

# A Quest for Common Cents

## The Future of the Penny in United States Currency

By Ethan Starr '21

Since its creation in 1793, the United States penny has enjoyed nearly uninterrupted production. The cent's long-term durability can be matched only by its adaptability, evidenced by its numerous designs before the advent of its modern iterations. This paper follows the penny throughout American history, from its origins through its evolution into the nation's most unprofitable and insignificant piece of currency. As a combination of perpetual inflation and rising costs of compositional metals renders continued production of the single-cent coin costly and unsustainable, the United States government must take immediate action to evaluate the coin's status within circulating currency. The only forward-thinking and cost-saving solution to the inefficiencies of penny production entails elimination of the one-cent coin. This paper outlines the processes crucial to the eventual retirement of the single-cent coin from American currency, including necessary interventional measures that minimize negative economic impacts, potential difficulties affecting the passage of currency reform packages in Congress, and instances of unsuccessful past attempts at eliminating the penny. Finally, the essay evaluates the likelihood of eliminating production of the penny through legislative action in the present day, as the coin's dissolution becomes more imperative.

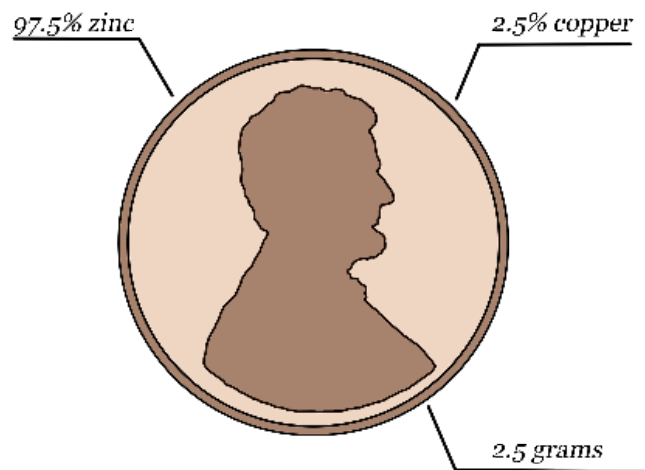
Idly they lie in the depths of piggy banks, the fissures of mall fountains, and the gutters of city streets. Some are amassed and stockpiled; others collect only the eerie green patina of a watery neglect, or the filthy black sheen of incomprehensible substances. These little, copper medallions are rendered untouched, unnoticed, and unappreciated by modern American society.

Despite its status as the most numerous item of metal currency in the world, the penny remains America's forgotten coin. The same metal token that survived World War rationing, underwent frequent metallic and dimensional adjustments, and was emblazoned with images as iconic as Abraham Lincoln, faces a sudden and irreversible incompatibility with contemporary American life. Modern externalities like inflation and non-cash transactions threaten the penny's purchasing power and solubility, while the coin's production costs simultaneously skyrocket to greater degrees of unsustainability.

The United States government continually subsidizes production of the most unprofitable major American currency in history while simultaneously maintaining an inflexibility that hinders currency innovation and modernization. While the average American could easily identify the uselessness and wastefulness of continued penny production, voices for reform within Congress are met with significant opposition, denying proper attention to the issues of necessary currency modernization. This comprehensive examination of currency reform will analyze the necessity of penny retirement, as well as the procedures and obstacles involved in the processes of currency legislation. Close analysis and consideration of these incentives, as well as the difficulties of currency discontinuation, should inform future governmental actions toward the single-cent coin. Future progress towards curtailing government waste in the form of continued penny production must overcome the marginalization and gridlock of Congress in addition

to significant opposition from self-interested groups. Informed in these considerations, the United States Congress should explore discontinuation of the penny in order to eliminate excess government spending on a single-cent coin that is unnecessary and irrelevant in modern America.

