



Office of Inspector General | United States Postal Service

RISC Report

Inflation and the U.S. Postal Service

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The background of the lower half of the page is a collage. It features a close-up of a US dollar bill, a white envelope with the United States Postal Service logo and name, and a financial candlestick chart with teal bars and a white line connecting the tops of the bars. The chart shows an overall upward trend.

**UNITED STATES
POSTAL SERVICE®**

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Executive Summary

In the first few months of 2022, the U.S. experienced the highest inflation rates since the early 1980s. This period of inflation is attributed to elevated consumer demand and supply chain disruptions resulting from the COVID-19 pandemic, coupled with commodity shocks from the war in Ukraine. As with many sectors of the economy, rapidly increasing prices are a concern for the Postal Service. To determine how inflation affects USPS, the U.S. Postal Service Office of Inspector General (OIG) conducted a qualitative assessment of the impacts of inflation on USPS's costs and revenue. Our research included interviews with USPS management and industry experts, as well as an economic analysis of postal data.

Inflation and Costs

We classified the Postal Service's cost segments into three categories:

- Labor costs, including wages and other benefits that are paid as a percentage of wages;
- Retirement and workers' compensation costs that adjust based on assumptions about the future, including inflation; and,
- Purchased goods and services, including rents, fuel, and supplies.

A primary way that inflation impacts labor costs, which accounted for more than two-thirds of the Postal Service's \$82 billion in fiscal year (FY) 2021 expenses, is through cost-of-living adjustments (COLAs) paid to career bargaining unit employees. COLAs agreed to in collective bargaining

agreements are adjusted every six months based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). However, COLAs increase wages less than the rate of inflation as measured by the CPI-W. As inflation increases, COLAs do not cover the full impact of that increase. In November 2021, the Postal Service estimated a \$1.1 billion increase in its FY 2022 expenses from COLAs.

Changes in the inflation rate can also significantly affect the estimation of future liabilities. Inflation is a major component in calculations of the Postal Service's liabilities for retirement benefits and workers' compensation, which were nearly 10 percent of FY 2021 expenses. However, these programs are largely administered by other agencies, including the Office of Personnel Management, the Department of Treasury, and the Department of Labor, and so these estimations of future liabilities are largely out of Postal Service's control.

Finally, products and services purchased in the market, such as transportation (including fuel), rent, and supplies, were approximately 20 percent of FY 2021 expenses. Generally, the immediacy of inflation's impact on these costs depends on contract terms concerning price adjustments and contract length. However, inflation in volatile commodities like fuel can have an immediate impact on costs. In addition, periods of high inflation create uncertainty for initiating procurement actions, making it more complicated for the Postal Service to determine the optimal

duration and the appropriate terms for price adjustment clauses in many contracts.

Inflation and Revenue

Turning to revenue, price increases for market dominant products, such as First-Class Mail for which the Postal Service maintains a monopoly, are directly tied to inflation as measured by the Consumer Price Index for All Urban Consumers (CPI-U). However, additional price authorities allow the Postal Service to increase prices above CPI-U. During periods of high inflation there can be a delay between when USPS incurs costs of inflation and when market dominant prices are adjusted to reflect these increases. Inflation's impact on revenue from market dominant products also depends on how customers respond to price increases and how their response affects mail volume. Existing research indicates that price increases alone have not had a significant negative impact on demand for mail. However, if a recession followed the current period of high inflation, the overall economic distress could have a considerable and adverse impact on mail demand, as occurred during the Great Recession, from 2007 to 2009.

When it comes to competitive products, such as shipping services where products are priced to compete against other shipping providers, the Postal Service has flexibility in terms of the frequency, timing, and rate at which it can increase prices in relation to inflation. Unlike competitors,

who revise fuel surcharges as frequently as every week, the Postal Service does not use inflation-related surcharges in its pricing. Still, since 2008, prices for the Postal Service's competitive products and its competitors' products have increased at a much higher rate than CPI-U.

Other Considerations

Lastly, inflation erodes the purchasing power of the dollar and can therefore diminish the value of the Postal Service's cash on hand, which was nearly \$24 billion as of March 31, 2022. USPS can only invest its liquidity in short-term Treasury securities whose extremely low interest rates do not compensate for inflation. Inflation's erosion of value also has implications on the \$15 billion statutory limit on the amount the Postal Service can borrow from the U.S. Treasury, which has not increased since 1999. The value of \$15 billion declined approximately 38.5 percent from 1999 to 2021, meaning the purchasing power of the borrowing authority is far less today than it was in 1999.

In 2022 thus far, the U.S. has experienced the highest inflation rates in decades. The Postal Service's business environment and operating model have changed since the early 1980s, when U.S. inflation rates were as high as in 2022. Consequently, USPS should monitor the impacts of prolonged high inflation on its finances and work with its stakeholders on strengthening the mechanisms in place to mitigate high inflation risks.

Observations

Introduction

Moderate inflation, or the gradual upward price movement of goods and services, is part of a healthy and growing economy. During periods of heightened inflation, however, economies can experience a misalignment between prices, costs, and wages. This misalignment often creates a myriad of challenges for workers, consumers, companies, and the overall economy. In 2022, the U.S. has experienced the highest inflation rates since the 1980s. As for many sectors of the economy, rapidly increasing prices are a concern for the Postal Service.

To understand how inflation affects the U.S. Postal Service, the U.S. Postal Service Office of Inspector General (OIG) conducted a qualitative assessment of the impacts of inflation on the Postal Service's costs and revenue. We also examined how the Postal Service currently manages inflation-related risks. See [Appendix A](#) for details of this paper's objective, scope, and methodology.

The Current Picture of Inflation in the U.S. Economy

There are several measures of inflation, but the most widely cited in the U.S. are the Consumer Price Index for All Urban Consumers (CPI-U) and the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). The CPI-U measures the change of the prices of goods and services purchased by urban consumers and covers 93 percent of the population, while the CPI-W measures prices paid by urban wage earners and clerical workers for consumer goods and services and covers 29 percent of the population.¹ The Federal Reserve's Federal Open Market Committee aims

The Federal Reserve aims for an inflation rate of 2 percent on average over time.

for 2 percent inflation over the long run, judging the rate as most consistent with the Federal Reserve's mandate for maximum employment and price stability.²

In 2022, the U.S. has experienced the highest levels of inflation in decades. The CPI-U increased by 9.1 percent from June 2021 to June 2022, the largest 12-month CPI-U increase since the period ending in December 1981.³ With the intent to lower inflation, in March 2022, the U.S. Federal Reserve raised its benchmark interest rate by one-quarter of a percentage point — the first increase since 2018. The Federal Reserve forecasted six more interest rate hikes and subsequently raised interest rates in May 2022 by half a percentage point, which was the largest increase since 2000.⁴

The U.S. has experienced many periods of high inflation, but the current inflationary period has some distinct characteristics. Namely, it is widely attributed to economic shocks from the COVID-19 pandemic and worldwide governmental restrictions to prevent the spread of the disease. Elevated consumer demand for goods and services during the pandemic coupled with scaled back production, supply chain disruptions, and labor shortages led to higher prices. At the same time, the war in Ukraine in 2022 contributed to a large spike in oil prices, among other commodities.

USPS Forecasts Inflation's Impact in the Integrated Financial Plan

The Postal Service forecasts the impact of inflation on costs and revenues in its Integrated Financial Plan (IFP) reports.⁵ In the fiscal year (FY) 2022 IFP, which was published in November 2021, USPS forecasted 3.7 percent inflation for the CPI-U and 3.9 percent inflation for the CPI-W. In April 2022, Postmaster General DeJoy commented on the impacts of inflation in FY 2022 forecasted in the IFP, noting that “[i]nflation is significantly higher than we forecasted in the [Delivering

1 Media references to “CPI” are frequently shorthand for Bureau of Labor Statistics reports on the CPI-U. U.S. Bureau of Labor Statistics (BLS), “Consumer Price Indexes Overview,” January 10, 2020, <https://www.bls.gov/cpi/overview.htm#:~:text=The%20CPI%2DU%20includes%20expenditures,wage%20earning%20or%20clerical%20jobs>.

2 The Federal Reserve reaffirmed its long-term objective in January 2022. Federal Reserve, Statement on Longer-Run Goals and Monetary Policy, https://www.federalreserve.gov/monetarypolicy/files/fomc_longerrungoals.pdf.

3 BLS, “Consumer Price Index Summary,” Economic News Release, U.S. Bureau of Labor Statistics, July 13, 2022, <https://www.bls.gov/news.release/cpi.nr0.htm>.

4 Federal Reserve, “Implementation Note issued May 4, 2022,” May 4, 2022, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504a1.htm>.

5 USPS, “Fiscal Year 2022 Integrated Financial Plan,” November 18, 2021, <https://about.usps.com/what/financials/integrated-financial-plans/fy2022.pdf>.

for America 10-year strategic plan]. I think we're going to incur \$1.8 billion more this year in unplanned inflation."⁶

