a schedule adjustment:


Transportation issues included a need to adjust schedules to participate in a carpool or to use transit services.

Other reasons included: Desire to telecommute, continue other previously agreed upon compressed work week, seniority rights, job requirements, coordinating manager and employee schedules, and personal preference.

After the alternate work week began, six people requested a schedule change because of a need for Americans with Disabilities Act (ADA) or Family/Medical Leave Act (FMLA) accommodations. Four of the six employees were already working a flexible schedule because of ADA and family reasons. Two employees requested a schedule change as a direct consequence of the alternate work week, and both of these employees were covered by ADA and FMLA.

## 3. Employee Experience

Three on-line surveys (Phase I, Phase II, Phase III) were administered to all County employees asking about their overall experience with the alternate work week and how it impacted their job productivity, their job satisfaction, and their ability to balance their work and their personal life. The Phase I survey was posted from October 30 to November 7, 2008 and received 1,107 responses. The Phase II survey was posted from April 8 to 23, 2009 and received 1,039 responses. The final survey, Phase III, was posted from July 27 to August 6, 2009, and received 867 responses.

An additional survey was administered to non-represented employees (managers) to gauge their perception regarding (1) manager and staff productivity: (2) staff morale; (3) customer/client reaction to the alternate schedule; (4) employee's experience managing under the alternate schedule; and (5) demographic information. The non-represented employee survey was posted from July 5 to July 16, 2009. A total of 199 employees responded.

In order to gain further insights into the employee's experience on the alternate work week pilot project, four focus group discussions were conducted in February 2009.
(See appendix for detail description of the data collection methods)

### 3.1. Overall Experience

In general, Clackamas County employees enjoy the alternate work week and want it to continue. The results of the Phase III survey show that 68 percent of employees who work the alternate work week reported they want to keep the schedule.

Employees who work the alternate work week reported a slight decrease in their desire to keep the alternate work week schedule from the Phase II to Phase III surveys. Employees who work the standard work schedule report a much higher desire for the County to return to a standard schedule. In the Phase II survey, 49 percent of employees who work the standard schedule reported a desire to keep the alternate work week. In the Phase III survey, 29 percent of employees who work the standard schedule said they wished to keep the alternate work week.


Do you feel the County should keep the alternate work week for some services, or should the County return all employees to a standard work schedule?


Do you feel the County should keep the alternate work week for some services, or should the County return all employees to a standard work schedule?

Employees on the alternate work week schedule were asked in both the Phase II and Phase III surveys if the schedule has been a positive or negative experience. Of the 657 responses, 75 percent said the alternate work week has been a positive experience. Employees on the alternate work week were also asked if they preferred the alternate work week to a standard schedule. Of the 632 people who answered this question, 80 percent said they prefer the alternate work week to a standard schedule. Analysis was conducted to determine if there were any discrepancies among departments. Overall, the majority of employees in each
department reported they have had a positive experience and they prefer the alternate schedule.

There were no significant differences in represented and non-represented employees in their desire to keep alternate work week. However, a slightly higher percentage of represented employees favored the alternate work week, in comparison to non-represented employees. In both Phase II and Phase III approximately 65 percent of the represented employees expressed their desire to keep alternate work week, and 60 percent of the non-represented employees expressed their desire to keep alternate work week. In the Phase III survey 81 percent of represented employees said they prefer alternate work week and 76 percent of the non-represented employees said they prefer alternate work week.

Overall, 56 percent of respondents to the Non-Represented Survey indicated that they would like to see the alternate work week continue. However, results differed significantly based on which schedule the respondent's department currently uses. Those currently on the alternate schedule strongly favor continuing it, while those on mixed or standard schedules tend to favor ending the alternate schedule. In departments on the alternate schedule, 75 percent of respondents indicated that they would like to see the alternate work week continue.

In contrast, less than 40 percent of respondents whose departments are on a mixed schedule favor keeping the alternate work week, and only 10 percent of respondents in departments on a standard schedule favor keeping the alternate work week. As the graph shows, respondents in mixed schedule departments favor ending the alternate work week. These results reflect a pattern that emerged in the Non-Represented Survey, which indicates that non-represented employees in mixed departments are struggling with the alternate schedule.


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## Would you like the alternate work week to continue?

Respondents to the Non-Represented Survey who work on the alternate or mixed schedules were also asked to rate the difficulty of supervising their staff since the alternate schedule was adopted ( $1=$ Much Easier to 5=Much More Difficult). The overall mean response was 3.05 , which indicates that the difficulty of managing under the alternate schedule is generally about the same as before. However, responses varied considerably based on which schedule the respondent's department maintains. The mean for those on the alternate schedule was 2.85, which suggests that managing became slightly easier. In contrast, the mean response for those on a mixed schedule was 3.55 , which indicates that managing became slightly more difficult. The following graph depicts the percentage of nonrepresented employees who indicated that supervising became difficult, easier, or remained the same.


Is it easier or more difficult to supervise your staff after the County implemented the alternate work week?