The penny has undergone a number of transformations throughout its history and had consistently adapted to the conditions within the nation. The United States' one-cent piece, informally known as the penny, has been in circulation in a number of different forms since 1793, becoming the lowest minted denomination of American currency in 1858. The obverse of the early 'large cent' coins displayed variations of Lady Liberty, with a simple wreath illustration surrounding the denomination on the reverse. The post-1857 'small cent' penny transformed the coin into a size and weight more familiar from a modern perspective, featuring subsequent designs of a flying eagle and an Indian head before the coin was finally graced with the profile of Abraham Lincoln in 1909. Following the laurel wreath on the reverses of the coin were wreaths of oak leaves and then wheat, before the Lincoln Memorial appeared starting in 1958.<sup>1</sup> Following the recent centennial of the Lincoln penny in 2009, the Mint exhibited their contin-



ued willingness to adapt coinage, with a 'Union Shield' design. Perhaps more consequentially, the United States Mint has also regularly adjusted the metal composition of the cent coin, often in response to rising production costs. Currently, the penny is composed of 97.5% zinc and 2.5% copper, with a weight of 2.5 grams. The modern composition is a result of the rising price of copper coupled with rapid inflation in the 1970s which forced the adjustment of the metal content, from pre-1982 levels of 95% copper and 5% zinc.<sup>2</sup> An additional noteworthy example is the 1943 steel cent, for which the Mint adjusted penny metal composition to a steel coin with only a thin outer coating of zinc. In reaction to wartime shortages in copper, the steel penny symbolizes the adaptability of coinage to reflect the condition of the nation. Just as post-Civil War America required a downsizing of the penny and the 20th century Mint developed a cost-saving adjustment for the cent coin, the future will require the extraordinary step of eliminating the nation's smallest denomination of currency.

Perhaps more than any physical change, inflation has affected the evolution of the single-cent coin in the American economy. As the purchasing power of the penny continues to fall, the coin becomes increasingly irrelevant in everyday transactions as well as the greater American economic landscape. As Stephanie King states in her analysis of penny retention and elimination, the penny "has outlived its usefulness in the U.S. economy due to its somewhat insignificant monetary value."<sup>3</sup> For example, a penny would have around the same purchasing power in 1965 as 8 cents today. In fact, the value of a penny did not fall below the equivalency to today's nickel until well into the inflationary decade of the 1970s. Due to continual inflation, prices in the United States have increased roughly 25-fold since the early 20th century and the introduction of the Lincoln penny.<sup>4</sup> Despite the penny remaining the lowest denomination of legal tender during that

time period, one cent would have been roughly equivalent to one quarter in today's money. While the Consumer Price Index (CPI) should be taken only as a broad estimate, as its measurement is independent on many other external economic elements, the value of pennies has clearly decreased in daily transactions. Diminished purchasing power of the penny only further incentivizes individuals to discontinue use of the coin, which effectively removes the coins from circulation. Inflation presents a significant obstacle for the future solubility of a single-cent coin, as annual decreases in purchasing power push the coin ever-closer to an inevitable extinction.

Production costs of the penny present the most striking evidence of the coin's long-term unsustainability, with metallic composition once again acting as a decisive factor in the cent's future. The calamitous relationship between a continually falling purchasing power and increasing costs of production create staggeringly wasteful costs for production of the penny at the United States Mint. An individual penny's production cost in 2016 was 1.5 cents, including both the prices of raw materials and distribution to the Federal Reserve Banks. Production cost reached an all time high in 2011, when each penny required 2.41 cents to mint. Although the price fluctuates, pennies have consistently cost more than their face value since 2006, with their production totaling about 300 million dollars in loss for the Mint from 2010-2015.<sup>5</sup> Additionally, since zinc and copper prices fluctuate mostly due to the burgeoning economies in Asia, metal commodity prices are not expected to fall in the coming years, with some projections expecting a loss of at least 2 billion dollars in penny production from 2016-2031.<sup>6</sup> Alongside the nickel, the penny represents a rare example of the Mint producing currency at a financial loss. Because the Mint produces most coins at costs below face value, they derive a profit from selling the coins at face value to the Federal Reserve Bank. This

process is officially known as seignorage and the Mint's profits from coin production enabled a 2016 profit of \$550 million, which is then given to the Treasury Department. Seignorage from other coins reverse the losses of the penny, leaving the losses from penny production inconspicuous in budget reports. Despite the skyrocketing costs of production, the Mint has increased penny production since 2012 by 58%, producing over 9 billion pennies in 2016. Coin currency tends to re-enter circulation during periods of economic hardship, consequently the Mint only produced 2.4 billion pennies in 2009.<sup>7</sup> Reports from the United States Government Accountability Office (GAO) estimated that, on average, two-thirds of pennies are outside of circulation, "making the trip from the Mint to the Federal Reserve to the commercial banks and finally to consumers is a 'one way trip.'"<sup>8</sup> Because of the coin's weak circulation, pennies accounted for over 60% of Mint production in 2016.<sup>9</sup> While the United States Mint is not a policy-making body, the unsustainability of their rates of penny production is reckless and wasteful, and the already astronomic prices will only continue to rise.

