THE FUTURE OF MONEY: DOLLARS AND SENSE

HEARING

BEFORE THE

SUBCOMMITTEE ON

DOMESTIC MONETARY POLICY

AND TECHNOLOGY

OF THE

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U.S. HOUSE OF REPRESENTATIVES

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CONTENTS

THE FUTURE OF MONEY: DOLLARS AND SENSE

Thursday, November 29, 2012

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY AND TECHNOLOGY,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 2 p.m., in room 2220, Rayburn House Office Building, Hon. David Schweikert [member of the subcommittee] presiding.

Members present: Representatives Schweikert, Leutkemeyer, Huizenga; Clay, Maloney, and Green.

Also present: Representative Stivers.

Mr. SCHWEIKERT [presiding]. This hearing will come to order. I ask for unanimous consent that Mr. Stivers of Ohio, as a member of the Financial Services Committee, be permitted to sit with members of the Subcommittee on Domestic Monetary Policy and Technology for the purposes of delivering a statement, hearing testimony, and questioning witnesses today.

Hearing no objection, it is so ordered.

We have an agreement already of a limitation of 10 minutes on each side for opening statements. Without objection, the Members' opening statements will be made a part of the record.

Let me just start with some opening comments, because in many ways I am much more interested in hearing your comments, some education for us, than hearing me go through a 5-minute hyperbole.

This is one of those issues that on the face should be almost blatantly simple. Out of the things we deal with here in Washington, trying to find a way to save money for this country shouldn't be political theater. I am, in many ways, on a personal level, almost heartbroken. I accept that we have industries out there that make their living making paper for currency, people who have sort of unique sole source contracts and they use the political process to defend those. But to engage in some of the levels of political theater have bordered on just absurd. I really want this to be one of those where let's deal with the truth, let's deal with the math. What was it—the 2012 GAO study had $4.4 billion savings over 30 years. And if we actually take a look at what happened in Canada, they blew past their projections of savings. As both of us even on a bipartisan basis are trying to find ways to keep this government marginally solvent, this is maybe just one of those little grains of

sand that we need to step up and embrace if it drives us in the right direction.

I now recognize Mr. Clay for an opening statement.

Mr. CLAY. Thank you so much, Chairman Schweikert. Let me also thank you for conducting this hearing which is entitled, "The Future of Money." This hearing will look into the cost of replacing the dollar bill with a $1 coin, which I am looking forward to hearing the testimony on. It is always good to have you here, but I also wanted to mention the current chairman of this subcommittee, Ron Paul, and I wanted to thank him for his long-term service to this Nation. And of course, this is one of the key issues in which he has always been interested. Hopefully, I will get to see him before we have finished our work here in the Congress.

I will stop there so that we can take testimony, and again, thank you for conducting the hearing.

Mr. SCHWEIKERT. Mr. Clay, you actually—maybe that is my failing—for all of you who have never had the chance to really get to know Congressman Paul, he truly is one of the nicest individuals you can ever make acquaintance of. I was a little nervous when they first put me on this subcommittee, but it turned out to be one of my great joys.

I know Congressman Stivers is on his way up.

Do we break a little bit of protocol, let Mr. Peterson start, and then maybe we will have another opening statement? Okay. We are going to play this somewhat on the fly.

Mr. Peterson, you are recognized for 5 minutes for a summary of your testimony.

STATEMENT OF RICHARD A. PETERSON, ACTING DIRECTOR, UNITED STATES MINT

Mr. PETERSON. Good afternoon, Mr. Chairman, Ranking Member Clay, and members of the subcommittee. I am pleased to testify this afternoon on behalf of the United States Mint and its vibrant team of 1,800 men and women located in 6 facilities across the Nation. I especially look forward to the discussion about the production of both $1 coins and $1 notes, as well as the metal composition of our circulating coins.

First, with regard to the ongoing production of dollar coins and Federal Reserve $1 notes simultaneously, I want to stress that the United States Mint continuously looks for ways to manufacture efficiently without compromising quality. I also want to stress that we have fulfilled our statutory requirement to aggressively promote the use of $1 coins.

However, in spite of our thorough and creative efforts, the Federal Reserve Bank still had significant inventories of dollar coins in 2011, and as a result, production of the dollar coins for circulation was suspended last December. We still offer $1 coins, however, through several numismatic products.

Even with the reduction in seigniorage from the suspension of Presidential $1 coins, we believe that we will continue to realize positive seigniorage for the circulating program overall since we expect production of the one-quarter dollar coin to continue to rebound in Fiscal Year 2013.

On the issue of the metallic composition of our circulating coins, the Mint made significant progress this year on a research and development program to examine possible metallic alternatives for our Nation's coins. To do so, we established and staffed a separate and secure research and development laboratory within the United States Mint at Philadelphia.

At this point, what I can say is that we have conducted two sets of trial strikes on a variety of metallic compositions and evaluated them for such things as hardness, ductility, corrosion, wear resistance, electromagnetic signature, the availability of raw materials, and, of course, cost.

In December, the Mint will provide its first biennial report to Congress under the provisions of the Coin Modernization Oversight and Continuity Act of 2010. This report will provide the results of our research and development efforts over the last 18 months.

We recognize that there are many stakeholders' challenges and other issues associated with adopting alternative metals, and we will continue to engage these parties throughout the process.

Mr. Chairman, this concludes my oral testimony. My entire written statement has been submitted for the record. I am happy to answer your questions or questions of other members of the subcommittee.

Thank you very much.

[The prepared statement of Acting Director Peterson can be found on page 52 of the appendix.]

Mr. SCHWEIKERT. Thank you, Mr. Peterson.

Ms. St. James?

STATEMENT OF LORELEI ST. JAMES, DIRECTOR, PHYSICAL INFRASTRUCTURE TEAM, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. ST. JAMES. Mr. Schweikert, Ranking Member Clay, and members of the subcommittee, I am pleased to be here today as you examine the potential savings from replacing the $1 note with the $1 coin. GAO has reported 6 times over the last 22 years that this replacement would provide millions of dollars in net financial benefits to the government every year.

Today, I would like to share with you our latest findings, experiences from other countries that have gone through such replacements, and public and private sector considerations in moving forward if the dollar note is replaced with the dollar coin.

This year, we reported that transitioning to the dollar coin would potentially offer $4.4 billion in net benefits to the government over 30 years. This amount consists solely of increased seigniorage, and not lower production costs, as you might expect. Seigniorage is the financial gain to the Federal Government when it issues notes or coins because both forms of currency usually cost less to produce than their face value. This financial transfer from the public to the government reduces the government's need to raise revenue through borrowing. With less borrowing, the government pays less in interest, hence the financial benefit.

Before I discuss the experiences of other countries, I want to mention two items that are important to know about our estimates.

First, our estimates are based on several assumptions, and when assumptions are changed, the estimates change.

Second, we assume that it would take 1½ coins to replace each note. This ratio has the largest impact on determining the net financial benefits to the government.

That said, let me discuss the experiences of other countries. Over the last 48 years, many countries have replaced notes with coins to save money. For example, Canada replaced its $1 note and $2 note with coins in 1987 and 1996 and reported saving millions of dollars because of seigniorage and lower coin production costs.

Canada and the United Kingdom experienced public resistance when they transitioned but took actions that overcame it within a few years. For example, in Canada, the Royal Canadian Mint conducted a public relations campaign to inform the public that the conversion would save money. In 2011, Canadian officials told us that the $1 and $2 coins were the most popular coins in circulation and were heavily used by businesses and the public. Canada and the United Kingdom used the transition period to implement the conversion and to gradually phase out the currency being replaced.

The United Kingdom issued the 1 pound coin in early 1983 and continued to issue the 1 pound note until 1984. Canada used a 2-year transition period for its $1 coin.

Let me turn to my last topic on considerations moving forward. In the past, we recommended that Congress proceed with replacing the $1 note with the coin only if the note was eliminated and negative public reaction to the replacement was effectively managed through outreach and public education.

In 2011, we reported that some private businesses had already made changes to accommodate the coin. Officials representing the vending industry said many of its members had already modified their vending machines for dollar coins, and many of the larger transit agencies had already modified their equipment as a result of the Presidential Coin Act of 2005.

Retail sales, banking and currency, and transportation officials, however, cited additional costs for modifying vending machines and cash register drawers, and increased costs for transportation and storage. They stated that the transition could be done, but that it would take 1 to 2 years to make the transition.

In summary, we have found that the government would receive a financial benefit from replacing the note with the coin, but it is not without challenges, one being public opposition. However, many other countries have managed such replacements with success, and some U.S. companies have already made changes to accommodate the dollar coin.

This concludes my statement. I would be happy to answer any questions at this time.

[The prepared statement of Director St. James can be found on page 58 of the appendix.]

Mr. SCHWEIKERT. Thank you, Ms. St. James.

Ms. Lepine, thank you for being here. I have actually been particularly looking forward to your testimony. And I will beg of you, as you begin your testimony, to describe your position with the Canadian Mint.

STATEMENT OF BEVERLEY LEPINE, CHIEF OPERATING OFFICER, ROYAL CANADIAN MINT

Ms. LEPINE. Thank you very much, Mr. Chairman. I am chief operating officer of the Royal Canadian Mint, and I have been with the organization for 25 years.

Mr. SCHWEIKERT. Thank you.

Ms. LEPINE. Good afternoon, and I want to thank the chairman and the respected members of this subcommittee for inviting the Royal Canadian Mint to speak on Canada's experience with replacing the $1 bank note with the circulation coin as well as with the introduction of innovative Multi-Ply Plated Steel material, which has dramatically improved the cost-effectiveness of circulation coins in Canada and around the world while also improving their reliability and security.

After twice successfully replacing a low denomination bank note with a circulation coin—first, with the $1 coin in 1987; and second, with the $2 coin in 1996—we have continued to maximize the benefits to users of our circulation coins through innovations such as: our Multi-Ply Plated Steel technology, the most economical, durable, and secure coins on the market, now used on all Canadian circulating denominations and over 70 other denominations in 30 countries around the world; our alloy recovery program, which replaces older alloys with Multi-Ply Plated Steel coins, reducing the number of coin compositions in the Canadian marketplace; our coin recycling program, which puts coins back into circulation in a more efficient and environmentally friendly way; our high-speed circulation coin coloring process first introduced in 2004 on a design commemorating our veterans; and our virtual image and laser mark security features ideally suited to high value circulation coins. Our DNA anti-counterfeiting technology currently used on our new $1 and $2 coins works like a fingerprint to ensure the authenticity of every new coin. Our Mint chip project is testing a digital currency solution with all the features of cash, and our coin forecasting and distribution systems manage Canadian coin distribution across the country for financial institutions without incurring any coin shortages or building excess inventories.

Our strong focus on innovation helps the Mint compete for the profits we need to fund our operations without taxpayer support. But its most important outcome is our enhanced ability to meet changing customer needs while making our coinage system more robust, efficient, and reliable.

Primarily a cost saving measure when it was announced in 1985, several businesses and special interest groups supported a $1 coin for the many advantages it offered in areas such as transit and vending. Public opinion surveys confirmed wide customer acceptance of this new coin, and instead of a requirement of 250 million coins over the first 3 years, almost 600 million coins had to be produced to adequately meet the marketplace demand.

Mass adoption of the $1 coin occurred 2 years later in 1989 after the last dollar note was printed. In hindsight, we found that the phased approach was not, after all, necessary, and with that lesson learned, we introduced the $2 circulation coin in conjunction with the end of the $2 bank note production.

Lasting 25 years or more instead of 1 year for a bank note, the $1 coin has saved the Canadian Government $175 million over its first 20 years. In the United States, we usually say it is 10 times that number.

The Multi-Ply Plated Steel version introduced this year, along with the $2 Multi-Ply Plated Steel coin offering equal or better durability at less cost, will produce a combined additional $15 million annual savings to the Canadian Government.

Our successful introduction of this technology depended on communicating early and often to all our stakeholders, particularly the vending industry, and collaborating closely with them. To quote the president of the Canadian Automatic Merchandising Association (CAMA), "While no one in our industry wants to see a change that will cost us money, we do applaud the effort of our government to find cost savings. Our relationship with the Mint is strong, and we value them as a partner in our industry."

Central banks and treasuries have much to gain from emulating the $250 million savings Canada has so far realized through Multi-Ply Plated Steel, and we now count customers on every continent, including an Asian jurisdiction whose current order is the largest foreign circulation contract in our history.

The Mint, along with its many strategic partners, is committed to advancing the science of coin and engineering and manufacturing for the benefit of all of its customers and stakeholders while meeting its duty to support Canadian commerce by producing and distributing Canada's circulation coinage cost effectively and profitably. We have more than met this goal with the combined profits of the last 5 years eclipsing those of the previous 25 years. We achieved record revenues of $3.2 billion in 2011, netted profits of over $43 million, and paid a record dividend of $10 million to our exclusive shareholder, the Government of Canada. We will continue to reinvest our profits in researching and developing coin technologies which meet the ever-changing needs of the marketplace, and we are committed to providing commonsense answers to the challenge of issuing coinage in today's world.

Thank you again for inviting me to appear before your committee, and it will be my pleasure to answer your questions.

[The prepared statement of Ms. Lepine can be found on page 41 of the appendix.]

Mr. SCHWEIKERT. Thank you for coming south, Ms. Lepine. I now recognize Congressman Stivers.

Mr. STIVERS. Thank you, Mr. Chairman. I apologize that I wasn't here in time to give an opening statement. I would like to ask your consent to be able to read that statement before I ask questions.

Mr. SCHWEIKERT. Why don't you make an opening statement and then just roll right into questions.

Mr. STIVERS. Thank you. I just wanted to make sure that was okay. Thank you, Mr. Chairman. I appreciate you, and I appreciate Chairman Bachus allowing this important hearing today.

In these times of fiscal strain, we can save millions of dollars by simply changing the composition of our coins from an alloy to multi-ply American steel. Since 2006, the cost of minting 1-cent and 5-cent coins has exceeded their face value. In fact, a penny costs about 2.4 cents to mint and a nickel costs 11.1 cents to mint,

and last year the Mint produced, I believe, 4.3 billion pennies and 914 million nickels. I will follow up with Mr. Peterson to make sure my math is correct on that.

But focusing on the content alone ignores some other issues, and I think we do need to look at issues like the overhead costs at the Mint. And I really appreciate Mr. Peterson's being here today. I think he has experience in manufacturing, experience in coins. That said, I am not sure he is the perfect witness for both pieces of the testimony. He is a great witness for my bill on coins, but on the transition to the coin from the dollar bill, I think this committee asked Rosie Rios—who oversees both the Mint and the Bureau of Engraving—to testify. And so I wish she would have been here, but I am glad you are here, Mr. Peterson, and I do want the folks at Treasury to understand that these coinage issues aren't going to go away and this committee is committed to focusing on this issue, and, in fact, there is a constitutional requirement for Congress to deal with coinage issues and regulate our currency.

In a study in April of 2012, Navigant Consulting estimated that we could save between $182 million and $207 million annually by moving to a plated multi-ply steel composition for our coins the way Canada did, as Ms. Lepine discussed. They could easily co-circulate with our current coins, which hopefully would be something that we would be able to work through with the vending machine industry. I know that is going to be an issue, and I want to talk to Ms. Lepine about how that worked in Canada, and Mr. Peterson about how we can do that. But as Congress considers various alternatives to what to do on currency and how to make the coinage as efficient as we can, I hope we will look at the Royal Canadian Mint's example of using multi-ply steel, a cheaper raw material that is actually more durable. And I want to talk to Ms. Lepine about that in a second, because it will save taxpayers' money.

But I do think there are other issues that I want to get to over time, including how we can reduce the overhead at the U.S. Mint, and I may ask Mr. Peterson some questions about that. If it is okay, I would like to start some questions.

Ms. Lepine, do you want to talk about the cost of multi-ply steel versus the alloys that you are using in Canada?

Ms. LEPINE. With pleasure. The Mint introduced Multi-Ply Plated Steel for its 5, 10, 25, and 50-cent denominations in 2000. This was really driven based on a look at costs where we believe the costs are 55 percent of the alloyed costs, and it really is changing to a material that has a steel core, so 94 percent of the coin, on average, is steel with only 6 percent more expensive nickel and copper.

The second part related, I think, to costs is metal and price volatility. So we recognize that there is metal sensitivities, particularly if you look at the markets over the last 6 or 7 years. By going to steel, we have reduced that sensitivity and enabled central banks around the world, treasuries around the world to be able to maintain their budgets for coinage.

In addition to the cost issue on Multi-Ply Plated Steel, the other benefits are related to the security around Multi-Ply Plated Steel, which offers a more unique and definite electromagnetic signature which aids in vending and/or cost processing machines, and the

ability to tailor that signal in terms of meeting the needs of a given country.