Several overall patterns were clear in the results of the Non-Represented Survey. First, non-represented employees who are on the alternate schedule generally feel positively about it, and overwhelming favor keeping the alternate work week. Those not on the alternate schedule, however, displayed more mixed-feelings about the alternate work week. A higher percentage of mixed schedule respondents favor ending the alternate work week as opposed to keeping it.

### 3.2. Impact on Productivity

In the three general employee surveys, employees were asked to assess their own level of personal work productivity with the question, "How do you rate your level of productivity?" The question used a 5-point scale (1=Very Low to 5=Very High).

The results from the Phase I survey show that most employees rated their level of productivity from High to Very High. In the Phase I survey, 58 percent rated their productivity "High," while 32 percent rated it "Very High" and 10 percent rated their productivity as "Moderate." No employees rated themselves as "Low" or "Very Low." However, the Phase II and III surveys show a marked decrease in selfassessed productivity.


How do you currently rate your productivity at work?

However, in Phase II and III employees felt differently about their productivity. The amount of people who rated themselves as "High" dropped from Phase I to Phases II and III, ending at 52 percent in Phase III. Slightly more people rated their productivity as "Very High," topping in at 35 percent in Phase III (the highest of all phases). More people rated themselves as "Moderate" in the Phase II and III surveys and for the first time, people rated their productivity as "Low" and "Very Low" (these responses were less than one percent of the respondents).

These results are somewhat surprising because of the responses to the subsequent question, "Has your personal productivity increased, remained the same, or decreased since the County adopted the alternate work week?" At the start of the alternate work week pilot project, most people (65 percent) thought the productivity would remain the same after the new schedule was implemented. However, this amount dropped all the way to 52 percent in Phase III. Instead, employees said they felt productivity had increased (from 18 percent in Phase I, all
the way up to 40 percent in Phase III). This also corresponds to the lower percentages of respondents who felt their productivity decreased (17 percent in Phase I, 13 percent in Phase II, and nine percent in Phase III).


Phase I: Do you anticipate your personal work productivity will increase or decrease after the County adopts an alternate work week?
Phase II and III: Has your personal productivity increased or decreased after the County adopted the alternate work week?

Focus group comments about productivity were mixed. Some employees, particularly those who work in the field, reported a 10-hour day gave them more time to reach job sites which normally are neglected because of distance. Others said because the public hadn't been using County services between 7:00 and 8:00 a.m., or from 5:00 to 6:00 p.m., employees had a true "quiet time" to catch up on work.

Not all participants in the focus groups had positive comments about their productivity. Some people felt their productivity had decreased. One participant said, "It seems the productivity is not as high as it is with the five day work week with staff." Another participant said productivity is down because 7:00 a.m. is too early to call customers back. A third related the frustration of working in a different office on Friday if the employee works a standard five-day per week schedule, but they work in a building that must close due to sustainability reasons related to the four-day work week.

In studying the focus groups, a pattern emerged with non-represented employees who work the alternate work week. It appeared non-represented employees on the alternate work week felt less productive in their job than their represented coworkers.

According to the data from the Phase I survey, represented employees switching to the alternate work week had higher levels of productivity compared to their nonrepresented counterparts who were also switching. Alternatively, represented employees on the standard schedule reported higher levels of productivity than their non-represented counterparts continuing on the standard schedule.

During Phase II, after the initial start of the pilot program, all groups experienced a slight perceived loss in their productivity, with non-represented employees on the alternate work week showing the greatest drop. After what appears to be an adjustment period, in Phase III, all groups except represented employees on the standard schedule, saw improvements in their productivity levels. Non-represented employees on the standard schedule and represented employees on the alternate work week actually experienced higher productivity levels than before the start of the program.


How do you currently rate your productivity at work?

According to the general surveys, non-represented employees on the alternate work week are still at a productivity level lower than before the start of the program, but their productivity appears to be rising. Since many of the nonrepresented employees are managers, this pattern appears to show managers working the alternate work schedule feel some stress related to employee productivity. This theme was reported in the focus groups as well. One participant said he didn't know how many managers who actually had a Friday off after the schedule changed. Another manager said, "I end up putting in long days as it is, and for me to go to a four-day work week, even though I might get off at 6:00 p.m., I probably would end up being here until 7:00 p.m. because l'm here until 6:00 p.m. now and I'm supposed to get off at 5:00 p.m."

Represented employees on the standard schedule are the only group showing a consistent decline in productivity as a result of the other employees switching to the alternate work week. This is consistent with other areas of examination of the alternate work week, such as county efficiency and workload.

In another survey directed to non-represented employees, respondents on the alternate or mixed schedule were asked, "How do you assess the amount of work produced by your department under the alternate work week?" Overall, a majority of respondents, 56 percent, reported no change in the amount of work produced under the alternate work week. Nearly 38 percent reported that the amount of work was either "High" or "Very High," and only about six percent indicated that the amount of work produced by the department was "Low" or "Very Low." Most respondents on the alternate work week indicated either no change (at 49 percent) or an increase (at 48 percent). Finally, 76 percent of respondents on a mixed schedule reported no change in the amount of work produced, and those reporting a change were split evenly between low and high. The results suggest that the amount of work produced under the alternate work week schedule has remained the same or increased.