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Elimination of low-denomination currencies is hardly an original idea; currency reform has occurred in countries across the world as well as the United States. For example, Canada, Australia, and New Zealand have all eliminated their lowest denomination currency within the last decade, and most Eurozone countries have dis-

continued production of the 1 and 2 cent pieces. While additional countries have taken similar steps to combat inflation and production costs, Canada, Australia, and New Zealand each introduced a rounding system to finalize the absence of their lowest currency denomination.<sup>10</sup> A similar price rounding system for retail, cash transactions to five-cent intervals is generally viewed as a necessary step for any country eliminating a one-cent coin. Noting the 11 million-dollar (Canadian) savings and the permanence of phasing out the penny, the Director of the Royal Canadian Mint stated in 2013: "There is no end date to this process."<sup>11</sup> In each of these cases, while the single-cent coin has remained legal tender, individual businesses accept them only at their own discretion; the coins do not, however, lose their face value. Historically successful implementation of currency retirement has not been entirely foreign; the United States eliminated the half-cent from circulation in 1857 and has already discontinued the use of pennies on many military bases. The smallest denomination ever minted by the United States, the half-penny, was retired in the Coinage Act of 1857, one of America's first currency reform laws, which also prohibited foreign money as legal tender.<sup>12</sup> The Department of Defense issued paper coins called pogs in the early 2000s to avoid the costs of air transportation of coinage for military bases. However, "even the one cent pog was discontinued for its lack of buying power,"<sup>13</sup> and these bases have since implemented a price rounding system as well. These numerous examples of successful elimination of low-denomination coins demonstrates the system's ability to flourish on a scale as large as the United States.

An effective price rounding system composes an essential portion of any potential sustained effort to eliminate the penny from circulation and everyday cash transactions. The most commonly misunderstood process in currency reform, the rounding process, appears complex procedurally, but is actually quite simple in execution. For cash

transactions only, the absence of a single-cent coin requires that retail prices must occur only at five-cent intervals on behalf of the consumer. Due to the tendencies of retailers not to include sales tax in listed prices within the United States and of consumers to purchase multiple items, the final digit of a total sale at a retail establishment is virtually random. Assuming random distribution of the final digit of sales price, a rounding system wherein each terminal digit is assigned either to round up or down to the nearest 5-cent interval, and the directions of rounding correspond to alternating digits, would function successfully. The objective of such a system, of course, would be the avoidance a 'rounding tax,' or any unequally distributed form of rounding that would either cause a consistent increase in the price for the consumer, or decrease for the consumer, which is a tax on the producer. Numerically, such a system would result in prices with terminal digits 1, 2, 6, and 7 rounding down to the nearest interval divisible by 5, while digits 3, 4, 8, and 9 would round up to the nearest interval divisible by 5. The economic response to such a measure, although limited, has been somewhat mixed. A 2001 study by Raymond Lombra, "Eliminating the Penny from the US Coinage System: An Economic Analysis" suggests a rounding system would create a rounding tax on consumers "no less than \$600 million a year"<sup>14</sup> due to an imbalance of price rounding evidenced in his study. Lombra's theory was largely based on the presumption of an unequal distribution of terminal digits in price resulting from the prevalence of prices ending with 99 cents. However, economist Robert Whaples rebuts Lombra's arguments in his paper, "Time to Eliminate the Penny from the U.S. Coinage System: New Evidence," and his own comprehensive study. Whaples ensured the inclusion of sales tax in his calculations, finding that "rounding would have essentially no effect on consumers or sellers as a group,"<sup>15</sup> when sales tax and multi-purchase transactions are taken

into account. When properly implemented and fairly studied, price rounding systems demonstrate the capability to round prices with at most a negligible impact on producers and consumers.