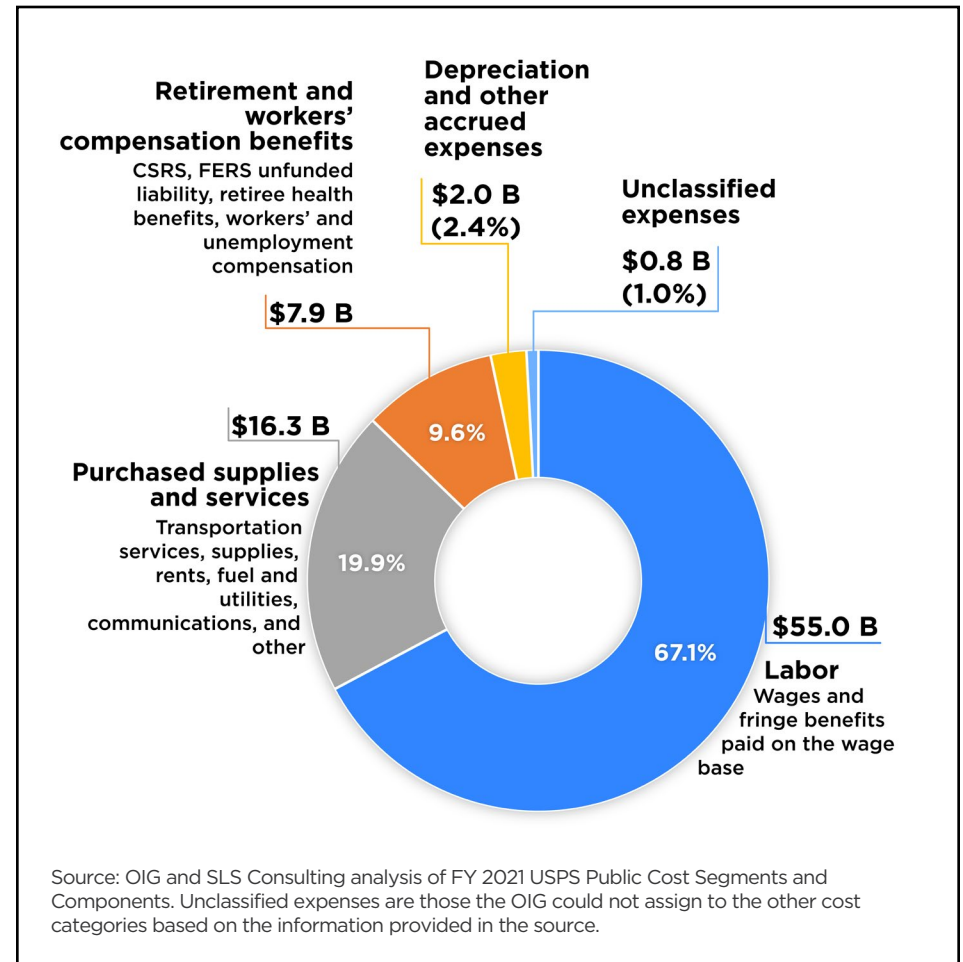
How Inflation Impacts Postal Service Costs

The OIG examined the ways that inflation impacts the Postal Service's costs. To help guide our analysis, we classified the Postal Service's costs into three categories:⁷

1. Labor costs, including wages and fringe benefits, such as the employer match of Social Security and Medicare contributions, that are paid as a percentage of wages;
2. Retirement and workers' compensation costs that adjust with actuarial estimates that are affected by the inflation rate; and,
3. Purchased supplies and services, including rents, fuel, and other supplies for which costs are determined by the market.

In FY 2021, the Postal Service accrued approximately \$82 billion in expenses. We categorized approximately 97 percent of FY 2021 accrued expenses spread across 17 cost segments into the three categories noted above. Figure 1 shows the high-level results of this classification.⁸ See [Appendix A](#) for a more detailed breakout of this classification of expenses.

Figure 1: FY 2021 Postal Service's Costs by OIG Classification



⁶ The OIG clarified with Postal Service management that the cited \$1.8 billion impact of inflation represents the change in projected FY 2022 controllable expense from the November 2020 Global Insight forecast for the Delivering for America plan compared to the October 2021 Global Insight forecast for the FY 2022 IFP. David Shephardson, "U.S. Postal Service chief warns of inflation impact," Reuters, April 22, 2022, <https://www.reuters.com/world/us/us-postal-service-chief-warns-inflation-impact-2022-04-22/>.

⁷ The OIG's discussions with Postal Service management indicated the model used for generating projected costs in the IFP are aggregated, and not calculated at the product, cost segment, and component level.

⁸ In addition to the three categories noted, Figure 1 also categorizes depreciation and other accrued expenses. However, depreciation schedules are established at the time an asset is purchased, and interest rates play no role in the schedule. Thus, inflation does not have a direct effect on annual accrued depreciation expenses.

Labor Costs

In FY 2021, labor expenses, including wages and fringe benefits paid on the wage base, were \$55 billion, over two-thirds of the Postal Service's operating expenses. Inflation's effect on wages and other labor costs is therefore very significant to USPS's overall costs. We discuss below three major components of labor costs increases: general wage increases, fringe COLAs paid to career bargaining unit employees, and fringe benefits.⁹

Section Highlights

- General wage increases for both bargaining and current non-bargaining unit employees are not directly tied to an inflation index.
- In FY 2021, 79 percent of USPS's workforce were career employees. In addition to general wage increases, career bargaining unit employees receive COLAs that increase wages at a rate below inflation (CPI-W). Still, during periods of high inflation, COLAs can significantly increase labor costs. USPS estimated a \$1.1 billion increase in its FY 2022 expenses from COLAs.
- Fringe benefits pegged to employees' gross pay or to medical inflation also contribute to labor cost increases.
- The gap between inflation and wage increases may contribute to non-career and non-bargaining unit employees' turnover.

General Wage Increases Are Not Directly Linked to Inflation

Wage increase policies for bargaining unit employees differ from those for non-bargaining unit employees.

Bargaining Unit Employees

The vast majority (91 percent) of Postal Service labor costs are comprised of wages and fringe benefits for bargaining unit employees, including career and non-career employees.¹⁰ At the end of FY 2021, the Postal Service employed approximately 516,500 career employees and 136,500 non-career employees. Non-career employees provide the Postal Service with flexibility and lower costs. General wage increases for career and non-career bargaining unit employees are negotiated in collective bargaining. In FY 2021, 93 percent of Postal Service employees were covered by collective bargaining agreements (CBAs). The agreed pay increase schedules are included in multi-year CBAs.¹¹

A main difference between the two categories is that non-career bargaining unit employees do not receive COLA increases or other benefits of career employees. However, they may receive higher general wage increases than career employees in lieu of COLA. For example, from 2019 to 2022, (non-career) City Carrier Assistants received annual wage adjustments that were 1 percent higher than the general pay increase their (career) City Carrier counterparts received.¹² For both career and non-career employees, the current inflation rate does not impact general wage increases negotiated in collective bargaining up to three years earlier.

Non-Bargaining Unit Employees

For career non-bargaining unit employees, including executives, professionals, supervisors, postmasters, and non-bargaining unit technical and clerical employees, annual salary increases occur through the Pay-For-Performance (PFP) system. With minor exceptions, COLA or locality pay programs do not apply to non-bargaining unit employees.

However, at the beginning of each year, the Postal Service can increase the maximum and the minimum ranges of the pay bands, using the U.S. Office of Personnel Management (OPM) percentage increase for civil servants as the

⁹ Wage increases for career bargaining unit employees generally range from 1.1 to 1.8 percent annually.

¹⁰ The Postal Service also refers to non-career employees as "pre-career" employees. USPS, "Fiscal Year 2021 Annual Report to Congress," December 9, 2021, <https://about.usps.com/what/financials/annual-reports/fy2021.pdf>, p. 29.

¹¹ Ninety-eight percent of non-career employees receive annual wage increases.

¹² For example, in November 2021, City Carrier Assistants received a 2.3 percent general wage increase, while Letter Carriers received 1.3 percent. NALC, Letter Carrier Pay Schedule effective February 26, 2022, <https://www.nalc.org/news/research-and-economics/body/paychart-02-26-22-web2.pdf>.

starting point for setting wage increases. OPM's increases may bear some relationship to inflation, but the Postal Service is not bound by OPM's rate of wage increases for other civil servants. Unlike COLAs for bargaining unit employees, PFP increases are not pegged to an inflation index.¹³ For example, PFP salary increases averaged 2.3 percent for 2021 (implemented in January 2022) and 2.75 percent for 2020 (implemented in January 2021) as compared to average annual CPI-W increases of 5.3 and 1.2 percent for calendar years 2021 and 2020, respectively.¹⁴

COLA Calculations for Career Bargaining Unit Employees are Linked to Inflation but Increase Wages Below CPI-W

A primary relationship of inflation to labor costs are COLAs that apply to the wages of career bargaining unit employees. COLAs directly increase employee wages with inflation, as measured by the CPI-W. In FY 2021, about 72 percent of USPS employees were career employees who received COLAs.

CBA's between the Postal Service and the four postal unions all include COLAs based on the same formula. The agreements stipulate that career employees' basic salary shall be increased one cent per hour for each full 0.4 of a point increase over the CPI-W index upon which the last COLA was calculated. However, for three of the four agreements, the actual levels of COLA payments are adjusted according to employee seniority (Table 1). That is, COLAs are adjusted proportionally according to each step's percentage of the highest pay step.¹⁵

While COLAs occur every six months and are determined according to inflation, they are under-indexed to the CPI-W. When the CPI-W increases by a percentage point, the COLA increases wages by less than a percentage point. For example, a representative from NALC told the OIG that the NALC COLAs are designed to cover 55 to 60 percent of inflation.

Table 1: Applicability of COLA to Career Employees by Union

	Number of career employees (FY 2021)	Applicability of full COLA to career employees
American Postal Workers Union (APWU)	171,428 clerks, maintenance, and motor vehicles employees	All career employees.
National Association of Letter Carriers (NALC)	172,894 city carriers	Employees at highest pay step, and all employees hired before January 2013 receive full COLA. More recent hires below highest step receive proportional COLA.
National Postal Mail Handlers Union (NPMHU)	46,866 handlers	Employees at highest pay step, and all employees hired before February 2013 receive full COLA. More recent hires below highest step receive proportional COLA.
National Rural Letter Carriers' Association (NRLCA)	75,134 fulltime rural carriers	Employees at highest pay step, and all employees hired before November 2010 receive full COLA. More recent hires below highest step receive proportional COLA.

Note: figures show the number of career employees by craft reported by the Postal Service, which may differ from unions' membership figures. Source: USPS, "Fiscal Year 2021 Annual Report to Congress."