A number of questions related to productivity were included on the nonrepresented survey. Respondents were asked to assess their ability to get work done, as well as their ability to access other employees and services under alternate schedule. The mean responses for the productivity related questions are displayed in the table on Appendix U. Generally, those in departments on a mixed schedule expressed the most difficulty maintaining productivity under the alternate schedule. Respondents in mixed schedule departments had the lowest mean score on every productivity question, with the exception of the question related to staff's productivity on Fridays; however, only the alternate schedule respondents showed a lower mean on this question, and alternate schedule staff do not work on Fridays.

### 3.2.1. Other Implications on Employee Productivity

Our surveys and focus groups asked employees to evaluate aspects related to operations that might be affected by switching to the alternate work week and could impact employee productivity. These aspects include impact on workload, effect on overall County efficiency, ability to schedule meetings with offices not be on the alternate work week, and the ability to access central services.

## Workload

In the Phase I survey, employees were asked if they were concerned about an increase in work because of not working on Fridays. Overall, employees were not concerned about an increased workload.


How concerned are you that your workload will increase on Mondays because you are not in the office on Fridays?

In the Phase II survey, employees were asked to evaluate if their workload on Mondays actually increased, decreased, or remained the same. Employees generally reported their workload remained the same. In the Phase II survey, 31 percent said their workload increased. In Phase III, 23 percent said their workload increased, and 3 percent said it decreased.


Has your workload been increased or decreased on Monday mornings because you are not in the office on Fridays?

One focus group participant reported that they expected their workload to increase on Mondays, but then realized since others in the County are also not working on Fridays, no additional work is generated to deal with on Monday morning.

## Manager's Experience with Workload

In the survey administered only to the non-represented employees, questions related to their work patterns and work load for Fridays were asked only to the alternate and mixed schedule managers. Overall, the mean score for the question "How often do you work on Friday in addition to working Monday through Thursday?" ( $1=$ Never to 5=Often) was 2.76 , which indicates that, on average, mangers who are on alternate or mixed schedule work on Fridays "Rarely" to "Sometimes." However, there were again significant differences in the responses based upon a manager's status and which schedule their department maintains. Elected officials and department directors have the highest tendency to work on Fridays, with a mean response of 3.43. Confidential or contract employees had the lowest mean response, 1.97. Managers currently working in departments on the alternate schedule indicated that they work less on Fridays than managers on a mixed schedule; the mean response for both groups respectively was 2.39 and 4.00.


## Frequency of Work on Fridays <br> Alternate Work Week vs. Mixed Schedule Departments



Non-represented employees on alternate and mixed schedule were also asked to indicate how many hours they work on Fridays. The overall mean score for this question was 3.96 hours (total valid response was 107). Responses were again varied across status and schedule type. Most notably, the reported average for those on the alternate schedule was 3.11 hours of work on Friday, while those on a mixed schedule reported an average of 6.13 hrs of work on Fridays.


Finally, non-represented employees on the alternate and mixed schedule were asked to indicate whether their total hours increased after the County implemented the alternate schedule. Of the 164 valid responses received, 62 percent indicated that their total hours worked remained about the same; approximately 28 percent noted an increase, and only 10 percent indicated a decrease in total hours. Sixty one percent of respondents on the alternate schedule indicated that their total hours had remained about the same, 25 percent reported an increase, and 14 percent reported a decrease. Approximately 66 percent of respondents in departments on a mixed schedule reported that their total hours remained the same; the remaining 34 percent reported that their hours had increased. No respondents from departments on a mixed schedule indicated a decrease in total hours.


## County Efficiency

In the Phase I survey, all employees were asked if they expected the overall efficiency of the County to increase, decrease, or remain the same. Employees were asked to rate their answers on a three-point scale with 1=Less Efficient, 2=Remained the Same or 3=More Efficient. The answers were evenly distributed with the majority (about 52 percent) of the 882 respondents reporting they expected the efficiency to remain the same. Of those who expected a change, 25 percent expected efficiency to decrease, and 23 percent expected efficiency to increase. During Phases II and III, the average score rose from 1.96 in Phase I to 2.08 and 2.29 , respectively, showing an increasing perception of the County's efficiency.


Phase I: Do you anticipate the overall efficiency of the County work will increase or decrease after the County adopts the alternate work week?
Phase II and III: Has the overall efficiency of the County work increased or decreased after the
County adopted the alternate work week?
A comparison was conducted between employees on and off of the alternate work week to evaluate if there were any differences in perceptions of the County's efficiency. During Phase I, both groups of employees had the perception that County efficiency would not change. However, during the Phase II and III surveys, employees on the alternate work week felt quite differently from those not on the alternate work week schedule. While employees on the alternate work week feel as if efficiency increased over time, those not on the pilot project felt completely opposite: that efficiency decreased over time (these differences are statistically significant for both Phase II and III). The chart below depicts the relationship.