There are numerous detractors and arguments in opposition to the elimination of the penny, stemming largely from self-interest or ignorance of the processes of penny retirement. Several myths are perpetuated by the organization Americans for Common Cents, which dedicates resources toward supporting penny retention. Among their primary critiques of penny retirement is the claim that the Mint would lose money discontinuing pennies due to increased nickel production, a coin which is also unprofitable for the Mint at a production cost of 7.4 cents per coin. However, although each individual nickel contributes greater negative seigniorage to Mint funds than each penny at 1.5 cents, the penny remains significantly more costly in proportion to its face value. Additionally, the Mint has recently explored an adjustment of the metal content of the nickel that would render the coin at least revenue-neutral.

Another popular argument used by the penny supporters claims that the elimination of the penny had the potential to harm charitable organizations. However, the "small, yet critical, penny contributions" for charities referenced by Americans for Common Cents represents pure speculation on the changing habits of donation by Americans. Moreover, with an increase in nickel production as well as the continued status of old pennies as legal tender, donations could conceivably increase with the American public's continued antipathy towards carrying low-value coins.

One additional criticism of price rounding systems claims that there are potential inflationary impacts which, while even Lombra admits would "probably be small," the "effect will cumulate over time to a considerable degree."<sup>16</sup> Whaples contends, in response, that even an unlikely occurrence of a 'rounding tax' "wouldn't generally affect the Consumer Price Index," due to its





minimal economic impacts, and would therefore have no effect on the measurement of inflation.<sup>17</sup>

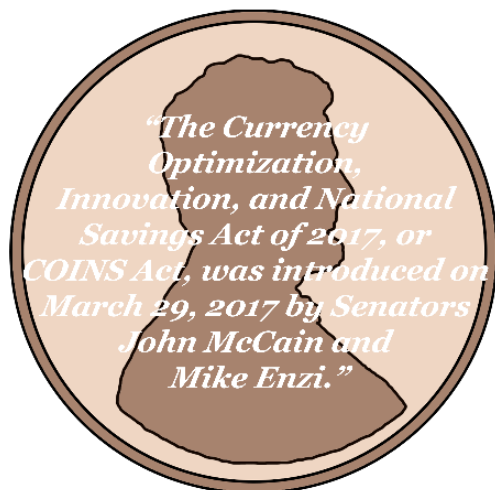
Perhaps the most intriguing argument from Lombra and advocates of penny retention stems from a concern toward the greater psychological impacts for the consumer of a perceived capitulation to inflation represented by penny elimination. While there exists little information to confirm or deny suspicions of an erosion of consumer confidence owing to the absence of a one-cent coin, the prevalence of non-cash transactions, unaffected by price rounding, has increased significantly since Lombra published his study.

Past congressional attempts to pass penny legislation have facilitated debate on cost-saving measures like penny elimination, supported by representatives dedicated to currency reform, but none have advanced to higher levels of consideration. Calls for the retirement of the one-cent coin extend as far back as the Carter administration, when the Treasury Department considered removal of the penny from circula-

tion, rather than the eventual adjustment in the coin's metallic composition. After "a newly elected Carter Administration scotched the idea,"<sup>18</sup> discussion surrounding elimination of low-denomination currency did not reappear until legislation from two Arizona Representatives, Mo Udall and Jim Kolbe, was introduced in the late 1980s. In what began as a "symbolic measure to reaffirm copper production,"<sup>19</sup> the Liberal Democrat Udall and moderate Republican Kolbe conceived a mandate that, following expansion of the dollar coin, copper composition of the dollar be sourced from within the United States, and that penny production be halted. As Representative Kolbe was a member of the House Financial Services Committee, these initial forays into currency modernization were largely proposed under his name. As Arizona leads copper production among the states, the early currency reform plans quickly received ridicule, but currency modernization would go on to be an issue of significant interest to Congressman Kolbe for the duration of his tenure.

