# U.S. POSTAL SERVICE 

# Additional Guidance Needed to Assess Effect of Changes to Employee Compensation 

Accessible Version

January 2020

# G/O <br> Highlights 

Highlights of GAO-20-140, a report to congressional requesters

## Why GAO Did This Study

USPS faces major financial challenges. In the last 11 years it has lost over $\$ 69$ billion; an issue for an organization that is to be self-sufficient. Significant USPS expenses are concentrated in employee compensation- 72 percent of its costs in fiscal year 2018-and USPS has taken actions to decrease these costs. GAO was asked to review issues related to USPS's employee compensation.

This report examines: (1) recent trends in postal employee compensation, (2) the results of recent USPS efforts to manage compensation and (3) potential effects of proposed changes to employee compensation that would require legislative change. GAO analyzed USPS employee payroll data from fiscal years 2009 through 2018 to determine compensation trends and impacts of management efforts to manage compensation. GAO reviewed relevant legal documents, USPS policy documents and collective bargaining agreements. GAO assessed four broad reviews of USPS including recommendations for legislative change related to pay, benefits and required workhours. GAO also interviewed USPS officials, officials representing USPS employee unions, and industry and mailer stakeholders.

## What GAO Recommends

GAO recommends that USPS develop guidance that specifies that cost estimates include important factors, such as turnover. USPS accepted this recommendation stating it would formally articulate internal guidance to ensure appropriate factors are taken into account when developing cost estimates and evaluating outcomes.
View GAO-20-140. For more information, contact Lori Rectanus at (202) 512-2834 or rectanus1@gao.gov.

# Additional Guidance Needed to Assess Effect of Changes to Employee Compensation 

## What GAO Found

Compensation costs for current United States Postal Service (USPS) employees are $\$ 9$ billion lower than 10 years ago, when adjusted for inflation (see fig). Most of the decline happened in fiscal years 2009 through 2014 as a result of reductions in the number of USPS employees and the hours they worked. While compensation costs have increased in recent years, USPS reports that more work hours were necessary to handle growth in delivery points and labor intensive packages. In recent years, USPS has also failed to make required payments for retiree health and pension benefits-a total unfunded liability of about $\$ 110$ billion.

Compensation Costs for Current USPS Employees for Fiscal Years 2009 through 2018

Source: GAO analysis of USPS annual reports to Congress. | GAO-20-140
USPS estimates a savings of about $\$ 9.7$ billion from fiscal years 2016 through 2018 as a result of paying new employees less, among other efforts. GAO substantiated about $\$ 8$ billion in savings, and found that USPS's cost savings estimates are likely overstated because they do not fully account for changes in work hours or tenure of employees. Also, USPS did not account for other costs such as increased turnover rates among lower-paid employees. USPS lacks guidance on what factors to consider in its cost savings estimates, and as a result may make future changes to employee compensation based on incomplete information.
Changes to employee compensation that would require legislative change could save USPS billions, but the amount saved is dependent on USPS overcoming implementation challenges. If USPS could reduce delivery frequency and associated work hours, GAO estimated USPS could save billions a year. However, other recent USPS reductions in service have not fully achieved planned work hour reductions due to, among other things, issues with management of work hours and lack of union agreement. Changing employee pay and benefit requirements could also achieve significant long-term savings, but saving depends on USPS overcoming challenges, such as potential increases in turnover and reduced productivity resulting from decreases in pay and benefits.

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## Abbreviations

APWU
CBA
CSRDF
CSRS
FECA
FEGLI
FEHB
FERS
NALC
NPMHU
NRLCA
ODL
OIG
OPM
POStPlan
PRA
PRC
TSP
USPS

American Postal Workers Union
Collective Bargaining Agreement
Civil Service Retirement and Disability Fund
Civil Service Retirement System
Federal Employees' Compensation Act
Federal Employees' Group Life Insurance
Federal Employee Health Benefits
Federal Employees Retirement System
National Association of Letter Carriers
National Postal Mail Handlers Unions
National Rural Letter Carriers' Association
Overtime Desired List
Office of Inspector General
Office of Personnel Management
Post Office Structure Plan
Postal Reorganization Act of 1970
Postal Regulatory Commission
Thrift Savings Plan
United States Postal Service

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January 17, 2020
The Honorable Ron Johnson
Chairman
Committee on Homeland Security and Governmental Affairs United States Senate

The Honorable Jim Jordan
Ranking Member

## Committee on Oversight and Reform

House of Representatives
The United States Postal Service (USPS) has a mission to provide prompt, reliable, and efficient universal service to the public while covering its expenses primarily through revenues generated from the sale of its products and services. ${ }^{1}$ However, over the past 11 fiscal years, USPS has not generated enough revenue to cover its costs, losing \$69 billion, with an expected $\$ 6.6$ billion net loss in fiscal year 2019. USPS's most profitable product-First-Class Mail-is expected to continue declining in volume for the foreseeable future, and USPS faces increasing competition in package shipping. Meanwhile, key costs, such as employee pay and benefits, have been rising. According to USPS, most of its annual costs are related to the over 634,000 employees who, on a typical day, process and deliver 493 million pieces of mail to 159 million delivery points. ${ }^{2}$ The cost of current employees is driven by a mix of USPS policies-which include collective bargaining agreements (CBAs) negotiated with unions representing 92 percent of USPS employees-and statutory requirements governing USPS employee pay and benefits. ${ }^{3}$

[^0]You asked us to review USPS's management of employee compensation and options for legislative change. This report examines (1) recent trends in postal employee compensation, (2) results of recent actions taken by USPS to manage employee compensation, and (3) potential effects of changes to USPS employee compensation that would require legislative or statutory change.

To describe recent trends in USPS employee compensation, we reviewed compensation data published in USPS reports, such as annual reports to Congress and financial forms filed as a result of Securities and Exchange Commission requirements, from fiscal year 2009 through fiscal year 2018. ${ }^{4}$ We also requested and analyzed high-level trends in USPS payroll data for fiscal years 2009 through 2018. We determined these data were reliable for reporting changes in total work hours and compensation over time by analyzing data, reviewing technical documentation of the dataset, and speaking with USPS officials. We reviewed USPS policies and CBAs with the four major postal employee unions. ${ }^{5}$ We also conducted interviews with USPS officials, officials from USPS's Office of Inspector General (OIG), representatives of the four postal unions, representatives of mailers, and academic experts, to obtain their views on recent employee compensation trends.

To determine the results of recent actions taken by USPS to manage employee compensation, we identified three major changes implemented through CBAs aimed at decreasing the cost of employee compensation. To evaluate the impact of these changes, we requested individual level payroll data for fiscal years 2009 through 2018. USPS provided data at the individual level for fiscal years 2016 through 2018. Data for fiscal years 2009 through 2015 were not readily available. We determined that the fiscal years 2016 through 2018 data were reliable to analyze the impact of specific policy changes on employee compensation. The individual-level payroll data included detailed information for all

[^1]employees who worked during that time period including pay, work hours, and demographic information. With these data we evaluated the effect of the policy changes through statistical models and other techniques. We developed estimates for the impact of changes, identifying cost savings as well as offsetting trends that decreased the potential for overall savings. For more information about data sources and how we conducted the analyses, see appendix I. We compared our results to USPS's estimated cost savings for these same changes. We assessed USPS's estimated cost savings associated with changes to employee compensation against best practice standards from the GAO Cost Estimating and Assessment Guide. ${ }^{6}$

To examine the impact of proposed legislative changes to USPS employee compensation, we reviewed academic literature, prior policy reviews of USPS, and recent legislation. We then judgmentally selected four broad reviews-two initiated by the executive branch, one by USPS's oversight body, the Postal Regulatory Commission (PRC), and one by USPS-that covered USPS's employee compensation and made recommendations for change. ${ }^{7}$ From these four reviews, we identified twelve recommendations for proposed legislative changes related to employee compensation. For more information on the reviews and recommendations we selected, see appendix II. Using the individual level payroll data described above, we also developed estimates, where possible, of potential savings of proposed legislative changes. We supplemented this analysis with findings from other sources, including prior GAO work, USPS OIG reports, and Congressional Budget Office estimates to inform the potential savings and limitations of these changes.

We conducted this performance audit from September 2018 to January 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for

[^2]our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Background

## USPS Employee Characteristics

USPS is one of the largest civilian employers in the United States. In fiscal year 2018, USPS reported that it employed approximately 634,000 people and retirement benefits were paid to over 600,000 retirees and their survivors. According to USPS, it is one of the leading employers of minorities, women, veterans, and disabled veterans; for example, USPS reports on its website that it currently employs about 100,000 military members and veterans, nearly one-sixth of its workforce.

Ninety-two percent of the USPS workforce is comprised of employees who are represented by four unions that are roughly organized along occupation type (see table 1 for the unions and member representation). These employees are also divided into "career", and "non-career" employees. Career employees are considered permanent and are entitled to a range of benefits (e.g., health and retirement) and privileges. Noncareer employees are generally considered temporary and hired, for example, during times of large mail volume such as holidays. As discussed later, non-career employees receive fewer benefits and lower pay than career employees.

Table 1: Representation of Postal Employees in Four Major Unions in Fiscal Year 2018

| Postal Unions | Types of Employees | $\mathbf{2 0 1 8}$ Career <br> Employees | $\mathbf{2 0 1 8}$Non-career <br> Employees | Total |
| :--- | :--- | :---: | :---: | :---: |
| National Rural Letter Carriers' <br> Association (NRLCA) | Rural Letter Carriers | 70,852 | 59,183 | $\mathbf{1 3 0 , 0 3 5}$ |
| National Association of Letter <br> Carriers (NALC) | City Letter Carriers | 168,199 | 42,115 | $\mathbf{2 1 0 , 3 1 4}$ |
| American Postal Workers Union <br> (APWU) | Clerks, Maintenance, Motor <br> Vehicle, and Other Services | 165,505 | 27,550 | $\mathbf{1 9 3 , 0 5 5}$ |
| National Postal Mail Handlers <br> Union (NPMHU) | Mail Handlers | 37,535 | 6,274 | $\mathbf{4 3 , 8 0 9}$ |

Source: GAO presentation of U.S. Postal Service Annual Report to Congress data. | GAO-20-140

## Legal Requirements Related to USPS Workforce

The Postal Reorganization Act (PRA) established USPS as an independent establishment of the executive branch of the government of the United States. ${ }^{8}$ PRA also established a compensation system where career postal employees and officers generally receive the same benefits as federal government employees, but also authorizes employees to collectively bargain over pay. Pay at many federal agencies is not subject to collective bargaining. Instead, pay at those entities is set through the General Schedule, which is developed and updated by the Office of Personnel Management (OPM). Additionally, PRA established that USPS should maintain compensation and benefits "on a standard of comparability to the compensation and benefits paid for comparable levels of work in the private sector of the economy." ${ }^{9}$ Reform bills have been introduced in Congress that would amend some of the current compensation requirements, but none have passed.

## USPS Compensation Costs

USPS costs are concentrated in employee compensation, which accounted for approximately 72 percent of total operational costs in fiscal year 2018 (see fig. 1). The majority of compensation costs are payments to current employees, which include an employee's hourly pay and benefits such as contributions to retirement and healthcare plans and USPS's share of payroll taxes for Social Security and Medicare. USPS contributions for retirement benefits are made to OPM administered funds that pay out USPS retiree pension and health benefits, as well as to the Thrift Savings Plan (TSP). ${ }^{10}$

[^3]Figure 1: USPS Fiscal Year 2018 Operating Costs


Source: GAO analysis of data from U.S. Postal Service 2018 report form 10-K. | GAO-20-140
aUSPS reported costs for new workers' compensation cases as $\$ 1,194$ million, which can be viewed as part of current compensation costs. We did not include these costs in our review. The $\$ 4$ million net cost for workers' compensation reported by USPS is the net result of several factors, with the cost of new cases mostly offset by the impact of discount rate changes.
${ }^{\mathrm{b}}$ The amortization costs related to pension and health benefits represent required payments towards funding the unfunded liabilities for these benefits. These are not current compensation costs, but rather costs for funding benefits earned in prior years.
USPS negotiates contracts that include terms for the compensation of the 92 percent of employees represented by unions through a collective bargaining process. This process may entail a three-step process for USPS: negotiation, mediation, and interest arbitration (as described below). If USPS and its unions cannot reach agreement during initial negotiations, a federal mediator is appointed, unless both parties waive mediation. If no agreement is reached with the mediator, or if the parties waive mediation, the contract goes to impasse. An impasse then proceeds to final and binding interest arbitration. In interest arbitration, the dispute goes before a three-member panel, which determines factors impacting compensation, such as pay increases.

USPS Compensation Costs for Employees in 2018 Were Lower Than in 2009, Though

## Unfunded Liabilities for Retirement Benefits Have Increased

## Adjusted for Inflation, Compensation for Current Employees in 2018 Was about $\$ 9$ Billion Less Than in 2009

The total cost of compensation for current USPS employees was about $\$ 9$ billion less in fiscal year 2018 than in fiscal year 2009, when adjusted for inflation. ${ }^{11}$ However, most costs decreased between fiscal year 2009 and fiscal year 2014, and costs have generally risen since (see fig. 2). Without adjusting for inflation, USPS compensation costs for current employees are still lower-by almost $\$ 1$ billion-when compared to 2009, but costs have been rising since 2014, and USPS has reported an anticipated total compensation cost increase for fiscal year 2019. Over the same time period, the number of employees followed a similar pattern of decline from fiscal years 2009 through 2013 and then generally increased. Overall, compared to fiscal year 2009, USPS has reduced its total number of employees as of fiscal year 2018 by over 77,000.

Figure 2: U.S. Postal Service Employee Compensation Cost, Fiscal Years 2009 through 2018 (Adjusted and Unadjusted to 2018 Value)


Source: GAO analysis of USPS annual reports to Congress. | GAO-20-140

[^4]One key reason for the decline in USPS compensation costs was the decrease of 90 million work hours over this period. The largest decrease in work hours was from fiscal years 2009 through 2013, when work hours declined about 12 percent. We reported in 2014 that this was accomplished in part through attrition and separation incentives. ${ }^{12}$ Recent trends, however, show total work hours are increasing, from a combination of new hiring and increased work hours for current employees. From fiscal years 2014 through 2018, work hours increased by 5.4 percent. Additionally, the number of work hours associated with higher costs-overtime and penalty overtime-have also been increasing. ${ }^{13}$ USPS reported that the recent increase in work hours and overall compensation costs is a result of increases in the number of delivery addresses and increases in more labor intensive package volume. USPS adds about one million new delivery points each year. Although overall mail volume declined from fiscal years 2009 through 2018, package volume increased almost 200 percent during the same period. However, package volume growth has slowed in recent months, largely due to significant competition among delivery providers, according to USPS.

Generally, USPS compensation grew more slowly over the last decade than in the private sector and federal government. ${ }^{14}$ Based on our review of USPS data for fiscal years 2009 through 2018, USPS employee compensation has increased on average by 1.0 percent per year. According to Bureau of Labor Statistics data, average employee compensation increased by approximately 2.3 percent per year for workers in private industry. ${ }^{15}$ In a prior review of federal civilian compensation trends, we found average compensation increased 1.2

[^5]percent per year for the federal workforce from 2004 through 2012. ${ }^{16}$ Based on a review of publically available Office of Management and Budget data, we found this trend of about a 1.2 percent annual increase continued through 2018.

## While Compensation Costs Have Decreased, USPS's Unfunded Liabilities for Retirement Benefits Have Increased

Although USPS decreased compensation costs paid to current workers, its unfunded liabilities for retirement benefits significantly increased during the same time period. By law, USPS employees are entitled to participate in the federal retirement health benefits and pension programs. USPS is required to make annual payments into the OPM administered pension and retiree health benefits funds that support postal employee retirement benefits; however, USPS has failed to make a significant portion of these payments.

Retiree Health Care Liabilities: OPM administers the Postal Service Retiree Health Benefits Fund, which pays USPS's share of premiums for retired postal employee health care coverage. ${ }^{17}$ As of September 30, 2018, USPS had contributed $\$ 20.9$ billion to the fund, and missed payments on an additional $\$ 33.9$ billion in required payments to the fund for 2012-2016. For fiscal years 2017 and 2018, OPM billed USPS for required payments to the fund of $\$ 3.3$ billion and $\$ 3.7$ billion respectively and USPS did not make either payment. As of September 30, 2018, USPS reported the unfunded retiree health benefit liability to be $\$ 66.5$ billion.

Pension Liabilities: OPM also administers federal pension benefits through the Civil Service Retirement System (CSRS) and the Federal Employees Retirement System (FERS). USPS employees participate in one or the other of these plans. Both plans are funded through the Civil Service Retirement and Disability Fund (CSRDF). In 2018, USPS failed to make required payments to the CSRDF totaling approximately $\$ 2.4$

[^6]billion; $\$ 958$ million for FERS and $\$ 1.4$ billion for CSRS. ${ }^{18}$ USPS reported the unfunded pension benefit liability, as of September 30, 2018, to be $\$ 25.1$ billion for CSRS and $\$ 18.4$ billion for FERS.