Mr. STIVERS. Can you talk about, because the vending machine industry is something that will come up I think in this process, what the Royal Canadian Mint did to work with the vending machine industry to ensure that the transition was as easy as possible for them? Obviously, they have some capital replacement that happens naturally. Did you work the cycle into their capital replacement cycle, extend the notice? Tell me how that worked to help allay their concerns.

Ms. LEPINE. If we look at our most recent change in 2012 which put the $1 and the $2, our final high denomination coins into Multi-Ply Plated Steel, we started working with the vending industry in about 2008. So the issue here is to let the stakeholders know, give them an opportunity to be able to work with you at developing what the specification partially might be. So we also allowed 6 months towards the end of that period to let them calibrate the machines and in fact made changes with the vending industry that would ensure that we didn't have overlap over our high denomination coins or the 50-cent coin in our next denomination.

Absolutely critical in doing that, there is no doubt there are always costs to changing software and their machines, but we know for a fact that in Canada about 90 percent of the machines are already at the upper end of the software capability so it really isn't that complicated of an issue to change the software.

Mr. STIVERS. And for a period of time, and I think even currently, Canada has had both multi-ply steel and alloyed coins in circulation at the same time. Did that present any issues and how were those issues addressed with maybe any vending machine folks or just folks in the general population?

Ms. LEPINE. Vending machines are very capable at reading more than one composition in terms of the material on the coins that may be in the marketplace at any point in time, and so there were no difficulties in reading both an alloyed coin and a Multi-Ply Plated Steel coin in terms of the, I will call it windows of ability, for the software to read those. That was not an issue for us at all.

Mr. STIVERS. And for the consumer, the look and feel of these coins can essentially look and feel the same as they do today but the core is different, is that correct?

Ms. LEPINE. That is correct. It is a steel core with a layer of nickel, copper-nickel on top of the steel core.

Mr. STIVERS. And today, the Royal Canadian Mint is working with several countries on a similar conversion. Can you talk about that and maybe why those countries have gone that route? It is going to get to the same point that I have been getting at all day.

Ms. LEPINE. In fact, New Zealand in 2006 converted all of their coins or three of their denomination coins to Multi-Ply Plated Steel and did an extensive review working with the vending industry, which we also helped them with in ensuring that their vending industry in their country would have a chance to calibrate and be able to understand and modify their machines.

The other part of work that we do with central banks around the world, and we have completed some and we have some under way now, is working with the central bank to look at what the countries

around their borders may be using, looking at the purchasing power of those countries around the border, looking at any of their trade relationships or vacation volumes of flows of coin and making sure that we take the multi-ply and design that middle copper layer which is probably the most key layer in this for EMS purposes, that we design that layer to try and mitigate any overlaps on coinage around the country. And in fact, in some cases the work with the central bank can be a year or longer as they develop the specification for the coin to convert their coins to Multi-Ply Plated Steel.

Mr. STIVERS. Great, and I hate to use all your time. I am out of time. I was going to ask Mr. Peterson some questions, but I will yield back and hope there is a second round.

Mr. SCHWEIKERT. Thank you, Mr. Stivers.

Mr. Clay.

Mr. CLAY. Thank you so much. Mr. Peterson, in discussing the Coin Modernization and Taxpayer Savings Act at a hearing in 2008, a former Mint Director, Edmund Moy, said that steel may not be the panacea, it doesn't make sense to reduce the cost of materials used in the penny if they are offset by higher manufacturing costs.

Mr. Peterson, do you believe that changing the composition of the penny and the nickel to plated steel would save the taxpayer money?

Mr. PETERSON. Ranking Member Clay, in 2010, Congress passed and the President signed into law a bill that allowed us to go conduct research and development on alternative coin compositions. We don't do this very often. The last time we did this on a comprehensive basis was 1965, and back then we hired a third-party consultant to assist us. We did the same over the last 2 years. If you look, if you remember your high school chemistry class and the periodic table of elements on the wall, there are 80 metals on the periodic table. Many of them are radioactive, many of them are more expensive than we are going to be able to use on our coins. And you rapidly distill that down to four elements: aluminum; iron in the form of steel; zinc; and lead. We are not going to make our coins out of lead, so we have aluminum, steel, and zinc.

The Mint has done, over the last 2 years, a very nice job in establishing momentum on conducting research and development. We established within the Philadelphia Mint the research and development laboratory, we conducted two sets of trial strikes on 29 different coin compositions of aluminum, steel, and zinc, some of which were the plated steel compositions, and our report to Congress is due within the next several weeks. We look forward to getting that up to Congress, and I just want to leave you with the message that the men and women at the United States Mint have done the Nation proud with the research and development effort that we have taken on over the last 2 years.

Mr. CLAY. Thank you for that response.

Let me ask Ms. St. James, benefits of the $1 coin were not realized until after 10 years in response to your February 2012 analysis of the benefits and losses from replacing the $1 note with a $1 coin, the Federal Reserve raised concerns with the fact that the

U.S. Government would face losses up to $31 million, and $1.8 billion over the first 10 years of the program.

The Federal Reserve went on to say that they are concerned that the 30-year savings projections may overstate the net financial benefit, perhaps substantially.

In your view, how would you expect the U.S. Mint to pay for a $1.8 billion loss in the first decade?

Ms. ST. JAMES. First of all, the model that we use looks at the net benefits between two different scenarios, one is today's scenario, in which the dollar note predominates, and then we have the other scenario in which the coin would predominate, and we looked at it over 30 years. And looking at it in a 10-year timeframe, we estimated that the Mint would need, conservatively, about 4 years to ramp up production because we would need more coins to replace—1½ more coins to replace $1 notes.

So you would have to have the Mint go from producing, I believe, about 3 billion coins, around that amount today, to about 13 billion coins to meet demand.

So looking at it in a 10-year timeframe, the benefits of switching to the coin, are they are front-loaded with the cost and back-loaded with the benefits?

Mr. CLAY. With the savings?

Ms. ST. JAMES. Right. So the savings only comes in after that 10-year period.

Mr. CLAY. All right, thank you for that response. Quickly, Ms. Lepine, what factors should Congress consider in order to ensure public acceptance of any changes to the composition of circulating coinage? And in your experience, do weight, size, color or other factors matter?

Ms. LEPINE. Certainly, I think market research—you want to conduct focus groups, which the Canadian Government did in terms of understanding what the Canadian public and the business community needs. We wanted to make sure that the coins were very visible for the visually impaired and ensure that a new coin could be easily used by that group.

Promoting the message of cost reduction was really the key message that the Canadian Government followed, and it was obviously well-received, as I think was mentioned. The Canadian $1 had its 25th anniversary this year and a public poll done by the CBC said that it is an icon for Canada just like the RCMP or the beaver, et cetera.

Making sure the coin, people understand that saving and visually get to see the coin, understand the coin's visual characteristics is very important.

Mr. CLAY. Thank you.

Mr. SCHWEIKERT. Thank you, Mr. Clay.

Mr. Luetkmeyer?

Mr. LUETKEMEYER. Thank you, Mr. Chairman.

Ms. Lepine, I am just kind of curious, in the last 2 years, I have had 2 interns from Australia. I had one a year ago, and I had one this past year. And when we got done with their internship, we had a little pizza party for them and we sat there and asked them what is the thing that is kind of interesting or different or something that struck you about our country. And each one of them

said, you guys have pennies. We don't have pennies in Australia. We just round to the nearest nickel. And I noticed that you have done the same thing in Canada, have you not?

Ms. LEPINE. Correct.

Mr. LUETKEMEYER. What are the effects of that?

Ms. LEPINE. The decision on our 1-cent coin just to clarify, is a decision by our Department of Finance. And that decision was very much based on public opinion which, close to the time when this decision was done, was running anywhere from 44 to 67 percent in terms of positive reaction and/or neutral reaction to the penny.

The second part is obviously looking at the savings that came from the penny, which were about $11 million per year.

I think what is important about the penny decision for us is it was an evolutionary process in terms of coinage introduction.

First, Canada introduced Multi-Ply Plated Steel coinage, which reduced the cost of our coinage, meaning that all of our denominations had positive seigniorage. It was the penny that had gone into negative seigniorage in the 2008–2009 period, and that message was very important for the Canadian public in terms of understanding that there was a negative aspect to producing that penny, and therefore it would be not a bad idea to eliminate that denomination.

In terms of impact on the Mint itself, we have been recycling since 2004, and as a result of those recycling operations, in partnership with Coinstar, over 50 percent of our production volume, or the demand in the country for coin, was actually met through recycling. So interestingly, for us, we had already started to reduce overheads and manage the issue of having coinage, pennies recirculating and coming back in through a recycling mechanism.

Mr. LUETKEMEYER. Was it accepted by the public?

Ms. LEPINE. Very much so.

Mr. LUETKEMEYER. How have the businesses reacted? Just round it up or round it down, is that what they did?

Ms. LEPINE. In fact, the decision was made in May. And back again to thinking about stakeholder reaction, the Department of Finance listened to some of the big coin processing, coin heavy retailers, so think of fast food, and the result of that was, although we stopped production in May, the decision was made by our Department of Finance to delay the actual end of distribution instead of September to the month of February so that retailers weren't having to deal with this change and the training associated with it and the rounding with it over this Christmas period.

Mr. LUETKEMEYER. Did you see a net increase or net decrease in level of taxation as a result of the coin or was it neutral?

Ms. LEPINE. In the first place, the coin is still in distribution right now, so I think the Department of Finance, which I would want answering that particular question, but the coin will actually only stop distributing on February 4th.

Mr. LUETKEMEYER. Thank you. And with that, I will yield the balance of my time to the gentleman from Ohio.

Mr. STIVERS. Thank you for yielding the balance of your time. I have a question for Mr. Peterson. You alluded to the report that is coming out in a couple of weeks. Is there any chance you could give us a Reader's Digest version? Sneak preview? Anything?

Mr. PETERSON. The report will be up here on or about December 13th. I will say that this committee has previously heard testimony that if the metal for the penny were free, we would still exceed 1 cent. On the nickel, I will say that we looked at the 29 different compositions that I mentioned, and there were several promising alternatives. We look forward to continuing the R&D in the coming months and years and have an active plan for 2013.

Mr. STIVERS. Thank you for that. Can you give us an insight into, of the penny, what percent of the current, and my math says 2.4 cents, what percent of that cost is raw material versus overhead at the Mint?

Mr. PETERSON. Our numbers for 2012 are at the auditors right now but they are going to come in very close to 2 cents for a total cost to make the penny in 2012. And we have lowered our costs of manufacturing in the circulating business since 2009. It cost us $230 million to run our circulating business then, it cost us $180 million this year in 2012. We have cut the cost in real dollars by 20 percent over the last 3 years. And so on the cost of the penny, the metal right now is very close to a penny: 47 percent of the cost is metal; mint production costs are 35 percent; and then the general and administrative allocation is 16 percent.

Mr. STIVERS. Thank you. I yield back because there is no time left.

Mr. SCHWEIKERT. So in other words, you are not really yielding back anything. Thank you, Mr. Stivers.

I want to do two things before I actually—one thing before I start to ask questions. If anyone feels trapped over on that side and you want to scurry across, because I have had the occasion where I got trapped over there. So if anyone needs to move one more time, I accept that this is a big crowd in a small room. Okay. If not, then we are going to move on.

Mr. Peterson, help me understand, because I want to make sure that I have my understanding of it. If we were to go to the clad multi-layer type coin do we have to get a license from Canada? Is this a patented process? Do we have to contract or have we developed something that we hold rights to?

Mr. PETERSON. I believe Canada's process is patented. We need to go investigate a supply chain for the plated technology. Steel, if we were to have authorization to convert to steel, it needs to be plated with some kind of coating. Electroplating in a large industrial environment is a complex and capital intensive process. The United States Mint does not have that capability internally today. To develop that capability would require several hundred million dollars. And imagine, if you will, what electroplating really is. Imagine a football field, a building that size filled about 4 or 5 feet deep with sulfuric acid and then electric current is passed through the acid to have the plating material deposited onto the steel. We are not going to build one of those in Denver or downtown Denver or downtown Philadelphia. So we would need to go find a site to if we wanted to vertically integrate and if this business case panned out, we would have to go find a site and develop that on our own.

Mr. SCHWEIKERT. From your understanding of the Canadian process, they hold copyrights, patents to the mechanics?

Mr. PETERSON. I believe they do.

Mr. SCHWEIKERT. Ms. Lepine, is this something you have been selling rights to, your intellectual property?

Ms. LEPINE. The R&D that obviously went into the development of Multi-Ply Plated Steel and then the construction of a facility in our Winnipeg operation, which is expanding, almost doubling right now under construction in Winnipeg. Obviously, that R&D is under patent, patent pending in some cases depending on the technology, and we do license. So for us, that R&D would have to be recovered. However, I look at what the 5-cent coin costs are and they are a bit under 3 cents. We believe that the opportunities for that cost in whatever manner is quite appropriate.

Mr. SCHWEIKERT. Any special deals for your good friends to the south?

Ms. LEPINE. I would like to add that we have licensed that multi-ply process to Jardens, Inc., which is, of course, a U.S. corporation, and they have been significant partners over many years in terms of helping us meet the marketplace demand with 30 countries wanting multi-ply steel, 10 of them who wanted in their high denominations already sold and done. The demand for multi-ply steel has been very high. In fact as we look at our foreign business, almost 95 to 97 percent of the business in the last 2 years has been plated material and not alloyed coins from the countries around the world.

Mr. SCHWEIKERT. Ms. St. James, one of those little things, as we sort of go through this process and being someone who has been trying to make sure they are doing the right thing, one time I get a report that says, okay, a U.S. dollar, a paper dollar survives 18 to 24 months. Then I come across a report that is a little bit older that I think said as short as 13 months. And then, I have seen some other reports bounce around where the Fed was using a much longer model. Am I safe continuing that sort of 18 to 24 months, which seems to be the mean in reports and data I come across?

Ms. ST. JAMES. When we looked at it in 2011 and then again in 2012, in 2012 we were told that the lifespan of a note was 40 months. And then in 2012, we were informed by the Fed that they had changed the technology in how they read the notes when they are processing them, and that the lifespan had increased to 56 months. So, in other words, when the dollars come in, for example, if the dollar is facedown in 2011, it would have pulled that note out and it would have had to have been replaced, and the technology they have now allows more dollars to remain in circulation. So the average life has increased.

We have been looking at those lifespans since we have been interested in this topic, and we don't feel that change is within scope.

Mr. SCHWEIKERT. Okay, and I think with that I am actually out of time. Congressman Huizenga, are you ready to ask a question?

Mr. HUIZENGA. I am not.

I was at a hearing downstairs, Mr. Chairman.

Mr. SCHWEIKERT. And please, forgive us. It is just sort of the nature of this time of year.

Mr. Stivers, did you want to continue?

Mr. STIVERS. I would love to, if I am allowed to.

Thank you.

Mr. Peterson, can you tell us what the output of the Mint has been over the last say 10 years of coins? Are you staying pretty constant with the number of pennies and nickels you are making? Are you reducing them?

Mr. PETERSON. Circulating production at the Mint over the last several years has been quite a volatile experience. I first joined the Mint 4 years ago, and our production in 2008 was 9.9 billion circulating coins. In 2009 and 2010, in response to the soft economy, people would go into their coin jars and piggy banks and turn in those coins to pay for basics such as groceries and gasoline. And the Federal Reserve vaults were filled up in 2009 and 2010 and our production volumes in those years were 5.2 billion coins and 5.4 billion coins respectively in 2009 and 2010. In 2011, we saw an increase to 7.4 billion coins, and in Fiscal Year 2012, our unaudited results are at 9.1 billion coins. And of that, and it has been pretty consistent, pennies and nickels have comprised between 60 to 70 percent of that circulating volume.

Mr. STIVERS. And you talked about how you have two facilities, you have a facility in Philadelphia and you have a facility in Denver, both in downtown as I recall. How old are those facilities?

Mr. PETERSON. The Denver facility was built in 1904—

Mr. STIVERS. I am sorry, how old is the manufacturing machinery and capacity, the stuff you use typically? I don't care how old the plant is but how old is the stuff inside it that you use to make coins?

Mr. PETERSON. Our peak production year was back in 1999, and we made some 23 billion coins in that fiscal year in response to Y2K and the Sacagawea golden dollar, and we really ramped up our production capacity between Denver and Philadelphia then. So most of the capital equipment in those two buildings was sourced in the 1997, 1998, 1999 timeframe.

Mr. STIVERS. Great, and you said you increased the efficiency of the Mint over the last 2 years, or was it 4 years, by 20 or 30 percent?

Mr. PETERSON. Absolutely. Our production volumes are up and our costs are down. It is the very definition of productivity.

Mr. STIVERS. So do you see future productivity gains outside of materials costs that you can do to reduce overhead?

And I guess the ultimate question is, do we need two facilities? Maybe we do, and maybe we don't. I guess I will just ask you that question as well.