Phase I: Do you anticipate the overall efficiency of the County work will increase or decrease after the County adopts the alternate work week?
Phases II and III: Has the overall efficiency of the County work increased or decreased after the
County adopted the alternate work week?

## Scheduling Meetings

The problem associated with scheduling meetings between alternate work week employees and standard work week employees was discussed at length during the focus group sessions. Employees on the standard work schedule said the difficulty came from a general sense that when all other County employees switched to the alternate work week, meetings would be arranged according to the alternate work week schedule, when standard schedule employees aren't available. Some employees on the standard work week reported they have attended some meetings during their off-hours, and then went on to work a longer day. Other employees have asked to have meetings rescheduled to match their hours. For instance, one employee said, "There was something at 7:30 a.m., and I just emailed back, 'I don’t start work until 8:00 a.m. I can either be there late or not at all. Which would you prefer?' I didn't want to interrupt. I wasn't trying to be flip about that. They said, 'Oh, oh. We'll have it at 8:00 a.m. then.' It was flexible."

In the Phase I survey, employees were asked if they expected scheduling meetings with other agencies, citizens, or vendors would be more difficult, less difficult, or about the same after the County adopted the alternate work week. In Phase II and III, employees were asked to evaluate if they thought there had been an actual change in difficulty. On a scale of 1 being less difficult to schedule meetings, and 3 being more difficult, the average scores for Phase I to III surveys did not fluctuate much, at 1.97, 2.1, and 1.95, respectively.


Phase I: Do you anticipate that scheduling meetings with other agencies, citizens, or vendors will be more difficult or less difficult after the County adopts the alternate work week? Phase II and III: Has scheduling meetings with other agencies, citizens, or vendors been more difficult or less difficult since the County adopted the alternate work week?

## Accessing Central Services

In the Phase I survey, employees were asked if they expected accessing central services (e.g., Employee Services, Country Counsel, Finance, Technology Services, Records Management, etc.), would be more difficult, less difficult or be about the same after the County adopted the alternate work week. During Phase II \& III, employees were asked to report their actual ability to access these services. On a scale of 1 being less difficult to access services, and 3 being more difficult, the average scores for Phase I-III surveys did not fluctuate much, with a starting score of 1.91 in Phase I, a slight increase in difficulty during Phase II at 2.09, and a subsequent drop to 1.98 during Phase III.


Phase I: Do you anticipate accessing central services will be more difficult or less difficult after the County adopts the alternate work week?
Phase II and III: Has accessing central services been more difficult or less difficult after the County adopted the alternate work week?

In the focus groups, employees on a standard schedule expressed frustration about contacting other departments on Fridays. For instance, one participant said, "If the computers go down on a Friday, you're out."

### 3.2.2. Summary

In the surveys, employees generally reported that the workload, County efficiency, ability to schedule meetings, and access to central services all remained the same. However, in the surveys and focus groups, employees noted how customers have reacted to the alternate work week. In the focus groups, participants recounted negative experiences with the public. However, in the survey, comments about citizen access were split between negative and positive comments.

### 3.3. Job Satisfaction

Eleven questions related to job satisfaction were asked in all three general employee surveys. Ten questions asked employees to rate their level of satisfaction on the following aspects of the work environment using a 1 to 5 scale ( $1=$ Very dissatisfied to $5=$ Very satisfied):
> Compensation
> Availability of resources to work effectively
> Opportunity for professional growth
$>$ Communication within the County
$>$ Health benefits
$>$ Retirement benefits
$>$ Workload
> Management
$>$ People they work with
> Meaningfulness of the work

One question asked employees to report their overall job satisfaction using the same 1 to 5 point scale ( $1=$ Very dissatisfied to $5=$ Very satisfied).

The level of general job satisfaction was measured by averaging the responses of the above 11 questions.

Overall, job satisfaction did not change throughout the survey period. In the Phase I survey, employees rated their general job satisfaction level at 3.88 , and in both the Phase II and Phase III surveys, their job satisfaction levels were rated at 3.79.
However, there is a significant difference in job satisfaction between employees who work the alternate work week and employees who work the standard work week. Employees who do not work the alternate work week reported declining job satisfaction since the beginning of the evaluation.


Statistically significant differences were found between those on the alternate schedule and those on a standard schedule in the following areas: availability of resources, opportunity for professional growth, communications within the county, workload, management, overall job satisfaction, and the combined average of all categories. A detailed table comparing responses for each of the questions relating to job satisfaction can be found in the appendix.

Job satisfaction was also compared between men and women, and employees with child care or elder care needs, but no statistically significant differences in job satisfaction were shown in any of the three general employee surveys.