As the total unfunded liabilities for health care and pension benefits owed to current and future retirees are about $\$ 110$ billion, we have previously reported on the significant risk posed by these financial liabilities to USPS's long-term sustainability. ${ }^{19}$ We have also reported that Congress should consider passing legislation to put postal retiree health benefits on a more sustainable financial footing, and recently provided options for proposed legislative changes related to retiree health costs in particular. ${ }^{20}$ For the remainder of this report we will focus mainly on those costs USPS incurs related to current employee services.

## USPS Efforts Have Decreased Employee Compensation Costs, but USPS Has Not Fully Assessed Savings and Other Costs

## USPS Estimates That Decreasing Pay Rates for New Employees and Health Insurance Contributions Have Saved Billions

In addition to decreasing the number of employees and work hours, USPS also implemented three major changes to decrease employee compensation: (1) lowering pay for new career employees, (2) increasing use of non-career employees, and (3) reducing USPS contributions to health insurance premiums for active employees. These changes were negotiated with the four unions representing the majority of postal employees and established in CBAs. According to USPS management officials, these actions were intended to decrease compensation costs and increase workforce flexibility, which were necessary responses to

[^7]declining letter mail volume and revenue, growth in more labor-intensive package volume, and increases in the number of delivery addresses. We report USPS's estimates, and our estimates, of how much these changes saved in employee compensation costs below; we further describe the differences between the two estimates in the next section. For additional technical details about our analysis, see appendix I.

1. Lowering Pay for New Career Employees: Beginning in 2010, ${ }^{21}$ USPS implemented a negotiated lower starting pay for new career employees. More specifically, career employees hired after a specified date have lower starting pay than previously hired career employees. For example, a city carrier hired in January 2016 would make about $\$ 37,640$ a year compared to $\$ 48,406$ a year if hired before the new starting pay agreement. USPS estimated about $\$ 2.3$ billion in savings for fiscal years 2016 through 2018 as a result of this effort. We were not able to substantiate the estimated savings because USPS could only provide individual data for fiscal years 2016 through 2018, which were not enough data to develop comparison groups for employees hired before and after the pay rate change. ${ }^{22}$
2. Increasing Use of Non-career Employees: In 2010 and 2011, USPS negotiated the ability to hire up to 20 percent of the workforce as noncareer employees; the prior limit had been 10 percent for most employee types. ${ }^{23}$ USPS officials told us they also changed some work rules so that USPS could use non-career employees for some tasks previously only allowed for career employees. Non-career employees are less costly because they generally have lower pay rates and are not entitled to the full federal benefits received by career

[^8]workers. ${ }^{24}$ According to USPS officials, non-career employees are also "more flexible" because there are fewer restrictions on their tasks and schedules. For example, USPS management officials told us that they use non-career employees for much of the Sunday package delivery service and to make extra trips needed to deliver packages to meet service targets. USPS estimated that increased use of noncareer employees saved about $\$ 8.2$ billion in compensation costs since fiscal year 2016, but our analysis found that USPS likely saved about $\$ 6.6$ billion from fiscal years 2016 through 2018 from this effort.
3. Reducing Contribution for Employee Health Insurance Premiums: USPS decreased its contribution percentage for employee health insurance premiums from 84 and 85 percent in 2008 to 74 percent in $2018 .{ }^{25}$ Based on its recent agreement with NRLCA, USPS's contribution will decrease from 73 percent in 2019 to 72 percent in 2020.26 In past CBAs with the three other unions (APWU, NALC, and NPMHU), negotiations over USPS contributions to health insurance premiums followed those agreed to by NRLCA. USPS officials estimated that USPS's reduced contribution percentage to employee health insurance premiums has saved about $\$ 1.6$ billion across the types of postal employees from fiscal years 2016 through 2018. However, our analysis found that USPS likely saved about $\$ 1.4$ billion for the three-year period.
Although USPS was able to decrease its share of the health insurance premium to achieve a larger saving in fiscal year 2018 than in fiscal year 2017, overall USPS expenditures for its share of employee health insurance premiums did not decrease due to annual increases in premiums. USPS reported that employee health benefits expenses increased from $\$ 5.0$ billion in 2016 to $\$ 5.2$ billion in 2018,

[^9]even as its share of premium costs decreased from 76 percent to 74 percent for employees covered by the CBAs during the same period. ${ }^{27}$

## Although USPS Saved Billions, Its Estimates Potentially Overstate Savings Because USPS Did Not Account for Various Factors

Across all of its efforts, USPS estimated it saved approximately $\$ 12$ billion for fiscal years 2016 through $2018 .{ }^{28}$ While there are multiple valid approaches for estimating cost savings based on policy changes, we found that USPS did not account for some significant factors and, therefore, potentially overstated the savings achieved. Specifically, USPS did not account for the effects of changes in work hours or tenure of employees. ${ }^{29}$ When we accounted for these additional factors, we were able to substantiate $\$ 8$ billion, of USPS's estimated $\$ 9.7$ billion, in savings over the last three fiscal years for changes to the number of non-career employees and health insurance contributions. ${ }^{30}$ As noted above, we were not able to substantiate the estimated savings of lowering pay for new career employees. We summarize the specific factors below and include additional details about our review of USPS's estimates and the effect of each factor in appendix I.

## Mix of Employee Work Hours

As previously discussed, in recent years, USPS employees have worked significantly more overtime and other "premium" pay hours. According to USPS, use of overtime and premium hours enables it to meet irregular work demands (for example, spikes in volume resulting from holidays) or

[^10]delivery performance targets, particularly for Sunday package delivery. Also, to incentivize or compensate employees for working extra or traditionally less desirable hours, USPS routinely uses overtime and other premium pay, such as additional pay for work at night and on Sundays. As a result, these types of work hours cost more to compensate than regular work hours (i.e., straight time hours) on a per hour basis. ${ }^{31}$

When calculating the savings it achieved from using lower-paid employees, USPS compared what it actually paid in compensation to estimates of what it would have paid in the absence of having non-career or lower-paid workers, using average pay rates and not individual level employee data. USPS's method therefore did not fully account for the mix of types of hours worked in its estimates. As a result, USPS underestimated how much the lower-paid employees are compensated in its cost estimates. Our analysis of the last three years of data found that lower-paid employees work a different mix of hours, and overall they work more hours and more premium hours, factors that USPS does not capture in its estimates. For example, from our analysis of USPS payroll data, we found that, on average:

- a non-career employee worked 30 more straight hours, 73 more overtime hours, and 23 more night and Sunday hours per year than a career employee, ${ }^{32}$ and
- a lower-paid career employee worked a higher number of straight time hours and, depending on the craft, also may work more overtime, night work, and Sunday hours than a higher-paid career employee. ${ }^{33}$

USPS officials said it was not necessary to factor in work hours because the amount of work hours was not changed by introducing lower-paid employees. For example, USPS officials told us that, to meet the increase in packages, more carrier work hours were needed in recent years, to make deliveries on Sundays for instance. USPS officials also noted that to save costs, it is preferable that these hours go to lower-paid employees.

[^11]However, our analysis suggests that lower-paid employees may work different amounts and mixes of work hours than higher paid employees. For example, newer, lower-paid employees may be more willing to work extra hours, and being newer, their inexperience could mean that they take longer to complete their work on average. USPS management officials said that they do not believe newer employees are less productive than more experienced employees, nor do they lead to increases in overall work hours. USPS management officials also told us that employees cannot opt into working more hours because overtime hours are assigned as necessary by supervisors. ${ }^{34}$ Our analysis did not include information that would allow us to determine whether management was pre-approving all overtime hours. However, in June 2019, the USPS OIG reported $\$ 136.6$ million in unauthorized overtimewhich occurs when an employee's clock time exceeds eight hours without prior approval-for mail processing alone. ${ }^{35}$

USPS has saved billions by using a less costly and more flexible workforce. Indeed, based on fiscal year 2018 data, we calculated that USPS could potentially save up to an additional $\$ 4.4$ billion a year if the current cap on non-career employees was doubled to 40 percent. However, USPS did not fully evaluate the impact of pay rates and work hours by employees. Given the growth in work hours, particularly overtime and premium pay hours, USPS risks overestimating savings and making ill-informed changes to employee compensation by not including information about employee work hours.

## Tenure of Employees

USPS employees with longer tenure generally receive higher pay than similar employees with less tenure. ${ }^{36}$ Based on our analysis of USPS

[^12]payroll data for fiscal year 2018, the average pay of career employees is driven in part by the high median tenure of those employees, which was 20 years (with a median age of 54 years old) in fiscal year 2018. ${ }^{37}$

However, when calculating its savings estimates for non-career employees, USPS did not factor in the effect of employee tenure. Specifically, USPS's savings estimate for non-career employees compared what it was paying for a newly hired non-career employee against the average pay for a career employee, rather than the starting pay for a career employee. When we accounted for tenure in our analysis, we found that some of the savings from hiring new employees could be explained by the shorter tenure of the lower-paid employees. USPS officials told us that they agreed that tenure should have been taken into account and that they would recalculate these estimates. Without adjusting for mix of hours worked and tenure, we found the difference in pay between career and non-career employees to be, on average, $\$ 25$ per hour. After adjusting for tenure and mix of workhours, we found the difference in pay to be, on average, $\$ 8.27$ per hour. ${ }^{38}$

There are a variety of acceptable methods for conducting cost savings estimates, but all estimates should include all the relevant factors driving costs and be clearly documented. The GAO Cost Estimating and Assessment Guide-a best practices guide for developing and managing program costs-states that estimates should include a common set of agreed-upon estimating standards and ensure that assumptions are not arbitrary. ${ }^{39}$ USPS officials said that they do not have guidance for how to develop these estimates, including what significant factors should be considered. ${ }^{40}$ Given that USPS regularly evaluates and manages employee compensation in its labor negotiation, as well as overall budget

[^13]planning, without guidance on what factors are necessary to consider when developing employee compensation cost estimates, USPS risks making ill-informed decisions about whether to maintain, or make additional, changes to compensation.

## USPS Did Not Factor Other Costs into Its Savings Estimates

Based on interviews with USPS and postal employee union officials, as well as recent research by the USPS OIG, we identified additional costs that USPS did not factor into its cost savings estimates related to lowering employee pay and benefits. Specifically, USPS did not include the impact of the changes on recruitment and turnover of non-career employees in its cost saving estimates, both of which could have a significant impact on the overall level of savings.

## Recruitment Costs

Both USPS management and postal union representatives discussed the impact of lower pay on recruitment of non-career employees. Officials from two unions told us USPS is having a harder time recruiting and retaining some non-career employees, especially minorities and veterans because of the lower pay. In July 2019, USPS OIG reported that a post office in Denver had constant challenges filling letter carrier vacancies due in part to USPS's inability to offer competitive compensation. ${ }^{41}$ The report noted that a high number of vacancies affected carriers' ability to complete their routes on time, contributing to excess overtime and penalty overtime. USPS officials stated that with very few exceptions USPS has had little trouble attracting applicants to non-career positions. One example of an exception USPS officials provided was that in fiscal year 2018 USPS increased pay for non-career seasonal holiday workers to make it more competitive. USPS and postal union officials also told us that USPS had trouble specifically hiring truck drivers at the non-career pay scale. In addition to lower pay compared to the private sector, a high demand for drivers and low unemployment rates across the industry has

[^14]made it challenging for USPS to find enough qualified drivers. ${ }^{42}$ In addition to the lower wages, USPS and postal union officials stated that the unpredictable non-career employee work schedules, as well as low unemployment rates, have created additional challenges for recruiting qualified non-career employees. In contrast, USPS officials told us that implementing a lower pay rate for new career employees has not affected recruitment because employees are generally recruited from the noncareer employee pool, so these employees get an increase in compensation from their current position.

## Turnover Costs

USPS and postal stakeholders also raised concerns about the effect of lower pay on retaining non-career employees and the associated costs. USPS officials told us they expected the turnover rate among non-career employees to increase with the reduction in starting pay, but stated that recent turnover was higher than expected. ${ }^{43}$ According to USPS, the average monthly turnover rate for non-career employees has decreased from 3.57 percent in fiscal year 2016 to 3.08 percent in fiscal year 2017 and 3.02 percent in fiscal year 2018.44 USPS officials told us that USPS strives to keep the turnover rate as low as possible and that overall, postal employees voluntarily leave their jobs at a lower rate than in the private sector. According to two postal union estimates, it costs USPS about $\$ 4,000$ to $\$ 7,000$ to hire and train new employees. USPS OIG has reported that turnover costs USPS about $\$ 95.1$ million in fiscal year 2015, with an additional $\$ 23.1$ million in fiscal year 2016 and could be $\$ 29.8$ million in fiscal year $2017 .{ }^{45}$

[^15]According to USPS officials, the lower pay rate for new career employees has not had a significant impact on employee turnover. New career employees were converted from the pool of non-career employees, who had a lower pay rate than the new career employees, thus getting an equivalent of a pay raise and more benefits. However, USPS provided us with its analysis showing that the turnover rate for career employees with a lower pay rate (average of 4.21 percent per month) was higher than for career employees with a higher pay rate (average of 0.36 percent per month) in fiscal year 2018.

According to postal union officials and USPS OIG, decreases in pay and lack of work schedule flexibility have resulted in some negative effects on morale that increased turnover of non-career employees. Union officials told us that some managers have abused the flexibility of non-career employees, such as requiring them to work many consecutive days. In addition, non-career employees do not have regular work schedules and can be laid off for lack of work. Officials at one union told us that noncareer employees would prefer being hired as career employees, but have to start as non-career employees before being converted to a career position, and getting such a conversion can take from one to seven years. USPS OIG reported that in exit surveys, non-career employees stated that the lack of schedule flexibility, low pay, and lack of benefits are among the most cited reasons for leaving their job. ${ }^{46}$ The report also stated that managers realized cost benefits by using non-career employees to provide coverage for vacation days, sick days, and unscheduled leave for career employees because their hourly rates are less than those of their career counterparts. Union officials also told us that some non-career employees do not receive the necessary training but are expected to perform their jobs correctly from the start. They also said that these new employees are less experienced and are more likely to make mistakes. In addition, they said that managers become upset that new employees cannot do their jobs correctly from the start, which leads to morale issues among employees.

USPS officials told us that when they implemented the compensation changes discussed above, they expected higher rates of employee turnover, especially among non-career employees. USPS officials told us that they are developing an assessment of the cost of turnover and the preliminary results have not been validated. Specifically, USPS officials

[^16]also told us that they have not yet determined how to accurately apply the turnover estimates to the population of employees who leave because some turnover is necessary and preferable. For example, there are seasonal needs for increases in labor hours, such as major holidays or in some vacation areas, and when these employees exit, it is often because the season ends and their employment is not needed. In contrast, other employees leave USPS voluntarily for higher paid, or less difficult, work elsewhere. USPS officials told us they recently began to develop estimates of employee turnover costs, estimates that include costs such as training, background checks, and drug screenings for new employees, and the estimates are preliminary.

> With Additional Authority to Manage Employee Compensation, USPS Could Further Reduce Costs, but Implementation Poses Challenges

## Reforms Related to Employee Compensation Are Likely Necessary to Address USPS's Long-term Sustainability

We have reported that legislative reform and additional cost-cutting are needed for USPS to achieve sustainable financial viability. ${ }^{47}$ As noted above, compensation costs are about three-quarters of USPS's annual expenditures and many aspects of how USPS compensates its employees are defined in law. As a result, changes to the current statutory requirements for employee compensation are one way to alter USPS's operational costs.

A variety of reviews of USPS have also recommended legislative action to help address USPS's long-term sustainability. We examined four broad reviews of USPS and found 12 recommendations that could impact employee compensation costs by amending statutes governing three areas: employee work hours, benefits, and pay. The four reviews we analyzed are: (1) Task Force Review of 2018, (2) Presidential Commission Review of 2003, (3) USPS 2010 Comprehensive Statement,

[^17]and (4) PRC 2016 Analysis. ${ }^{48}$ The recommendations in these four reviews are not exhaustive of all possible statutory changes that could impact employee compensation costs. ${ }^{49}$ The recommendations we reviewed also do not include changes to the fundamental business model of USPS, such as privatization, or a return to annual appropriations to finance its operations. ${ }^{50}$ We are also not recommending or endorsing the adoption of any of these recommendations, in part, because our cost estimates and limitations discussed below are based on broad policy options and do not take into account many of the specific factors that would need to be determined when implementing any of these options. This information is meant to describe the potential for savings from increasing flexibility related to work hours, benefits, and pay, as well as highlight some potential challenges of implementing those changes.

## Changes to Delivery Requirements Could Have Significant Cost Savings, If USPS Can Overcome Implementation Challenges and Decrease Overall Work Hours

A major driver of USPS's operating costs is delivering mail to nearly every mailing address, regardless of volume, six days per week. ${ }^{51}$ USPS's mission to serve, as nearly as practicable, the entire population of the United States, ${ }^{52}$ requires a significant, continual use of employee work hours. This is particularly true of the mail carriers who visit addresses each delivery day. Based on USPS payroll data, we found mail carrier

[^18]compensation in fiscal year 2018 was approximately $\$ 24.4$ billion, or about 50 percent of compensation costs for current employees.