Even with wages increasing at a lower rate than CPI-W, the impacts on USPS labor costs can still be significant during periods of high inflation. As inflation picked up, employees eligible to receive a full COLA under the four CBA's

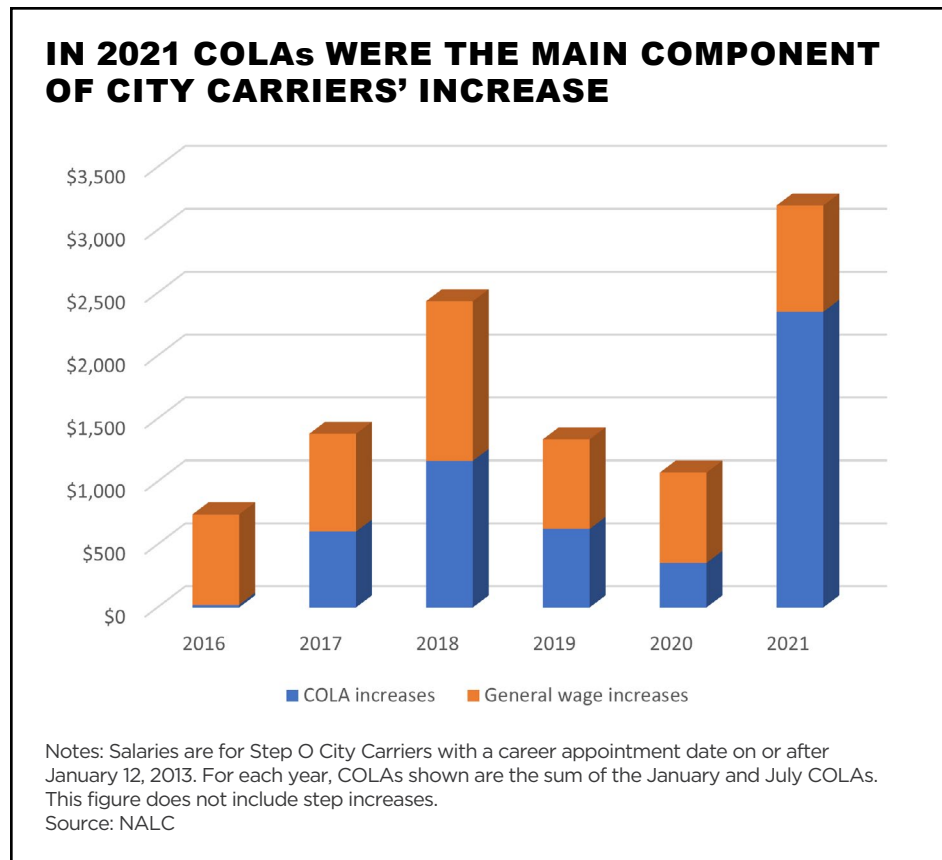
¹³ Postal Service management noted to the OIG that there have been years where the Postal Service had no wage increases due to financial issues, while the rest of the federal government did receive an increase.

¹⁴ Annual CPI-W averages are the sum of the 12 monthly data points divided by 12 and represent an average index for a given year, not a particular month. Annual average changes are therefore different from year-over-year percent changes for specific months. USPS, "FY 2021 Report on Form 10-K," November 10, 2021, <https://about.usps.com/what/financials/10k-reports/fy2021.pdf>, p.31; BLS, "Summary of annual and semi-annual indexes," https://www.bls.gov/regions/mid-atlantic/data/consumerpriceindexannualandsemiannual_table.htm, and BLS, "Math calculations to better utilize CPI data," <https://www.bls.gov/cpi/factsheets/cpi-math-calculations.pdf>.

¹⁵ For example, see NALC-U.S. Postal Service, "National Agreement 2019-2023," <https://www.nalc.org/workplace-issues/body/2019-2023-National-Agreement-Bookmarked.pdf>, p.25.

received a \$1,935 July 2021 COLA that was ten times larger than the one for July 2020. COLAs can become the largest factor of salary increase (See Figure 2. For simplicity, we took the example of the largest craft; city carriers.) Anticipating the impact of inflation, in November 2021, the Postal Service estimated an increase of approximately \$1.1 billion in its FY 2022 expenses from COLAs.¹⁶

Figure 2: Impact of COLAs on the Basic Salary of Step O City Letter Carriers (2016-2021)



Inflation Influences Fringe Benefits

Fringe benefits constitute a significant portion of total compensation for career bargaining unit employees and represented \$13.1 billion in expenses in FY 2021. Increases in the costs of these benefits are impacted by inflation, via medical inflation and the COLA increase of wages.

- Immediate impact: Benefits paid as a percentage of wages include the employer match of contributions to Social Security, Medicare, the Federal Employees Retirement System (FERS), and the Thrift Savings Plan.¹⁷ When an employee's gross pay increases as a result, among other factors, of inflation-based COLA, these contributions immediately increase.
- Delayed impact: While revised only once a year, annual cost increases for the Postal Service's share of employee health insurance premiums are affected by medical inflation. Medical inflation has consistently exceeded general inflation for decades. For example, urban medical care costs have increased on average by 2.7 percent annually from 2012 to 2022 versus 2.2 percent for urban prices (CPI-U index).

A Gap Between Inflation and Pay Increases May Negatively Impact Employee Retention

As discussed above, non-career bargaining unit as well as non-bargaining unit employees receive salaries that do not adjust, even partially, with inflation. Non-career employee turnover is much higher than career employees. According to the Postal Service, the rate of attrition for non-career employees ranged between 36 and 43 percent annually from FY 2016 to FY 2020 and increased to 55 percent in FY 2021.¹⁸ A NALC representative noted to the OIG that high inflation potentially exacerbates challenges in retention of non-career employees. Rising wages from inflation could make other jobs more competitive and contribute to already high turnover among non-career employees, thereby contributing to the costs per hire and costs of vacancy associated with high turnover. Such costs can include onboarding and training, as well as costs incurred while positions remain

¹⁶ USPS, "FY 2021 Report on Form 10-K," November 10, 2021, <https://about.usps.com/what/financials/10k-reports/fy2021.pdf>, p.13.

¹⁷ The Social Security tax is subject to an annual cap.

¹⁸ The OIG previously examined turnover among non-career employees in the following audit: USPS OIG, "Effectiveness of the Postal Service's Efforts to Reduce Non-Career Employee Turnover," February 12, 2020, <https://www.uspsoig.gov/sites/default/files/document-library-files/2020/19POG001SAT000-R20.pdf>.

vacant. For the same reasons, retention might also become an issue with non-bargaining unit employees if pay increases do not keep up with inflation.

In April 2021, Postal Service's 10-year plan set the objective to cut non-career employee turnover by half. A year later, USPS stated that the conversion of close to 63,000 non-career into career positions contributed to its objective of stabilizing workplace availability nationally.¹⁹

Retiree Liabilities and Workers' Compensation Costs

Economic assumptions about future inflation rates can significantly impact the Postal Service's liabilities for retiree benefits and workers' compensation. The Postal Service is required by law to participate in two governmentwide pension plans that are administered by OPM: the Civil Service Retirement System (CSRS) and the Federal Employees Retirement System (FERS). In addition, eligible retirees may continue participating in the OPM-administered Federal Employees Health Benefits Program.²⁰ Finally, Postal Service employees are covered by the Federal Employees' Compensation Act (FECA) to receive workers' compensation benefits for injuries or an occupational disease resulting from their employment.

Inflation Influences Estimates of Retirement Liabilities

Assumptions about inflation affect the Postal Service's retirement liabilities in a number of ways, including the calculations of the discount rate, estimates of COLA increases in benefits paid to retirees, and estimates of employee wage increases. Expenses for retirement benefits, including pensions and health benefits, and workers' compensation were \$7.9 billion for FY 2021, almost 10 percent of the Postal Service's accrued expenses. These expenses were incurred for contributions to CSRS (\$1.9B in FY 2021), the FERS unfunded liability (\$1.4B in FY 2021), and the Postal Service Retiree Health Benefits Fund (PSRHBF) (\$5.1B in FY 2021).²¹ The Postal Service's annual costs for each

Section Highlights

- The Postal Service's liabilities for retirement benefits and workers' compensation are directly affected by changes in the expected rate of return – or the discount rate – for retirement investments, which is influenced by inflation assumptions.
- The calculation of the Postal Service's costs for retirement funds, including the assumed inflation rate, is determined by OPM. Therefore, inflation's effects on these liabilities are not in the Postal Service's direct control.
- Workers' compensation costs are also sensitive to inflation and can fluctuate dramatically from year to year. All things equal, higher interest rates reduce workers' compensation liability. Lower interest rates, when they occur, increase them.
- The Postal Service's retirement investments must be invested in obligations of the U.S. government and may offer limited protection against higher inflation.

of these benefit categories are determined by OPM through its calculation of amortization payments – or amounts necessary to pay off deficits in the funds for retirement and retiree health benefit insurance payments.²² Consequently, the Postal Service has very little ability to directly mitigate the effect of inflation on pensions, retiree health benefit expenses, or future payouts.

To estimate the Postal Service's annual amortization payments for CSRS and FERS, OPM estimates the unfunded liability, which is essentially the fund deficit. OPM's calculations of the unfunded liabilities depend on several assumptions regarding the future, including the assumed return rate from investing the funds in

19 USPS, "Delivering for America — First-year Progress Report," April 7, 2022, <https://about.usps.com/what/strategic-plans/delivering-for-america/assets/usps-dfa-one-year-report.pdf>, p.6.

20 In addition, the Postal Service Reform Act of 2022 establishes the Postal Service Health Benefits (PSHB) Program to provide health insurance to USPS career employees, retirees and their dependents, beginning January 1, 2025. The PSHB will be administered by OPM and will be structured similarly to the FEHB Program.

21 CSRS is the pension system for certain federal employees that was replaced by the FERS for federal employees who first entered covered service on and after January 1, 1987. The PSRHBF was set up through the Postal Accountability and Enhancement Act of 2006 to prefund and provide retiree health benefits to Postal Service retirees.

22 The CSRS and FERS costs represent the Postal Service's payments for the unfunded portion of the Civil Service Retirement and Disability Fund. OPM also estimates the FERS "normal cost," or the percentage of payroll that the Postal Service must set aside each year to fund the pension benefits that participants have earned. Because USPS pays the FERS normal cost as a percentage of payroll in accordance with its bi-weekly payroll cycle, these costs were included under labor costs for this analysis. Normal FERS cost payments for USPS were \$4.1 billion in FY 2021. USPS also incurs normal costs for PSRHBF but did not make these payments in FY 2021 to preserve liquidity. Therefore, PSRHBF normal costs were included in the categorization of retirement and health benefits for this analysis. USPS does not incur normal costs for CSRS.