In the Non-represented Survey, respondents whose departments are on a mixed or alternate schedule were asked to assess their staff's work morale under the alternate work week. A 1 to 5 scale was used ( $1=$ Very Low, $5=$ Very High). The overall mean response was 3.76, which indicates that managers feel that morale has either remained the same or improved somewhat. The mean response for those in departments on the alternate work week was higher, at 3.94, and the mean for those in mixed schedule departments was lower, at 3.26 . However, all groups displayed a mean response above 3.00, which indicates that supervisors generally believe that their workers' morale has not deteriorated under the alternate work week. The following table provides the percentage of respondents who indicated that morale had gotten lower, higher, or remained the same.


How do you assess the work morale of your staff under the alternate work week?

Furthermore, results of the Non-Represented Survey indicate that the quality of work has either remained the same or improved under the alternate schedule. Nearly 56 percent of respondents reported no change in their staff's quality of work, while 38 percent indicated an improvement. However, results differed considerably based on schedule type. Less than 3 percent of respondents in departments on the alternate schedule reported that their staff's quality of work had deteriorated, while nearly 18 percent of mixed schedule respondents indicated a lower quality of work.

Nearly 96 percent of Non-Represented Survey respondents reported that their personal quality of work has remained the same or improved under the alternate schedule. The remaining four percent of respondents reported "Low" quality of work, but none of the respondents reported "Very Low" quality. A higher percentage of employees on the alternate schedule reported an improvement in their personal quality of work than did those on a mixed schedule, at 53 percent and 22 percent respectively

### 3.4. Work/Life Balance

Nine questions related to people's ability to balance work and family were asked in all three phases of the general employee surveys. Three questions asked the employees to assess how much work interferes with their family life, three questions asked how much family interferes with work, and three questions asked how they see the alternate work week impacting their family life. Respondents were asked to select the level of agreement that best reflected their opinion using the 1 to 5 point scale ( $1=$ Strongly Disagree to 5=Strongly Agree).

The nine questions asked were:

Questions on the level of work interfering with family life:
$>$ I come home too tired from work
> My work takes away time for my personal interest
> My work takes away time l'd like to spend with family and friends.

Questions on the level of family life interfering with work:
$>$ I am too tired at work because of my home demands
> My personal demands take me away from work
> My personal demands take up time l'd rather spend at work.

Questions on the impact of the alternate work week schedule on family life:
$>$ An alternate work week will contribute to more personal/recreational time to pursue interests
> An alternate work week will create a day in the week to schedule personal appointments without having to take time off work
> An alternate work week will contribute to better work/life balance in a shorter work week.

Questions 1 to 3 were averaged to assess the level of work interfering with family life, questions 4 to 6 were averaged to assess the level of family life interfering with work, and questions 7 to 9 were averaged to assess the perceived positive impact of the alternate work week on family/personal time.

Over the course of the evaluation, there appeared to be a steady decrease in the sense of work interfering with family life. The sense that family life interferes with work has decreased only slightly. However, there is a steady increase throughout the pilot project in the sense that the alternate work week is good for family life.


When comparing the survey results for employees on the alternate work week with those who are not, some apparent differences emerge. In particular, these differences were more evident between the Phase II and Phase III surveys. For example, employees who do not work the alternate work week reported a higher sense that work interferes with family life. Also, employees on the alternate work week indicated a slightly decreasing sense of family life interfering with work, while employees who work the standard work week showed a significant increase in their sense of family interference.



Throughout the evaluation period, there was a steady increase in the sense that the alternate work week is good for family life among employees who work the alternate work week. However, there was an almost equal decrease among employees who work the standard schedule. This difference becomes more pronounced with each consecutive survey.


Participants in the February 2009 focus groups related anecdotes about how the ability to balance work and family life was dependent upon an employee's marital status and whether or not he or she has dependents.

Responses in the Phase I survey indicated that people who are married or have domestic partners did not think the alternate work week would be good for their ability to balance work with their personal life. In contrast, single or divorced employees indicated that they thought the alternate work week would be good for their ability to balance their work and personal life. After the implementation of the alternate work week, married employees reported an increase in the sense that the alternate work week contributed to better work/life balance. By the Phase III survey, this increase was most dramatic for married employees with children. By comparison, single employees reported a decrease in their sense that an alternate work week contributes to better work/life balance. Single employees with children reported the least sense that the alternate work week is good for their ability to balance their work and personal life. However, their rating increased slightly from the Phase II to the Phase III survey.


An alternate work week has contributed to a better work/life balance in a shorter work week.

In the Non-Represented Survey, respondents were asked to indicate how the alternate schedule has affected the total number of hours they work. Approximately 62 percent of all respondents indicated that their total hours remained about the same; approximately 28 percent noted an increase, and only 10 percent indicated a decrease in total hours. Results based on schedule type are represented in the following chart. Notably, no respondents from departments on a mixed schedule indicated a decrease in total hours.


Has the total number of hours you work each week increase or decreased after the County adopted the alternate work week?

Non-represented employees from departments on the alternate or mixed schedules were also asked how often they work on Fridays in addition to working Monday through Thursday. The responses were scored from 1 to 5 ( $1=$ Never, $5=$ Very Often). The total mean response was 2.76 , which generally indicates that nonrepresented employees "sometimes" work on Fridays. However, there were again significant differences in the responses based upon which schedule the respondent's department maintains. Managers currently working in departments on the alternate schedule indicated that they work less on Fridays than managers on a mixed schedule; the mean response for both groups respectively was 2.39 , and 4.00.