Two of the twelve recommendations we reviewed suggest legislative changes to increase USPS's authority to determine delivery frequency, which would enable USPS to manage work hours more closely to volume. Specifically, the 2018 Task Force report recommended that USPS be given more flexibility to determine delivery frequency. USPS recommended in its 2010 Comprehensive Statement that Congress change the current delivery requirement from six days a week to five days a week.

## Potential Savings

Changing the frequency of USPS's deliveries could reduce its employee compensation costs significantly by allowing USPS to reduce work hours, particularly for carriers. Reducing delivery by one day could potentially reduce carrier work hours by a maximum of one sixth-or 16.7 percent. ${ }^{53}$ Our analysis shows that, based on fiscal year 2018 payroll data, if USPS decreased the current mail carrier hours by one sixth, it could save up to $\$ 2.6$ billion in compensation costs. ${ }^{54}$ This estimate assumes that USPS would reduce work hours from both the career and non-career carrier employee pools. If USPS reduced mail carrier hours from only the noncareer carrier workforce by 16.7 percent, it could save approximately $\$ 1.96$ billion. ${ }^{55}$

USPS officials agreed that USPS could potentially save work hours and associated costs due to a reduction in delivery frequency. However, they noted that, even if USPS went to 5-day delivery, it would still deliver packages seven days a week. Under that scenario, USPS has reported estimated savings of $\$ 1.4$ to $\$ 1.8$ billion a year.

The 2018 Task Force report recommended that USPS be given increased delivery flexibility by allowing USPS to determine delivery frequency.

[^19]Additional flexibility could result in a range of alternatives. For example, USPS could deliver to addresses every other day (three or four days a week) with optional dynamic routing as necessary up to an additional two days a week, and could potentially save more than 16 percent. USPS has begun to introduce technology and other options within its package handling that might alleviate undue burden caused by such a large decrease in service. For example, USPS now offers informed delivery, which is an email that is sent to mail recipients with pictures of their mail that is to be delivered, and enables people to have better insight into what to expect and when. In 2018, we reported that USPS was piloting keyless parcel lockers where customers could independently pick up their packages; it is possible similar types of backups could be provided for letters. ${ }^{56}$

Regardless of the delivery frequency, reducing mail carrier hours is more likely to come through a decrease in non-career employee hours. USPS reports that non-career employees are temporary in nature and can be laid off; therefore, it would be easier to implement hour reductions in this pool of employees. In contrast, if USPS were to reduce hours for career employees, savings would accrue more slowly over time, because career employees' are usually covered by no lay-off clauses in their CBAs, and with low turnover rates, USPS would need employees to leave voluntarily. A large portion of the career mail carriers, however, are aging, and it is possible that many will leave through retirement in the next five years. Specifically, in analyzing the USPS payroll data, we found that, in fiscal year 2018, approximately 16 percent of career city carriers are currently 60 or older, with an additional 38 percent between the ages of 50 and 59. Approximately 21 percent of career rural carriers are 60 or older and 38 percent are between the ages of 50 and 59 .

## Implementation Challenges

Based on our analysis of the recommendations, we identified three potential challenges to reducing delivery frequency: (1) management of work hours (2) redistribution of mail volume; and (3) meeting delivery needs.

[^20]Management of work hours: Realizing cost savings from a decrease in delivery frequency largely depends on USPS being able to reduce work hours accordingly. Prior USPS OIG and GAO reports have found that in two previous efforts USPS has not successfully decreased labor hours commensurate with a decreased level of service.

- Beginning in January 2015, USPS revised its First-Class Mail service standards, eliminating single-piece overnight service and shifting some mail from a 2-day to a 3-day service standard. According to USPS officials, these revisions were intended to, among other things, allow USPS to process mail on fewer machines and decrease the need for overnight work hours, which are paid at a higher rate than day time hours. USPS OIG, in its review of this service change, found that mail processing overtime costs increased by $\$ 68.4$ million, or 9 percent, rather than decreasing. ${ }^{57}$ USPS OIG conducted a follow-up study that found USPS was not effectively managing mail processing overtime in fiscal year 2018. ${ }^{58}$ USPS management's official response partially agreed with the recommended steps USPS OIG outlined to better manage overtime.
- In 2012, USPS implemented Post Office Structure Plan (POStPlan), which was intended to reduce work hours at some retail facilities, which USPS estimated would result in about $\$ 500$ million in annual cost savings. In 2016, we found that this effort likely resulted in less savings than USPS had estimated. ${ }^{59}$ According to USPS officials, this is, in part, because USPS had to revise its plan after a union grievance and arbitrator award required it to change the way it was staffing post offices. We also reported concerns with USPS's methodology for determining work hour and compensation savings. Overall, while USPS likely achieved an overall reduction in work hours at thousands of post offices, we found the accuracy of the saving may have been limited by errors we identified. For example, among other issues, we found that USPS had not included the increase in workload, and associated costs, from increasing the number of remotely managed post offices.
Distribution of volume: Any reduction of delivery frequency would require USPS to re-distribute its mail volume to the remaining delivery

[^21]days. In 2010, USPS recommended eliminating Saturday delivery and redistributing the mail volume from Saturday to the delivery days Monday through Friday, though USPS continues to deliver mail on Saturdays. USPS stated that the additional volume in the remaining delivery days would result in higher mail carrier productivity. However, we reported in 2011 that USPS's ability to efficiently absorb the cost of transferred workload from Saturday to weekdays is a key factor in determining potential cost savings. ${ }^{60}$

Meeting Delivery Needs: Another challenge to reducing delivery frequency is that it could reduce the demand and value of USPS products if customers are not getting their delivery needs met. Some stakeholders have raised concerns that a reduction in mail delivery frequency will decrease demand from mailers because products may not reach households in a timely manner. Other stakeholders, however, have stated that reducing delivery frequency is worth pursuing as long as it results in significant cost savings.

## Removing Requirement to Offer Federal Retirement Benefits Could Result in Significant Long-term Savings, Depending on the Replacement Benefits

Federal law requires USPS to provide certain benefits to its employees, which cost USPS billions each year to satisfy. Further, as noted above, USPS is mandated to pre-fund its retiree health benefits, which USPS has failed to do in recent years. Four of the twelve recommendations we reviewed suggest legislative changes to the funding mechanism and requirements for USPS retiree health benefits. In addition, in 2018, we issued a report with options for postal retiree health benefits and noted that it is up to Congress to consider the merits of different approaches and determine the most appropriate action to take. ${ }^{61}$

Here, we focus on the other three of the twelve recommendations we reviewed that suggest legislative changes to other USPS retiree benefits. USPS's 2010 Comprehensive Statement and the 2003 Presidential

[^22]Commission Report both have broad recommendations suggesting that USPS should be allowed to make changes to its retirement benefits package. USPS pays toward the following retirement benefits for current employees: contribution to retirement pension (FERS or CSRS) and contributions to the TSP, Medicare, and Social Security. For the purposes of estimating the impact of decreases in retirement contributions, we estimated savings based on decreases to the cost of pensions (CSRS and FERS) and TSP, and assume no changes to Medicare and Social Security costs. ${ }^{62}$

## Potential Savings

Decreases to Retirement Contributions: If USPS was able to decrease its cost of retirement payments made on behalf of current employees by 1 percent, 5 percent, and 10 percent, then we estimate based on fiscal year 2018 payroll data, the potential savings would be about $\$ 35$ million, $\$ 175$ million, and $\$ 350$ million respectively. Implementation of such decreases could include USPS offering lower cost benefits by increasing the employee contribution or lowering the promised benefits.

The 2018 Task Force report recommended reform for postal employees under FERS to move away from a "defined benefit" system-where the payment received in retirement is a specified amount-towards a defined contribution system-where the contribution into the system is a specified amount. There are many different ways to implement this kind of change, and we have not outlined potentially restructuring options. However, CBO has calculated potential savings of increasing civilian employees' contribution for FERS and estimates it would save about $\$ 20$ billion over five years. ${ }^{63}$

Decreases to Healthcare Contributions: If USPS was able to decrease its cost of health care payments for current employee coverage by 1 percent, 5 percent, and 10 percent, we estimate, based on fiscal year 2018 payroll data, the potential savings would be about $\$ 45$ million, $\$ 224$ million, and $\$ 449$ million, respectively. If USPS no longer had to offer federal health care coverage for current employees, it is possible that

[^23]USPS could substitute a less costly alternative. In 2013, we conducted a review of a specific USPS proposal for restructuring its health care benefits, and reported that the change could result in cost savings, but that other issues should be considered, such as exposure of health care funding if investments are made outside of Treasury securities. ${ }^{64}$

## Implementation Challenges

Based on our analysis of the recommendations, we identified three challenges to achieving cost savings from changes to employee benefits: (1) union agreement; (2) cost savings timeline; and (3) impact on federal benefit programs.

Union Agreement: According to USPS officials, if there was a legislative change that allowed for USPS to alter the current retirement benefits, USPS would need to negotiate future benefits offerings with the unions. Savings, therefore, depend on the ability of USPS and the unions to develop alternative options that meet the needs of the current workforce, but also cost less than the current options.

Implementation Timeline: Cost savings are not likely to be realized in the short-term because changes likely will not apply to current career employees. In the past, when Congress has made changes to benefitsas when Congress increased the required retirement contribution levels for federal employees under FERS, which also applied to USPS employees-it only applied to employees hired after the change was implemented. Therefore, savings would only occur as new employees replace current employees. This is also consistent with the lower pay for new career workers that USPS negotiated with the unions we discussed previously-it only applied to new career employees.

Federal Benefit Impact: The Presidential Commission Review of 2003 stated that USPS should work with the Department of the Treasury and OPM to determine the impact that separating USPS's pension and retiree health care programs would have on the existing federal systems. With over 600,000 USPS employees, the Presidential Commission review stated that it had concerns about the impact of removing USPS

[^24]employees might have on the OPM administered fund, which also pays out retirement benefits for other federal employees.

## Legislative Changes to Collective Bargaining Rights Could Result in Decreased Employee Pay and Costs, But Implementation would Be Difficult

Two of the twelve recommendations we reviewed suggest legislative changes to collective bargaining rights, which could result in decreased pay rates. The 2018 Task Force report recommended the elimination of the right of USPS employees to bargain over compensation and that employee pay rates be frozen in the short term, which would lead to a slower rate in growth over time.

## Potential Savings

If USPS was provided authority to determine pay rates for its employees without going through collective bargaining, it could reduce employee compensation costs through pay cuts. We estimated the potential annual cost savings associated with USPS implementing cuts for all current employee pay by 1 percent, 5 percent, and 10 percent across all current employees based on fiscal year 2018 payroll data. We find the potential savings to be about $\$ 321$ million, $\$ 1.6$ billion, and $\$ 3.2$ billion, respectively.

## Implementation Challenges

Based on our analysis of the recommendations, we identified three challenges to obtaining savings through reductions in pay: (1) difficulty of cutting current workers' pay; (2) trade-offs of lower wage rates; and (3) history of collectively bargaining pay.

Difficult to cut pay: As discussed previously, pay has been the area in which USPS has made progress in reducing employee compensation costs in the recent past. However, as discussed, the savings mostly comes from implementing lower pay rates for new employees. It is difficult to implement changes that decrease the current pay of workers below what they have previously received. In the private sector, a company can restructure and turnover a portion of the workforce as an effort to decrease compensation. USPS cannot easily turnover and restructure its workforce because of the no layoff clauses.

Trade-off effects: Pay cuts to current employees could result in a variety of negative consequences for USPS. According to literature on labor economics, workers who face pay cuts may exhibit behavioral responses including adjusting worked hours, adjusting level of effort for each hour of work, or dropping out from the workforce altogether. ${ }^{65}$

Workers may adjust the hours of work from changes in pay for two reasons. First, a pay cut may reduce the incentive for employees to work because each hour of work generates less money than it did before, holding income constant. ${ }^{66}$ Second, a pay cut that reduces the income of the worker may induce an employee to work more hours because the employee feels poorer. ${ }^{67}$

Changes in pay rates may also change workers' morale, and consequently the effort workers exert during worked hours. Economic literature has found that wage cuts can impact the effort workers provide, and that productivity may fall. For example, workers may exert less effort in an attempt to punish the employer for the wage cut, or they may be less worried about job loss because the cost of losing a job is lower after a wage cut. ${ }^{68}$ These consequences may be of particular concern as USPS has reported that productivity has stagnated in recent years, and USPS is currently not meeting its standards for on-time delivery service. ${ }^{69}$

Finally, pay cuts may also induce some individuals to leave the workforce altogether. Studies have found that the share of the population that is

[^25]working may be influenced by pay rates. ${ }^{70}$ As we discussed previously, USPS has already experienced some difficulty in recruitment and retention as a result of the lower pay for new employees.

History of Collective Bargaining: Elimination of collective bargaining rights-which could facilitate changes to USPS employee pay-would be a major change in management-labor relations at USPS, with possible negative effects on employee commitment and productivity. Unions representing USPS employees have been bargaining over pay since the 1970s. Prior to that time, USPS employees had major strikes over low compensation levels. USPS has a high approval rating from the public, which it attributes, in part, to its employees feeling a sense of duty related to their work. ${ }^{71}$ All of the union officials we spoke with said that they would not support the removal of collective bargaining rights over pay. One union official stated that both parties are better served through working as a team to meet the needs of postal customers at reasonable cost.

## Conclusions

USPS has made changes to employee compensation and saved billions through these efforts. USPS, however, has not achieved financial sustainability. USPS overestimated its cost savings from the employee compensation changes because it did not include significant factors such as tenure and mix of work hours when developing its estimates. In addition, USPS did not weigh the costs of tradeoffs, such as an increase in turnover, which likely further limits cost savings. Cost estimates that include the significant factors driving compensation costs would help USPS make better informed decisions about how to use, and potentially change, its workforce. Quality estimates are also important for USPS to make a business case for additional employee compensation changes, which it does regularly as it negotiates employee contracts and will be doing as it develops future strategic plans. Additionally, as Congress considers USPS reform legislation, comprehensive cost estimates will improve policymakers' ability to fully assess savings, as well as costs

[^26]associated with any efforts and associated implications for managing USPS compensation.

## Recommendation for Executive Action

We are making the following recommendation to USPS:
The Postmaster General should direct executive leaders to develop guidance for cost savings estimates related to employee compensation specifying that analysis used to calculate estimates should, to the extent possible, include significant factors, such as work hours, tenure, and turnover. (Recommendation 1)

## Agency Comments and Our Evaluation

We provided a draft of this report to USPS for review and comment. USPS provided written comments that are summarized below and reprinted in appendix III. In its written comments, USPS agreed that quality decision-making rests upon quantitative analysis using the best available data. In that respect, it stated that it accepts the recommendation to more formally articulate internal guidance for developing cost savings estimates to ensure appropriate factors-such as work hours, tenure, and turnover-are taken into account when evaluating potential business outcomes. USPS disagreed, however, that the lack of formal guidance adversely affected USPS's ability to develop appropriate cost estimates. As discussed in detail in the report, we found that USPS's analysis potentially overestimates savings because it did not take certain factors into account.

Specifically, in its comments, USPS identified issues related to our findings about their cost-estimation analysis. For example, our analysis, which relied on USPS payroll data, showed that non-career employees have generally worked more overtime hours when compared to career employees. Although USPS did not dispute this finding, it said it believed our analysis reflected erroneous assumptions about the source and administration of overtime because we described some possible reasons for the overtime patterns we saw based on our analysis and other research. We did not intend to determine the full cause of overtime hours and how they are distributed among employees, rather, our analysis sought to identify important factors in employee compensation costs, and found that the mix of work hours was important and varied across types of
employees. We also found that USPS estimates had not taken differences in the mix of work hours into account and in assuming that career and non-career employees work similar types of hours, USPS potentially overstates the savings from non-career employees. USPS agreed to take work hours into consideration in future cost estimates and this may provide a more accurate assessment of costs, and better opportunity to target future efforts to manage workforce costs.

Regarding our analysis related to recruitment and retention issues among non-career employees, USPS stated that it disagreed with our statements regarding wages for non-career workers and their purported impact on recruitment of certain employees. It said that USPS has little trouble attracting applicants to non-career positions, and we made changes to the report to reflect this view. Regarding turnover, USPS acknowledged that turnover among certain groups will be higher and they account for these turnover rates in their analysis. However, we found that USPS did not fully account for costs associated with these turnover rates in the analysis they provided us. With a higher than expected turnover rate among non-career employees, which have become a significantly larger percentage of its workforce, USPS should be accounting for the additional costs of on-boarding of employees, like recruitment and training. USPS stated that, in response to the recommendation, it will incorporate the cost of turnover into future analysis.

We are sending copies of this report to the appropriate congressional committees, the Postmaster General, Chairman of PRC, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or rectanusl@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff making key contributions to this report are listed in appendix IV.