Mr. PETERSON. Absolutely, we see continued cost improvements possible. We have been on our Lean Six Sigma Five S journey, and we have a good manufacturing team that knows how to do this. Our plant manager in Denver came to us from General Motors, our plant manager in Philadelphia came to us from Ford Motor, and I came from General Electric. We get this stuff. And we are going to continue driving overhead costs down.

Mr. STIVERS. I appreciate your commitment to that as well. I did think it was really interesting—Mr. Schweikert's question about licensing the Canadian technology instead of doing your own R&D. Obviously, you have to do a cost-benefit analysis to see what makes the most sense, but if our friends up north would give us a great deal on their technology, that would be great.

So I will encourage you to talk to them and I will yield back the balance of my time. I have asked a lot of questions.

Mr. SCHWEIKERT. Thank you, Mr. Stivers. Love the holiday tie.

Mr. STIVERS. Thank you. Merry Christmas, happy holidays.

Mr. HUIZENGA. Mr. Chairman, can I just interject, for some of us, those of us from Michigan, it would be our neighbors to the east and not just to the north. So thank you.

Mr. SCHWEIKERT. And there goes my geography. Mr. Huizenga, if you are from the Scottsdale area, there are neighbors all around us.

Mr. Clay?

Mr. CLAY. Okay. Mr. Peterson, the Federal Reserve has raised concerns that increased production of the $1 coin could result in an increased risk of counterfeiting. Given that the $1 coin, unlike the $1 note, does not have effective, machine-readable, publicly usable counterfeit deterrent features, is this a concern you are familiar with?

Mr. PETERSON. I understand the question, sir. The dollar coin does have anti-counterfeit devices built into it. It has—I am not at liberty to go into those right now and probably shouldn't in this forum. But there are devices that are built into the dollar coin. We could go further and perhaps look at some additional technologies to make them even more secure.

Mr. CLAY. All right. Ms. St. James, how many years would it take before the government would earn enough from issuing dollar coins to break even?

Ms. ST. JAMES. Break even?

Mr. CLAY. Yes.

Ms. ST. JAMES. We have shown that if you look at 30 years, there is certainly a benefit, and if you work your way through the transition period, depending upon the assumptions that you have, is that once we work through the transition period and the amount of coins necessary is out there, then you would begin to break even and that was usually in a 10-year period or more.

Mr. CLAY. What is your response to the Federal Reserve's position that you may have substantially overstated the financial benefits of eliminating the dollar bill in favor of the dollar coin?

Ms. ST. JAMES. The response that we got from the Federal Reserve in terms of both our 2011 and 2012 reports was that, in fact, we did not include cost to the private industry in there. And the model that we developed is only measuring the benefit or loss to the Federal Government. So their overstatement of seigniorage for us, we believe seigniorage is a valid measure and a valid benefit to the government, and I believe Canada recognizes seigniorage as well. So I can only state that we feel it is valid.

Mr. CLAY. Something a little different in my line of questioning, to be able to convert from the paper dollar to the coinage I think will take a cultural change in this country. When you think about it, most men don't want a lot of coins in their pocket, in their suit, it may make our suit sag or something. A lot of my constituents like to have the paper money. Maybe Ms. Lepine can help us on how Canada got accustomed, the consumers became accustomed to actually having more coins in their pocket, how women put more

coins in their purse, I guess it is not too difficult to do, but how did they adjust?

Ms. LEPINE. I don't want to get into a discussion about the suit pockets; however, certainly in Canada the savings, the seigniorage savings on the $1 coin when it was issued was $450 million and on the $2 coin, remembering that you probably combine them because you don't have an active working $2 note and coin in the United States, was $695 million. So the savings message was very, very important in Canada. And if you look at what the polls, the recent poll is saying about our $1 and $2 coin, the loonie, as it was named, and the toonie, which is the $2, became and are icons in Canadian society. And so, they are actively used.

We have had a steady volume of coins of the 1 and the 2 since their introduction, and we only produce to demand for trade and commerce. We do not build inventories across the country. We run online forecasting systems such that I can tell you if a casino opens, if a new toll road opens, I know how much coin I am going to need and I know where I need to put it in the country. So, in fact, if I take just the demand that the market is looking for on $1 and $2 coins, Canadians are actively using them. We don't get complaints in terms of the $1 and $2 coin usage at all.

Mr. CLAY. Thank you for your response.

Mr. SCHWEIKERT. Thank you, Mr. Clay. Interesting questions.

Mr. Huizenga?

Mr. HUIZENGA. Thank you, Mr. Chairman. Actually, that follows right into what I was going to be saying, and Michigan does have a unique relationship with our neighbors to the east. In all fairness, they are to the north as well, but once you go up to Sault Ste. Marie—I have a special working relationship with Canada in that I married one. Not a country, I mean a person from the country, I should say. Sorry, honey, if you are watching on C-SPAN. But I know my lovely bride is from the Toronto area. And when we started dating and I started crossing the border on a more regular basis, I said, what in the heck is this coin, the loonie, and I couldn't figure out why they would give it quite the moniker and was in the picture when the $2 coin, the toonie replaced the $2 paper bill. And through that family experience, I can tell my colleagues, it is absolutely considered "the thing" and I don't know anyone who would go back to the paper dollar and $2 bills. You get $5 bills and up in those denominations. We have enough of a both formal and informal trade back and forth with Canada that if you go into many places in the State of Michigan, Canadian coins are commonly accepted. And it used to be everybody would try and figure out how they could cheat the system and how many "Canadian quarters" they could use to pay for an American dollar whatever when it was 65 cents. Now that we are basically on parity, you will see Canadian coins being, $1 and $2 coins being exchanged in a number of places as well.

So I have never quite understood the reluctance from a personal basis that we have had, other than some of the obvious challenges we are going to have with our vending machines and some of those things. And I was hoping that you would—you have to refresh my memory, but the loonie has been around how long? And then, the toonie came in around the mid-1990s, is that correct?

Ms. LEPINE. 1987 for the loon and 1996 for the toon for the toonie.

Mr. HUIZENGA. Okay. I actually have some memory left of that. And what was the conversion going to a $2 coin, which for those of you who haven't seen it, is substantially bigger and actually has almost two strikes to it. I am assuming it is some kind of blank that was inserted into another silver part with a copper-looking centerpiece to it, so it is some construction to that $2 coin. But how did that conversion to a $2 coin that clearly was a different size and all of those things, how did that go?

Ms. LEPINE. The $2 is a bimetallic coin, meaning there is a double strike of the ring and the center core. So at the time, the look at the coin denomination was to have the $2 psychologically slightly bigger than the $1, but it is a much lighter coin in terms of—or thinner coin in terms of the next one up.

Again, publicity was done, obviously a lot of awareness with the Canadian public. And the same message of savings, I just said it was $695 million in terms of straight seigniorage savings, and it is about $34 million a year, and the volume has stayed constant. So Canadians had already been used to the first message on the $1 coin. On the $2 coin, that message was repeated and was in the same vein and once again, very well-accepted.

Mr. HUIZENGA. So just to recap, within a period of 9 years, you had introduced two separate coin denominations, a $1 and a $2 coin, and you saw those savings quickly?

Ms. LEPINE. Correct. And in the case of the $2 coin, it was because of our learnings on the $1 coin, we did an immediate withdrawal of the $2 note on the $2 coin.

Mr. HUIZENGA. So, there was very little phase-in? It just happened?

Ms. LEPINE. Correct.

Mr. HUIZENGA. Okay. Thank you.

Mr. SCHWEIKERT. Mr. Luetkemeyer?

Mr. LUETKEMEYER. I pass.

Mr. SCHWEIKERT. In that case, it is my turn, because there are a couple of other things I want to understand. Ms. Lepine, my understanding is the Canadian experience, what you had modeled, you had actually much more aggressive, much faster adoption and much faster savings than your original modeling. Is my understanding correct?

Ms. LEPINE. Correct. When we launched the $1 coin in 1987, the feeling was that the demand would be about 250 million pieces. What actually happened is over a period of 2½ years, the demand was 600 million pieces, so far bigger acceptance and volume rate going into the marketplace. Certainly, that acceptance happened even closer as we got to the 1989 date when the $1 note was actually withdrawn from circulation. So if you look at the movement of volume, the mass adoption of the $1 coin improved as we got closer to the date that the $1 note was dropped.

Mr. SCHWEIKERT. And your instinct, why did, in many ways, you blow there through your projections and do so much better?

Ms. LEPINE. I guess I will use the word "change" and not in the sense of we are talking about coin. And I commend this committee for the perseverance in looking at this issue. Change is never easy.

It isn't easy for us, it isn't easy for organizations, and it isn't easy for the consumer. And so, I think it was just we touched on something that in the $1 coin, the vending industry was struggling, particularly the transit, with paper notes going in and getting jammed. So the industry was very, very motivated to see a coin coming in for the $1 coin.

The Canadian public, we talked about this a lot, we talked about the savings a lot, and it was a matter of getting over that issue of change, and as we got closer to the $1 note and as the $1 note was removed, obviously at that point in time, the ability to adapt to that change, it is the dollar coin that is now the vehicle for trade and commerce and the Canadian public were prepared for that.

Mr. SCHWEIKERT. Was there anything unique you did in the way you told the story of the savings, any brilliant insight in how you communicated with the Canadian public?

Ms. LEPINE. I would love to say that there was great brilliant insight and the history is probably known on the $1 coin. When the $1 coin concept was conceived, and ready to go, dies were shipped to Winnipeg and were lost. And it was not a loon that was supposed to be the design on the $1 coin, it was supposed to be a voyager. The dies have never been found. There was a major snowstorm. Nobody has ever known.

As a result of that, the Canadian Government immediately made the decision to bring the loon design up. The loon design caught on and was called a loonie, and I have to say if you look at the pickup from that moment in time, it became a name, it became a symbol, and it just grew from there. We won an award for the damage control in terms of dealing with that issue, and I hate to even mention it, because I wouldn't want to have to repeat it.

Mr. SCHWEIKERT. If you were sitting up here and had to go on to the next question after that, where do you start? I am trying to figure out what would be a loonie for the United States besides myself? Okay, come on, guys, that was almost funny.

Ms. St. James, did you ever do, in your modeling, a test that said okay, here is our model for the United States, but if we build the model, if we had the Canadian experience, how fast you get to even cost, if you had the same very aggressive adoption and substantially larger production. Or my understanding, wasn't there something similar also in Australia, New Zealand, other countries who also have done this?

Ms. ST. JAMES. We didn't necessarily look at that transition period from Canada, but in determining the—short of that transition period for the Mint, the sooner you would have benefits in seigniorage.

Mr. SCHWEIKERT. Ms. St. James, in your model, what was the shortest and what was the longest to break even?

Ms. ST. JAMES. I would say that the shortest was probably, again, based on 4-year transition, would still be around—

Mr. SCHWEIKERT. But did you ever model something where you had a faster transition?

Ms. ST. JAMES. No. No.

Mr. SCHWEIKERT. Okay. When is the next cycle? Are you obligated to continue to analyze this or update your data?

Ms. ST. JAMES. We would be happy to entertain a request to do that again.

Mr. SCHWEIKERT. We may have to talk offline because I want to know what the cost of such a thing is. I hate asking for data when I feel like I am adding cost on the taxpayers. But it would be interesting in what would happen if we had a similar adoption from our friends to the north, or to the east, and what that cost curve would end up looking like.

Ms. ST. JAMES. I am sure we could use the model we have and shorten that timeframe and get back to you.

Mr. SCHWEIKERT. Forgive me, I am going to go over a couple of seconds here.

Mr. Peterson, as efficient as the Mint seems to have become the last few years, and we appreciate the diligence there, and I am delighted you are using Six Sigma and the production focus, if that production time was squeezed down because there was much more aggressive adoption and transition, could you handle it?

Mr. PETERSON. Currently in the Federal Reserve vaults, there are approximately 1.4 billion dollar coins. Our capacity in Denver and Philadelphia is a billion coins per year apiece right now. We could probably—add that together, there is 2 billion. We could probably do some overtime and get to 2.2 billion right now. If we got the green light tomorrow, we would need to go investigate and purchase some additional capital equipment to the tune of about $8 million to $10 million. It takes time to get that in place and set up. But we could be manufacturing double the capacity of dollar coins within a few years.

Mr. SCHWEIKERT. I am going to annoy my brethren here. How many quarters do we have in storage?

Mr. PETERSON. Quarters in storage right now, they are down from the peak that we saw in 2009 and 2010. The Federal Reserve inventory numbers right now are about 1.7 billion.

Mr. SCHWEIKERT. So holding 1 billion is not something extraordinary? We actually do that in other denominations of coinage.

Mr. PETERSON. Yes.

Mr. SCHWEIKERT. Okay. I have always wanted to ask that. Gentlemen, anyone with any additional questions they would like to ask? Mr. Stivers?

Mr. STIVERS. Just one additional question. I have already asked a lot. But this is for Mr. Peterson. Mr. Weller, who is going to testify in the second panel, in his written testimony claims that the Mint's accounting inflates the cost of the penny by unfairly double-charging for portions of the penny's fabrication. I guess I wanted to give you, while you were sitting on the panel, a chance to respond to that, since his testimony will be after yours. I figured I would let you know. I don't know if you saw that in his testimony and if you have any response to it.

Mr. PETERSON. I did. A few years ago, we saw the penny and the nickel were not bearing any of the general administrative expenses of the Mint. Circulating coins, the penny and the nickel, make up 75 percent of the circulating coins that we manufacture and they were not bearing any of the overhead. We saw that. We developed a new overhead allocation model in 2009. We fully communicated that through Treasury, the Office of Management and Budget, this

committee, and other Members here on the Hill, and we implemented that change in 2011.

Mr. STIVERS. I just wanted to give you a chance to respond to that.

Mr. SCHWEIKERT. Okay, Mr. Stivers, thank you. For this first panel, thank you. We truly appreciate your coming down and sharing with us.

I guess we are going to move on to the second panel.

[brief recess].

Mr. LUETKEMEYER [presiding]. Okay, are we ready to go? Let's reconvene. We thank the second panel for being here, and you will each be recognized for a 5-minute summary of your testimony.We will begin with you, Mr. Miller.

STATEMENTS OF JAMES C. MILLER III, FORMER DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Mr. MILLER. Thank you, Mr. Chairman. I thank you for inviting me. I would like to submit a short statement for the record.

Mr. LUETKEMEYER. Without objection, it is so ordered.

Mr. MILLER. This is a matter I have followed for over a decade, and I must say I think the proposal to replace all dollar bills with dollar coins doesn't make any more sense today than it did 10 years ago. The fact is, Americans like having available both coins and bills and they reject the forced replacement of the dollar bill with dollar coins.

We know this from numerous polls. We also know this because consumers view dollar coins as a novelty, not as something they use every day, as some $1.4 billion now languish in Federal Reserve Bank vaults. So why does this dollar coin replacement proposal keep coming back? Because proponents allege it would save money.

Now, let's look at that. According to the GAO's most recent report summarized in Ms. St. James' testimony, production costs of converting to the dollar coin would far exceed the production costs of the dollar bill. So where would the claimed savings come from? According to GAO testimony, and it is accurate, by the way, solely from seigniorage.

Now, seigniorage is a fancy term for the difference between the nominal value of the coin and the government's cost of producing it. If production costs are higher for coins than for bills, then the government's interest gained from seigniorage would be less for coins, right? That would be true if the government issued the same number of coins as bills. But what we know from experience is that to maintain commerce, you need three coins to replace every two bills, given the lower circulation rate of coins due to their inconvenience. People drop them out of their pockets, they fall into the cushions of sofas, they fall under the seats of cars, et cetera.

This 3-to-2 ratio would increase seigniorage interest savings a lot more than the increase in the cost of producing the coins. That is what is responsible, solely responsible, for the so-called savings to government, as GAO has attested, and not until a decade has passed would there be any such savings, as if we would be massively using dollar coins 10 years from now, given the escalation in the use of debit cards and credit cards and electronic payments, et

cetera. But where does that increased seigniorage money come from? It comes from the private sector businesses and consumers. It surely doesn't come from the tooth fairy.

So we have a change in the monetary medium of exchange imposed by government where dollar bills are withdrawn from circulation and replaced by dollar coins and the gain to government is wholly due to increased costs to the private sector. This, by almost anyone's definition, is a tax.

Now, I realize that GAO takes issue with calling it a tax because it is "voluntary." But our system of income taxes in this country is often characterized as "voluntary," but no one would argue that what they are coerced to pay voluntarily are not taxes. When money flows from the private sector to the government, that is a tax. When the Federal Government, which has a monopoly on the medium of exchange, mandates the use of a particular means of exchange, clearly in its favor, that too is a tax. And in terms of the use of resources, the compulsory dollar coin proposal is clearly inferior since production costs of dollar coins are higher than for dollar bills.

Moreover, as GAO points out, its analysis does not consider the cost to the private sector from adjusting from dollar bills to dollar coins, nor does it consider the environmental cost associated with the increased use of dollar coins, which could be considerable.