Non-represented employees were also asked to approximate the number of hours they work on Fridays. The overall mean response was 3.96 hours. However, managers in mixed schedule departments reported that they work more on Fridays, with an average of 6.13 hours. In contrast, the average for those on the alternate schedule was 3.11 hours of work on Friday.

### 3.4.1. Childcare/Eldercare Arrangements

Some concerns were expressed at the initial three focus group discussions regarding the impact of the alternate work week on those employees who have childcare or elder care needs. Despite the fact that nobody in the focus group actually had childcare or elder care needs, they all shared their observations about the difficulty their co-workers who have child/elder care needs experienced. The following are examples of comments from the focus group discussion:
"I have two employees who have child care issues. And it took a lot of rearranging for them to set up child care for the 4-day work week."
"I don't have this situation now, but at one point in my life, I was taking care of an elderly parent, and I became the evening caregiver when the day caregiver would leave. Had I been on this schedule, it would have been very costly to me to have to try to get home, and I live a very long distance from here, to take over my duties."

To obtain direct feedback from people who actually have child/elder care needs, an additional focus group session was scheduled for those with child/elder care needs.

Issues people with child/elder care needs raised in the focus group discussion were:
$>$ Difficulty in finding child care in Oregon City
$>$ Difficulty in finding child care that takes children for extended hours
$>$ Being charged an extra day for a day of un-needed child care. (Most child care facility charges for either five days or three days. The alternate work week requires four days of child care).
$>$ Difficulty in finding child care before school starts and after school ends before pick up.
$>$ Difficulty in arranging and attending children's after school activities.
> Difficulty in having children and other family members to adjust to early morning or late dinner schedule.
> Having to pay more for extended hours.

There were some positive aspects of alternate work week noted by the people with child/elder care needs. They are:
$>$ If you were able to find a child care that takes the child for four days, then it will save money in child care costs.
$>$ Fridays can be days to take care of the children (e.g. doctors appointments)
$>$ Fridays can be the days to volunteer at their children's school
It is interesting to note that despite the number of challenges they raised, people from the focus group with child/elder care needs indicated they would not want to go back to the five-day work week. They said it is not because they like the alternate work week schedule, but because they cannot afford to go through another set of adjustments.

In the general employee surveys, respondents were asked 1) if they use child/elder care, and 2) if they perceive that the child/elder care arrangements have been
more difficult as a result of alternate work week (asked only to employees in the alternate work).

The following table shows the numbers of people who responded to the survey that have child/elder care needs broken down by their work schedule.

| Number of People Who Use Childcare or Elder Care |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Phase I | Phase II | Phase III |
| Number of People With Child/Elder Care | 195 | 162 | 130 |
| Percentage | $17.90 \%$ | $15.90 \%$ | $15.20 \%$ |
|  |  |  |  |
| Phase I |  |  |  |
| Phase II | Phase III |  |  |
| AAW With Child/Elder Care | 139 | 135 | 101 |
| AWW Without Child/Elder Care | $(19.3 \%)$ | $(17.6 \%)$ | $(15.3 \%)$ |
| Std. With Child/Elder Care | 583 | 633 | 557 |
| Std. Without Child/Elder Care | $50.7 \%)$ | $(82.4 \%)$ | $(84.7 \%)$ |
|  | $(15.3 \%)$ | 27 | 29 |
|  | 309 | 223 | $(10.8 \%)$ |
|  | $(84.7 \%)$ | $(89.2 \%)$ | 171 |
| $(85.5 \%)$ |  |  |  |

The survey respondents were asked if they perceive making child/elder care arrangements is less difficult (1), the same (2), or more difficult (3). Average rating for the perceived child/elder care arrangement difficulty was higher in Phase I, between about the same and more difficult (2.55). However, in Phase II the rating became lower (2.20), and in Phase III it went down further (2.04). This indicates that people expected making child/elder care arrangements for the alternate work week would be more difficult, and they may have experienced some difficulty immediately after the adoption of the alternate work week; but as time passed, they got used to the new arrangement and the situation became about the same as before.

## Average Rating for Difficulty in Arranging Child or Elder Care



Has child care or elder care arrangements been more difficult or less difficult after the County adopted an alternate work week?