Lori Rectanus, Director Physical Infrastructure Issues

## Appendix I: GAO Analysis of USPS National Payroll Data, Fiscal Years 2009 through 2018

To support all parts of this review, we requested and received U.S. Postal Service (USPS) national payroll data for fiscal years 2009 through 2018. We specifically requested individual level payroll data for all ten years; however, individual employee level data before fiscal year 2016 were not readily available. For fiscal years 2009 through 2015, we received aggregate data at the post office level, and for fiscal years 2016 through 2018, we received the data at the individual level. For both sets of data, USPS provided point-in-time data at the end of the fiscal year.

## Data Reliability

We conducted a data reliability assessment and found that, for describing general trends, the fiscal years 2009 through 2015 payroll data provided at the post office level was sufficient for our purposes. However, for evaluating policy changes to employee compensation, only fiscal years 2016 through 2018 payroll data provided at the individual level were appropriate. To assess the reliability of the payroll data for fiscal years 2009 through 2018, we reviewed technical documentation for the dataset, related publications, and information on USPS and Bureau of Labor Statistics websites about employee compensation. We performed several analyses in order to validate that these data were appropriate to use for the purposes of our work. We spoke with USPS payroll data specialists to discuss known limitations and issues with the data. USPS officials informed us that they do not keep a data dictionary for the entire payroll system because it is a conglomerate data system with over 40 subdatabases. However, we were able to obtain documentation on the variables relevant to our analysis to understand the definitions and limitations of those variables. We found the individual level payroll data provided for fiscal years 2016 through 2018 reliable for the purpose of examining policy changes to manage employee compensation, and to
determine the effect of potential legislative changes to USPS employee compensation.

To describe recent trends in USPS employee compensation, we analyzed high-level trends in the payroll data for fiscal years 2009 through 2018. We compared our analysis of USPS national payroll data with USPS annual reports to Congress and financial forms filed as a result of Securities and Exchange Commission requirements, from fiscal years 2009 through 2018. ${ }^{1}$ While we found that the data do not match exactly, we found that our estimates are close to reported USPS numbers for each year, (see table 2). We had several discussions with USPS payroll data specialists to clarify how to use the payroll data and ensure that the payroll data were reliable for reporting on changes in hours and overall compensation.

Table 2: Comparison of USPS Employees, Work Hours and Compensation for Fiscal Years 2009 through 2018

| Category | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total Employees | 712,082 | 671,687 | 645,950 | 629,028 | 617,714 | 617,877 | 621,831 | 639,789 | 644,124 | 634,357 |
| Total Work <br> Hours (in billion) <br> From USPS |  |  |  |  |  |  |  |  |  |  |
| Annual Report | 1.26 | 1.18 | 1.15 | 1.12 | 1.11 | 1.11 | 1.13 | 1.16 | 1.16 |  |
| Total work <br> Hours (in billion) <br> Calculated from <br> USPS payroll <br> data |  |  |  |  |  |  |  |  |  |  |
| Total <br> Compensation <br> (in billion) | 1.23 | 1.16 | 1.13 | 1.11 | 1.10 | 1.10 | 1.11 | 1.19 | 1.15 |  |
| From USPS <br> Annual Report | 50.88 | 48.91 | 48.31 | 47.69 | 46.71 | 46.00 | 47.28 | 48.44 | 49.11 |  |
| Total <br> compensation <br> (in billion) <br> Calculated from <br> USPS payroll |  |  |  |  |  |  |  |  |  |  |

[^27]| Category | 2009 | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total <br> Compensation <br> Adjusted for <br> Inflation (in <br> billion) |  |  |  |  |  |  |  |  |  |  |
| Calculated from |  |  |  |  |  |  |  |  |  |  |

Source: GAO analysis of USPS Annual Report to Congress, Form 10-K, and National Payroll data. | GAO-20-140

## Data Analysis

To examine the results of recent actions taken by USPS to manage employee compensation costs, we identified three major changes implemented through collective bargaining agreements aimed a decreasing the cost of employee compensation. To evaluate the impact of these changes, we analyzed USPS payroll data. Using these data we developed models to determine trends in compensation based on worker characteristics, including pay rate, participation in various benefits, and career or non-career status. We analyzed data to determine the costs savings accrued by USPS from having undertaken changes to compensation in recent years. We also analyzed the data to determine the effect of potential legislative changes to USPS employee compensation.

## Data Source

We received USPS National Payroll data from fiscal years 2016 through 2018 for individual employees with a detailed summary of a worker's pay, benefits, and hours worked. ${ }^{2}$

Pay data include pay for straight time, overtime, and other time with pay differentials (Sundays, nights, holidays, and Christmas), and leave, including annual, sick, holiday, military and other types of leave. See table 3 for a summary description of the types of pay and hours. For each pay category (e.g., straight time, overtime), USPS provided information on the number of hours worked by each worker in a given fiscal year.

[^28]Table 3: Summary of Variables Related to Pay and Hours for USPS Employees
\(\left.$$
\begin{array}{ll}\hline \text { Variable } & \text { Description } \\
\hline \text { Straight Time } & \begin{array}{l}\text { Straight Time pay is the total earnings of an employee for hours of work or authorized paid leave in a service } \\
\text { week excluding overtime, Executive Administration Schedule additional pay, and other premium pay. }\end{array} \\
\hline \text { Overtime Work } & \begin{array}{l}\text { Overtime Work is paid at one and one-half times the basic hourly rate for actual work hours in excess of } 8 \\
\text { paid hours in a day, 40 paid hours in a service week or, if a full-time bargaining unit employee, on a } \\
\text { nonscheduled day. }\end{array} \\
\hline \text { Penalty Overtime } & \begin{array}{l}\text { Penalty Overtime is compensation paid to eligible personnel at two times the employee's basic straight hour } \\
\text { rate for hours described in applicable labor agreements. }\end{array} \\
\hline \text { Holiday Work } & \begin{array}{l}\text { Holiday Work is paid to eligible employees for the hours worked on a recognized holiday or for the hours } \\
\text { worked on the employee's designated holiday, except Christmas. } \\
\text { Eligible employees are paid (in addition to any pay for holiday leave to which they may be entitled) their } \\
\text { basic hourly straight time rate for each hour worked up to 8 hours. }\end{array} \\
\hline \text { Night Work } & \begin{array}{l}\text { Night Work is a premium pay to eligible employees for all work and paid training or travel time performed } \\
\text { between 6:00 pm and 6:00 am. }\end{array} \\
\hline \text { Sunday Work } & \begin{array}{l}\text { Sunday Work is a premium pay for all work and paid training or travel time performed during a scheduled } \\
\text { tour that includes any part of a Sunday. }\end{array} \\
\hline \text { Holiday Leave } & \begin{array}{l}\text { Employees receive Holiday Leave pay for the number of hours equal to their regular daily work schedule, } \\
\text { not to exceed 8 hours. Holiday Leave pay is received instead of other paid leave to which employees might } \\
\text { otherwise be entitled on their holiday. }\end{array} \\
\hline \text { Christmas Work } & \begin{array}{l}\text { Christmas Work is paid to eligible employees for the hours worked on Christmas day or the day designated } \\
\text { as the employee's Christmas holiday. } \\
\text { Eligible employees are paid at 50 percent of their basic Straight Hour rate, in addition to authorized holiday } \\
\text { leave pay and Holiday Work pay. Work performed beyond 8 hours is treated as overtime for bargaining unit } \\
\text { employees. The Christmas Work premium is not paid for overtime hours. }\end{array}
$$ <br>

\hline Annual Leave is provided to employees for rest, for recreation, and for personal and emergency purposes.\end{array}\right]\)| Aick Leave insures employees against loss of pay if they are incapacitated for the performance of duties |
| :--- | :--- |
| Aecause of illness, injury, pregnancy and confinement, and medical (including dental or optical) examination |
| or treatment. |

${ }^{\text {a}}$ FECA compensates federal employees for workplace injuries. 39 U.S.C. § 1005(c).
Benefits include health insurance payments, pension contributions (FERS, CSRS and Dual CSRS with Social Security) and Thrift Savings Plan (TSP), life insurance, Social Security, and Medicare (see table 4).

Table 4: Summary of Variables Related to Benefits Hours for USPS Employees Included in GAO's Analysis of Total Compensation

| Variable | Description |
| :--- | :--- |
| Health Insurance | USPS contribution to health insurance premium for employees. The Postal Service participates in the <br> Federal Employees Health Benefits (FEHB) Program. <br> We did not include required payments to fund retiree health benefits, even though these required payments <br> include an amount for benefits accruing for current employees. |
| Life Insurance | USPS contribution to life insurance. The Postal Service offers coverage through the Federal Employees' <br> Group Life Insurance (FEGLI) Program. The cost of Basic coverage is fully paid by the Postal Service. |
| Defined Benefit USPS contributions to the federal defined benefit pension program. The Postal Service participates in the <br> federal retirement program, which provides a defined benefit (i.e., FERS and CSRS), as well as disability <br> coverage. Eligibility is determined by your age and number of years of creditable service. <br> We only included the contributions for "normal cost" (the cost of benefits accruing for current employees), <br> not amortization payments designed to fund unfunded liabilities. <br> USPS contribution to Thrift Savings Plan (TSP)a for eligible employees.  <br> TSP Social Security tax paid by USPS for employee. Newly hired postal employees are covered under Social <br> Security and Medicare. <br> Medicare Medicare tax paid by USPS for employee. Newly hired postal employees are covered under Social Security <br> and Medicare. <br> The sum of health insurance, life insurance, retirement normal cost, TSP, social security and Medicare taxes  <br> and leave hours.  |  |
| The sum of dollars from worked hours, and benefits. |  |

Source: GAO summary of USPS National Payroll data. | GAO-20-140
${ }^{\text {a }}$ Career postal employees are eligible to make contributions to TSP, which is similar to 401(k) retirement savings plans offered by private sector employers, on a tax-deferred basis, and may receive automatic and matching contributions (up to 5 percent of pay) from the Postal Service.
The data contained detailed information on the worker's earnings, benefits, and hours of work and some characteristics, including age, and the worker's start and separation dates, if the worker has separated from the USPS. ${ }^{3}$

We examined postal employees classified as career or non-career within each of the four main crafts based on the type of work performed. We separated employees into their respective craft and career or non-career status based on their Designation Activity Code. ${ }^{4}$ We used these

[^29]individual-level data to estimate total compensation costs based on observable characteristics of the workers.

## GAO Analyses

This section discusses the quantitative analysis methods we used to determine the results of recent actions taken by USPS to manage employee compensation.

Table 5 presents the numbers of employees in the postal workforce for fiscal years 2016 through 2018, within four crafts - city carriers, rural carriers, mail handlers, and clerks - and other employees not in the four crafts.

| Category | 2016 (career employee) | 2017 (career employee | 2018 (career employee) | 2016 (noncareer employee) | 2017 (noncareer employee) | 2018 (noncareer employee) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| City Carriers | 168,965 | 173,087 | 178,974 | 86,803 | 79,207 | 99,036 |
| Clerks | 131,934 | 143,224 | 130,413 | 54,849 | 65,831 | 51,137 |
| Mail Handlers | 38,642 | 40,259 | 39,718 | 22,402 | 21,480 | 19,020 |
| Other Employees | 99,633 | 105,807 | 104,028 | 12,700 | 5,927 | 5,263 |
| Rural Carriers | 73,273 | 74,515 | 76,938 | 73,763 | 81,268 | 84,936 |
| All Postal Employees ${ }^{\text {a }}$ | 512,447 | 536,892 | 530,071 | 250,517 | 253,713 | 259,392 |

Source: GAO analysis of National Payroll data. | GAO- 20-140
${ }^{\text {a }}$ Represents the number of postal employees at the end of each fiscal year and is not a sum of all postal employees across the fiscal years. There were 4,233 workers that we could not categorize as career or non-career in fiscal years 2016 through 2018.
Table 6 presents average pay, average benefits, average compensation, and the median age for postal workers by craft and career status.

Table 6: Hourly Pay and Benefits Rates by Type of USPS Employee in Fiscal Year 2018

| Category | Subcategory | Average Pay ${ }^{\text {a }}$ | Average Benefit ${ }^{\text {b }}$ | Average Total <br> Compensation $^{\mathbf{c}}$ | Median Age |
| :--- | :--- | ---: | ---: | ---: | ---: |
| All Postal Employees | na | $\$ 26.21$ | $\$ 7.49$ | $\$ 33.70$ | 48 |
| Career Employees | City Carrier | $\$ 29.58$ | $\$ 10.21$ | $\$ 39.79$ | 52 |
| Career Employees | Rural Carrier | $\$ 27.33$ | $\$ 10.05$ | $\$ 37.38$ | 53 |
| Career Employees | Clerk | $\$ 28.60$ | $\$ 9.63$ | $\$ 38.23$ | 55 |
| Career Employees | Mail Handler | $\$ 28.86$ | $\$ 9.34$ | $\$ 38.20$ | 53 |
| All Career Employees | na | $\$ 29.76$ | $\$ 10.22$ | $\$ 39.98$ | 54 |
| Non-career Employees | City Carrier | $\$ 19.19$ | $\$ 1.73$ | $\$ 20.92$ | 33 |
| Non-career Employees | Rural Carrier | $\$ 18.61$ | $\$ 1.42$ | $\$ 20.04$ | 37 |
| Non-career Employees | Clerk | $\$ 18.23$ | $\$ 1.85$ | $\$ 20.07$ | 34 |
| Non-career Employees | Mail Handler | $\$ 16.74$ | $\$ 1.43$ | $\$ 18.17$ | 31 |
| All Non-career na $\$ 18.55$ | $\$ 1.62$ | $\$ 20.17$ | 34 |  |  |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
${ }^{\text {a }}$ We defined pay to include pay for hours related to regular work hours, annual leave hours, and premium hours, such as holiday hours, Sunday hours, etc.
${ }^{\text {b }}$ We defined benefits to include health, life, retirement, Thrift Savings Plan, social security and Medicare. It does not include payments for benefits to retired employees.
${ }^{\circ}$ We defined total compensation as pay and benefit for an employee.

## Lowering Pay for New Career Employees

We examined the mix of straight and premium hours between the higher pay (Tier-1) and new career employees hired at the lower starting pay (Tier-2). We used USPS individual-level payroll data for fiscal years 2016 through 2018. Table 7 summarizes the effective dates for the lower starting pay for new career employees by craft.

Table 7: Effective Date for Lower Starting Pay for New Career Employees

| Postal Employee Union | Employee Craft | Effective Date for Lower Starting <br> Pay |
| :--- | :--- | :--- |
| National Association of Letter Carriers (NALC) | City carriers | January 12, 2013 |
| National Rural Letter Carriers' Association (NRLCA) | Rural carriers | November 21, 2010 |
| American Postal Workers Union (APWU) | Clerks | May 23, 2011 |
| National Postal Mail Handlers Union (NPMHU) | Mail Handlers | February 15, 2013 |

Source: GAO analysis of collective bargaining agreements between USPS and postal employee unions. | GAO-20-140
Table 8 summarizes differences in hours between these two groups among full-time equivalent employees. We examined several types of
work hours. Straight time hours include all reported straight time hours in a fiscal year. Overtime hours include overtime work, penalty overtime, holiday work, and Christmas hours. Premium hours include hours worked in night work and Sunday work hours. Our analysis does not adjust for characteristics that can affect hours such as age or tenure.

## Work Hours for Tier-1 and Tier-2 Career Employees

We found that Tier-2 employees worked a higher number of straight hours. Furthermore, carriers who are Tier-2 employees also worked a larger number of overtime hours. Among mail handlers, Tier-2 employees worked a higher number of night work and Sunday work hours (see table 8).

To the extent that Tier-2 employees work more overtime hours, and assuming a similar productivity between the two tiers of employees, USPS may be miscalculating the effect of the lower pay rate on costs.

Table 8: Differences in Hours Worked, for Tier-1 and Tier-2 Employees, Average for Fiscal Years 2016 through 2018

| Craft | Tier Designation | Straight Hours (work hours) | Overtime Hours (work hours) | Night and Sunday Hours (work hours) |
| :---: | :---: | :---: | :---: | :---: |
| City Carriers | Tier-1 | 1715.5 | 272.7 | 32.0 |
| City Carriers | Tier-2 | 1791.2 | 300.9 | 50.9 |
| Difference (City Carriers) | na | 75.7 | 28.2 | 18.9 |
| Clerks | Tier-1 | 1709.4 | 223.1 | 590.1 |
| Clerks | Tier-2 | 1786.8 | 201.7 | 566.6 |
| Difference (Clerks) | na | 77.4 | -21.4 | -23.6 |
| Mail Handlers | Tier-1 | 1677.8 | 349.7 | 1139.0 |
| Mail Handlers | Tier-2 | 1728.6 | 342.3 | 1562.8 |
| Difference (Mail Handlers) |  | 50.8 | -7.4 | 423.8 |
| Rural Carriers | Tier-1 | 1902.9 | 58.7 | 0.6 |
| Rural Carriers | Tier-2 | 1965.4 | 159.2 | 1.3 |
| Difference (Rural Carriers) | na | 62.5 | 100.5 | 0.7 |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140

## Increasing Non-career Employees

To analyze the results of hiring more non-career employees, we examined differences in hourly compensation (pay and benefits) between career and non-career postal employees, and estimated cost savings from moving to a workforce with more non-career employees. The analysis examined the entire workforce, within the four different crafts (i.e., city carrier, clerk, mail handlers, and rural carriers) and the remainder of the workforce excluding employee from the four crafts (termed as "other").