Finally, as Ms. St. James points out in her statement, the cost of the coins are up-front and certain, fairly certain, whereas the savings would come only in later years and are not nearly as certain.

I was Budget Director and I can tell you this: Anybody who was Budget Director, Secretary of the Treasury, anybody involved in forecasting what government is going to do, revenues and expenses the next year out, you can be fairly certain; the next year out, you will be pretty good; the next year out, you are not so sure. Ten years out, or 30 years out? Great uncertainty is attendant with that.

In summary, the proposal to replace dollar bills with dollar coins is a loser. It requires more real resources measured by production costs and it can claim lower costs to government only by taxing the private sector and calling this a savings. It is just a matter of arithmetic. And it would be certain to increase the deficit and the debt in the next few years, hundreds of millions of dollars increase, increase in the debt and increase in the deficit. And it would realize savings to the government only many years from now, if at all.

Finally, there is a disutility factor. Are you really prepared to force users, voters, to use a means of exchange they clearly reject out of hand? According to a survey by Frank Luntz, members of the public think they should be the ones deciding whether to use dollar coins or dollar bills. Some like one, and some like the other. But they think they ought to be the one deciding. Moreover, three out of four Americans think all this business about replacing the dollar bill is at best a budget gimmick.

Mr. Chairman, thank you for your attention. I would be glad to respond to any question you or your colleagues may have.

[The prepared statement of Mr. Miller can be found on page 49 of the appendix.]

Mr. LUETKEMEYER. Thank you, Mr. Miller.
Mr. Diehl?

STATEMENT OF THE HONORABLE PHILIP N. DIEHL, FORMER DIRECTOR, UNITED STATES MINT

Mr. DIEHL. Thank you, Mr. Chairman, for the opportunity to testify today. For background, I was the Director of the United States Mint from 1994 to the year 2000, during the time the Sacagawea dollar was launched.

Since 1990, GAO has issued 7 reports on this matter, all reaching the same conclusion: Replacing the dollar note with a dollar coin will save American taxpayers billions of dollars, with estimated savings between $4.4 billion and $15.7 billion over 30 years.

Based on my experience, I can say that claims that the public will never accept a dollar coin are false. When the Sacagawea dollar was launched in 2000, public demand was so strong that the Mint shipped more coins in its first year than it did in the entire 20-year history of the Susan B. Anthony. In other words, our experience was very similar to the experience that Ms. Lepine described with the launch of the toonie.

Opponents will also cite research as we heard which they claim shows the public opposes substituting a dollar coin for a dollar note. What they don't reveal, however, is that if respondents are first informed that this will mean millions in savings, two-thirds of them support it.

Opponents also question how long it will take to manufacture the 9 billion coins needed to add to those already in circulation. I have doubts about these objections. During my last year as Director, we produced 28 billion coins, with additional capacity to produce another 2 billion. I understand the Mint will produce around 9 billion coins this year. So, there appears to be significant unused capacity to produce more dollar coins.

Today's conventional wisdom is that the Sacagawea dollar was a failure, but it certainly wasn't at the time. As I said, demand was much stronger than we anticipated. In fact, we had to increase production and develop a direct shipment program to reduce delays through the FRB. But demand for the new dollar coin ultimately flagged due to resistance within the government and the banking sector, which I will describe momentarily, and competition from the dollar note. Frankly, you will never overcome this resistance without removing the dollar note.

For many years, the dollar coin has faced a significant obstacle, the FRB's strong preference for the dollar note. I discovered this myself when we launched the Sacagawea dollar in 2000. The FRB is the sole channel through which the Mint distributes coins to banks and ultimately to businesses and consumers. If the FRB doesn't order a coin, it doesn't get into the hands of the public.

We did an extensive survey of banks and the FRB to prepare for launching the Sacagawea dollar. They confronted us with a dilemma. They would not order the Sacagawea dollar unless we first demonstrated there was demand for it, and market research wasn't sufficient. This presented us with a Catch-22 since we couldn't prove there was public demand unless we could get the coin into the market.

We solved this dilemma by shipping the coins directly to thousands of Wal-Mart stores all over the country. In just a few weeks, Wal-Mart distributed 100 million Sacagawea coins as change in routine retail transactions. Lines formed outside the stores before they opened in order to get the coins. In fact, Wal-Mart wanted another 100 million to distribute over the next several weeks. But when the banks started receiving calls from customers asking for the coins, they insisted on receiving shipments immediately and we accommodated them.

As GAO has reported, and as Ms. Lepine described, both notes and coins make a profit, and this profit is called "seigniorage." But the profit from coins and notes is accounted for differently and this difference is important to the FRB's preference for notes.

The bottom line is that the Mint earns the profits for dollar coins, and the FRB earns the profits from dollar notes. In 2011, the FRB's note seigniorage was estimated at nearly $200 billion. In other words, eliminating the dollar note denies the FRB an important source of its profits that would be lost as a result of this legislation. However, this loss would be offset by a much larger benefit for the taxpayer.

I was surprised, as some of you may have been, by the dramatic reduction in GAO's savings estimate reported in its 2012 report. A significant part of this reduction is related to the FRB's remarkable increase in the estimated lifespan of the dollar note. For the past 20 years or so, the FRB cited a lifespan of between 13 and 18 months. Then over the past 2 years, they increased the note's lifespan three- to fourfold to 56 months. It is hard for me to imagine what accounts for the dollar note's sudden immunity to wear and tear in circulation, but frankly for me it strains credulity.

Now, I would like to speak to a few points we heard earlier. Mr. Miller says, in his written testimony, that the taxpayer benefits from this legislation are actually taxes imposed on consumers. For me, this is not evidently true and it is difficult to see how this conclusion is reached since there is very little support in the testimony. But let's say, for the sake of argument, it is a tax. In that case, the profits from the note are also a tax on consumers, are they not? Why ignore these taxes in the analysis?

Also, he says that between the tax benefits and the tax on consumers, there is no net savings here. But if there is no net savings, how can there be a net tax? And if there is no net tax, his next argument that the tax is regressive is invalid as well.

Thank you, Mr. Chairman, for the opportunity to testify.

[The prepared statement of Mr. Diehl can be found on page 36 of the appendix.]

Mr. LUETKEMEYER. Thank you, Mr. Diehl.

Mr. Weller?

STATEMENT OF MARK WELLER, EXECUTIVE DIRECTOR, AMERICANS FOR COMMON CENTS

Mr. WELLER. Mr. Chairman, members of the subcommittee, my name is Mark Weller. I am a partner at S&R Denton and executive director of Americans for Common Cents. Thank you for inviting our organization to appear before the committee today. I am excited to talk to you about the one cent coin, the metal content of

our coins, and the role that the penny plays in our economy and culture. Americans for Common Cents was formed in 1990 to conduct research and provide information to the Executive Branch and Congress about the value of the U.S. penny.

There are three points I would like to make today. First, ACC does not have a preference regarding which metals are used to create our coins. Our focus is directly looking at the broader fact that consumers benefit with a low denomination coin. The penny is important for our economy. Working families benefit from the penny, and America's many charities thrive on it.

Second, steel is a coin material that saves money and it has been used successfully in Canada and other countries. We are excited to see what the Treasury Department recommends to this committee next month when they produce their report, not just on the content of the penny, but on our other circulating coins.

Third, a focus on metal content alone ignores the Mint's substantial overhead as well as cost accounting changes that inflate the cost of the penny and the nickel. Metal content is just one component in the rising costs of our circulating coins. In fact, metal actually has become less of a factor since the prices have lowered from their highs of 2006. And last year, the Mint reallocated the costs of the penny looking at the number of coins produced rather than their traditional accounting that looked at Mint labor costs.

So these findings together suggest that Congress is on the right track in looking for ways to make our coins less expensively. However, in addition to coin composition, there needs to be an additional focus on Mint overhead and those costs and how they are allocated.

Let me just take a minute to specifically address one of the topics of this hearing, H.R. 3693, Congressman Stivers' Cents and Sensibility Act, that is going to require the pennies to be made from steel; and H.R. 3694, the STEEL Nickel Act to require nickels to be made out of steel and resemble the current 5-cent coin.

Multi-ply plated steel compositions have been successfully used by the Royal Canadian Mint, as we heard from Ms. Lepine this afternoon, to manufacture circulating coins in Canada as well as a number of other countries for over a decade. And as Congressman Stivers mentioned in his opening statement, a February 2012 Navigant Consulting study looked at the raw material cost savings the U.S. Mint could achieve if we substituted the compositions currently in use with steel coin compositions that have been successfully used in Canada.

There are two findings in this Navigant report. First, they found that the adoption of a multi-ply plated steel technology for the nickel, the dime, and the quarter would reduce the per unit raw material costs by over 85 percent. Second, applied to the historic Mint production levels for these denominations, the raw material cost savings alone by making this change to the multi-plated steel would run between $183 and $207 million. So based on these findings, Congress and the Mint should consider changing the composition of the vending coins to multi-ply plated steel.

The metal we use in our coins is just part of the picture. While metal prices have stabilized since 2006, the reported costs of the penny and nickel have increased dramatically. Why is this so? The

Mint has spread costs over a smaller number of circulating coins, and an accounting change by the Mint in 2011 exacerbated the Mint's cost allocation for the penny. This accounting change unfairly doubled charges, the costs for the penny fabrication process, since the Mint receives a finished, ready-to-strike blank from a private sector firm, and only a small fraction of the overall penny operations are performed by the Mint.

So here is the key point: Metal prices have decreased from their highs of 6 years ago and the penny production and transport costs have remained relatively constant, but low coin demand and the allocation of Mint costs across a smaller number of circulating coins have negatively impacted the penny's reported unit production cost.

In summary, as the Mint and Congress explore options to make our coins more cost-effective, several factors should be paramount. First, steel is a coin material that saves money and has been used successfully in Canada and other countries. Second, the metal content is just one component in the rising cost of our circulating coins and a focus on metal content alone ignores the Mint's substantial overhead as well as cost accounting changes that inflate the reported costs of the penny and the nickel. And, third, we need to ensure that the Mint and congressional discussions about alternative metals don't become a pretext for an ill-considered decision to remove the penny from circulation. The alternative to the penny, which is rounding transactions to the nickel, is bad for consumers and it is bad for the economy. It will hurt those who can least afford it because they make more cash purchases than others.

Americans overwhelmingly want to keep the penny. No one has explained how we would replace the millions of dollars that are raised by charities and charity drives every year if we didn't have the penny around. In these uncertain economic times, the last thing consumers need is price rounding and inflation and reduced charitable assistance. But with the changes outlined above, I think we can retain the penny and achieve the other cost benefits for our circulating coins.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Weller can be found on page 71 of the appendix.]

Mr. LUETKEMEYER. Thank you, Mr. Weller.

Let me begin with you, Mr. Weller. You probably heard my questions awhile ago to Ms. Lepine with regards to doing away with the penny altogether, and you made some comments within your testimony here with regards to that. Can you expound on that?

I guess, number one, how many other countries in the world do not have pennies that have similar monetary structures as we do? I guess the second question is you made the comment that it impacts the poor, and if you round it up, it looks to me like half the time you are going to win, and half the time you are going to lose, regardless of what you do. Can you expound on why it is going to impact somebody in a negative way?

Mr. WELLER. Sure, I would be happy to. Thank you. There are a couple of responses. There are some countries that have been mentioned, New Zealand and Australia. I think you mentioned Australia. Our economy is 16 times larger than Australia's, so I think it is difficult to make those comparisons on what that would

mean. We have the largest economy in the world with millions of transactions that are taking place.

Britain still has a one pence coin—it is about 1½ the value of the penny—in existence. And the European Union, when they were created, Mr. Chairman, had a number of coin options they could look at and they felt it was important to have both a one- and a two-cent Euro coin. Why? Because they were concerned about inflationary impacts and the impacts of rounding.

I think it was interesting in Ms. Lepine's testimony that when she was talking about their experience with the Canadian penny, they have actually stopped production but they are continuing to circulate that coin and they have delayed any change until February of next year because the merchants were concerned about rounding and the public reaction to rounding over the holiday shopping season.

So I think the answer is that unlike Canada, we have consistently seen that over 60 to 70 percent of the American public wants to keep the coin. Americans abhor the idea of rounding, and over 77 percent think merchants would use that opportunity to raise prices, and they are probably right.

The misconception is that rounding is going to work out and even out and be done fairly, and the fact is if there is one proposition that economists can agree on, it is that merchants have an incentive to make a profit. So if you talk to retail grocers and convenience stores and others, they work on very small margins and that cent up or down, one way or another, really does make a difference.

The poor, just to finish, and I am taking probably more of your time, are affected the most because they rely predominantly on cash transactions. They don't have credit cards. They don't have checking accounts. They are using cash and payday lenders. So you are not only having an a broad impact on the economy, but you are affecting those who can least afford it.

Mr. LUETKEMEYER. Okay. Have you checked New Zealand and Australia on their doing away with the penny? What were the problems that they had with that? Did they see inflationary effects with smaller purchases?

Mr. WELLER. We have not spoken to them specifically on what the inflation impact is. I think there is a real impact on inflation and a perceived impact. The studies we have seen showed that there would be a very small actual impact on inflation. However, there are a number of programs that are tied to the CPI, Social Security and other wage programs, and so even a small change in inflation has a dramatic impact on the cost.

But more so, I think, as The Wall Street Journal editorialized in 2006, doing away with the penny would be waving a white flag to the forces of inflation. We are not a South American country that devalues its pesos. I think it is a real tribute to our economy that we have had a low denomination coin as long as we have, and I think it sends all the wrong signals that we are doing away with the penny, rounding to the nickel, for these perceived cost issues when the nickel is costing 11 cents, and the logical conclusion is you do away with the penny and the nickel and then you have your dime as the lowest denomination, and that doesn't really make much sense.

Mr. LUETKEMEYER. Interesting. My local utility company at home rounds it to the nearest dollar. I don't have any pennies, I don't have any quarters or anything. It is always rounded to the nearest dollar.

Along this line, Mr. Miller, would you like to just give an opinion on this?

Mr. MILLER. I don't have any comments on that, no, sir. I do have—

Mr. LUETKEMEYER. Mr. Diehl?

Mr. DIEHL. I really don't have an opinion on this either.

Mr. LUETKEMEYER. One way or another? Okay. I know we are talking about the different make-ups of the coins themselves. Have we looked at other countries with regards to how they do their metal coins, other than Canada? Have any of you done any studies or looked at other countries? Mr. Weller?

Mr. WELLER. We have looked at other countries. I think as was pointed out in the first panel that you have a limited option of coin materials that produce a cost savings. But certainly those countries that we are looking at, copper and nickel that were really higher cost coins, were all looking at ways to try to make their coins less expensively. I know that the multi-ply steel not only has been used in Canada, but we are seeing that in, I think, about 20 or 30 other countries, which would indicate that is an option which has been popular. But I think there are other technologies out there that the Mint is examining that can produce similar cost savings and aren't necessarily just that steel approach.

Mr. LUETKEMEYER. Very good. Thank you for your testimony. I recognize the gentlelady from New York.

Mrs. MALONEY. Thank you, and first of all, I would like to welcome Mr. Diehl, the former Director of the U.S. Mint, and also Mr. Miller, and thank you for your former service to our country.

I was on this committee when we came out with the dollar coin, and one of the reasons we did it is that we had a dollar coin, the Sacagawea coin. It wasn't popular; no one wanted it. So we thought if we had an innovative, creative dollar coin series, the collectors would want it and it would move forward. Well, that didn't happen. Then what happened is that people didn't want them, so they went out of circulation back to the Fed and the Fed had to spend all this money to store them.

I just know one factor that I didn't like about the dollar coin was that it was the exact same size as the quarter, so I was constantly moving fast and handing out dollars like they were quarters. And a number of people tell me they don't like the fact that the size is the same as the quarter. They confuse them when they are working fast. And also the weight of it, of carrying around dollars that are in coins, is heavier than carrying the paper. But the whole thing about we stopped the dollar coin because they were just going to the Fed.

Now, if the people don't want it and they don't want to use it, and I hear complaints that it is the same size as the quarter, they don't want to put it in their pocketbooks because they hand the dollar out as a quarter, the collectors don't want it, why in the world are we even talking about changing it if it has failed? We tried to make this the most exciting dollar coin series with all kinds of cre-

ative things. The people didn't want them and the collectors didn't want them, and it ended up costing taxpayers more money to sit there and store them.

I know that the weight is something to me, someone who leaves at 6 o'clock in the morning, you get back late. I carry a lot of paper dollar bills with me and use them. If I turn them into quarters, or rather dollar bills, it is added weight you are carrying around. And it seems like the cost is basically the same. So why bother to change it? I will ask Mr. Diehl first, and then Mr. Miller.