Open ended comments from the survey matched the comments in the focus group.
Following are examples of comments from the survey:
> Issues in making child/elder care arrangement under alternate work week
"Some daycares do not open early / stay open late enough."
"Finding someone with the hour restrictions (before 7:30, after 5:30) has been difficult."
"Costs [me] more to have extended hours daycare."
"It has cost me more each week as they are in care longer and more days as I had a partner that also worked in the county and we were able to adjust our schedules to lessen the time away and without that flexibility I am stuck with higher costs."
"For staff with young children, child care has become much more difficult to arrange. In addition, child care centers are open at the same time as parents work on a 4-day week so are difficult to use."
> Positive aspects of alternate work week for people having child/elder care
"One less day a week that I need to worry about daycare."
"It is very nice to only have childcare 4 days a week and spend Friday with my kids."
"I am able to schedule elder care appts and take care of elder care issues on Fridays as much as possible, I don't have to miss the other four work days leaving me more time for myself creating a better life work balance."
"I have saved money on childcare by having Fridays off."
$>$ One person made a request to have the County administration entertain the idea of operating a child care facility.
"If the county continues with this, I would love for Admin to consider a county-operated child care facility...that staff could opt to pay for close by."

Overall, it appears that there were some challenges for people with child and elder care needs. However, as the following comment notes, people found a way to make arrangements and adjusted to the new situation.
"It has been a little bit more difficult, I have to rely on other people to pick up my kids, but overall it has worked out."

### 3.4.2. Life Adjustments

## Health

During the focus groups, some participants commented that their eating patterns had changed due to the alternate work week, and that the alternate work week had impacted their overall health. To better measure this, the Phase II and Phase III survey asked two questions related to health and eating habits.

Overall, it appears people have adjusted to an earlier breakfast and later dinner time. For some, it was difficult to make this adjustment because of their desire to have a relaxing meal with their family. Also, some noted that they don't have time to cook dinner and therefore tend to eat precooked dinner or eat out. Others noted that eating late contributed to weight gain.

Some employees commented that they had to plan their meals more carefully due to the alternate work week and consequently are eating more healthy meals. Many employees noted that they eat more snacks during the day to maintain energy to work the longer hours.


Have your eating patterns changed because of the alternate work week?

When asked if people feel the alternate work week has impacted their overall health, most employees reported their health remained the same. Of those that reported a change, most reported their overall health improved. By the Phase III survey, more employees said their health had improved, while less said their health had deteriorated, as depicted in the graph below.


Do you feel the alternate work week has improved or deteriorated your overall health?

Interestingly, those who reported a change in their eating habits were more likely to report their overall health had decreased. Employees who reported that their
eating habits did not change also reported their overall health had improved. While 40 percent of people in the Phase III survey still reported deteriorated health if there was a change in their eating patterns, 28 percent reported that their health had improved, an increase of 10 percent from the Phase Il survey.

|  | Phase II |  |  | Phase III |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deteriorated <br> Health | Same | Improved <br> Health | Deteriorated <br> Health | Same | Improved <br> Health |
| Change in <br> eating <br> patterns | $44.40 \%$ | $37.20 \%$ | $18.40 \%$ | $40.20 \%$ | $32.10 \%$ | $27.80 \%$ |
| No change <br> in eating <br> patterns | $6.50 \%$ | $57.00 \%$ | $36.50 \%$ | $3.70 \%$ | $53.90 \%$ | $42.40 \%$ |

In the Non-Represented Survey, nearly 50 percent of all respondents indicated that the alternate schedule had no impact on their overall health. While 56 percent of those who work in departments that maintain a mixed schedule reported no health impact, 48 percent of those working in departments on the alternate schedule reported no health impact.

Overall, around 26 percent of respondents reported deteriorated health. Although those reporting deteriorated and improved health were even in alternate schedule departments, a higher percentage of people in mixed departments reported deteriorated health. Those working a standard schedule were not asked to assess the health impact of the alternate schedule.


Non-Represented Employee Opinion: Do you feel the alternate work week has improved or deteriorated your overall health?

## Other Adjustments

In the three general employee surveys, employees were asked to rate on a threepoint scale their sense of difficulty participating in certain activities outside of work (1=Less Difficult, 2=About the Same, 3=More Difficult). These activities included education, secondary employment, social activities and wellness programs. In the Phase I survey, most employees expected their ability to participate in outside activities would be about the same after the adoption of the alternate work week.

However, in the Phase II survey, employees reported an increase in difficulty participating in outside activities compared with their expectations, particularly in terms of attending classes and secondary employment. By the Phase III survey, however, it appears that employees adjusted better to the impact of the alternate work week on their outside activities. The ratings showed the difficulty of participating in outside activities was less than they expected in the Phase I survey. The following chart depicts these results.


### 3.5. Summary

Employees generally like the alternate work week, and most would like to keep it. People who are on the standard work week are less interested in keeping the alternate schedule, but the majority still wish to keep the alternate work week. Employees with child and elder care needs expressed the most challenges in adjusting to the alternate work week. However, it appears the alternate work week positively impacts employees by allowing more time to spend with family, and allowing employees to feel rested after a long weekend. For the most part, employees at Clackamas County are satisfied with their jobs, and the alternate work week did not significantly affect their level of job satisfaction. There is, however, a statistical significance between the job satisfaction levels indicated by represented and non-represented employees, with non-represented employees being less satisfied with the new schedule.

## 4. OTHER FACTORS

Over the past six months, other changes took place that may have affected the outcome of the alternate work week pilot project. While it is difficult to isolate the impact of these factors from the impact of the alternate work week it is important to recognize the potential impact of some of these factors.