We examined hours, pay, benefits, and overall compensation between career and non-career employees in the following framework:

$$
y_{i c t}=\alpha+\beta_{1} \text { NonCareer }_{i}+\beta X_{i c t}+\gamma C_{i}+\delta F Y_{i}+\zeta_{i}+\varphi_{i}+\varepsilon_{i c t}(2)
$$

Equation (2) predicts work hours, hourly pay, benefits, and compensation as a function of individual characteristics. All models are estimated using Ordinary Least Squares (OLS).

## Outcome Variables

(1) We examined several types of work hours. Straight hours include all reported straight hours in a fiscal year. Overtime hours include overtime hours, penalty overtime, holiday work hours, and Christmas work hours. Premium hours include hours worked in night shift differential and Sunday premium. Total work hours include straight time, overtime, holiday hours, Christmas work, and penalty overtime. We do not include night shift differentials and Sunday work in the calculations for total worked hours as these hours are already captured under straight hours. We also exclude from work hours any leave.
(2) Per hour pay is defined as earnings for worked hours divided by total worked hours. Earnings for worked hours includes payments for straight time, overtime, holiday hours, Christmas work, penalty overtime, and premiums for night and Sunday work.
(3) Hourly benefits include USPS contribution to health insurance, life insurance, retirement, TSP, Social Security and Medicare, and dollars associated with leave (see table 4). These variables were
calculated by summing over all benefits and dividing by total work hours.
(4) We calculated hourly total compensation by summing over hourly wage compensation and benefits that USPS paid to employees. The value of total compensation is divided by total work hours which include total work hours.

## Control Variables

- The NonCareer variable 'NonCareerl' is a dummy taking the value of 1 for non-career employees and zero for career employees. We were able to generate this variable based on designation activity codes describing the employee's position. The parameter $\beta_{1}$ identifies how different (if at all) non-career employees' hours, pay, benefits and compensation are relative to career employees.
- To account for other variables that could be driving differences in pay, benefits and compensation between career and non-career employees, we included the variables described below in the estimation.
- Employee craft $\frac{C_{i} \text { b }}{}$ are a series of binary indicators for city carriers, clerks, mail handlers, rural carriers, and the other employees category. City carrier is the benchmark category. These indicators were excluded in the results by craft, but were included in results for the entire workforce.
- Finance unit binary indicators $\zeta_{i}$ ) (control for level difference in demand between finance units (usually post offices), but also implicitly account for level differences in local level unemployment rates during the period of our study.
- Age, and age squared capture differences in potential labor market experience and were included in $\left(X_{\text {ictt }}\right)$. We defined age in each fiscal year as fiscal year minus the year of birth for the employee.
- Tenure and tenure squared describe years of experience with USPS $\left(X_{\text {ict }}\right)$. We defined tenure as the difference between the
year a worker began working for the USPS and the fiscal year in the data.
- To account for time effects that could affect compensation and earnings we included year indicators for fiscal years 2016 through 2018
- The error term ${ }^{\varepsilon_{i c t}}$ captures differences in earnings and compensation that are not observed in our data.
- We adjusted earnings and compensation by the Consumer Price Index for Urban Wage and Clerical Workers (CPI-W), and present values in 2018 constant dollars.
- We cluster all errors at the finance unit level to allow for correlation in errors between those within the same finance unit.
- Indexes i, c, and t designate the individual (i), cohort of hire (c) and time ( t ).


## Sample Selection

Many non-career employees work a limited number of hours each year, because employees who work on short contracts may have different preferences about the number of work hours that they are willing to supply. Therefore, comparing the outcomes of those who work a limited number of hours to those who work on a full-time basis does not generate a valid comparison. We do not observe preferences for flexible workschedules in our data, and as a result, analysis comparing individuals with different work schedules would be subject to omitted variables that could bias our estimates of cost differences between career and noncareer employees. To facilitate a closer comparison between career and non-career employees, we restricted the sample to those employees who work more than 1,820 each year (excluding leave) which we computed by assuming a 35 hour work week. Furthermore, we excluded those who worked more than 80 hours a week, or the equivalent of working 4,160 hours each year. We refer to these employees as full-time equivalent employees, because their hours are equal to or exceed the full-time equivalent of 35 hours per week.

Our analysis relied on payroll data, and these data have not been collected for research purposes. ${ }^{5}$ We limited our analysis to those with positive benefits and compensation per hour. We excluded from the sample those earning wages below the federal minimum wage ( $\$ 7.25$ per hour) in the study period. Our data on hourly wage, benefits, and compensation included values in the thousands of dollars. We considered these values to be aberrations related to adjustments in the payroll system. To address these values, we excluded observations that were above the 99.5 percentile for hourly wages, benefits, and compensation for a particular craft and in a fiscal year. Our final analytical sample included $1,373,717$ observations over the three years of data, from fiscal years 2016 through 2018.

## Limitations

The analysis described adjusted differences in components of compensation, but does not adjust for many characteristic differences among the different categories of employees that may matter in determining outcome variables (e.g., aptitude, gender, and race). The tenure variable is likely mis-measured because non-career employees may have previously been employed by USPS in some other capacity, but given that our individual-level dataset goes back to fiscal year 2016, we do not have previous USPS job experiences for these employees.

Because the analysis restricted the data to those working between 1,820 and 4,160 hours a year, we were modeling the USPS workforce that is employed with USPS on what would be considered a full-time basis. While non-career employees on short-term contracts are expected to work a full-time schedule, we do not observe start and separation dates for these non-career employees in our data. As a result, the analysis including these employees cannot be conducted as we would be making assumptions about unobserved preferences of individuals who work on a full-time basis and those who do not.

## Results

Unadjusted differences in work hours and hourly pay, benefits, and compensation can be found in table 9 . We note that these differences

[^30]compare full-time equivalent employees with non-career and career status. For the entire workforce, differences in work hours existed between career and non-career employees. For example, the average non-career employees worked 115 more straight time hours, 94 more overtime hours, and 6 more night and Sunday premium hours.

Regarding differences in the hourly wage, benefits and compensation, we observe a difference of $\$ 11$ in hourly pay, $\$ 14$ in benefits per hour, and $\$ 25$ in overall compensation between career and non-career employees. While these unadjusted differences capture the overall rate differentials between career and non-career employees, they do not account for the differences in characteristics in the career and non-career workforce. The majority of the USPS career workforce is comprised of employees who have been with USPS for a long time. In contrast, the non-career workforce, by its very function, is more flexible and comes and goes based on demand for postal products and services. Consequently, the non-career workforce may have less of an opportunity to accumulate on-the-job experience (tenure) with USPS. Previous literature finds that wages rise with tenure. ${ }^{6}$ As such, these large unadjusted differences between career and non-career employees can be attributed in part to the extensive on-the-job experience of career employees. To account for these differences, and other differences in labor market experience, we present adjusted estimates among the career and non-career workforce in table 10.

[^31]Table 9: Unadjusted Differences in Hours Worked, Hourly Pay, Benefits and Compensation between Career and Non-career Full-time Equivalent Workers, Average for Fiscal Years 2016 through 2018

| Craft | Category | Straight Hours (Work Hours) | Overtime Hours (Work Hours) | Night and Sunday Hours (Work Hours) | Straight Wage (Per Hour Pay, Benefit or <br> Compen sation) | Overtime <br> Wage (Per <br> Hour Pay, <br> Benefit or <br> Compens ation) | Night and Sunday Differential (Per Hour Pay, Benefit or Compensati on) | Wage All Work Hours (Per Hour Pay, Benefit or <br> Compen sation) | Benefits per Hour (Per Hour Pay, Benefit or Compens ation) | Compensation Per Hour (Per Hour Pay, Benefit or Compensation) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Entire Workforce | Career | 1766.7 | 216.3 | 315.7 | 28.7 | 36.1 | 1.5 | 30.4 | 17.7 | 48.0 |
| Entire Workforce | Non-Career | 1882.1 | 310.7 | 321.2 | 17.9 | 26.7 | 0.8 | 19.3 | 3.3 | 22.6 |
| Difference (Entire Workforce) | na | 115.4 | 94.4 | 5.6 | -10.8 | -9.5 | -0.7 | -11.1 | -14.4 | -25.4 |
| City Carriers | Career | 1736.1 | 277.5 | 34.3 | 27.9 | 41.9 | 1.3 | 29.8 | 17.4 | 47.2 |
| City Carriers | Non-Career | 1849.3 | 406.1 | 82.5 | 17.6 | 26.9 | 1.2 | 19.3 | 3.9 | 23.2 |
| Difference (City Carriers) | na | 113.2 | 128.6 | 48.2 | -10.3 | -15.0 | -0.2 | -10.5 | -13.5 | -24.0 |
| Clerks | Career | 1729.7 | 219.6 | 587.2 | 27.4 | 38.6 | 1.9 | 29.4 | 16.7 | 46.1 |
| Clerks | Non-Career | 1871.1 | 249.5 | 867.2 | 17.6 | 25.9 | 1.2 | 19.1 | 4.2 | 23.3 |
| Difference (Clerks) | na | 141.4 | 29.8 | 280.0 | -9.8 | -12.6 | -0.7 | -10.4 | -12.5 | -22.9 |
| Mail Handlers | Career | 1688.2 | 351.4 | 1197.0 | 26.9 | 36.7 | 2.7 | 30.2 | 16.7 | 46.9 |
| Mail Handlers | Non-Career | 1864.5 | 302.5 | 1590.6 | 15.8 | 23.0 | 1.2 | 17.7 | 3.8 | 21.5 |
| Difference (Mail Handlers) | na | 176.3 | -48.9 | 393.5 | -11.1 | -13.7 | -1.5 | -12.5 | -12.9 | -25.4 |
| Other Employees | Career | 1777.8 | 175.7 | 427.1 | 33.3 | 27.0 | 2.0 | 34.7 | 20.1 | 54.7 |
| Other Employees | Non-Career | 1917.3 | 177.0 | 638.4 | 19.2 | 27.9 | 1.3 | 20.3 | 3.8 | 24.2 |
| Difference (Other Employees) | na | 139.5 | 1.4 | 211.3 | -14.2 | 0.9 | -0.7 | -14.3 | -16.2 | -30.6 |
| Rural Carriers | Career | 1912.9 | 66.7 | 0.0 | 26.9 | 31.4 | 0.0 | 27.3 | 17.0 | 44.3 |
| Rural Carriers | Non-Career | 1935.7 | 233.1 | 0.0 | 18.8 | 27.5 | 0.0 | 19.7 | 1.8 | 21.5 |
| Difference (Rural Carriers) | na | 22.8 | 166.4 | 0.0 | -8.1 | -3.9 | 0.0 | -7.5 | -15.3 | -22.8 |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140

## Work Hours for Career and Non-Career Employees

Results from the analysis that controls for differences in employee characteristics are summarized in table 10. Differences in work hours
indicate that full-time equivalent non-career employees perform 30 more straight time hours, 73 more overtime hours, and 23 more night and Sunday work hours. We observe variation in these estimated effects by craft. For example, differences in straight time hours are largest for clerks and mail handlers, followed by others, and city carriers. In contrast, the highest differences in overtime hours are observed for city and rural carriers, no differences in hours worked between career and non-career clerks. We also found that non-career mail handlers and other employees work fewer overtime hours relative to their respective career counterparts. The use of night and Sunday differential is higher among non-career city carriers and clerks, while it is lower for non-career mail handlers. While we found a small statistically significant effect for non-career rural carriers, this effect is relatively small given that rural carriers perform a very limited number of hours at night and on Sundays.

We found that non-career employees receive $\$ 2.10$ less in pay per hour, $\$ 6.17$ less in benefits per hour and $\$ 8.27$ less in compensation per hour. Examining the differences in pay by different types of work hours reveals that the largest difference in pay exists for overtime hours, where pay is $\$ 3.42$ less among non-career relative to career workers. The difference in pay is $\$ 2.23$ per hour, and while differences for night shift and Sunday differential are present, they are smaller at 13 cents per hour. Examining the effect across crafts, we find that clerks have the largest difference in per hour compensation at $\$ 8.43$, followed by $\$ 8.04$ for rural carriers, $\$ 7.72$ for mail handlers, and $\$ 7.25$ for city carriers. We also describe differences for the category of employees designated as other, which includes all other employees not designated as carriers, clerks and mail handlers. Among these employees, non-career employees receive $\$ 10.79$ less in hourly compensation relative to career employees.

These findings contrast with the findings in table 9, where we do not adjust for differences in characteristics between career and non-career employees. Adjusted differences are approximately 19 percent of the unadjusted difference in hourly pay, 43 percent of the unadjusted difference in benefits, and 33 percent of the difference in hourly compensation, highlighting the importance of controlling for employee characteristics in estimating difference in pay between career and noncareer employees.

## Estimated Savings from Hiring Non-career Employees

We estimated savings USPS generate by hiring non-career employees, by calculating all hours serviced by non-career employees and multiplying this number by the difference in compensation estimate for the entire workforce ( $\$ 8.27$ per hour). Our calculations indicate that USPS was able to save $\$ 2.3$ billion in fiscal year 2016, $\$ 2.1$ billion in fiscal year 2017 and $\$ 2.2$ billion in fiscal year 2018 from using non-career employees.

Table 10: Adjusted Differences in Hours Worked, Hourly Pay, Benefits and Compensation for Non-Career Relative to Career, Average for Fiscal Years 2016 through 2018

| Category | Straight Hours | Overtime Hours | Night and Sunday Hours |  | Overtime Wage (Per Hour Pay, Benefit or Compens ation) | Night and Sunday Differential (Per Hour Pay, Benefit or Compensat ion) | Wage All Work Hours (Per Hour Pay, Benefit or Compensati on) | Benefits per Hour (Per Hour Pay, Benefit or Compe nsation ) | Compensation Per Hour (Per Hour Pay, Benefit or Compensatio n) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Entire Workforce | 29.642** | 73.434** | 23.028** | -2.230** | -3.423** | -0.127** | -2.098** | -6.167** | -8.265** |
| Entire Workforce | (1.332) | (2.133) | (3.204) | (0.020) | (0.069) | (0.009) | (0.026) | (0.033) | (0.040) |
| City Carriers | 40.769** | 104.138** | 27.900** | -2.061** | -2.847** | 0.074** | -1.823** | -5.422** | -7.245** |
| City Carriers | (1.099) | (1.538) | (1.113) | (0.018) | (0.028) | (0.003) | (0.021) | (0.027) | (0.039) |
| Clerks | 81.201** | -0.365 | 66.050** | -2.745** | -3.500** | -0.496** | -3.201** | -5.232** | -8.434** |
| Clerks | (2.057) | (3.701) | (11.574) | (0.031) | (0.087) | (0.020) | (0.040) | (0.047) | (0.070) |
| Mail Handlers | 115.202** | -34.541** | -53.372* | -2.251** | -2.091** | -0.643** | -2.901** | -4.819** | -7.720** |
| Mail Handlers | (4.249) | (8.784) | (23.407) | (0.131) | (0.206) | (0.041) | (0.149) | (0.116) | (0.237) |
| Rural Carriers | -26.489** | 80.549** | -0.174* | -1.432** | 1.215** | -0.002** | -1.076** | -6.963** | -8.039** |
| Rural Carriers | (1.880) | (2.441) | (0.083) | (0.025) | (0.108) | (0.000) | (0.026) | (0.066) | (0.086) |
| Other Employees | 48.864** | -47.239** | -12.810 | -4.350** | -2.953** | -0.648** | -4.727** | -6.059** | -10.786** |
| Other Employees | (10.444) | (6.476) | (28.490) | (0.575) | (1.135) | (0.244) | (0.679) | (0.671) | (0.279) |

Standard errors in parentheses: + significance at the 10 percent level, * indicates significance at the 5 percent level, and ** indicates significance at the 1 percent level.
Source: GAO analysis of USPS National Payroll data. | GAO-20-140

## Reducing Contribution to Employee Health Insurance Premiums

To analyze the result of USPS reducing its contributions to health insurance premium for active employees, we examined the differences in cost of these contributions. We assumed that in the absence of decreases in the contribution percentage each year, USPS would continue to contribute health insurance premiums at the 2008 rate of 85 or 84 percent (see table 11). We examined employees with positive health insurance premiums contributions and generated average contributions per employee. We then calculated health insurance costs in the absence of any contributions by dividing the cost paid by USPS by the percentage contribution in each year (see table 11). We generated per employee savings by comparing the dollar values between what USPS paid each year and what it would have paid under an 85 or 84 percent contribution. We generated total savings by multiplying the number of
employees who took up these plans by the savings per employee. We present these results in table 12. Our results indicated that the reduction in USPS health insurance contributions generated savings of $\$ 429.45$ million in fiscal year 2016, $\$ 438.14$ million in fiscal year 2017, and $\$ 513.77$ million in fiscal year 2018, or $\$ 1.38$ billion for the entire three year period.