Mr. DIEHL. Let me address several things because you have raised a number of issues. We learned the lesson from the Susan B. Anthony dollar that you have to produce a dollar coin that is easily distinguishable from the quarter because the Susan B. Anthony was the same color, and like the quarter, it had a smooth edge.

So the Sacagawea coin was produced as a gold colored coin with a reeded edge so that it was easy to tell the difference, and, excuse me, but it is not the same size as the quarter. It is larger than a quarter. And once you get used to handling it, it is easy for me to reach into my pocket and actually pick out the Sacagawea coin from a quarter. And it is really a matter of just sort of getting used to it.

Now, in terms of whether or not the Sacagawea dollar was a success, I addressed this in my testimony. It was a hugely popular coin when we launched it. But we knew from the very beginning, and in fact, we knew from before we launched the Susan B. Anthony because of market research that was done in 1978 and 1979 by the Treasury Department that a dollar coin would never successfully circulate unless you remove the dollar bill. We have never bitten the bullet to remove the dollar bill, as every other western economy has done. If we do that, I am absolutely convinced we will have the same success as the Canadians have had with removing their dollar note and substituting a dollar coin.

They found that the seigniorage profits from that substitution were 10 times what the original estimates were. That doesn't surprise me, because I think the natural result—

Mrs. MALONEY. What year was it when they found that out in Canada?

Mr. DIEHL. That was in 1986, and then they had so much success, they subsequently introduced a $2 coin to replace the $2 note in 1997 and they reaped similar kinds of benefits. I don't see any reason why the passage of time would make any difference in that regard.

Mrs. MALONEY. I would say that there is a difference, Mr. Diehl, because we are really moving to an electronic system in banking. We are moving to paying everything electronically, debit cards, charge cards, all kinds of different cards. They now have phone cards, they have meal cards, they have prepaid cards. We are moving to cards over the traditional notes that we had.

And I would say also when the American public, and I guess elected officials listen more to the American public than appointed officials because we have to answer to them, elected officials hear from our constituents that they like the dollar bill, and they don't want it changed. And Sacagawea, when it came out, it was sort of

exciting, we have this new dollar coin. But then that was also stockpiled at the Federal Reserve because people were not using it. It didn't stay in the currency. It wasn't being collected. And it really got to a point where it was costing us money keeping all that material there.

And I would venture to say the fact that we are moving to really a card situation, particularly with younger people, my daughters don't carry money, they don't carry a phone, everything is on a card. And I think that might be a change that will affect the finances of it quite dramatically.

Your comment on that, moving to the prepaid cards?

Mr. LUETKEMEYER. Very quickly, if you can respond to that? We need to move on.

Mr. DIEHL. That change will have the same effect on currency as it will on coins, and as a result, there will be a net wash between the two. The big advantage of a coin is while, in fact, it is more expensive to produce, it has a much longer lifespan, a 30-year lifespan, and Ms. Lepine spoke to that in her testimony on the first panel.

Mrs. MALONEY. Versus a paper dollar is what, 5 years?

Mr. DIEHL. It depends on when you asked. The estimates have ranged between 13 months and 56 months over the last several years.

Mrs. MALONEY. Thank you for your testimony. Thank you for your service.

Mr. LUETKEMEYER. Thank you. The gentleman from Ohio.

Mr. STIVERS. Thank you so much, and thank you all for your testimony. Most of the second panel is about the dollar, and I appreciate Mr. Weller's comments about the penny. I did appreciate your points about the overhead at the Mint. You may have heard Mr. Peterson earlier respond to your statement about the accounting changes at the U.S. Mint which changed the cost, listed cost and overhead which is assigned to the penny and the nickel.

Did you want to comment on his points earlier where he said all it was is general and administrative expenses being assigned to the penny and the nickel?

Mr. WELLER. Yes. I think the response, Congressman, is still that you have in the situation of the penny a ready-to-strike blank that is produced for the Mint and all they do then is mint Abe Lincoln's head on that that coin. If you look at the Navigant report from earlier this year, and they looked at some of these costs in more detail, the costs of taking the metal, melting that down, rolling it, stamping it up, setting it, delivering that finished blank was around a cent or 1.1 cents, and then we move from that to 2.4 by the Mint cost. And I think that inflated cost, at least for the 2011 situation we are discussing, is due to the fact that the Mint reallocated their costs and looked at those GS&A costs based on the percentage of coins produced. And since the penny is 60 to 70 percent of the Mint production, they were getting a large portion of those overhead costs, when, in fact, that ready-to-strike blank, in our view, does not really require all the overhead that is being put on it.

So that when you saw that penny cost go from 1.5 to 1.7 to 1.9 and now to 2.4, and who knows what it is going to be if the dollar

coin costs are now distributed over a smaller number of coins. I think that is what is causing this inflation we are seeing.

Mr. STIVERS. Sure. And as an example of what you are talking about, the Royal Canadian Mint's production costs for their coins are actually lower on a per unit basis than the U.S. Mint. However, their volume is approximately one-tenth the U.S. Mint's. Do you have any explanation for that, and then do you have any recommendations or a prescription for increasing the efficiency of the U.S. Mint?

Mr. WELLER. Yes. I believe that the Royal Canadian Mint doesn't allocate their costs on a per-unit basis, so that would be one difference. I think Mr. Peterson did a nice job of explaining how they have made some significant reductions over time. I think what was interesting in Ms. Lepine's testimony was just more broadly not looking specifically at one denomination of the penny or the nickel, but the number of the steps the RCM has taken to reduce their overall costs of production. They instituted a $1 and $2 coin that extracted savings. They moved their nickel, dime, and quarter to a multi-ply steel and saved money. They moved their penny to a steel coin. They changed the size of their coins. So all these steps were a part of the whole effort I think that reduced their costs and their production and helped in their efficiencies.

Mr. STIVERS. Would you normally expect somebody with more volume or less volume to have a lower unit cost?

Mr. WELLER. You would assume that the higher volume would produce the lower cost.

Mr. STIVERS. It kind of defies logic.

Mr. WELLER. Yes.

Mr. STIVERS. Thank you for that. I really appreciate it. Do you have any other prescriptions or advice for the U.S. Mint on how they could do what needs to be done to make themselves more efficient? And if you don't, that is fine.

Mr. WELLER. I think I will probably pass on that. It is a little outside of the mission of the Americans for Common Cents.

Mr. STIVERS. Sure. But you do talk about the overhead in your testimony. I wanted to give you an opportunity to talk about the—if you had any specific recommendations, I felt that was only fair.

Mr. WELLER. Thank you. I think the point would be that a lot of this focus has been on metal content, and I simply wanted to raise for the chairman and the members of the committee that there is a second side to the coin, if you will, which is there is an allocation of cost here that plays into this certainly with the penny and the nickel.

I am sorry that Congresswoman Maloney left. Several years ago, she submitted a question to the Mint that asked what would happen to nickel production if you didn't have the penny, and the Mint came back in response to that and said that their nickel production would double. So this whole idea we are going to save money if we eliminate the penny really doesn't pan out. Navigant found out that there is actually an $11 million cost to the Mint without the penny because you have fixed costs that are applying to our other coins and then you have more nickels that are also being produced at a loss.

So I wanted to just say that if you look at the RCM experience, they made a number of changes across a number of coins. I think the way to address this is holistically.

Mr. STIVERS. Sure. And I think that makes a lot of sense, and the report coming out of the U.S. Mint in December is something we are all going to anxiously await.

It looks like my time is up. I appreciate the opportunity, and I yield back.

Mr. LUETKEMEYER. Thank you. We are going to also, if there are no objections, enter into the record the testimony of Thomas Schatz, president of Citizens Against Government Waste. They have some comments to make on this issue as well.

I have one or two questions myself yet, and then we will keep going here. Mrs. Maloney made the comment with regards to a lot of transactions being done electronically, and I was talking to someone in the financial services industry just yesterday and they said that in 5 years, 50 percent of transactions are going to be made on this thing right here. Now, I don't know if that is true or not. I am the least tech savvy person in this room, I will guarantee you.

But if that is the case, where do we go with our coinage and our paper money? Is there going to be the need for it? Are we really looking at long-term, long-range needs for these sort of things? Can you gentlemen, each one of you, give an answer to that? Where do you see it is going?

Mr. MILLER. I would say if we do that, it is going to really increase the cost of converting to coins, because then we will have paid all the up-front costs and we don't get the benefits. So I think it makes this proposal that is outstanding really a much worse deal.

Mr. LUETKEMEYER. You are talking about the proposal going to the $1 coin, or going to the steel-plated coins?

Mr. MILLER. No, I am talking about replacing the bills with the $1 coin.

Mr. LUETKEMEYER. Mr. Diehl?

Mr. DIEHL. If estimates of the budgetary effects of legislation over the next several years are relatively accurate, but the further out you look, the more speculative they become, then it is certainly speculative to say what the future of money will be.

It has been 13 years since I was at the Mint and I testified in front of this committee about the future of money, the very same title of this hearing, where we discussed whether coins and notes would be replaced by other forms of money. I don't believe money is going to go away. There is a bigger role, no doubt, for electronic forms of money. I think you are absolutely right, there will be more transactions on cell phones.

But it took me 5 minutes this afternoon to get in a taxicab at my hotel because the people who were in the taxicab were trying to pay using a cell phone and it wouldn't work. It was the only taxicab available, and as a result, I was almost late today. So count me as a bit of a skeptic that electronic forms of money will replace coins anytime soon.

Mr. LUETKEMEYER. Very good. Mr. Weller?

Mr. WELLER. Certainly, the technology trends are moving in that direction, Mr. Chairman. Who would have thought 10 years ago that anybody going to a fast food restaurant would be using plastic? But we have micro-transactions under $10 or $5 that were predominantly the world of cash that are now debit and credit. So I think you could see a continuing use of cash and currency in the economy as the changes that you outlined occur.

That said, I think there is always a need for cash and coin, predominantly in the lower-income populations who don't have credit cards, they don't have checking accounts, and those people are the ones who rely predominantly on cash and currency. So we have to make sure we are not taking any steps that are going to have a harmful effect on those populations.

Mr. LUETKEMEYER. For the record, they said the same thing about checks 30 or 40 years ago when they introduced credit cards and debit cards. They said, well, the checks are all going to go away. We are going to have a checkless society. Now, the level of checks is about the same as it was 30 years ago. However, there are still a lot more transactions being done, but the level of checks is still relatively the same. So it is interesting that comment was made and I was interested in your thoughts on that.

With that, I will yield to the gentleman from Ohio, if he has any further questions.

Mr. STIVERS. I think we have kept these people busy a long time. I am good. Thank you so much, Mr. Chairman.

Mr. MILLER. Mr. Chairman, could I respond to do Mr. Diehl, because he did point me out in his testimony.

Mr. LUETKEMEYER. He did mention you, but I did not see him physically point to you.

Mr. MILLER. Mr. Diehl said that he didn't see how the seigniorage interest was a tax on consumers and businesses. Let me just give you another—I thought I explained it, but let me give you another analogy.

I am sitting in my office surrounded by my associates at OMB, and we are trying to put the budget to bed, and we are trying to meet Gramm-Rudman-Hollings deficit reduction requirements and we are about $20 billion short, and I say, I have an idea. We will get Congress to pass a law that will force everybody to pay all of their income tax on the first of January. Then we will have that money through the whole year where we can effectively earn interest on it by not borrowing or not turning over debt that otherwise we would have to turn over, et cetera. Isn't that a great idea?

It would certainly solve the $20 billion revenue shortfall. But who would argue that it is not an inconvenience and a tax on people to have to pay all of their income tax up front? So it doesn't—it seems to me that might be a distinction without a difference.

Also, the question of whether it is regressive, I cite a study in my testimony, and I will be glad to share that study with the committee. If Mr. Diehl has studies showing otherwise, he should share that.

Mr. Diehl also said that people would support the coin if they are told up front that it would save money. There was a survey that was taken by Frank Luntz that I cited in my testimony, where even though people were told that it would save the government

half a billion dollars a year, they still opposed converting or forced conversion from coins to dollars.

Mr. Diehl said the coin would be successful only if you withdrew the dollar bill. Yes, I agree. I agree. But why is that? The government is a monopoly. If they withdraw from consumers a choice, then the consumers would have to go with the other thing. But suppose that you are a monopoly producer of automobiles in the United States or any other country and you have two models: one that we will call the Lion, it is really a great model; and the other we will call a Dog. And the Lion is a really good vehicle and the Dog is a bad vehicle, but the Dog earns a whole lot more money than the Lion. So somebody says, why don't we just withdraw the Lion? People don't have any choice. They will have to buy the Dog. Well, that is true. If they buy the Dog, the company will make more money. But that is not good policy. And I don't think the Federal Government should be taking away the choice from consumers whether they hold their cash in coins or dollars, and the public agrees with that position.

Mr. LUETKEMEYER. So you are advocating the penny be called the Fido. Mr. Diehl, would you like to respond? I will give you 30 seconds.

Mr. DIEHL. Great. This bill would impose virtually no pain on American taxpayers and minimum inconvenience. Congress is considering cuts that represent enormous pain to virtually every taxpayer in America, and I think it is sort of silly for us to make such a big deal out of reaping the benefits that are available that are difficult to argue with, because the GAO has documented it 7 times. And we had testimony from Ms. Lepine today that the benefits were 10 times what they expected in Canada. I think it is an open-and-shut case.

Mr. LUETKEMEYER. Very good. With that, we want to thank the panel and the members of the former panel for their testimony today. It has been enlightening and it has been lively. Obviously, there are two distinct sides to this, and we will continue to work on it. Thank you again for your enlightened testimony and we appreciate your participation.

The Chair notes that some Members may have additional questions for today's witnesses, which they may wish to submit in writing. Without objection, the hearing record will remain open for 30 days for Members to submit written questions to these witnesses and to place their responses in the record.

With that, the hearing is adjourned.

[Whereupon, at 4:01 p.m., the hearing was adjourned.]

A P P E N D I X

November 29, 2012

Statement by Philip N. Diehl

Mister Chairman, Members of this Committee, it was my honor to serve as the Director of the United States Mint from 1994 to 2000. Thank you for your invitation to appear before you.

The U.S. Government Accountability Office (GAO) has, for the seventh time, gotten it right: replacing the dollar note with a dollar coin will save the United States Government and American taxpayers billions of dollars, and Congress should accept GAO's recommendation to enact this change.

GAO stands for accountability, reliability, and independence. Since 1990, GAO has issued seven reports, all reaching the same conclusion: billions will be saved. The estimated savings over 30 years have ranged from $4.4 billion to $15.7 billion. It didn't matter whether a Republican or Democrat asked the question, the answer always came back the same.

I've been gone from the U.S. Mint for 13 years, and I have no financial interest in this matter. I'm here because I think this is sound public policy. In a time when Congress is considering painful cuts in government spending affecting virtually every American, why would we not take this small and painless measure. Virtually every Western economy has replaced its lowest denomination note with a coin of the same denomination, and I'll wager that no elected representative lost their job as a result. Congress has twice avoided the tough choice in passing dollar coin legislation hoping a coin could circulate alongside the dollar note despite overwhelming evidence that this will not happen.

That said, based on my own experience, I can say opponents' claims that the public will never accept a dollar coin are false. When the Sacagawea dollar coin was launched in 2000, public demand was so strong that the Mint shipped more coins in its first year, 1.3 billion, than it did in the entire 20-year history of the Susan B. Anthony dollar. Although the public greeted the Sacagawea dollar enthusiastically, the new dollar coin could not overcome the continued presence of the dollar note.

Opponents of this measure will cite survey research they claim demonstrates the public opposes substituting a dollar coin for a dollar note. But if survey respondents are informed this change will mean billions in savings, two-thirds support it.

This isn't rocket science, and no new coin is required. We did that 13 years ago. Opponents may claim the logistics are difficult or they might raise doubts about how long it will take to manufacture the 9 billion or so new coins GAO estimates will be needed to add to those already in circulation. I have doubts about these objections. During my last year as Director of the Mint we produced 28 billion coins and had capacity to produce another 2 billion that year. I understand the Mint will produce around 9 billion coins this year. Unless there has been a radical reduction in the capacity of the U.S. Mint plants in Philadelphia and Denver, and to my knowledge there has not been, the Mint is capable of meeting these requirements.

The Mint has told GAO it will need about $8 million in additional equipment, a figure that strikes me as reasonable. According to the Mint's financial reports, each dollar coin makes 82 cents in bottom-line profit for the Treasury. Spending $8 million to make $7.4 billion in net dollar coin profit sounds like a pretty good deal to me.

You have already heard all the reasons why this can't or shouldn't be done. Let me explain why I think it can, and dispel a number of the myths created to block this change.