In the Price Rounding Act of 1989, Mr. Kolbe and Democratic congressman Jim Hayes of Louisiana introduced legislation entirely focused on penny retirement, including detailed instructions pertaining to implementation of the rounding system. Detractors were again quick to call attention to the 75% copper composition of nickels, increased production of which would benefit copper mining more than minting of the majority-zinc penny, and the legislation again failed to gain traction and was defeated in committee. The bill represented the first introduction of a currency rounding system to Congress. However, the measure was never debated in the Senate or outside of the House Financial Services Committee, and the concept of price rounding laid dormant for decades. In July 2006, a year marking the coinciding of both Mr. Kolbe's announcement of retirement and the first United States Mint net loss on penny

production, the Congressman once again introduced currency reform legislation. The Currency Overhaul for an Industrious Nation (COIN) Act included not only penny elimination and price



rounding, but also a demand for an annual redesign of the two-dollar bill and encouragement for the Mint to expand production of the dollar coin. “We found it easier to find support for the bill when it was presented within a broader currency reform package,” recollected Kolbe,<sup>20</sup> who by then had increased his advocacy for replacing the dollar bill with coinage, as had other proponents of currency modernization. His sponsored legislation again failed to advance outside the House Financial Services and Budget Committees. Past currency reform bills experienced downfall in the face of varying sources of opposition ranging from special interests to skeptical members of Congress. Representative Kolbe remarked that he “thought it would be easier to eliminate the penny” than he experienced when supporting reform legislation. Several detractors, special interest groups and congressional peers debilitated the chances of penny elimination, price rounding, and other measures of reform from succeeding in the House. The zinc lobby, financed by Jarden Zinc, the manufacturing company that produces the alloy planchets, or blanks, fielded significant resistance to proposals eliminating the penny.

Jarden Zinc, in fact, has provided most financial support for the lobbying group Americans for Common Cents, which testified before Congress on the issue, and even for Lombra’s economic research.<sup>21</sup> The lobbying organization continues to remain active in Washington as well as maintaining a website. Additionally, Crane Paper, the exclusive producers of paper for United States dollars, located in Western Massachusetts, sought to dismantle Kolbe’s legislation promoting the dollar coin. Congressman Silvio Conte, representing Western Massachusetts, interjected “What a pathetic statement of American decline!”,<sup>22</sup> encouraging further resistance against currency overhaul from peers in the House during the first attempted dollar-elimination legislation. Among the greatest obstacles for Kolbe’s COIN Act in the early 2000s was the disapproval of Speaker of the House Dennis Hastert. Hastert, representing Illinois’ fourteenth district, firmly objected to discontinuing the coin graced with the image of President Lincoln, an historical resident of his state. Mr. Kolbe cited Speaker Hastert’s opposition as the greatest factor in the COIN Act’s downfall, with Hastert’s denouncement resulting in meager support among members of the Act’s relevant committees.<sup>23</sup>

Legislation providing for the retirement of the penny has recently been resurrected within the Currency Optimization, Innovation, and National Savings Act of 2017, or COINS Act, introduced on March 29, 2017 by Senators John McCain and Mike Enzi. The proposed legislation includes broader currency modernization, including replacement of the dollar bill with a dollar coin as well as the alteration of the metal composition for the nickel. Sponsored by two high-profile senators, the 2017 bill represents the first appearance of currency reform discontinuing the penny in the United States Senate.<sup>24</sup> A renewed sense of optimism has engrossed modern proponents for currency reform, with emphatic endorsement and support of the legislation delivered from the Dollar Coin Alliance and The Council for Citizens

Against Government Waste. The Act would immediately discontinue penny production at the Mint, contributing that “further production of the one-cent coin is not necessary for the next decade.”<sup>25</sup> Rather than supporting the immediate implementation of a price rounding system, the Act would mandate a GAO report after the passing of three years to explore whether or not to resume penny production. Former Representative Kolbe referred to the probability of success of the recently introduced bill as “better than ever before,” noting that his proposed legislation was never offered the public debate and the national spotlight that the McCain-Enzi bill is likely to receive.<sup>26</sup> A Washington lobbyist from the American Continental Group, contracted by the Dollar Coin Alliance, confirmed that the yet-to-be-introduced “bill in the House will be bipartisan,” when it reaches the Financial Services Committee, also admitting that proponents of the COINS Act have yet to secure any Democratic votes in the Senate. While the lobbyist emphasized a projected 17 billion savings for the Mint with about 150 million dollars annually in savings following the three components of reform, would present a compelling argument for modernization advocates, she recognized the difficulties posed by traditional opponents like Crane Paper, among others.<sup>27</sup> The reception of the COINS Act within Congress is likely to determine the trajectory and feasibility of any future retirement of the single-cent coin. Achieving massive government savings as well as changing the nature of cash transactions in the United States rests, for the near future, squarely in the success or failure of the McCain-Enzi legislation.