Treasury securities.²³ These liabilities are, in fact, partially covered by the returns from these investments. When setting the investment return rate assumptions, OPM considers current and future Treasury interest rates, which adjust with inflation and influence the assumed return rate.

OPM uses that assumed return rate from investments as a discount rate to calculate how much future cash flows are worth in today's dollars — what is called their “net present value.” This means that when the assumed return rate (discount rate) increases, the remaining deficit that Postal Service needs to fund decreases.

OPM also directly uses an assumption for long-term inflation in its pension estimates as the COLAs that will be paid to retirees for retirement benefits are determined based on inflation rates. Inflation also influences OPM's assumption about future general salary increases. The economic assumptions are reviewed every year by the Board of Actuaries of OPM's Civil Service Retirement System. In practice, small changes to estimates can have a major impact on OPM valuations, and therefore on the retiree benefits cost expenses incurred by the Postal Service.²⁴

As with the retiree benefits discussed above, the calculation of expenses for the PSRHBF depends on assumptions used by OPM, including medical inflation. However, under the Postal Service Reform Act of 2022 (PSRA), the Postal Service will no longer have to make amortization payments for retiree health benefits. Instead, starting in 2026, it will pay the difference between premium costs and claims costs incurred by postal retirees the previous fiscal year.

Liabilities for Workers' Compensation Are Sensitive to Inflation

As with retirement benefit liabilities, workers' compensation liabilities are also sensitive to assumptions for inflation. Postal Service employees who are

injured on the job are covered by the Federal Employees' Compensation Act (FECA), administered by the Department of Labor's (DOL) Office of Workers' Compensation Programs. The Postal Service reimburses DOL for all FECA benefits paid to, or on behalf of, USPS employees, plus an administrative fee.

For its financial reporting, the Postal Service uses an estimation model to forecast and record its workers' compensation liability for the present value of estimated future payments. As explained in its FY 2021 Report on Form 10-K, USPS determines its workers' compensation liability each quarter by estimating the future total cost of workers' compensation claims.²⁵ USPS then calculates the amount that would need to be invested at current interest (discount) rates to fully fund the future claims, and this calculated present value is the workers' compensation liability. This model is also highly sensitive to changes in the discount rate. For example, according to USPS, a 1 percent increase in the discount rate would decrease the September 30, 2021 liability and related expenses by approximately \$2 billion, and a 1 percent decrease in the discount rate would increase the liability and related expenses by approximately \$2.5 billion. In fact, workers' compensation expenses decreased by \$3.5 billion between 2020 and 2021 primarily due to changes in the discount rate.²⁶ Changes in the liability are also influenced by inflation in other ways, such as long-term COLA rates for compensation claims, and medical rates for medical claims.

An important point about workers' compensation is that while accrued costs based on changes in the liability calculation can fluctuate dramatically from year to year, the actual cash payouts are relatively stable.²⁷ As already mentioned, the Federal Reserve raised the target for the federal funds rate in March and May 2022 and forecasted additional hikes. As the discount rate increases with interest rates, 2022 should see another reduction in the long-term workers' compensation liability and a corresponding decrease in operating expenses. However, if in the future the Federal Reserve reverses course and decreases interest rates, fund liabilities will increase. In practice, these non-cash effects related to changing

²³ OPM, “Statement of the Board of Actuaries of the Civil Service Retirement System,” February 2022, <https://www.opm.gov/about-us/budget-performance/other-reports/boa-statement-fy-2021-csrdp-annual-report.pdf>.

²⁴ While outside of the scope of this paper, the OIG addressed options to reduce unfunded retirement liabilities in the following audit: OIG, “Options to Reduce Unfunded Retirement Liabilities,” Report No. 19BG010FT000-R20, March 6, 2020, <https://www.uspsig.gov/sites/default/files/document-library-files/2020/19BG010FT000-R20.pdf>.

²⁵ This estimation is based on the dates of claim-related injuries, frequency or severity of the injuries, the pattern of historical payments to beneficiaries, and the expected trend in future costs.

²⁶ USPS, “FY 2021 Report on Form 10-K,” November 10, 2021, <https://about.usps.com/what/financials/10k-reports/fy2021.pdf>, pp.42, 81-82.

²⁷ OIG, “Workers' Compensation Program Cost Containment Activities,” Report Number 19-031-R20, August 6, 2020, <https://www.uspsig.gov/sites/default/files/document-library-files/2020/19-031-R20.pdf>, pp.6-7.

discount rate assumptions impact the valuation of fund liabilities but do not affect cash flows.

Retirement Investments Have Limited Protection Against High Inflation

The Postal Service's retirement investments must be invested in obligations of the U.S. government and are invested in fixed-rate U.S. Treasury securities administered by OPM in conjunction with the Department of Treasury.²⁸ While these securities are low risk, they offer limited protection against higher inflation. The reason is that OPM and the Department of Treasury rebalance retirement assets once annually, at the end of June, generally ensuring that similar amounts of assets mature in each of the next 15 years. A March 2020 OIG report noted that a consequence of this "laddering" approach is that if market interest rates rise with inflation, the yields on existing Postal Service retirement assets can rise only gradually. The report notes that under perfect laddering of investment maturities, less than 7 percent of the investments would be replaced with higher-yielding investments in any year, leaving about 93 percent of investments with unchanged yields.²⁹

Purchased Supplies and Services

As prices across the economy rise with inflation, the Postal Service's costs for supplies and services necessary for its operations are also impacted. Our analysis indicates that expenses for supplies and services were \$16.3 billion in FY 2021, approximately 20 percent of total expenses. Commodity price volatility can affect the immediacy of inflation's impact on USPS costs, and high-inflationary periods create complications for the procurement of supplies and services.

Section Highlights

- Costs related to products and services purchased in the market adjust as inflation affects market prices, but volatile commodities like fuel can have an immediate impact of costs.
- High inflation creates uncertainty for procurement, making it more complicated for the Postal Service to determine the optimal contract duration and the appropriate terms for price adjustment clauses.

Contract Terms and Commodity Price Volatility Can Affect the Immediacy of Inflation's Impact

Costs related to purchasing supplies and services include transportation, fuel, rents, utilities, technology, and other operational supplies and services. Many supplies and services are procured under contracts issued by the Postal Service's Supply Management unit. In a general sense, inflation affects supplies and services in similar ways; the prices the Postal Service pays during the contract period are determined by the negotiated terms of each contract. Contracts may include price adjustments pegged to price indices that allow contract costs to adjust periodically with inflation, such as annually or at specific times during the year. However, some commodities have more volatile costs than others and price adjustments tend to be more frequent and immediate. We demonstrate this difference by comparing fuel and rental costs.

Fuel prices are an example of a volatile commodity, and recent inflation in fuel prices has had a direct and immediate impact on the Postal Service's transportation costs. For example, in contracts with Highway Contract Route suppliers, which provide bulk transportation of mail, the Postal Service will allow compensation for fuel costs to adjust monthly through a surcharge.³⁰ When fuel

28 The assets of the CSRS and FERS plans are held in one fund in the Treasury, the Civil Service Retirement and Disability Fund, and RHB assets reside in a separate fund, the Postal Service Retiree Health Benefit Fund.

29 OIG, "Options to Reduce Unfunded Retirement Liabilities," p.8. The OIG has previously analyzed USPS retiree funds investment strategies in other reports. See OIG, "Foreign Posts' Retirement Asset Investments," Report No. FT-WP-19-001, May 21, 2019, <https://www.uspsoidg.gov/sites/default/files/document-library-files/2019/FT-WP-19-001.pdf>; OIG, "Treasury Inflation-Protected Securities," Report No. FT-AR-19-003, November 26, 2018; <https://www.uspsoidg.gov/sites/default/files/document-library-files/2018/FT-AR-19-003.pdf>; and OIG, "Postal Service Retiree Funds Investment Strategies," Report No. FT-WP-17-001, September 20, 2017, <https://www.uspsoidg.gov/sites/default/files/document-library-files/2017/FT-WP-17-001.pdf>.

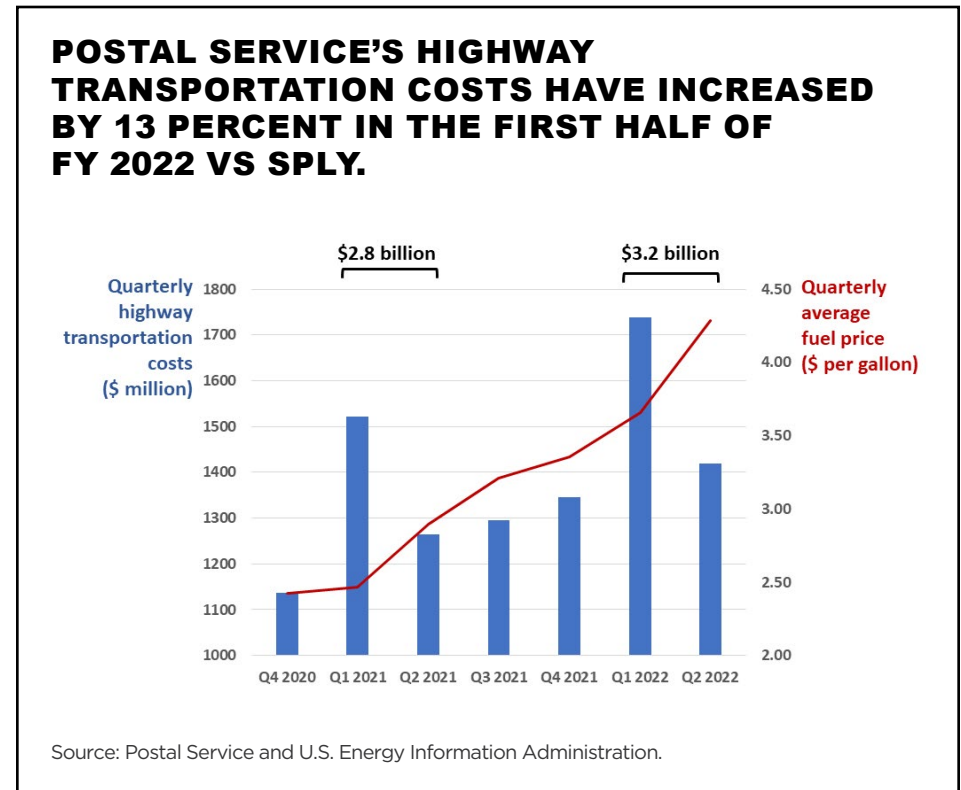
30 The Postal Service's Transportation Strategy team manages contracts with HCR suppliers. The Postal Service uses U.S. Energy Information Administration (EIA) data for the base fuel pricing.

prices escalate, the surcharge is determined according to changes in the average fuel compared to established base contract fuel rates. Conversely, when fuel prices decline, USPS will use the surcharge formula and decrease rates.³¹ In addition, fuel for USPS-owned vehicles is purchased by USPS on the spot – that is, purchased as needed at current retail prices.