### 4.1. Daylight Hours

The number of daylight hours appears to have an impact on how employees react to the alternate work week. The alternate work week began on the same week as the switch from Daylight Savings Time to Standard Time. At first, it appeared this would be a good time to switch, as employees would not miss the extra hour of sleep they gained with the time change. However, focus group participants reported less of a benefit to the time change and more of a struggle to go to work while it is still dark and return home in the dark. Employees commented in the survey and in the focus group discussion that they anticipate productivity may increase in the summer, and as a result there may be more support for the alternate work week. They noted that it is easier to work longer hours in the summer when the sun sets around 10 p.m. giving employees daylight hours after work.

### 4.2. Change in Energy Costs

Gasoline price has fluctuated drastically during the last year. The gasoline cost is about $\$ 2$ less per gallon in April 2009 than it was in June 2008. When the gasoline price is high, small changes in gasoline usage affect the overall cost. The high price of gasoline was one of the key factors that motivated the County to consider adopting the alternate work week. It may also have been one of the driving forces for employees to support alternate work week and reduce the use of cars for commuting. With gasoline prices decreasing, employees may have less motivation to reduce the use of cars. Therefore, it is important to note that gasoline prices potentially affected both the overall cost saving that occurred on the alternate work week, and the changes in employees' commuting patterns.

### 4.3. Energy Conservation Education

Facilities management has been a part of an on-going program to decrease energy use for all buildings. Some of their work has included the following:

Flyers promoting shutting down computers at night
$>$ Reminders to managers about the importance of energy conservation
$>$ Announcements and articles about energy efficiency from the Administrator's office
> Sustainability training for employees (including discouraging desk fans and heaters)
> Lighting upgrades for buildings to more energy efficient bulbs and similar changes

These changes could bear a large part of the responsibility for the reduced energy use in the standard schedule buildings. This further complicates the analysis of comparing the buildings on the standard schedule to the buildings on the alternate work week.

### 4.4. Decrease in Overall County Employment

At the beginning of the evaluation period in November 2008, the County employed 1,844 employees. By July 2009, the number of employees dropped to 1,755 . Part of this decrease is due to moving approximately 80 employees from Social Services to the State of Oregon in July. This also accounts for a lower response to the Phase III survey.

The loss off Community Services employees also decreased the level of discussion about the alternate work week. Employees from the Social Services department appear to have been the most vocal about the alternate work week --- both for and against. Members of this department conducted their own informal survey before the alternate work week began to determine the level of employee support. Their opinions had been collected and considered in the Phase I and II surveys and the focus groups. Since these employees moved to State employment, their attitudes and opinions about the alternate work week were not captured for the Phase III employee survey.

### 4.5. Change in Building Location

The alternate work week started around the same time as the opening of the DSB. Approximately 340 employees made the move to the new building, and consequently affected their commute patterns. Also DSB is one of the highly energy efficient buildings and the move to DSB confounded the analysis of energy usage and cost changes.

### 4.6. Departments Switched Back to the Alternate Work Schedule

Two divisions that adopted the alternate work schedule subsequently reverted back to the standard work schedule after the pilot project began. The ClerkRecording office switched back to the standard work schedule in February 2009
after individuals in the real estate industry protested the Friday closure, and cited an Oregon statute requiring all recording offices be open five days each week from 9:00 a.m. to 4:00 p.m. The recording office is located in the PSB, a building the County hoped to close on Fridays for this pilot study. Energy and cost savings for this building, therefore, will be less than expected.

In April 2009, the Clerk-Elections division returned to a five-day work week following an error by an employee who posted the filing deadline as March 19 at 6:00 p.m., when state law requires the deadline to be 5:00 p.m. Since the elections division is not in the PSB or DSB, the full effect of this switch back to a standard work week is unknown.

### 4.7. Economic Changes

The downturn in the national economy impacted Clackamas County as well. With decreased economic activity came a decrease in the demand for some County services. For example, as the building and housing industries slowed, there was less inspection and permit activity for building, plumbing, or electrical. In turn, County inspectors needed less overtime and used less fleet fuel than during the prior year. While this decrease may be specific only to the building industry, it has impacted the overall usage of the County and should be considered when interpreting the results.


[^0]:    ${ }^{1}$ In this study, "customers" are defined as those who actively access County services by calling or visiting departments. "Citizens" are members of the general public who reside in Clackamas Country who may or may not actively access Country services.

[^1]:    ${ }^{2}$ DSB was not used for the before and after comparisons because it opened right as the pilot project began and had no data available prior to the pilot project.

[^2]:    ${ }^{3}$ http://www.epa.gov/cleanenergy/energy-resources/calculator.html

[^3]:    ${ }^{4}$ This figure was obtained by adding the reported time changes in the Phase III survey to the total commute time reported in the same survey.

[^4]:    5 http://www.epa.gov

[^5]:    ${ }^{6}$ http://www.oregongasprices.com/retail_price_chart.aspx