## Limitations

Our analysis does not model changes in health insurance participation arising from workers who drop insurance as a result of having to contribute a higher percentage of their health insurance costs.

| Table 11: USPS Health Insurance Premium Contribution Percentage, $\mathbf{2 0 0 8}$ through $\mathbf{2 0 1 8}$ |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Category | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| Rural carriers | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 81.0 | 81.0 | 82.0 | 83.0 |
| Clerks | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 81.0 | 81.0 | 82.0 | 83.0 |
| City carriers | 74.0 | 76.0 | 76.0 | 77.0 | 78.0 | 80.0 | 80.0 | 81.0 | 82.0 | 83.0 |
| Mail handlers | 74.0 | 76.0 | 76.0 | 77.0 | 78.0 | 80.0 | 80.0 | 81.0 | 82.0 | 83.0 |

Source: GAO analysis of collective bargaining agreements between USPS and postal unions. | GAO-20-140

Table 12: Estimated Savings from Reduction in USPS's Percentage Contribution to Employee Health Insurance Premiums, Fiscal Years 2016 through 2018, Compared to Baseline Percentage in 2008


Source: GAO analysis of USPS National Payroll data. | GAO-20-140
To understand the potential effects of changes to USPS employee compensation that would require legislative or statutory change, we conducted several analyses to estimate potential costs and savings from these changes. We examined the impact of (1) eliminating one day of delivery, (2) reducing benefits, such as shifting additional costs of health insurance premium to active employees, and (3) cutting employee pay across the board.

## Eliminating One-Sixth of Delivery Hours

Eliminating some of the current mail delivery would have varied effects on employees based on their craft. If all delivery were stopped for one day that USPS currently delivers mail, work hours for carriers may be reduced by a maximum of one-sixth ${ }^{1}$ but work hours for clerks, mail handlers, and other employees would not be affected in the same way. We examined two ways to reduce employee compensation costs, by cutting hours (1) across all career and non-career carriers (city and rural) and (2) only for non-career carriers.

Cutting work hours for career and non-career carriers by one-sixth: We aggregated over all work hours for career and non-career city and rural carriers for fiscal year 2018. We multiplied the number of hours under a one-sixth hours reduction by the average pay for hours worked for city and rural carriers. We generated yearly savings for rural and city carriers.

Table 13: Across the Board Cut of One-Sixth Hours for Carriers

| Fiscal Year | Craft | Work Hours (in millions) | One-Sixth of Work Hours (in millions) | Average Hourly Pay | Savings by Craft (in millions) | Combined Savings (in millions) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | City Carriers | 412.79 | 68.80 | \$26.43 | \$1,818.59 |  |
| 2018 | Rural Carriers | 206.18 | 34.36 | \$22.75 | \$781.92 |  |
| 2018 |  |  |  |  |  | \$2,600.51 |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Our analysis suggests that cutting mail carrier hours by one-sixth, through a reduction in delivery frequency may have saved USPS $\$ 2.6$ billion in fiscal year 2018.

Cutting work hours for non-career carriers by one-sixth: We aggregated over all work hours for career and non-career city and rural carriers. We then reduced this amount of work by one-sixth, to roughly approximate a cut in hours on average equivalent to cutting one day of delivery for all carriers regardless of career status. We multiplied the hours by the pay of non-career carriers (i.e., rural and city carriers) and estimated savings generated if the one-sixth cut was applied only to non-career carriers. We

[^32]expected the savings to be less than the scenario presented above, since non-career carriers receive a lower per hour wage rate. We also calculated the percent reduction of work hours for non-career workers that would be necessary to eliminate one day of delivery.

Table 14: Cut of One-Sixth Hours for Non-Career Carriers

| Fiscal Year | Craft | Work Hours (in millions) | One-Sixth of Work Hours (in millions) | Average Hourly Pay | Savings by Craft (in millions) | Combined Savings (in millions) | Percent Cut in Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | City Carriers | 108.09 | 68.80 | \$19.15 | \$1,317.77 |  | 63.65 |
| 2018 | Rural Carriers | 69.02 | 34.36 | \$18.57 | \$638.17 | \$1,955.94 | 49.79 |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Our analysis suggest that reducing non-career hours by the equivalent of cutting one-sixth of all carrier hours may have saved USPS $\$ 1.96$ billion in fiscal year 2018. These cuts would imply a decrease in non-career hours of 49 percent for rural carriers and 69 percent for city carriers.

## Limitations

This analysis does not account for substitution between hours worked. For example, cutting Saturday delivery may shift workers to work more overtime or premium time pay categories. The analysis assumed carrier productivity per hour does not vary with career status, and is not affected by cuts. Finally, it assumed that benefits do not change, but to the extent that benefits are a function of income they may also be reduced.

## Reducing Benefits for Postal Employees

We examined the overall effect of cutting benefits by 1.0 percent, 5.0 percent, and 10.0 percent for all employees. We considered the entire workforce and examined the total payments USPS contributed to health insurance and retirement accounts (e.g., FERS, CSRS, and TSP).

Reducing Health Insurance Premiums: We examined the effect of reducing USPS's contributions toward employee health insurance premiums by 1.0 percent, 5.0 percent, and 10.0 percent, by aggregating all health insurance contributions that USPS made on behalf of all employees in fiscal year 2018 and applying these respective cuts. The analysis does not account for the fact that health insurance participation may fall because the USPS contribution cuts would shift a higher
proportion of the cost of insurance to workers. We present the results in table 15.

Table 15: Cuts in Health Insurance Premium Contributions by Craft and Fiscal Year (in millions)

| Fiscal <br> Year | Craft | Health <br> Insurance Costs | Savings from <br> 1 percent Cut | Savings from 5 <br> percent Cut | Savings from <br> 10 percent Cut |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 1 8}$ | City Carriers | $\$ 1,541.41$ | $\$ 15.41$ | $\$ 77.07$ | $\$ 154.14$ |
| $\mathbf{2 0 1 8}$ | Clerks | $\$ 1,092.95$ | $\$ 10.93$ | $\$ 54.65$ | $\$ 109.29$ |
| $\mathbf{2 0 1 8}$ | Mail Handlers | $\$ 314.75$ | $\$ 3.15$ | $\$ 15.74$ | $\$ 31.47$ |
| $\mathbf{2 0 1 8}$ | Others | $\$ 902.28$ | $\$ 9.02$ | $\$ 45.11$ | $\$ 90.23$ |
| $\mathbf{2 0 1 8}$ | Rural Carriers | $\$ 635.45$ | $\$ 6.35$ | $\$ 31.77$ | $\$ 63.54$ |
| Fiscal <br> Year $\mathbf{2 0 1 8}$ <br> Total | $\$ 4,486.84$ | $\$ 44.86$ | $\$ 224.34$ | $\$ 448.67$ |  |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Note: Values may not add up to the fiscal year 2018 total due to rounding.
Reducing Retirement Contributions: To examine the effect of cuts of 1.0 percent, 5.0 percent, and 10.0 percent in USPS retirement contributions (FERS normal cost) and USPS TSP contributions, we aggregated over all such USPS contributions for all USPS employees participating in these plans, and applied these respective cuts to contributions for fiscal year 2018. ${ }^{2}$ One limitation of this analysis is that it does not account for the change in work hours and, as a result, in compensation from the cut in these benefits. We present results in tables 16 and 17.

[^33]Table 16: Cuts in Retirement by Craft and Fiscal Year (in millions)

| Fiscal Year Craft | Retirement | Savings from 1 <br> percent Cut | Savings from 5 <br> percent Cut | Savings from 10 <br> percent Cut |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 1 8}$ | City Carriers | $\$ 1,129.15$ | $\$ 11.29$ | $\$ 56.46$ | $\$ 112.92$ |
| $\mathbf{2 0 1 8}$ | Clerks | $\$ 755.35$ | $\$ 7.55$ | $\$ 37.77$ | $\$ 75.54$ |
| $\mathbf{2 0 1 8}$ | Mail Handlers | $\$ 232.19$ | $\$ 2.32$ | $\$ 11.61$ | $\$ 23.22$ |
| $\mathbf{2 0 1 8}$ | Others | $\$ 855.22$ | $\$ 8.55$ | $\$ 42.76$ | $\$ 8.52$ |
| $\mathbf{2 0 1 8}$ | Rural Carriers | $\$ 520.20$ | $\$ 5.20$ | $\$ 26.01$ | $\$ 52.02$ |
| Fiscal Year <br> 2018 Total | $\$ 3,492.11$ | $\$ 34.91$ | $\$ 174.61$ | $\$ 349.22$ |  |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Note: Values may not add up to the fiscal year 2018 total due to rounding.

Table 17: Cuts in TSP by Craft and Fiscal Year (in millions)

| Fiscal <br> Year | Craft | TSP | Savings from <br> 1 percent Cut | Savings from <br> 5 percent Cut | Savings from <br> 10 percent Cut |
| :--- | :--- | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 1 8}$ | City Carriers | $\$ 337.71$ | $\$ 3.38$ | $\$ 16.89$ | $\$ 33.77$ |
| $\mathbf{2 0 1 8}$ | Clerks | $\$ 228.19$ | $\$ 2.28$ | $\$ 11.41$ | $\$ 22.82$ |
| $\mathbf{2 0 1 8}$ | Mail Handlers | $\$ 63.24$ | $\$ 0.63$ | $\$ 3.16$ | $\$ 6.32$ |
| $\mathbf{2 0 1 8}$ | Others | $\$ 246.05$ | $\$ 2.46$ | $\$ 12.30$ | $\$ 24.61$ |
| $\mathbf{2 0 1 8}$ | Rural Carriers | $\$ 162.00$ | $\$ 1.62$ | $\$ 8.10$ | $\$ 16.20$ |
| Fiscal |  | $\$ 1,037.19$ | $\$ 10.37$ | $\$ 51.86$ | $\$ 103.72$ |
| Year <br> $\mathbf{2 0 1 8}$ <br> Total |  |  |  |  |  |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Note: Values may not add up to the fiscal year 2018 total due to rounding.

## Cutting Employee Pay

To examine the effect of cuts of 1.0 percent, 5.0 percent, and 10.0 percent in USPS employee pay, we determined the total work hours (straight, overtime, other hours) and average pay rates for all USPS employees. We performed the following calculations.

- percent reduction in pay: hours ${ }^{*} \Delta l$
wage $=$ hours*(wage*0.01)
* $\Delta 1$
- 5.0 percent reduction in pay: hours ${ }^{\text {w }}$ wage $=$ hours*(wage*0.05)
* $\Delta 1$
- 10.0 percent reduction in pay: hours "wage= hours*(wage*0.10)


## Results for Direct, Indirect and Total Effect of Wage Cuts

We found the cost savings associated with cuts of 1.0 percent, 5.0 percent, and 10.0 percent across all current employees are $\$ 322$ million, $\$ 1.61$ billion, and $\$ 3.22$ billion respectively for fiscal year 2018.

Table 18: Cost Savings or Dissaving from Wage Cuts (in millions)

| Fiscal Year | Employee Group | Direct Effect <br> 1 percent Cut | Direct Effect <br> 5 percent Cut | Direct Effect <br> 10 percent Cut |
| :--- | :--- | ---: | ---: | ---: |
| $\mathbf{2 0 1 8}$ | Career Tier-1 | $\$ 234$ | $\$ 1,171$ | $\$ 2,341$ |
| $\mathbf{2 0 1 8}$ | Career Tier-2 | $\$ 40$ | $\$ 201$ | $\$ 401$ |
| 2018 | Non-Career | $\$ 47$ | $\$ 235$ | $\$ 471$ |
| Fiscal Year Total |  | $\$ 322$ | $\$ 1,610$ | $\$ 3,220$ |

Source: GAO analysis of USPS National Payroll data. | GAO-20-140
Note: Savings excludes workers we could not categorize into the above employee groups, which we termed as unknown.

## Secondary Effects of Wage Cuts

Across the board wage cuts will produce both direct and indirect effects on overall compensation costs for USPS. In the section above, we provided a calculation of the savings that USPS may realize from the direct effect of a policy that cuts worker pay. The direct effect implies that a pay cut reduces the total wages paid. For example, a 10 percent reduction in pay should reduce the total wage paid by 10 percent, other things constant. However, workers who face pay cuts may exhibit responses to wage cuts that include: adjusting hours worked, adjusting their level of effort for each hour of work. These responses may negate or reinforce additional savings from a wage cut and are examples of indirect effects of wage cuts.

Workers may adjust the hours of work from changes in wages, as these wage changes produce to both substitution and income effects on hours worked. The Substitution Effect implies that a pay cut reduces the incentive for employees to work because each hour of work generates less money than it did before, decreasing the opportunity cost of leisure (the time spent not working for pay), holding income constant. Thus a reduction in pay could lead to additional reductions in work hours that employees are willing to supply. Consequently, the reduction in pay may lead to additional savings for USPS in its labor costs from the substitution effect. In contrast, the Income Effect implies that a pay cut reduces the income of the worker; this reduction in income induces the employee to work more hours because the employee feels poorer. The income effect would therefore increase the hours worked, and could lead to reductions in savings for USPS. Income and substitution effects generally run in opposite directions, and uncertainty regarding which effect will dominate determines the overall effect on hours worked.

A recent review of the literature from the Congressional Budget Office finds that combined hour elasticities that incorporate both income and substitution effects range between 0 and 0.2 . These combined hours elasticities would suggest that a 10 percent cut in wages would reduce hours between zero and 2 percent ( $0.2^{*} 10 \%$ ). While we are aware that the estimates from the general population may not extend to the USPS workforce, we provide the above example for illustrative purposes. While the effect on workhours from a change in wages may appear small, given the overall hours serviced by USPS each year - adjustments in hours arising from wage cuts may produce nontrivial changes in USPS compensation costs.

Changes in wage rates may change workers' morale, and consequently the effort workers exert during work hours. Economic literature finds that wage cuts can impact on the effort workers provide, and that productivity may fall. ${ }^{1}$ For example, workers may exert less effort in an attempt to punish the employer for the wage cut, or they may be less worried about job loss because the cost of losing a job is lower after a wage cut.

It is important to note that wage cuts may also induce some individuals to leave the USPS workforce altogether. Estimates of participation elasticities in the literature range between zero and 0.2. ${ }^{2}$ Participation elasticities capture the percentage change in the share of the population that is working resulting from a 1 percent change in wage rates. These estimate elasticities would imply that a 10 percent wage cut could be met with a reduction in the USPS workforce between 0 and 2 percent. As we previously noted, it is not clear that these population estimates extend to the USPS workforce, thus we believe examining these effects from USPS workforce data may be an important step in understanding the potential changes in workforce that wage cuts may generate.

[^34]
## Appendix II: Reports GAO Reviewed and their Recommendations for Legislative Changes to USPS Compensation

We reviewed four reports and identified twelve recommendations that proposed legislative changes that relate to USPS employee compensation (see table 19). We categorized these recommendations as having the potential to impact wages, benefits, or required work hours. The reports we reviewed were:

1) 2018 Task Force Report: United States Postal Service: A Sustainable Path Forward. Report from the Task Force on the United States Postal System, U.S. Department of the Treasury. December 2018.
2) 2016 PRC Analysis: Section 701 Report: Analysis of the Postal Accountability and Enhancement Act of 2006, Postal Regulatory Commission, November 2016
3) 2010 USPS Comprehensive Statement: Foundation for the Future: 2010 USPS Comprehensive Statement on Postal Operations United States Postal Service.
4) 2003 Presidential Commission Report: Embracing the Future: Making the Tough Choices to Preserve Universal Mail Service. Report of the President's Commission on the United States Postal Service, July 2003.

Table 19: Recommendations for Legislative Change Related to USPS Employee Compensation

| Source Report | Recommendation | Area of Impact |
| :---: | :---: | :---: |
| 1 (2018 Task Force Report) | Provide greater flexibility to determine mail and package delivery frequency. | Work Hours |
| 2 (2018 Task Force Report) | Align USPS employee rights with other federal employee rights by eliminating collective bargaining over compensation for USPS employees. | Pay |
| 3 (2018 Task Force Report) | Pursue reforms to USPS employee wages consistent with those proposed for the broader federal workforce in the President's Management Agenda. | Pay |
| 4 (2018 Task Force Report) | Pursue reform of the Federal Employee Retirement System that would increase employee contributions and move toward a defined contribution system. | Benefits |
| 5 (2018 Task Force Report) | Maintain but restructure the retiree health benefits liability, including the $\$ 43$ billion in pre-funding payments that the USPS failed to pay into the Postal Service Retiree Health Benefits Fund and the unfunded actuarial liability, with the total liability reamortized with a new actuarial calculation based on the population of employees at or near retirement age. | Financing of Benefits ${ }^{\text {a }}$ |
| 6 (2016 PRC Analysis) | The Commission recommends that Congress amend the current required retirement health benefits fund prefunding level to comport with standard industry practice in both private and public sectors. | Financing of Benefits ${ }^{\text {a }}$ |
| $\begin{aligned} & \hline 7 \text { (2016 PRC } \\ & \text { Analysis) } \end{aligned}$ | The Commission recommends lengthening the amortization period of the current unfunded liability. | Financing of Benefits ${ }^{\text {a }}$ |
| 8 (2010 USPS Comprehensive Statement) | Discontinue legislatively required prefunding retiree health benefits | Financing of Benefits ${ }^{\text {a }}$ |
| 9 (2010 USPS Comprehensive Statement) | Decrease delivery days to five-day | Work Hours |
| 10 (2010 USPS Comprehensive Statement) | Allow for changes to benefits package. | Benefits |
| 11 (2003 <br> Presidential Commission Report) | Postal Service's pension and post-retirement health care plans should be subject to collective bargaining - meaning that the Postal Service and its unions should have the flexibility to develop new plans that are separate and apart from existing Federal pension and retiree health care plans. | Benefits |
| $12(2003$ <br> Presidential Commission Report) | The 1970 Act should be amended to clarify the meaning of the term comparability, and the new Postal Regulatory Board should be authorized to determine comparable total compensation for all Postal Service employees. The comparability determination of the Postal Regulatory Board should be enforced as a cap on the total compensation of new employees. | Pay and Benefits |

Source: GAO Analysis of Reports. | GAO-20-140
aThis change would not alter employee compensation; it would change the period of time over which USPS would pay for the benefit, generally by extending the period over which USPS would fund retiree health benefits.