As a result, the Postal Service’s fuel costs, which represented 3.2 percent of operating expenses in FY 2021, are immediately impacted by high inflation.³² As of September 30, 2021, the Postal Service estimated that a 1 percent increase in fuel and natural gas prices would have resulted in a \$27 million increase in its FY 2021 expenses. In the first few months of FY 2022, diesel prices increased dramatically, from \$3.38 per gallon in September 2021 to \$5.11 in March 2022 – a 51 percent increase.³³ As a result, highway transportation expenses increased in the first half of FY 2022 (October 2021 to March 2022) by \$371 million (13.3 percent) compared to the same period in FY 2021 (Figure 3).³⁴

The Postal Service monitors risks to fuel prices as a commodity risk as part of its Enterprise Risk Management process but does not currently hedge fuel prices – that is, purchase fuel for the future at a predetermined earlier price – which is a method of mitigating the effects of inflation in fuel prices. In contrast, in an interview with the OIG, a representative from UPS noted that the company buys fuel through contracts to give a smoothing effect on prices, and to find consistency to avoid shocks to UPS or its customers. Competitors also use fuel surcharges in their product pricing to mitigate inflation (as discussed below in the [Inflation and Competitive Products](#) section).

Figure 3: Postal Service’s Quarterly Highway Transportation Costs vs. Quarterly Average Fuel Price per Gallon (Q4 FY 2020 to Q2 2022)



Unlike fuel costs that can adjust monthly, other types of contracts provide for more price stability. In addition, these contracts may have longer terms at fixed rates with periodic options for price changes. For instance, property leases are

31 Monthly increases and decreases are based on changes in the EIA national fuel average price. For the purpose of calculating a fuel surcharge, the average price of fuel for the month prior to the month in which the segment operated is used to determine the fuel surcharge.

32 While evaluation of the effectiveness of the Postal Service’s administration of fuel surcharges for compensation to HCR suppliers was outside of the scope of this project, a 2018 OIG audit noted that 90 of the 174 reviewed contracts (about 52 percent) exceeded the DOE’s regional fuel index price or the local market fuel price and did not have the required documentation. In addition, a 2017 OIG audit found that the Postal Service was not financially or contractually positioned to mitigate risks of increasing diesel fuel prices or consumption. See OIG, “Highway Contract Route Fuel Price Index Program Effectiveness,” Report Number NL-AR-18-008, May 24, 2018, <https://www.uspsoidg.gov/sites/default/files/document-library-files/2019/NL-AR-18-008.pdf>, and OIG, “Fuel Consumption and Cost Risk Mitigation,” Report No. NL-AR-17-004, April 24, 2017, <https://www.uspsoidg.gov/sites/default/files/document-library-files/2017/NL-AR-17-004.pdf>.

33 See U.S. Energy Information Administration, U.S. No 2 Diesel Retail Prices: https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=emd_epd2d_pte_nus_dpg&f=m.

34 USPS, “Form 10-Q Quarter II FY 2022,” May 5, 2022, <https://about.usps.com/what/financials/financial-conditions-results-reports/fy2022-q2.pdf>, p.32.

renewed every five years.³⁵ For longer-term fixed price contracts, inflation has a long-term impact as current contracts expire and new ones are negotiated or as periodic options for price adjustments take effect. However, sudden spikes in inflation are not as immediately impactful as with fuel. Still, inflation creates uncertainty for procurement beyond fuel, including complications in determining the length of term for contracts.

High Inflation Can Create Uncertainty for Procurement Strategies

Beyond the direct impact of higher prices on costs, high inflation can create challenges in contracting and procurement. Higher than normal inflation or increased price volatility can make it more complicated for the Postal Service to determine and negotiate the optimal length of new contracts and the appropriate options for price adjustment clauses. The Supply Management team must balance getting terms most advantageous to the Postal Service with the need to attract potential suppliers who also need to guard against the risk of volatile prices. The longer the contract, the greater concern of the unpredictable nature of inflation. In addition, if the price of a material is too expensive, the Postal Service might also consider an alternative material.

The Supply Management team must balance getting terms most advantageous to the Postal Service with the need to attract potential suppliers who also need to guard against the risk of volatile prices.

To manage inflation, the Postal Service's Supply Management team regularly creates Commodity Strategies Sourcing Plans (CSSPs) across a variety of commodities. CSSPs are used to develop commodity sourcing strategies, and incorporate analyses of market trends, market changes, and price forecasts. Outside of the CSSPs, the Supply Management team also told the OIG that they actively monitor markets for certain commodities, to try to avoid having increased prices baked into contracts. For example, the Supply Management team tracks resin indices, as resin is required for mail processing equipment. If Supply Management anticipates a price increase in resin, the team will try to order ahead of the price spike. The Supply Management team noted that inflation

is particularly disruptive for purchases involving materials, as material prices tend to fluctuate more dramatically than labor-intensive contracts.

Price uncertainty during periods of high inflation can quickly make the CSSP insights out of date and create challenges for market forecasting, which can translate into procurement delays. For example, the Postal Service's Supply Management team told the OIG that paper products, including tags, labels, and boxes, have recently increased significantly because of inflation. Consequently, the Postal Service had already delayed solicitations for these supplies for months and planned to hold off until later into the fiscal year to release a solicitation.

How Inflation Impacts Postal Service Revenue

When the Postal Service's costs increase with inflation, it needs to generate more revenue by increasing the prices for its products. In FY 2021, the Postal Service's accrued revenues were approximately \$77 billion, almost all of which (\$76 billion) were from product sales. Revenue from market dominant products was \$41.6 billion and competitive product revenues totaled \$34.2 billion. Since price regulations are different for the two product categories, they are impacted by inflation in different ways.

Inflation and Market Dominant Products

Market dominant products include First-Class Mail, Marketing Mail, Periodicals, and Special Services and Package Services (which include Media Mail, Library Mail, and Bound Printed Matter). Price increases for market dominant products, for which the Postal Service maintains a monopoly, are directly linked to inflation as measured by the CPI-U. However, the impact of inflation on revenue is not only influenced by price increases, but also by corresponding customer response to price increases and the potential for high inflation to precede a recession.

Market Dominant Product Price Increases Are Linked to Inflation

The Postal Accountability and Enhancement Act (PAEA) of 2006 established a CPI-based price cap for market dominant products. Under this pricing structure, market dominant product price increases were directly linked to and limited by inflation as measured by CPI-U.

³⁵ The Postal Service leased over 23,000 properties, at a cost of \$1.17 billion in FY 2021.

In November 2020, the Postal Regulatory Commission (PRC) augmented the price cap with supplemental price increase authorities to allow the Postal Service, when certain conditions are met, to generate additional revenue to cover the costs largely outside of its control.³⁶ One of the additional authorities is a density authority to cover the increase in per-unit costs resulting from declines in mail density — the number of mailpieces per delivery point. This authority aims to address increases in the cost-per-mailpiece that are driven by measured declines in year-over-year density. The Postal Service can use it only if the number of mailpieces per delivery point declines. Another authority is a retirement authority that was added to cover statutorily mandated amortization payments for employee retirement costs. The system also includes price increases for any unused authority; and, if applicable, a two percent non-compensatory authority for mail products that currently do not cover their attributable costs. The PRC’s November 2020 Order adopting the new rate setting system highlighted several reasons in support of its decision. In particular, the PRC noted that following the Great Recession, there was a period of deflation, which constrained the Postal Service’s ability to raise rates given the CPI-based cap to price increases.³⁷

Table 2: CPI-U Authority and Total Cap Space in USPS’s April 2022 Notice of Market Dominant Price Change

Class	CPI-U Authority	Total Cap Space
First-Class Mail	5.135%	6.507%
USPS Marketing Mail	5.135%	6.505%
Periodicals	5.135%	8.540%
Package Services	5.135%	8.511%
Special Services	5.135%	6.508%

Source: PRC, Docket No. R2022-1, United States Postal Service Notice of Market-Dominant Price Change, p.4.

36 PRC, “Order Adopting Final Rules for the System of Regulating Rates and Classes for Market Dominant Products,” Docket No. RM20173, November 30, 2020, <https://www.prc.gov/docs/115/115227/Order%20No.%205763.pdf>, p.23.

37 Ibid., p.6.

38 PRC, “United States Postal Service Notice of Market-Dominant Price Change,” Docket No. R2022-1, April 6, 2022, <https://www.prc.gov/docs/121/121358/R2022-1%20USPS%20Notice%20M-D%20Price%20Change.pdf>, p.4.

39 Beginning January 2023, Market Dominant price adjustments will occur twice a year. PRC, “United States Postal Service Filing of Updated Schedule of Regular and Predictable Rate Adjustments,” September 15, 2021, https://www.prc.gov/sites/default/files/USPS%20Schedule%20for%20Rate%20Adjustments_2021.pdf, p.3.

40 The PRC determines the CPI-U rate authority for any 12-month period by calculating the ratio of two 12-month CPI-U averages that are 12 months apart, subtracting one, and expressing the value as a percentage. For a more detailed explanation of the calculation of the CPI-U rate authority, see 39 CFR §3030.140-143.

41 The most recent CPI-U month in the April 2022 filing was February 2022, and the most recent CPI-U month in the August 2021 Market Dominant price increase was April 2021.