Success Throughout the World

Considering the broad, bi-partisan support for reducing federal deficits, you would think that saving American taxpayers billions of dollars with no pain and minimal inconvenience would be welcomed. These savings aren't hypothetical – most major economies of the world, including the G-8 nations, long ago realized substantial savings from eliminating their small denomination paper currency. Canada, which made the change in 1987, reaped savings that were ten times what had been forecast. Instead of saving $175 million over 20 years, as estimated, Canadian officials later determined that they actually saved $450 million in the first five years. The change was so successful, the Canadians went for a second round, eliminating their $2 note and introducing a $2 coin in 1996.

As GAO has repeatedly stated, "Over the last 47 years, Australia, Canada, France, Japan, the Netherlands, New Zealand, Norway, Russia, Spain, and the UK, among others, have replaced lower-denomination notes with coins. Most of these replacements occurred in the 1980s."

Dollar Coins Work

When I was Director of the Mint, I worked with Republicans and Democrats alike to enact the Dollar Coin Act, launching a beautiful, easily recognizable, new Sacagawea dollar coin. Today's conventional wisdom is that the dollar coin was a failure, but it certainly wasn't at the time. As I said previously, demand was much stronger than we anticipated, and we had to quickly ramp up production. In fact, demand from banks was so strong we developed a direct shipment program to reduce delivery delays through the Federal Reserve Bank (FRB).

Given some of the press reports, you might think many of those Sacagawea dollars gathered dust in (FRB) vaults. Not so. By December 2002 nearly 1.5 billion Sacagawea dollars had been issued by the Mint while only 183 million remained in FRB vaults. But demand for the new dollar coin ultimately flagged due to the loss of a champion of the coin and resistance within the government and the banking sector. Frankly, you will never overcome this resistance without removing the dollar note.

The FRB has repeatedly testified before this Committee that its vaults were bulging with unwanted dollar coins, "almost $1 billion as of May 31, 2010." What you wouldn't have known without reading the fine print is that as of that same date, the FRB also held inventories of other denominations amounting to six billion coins, including 3.3 billion quarters and 1.5 billion pennies, or that coin inventory is distributed throughout a network of approximately 110 coin depots across the United States to ensure immediate availability and prevent localized shortages.

What is also noteworthy about the FRB's inventory numbers in 2010 is that new coin demand had fallen dramatically in 2009 and 2010, to an average of about 5 billion coins per year. This pattern is as regular as the night following the day. Coin demand plummets during recessions and surges with strong economic growth.

Contrast the FRB's 2009-2010 inventory with the prior four years when new coin demand averaged nearly 14 billion per year. Even with coin demand cut by 65%, the FRB still required 7 billion circulating coins in its inventory, with only one-seventh of those dollar coins.

Before the Susan B. Anthony was issued in 1979, Treasury and the Federal Reserve knew a new dollar coin could not succeed unless the dollar note was eliminated at the same time. I know because I saw the research. This knowledge was ignored. It was ignored again in 2000. I know because I was there. We need to face the simple truth: dollar coins do not circulate because we refuse to remove the dollar note.

Barriers

For many years, the dollar coin has faced another significant obstacle: the FRB's preference for the dollar note. I discovered this for myself when the Mint launched the Sacagawea dollar in 2000. The FRB is the sole channel through which the Mint distributes coins to banks and ultimately to businesses and consumers. If the FRB doesn't order a coin, it doesn't get into the hands of the public.

When we were planning the Sacagawea launch in 2000, we did an extensive survey of banks and the FRB to coordinate the logistics of distributing the new coin. They confronted us with a dilemma saying they would not order the Sacagawea dollar unless we first demonstrated there was demand for it. And they said survey research wasn't sufficient. This presented us with a Catch 22 situation since we couldn't prove there was public demand unless we could get the coin into the marketplace.

We solved this challenge by bypassing the FRB and the banks, shipping the coins directly to Wal-Mart stores nationwide. In just a few weeks, Wal-Mart distributed 100 million Sacagawea dollars as change in routine retail transactions, demonstrating that Americans welcomed the new coin. In fact, Wal-Mart wanted another 100 million coins, but when the banks started receiving calls from customers asking for the coin, they realized we had just proven public demand and they wanted shipments immediately.

This debunked another piece of conventional wisdom that Americans are opposed to eliminating the dollar note. When readily available to the public, coins are accepted. And as I said earlier, opinion polls consistently show that, when informed of the savings of substituting a dollar coin for the dollar note, two-thirds of Americans support making the switch.

Dollar coins faced other artificial barriers after the release of the Presidential Dollar coins in 2007. The FRB restricted delivery of bank orders for each new coin design to only two weeks, four times a year. What business is going to make use of a coin it isn't certain will be consistently available from its bank? This rule means businesses are unable to integrate the dollar coin into their operations so banks don't order the coin. FRB inventories then accumulate, and once again, the dollar coin is declared a failure.

Seigniorage

As GAO has reported, both notes and coins are products that make a "profit", termed "seigniorage", but they are accounted for differently. Seigniorage is the difference between the face value of a note or coin, and its cost. The FRB buys coins from the Mint *at full face value*. The Mint then records all coin seigniorage, or profit, on its books, and ultimately deposits profits into Treasury's general fund. In contrast, the FRB buys notes from the Bureau of Engraving and Printing *at cost*, with the FRB recording all note profit, or seigniorage, on its books. In 2011 the FRB's note seigniorage was estimated at nearly $200 billion, and the FRB returned $77 billion to Treasury. I am not an expert on the Federal Reserve's finances, but the math here is pretty simple: eliminating the dollar note denies the FRB a significant source of its profits.

GAO Savings Estimate Likely Understated

I was surprised, as some of the Committee members may have been, by the dramatic reduction in GAO's annual savings estimate from $522 million, issued in 2000, to $184 million in its updated 2011 Report. A significant part of this reduction can be attributed to the FRB's reported increase in the lifespan of the dollar note. For the past 20 years or so, the FRB had cited a lifespan of 13 to 18 months for the note. This was the case when I was Director. In 2011, the FRB more than doubled the lifespan to an average of 32 to 40 months.

Then, in preparation for the 2012 Report, the FRB provided GAO with an eye-popping lifespan estimate of 56 months, again nearly doubling the estimate from the year before. Mr. Chairman, it's hard for me to imagine what accounts for the $1 note's sudden immunity to the wear and tear of circulation. Maybe we all treat the dollar bill more gently, or maybe they've developed some kind of Kevlar technology to ruggedize it. In any case, I note this change as worthy of attention.

In addition, GAO has calculated that the Mint will need four years to manufacture the quantity of dollar coins required to replace the dollar notes now in circulation and as a result the Mint will be forced to absorb dollar coin production costs without reimbursement for several years, creating a net loss during those years. As I've said, Mr. Chairman, I've been gone from the Mint for 13 years, but based on what I know of the Mint's capacity, both human and technological, I'd be very surprised if it took four years to build a sufficient inventory to replace the dollar note. My judgment is that if your legislation mandates the removal of the dollar note and gives the Mint enough time to plan for an increase in production, the Mint could produce the require inventory of coins in a year or two, with the current FRB inventory of dollar coins providing a head start. Therefore, I suggest you consider shortening the transition time, currently set at four years, so the Treasury can begin to realize these savings sooner rather than later.

Also of note, after the release of GAO's 2011 Report and their estimated savings projection of $5.5 billion over 30 years, the junior Senator from Massachusetts, where the cotton-linen for the dollar note is produced, asked GAO to change its assumptions and rerun its analysis. Even with assumptions far more favorable to the dollar note, GAO still estimated savings of $4.4 billion over 30 years. Remarkably, this is the GAO analysis that opponents of this bill are criticizing, one using their chosen methodology. So if the 2012 estimate was reached through "gimmick accounting", as one opponent has said, I could venture a guess where the gimmick originated. My own opinion is that GAO's 2011 estimate, without the "gimmick accounting" and changed assumptions in the 2012 estimate, is probably more sound.

Conclusion

Thank you, Mr. Chairman. That concludes my testimony.

ROYAL CANADIAN MINT
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Beverley Lepine
Chief Operating Officer

Statement to the
United States House of Representatives Committee
on Financial Services

Subcommittee on Domestic Monetary Policy
and Technology hearing on
"The Future of Money: Dollars and Sense"

Room 2128, Rayburn House Office Building
Washington, DC
November 29, 2011

Check against delivery

Good afternoon. I want to thank Chairman Bachus and the respected members of this committee for inviting me to testify, on behalf of the Royal Canadian Mint, on Canada's experience with replacing the $1 bank note with a circulation coin, as well as with the introduction of an innovative coin plating technology which has dramatically improved the cost-effectiveness of circulation coins, while also improving their reliability and security.

The Mint continuously strives to improve products and services for our customers and we are quite proud of what we have achieved within our circulation coinage business, for the benefit of Canadians, as well as our international customers, since the introduction of our one-dollar circulation coin in 1987.

Although we have twice successfully managed the replacement of a low-denomination bank note with a circulation coin (with the one-dollar coin in 1987 and a two-dollar coin in 1996), our record of maximizing the benefits to our circulation coins now encompasses a broad range of innovations, among them:

- Our patented **Multi-Ply Plated Steel** (MPPS) technology, first introduced on our 1-, 5-, 10- 25- and 50-cent coins in 2000 to create the most economical, durable and secure coins on the market by plating thin alternating layers of nickel and copper over a steel core –a technology used in over 70 coin denominations in 30 countries. The Mint now uses it on all Canadian circulating denominations since the launch of MPPS $1 and $2 coins in April 2012;

- Our **Alloy Recovery Program**, through which we continue to recover older alloy coins, extract their nickel content; generate revenue through bulk nickel sales; and replace the coins with new multi-ply plated product. This program has also streamlined the number of coin compositions the vending industry has to read;

- Our **Coin Recycling Program,** which allows Canadians to easily put their coins back into circulation and is a more efficient and environmentally-friendly way of supplying the market with coins by reducing the number of new coins the Mint needs to produce. Since June 2005, over six billion coins have been re-circulated through this program;

- Our **High-Speed Circulation Coin Colouring** process, introduced for the first time in 2004 on a 25-cent circulation coin honouring Canadian veterans. The Mint led the industry with this technology and it continues to evolve through ever-complex applications on new commemorative circulation coins, as well as coins for international customers;

- Our new Multi-Ply Plated Steel $1 and $2 coins with **Virtual Image** and **Laser Mark** security features ideally suited to high-value circulation coins;

- Our **Digital Non-Destructive Activation** (DNA) technology, by which the surface of every new $1 and $2 coin is essentially "fingerprinted" to store a unique code of that surface structure in a database. Although Canada does not have a coin counterfeiting problem, this anti-counterfeiting innovation has been proactively adopted to make our currency system even more robust, as well as to help our international customers add a potent new layer of security to their coins; and

- While a Bank of Canada Study in 2012 concluded that "cash is still the predominant payment method in terms of volume for 54% of transactions", we launched our **MintChip** research and development project to test a digital currency solution with all the features of cash, to explore the potential role of the Mint in an alternative payment world.

This highlights only a 12-year span of innovation specifically developed for the circulation coin market, but which can find application in other areas of our business, which includes collector and investment coins, and refinery operations.

While our strong focus on innovation helps the Mint compete for a greater share of the world plating market, as well as increased collector coin and bullion product sales, and fund our operations without taxpayer support, its most important outcome is our enhanced ability to meet changing customer needs while making our coinage system more robust, efficient, and reliable.

It is in this context that Canada's replacement of its one-dollar bank note with a circulation coin, and the later introduction of the two-dollar coin, can be deemed a success, from the perspective of the Mint and all end-users of Canadian currency.

Having already pointed to a number of innovations which point to the Mint's unique expertise, it is important to highlight another important and defining characteristic of our business which is the forecasting of coin inventories and the management of the coin distribution system across Canada. With distribution centres in 12 cities; 29 coin pools; and 2,000 forecasts per week, this end-to-end management of the coin supply makes us unique among the world's mints.

We also lead financial institutions and armoured car companies in managing the circulation of these coins through a network of distribution centres across Canada.

This requires timely production of Canadian circulation coins, which we consistently supply in response to market demand. By virtue of this approach, we avoid building significant inventories and prevent shortages of any denomination as we meet the fluctuating needs of Canadian trade and commerce. The prevention of coin shortages is an important performance measure for the Mint and we are proud of not having allowed any coin shortage, without building excess inventory, over the last five years.

This was an important ingredient to the success of both our past conversions from bank notes to coins, which placed a high burden of public expectation on the Mint.

Our one-dollar circulation coin was proposed by a Parliamentary committee as an outcome of public hearings in 1985 and although principally a cost-saving measure, several business and special interest groups suggested other benefits could be realized such as:

- It would be easier for transit companies to process coins than bills
- Vending machines could expand product lines and provide faster service to customers
- Organizations for the visually impaired appreciated the coin's eleven-sided, distinctive shape

Stakeholders and consumers were very receptive to this new coin. Public opinion polling revealed largely positive to neutral attitudes to the new coin and demand actually eclipsed the projected initial requirement of 250 million coins over the first three years. Instead, almost 600 million coins were produced to adequately supply the marketplace.

Canadians have come to embrace the one-dollar coin, which they nicknamed the Loonie by virtue of its iconic bird design, and use it as they would any other coin.

In a June 2012 online poll conducted on the Loonie's 25th anniversary by the CBC, Canada's public broadcaster, almost 70% of Canadians identified the coin as a recognizable symbol of Canada and many of those consider it a national icon equal to the beaver and maple leaf.

Despite our ability to manage production and distribution in the face of three-fold demand, our only hurdle was the continued production of the dollar bank note until 1989. This phased approach proved the only barrier to full scale adoption of the coin, which occurred soon after the last bank note was printed.

This was a lesson learned by the time Canada saw the introduction of the $2 circulation coin, which was simultaneously met by the end of two-dollar bank note production.

Lasting 25 years instead of one year for a bank note, the one-dollar circulation coin has saved the Canadian government $175 million over its first 20 years. It generated $450 million in seigniorage (the difference between the cost manufacturing and distributing a coin versus its face value, paid directly to the government) in its launch phase.

Today, the multi-ply plated steel $1 coin launched in 2012 has the same or better life, an even higher seigniorage potential and, along with the new $2 multi-ply coin, generates a combined additional $15 million annual cost savings to the government of Canada.

Since April of this year, all new Canadian circulation coinage leaving our Winnipeg, Manitoba facility is multi-ply plated steel.

Through this technology, a harmonized coinage system is minimizing costs for the Government of Canada and maximizing seigniorage revenue.

It is also widely supported by multiple stakeholders with whom the Mint worked closely and proactively to facilitate the transition from expensive, traditional alloy coins, to the most economical, durable and secure coins in the market today.

Our successful introduction of these coins depended on getting the message out early and often to all our stakeholders and in the case of the vending industry, we were able to provide first notice of this change in 2008, fully four years before the new coins started circulating this April. This allowed us to develop coins with the same look and feel as existing $1 and $2 coins despite the radical improvements they now contain.

These new coins were developed in partnership with industry and even though there were costs to operators of coin-operated equipment, our strategy of communicating early and frequently with stakeholders to facilitate the transition to new coins was widely praised.

Official statements such as that of Neil Madden, President of the Canadian Automatic Merchandising Association, summarize the merits of our initiative and its implementation:

"While no one in our industry wants to see a change that will cost us money, we do applaud the effort of our government to find cost savings. Our relationship with the Mint is strong and we value them as a partner in our industry".

Validation of our technology and implementation strategies by Canadian stakeholders is being echoed by stakeholders and customers beyond our borders.

Central banks around the world are looking for cost-effective and reliable alternatives to their expensive 100% alloy coins. These are customers who have much to gain from emulating the $250 million savings multi-ply plated steel has realized for the Canadian government since 2000.

We saw a pronounced shift in the international popularity of our technology when New Zealand changed all its coins to our multi-ply plated steel in 2005 and saved millions of dollars as a result of this decision. Since then, circulation coin customers on every continent are using our technology.

And as we are completing a 70,000 square foot expansion of our Winnipeg plating facility, we are looking forward to soon announcing our agreement with an Asian customer whose similar conversion to multi-ply plated steel has become the largest foreign circulation contract in our history.

I should add that industry partnerships have been very influential in the Mint's success in selling new technologies and as a case in point, our partner and licensee Jarden Zinc of Greeneville, Tennessee has been instrumental in helping us deliver multi-ply plated steel products to our international customers.

The Royal Canadian Mint is committed to advancing the science of coin engineering and manufacturing for the benefit of all its customers and stakeholders.

We are mindful of our core mandate, to support the needs of Canadian commerce by producing and distributing Canada's circulation coinage.

We have the added responsibility of managing the costs of delivering this mandate and being consistently profitable as the Mint is a self-financing agency which does not does rely on any taxpayer support despite being 100% owned by the Government of Canada.

We have more than met this goal with the combined profits of the last five years eclipsing those of the previous 25. We achieved record revenues of $3.2 billion in 2011, netted profits of over $43 million and paid a record dividend of $10 million to our exclusive shareholder; the Government of Canada.