## Appendix III: Comments from the U.S. Postal Service

## UNITED STATES

POSTAL SERVICE

December 17, 2019

Ms. Lori Rectanus
Director, Physical Infrastructure Team
United States Government Accountability Office
441 G Street, NW
Washington, DC 20548-0001
Dear Ms. Rectanus:
Thank you for providing the Postal Service with the opportunity to review and comment on the United States Government Accountability Office (GAO) draft report titled, "U.S. Postal Service: Additional Guidance Needed to Assess Effect of Changes to Employee Compensation." Our comments to the draft report and our response to the GAO recommendation for executive action are set forth below.

## General Comments

The Postal Service has worked assiduously over the past decade to reduce its labor costs in response to its ongoing financial challenges. We note that GAO concurs that the Postal Service has saved billions of dollars by right-sizing its workforce and negotiating more favorable terms through the collective bargaining process. We also note that GAO confirmed that, over the last decade, the Postal Service has increased compensation at a slower rate than either the private sector or federal civilian service sector.

Although GAO was unable to fully verify some of the cost savings estimated by the Postal Service, this does not mean that they are not real. In fact, it must be noted that GAO's cost savings estimates were derived through statistical estimation techniques and, therefore, constitute only another estimate. Irrespective of the exact magnitude of the savings, both GAO's and the Postal Service's estimates of the savings are substantial-between $\$ 8$ billion (GAO's estimate) and $\$ 12.1$ billion (the Postal Service's estimate ${ }^{1}$ ) from fiscal years 2016 through 2018 alone.

In addition to our general comments above, we would also like to share the following observations concerning some of the points made in the report:

1. GAO's statements with respect to work hours (e.g., "lower-paid employees may be more willing to work extra hours") suggest a general misunderstanding of postal operations and the administration of overtime pursuant to our collective bargaining agreements.
Overtime is not a function of lower pay rates; rather, it is a product of workload. Furthermore, the amount of overtime an employee works is not dictated by employee
[^35]475 L'Enfant PLAZA SW
WASHINGTON DC 20260
choice, but is assigned pursuant to a specific order outlined in our collective bargaining agreements (generally based on seniority). The Postal Service disagrees with GAO's cost savings analysis to the extent GAO relies on erroneous assumptions about the source and administration of overtime; GAO's regression analysis over-complicates what should be a relatively straightforward comparison of the cost of new career and noncareer workhours versus what those hours would have cost without the workforce structure changes.
2. The Postal Service also disagrees with GAO's statements related to non-career wages and their purported impact on recruitment and retention. With very few exceptions, the Postal Service has little trouble attracting qualified applicants to non-career positions. The Postal Service has engaged multiple external experts on private sector comparability over the years who have all concluded that our non-career wages are at or above market compared to those paid for comparable levels of work in the private sector of the economy. With respect to turnover, the Postal Service is not alarmed to see a higher amount of turnover among its non-career complement compared to other, more tenured employees. Our non-career positions are entry-level positions, and as such, provide an opportunity for both parties-employee and employer-to determine whether the job is a good fit. As a result, we see more terminations, choices not to reappoint, and voluntary quits among this cohort, as would be expected for almost any entry-level position in the private sector. As it stands, our non-career component has quit rates that are near those of the overall private sector. When non-career employees do remain in the Postal Service, they have a fair expectation of converting to a career position within a reasonable amount of time-on average, two years. We also note the turnover rates cited by GAO include those employees who temporarily join the Postal Service with no expectation of continued employment, such as holiday/peak season non-career hires. These holiday non-career hires are automatically terminated after the completion of their limited term appointment.
3. The Postal Service agrees with GAO's findings related to the substantial cost of its retirement benefits, which are governed by law and not subject to collective bargaining. For example, under current law, retiree health benefits may not be negotiated with employee unions. The Postal Service's share of premium costs for postal retirees is set according to a statutory formula and is not subject to negotiations. Likewise, benefit levels, available health plans, and individual eligibility rules for annuitants are all managed by the Office of Personnel Management by law and are not subject to collective bargaining. Nor can the Postal Service negotiate over statutory federal retirement benefits (i.e., CSRS or FERS). These statutory benefits make up approximately 24 percent of the Postal Service's total labor costs and 19 percent of its total operating costs. Any changes to these benefits to make them more affordable and sustainable for the Postal Service (such as integration of retiree health benefits with Medicare) must be accomplished through legislation.

## Response to GAO's Recommendation

With respect to your specific recommendation, we provide the following response:

## Recommendation 1:

The Postmaster General should direct executive leaders to develop guidance for cost savings estimates related to employee compensation specifying that analysis used to calculate estimates should be, to the extent possible, inclusive of significant factors, such as work hours, tenure, and turnover.

# Appendix III: Comments from the U.S. Postal Service 

## -3-

## USPS Response:

The Postal Service agrees with GAO that quality decision-making rests upon quantitative analysis using the best available data, including the use of defensible assumptions and reasonably predictable contingencies. The Postal Service disagrees with GAO's recommendation to the extent GAO suggests the Postal Service does not already include significant factors such as work hours and tenure in its cost estimates. GAO mistakenly concludes the Postal Service has an inability to develop appropriate cost estimates based on the fact that it has no formal, published guidance on developing cost estimates. To the contrary, the Postal Service employs a number of labor economists and finance professionals who have developed best practices over time on this topic and who engage in the rigorous costing analysis necessary to evaluate business decisions We note that the methodology GAO employed to analyze the magnitude of the Postal Service's savings is a post-hoc analysis impractical for real-time decision-making. Nonetheless, the Postal Service accepts GAO's recommendation to more formally articulate internal guidance for developing cost savings estimates in order to ensure appropriate factors are taken into account when evaluating potential business outcomes.

With respect to the specific factors GAO mentions, while we disagree with GAO's assumptions about the source and administration of overtime, we agree that work hours should be factored into cost savings estimates related to employee compensation. The Postal Service will continue to utilize work hours to the extent practicable as a factor to determine cost savings associated with various initiatives.

As noted in the report, GAO identified an opportunity to refine our non-career employee cost savings analysis by factoring in tenure; the Postal Service will incorporate this concept where appropriate in future costing analyses.

With respect to incorporating the cost of turnover in evaluating potential workforce structure changes, the Postal Service already incorporates turnover projections in its labor costing models. As noted in GAO's report, the Postal Service has developed estimates of turnover costs and will incorporate them into future cost analyses when appropriate.

Again, thank you for the opportunity to respond to the GAO Report and Recommendation for Executive Action. We appreciate the effort that GAO has put into validating the billions of dollars saved by the Postal Service.

Sincerely,


Doug A. Tulino
Vice President, Labor Relations
cc: Sally Haring

# Appendix IV: GAO Contact and Staff Acknowledgments 

## GAO Contact

Lori Rectanus, (202) 512-2834 or RectanusL@gao.gov

## Staff Acknowledgments

In addition to the individual named above, Kyle Browning (Assistant Director); Jade Winfree (Analyst-in-Charge); Thanh Lu, Silda Nikaj; Josh Ormond; Steven Putansu; Oliver Richard, Frank Todisco, Michelle Weathers; Seyda Wentworth; and Crystal Wesco made key contributions to this report.

## Appendix V: Accessible Data

## Data Tables

Accessible Data for Compensation Costs for Current USPS Employees for Fiscal Years 2009 through 2018

| Fiscal year | Compensation (unadjusted) | Compensation (adjusted to <br> $\mathbf{2 0 1 8}$ value) |
| :--- | :--- | :--- |
| 2009 | 50883 | 58841 |
| 2010 | 48909 | 56071 |
| 2011 | 48310 | 54302 |
| 2012 | 47689 | 52608 |
| 2013 | 46708 | 50595 |
| 2014 | 46000 | 48882 |
| 2015 | 47278 | 49639 |
| 2016 | 48441 | 50393 |
| 2017 | 49108 | 50179 |
| 2018 | 50004 | 50004 |

Accessible Data for Figure 1: USPS Fiscal Year 2018 Operating Costs

| Costs | Dollars (in millions) | Percentage |
| :--- | :--- | :--- |
| Workers' compensation | 4 | Less than 1 |
| Amortization cost for retirement <br> benefits | 3213 | 4 |
| Transportation | 7861 | 11 |
| All other operating expenses | 9697 | 13 |
| Retiree health benefits <br> (compensation-related cost) | 3666 | 5 |
| Pay and benefits <br> (compensation-related cost) | 50004 | 67 |
| Compensation-related costs <br> subtotal | 53670 | 72 |

Accessible Data for Figure 2: U.S. Postal Service Employee Compensation Cost, Fiscal Years 2009 through 2018 (Adjusted and Unadjusted to 2018 Value)

| Fiscal year | Compensation (unadjusted) | Compensation (adjusted to <br> 2018 value) |
| :--- | :--- | :--- |
| 2009 | 50883 | 58841 |
| 2010 | 48909 | 56071 |
| 2011 | 48310 | 54302 |
| 2012 | 47689 | 52608 |
| 2013 | 46708 | 50595 |
| 2014 | 46000 | 48882 |
| 2015 | 47278 | 49639 |
| 2016 | 48441 | 50393 |
| 2017 | 49108 | 50179 |
| 2018 | 50004 | 50004 |

## Agency Comment Letter

Accessible Text for Appendix III Comments from the U.S. Postal Service

## Page 1

December 17, 2019
Ms. Lori Rectanus
Director, Physical Infrastructure Team
United States Government Accountability Office

## 441 G Street, NW

Washington, DC 20548-0001
Dear Ms. Rectanus:
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## General Comments

The Postal Service has worked assiduously over the past decade to reduce its labor costs in response to its ongoing financial challenges. We note that GAO concurs that the Postal Service has saved billions of dollars by right-sizing its workforce and negotiating more favorable terms through the collective bargaining process. We also note that GAO confirmed that, over the last decade, the Postal Service has increased compensation at a slower rate than either the private sector or federal civilian service sector.

Although GAO was unable to fully verify some of the cost savings estimated by the Postal Service, this does not mean that they are not real. In fact, it must be noted that GAO's cost savings estimates were derived through statistical estimation techniques and, therefore, constitute only another estimate. Irrespective of the exact magnitude of the savings, both GAO's and the Postal Service's estimates of the savings are substantial-between $\$ 8$ billion (GAO's estimate) and $\$ 12.1$ billion (the Postal Service's estimate1) from fiscal years 2016 through 2018 alone.

In addition to our general comments above, we would also like to share the following observations concerning some of the points made in the report:

1. GAO's statements with respect to work hours (e.g., "lower-paid employees may be more willing to work extra hours") suggest a general misunderstanding of postal operations and the administration of overtime pursuant to our collective bargaining agreements. Overtime is not a function of lower pay rates; rather, it is a product of workload. Furthermore, the amount of overtime an employee works is not dictated by employee
[^36]
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1. choice, but is assigned pursuant to a specific order outlined in our collective bargaining agreements (generally based on seniority). The Postal Service disagrees with GAO's cost savings analysis to the extent GAO relies on erroneous assumptions about the source and administration of overtime; GAO's regression analysis overcomplicates what should be a relatively straightforward comparison of the cost of new career and non-career workhours versus what those hours would have cost without the workforce structure changes.
2. The Postal Service also disagrees with GAO's statements related to non-career wages and their purported impact on recruitment and retention. With very few exceptions, the Postal Service has little trouble attracting qualified applicants to non-career positions. The Postal Service has engaged multiple external experts on private sector comparability over the years who have all concluded that our non-career wages are at or above market compared to those paid for comparable levels of work in the private sector of the economy. With respect to turnover, the Postal Service is not alarmed to see a higher amount of turnover among its non-career complement compared to other, more tenured employees. Our non-career positions are entry-level positions, and as such, provide an opportunity for both parties-employee and employer-to determine whether the job is a good fit. As a result, we see more terminations, choices not to reappoint, and voluntary quits among this cohort, as would be expected for almost any entry-level position in the private sector. As it stands, our noncareer component has quit rates that are near those of the overall private sector. When non-career employees do remain in the Postal Service, they have a fair expectation of converting to a career position within a reasonable amount of time-on average, two years. We also note the turnover rates cited by GAO include those employees who temporarily join the Postal Service with no expectation of continued employment, such as holiday/peak season non-career hires. These holiday non-career hires are automatically terminated after the completion of their limited term appointment.
3. The Postal Service agrees with GAO's findings related to the substantial cost of its retirement benefits, which are governed by law and not subject to collective bargaining. For example, under
current law, retiree health benefits may not be negotiated with employee unions. The Postal Service's share of premium costs for postal retirees is set according to a statutory formula and is not subject to negotiations. Likewise, benefit levels, available health plans, and individual eligibility rules for annuitants are all managed by the Office of Personnel Management by law and are not subject to collective bargaining. Nor can the Postal Service negotiate over statutory federal retirement benefits (i.e., CSRS or FERS). These statutory benefits make up approximately 24 percent of the Postal Service's total labor costs and 19 percent of its total operating costs. Any changes to these benefits to make them more affordable and sustainable for the Postal Service (such as integration of retiree health benefits with Medicare) must be accomplished through legislation.

Response to GAO's Recommendation
With respect to your specific recommendation, we provide the following response:

Recommendation 1:
The Postmaster General should direct executive leaders to develop guidance for cost savings estimates related to employee compensation specifying that analysis used to calculate estimates should be, to the extent possible, inclusive of significant factors, such as work hours, tenure, and turnover.

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USPS Response:
The Postal Service agrees with GAO that quality decision-making rests upon quantitative analysis using the best available data, including the use of defensible assumptions and reasonably predictable contingencies. The Postal Service disagrees with GAO's recommendation to the extent GAO suggests the Postal Service does not already include significant factors such as work hours and tenure in its cost estimates. GAO mistakenly concludes the Postal Service has an inability to develop appropriate cost estimates based on the fact that it has no formal, published guidance on developing cost estimates. To the contrary, the Postal Service employs a number of labor economists and finance professionals who have developed best practices over time on this topic and who engage in the
rigorous costing analysis necessary to evaluate business decisions. We note that the methodology GAO employed to analyze the magnitude of the Postal Service's savings is a post-hoc analysis impractical for realtime decision-making. Nonetheless, the Postal Service accepts GAO's recommendation to more formally articulate internal guidance for developing cost savings estimates in order to ensure appropriate factors are taken into account when evaluating potential business outcomes.

With respect to the specific factors GAO mentions, while we disagree with GAO's assumptions about the source and administration of overtime, we agree that work hours should be factored into cost savings estimates related to employee compensation. The Postal Service will continue to utilize work hours to the extent practicable as a factor to determine cost savings associated with various initiatives.

As noted in the report, GAO identified an opportunity to refine our noncareer employee cost savings analysis by factoring in tenure; the Postal Service will incorporate this concept where appropriate in future costing analyses.

With respect to incorporating the cost of turnover in evaluating potential workforce structure changes, the Postal Service already incorporates turnover projections in its labor costing models. As noted in GAO's report, the Postal Service has developed estimates of turnover costs and will incorporate them into future cost analyses when appropriate.

Again, thank you for the opportunity to respond to the GAO Report and Recommendation for Executive Action. We appreciate the effort that GAO has put into validating the billions of dollars saved by the Postal Service.

Sincerely,
Doug A. Tulino
Vice President, Labor Relations
Luke T. Grossmann
Senior Vice President, Finance and Strategy
cc: Sally Haring

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[^0]:    ${ }^{1} 39$ U.S.C. § 101. Prior to the establishment of USPS, mail delivery in the U.S. was the responsibility of the U.S. Post Office Department, a cabinet-level department in the executive branch.
    ${ }^{2}$ United States Postal Service. Fiscal Year 2018 Annual Report to Congress (Washington, D.C.). USPS is required to deliver mail six days a week, and delivers packages on the seventh day (Sunday). See Pub. L. No. 116-93 (2019). The frequency with which customers receive mail service from USPS has evolved over time to account for changes in communication, technology, transportation, and postal finances.
    ${ }^{3}$ In this report, we define "current" employees as those who were employed by USPS during the referenced time period.