Importantly, the additional authorities in the rate setting system allow the Postal Service to increase prices on Market Dominant products above inflation, as measured by the CPI-U authority. For instance, Table 2 compares the CPI-U authority to increase prices based on inflation in July 2022 to the total authority to increase prices when all authorities are applied (total cap space).³⁸

Potential Lag Between Inflation and Price Increases

Postal Service management noted to the OIG that there is sometimes a lag between rising inflation and price increases. The potential lag is due to the notice period required before price increases can go into effect and the method by which the CPI-U authority is calculated. Market dominant price increases require a notice period of 90 days before increases can go into effect. For example, the Postal Service used February 2022 CPI-U data in its April 2022 filing with the PRC for July 2022 price changes.³⁹ Thus, there is an anticipated lag of around 5 months between the most recent data used in the CPI-U authority calculation and when market dominant prices will increase.

In addition, the CPI-U authority is not based on the actual change in inflation (CPI-U) that occurred since the previous rate increase (point-to-point change). The CPI-U authority is instead calculated by comparing 12-month averages (moving average method).⁴⁰ As a result, during periods of accelerating inflation, the CPI-U authority available to raise prices can be lower than the actual inflation. For instance, the CPI-U authority in the Postal Service’s April 2022 filing for price increases was 5.135 percent, whereas the change in inflation (CPI-U) since the prior price increase was 6.239 percent.⁴¹

Table 3: CPI-U Authority versus Point-to-Point Inflation

RATE INCREASE AUTHORITY AND INFLATION CAN DIVERGE

The table below shows the CPI-U authorities for First-Class Mail price increases since FY 2009 compared to the change in CPI-U between rate increases (point-to-point CPI-U). The gray cells indicate when inflation between rate increases was higher than the authority available to increase First-Class Mail prices. In eight instances the point-to-point CPI-U increase was higher than the CPI-U authority and in eight instances it was lower.

Month of CPI-U authority calculation	CPI-U authority available to increase First-Class Mail prices	Change in CPI-U since last price increase (point-to-point CPI-U)
December 2008	3.800%	0.092%
November 2010	1.741%	4.079%
August 2011	2.133%	3.538%
August 2012	2.570%	1.692%
August 2013	1.696%	1.519%
November 2014	1.966%	0.972%
September 2015	0.064%	0.760%
March 2016	0.384%	0.079%
August 2016	0.422%	1.141%
May 2017	1.542%	1.613%
August 2017	0.439%	0.321%
August 2018	2.419%	2.699%
August 2019	1.900%	1.750%
August 2020	1.458%	1.310%
April 2021	1.244%	2.745%
February 2022	5.135%	6.239%

Note: The “change in CPI-U since last price increase” column calculates the point-to-point increase in CPI-U between the months when the CPI-U authorities were calculated. The dates in the chart reflect the most recent CPI-U month used in the calculation of the authorities (including authorities for mail promotions), not the date of PRC approval. Additionally, some of the authorities are adjusted as partial year price caps (the rate change was less than 12 months from the prior rate change) and interim unused rate authority (the rate change was more than 12 months since the prior rate change). Source: Postal Regulatory Commission and U.S. Bureau of Labor Statistics.

Because of this dynamic, the Postal Service can incur some of the costs of high inflation before CPI-U authority adjusts accordingly, and some revenue is forgone due to the delay in price increases.⁴² While inflation can potentially increase costs before prices increase, the lag could also delay the immediate impact of inflation on customers. Also, as shown in Table 3, there are periods when inflation between rate increases is lower than the CPI-U authority. Over time, high inflation between rate increases is eventually reflected in the CPI-U authority, with the main difference between the CPI-U authority calculation and point-to-point CPI-U being the timing and volatility of price increases.⁴³

Inflation's Impact on Market Dominant Volumes

While inflation directly drives market dominant product price increases via the CPI-U, the effect of price increases on mail volume is important for the overall impact on revenue. Price increases only increase revenue in so far as volumes are not too dramatically decreased by the higher prices. Estimates from elasticity studies looking at the impact of price changes on demand for mail indicate that market dominant products are price inelastic, meaning customer demand will not significantly change when price increases.⁴⁴ As a result, when market dominant prices increase with inflation, revenue will also increase.

Some mailers' organizations have expressed concern over the impact that recent and potential future rate hikes could have on volume declines, including the

influence that price increases will have on mailers' decisions to reduce future mailings and investments in mailing technology.⁴⁵ As noted above, past elasticity research indicates that price increases alone should not have a large impact on volume. However, if a recession follows the current period of high inflation, the overall economic distress would likely impact volumes. For instance, there was a major decline in volumes during the Great Recession from 2007-2009, when annual declines of First-Class Mail Single Piece exceeded 11 percent.⁴⁶ Some economists have recently warned of an increasing risk of a recession related to high inflation.⁴⁷ Therefore, changes in volume will be important for the Postal Service to monitor in the current period of heightened inflation. If price elasticities for market dominant products change and volume effects are outside the expected range, the PRC has retained the ability to revisit the issue sooner than its planned 5-year review.⁴⁸

Inflation and Competitive Products

As with other sectors of the economy, inflation affects shipping prices, as evidenced by general rate hikes of 5.9 percent among major carriers at the start of 2022, a full percentage point higher than rate hikes in 2021.⁴⁹ However, as discussed below, the Postal Service has flexibility in pricing its competitive products to keep up with inflation.⁵⁰

42 The extent to which costs are incurred before price increases depends on the timing of cost increases. For instance, COLAs occur at fixed points in the year whereas fuel costs increase with market prices. The OIG did not calculate the timing of the Postal Service's various cost increases from inflation relative to the Market Dominant rate increases.

43 PRC, "Office of the Consumer Advocate Comments in Response to Second Advance Notice of Proposed Rulemaking on Regulations Establishing a System of Ratemaking," Docket No. RM2007-1, June 18, 2007, <https://www.prc.gov/docs/56/56969/Replyto2ndNoticedraftrevised.pdf>, pp.1-6.

44 PRC, "Narrative Explanation of Econometric Demand Equations for Market Dominant Products Filed with Postal Regulatory Commission on January 20, 2021," July 1, 2021, <https://www.prc.gov/docs/119/119133/NarrativeExplanationforPRC-MD%202021.pdf>, p.3.

45 Mailers' organization have also questioned the legality of price increases above inflation. PRC, "Order on Price Adjustments for First-Class Mail, USPS Marketing Mail, Periodicals, Package Services, and Special Services Products and Related Mail Classification Changes," Docket No. R2021-2, <https://www.prc.gov/docs/119/119291/Order%20No.%205937.pdf>, pp.18-19 and 65-67.

46 OIG, "What's up with Mail? How Mail Use Is Changing across the United States," April 17, 2017, RARC-WP-17-006, https://www.uspsog.gov/sites/default/files/document-library-files/2017/RARC-WP-17-006_0.pdf, p.7.

47 Gwynn Guilford and Anthony DeBarros, "Recession Risk Is Rising, Economists Say," Wall Street Journal, April 10, 2022.

48 PRC, "Order On Price Adjustments For First-Class Mail, USPS Marketing Mail, Periodicals, Package Services, And Special Services Products And Related Mail Classification Changes," Docket No. R2021-2, <https://www.prc.gov/docs/119/119291/Order%20No.%205937.pdf>, p.69.

49 Max Garland, "Why parcel shipping will be even more expensive in 2022," Supply Chain Dive, January 31, 2022, <https://www.supplychaindive.com/news/elevated-parcel-shipping-costs-climb-2022-fedex-ups/617915/>.

50 Competitive products are those Postal Service products which are not regulated by a price cap and include Priority Mail, Priority Mail Express, and First-Class Package Service, among others. For a complete competitive product list, see PRC, "Mail Classification Schedule," <https://www.prc.gov/mail-classification-schedule>.

Section Highlights

- The Postal Service has flexibility in terms of the frequency, timing, and the rate at which it can increase competitive product prices in relation to inflation.
- Unlike its competitors, the Postal Service does not use inflation-related surcharges, such as fuel surcharges, in its pricing.
- Prices for the Postal Service's competitive products and its competitors' products have increased at a greater rate than CPI-U.

USPS Has Flexibility to Price Competitive Products Above Inflation

Postal Service prices for competitive products are market-driven, based on demand levels and competitors' prices. Inflation, therefore, is not linked to competitive product prices in the same way as with market dominant products. However, competitive products are subject to a regulatory review process which requires that:

- Competitive products cover their collective incremental costs,⁵¹
- Each competitive product covers its incremental cost, and,
- Competitive products collectively make an appropriate contribution to institutional costs, called the appropriate share.⁵²

While not directly tied to an inflation index, inflation does impact the overall market and competitors' pricing, which influences the Postal Service's pricing decisions. Postal Service management and the Board of Governors have the flexibility to make pricing decisions on competitive products. Pricing decisions are also implemented more quickly for competitive products than market dominant

products. Decisions are filed with the PRC 60 days before implementation and Negotiated Service Agreement contracts must be filed 15 days before implementation.⁵³

The Postal Service's pricing strategies for competitive products differ from competitors' in several ways. Competitors sometimes turn away low-margin volume from shippers to mitigate the impacts of inflation by maximizing efficiencies before resorting to price increases. In contrast, the Postal Service has the obligation to serve all customers. In addition, unlike USPS, competitors use inflation-driven surcharges on competitive products, such as fuel surcharges. Surcharges allow carriers to adjust shipping prices on a weekly or monthly basis.⁵⁴ Postal Service management told the OIG that because competitive products adequately cover their costs, USPS does not need to do as much cost-based pricing but focuses on market-based pricing.⁵⁵

While its pricing strategies may differ from other carriers', USPS's competitive product prices have in the past 15 years increased faster than inflation as measured by the CPI-U, in line with competitors. See [Figure 4](#).

Continued periods of high inflation may also impact the level of demand for competitive products, as well as carriers' delivery strategies. Faced with higher shipping costs, online ecommerce customers may opt for cheaper alternatives to home delivery — such as pick-up in stores — or switch back to retail shopping. At the same time, significantly higher delivery costs may put additional pressure on carriers to generate greater cost efficiencies. For example, carriers may potentially introduce lower cost centralized delivery channels, such as parcel lockers.

51 The incremental cost of a product is the total cost caused by adding that product to the Postal Service's output mix.

52 Institutional costs are Postal Service costs that cannot be directly or indirectly assigned to any mail class or product.