Through our many innovations, we have also found ways to improve the integrity of our coinage system with coins that incorporate better security and perform reliably. We also value the strategic relationships we have built with industry stakeholders and consumer groups to create and introduce innovations which benefit the end-users of our products.

The Mint will continue to invest in research and development to keep generating solutions which meet the ever-changing needs of the marketplace and we look forward to sharing our knowledge and expertise with currency issuers all over the world looking for the best, common sense solutions to improving their coinage.

Thank you again for inviting the Royal Canadian Mint to appear before your Committee and it will be my pleasure to answer your questions.

Prepared Statement
of
James C. Miller III
before the
Subcommittee on Domestic Monetary Policy and Technology
Committee on Financial Services
United States House of Representatives
November 29, 2012

Thank you, Mr. Chairman and Members of the Committee.

It is my pleasure to speak today on a subject that I have followed for over a decade. I testified about the problems associated with eliminating the dollar bill back in 2000. The issues have changed only to the degree that substituting dollar coins for dollar bills has become an even worse deal for American businesses and consumers.

It has been quite clear from polls carried out by many sources over the years that people prefer dollar bills to dollar coins.[1] In one survey, people said the dollar bill evokes their pride in America and that eliminating it suggests erosion of our national character.[2] Americans said they see the dollar coin as a rarity, not something they use or spend. We also know they object strenuously to the elimination of the dollar bill.

Despite extensive efforts since 2007 by the Federal Reserve and financial institutions across the country to support the circulation of Presidential Dollar coins, we know that more than 1.4 billion of them are stored in Federal Reserve Bank vaults – enough to satisfy the demands of commerce for the next 40 years.[3] Many of the relatively few Presidential Dollar coins issued over the past six years that are not in Federal Reserve vaults are held by consumers as collectibles or keepsakes.

As in the past, I am disturbed by allegations of huge savings from substituting dollar coins for dollar bills. If you look at various GAO reports, you find that the major portion of what they label as benefits to government stem from the interest-free loans consumers would be forced to give to government. That is, what GAO calls benefits to government are really taxes -- implicit taxes on consumers. There is no net savings here. It is a wash. Moreover, the tax is a

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[1] See, for example, GAO-11-281 (Washington, DC: March 4, 2011), p.17; GAO-03-206. (Washington DC: December 17, 2002), p. 20; and Gallup News Service, *Americans Support Dollar Coins Featuring Past Presidents* (Princeton, New Jersey: November 21, 2006).

[2] Luntz Global, October 2011.

[3] http://www.federalreserve.gov/paymentsystems/coin_data.htm#dollarcoin. See also, Board of Governors of the Federal Reserve System, *Annual Report to the Congress on the Presidential $1 Coin Program* (Washington DC: June 2012), p. 2.

regressive one: studies show that higher-income consumers are more likely to use alternative forms of payment such as debit or credit cards.[4] So, the tax would fall disproportionately on the poor.

Moreover, analysis of production costs for dollar notes and coins is very sensitive to assumptions. The two reports issued by the GAO in February of 2012 make it very clear that their modeling of the costs and benefits to government of substituting dollar coins for dollar bills varies enormously depending on the questions they address.[5] In fact, GAO entitled one of its reports "Alternative Scenarios Suggest Different Benefits and Losses from Replacing the $1 Note with a $1 Coin."[6] GAO stated clearly that dollar coins would always cost more to produce than dollar bills and that the purported benefits to the government come solely from seigniorage – the implicit tax on consumers. They reported that when seigniorage is eliminated from GAO's calculations, the cost to government of substituting dollar coins for dollar bills is estimated at $1.8 billion over 10 years.[7]

Even counting seigniorage, if you assume that only one dollar coin would be needed to replace each dollar bill, the government would lose $582 million over 10 years.[8] Or, if you assume, as does GAO, that it would take 1.5 dollar coins to replace each dollar bill, the government would still lose $531 million over 10 years.[9] And even with this greater seigniorage, it would take 10 years for the government to start breaking even.[10] Given the rapid development of electronic payment systems, does anyone on this Committee really think that we would be making abundant use of dollar coins 10 years from now?

The GAO has also made it clear that it has never calculated the costs to parties outside of government, including businesses and consumers. Thirteen of 15 stakeholders that it surveyed about eliminating dollar notes said they would incur both short- and long-term costs related to changing their operations to handle dollar coins.[11] It cannot be a surprise to anyone that managing coins that weigh eight times as much as notes would create significant additional handling and transportation costs. There also could be significant environmental consequences associated with transportation, but the GAO has not addressed that issue either.

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[4] See, for example, Arango, Hogg, and Lee, "Why is cash (still) so entrenched? Insights from the Bank of Canada's 2009 Methods-of-Payment Survey," Bank of Canada Discussion Paper 2012-2 (Ottawa, Canada: February 2012), p. 5.
[5] GAO-12-307 (Washington DC: February 15, 2012) and GAO-12-342SP 2012 Annual Report (Washington DC: February 28, 2012). See also GAO-11-281 (Washington, DC: March 4, 2011).
[6] GAO-12-307 (Washington DC: February 15, 2012).
[7] Ibid., p. 7.
[8] Ibid., p. 9.
[9] Ibid., p. 6.
[10] GAO-11-281 (Washington DC: March 4, 2011), p. 4.
[11] Ibid., p. 19.

The GAO tells us that if we look out over 30 years, the government would benefit from the seignioriage tax that comes from substituting three dollar coins for every two dollar bills. Why? Because coins circulate differently than bills. People leave them at home instead of recirculating them; they drop on the ground or between sofa cushions. And businesses hold onto coins longer than bills to avoid transportation costs.

So, the best that can be said for the dollar coin is that the production costs to government may be no higher than the costs of producing dollar bills. But the costs to businesses, and ultimately to consumers, are far greater. And finally, consumers would pay a huge tax that would offset precisely the government's gain on seignioriage.

In any event, it seems to me that consumers ought to be the ones making this decision. The Federal Government's sovereign power to mint money is a monopoly power, and just as a monopolist in the private sector might raise prices and stick it to consumers, a government that dictated using a means of exchange that is clearly in disfavor would be sticking it to consumers.

In conclusion, Mr. Chairman and Members of the Committee, Americans view eliminating the dollar bill as a budget gimmick, not a serious cost-cutting measure.[12] What the GAO characterizes as a benefit to the government – seignioriage -- is really a tax on the American people. The sovereign power of government to print money or to mint coins is a monopoly power, and just as monopolies impose more costs on consumers, the same thing happens when the government forecloses choices for consumers.

And finally, it seems to me that after many failed efforts to make dollar coins more appealing to consumers and the clear costs that would be shifted to them from government, the notion of eliminating the dollar bill from circulation is really quite absurd.

Thank you, Mr. Chairman and Members of the Committee: that completes my prepared statement. I shall be happy to address any questions you might have.

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[12] Luntz Global, ibid.

STATEMENT OF
RICHARD A. PETERSON
ACTING DIRECTOR
UNITED STATES MINT

BEFORE THE
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY AND TECHNOLOGY:
HOUSE COMMITTEE ON FINANCIAL SERVICES
"The Future of Money: Dollars and Sense"

Thursday, November 29, 2012
2:00 p.m.
2128 Rayburn House Office Building

Mr. Chairman, Ranking Member Clay, members of the Subcommittee, I appreciate the opportunity to appear before the Subcommittee today on behalf of the United States Mint (Mint) to address an issue that is at the top of the list of concerns of most Americans – how to save taxpayers' money. I look forward to the discussion about the Subcommittee's continued interest in the issue of $1 coins and $1 notes and cost savings regarding the manufacturing of our circulating coins.

The Mint celebrated its 220th anniversary on April 2, 2012. As one of the oldest and most visible public institutions in government, we play a special role in the life of our Nation and we have a rich history to share with the public.

The Mint is a vibrant team of 1,800 employees located in six facilities across the country. We operate three business lines: a circulating program, a numismatic program that includes

collectible products, and investment-grade precious metal bullion coins. In all business lines, the Mint had a strong performance throughout 2012. Though revenue decreased in 2012 compared to 2011, through our continued focus on costs, we were able to post solid net income results in all programs.

In 2012, the Mint made significant progress on a research and development program to examine the possible metallic alternatives for our Nation's coinage. To do so, we established and staffed a separate and secure research and development laboratory within the United States Mint at Philadelphia. This December, the Mint will provide the first annual report to Congress under the provisions of the "Coin Modernization, Oversight, and Continuity Act of 2010," which will discuss the findings of that program.

The men and women of the Mint delivered outstanding results for our Nation throughout the year. Thanks to their foresight, hard work and commitment, the Mint is well prepared for the opportunities and challenges ahead.

I would now like to discuss specific elements and highlights of the Mint's programs as they relate to today's hearing.

CIRCULATING

In fiscal year 2012, circulating coin production increased 24 percent to approximately 9.2 billion units from 7.4 billion in fiscal year 2011. Our circulating coin production has grown at a

compound annual growth rate of more than 20 percent for each of the last three years since a low of 5.2 billion coins in fiscal year 2009. We are pleased with the results of the ongoing cost-reduction efforts that we began in 2009. As a result, we reduced our non-metal costs of producing circulating coins, in absolute dollars, by $58.8 million (25.5 percent) from $230.3 million in 2009 to $171.5 million as of August 2012 by improving our capacity utilization and significantly reducing expenses.

While our cost reduction efforts, increased productivity, and decreased commodity metals prices were all favorable in fiscal year 2012, the costs to manufacture and distribute both the penny and the nickel exceeded their face values again, just as they have for each of the last six fiscal years. Overall, seigniorage was positive in fiscal year 2012, and we expect it to be healthy again in 2013.

BULLION

One of our most important missions is to produce and market precious metal bullion coins to meet the needs of investors seeking exposure to silver and gold products. Although our bullion coin unit volumes and commodity prices were down in 2012, global economic and security conditions contributed to the significant volatility experienced throughout the year. In January 2012, we saw the highest monthly unit sales total in our history – with over 6.2 million ounces of bullion sold. For the fiscal year, we sold 788,000 ounces of gold bullion and 34.1 million ounces of silver bullion. Net income for the bullion program saw a decrease of 57 percent to $28.4 million from $65.8 million in 2011 because of lower volumes and pricing.

The Mint held roundtable discussions with its bullion coin Authorized Purchasers at the Philadelphia Mint in November 2011 and again last month at our facility in West Point, New York. This is the private sector network that purchases bullion coins directly from the Mint and makes them available to investors, coin and precious metal dealers, participating banks, and brokerage firms. The purpose of the meetings was to identify market trends and bullion coin demand trends. The meetings also gave us an opportunity to discuss the development and maintenance of more effective and efficient bullion coin operations and to improve communication between the Mint and the private sector.

NUMISMATIC

Results for fiscal year 2011 were exceptional for the numismatic (collector) program, with demand being driven by higher precious metal prices and the release of two popular American Eagle Silver Proof Coins. In addition, we released our most popular coin sets early in the year, increasing sales in fiscal year 2011. In fiscal year 2012, demand weakened across the board, with moderating silver prices, only one American Eagle Silver Proof Coin release, and a later-than-usual sale date for our recurring sets all contributing to a revenue decrease of approximately $241 million. We are developing a comprehensive marketing strategy to increase the numismatic customer base and to incorporate new technologies and products.

DOLLAR COINS

With regard to ongoing production of the $1 Coin, I want to stress that the Mint continuously looks for ways to manufacture more efficiently without compromising quality. Since 2007, the Mint has produced 2.4 billion Presidential $1 Coins. The Federal Reserve currently has approximately 1.4 billion $1 Coins in inventory. This inventory consists of Susan B. Anthony $1 Coins, Sacagawea Golden $1 Coins, Presidential $1 Coins, and Native American $1 Coins. The Mint fulfilled its statutory requirement to promote use of $1 Coins. But despite these efforts, the Federal Reserve Banks still had significant – and growing – inventories of the coins in 2011, and, as a result, production of the coins for circulation was suspended in December of last year. This suspension reduced overall Mint production expenses by $50 million. The Mint continues to offer the Presidential $1 and Native American $1 Coins through annual coin sets and other numismatic product options.

ALTERNATIVE METALS

Earlier, I mentioned our progress in research and development on the possible metallic alternatives for our Nation's coinage, and I note that your second panel today will focus, in part, on the issue of minting pennies and nickels composed of steel. The Mint is looking forward to providing the first biennial report to Congress in December under the provisions of the "Coin Modernization, Oversight, and Continuity Act of 2010." At this point, I can say that we have conducted two sets of trial strikes on a variety of metallic compositions and evaluated them for attributes such as hardness, ductility, corrosion and wear resistance, electromagnetic signature,

availability of raw materials, and cost. The report we submit to Congress in December will provide the results of our research and development efforts over the last 18 months. We recognize that there are many issues associated with adopting alternative metals to produce circulating coins, and we will continue to engage stakeholders in this process.

Mr. Chairman, this concludes my remarks. I will be happy to respond to any questions you or other members of the Subcommittee may have. Thank you.

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Domestic Monetary Policy and Technology, Committee on Financial Services, House of Representatives

For Release on Delivery
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U.S. COINS

Benefits and Considerations for Replacing the $1 Note with a $1 Coin

Statement of Lorelei St. James, Director
Physical Infrastructure Team

GAO
Accountability * Integrity * Reliability

Highlights

Highlights of GAO-13-164T, a testimony before the Subcommittee on Domestic Monetary Policy and Technology, Committee on Financial Services, House of Representatives

November 29, 2012

U.S. COINS

Benefits and Considerations for Replacing the $1 Note with a $1 Coin

Why GAO Did This Study

Since coins are more durable than notes and do not need replacement as often, many countries have replaced lower-denomination notes with coins to obtain a financial benefit, among other reasons. Six times over the past 22 years, GAO has reported that replacing the $1 note with a $1 coin would provide a net benefit to the federal government of hundreds of millions of dollars annually.

This testimony provides information on what GAO's most recent work in 2011 and 2012 found regarding (1) the net benefit to the government of replacing the $1 note with a $1 coin, (2) stakeholder views on considerations for the private sector and the public in making such a replacement, and (3) the experiences of other countries in replacing small-denomination notes with coins. This testimony is based on previous GAO reports. To perform that work, GAO constructed an economic model to assess the net benefit to the government. GAO also interviewed officials from the Federal Reserve and Treasury Department, currency experts, officials from Canada and the United Kingdom, and representatives of U.S. industries that could be affected by currency changes.

What GAO Recommends

GAO has recommended in prior work that Congress replace the $1 note with a $1 coin. GAO continues to believe that replacing the $1 note with a coin is likely to provide a financial benefit to the federal government if the note is eliminated and negative public reaction is effectively managed through stakeholder outreach and public education.

View GAO-13-164T. For more information, contact Lorelei St.James at (202) 512-2834 or stjamesl@gao.gov.

What GAO Found

GAO reported in February 2012 that replacing $1 notes with $1 coins could potentially provide $4.4 billion in net benefits to the federal government over 30 years. The overall net benefit was due solely to increased *seigniorage* and not to reduced production costs. *Seigniorage* is the difference between the cost of producing coins or notes and their face value; it reduces government borrowing and interest costs, resulting in a financial benefit to the government. GAO's estimate takes into account processing and production changes that occurred in 2011, including the Federal Reserve's use of new equipment to determine the quality and authenticity of notes, which has increased the expected life of the note thereby reducing the costs of circulating a note over 30 years. (The $1 note is expected to last 4.7 years and the $1 coin 30 years.) Like all estimates, there are uncertainties surrounding GAO's estimate, especially since the costs of the replacement occur in the first several years and can be estimated with more certainty than the benefits, which are less certain because they occur further in the future. Moreover, changes to the inputs and assumptions GAO used in the estimate could significantly increase or decrease the results. For example, if the public relies more heavily on electronic payments in the future, the demand for cash could be lower than GAO estimated and, as a result, the net benefit would be lower.

In March 2011, GAO identified potential shorter- and longer-term costs to the private sector that could result from the replacement of the $1 note with a $1 coin. Industry stakeholders indicated that they would initially incur costs to modify equipment and add storage and that later their costs to process and transport coins would increase. However, others, such as some transit agencies, have already made the transition to accept $1 coins and would not incur such costs. In addition, for such a replacement to be successful, the $1 coin would have to be widely accepted and used by the public. Nationwide opinion polls over the last decade have indicated lack of public acceptance of the $1 coin. Efforts to increase the circulation and public acceptance of the $1 coins have not succeeded, in part, because the $1 note has remained in circulation.

Over the last 48 years, many countries, including Canada and the United Kingdom, have replaced low denomination notes with coins because of expected cost savings, among other reasons. The Canadian government, for example, saved $450 million (Canadian) over 5 years by converting to the $1 coin. Canada and the United Kingdom found that stopping production of the note combined with stakeholder outreach and public education were important to overcome public resistance, which dissipated within a few years after transitioning to the low denomination coins.