While success of the recently introduced COINS Act remains far from a surety, the likelihood of penny elimination within the immediate future continues to increase. Contemporary attitudes in American politics, as well as increasingly evident savings, provide a sympathetic environment in Washington for legislation discon-

tinuing the one-cent coin. On the campaign trail and inside the White House, President Trump has repeatedly called out instances of government waste like Boeing’s production of a new Air Force One, as well as the wasteful development program of the F-35 Joint Strike Fighter. Defense Secretary Mattis has since ordered reviews of the contracting programs with Boeing Co. and Lockheed Martin Corp.<sup>28</sup> As the first United States president elevated from the role of a private citizen and entrepreneur to the White House, the President has significant experience in running a generally successful business empire. With the President’s enduring mindset of a businessman working in government administration, his ability and willingness to target and combat inefficiencies and unprofitable programs leads supporters of currency reform to theorize “a positive attitude toward the President’s involvement” in Congressional legislation.<sup>29</sup> A self-described “budget hawk,” this same lobbyist declined to speculate on the chances of success of the COINS Act, concluding that the “circumstances are ripe to mature.”<sup>30</sup> The procedure described in the bill, consisting of a production suspension followed by a later GAO study, undoubtedly presents the best case scenario for congressional approval, wherein debate surrounding a price rounding system is delayed until well after the Mint and the American public grow accustomed to discontinued penny production. Penny retirement remains most likely to succeed if inserted on its own into an annual budget, either by the President or an amendment from Congress.

Despite the staggering, avoidable costs of penny retention, progress toward currency modernization in Congress continues to present perhaps insuperable difficulties that may render retirement of the one-cent coin impossible to attain in the near future. Perpetual congressional gridlock, as well as a lack of awareness and focus toward the cost-saving nature of currency reform, endanger the COINS Act in similar



fashion to previous attempts at reform. The combination of the suspension of penny production with the phasing out of the dollar bill in a single currency reform package creates the opportunity for numerous critics to unite and orchestrate its downfall. This is in addition to the traditional opposition of metal lobbies, paper manufacturers, and congressional delegations from specific states. Besides criticism from the congressional delegations of Illinois (home of Abraham Lincoln), Massachusetts (home of Crane Paper), and Tennessee (home of Jarden Zinc), more latent concerns toward the dollar coin will negatively affect its ability to succeed. For example, the Federal Reserve, although a nonpartisan entity without a force of lobbyists, might quietly oppose expansion of the dollar coin, because the Banks would be denied the seignorage from 1-dollar bills, which would instead contribute to the surplus of the Mint budget.<sup>31</sup> President Obama reflected in 2014 that “the penny ends up being, I think, a good metaphor for some of the larger problems we’ve got.”<sup>32</sup> The long-standing inability of Congress to modernize American coinage will only result in continued waste of federal monies that could otherwise be diverted to pressing issues of greater concern, or perhaps alleviating the deficit. In reference to the words of Benjamin Franklin, Aaron Klein noted that in modern America, “a penny not made is a penny saved.”<sup>33</sup> Any successful passage of much-needed currency legislation addressing the inefficiency of the penny within the American economy must overcome a multitude of opposition groups, individuals, and ideologies defending the one-cent coin.

Congress must urgently address the status of the single-cent coin within the American numismatic and commercial future, especially as they become increasingly cognizant of the unsustainability of penny production and its rapidly decreasing relevance in the modern American economy. Just as the penny has adapted alongside the nation in the past, America’s lowest de-

nomination of coinage must meet its end. Implementation of a price rounding system similar to the methods utilized by other nations must be incorporated into legislation in order to successfully rid cash transactions of the useless one-cent coin. Current and future proposals to retire the single-cent coin must overcome significant opposition and correct the mistakes of past attempts at reform legislation. If Americans trust their elected officials to address important issues like national security, those same public servants should readily respond to the large-scale waste of public funds by inefficiencies like penny production. Even if the current currency reform package meets the same end as its predecessors in Congress, public officials must continue to pursue this simple, cost-saving solution. The elimination of the penny is in the national interest.

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