53 A Negotiated Service Agreement is a contractual agreement between the Postal Service and a mailer which can include customized pricing for postal products.

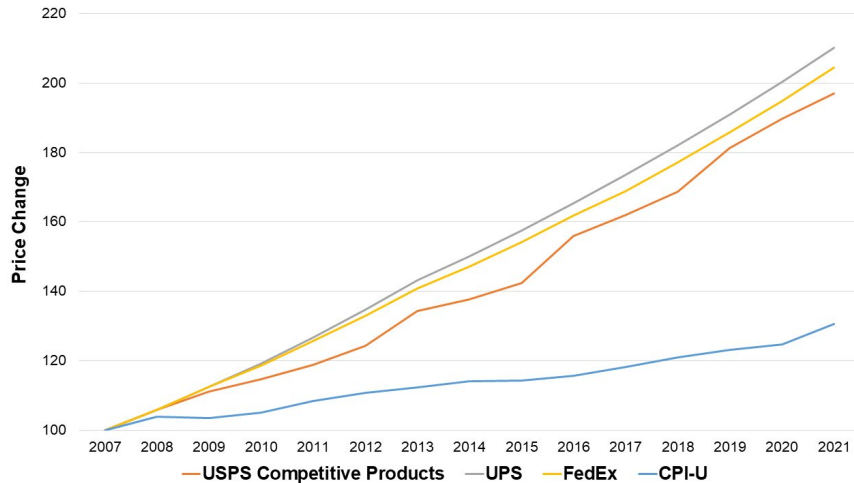
54 In early June 2022, the fuel surcharges competitors charged on their domestic ground shipping products were typically in a 18-20 percent range. For example, see UPS, "Ground and UPS SurePost Fuel Surcharge," <https://www.ups.com/us/en/support/shipping-support/shipping-costs-rates/fuel-surcharges.page>.

55 Postal Service management told the OIG that for competitive products, USPS does not have to price based on cost because of competitive products' cost coverage. Management also noted that surcharges for market dominant products are impractical given the cap calculation. Although outside the scope of this project, a 2019 OIG audit recommended that USPS management evaluate available options to modernize the pricing management system. The audit noted that in addition to annual general rate increases, others in the industry have controlled the growth in general rate increases by using various fees, such as peak season add-on fees, with rate increases. OIG, "Competitive Products Pricing Best Practices," Report No. CP-AR-19-003, September 11, 2019, <https://www.uspsog.gov/sites/default/files/document-library-files/2019/CP-AR-19-003.pdf>.

Figure 4: Competitive Price Increases versus CPI-U

COMPETITIVE PRICES HAVE INCREASED FASTER THAN INFLATION

The average prices of the Postal Service's competitive products, along with its competitors' general rates, have increased faster than inflation as measured by the annual average of the CPI-U. The following chart shows the annual average price increase of the Postal Service's competitive products and its competitors', as well as annual average CPI-U since the enactment of PAEA (indexed to a 2007 base of 100).



Source: PRC, Docket No. RM2017-1, Order No. 4963, p.11, Table II-4; Fiscal Year 2020-2021 Integrated Financial Plans, p.4; Lojistic, 2022 Annual Carrier General Price Increase, p.3; U.S. Bureau of Labor Statistics.

Cash on Hand and the Borrowing Limit

Inflation reduces the purchasing power of the dollar, and this erosion of value occurs more rapidly during periods of high inflation. The erosion of value from high inflation has a particular impact on the value of the Postal Service's cash on hand and its borrowing limit.

Section Highlights

- High inflation erodes the purchasing power of the Postal Service's cash on hand, which was nearly \$24 billion as of September 30, 2021.
- The Postal Service's \$15 billion statutory debt limit has lost real value because it has not increased in over two decades.

High Inflation Can Erode the Value of Cash on Hand

High inflation has impacted USPS's cash on hand, in so far as the cash has lost real value. As of September 30, 2021, and September 30, 2020, USPS held unrestricted cash and cash equivalents of \$23.9 billion and \$14.4 billion, respectively.⁵⁶ In FY 2021, the average daily liquidity balance was \$20.7 billion, which represented approximately 103 days of liquidity. USPS can invest its liquidity only with the U.S. Treasury and is restricted from investing in longer-term securities or Treasury Inflation-Protected Securities (TIPS).⁵⁷ Currently, USPS invests all available cash on deposit in its Treasury Account at the New York Federal Reserve. In May 2022, Postal management stated that over the previous year, the Postal Service's average overnight investment rate was a very low 0.082 percent.⁵⁸ The gap between the high inflation rate and the very low rate of return on its investments erodes the purchasing power of the Postal Service's cash on hand. This could translate into income statement effects in out years as

⁵⁶ As of March 31, 2022, this amount was stable, at \$23.7 billion. The increase in liquidity in FY 2021 was due to CARES Act funding of \$10.0 billion, non-payments for statutorily specified health fund obligations, increased revenue from the surge in package revenue during the pandemic, the deferral of approximately \$529 million in payments for the employer contribution of Social Security benefits under provisions of the CARES Act; and leave reimbursements under the American Rescue Plan Act. USPS, "Form 10-K FY 2021," November 10, 2021, <https://about.usps.com/what/financials/10k-reports/fy2021.pdf>, p.45.

⁵⁷ Beyond government securities, corporations can seek returns on cash while preserving liquidity by investing it in other funds and securities, such as money market funds, corporate bonds, or mortgage-backed securities.

⁵⁸ As of June 16, 2022, the overnight investment rate had increased to 1.18%.

the cash is used to purchase capital goods or for operating expenses that might have increased.

USPS's Borrowing Limit Does Not Increase with Inflation

The Postal Service's maximum borrowing amount under the Postal Reorganization Act has remained at the same ceiling of \$15 billion since 1999 and has not changed despite inflation.⁵⁹ In addition, the Postal Service is limited to annual net increases in debt of \$3 billion.⁶⁰ Consequently, the real value of the Postal Service's \$15 billion borrowing authority has decreased substantially with inflation. The purchasing power of the \$15 billion maximum declined approximately 38.5 percent from 1999 to 2021. The Postal Service reached its debt ceiling in September 2012 and generally maintained the maximum borrowing amount until September 2018. As of September 30, 2021, the Postal Service's outstanding debt was \$11 billion.⁶¹ However, in its FY 2021 Annual Form 10K Report, the Postal Service states that, given its inability to raise cash through debt beyond the statutory limit, it does "not have sufficient cash balances to meet all of [its] existing legal obligations and make all of the critical investments in [its] infrastructure that are necessary for operational continuity and that have been deferred in recent years."⁶²

Conclusion

Inflation's impacts on the Postal Service costs and revenue vary widely in terms of magnitude and immediacy of the impact. The extent of the impact depends on the mechanisms by which inflation rates adjust costs and postal prices, and the level of USPS management's control over these mechanisms (Table 4).

Labor costs are directly affected by inflation through COLAs for career bargaining unit employees. The COLAs paid twice a year are tied to an inflation index (CPI-W) but do not fully compensate for the impact of inflation on wages. In addition, inflation assumptions affect the discount rate used to calculate the Postal Service's future liabilities for retirement benefits and workers' compensation. Any increase in the assumed inflation rate increases the interest

(discount) rate and reduces the present value of future liabilities. As a result, the workers' compensation liability decreased by \$3.5 billion between FYs 2020 and 2021. However, the calculation of the Postal Service's retirement benefits amortization payments, including the assumed inflation rate, is determined by OPM. Therefore, inflation's effect on the level of these payments is beyond the Postal Service's direct control.

For costs related to purchased supplies and services, contract terms determine the immediacy of inflation's impact. However, inflation-related price volatility makes it more complicated for the Postal Service to determine the optimal duration and price adjustment terms in many contracts.

Price increases for market dominant products are directly tied to inflation (CPI-U). However, in periods of high inflation, the rate-setting process causes a delay between when USPS incurs the costs of inflation and when it can increase prices for market dominant products and generate revenue to compensate for higher inflation costs. Prices for competitive products are not directly tied to inflation and are market driven. USPS has flexibility in terms of the frequency, timing, and the rate at which it can increase prices for these products. Since 2008, prices for the USPS's competitive products and its competitors' products have increased at a much higher rate than CPI-U. Unlike competitors that apply fuel surcharges, USPS does not update its shipping fees every week. However, if a recession followed the current period of high inflation, the overall economic distress could negatively impact customer demand for postal products.

Finally, inflation erodes the value of the Postal Service's cash on hand, which was nearly \$24 billion as of March 31, 2022. USPS can only invest in short-term Treasury securities, which have interest rates that are much lower than inflation rates. Inflation's erosion of value also has implications on the Postal Service's \$15 billion statutory debt limit, which has not increased since 1999. The value of the \$15 billion declined approximately 38.5 percent from 1999 to 2021, meaning the purchasing power of the borrowing authority is far less today than it was in 1999.

59 39 U.S.C. § 2005 (a)(2) and Congressional Research Service, "U.S. Postal Service Financial Condition and Title VI of the CARES Act," May 12, 2020, <https://crsreports.congress.gov/product/pdf/IN/IN11384>, p.2.

60 39 U.S.C. § 2005 (a)(1) and USPS, "Form 10-K FY 2021," November 10, 2021, <https://about.usps.com/what/financials/10k-reports/fy2021.pdf>, p.46.