[^1]:    ${ }^{4}$ We did not include an evaluation of the Federal Employees' Compensation Act, which established a program that provides cash payment, medical care, and other benefits to employees who sustain disabilities resulting from work-related injuries or diseases, in our review.
    ${ }^{5}$ The postal employee unions are (1) American Postal Workers Union, (2) National Postal Mail Handlers Union, (3) National Association of Letter Carriers, and (4) National Rural Letter Carriers' Association. Most other USPS employees are covered by management organizations, such as the National Association of Postal Supervisors. USPS is required to provide a consultation program with these organizations; however, these employees are not covered by collective bargaining agreements. 39 U.S.C. § 1004.

[^2]:    ${ }^{6}$ GAO, GAO Cost Estimating and Assessment Guide, GAO-09-3SP (Washington, D.C.: March 2009).
    ${ }^{7}$ The four reviews are: (1) United States Postal Service: A Sustainable Path Forward. Report from the Task Force on the United States Postal System (U.S. Department of the Treasury: December 2018); (2) Embracing the Future: Making the Tough Choices to Preserve Universal Mail Service. Report of the President's Commission on the United States Postal Service (July 2003); (3) Foundation for the Future: 2010 USPS Comprehensive Statement on Postal Operations United States Postal Service; (4) Section 701 Report: Analysis of the Postal Accountability and Enhancement Act of 2006 (Postal Regulatory Commission, November 2016).

[^3]:    ${ }^{8}$ Pub. L. No. 91-375 (1970).
    ${ }^{9} 39$ U.S.C. § 1003(a).
    ${ }^{10}$ The TSP is intended to resemble 401(k) pension plans in the private sector, and is available to federal and postal employees.

[^4]:    ${ }^{11}$ Included in total compensation are employee wages and USPS's contributions to benefits including, health insurance payments, pension contributions, Thrift Savings Plan, life insurance, Social Security, and Medicare; for more information see appendix I.

[^5]:    12 GAO, U.S. Postal Service Status of Workforce Reductions and Related Planning Efforts, GAO-15-43 (Washington, D.C.: Nov. 13, 2014).
    ${ }^{13}$ Overtime hours are paid at one and one-half times the employee's basic hourly rate and penalty overtime hour is paid at twice the employee's basic hourly rate for hours as provided for in applicable labor agreements.
    14 This comparison is at a very broad level. Identifying a reference group that is comparable to the USPS workforce in regard to occupation and skill level could reveal different growth rates in compensation.
    ${ }^{15}$ Bureau of Labor Statistics, Employer Costs for Employee Compensation Historical Listing, National Compensation Survey, table 9: Private industry workers, full-time workers. Also, according to the same data source: the average compensation growth for employees in production, transportation and material moving occupations was 2.0 percent, and the average compensation growth for private industry workers who are unionized was 2.8 percent.

[^6]:    ${ }^{16}$ GAO, Federal Workforce: Recent Trends in Federal Civilian Employment and Compensation, GAO-14-215 (Washington, D.C.: Jan. 29, 2014); GAO is currently working on an update to this report which is expected to be published in summer 2020.
    17 Pub. L. No. 109-435 (2006).

[^7]:    18 In fiscal year 2018, USPS paid approximately $\$ 3.5$ billion in employer cash contributions for the FERS normal costs, which represents the future pension costs attributable to employee service during the year.

    19 GAO, High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas, GAO-19-157SP (Washington, D.C.: Mar. 6, 2019).
    20 GAO, Postal Retiree Health Benefits: Unsustainable Finances Need to Be Addressed, GAO-18-602 (Washington, D.C.: Aug. 31, 2018).

[^8]:    21 The lower pay rate was implemented at different times based on the CBAs between USPS and postal employee unions. Specifically, (1) rural carriers on or after November 21, 2010, under the CBA with NRLCA; (2) clerks on or after May 23, 2011, under the CBA with APWU; (3) city carriers on or after January 12, 2013, under the CBA with NALC, and (4) mail handlers on or after February 15, 2013, under the CBA with NPMHU start at the lower pay rate.
    22 Because USPS no longer hired employees at the higher pay rates once this policy took effect, we determined the three recent fiscal years of data were not sufficient to compare employees who started at higher rates with employees hired after.
    ${ }^{23}$ CBAs generally specify caps for the percentage of non-career employees that USPS may use in positions covered by the agreements. USPS has a cap of 20 percent, per USPS district, for employees in APWU; 18.5 percent cap, per district, for employees in NPMHU; and a 15 percent cap, per district, with an additional 3 percent for Sunday delivery, for employees in NALC. However, USPS's agreement with NRLCA has no cap on the percentage of non-career employees.

[^9]:    ${ }^{24}$ USPS officials told us that they have begun to offer some additional benefits. For example, in 2014, USPS began to offer a separate healthcare plan to certain non-career employees who are ineligible for Federal Employees Health Benefits. In fiscal year 2018, USPS reported it incurred expenses of $\$ 131$ million for the separate healthcare plan. In addition, one union may seek to obtain retirement benefits for non-career employees.
    ${ }^{25}$ This does not apply to retiree health benefits, which are not negotiated with employee unions. USPS's share of FEHBP premium costs for postal retirees is set according to a statutory formula and is not subject to collective bargaining. See 5 U.S.C. $\S \S 8906,8909$ a. In 2008, USPS contributions to health insurance premiums were 85 percent for rural and city carriers and 84 percent for clerks and mail handlers.

    26 USPS reached a tentative three-year agreement with NRLCA in May 2019 that was ratified in July 2019 by 86 percent of NRLCA bargaining craft members in good standing. The agreement covers the period from May 2018 through May 2021.

[^10]:    27 USPS, United States Postal Service 2018 Report on Form 10-K, (Washington, D.C.: Nov. 14, 2018).

    28 USPS estimated saving a total of $\$ 12$ billion as a result of saving $\$ 2.3$ billion from hiring new career employees with lower starting pay, $\$ 8.2$ billion from hiring more non-career employees, and $\$ 1.5$ billion from reducing its contributions to employee health insurance premiums.
    ${ }^{29}$ This was not the case for the estimate related to the reduction in health insurance benefit contribution, where these factors did not apply and we found similar levels of cost savings as USPS estimated.
    ${ }^{30}$ As we reported earlier, our analysis of payroll data estimated that USPS saved \$6.6 billion from hiring non-career employees and $\$ 1.4$ billion by reducing its contribution to health insurance premiums. However, we were not able to substantiate savings as a result of implementing the lower starting pay for new career employees.

[^11]:    ${ }^{31}$ Eligible employees receive Sunday premium for hours actually worked on Sunday and night differential for work during their normal schedule. These hours do not incur extra benefits costs, such as additional health insurance benefits costs.

    32 See table 10 of appendix I.
    ${ }^{33}$ See table 8 of appendix I.

[^12]:    ${ }^{34}$ Career employees who want to work overtime hours are placed on the "Overtime Desired List" (ODL). Managers assign overtime hours to employees on the ODL based on seniority. After the list is exhausted, managers can assign overtime hours to non-career employees. USPS does not maintain an ODL for non-career employees.
    ${ }^{35}$ USPS OIG, Mail Processing Overtime, NO-AR-19-005 (Arlington, VA: June 13, 2019). USPS management partially agreed with OIG's recommendation to issue supplemental guidance on management oversight to reduce unauthorized overtime. Management stated that plant manager and line level management staff have full authority and responsibility to reduce unauthorized overtime.
    ${ }^{36}$ This characteristic of USPS employees is consistent with the economic literature examining the relationship between tenure and wages. See, for example, Hutchens, Robert M., "Seniority, Wages and Productivity: A Turbulent Decade," Journal of Economic Perspectives, 3, no. 4 (1989): 49-64.

[^13]:    ${ }^{37}$ See table 6 appendix I for more information.
    ${ }^{38}$ See discussion around tables 9 and 10 in appendix I.
    39 GAO, GAO Cost Estimating and Assessment Guide, GAO-09-3SP (Washington, D.C.: March 2009).
    ${ }^{40}$ We previously reported that USPS should establish guidance that clarifies when USPS should develop cost saving estimates using a rigorous approach. USPS implemented this recommendation through its Five-Year Strategic Plan for fiscal years 2017 through 2021, which incorporates guidance for USPS management and staff to follow when considering, developing, refining, and approving initiatives. However, USPS officials told us that for the cost estimates they provided during this review, they had discretion in terms of the methods they used and factors they considered. GAO, U.S. Postal Service: Post Office Changes Suggest Cost Savings, but Improved Guidance, Data, and Analysis Can Inform Future Savings Efforts, GAO-16-385 (Washington, D.C.: Apr. 29, 2016).

[^14]:    41 USPS OIG, Mail Delivery Issues - Bear Valley Station, Denver, CO, DRT-AR-19-009 (Arlington, VA: July 12, 2019). In May 2018, USPS OIG also reported that the San Francisco District had been unable to hire or retain sufficient non-career carriers because the hourly pay rate is not sufficient to sustain the cost of living in the San Francisco area. USPS OIG, Sunday Operations - San Francisco District, DR-AR-18-003 (Arlington, VA: May 1, 2018).

[^15]:    42 USPS has offered higher "exception rates" to attract enough truck drivers. Exception rates are several steps into the path of a career employee, resulting in a higher pay rate.
    ${ }^{43}$ However, USPS officials stated that not all employee turn-over is related to the lower pay and they are working to improve management practices for non-career employees.

    44 The annual turnover rates include employees who leave the postal service at any time in the year, such as those hired temporarily for the holiday peak season.

    45 USPS OIG, Non-Career Employee Turnover, HR-AR-17-002 (Arlington, VA: Dec. 20, 2016). USPS management disagreed with the monetary impact as reported in this report. Management stated that recent efforts have decreased the average cost of onboarding employees and cost was also overstated because cost was calculated for months of turnover that were higher than 2.9 percent, but credit was not given for those months when turnover was lower than 2.9 percent.

[^16]:    ${ }^{46}$ USPS OIG, Non-Career Employee Turnover, HR-AR-17-002 (Arlington, VA: Dec. 20, 2016).

[^17]:    ${ }^{47}$ GAO, High-Risk Series: Substantial Efforts Needed to Achieve Greater Progress on High-Risk Areas. GAO-19-157SP (Washington, D.C.: Mar 6, 2019). USPS financial viability has been on our High Risk list since 2009.

[^18]:    48 The full citations for the four reviews are: (1) United States Postal Service: A Sustainable Path Forward. Report from the Task Force on the United States Postal System, U.S. Department of the Treasury. December 2018. (2) Embracing the Future: Making the Tough Choices to Preserve Universal Mail Service. Report of the President's Commission on the United States Postal Service, July 2003. (3) Foundation for the Future: 2010 USPS Comprehensive Statement on Postal Operations United States Postal Service. (4) Section 701 Report: Analysis of the Postal Accountability and Enhancement Act of 2006, Postal Regulatory Commission, November 2016. For the full list of reviews and recommendations analyzed, see appendix II.
    49 In particular, our analysis did not include options from proposed legislation.
    ${ }^{50}$ We have additional, ongoing, work about potential changes to USPS's business model.
    51 Some residents do not receive 6-day delivery, particularly those located in remote or seasonal vacation areas.
    5239 U.S.C. § 403(a).

[^19]:    ${ }^{53}$ USPS currently delivers letters six days a week and one day is 16.67 percent of six days.
    54 In order to achieve this level of reduction in work hours, USPS would likely need to make other changes such as slowing delivery standards and improving carrier productivity.
    ${ }^{55}$ For the assumptions and techniques used to generate these estimates, see appendix I, discussion and findings in tables 13 and 14.

[^20]:    56 GAO, U.S. Postal Service: Addressing Policy Gaps Could Improve Pilot Design and Evaluation for Postal Innovations, GAO-19-293 (Washington, D.C.: Mar. 14, 2019).

[^21]:    57 USPS OIG, Operational Window Change Savings, NO-AR-19-001 (Arlington, VA: Oct. $15,2018)$.

    58 USPS OIG, Mail Processing Overtime, NO-AR-19-005 (Arlington, VA: June 13, 2019).
    59 GAO, U.S. Postal Service: Post Office Changes Suggest Cost Savings, But Improved Guidance, Data and Analysis Can Inform Future Savings Efforts, GAO-16-385 (Washington, D.C.: Apr. 29, 2016).

[^22]:    60 GAO, U.S. Postal Service Ending Saturday Delivery Would Reduce Costs, but Comprehensive Restructuring is Also Needed, GAO-11-270, (Washington, D.C., Mar. 29, 2011).
    ${ }^{61}$ GAO, U.S. Postal Service: Unsustainable Finances Need to Be Addressed, GAO-18-602 (Washington, D.C.: Aug. 31, 2018).

[^23]:    62 Similar to other employers, USPS pays a certain rate into Social Security and Medicare for its employees.
    ${ }^{63}$ CBO, Options for Reducing the Deficit 2019-2028. This analysis does not include USPS employees but similar prior changes have applied to USPS employees.

[^24]:    ${ }^{64}$ GAO, U.S. Postal Service: Proposed Health Plan Could Improve Financial Condition, but Impact on Medicare and Other Issues Should Be Weighed before Approval, GAO-13-658 (Washington, D.C., July 18, 2013).

[^25]:    ${ }^{65}$ Robert McClelland, and Shannon Mok. "A review of recent research on labor supply elasticities," (2012), Working Paper 2012-12.

    66 This is known as the substitution effect arising from a pay cut. For more information on substitution effect see appendix $I$.

    67 This is known as the income effect arising from a pay cut. For more information on income effect see appendix $I$.

    68 Sebastian Kube, Michel André Maréchal, and Clemens Puppe, "Do wage cuts damage work morale? Evidence from a natural field experiment," Journal of the European Economic Association 11, no. 4 (2013): 853-870.
    ${ }^{69}$ For example, the annual target for Two-Day and Three-to-Five-Day delivery is 96.5 percent and 95.25 percent on time delivery and for the first two quarters performance has been under 92 percent for Two-day and under 80 percent for Three-to-Five day, according to the Quarterly Performance for Single-Piece First-Class Mail, Quarter III, fiscal year 2019 report.

[^26]:    ${ }^{70}$ Robert McClelland, and Shannon Mok. "A review of recent research on labor supply elasticities." (2012), Working Paper 2012-12.
    ${ }^{71}$ The Pew Research Center found in 2018 that USPS is viewed favorably by 88 percent of Americans. Pew Research Center "Majorities Express Favorable Opinions of Several Federal Agencies, Including the FBI" (February 2018).

[^27]:    ${ }^{1}$ We did not include an evaluation of the Federal Employee Compensation Act (FECA), a program that provides cash, medical benefits to federal employees who suffer temporary or permanent disabilities resulting for work-related injuries or diseases, in our review.

[^28]:    ${ }^{2}$ For payroll data prior to fiscal year 2016, we received finance level data that aggregate payroll information for all employees at the facility level. The aggregated data do not have information related to individual workers, such as age, tenure, pay, hours worked, and benefits. This level of detail was sufficient for reporting general trends but not sufficient to determine the impact of policy changes on trends in pay and benefits.

[^29]:    ${ }^{3}$ The data do not include a reason for separation.
    ${ }^{4}$ Designation Activity Code is the combination of the two-digit designation code that indicates an employee's type of position and workforce designation (such as full-time or part-time) followed with the one-digit activity code that indicates functional area in which the employee is assigned.

[^30]:    ${ }^{5}$ USPS payroll data are not primarily for research purposes, thus the data does not contain all relevant variables necessary to conduct some types of analysis.

[^31]:    ${ }^{6}$ Hirsch, Barry T., Wachter, Michael L., and Gillula, James W., "Postal Service Compensation and the comparability Standard." Research in Labor Economics, Vol. 18, (1999): 243-279.

[^32]:    ${ }^{1}$ USPS is required to deliver mail six days a week. See Pub. L. No. 116-6 (2019). Additionally, USPS makes package delivery seven days a week.

[^33]:    ${ }^{2}$ Reductions in USPS's FERS normal cost contributions would require some combination of actuarially equivalent reductions to the FERS benefit formulas.

[^34]:    ${ }^{1}$ Kube, Sebastian, Michel André Maréchal, and Clemens Puppe. "Do wage cuts damage work morale? Evidence from a natural field experiment." Journal of the European Economic Association 11, no. 4 (2013): 853-870.
    ${ }^{2}$ McClelland, Robert, and Shannon Mok. "A review of recent research on labor supply elasticities." (2012), Working Paper 2012-12, Available at: https://www.cbo.gov/publication/43675

[^35]:    ${ }^{1}$ GAO's estimates only include savings from non-career employees and reductions in the employer health benefit contribution. Although GAO was unable to substantiate the Postal Service's estimated savings from lower wage schedules for new career employees, the Postal Service stands by its analysis, bringing its total estimated savings over this period to $\$ 12.1$ billion.

[^36]:    ${ }^{1}$ GAO's estimates only include savings from non-career employees and reductions in the employer health benefit contribution. Although GAO was unable to substantiate the Postal Service's estimated savings from lower wage schedules for new career employees, the Postal Service stands by its analysis, bringing its total estimated savings over this period to $\$ 12.1$ billion.