61 Ibid., p.64.

62 Ibid., p.46.

Table 4: Impacts of Inflation on Expenses, and Revenue, and Liability Types Discussed in this Paper

		Directly tied to an Inflation Index	Immediacy of Impact	Magnitude of Impact
Expenses	General wage increases for bargaining unit employees	NO	CBA's generally cover a three-year period	Depends on outcome of collective bargaining
	Salary increases for current career non-bargaining unit employees	NO	Salary increases are only based on performance (PFP)	N/A
	Salaries of new career non-bargaining employees	NO	Once a year	USPS often use OPM's updated pay bands, which may consider inflation
	COLAs for career bargaining unit employees	YES	Twice a year	Below inflation (CPI-W)
	Contribution to employee health care premiums and retirement benefits (FERS normal costs)	NO	Annually	Medical inflation is higher than inflation (CPI-U)
	Workers' compensation (cash outlays)	NO	Annually (through reimbursement to the DOL)	N/A
	Fuel expenses	YES	Monthly (HCR)	Adjusted to Department of Energy EIA fuel index
	Rents	NO	Upon contract renewal	Depends on terms and conditions set in contracts
	Other supplies and services	MAYBE	Depends on terms and conditions set in contracts, for example, escalation clauses	
Revenue	Market dominant	YES	Twice a year beginning in 2023	Currently below inflation (CPI-U)
	Competitive	NO	As needed	Historically higher than inflation (CPI-U)
Liabilities	Workers' compensation (non-cash component)	NO	Annually	Changes in inflation rates influence discount rates, which impact workers' compensation liability
	Retiree health benefits	NO	Annually	Changes in inflation rates influence discount rates, which impact liabilities for retirement benefits

Source: OIG analysis.

The Postal Service's business environment and operating model have dramatically changed since the last time inflation was at 2022's rates. Consequently, USPS should monitor the impacts of prolonged high inflation on its finances and work with its stakeholders on strengthening the mechanisms in place to mitigate high inflation risks.

Appendices

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Appendix A: Additional Information

Objective, Scope, and Methodology

Objective

The objective of this paper was to conduct a qualitative assessment of the impacts of inflation on the Postal Service's costs and revenue, to include and highlight how the Postal Service currently manages inflation-related risks.

Scope

Our focus was the impact of inflation on the Postal Service's costs and revenue, and its current mechanisms for managing inflation-related risks. We divided the components of our research into several tasks:

- Task 1: Current picture of the U.S. economy
- Task 2: How inflation impacts USPS
- Task 3: How USPS manages inflation
- Task 4: How other related companies or government agencies manage inflation

We did not intend to perform a predictive quantitative analysis for this paper.

Methodology

To develop these main components, we use several approaches.

- Desk research. We conducted desk research to support tasks 1 and 2. We analyzed documents from government agencies, including the U.S. Bureau of Labor Statistics and the World Bank, and articles from economic publications. We also reviewed relevant Postal Service and PRC documentation and data, as well as past OIG audit reports, to understand how USPS addresses and mitigates inflation risks.
- Interviews with Postal Service management. In support of Tasks 2 and 3, we conducted interviews with Postal Service management to gather information

on how inflation impacts the Postal Service and how it manages it. We spoke with representatives from Strategic Business & Financial Planning, Revenue & Volume Forecasting, Compensation & Benefits, Transportation Strategy, Pricing & Costing, and Supply Management.

- Interviews with experts. The purpose of these interviews was to gather outside experts' perspective on the impact of inflation in general (Task 1), on the Postal Service (Task 2) and other logistics companies (Task 4). As part of this research phase, we spoke with Prof. Victor Glass (Rutgers Business School), representatives from the Postal Regulatory Commission, UPS, the Council of Supply Chain Management Professionals, the American Trucking Association, and the National Association of Letter Carriers. We also interviewed representatives of Amtrak, as an example of a government-controlled corporation which, like the Postal Service, generates revenue from selling services to the public.
- Economic analysis by outside contractor. The main source of evidence supporting Task 2 was a study the OIG commissioned in January 2022 from SLS Consulting, Inc. (SLS). SLS is a Washington, DC-based contractor with longstanding expertise in postal economics. SLS developed an analysis of how inflation impacts the Postal Service's costs and revenue.

Note on SLS Cost segmentation methodology

The first step of SLS's analysis consisted of grouping the Postal Service's cost segments into categories that should be similarly impacted by inflation. SLS used 17 cost segments from the Postal Service's Public Cost Segments and Components FY 2021 report.⁶³ Each cost segment comprises multiple components and sub-components. SLS grouped the Postal Service's cost segments and sub-segments into six main categories, totaling about 99 percent of total accrued costs. [Table 5](#) shows SLS groupings. In particular, SLS broke down two cost components:

⁶³ USPS issued its Cost Segments and Components Report as part of the FY 2021 Annual Compliance Report. ACR2021, USPS-FY21-2 - FY 2021 Public Cost Segments and Components Report, filed on December 29, 2021, <https://www.prc.gov/docs/120/120584/USPS-FY21-2.zip>.

- CS 12 “Motor Vehicle Service” was divided into three sub-categories (Personnel, Vehicle Hires, and Supplies & Materials), which were assigned, respectively, to the Labor, Long Distance Transportation & Vehicle Hire, and Supplies categories.

- CS 18 “Servicewide Personnel Benefits” was split in two. Its benefits sub-components were assigned to the Retirement, Post Retirement, & Benefits category. Its HQ/Area Operations, Holiday Leave and Repriced Leave components were assigned to the Labor category.⁶⁴

Table 5: SLS Classification of USPS Cost-Components for Analysis of Inflation impacts

SLS classification of costs for analysis of inflation impacts								
Cost Seg. Number	Name	Labor	Long Distance Transportation & Vehicle Hire	Retirement, Post-Retirement, & Benefits	Supplies	Building Occupancy, Rents, & Fuel	Depreciation & Other Accrued Expenses	Unclassified Costs
C/S 1	Postmasters	X						
C/S 2	Supervisors and Technicians	X						
CS 3	Clerks and Mailhandlers	X						
C/ 6	City Delivery Carriers - Office Activity	X						
C/S 7	City Delivery Carriers - Street Activity	X						
C/S 8	Vehicle Service Drivers	X						
C/S 10	Rural Carriers	X						
C/S 11	Custodial and Maintenance Services	X						
C/S 12	Motor Vehicle Service							
	-Personnel	X						
	-Vehicle Hire		X					
	-Supplies and materials				X			
C/S 13	Miscellaneous Local Operations							X
C/S 14	Transportation		X					
C/S 15	Building Occupancy					X		
C/S 16	Supplies and Services				X			

⁶⁴ These sub-components included CSRS and FERS supplemental liability, RHB benefits, workers' compensation, and unemployment compensation.

SLS classification of costs for analysis of inflation impacts

Cost Seg. Number	Name	Labor	Long Distance Transportation & Vehicle Hire	Retirement, Post-Retirement, & Benefits	Supplies	Building Occupancy, Rents, & Fuel	Depreciation & Other Accrued Expenses	Unclassified Costs
C/S 17	Research and Development							X
C/S 18	Service-wide Personnel Benefits and HQ/Area Operations							
	-HQ area operations	X						
	- CSRS and FERS supplemental liability, RHB benefits, workers' compensation, and unemployment compensation			X				
C/S 19	General Management Systems							X
C/S 20	Other Accrued Expenses (Service-wide)						X	

The OIG conducted work for this white paper in accordance with the Council of the Inspectors General on Integrity and Efficiency, Quality Standards for Inspection and Evaluation. We discussed our observations and conclusions with management on July 21, 2022, and included their comments where appropriate.

Prior Coverage

Title	Objective	Report Number	Final Report Date	Monetary Impact
<i>Worker's Compensation Program Cost Containment Activities</i>	Determine the current status of Postal Service cost containment activities related to workers' compensation costs and liabilities.	19-031-R20	August 6, 2020	\$0
<i>Options to Reduce Unfunded Retirement Liabilities</i>	Explore options to address reducing unfunded retirement liabilities.	19BG010FT000-R20	March 6, 2020	\$4,208,914,264
<i>A Closer Look at Postal Labor Costs</i>	Gain a better understanding of the sources of the Postal Service's labor costs and how it has changed over the last 10 years.	RISC-WP-20-001	December 2, 2019	\$0
<i>Treasury Inflation-Protected Securities</i>	Determine the impact of investing Postal Service retirement fund assets in Treasury Inflation-Protected Securities.	FT-AR-19-003	November 26, 2018	\$2,781,473,463
<i>Highway Contract Route Fuel Price Index Program Effectiveness</i>	Determine the effectiveness of the March 2017 Highway Contract Route (HCR) baseline fuel price per gallon (ppg) procedural guidance.	NI-AR-18-008	May 24, 2018	\$606,602

Appendix B: Management's Comments

JOSEPH CORBETT
CHIEF FINANCIAL OFFICER
EXECUTIVE VICE PRESIDENT



August 1, 2022

CARRIE FOX
DIRECTOR, OPERATIONS CENTRAL
RESEARCH AND INSIGHTS SOLUTION CENTER

SUBJECT: Inflation and the U.S. Postal Service – White Paper (2022RISC002)

Thank you for providing the Postal Service the opportunity to review and comment on the findings contained in the draft report, *Inflation and the U.S. Postal Service*. We appreciate the communication and interactions from your office throughout this process. We also appreciate your representation of the many challenges we face in times of increased inflation.

Recent surges in inflation have impacted the Postal Service's costs in unprecedented ways. We have a contractually negotiated cost of living adjustment (COLA) in our labor contracts. September 2021 was the single highest COLA adjustment made since the inception of our COLA provision. Rising fuel costs are pushing our transportation expenses up to record levels. And, increasing inflation increasingly impacts what we pay for the supplies and services we need to continue to provide mail and package delivery to every address, nationwide.

To a limited extent, we can mitigate these inflation impacts, such as by attempting to negotiate contracts with suppliers which controls costs even in high-inflation environments. Unfortunately, the measures available to us are limited. For example, our negotiated COLA provisions can only be modified through collective bargaining with our labor unions, an unlikely proposition in this hyperinflationary time. Furthermore, the law allows us to invest our cash holdings only in certain Treasury bonds, preventing us from using the inflation protection strategies the private sector might use.

Additionally, the impact of inflation on our revenue lags behind its impact on our costs. Because of the way the Consumer Price Index is incorporated into the price cap on our Market Dominant products, it can take over a year for an increase in inflation to be fully reflected in our prices. This leaves us more vulnerable to inflation than many private sector companies, who can immediately address increased costs by increasing prices for their own products.

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We look forward to working with our stakeholders to explore solutions to these challenges. We are committed to continue providing high-quality service across the United States while achieving long-term financial sustainability.

A handwritten signature in black ink, appearing to read "Joseph", with a long horizontal flourish extending to the right.

Joseph Corbett

cc: Manager, Corporate Audit Response Management



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