Chairman Paul, Ranking Member Clay, and Members of the Subcommittee:

I am pleased to be here today to participate in your hearing that examines the potential savings from replacing the $1 note with the $1 coin. GAO has reported six times over the last 22 years that replacing the $1 note with the $1 coin would result in net financial benefits to the government of hundreds of millions of dollars annually.[1]

In our prior reports, we recommended that Congress proceed with replacing the $1 note with the $1 coin. We continue to believe that replacing the note with a coin is likely to provide a financial benefit to the government if the note is eliminated and negative public reaction is effectively managed through stakeholder outreach and public education. However, we realize that replacing the $1 note with the $1 coin is controversial. We have previously reported on public opposition to using the $1 coin and the challenges that private businesses such as vending machine owners would face if such a transition were undertaken. Several foreign countries have already transitioned from small note denominations to coins, for a number of reasons, including the greater durability of coins and inflationary pressures.

My statement today addresses (1) our most recent estimates of the net financial benefit from replacing the $1 note with a $1 coin, (2) the long-standing public and private sector considerations of such a replacement, and (3) the experiences of other countries with replacing currency. This statement is based primarily on our most recent reports issued in March 2011 and February 2012. For our March 2011 report, to estimate the net financial benefit to the government, we constructed an economic model with data from the Federal Reserve, and the Department of the Treasury's (Treasury Department) Bureau of Engraving and Printing and

[1]GAO, *National Coinage Proposals: Limited Public Demand for New Dollar Coin or Elimination of Pennies,* GAO/GGD-90-88 (Washington, D.C.: May 23, 1990); GAO, *1-Dollar Coin: Reintroduction Could Save Millions If Properly Managed*, GAO/GGD-93-56 (Washington, D.C.: Mar. 11, 1993); GAO, *Dollar Coin Could Save Millions*, GAO/T-GGD-95-203 (Washington, D.C.: July 13, 1995); GAO, *Financial Impact of Issuing the New $1 Coin*, GAO/GGD-00-111R (Washington, D.C.: Apr. 7, 2000); GAO, *U.S. Coins: Replacing the $1 Note with a $1 Coin Would Provide a Financial Benefit to the Government,* GAO-11-281 (Washington, D.C.: Mar. 4, 2011); and GAO, *U.S. Coins: Alternate Scenarios Suggest Different Benefits and Losses from Replacing the $1 Note with a $1 Coin,* GAO-12-307 (Washington, D.C.: Feb. 15, 2012).

the United States Mint (Mint). We interviewed government officials from Canada and the United Kingdom to obtain information about their experiences with replacing notes with coins and used the information to develop some of the assumptions used in our model. To determine the effects such a replacement would have on the public and on private business, we identified and interviewed officials from industries and organizations that could be affected by currency changes. For our February 2012 report, we updated our model to reflect actions taken by the Federal Reserve and the Treasury Department. In its most basic form, the model measures the difference between the status quo scenario—where $1 coins are available, but $1 notes predominate—and an alternative replacement scenario in which the $1 note is replaced with the $1 coin, the $1 notes are phased out, and $1 coins are produced and issued into circulation at a rate to match the way the public uses coins. Although we recognize that such a replacement would have benefits and costs for the public and for private businesses, the model was designed to estimate the net benefit and costs solely to the federal government and did not quantify the effects on the public or on private business. More detailed information on our objectives, scope, and methodology for this work can be found in the issued reports.[2] We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Potential Benefits from Replacing the $1 Note with the $1 Coin

In February 2012, we reported that the increased *seigniorage* resulting from replacing $1 notes with $1 coins could potentially offer $4.4 billion in net benefits to the government over 30 years. We determined that seigniorage was the sole source of the net benefits and not lower production costs due to switching to the coin, which lasts much longer than a note. *Seigniorage* is the financial gain the federal government realizes when it issues notes or coins because both forms of currency usually cost less to produce than their face value. This gain equals the difference between the face value of currency and its costs of production, which reflects a financial transfer to the federal government because it

[2]GAO-11-281 and GAO-12-307.

reduces the government's need to raise revenues through borrowing.[3] With less borrowing, the government pays less interest over time, resulting in a financial benefit.[4]

The replacement scenario of our 2012 estimate assumed the production of $1 notes would stop immediately followed by a 4-year transition period during which worn and unfit $1 notes would gradually be removed from circulation. Based on information provided by the Mint, we also assumed that the Mint would convert existing equipment to increase its production capability for $1 coins during the first year and that it would take 4 years for the Mint to produce enough coins to replace the currently outstanding $1 notes. Our assumptions covered a range of factors, but key among these was a replacement ratio of 1.5 coins to 1 note to take into consideration the fact that coins circulate with less frequency than notes and therefore a larger number are required in circulation. Other key assumptions included the expected rate of growth in the demand for currency over 30 years, the costs of producing and processing both coins and notes, and the differential life spans of coins and notes. We projected our analyses over 30 years to be consistent with previous GAO analyses and because that period roughly coincides with the life expectancy of the $1 coin.

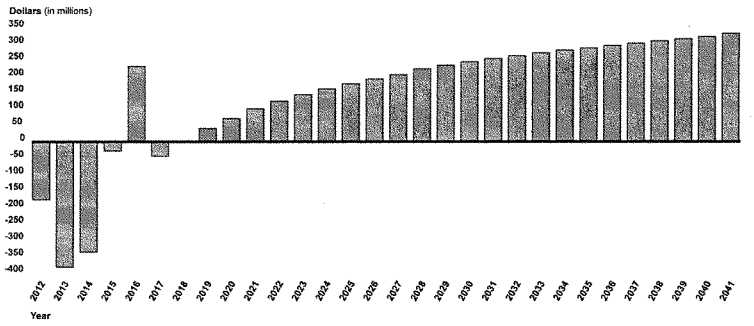
As shown in figure 1, we found that the net benefit accruing each year varied considerably over the 30 years. More specifically, across the first 10 years of our 30-year analysis, replacing the $1 note with a $1 coin would result in a $531 million net loss or approximately $53 million per year in net loss to the government. The early net loss would be due in part to the up-front costs to the Mint of increasing its coin production

[3]Traditionally, *seigniorage* is defined as the difference between the face value of coins and their cost of production. As long as there is public demand, the government creates this net value when it puts coins into circulation. Similarly, when the government issues notes, it creates an analogous net value, equal to the face value of the notes less their production costs. In this statement, we use the term *seigniorage* to refer to the value created from the issuance of both coins and notes.

[4]Some observers have stated that seigniorage essentially represents a tax on the public. The gains to the federal government through increased seigniorage occur because as $1 notes are replaced by $1 coins, the public will choose to hold more of their wealth in cash, thus providing a transfer to the federal government. Thus, the financial benefit to the federal government comes at a cost to the public, and there is not a net gain to society from increased seigniorage. However, this transfer occurs as a result of voluntary changes in how people are choosing to hold their wealth, which is different than in the case of a tax, which is a mandated transfer to the government.

during the transition, together with the limited interest expense the government would avoid in the first few years after replacement began.[5]

Figure 1: Discounted Net Benefit to the Government of Replacing the $1 Note with a $1 Coin



Source: GAO analysis.

This estimate differs from our 2011 estimate, which found that replacement would result in a net benefit of about $5.5 billion over 30 years (an average of about $184 million per year) because the 2012 estimate takes into account two key actions that occurred since our 2011 report, specifically:

- In April 2011, the Federal Reserve began using new equipment to process notes, which has increased the expected life of the $1 note to an average of 56 months (or 4.7 years), according to the Federal Reserve, compared with the 40 months we used in our 2011

[5]The large net benefit in 2016 would occur because we assume that the Mint's production at maximum capacity during the 4-year transition period would lead to some overproduction and thus production would drop dramatically in 2016. Because of the far lower coin production costs, the net benefit to the government would temporarily spike in that year.

analysis.[6] The longer note life reduces the costs of circulating a note over 30 years and thus reduces the expected net benefits of replacing the $1 note with a $1 coin.

- In December 2011, the Treasury Department announced that it would take steps to eliminate the overproduction of dollar coins by relying on the approximately 1.4 billion $1 coins stored with the Federal Reserve as of September 30, 2011, to meet the relatively small transactional demand for dollar coins. This new policy would reduce the cost associated with producing $1 coins that we estimated in the status quo scenario and, therefore, would reduce the net benefit, which is the difference in the estimated costs between the status quo scenario and the replacement scenario.

However, like all estimates, there are uncertainties involved in developing these analyses. In particular, while the up-front costs to the Mint of increasing its coin production during the transition is reasonably certain—in large part because it is closer in time—the longer-term benefits, particularly those occurring in the later years, involve greater uncertainty because of unforeseen circumstances that could occur farther into the future. Nonetheless, looking at a longer time period allows for trends to be seen.

Moreover, changes to the inputs and assumptions used in our analysis could significantly change the estimated net benefit. For example, in 2011, we compared our status quo scenario to an alternative scenario in which the growing use of electronic payments—such as making payments with a cell phone—results in a lower demand for cash and lower net benefit. If Americans come to rely more heavily on electronic payments, the demand for cash could grow more slowly than we assumed or even decrease. By reducing the public's demand for $1 currency by 20 percent in this alternative scenario, we found that the net benefit to the government would decrease to about $3.4 billion over 30 years.[7]

[6]When notes are returned by commercial banks as deposits to the Federal Reserve, each note is processed to determine its quality and authenticity. During processing, worn and counterfeit notes are removed from circulation and the rest are wrapped for storage or re-circulation.

[7]We did not have any evidence to suggest how much demand might transfer to electronic use, but a 20 percent transfer to electronic use would appear to be a reasonably substantial change in the public's use of money. The actual number, however, could be higher or lower.

In another scenario, we reported in 2012 that if interest savings because of seigniorage were not considered, a net loss of approximately $1.8 billion would accrue during the first 10 years for an average cost of $179 million per year—or $2.8 billion net loss over 30 years. While this scenario suggests that there would be no net benefits from switching to a $1 coin, we believe that the interest savings related to seigniorage, which is a result of issuing currency, cannot be set aside because the interest savings reflects a monetary benefit to the government.

Our estimates of the discounted net benefit to the government of replacing the $1 note with a $1 coin differ from the method that the Congressional Budget Office (CBO) would use to calculate the impact on the budget of the same replacement. In the mid-1990s, CBO made such an estimate and noted that its findings for government savings were lower than our estimates at that time because of key differences in the two analyses. Most important, budget scorekeeping conventions do not factor in gains in seigniorage in calculating budget deficits.[8] Thus, the interest expense avoided in future years by reducing borrowing needs, which accounts for our estimate of net benefit to the government, would not be part of a CBO budget-scoring analysis. Additionally, CBO's time horizon for analyzing the budget impact is up to 10 years—a much shorter time horizon than we use in our recent analyses.

Considerations Moving Forward

Two factors merit consideration moving forward. The first factor is the effect of a currency change on the private sector. Our 2011 and 2012 reports considered only the fiscal effect on the government. Because we found no quantitative estimates that could be evaluated or modeled, our estimate did not consider factors such as the broader societal impact of replacing the $1 note with a $1 coin or attempt to quantify the costs to the private sector. Based on our interviews with stakeholders representing a variety of cash-intensive industries, we believe that the costs and benefits to the private sector should be carefully weighed since some costs could be substantial. In 2011 we reported that stakeholders identified potential shorter- and longer-term costs that would likely result from the replacement. Specifically, shorter-term costs would be those costs involved in adapting to the transition such as modifying vending

[8]*Budget scorekeeping* is the process of estimating the budgetary effects of pending and enacted legislation and comparing them with limits set in the budget resolution or legislation.

machines, cash-register drawers, and night-depository equipment to accept $1 coins. Such costs would also include the need to purchase or adapt the processing equipment that businesses may need, such as coin-counting and coin-wrapping machines. Longer-term costs would be those costs that would permanently increase the cost of doing business, such as the increased transportation and storage costs for the heavier and more voluminous coins as compared to notes, and processing costs. These costs would likely be passed on to the customer and the public at large through, for example, higher prices or fees. Most stakeholders we interviewed said, however, that they could not easily quantify the magnitude of these costs, and the majority indicated that they would need 1 to 2 years to make the transition from $1 notes to $1 coins.

In contrast to the stakeholders who said that a replacement would mean higher costs for their businesses, stakeholders from the vending machine industry and public transit said that the changeover might have only a minimal impact on them. For example, according to officials from the National Automatic Merchandising Association, an organization representing the food and refreshment vending industry, many of its members have already modified their vending machines to accept all forms of payment, including $1 coins. In addition, according to transit industry officials, the impact on the transit industry would be minimal since transit agencies that receive federal funds were required under the Presidential $1 Coin Act of 2005 to accept and distribute $1 coins.

The second factor that merits consideration is public acceptance. Our 2012 estimate assumes that the $1 coin would be widely accepted and used by the public. In 2002, we conducted a nationwide public opinion survey, and we found that the public was not using the $1 coin because people were familiar with the $1 note, the $1 coin was not widely available, and people did not want to carry more coins. However, when respondents were told that such a replacement would save the government about half a billion dollars a year (our 2000 estimate), the proportion who said they opposed elimination of the note dropped from 64 percent to 37 percent. Yet, two more recent national-survey results suggest that opposition to eliminating the $1 note persists. For example, according to a Gallup poll conducted in 2006, 79 percent of respondents were opposed to replacing $1 notes with $1 coins, and their opposition decreased only slightly, to 64 percent, when they were asked to assume that a replacement would result in half a billion dollars in government savings each year. We have noted in past reports that efforts to increase the circulation and public acceptance of the $1 coins—such as changes

to the color of the $1 coin and new coin designs—have not succeeded, in part, because the $1 note has remained in circulation.[9]

Experiences of Other Countries

Over the last 48 years, Australia, Canada, France, Japan, the Netherlands, New Zealand, Norway, Russia, Spain, and the United Kingdom, among others, have replaced lower-denomination notes with coins. The rationales for replacing notes with coins cited by foreign government officials and experts include the cost savings to governments derived from lower production costs and the decline over time of the purchasing power of currency because of inflation.[10] For example, Canada replaced its $1 and $2 notes with coins in 1987 and 1996, respectively. Canadian officials determined that the conversion to the $1 coin saved the Canadian government $450 million (Canadian) between 1987 and 1991 because it no longer had to regularly replace worn out $1 notes. However, Canadian $1 notes did not last as long as $1 notes in the United States currently do.

Stopping production of the note and actions to overcome public resistance have been important in Canada and the United Kingdom as the governments transitioned from a note to a coin. While observing that the public was resistant at first, Canadian and United Kingdom officials said that with the combination of stakeholder outreach, public relations efforts, and ending production and issuance of the notes, public dissatisfaction dissipated within a few years. Canada undertook several efforts to prepare the public and businesses for the transition to the coin. For example, the Royal Canadian Mint reached out to stakeholders in the retail business community to ensure that they were aware of the scope of the change and surveyed public opinion about using coins instead of notes and the perceived impact on consumer transactions. The Canadian Mint also proactively worked with large coin usage industries, such as vending and parking enterprises, to facilitate conversion of their equipment, and conducted a public relations campaign to advise the

[9]GAO/GGD-90-88, GAO/GGD-93-56, and GAO/GGD-00-111R.

[10]Lower-denominated currencies tend to be metal based rather than paper based because, among other reasons, these denominations tend to circulate more rapidly than higher denominations. Over time, inflation erodes the purchasing power of any particular denomination of currency. As the real value of a note declines with inflation, its more rapid circulation may wear paper notes more quickly and can make a switch to a coin cost effective.

public of the cost savings that would result from the switch. According to Canadian officials, the $1 and $2 coins were the most popular coins in circulation and were heavily used by businesses and the public. In our analysis of replacing the $1 note with a $1 coin, we assumed that the U.S. government would conduct a public awareness campaign to inform the public during the first year of the transition and assigned a value of approximately $7.8 million for that effort.

In addition, some countries have used a transition period to gradually introduce new coins or currency. For example, the United Kingdom issued the £1 coin in April 1983 and continued to simultaneously issue the £1 note until December 1984. Similarly, Canada issued the $1 coin in 1987 and ceased issuing the $1 note in 1989.

Concluding Observations

In our prior reports, we recommended that Congress proceed with replacing the $1 note with the $1 coin. We continue to believe that the government would receive a financial benefit from making the replacement. However, this finding comes with several caveats. First, the costs are immediate and certain while the benefits are further in the future and more uncertain. The uncertainty comes, in part, from the uncertainty surrounding key assumptions like the future demand for cash. Second, the benefits derive from seigniorage, a transfer from the public, and not a cost-saving change in production. Third, these are benefits to the government and not necessarily to the public at large. In fact, public opinion has consistently been opposed to the $1 coin. Keeping those caveats in mind, many other countries have successfully replaced low denomination notes with coins, even when initially faced with public opposition.

Chairman Paul, Ranking Member Clay, and members of the Subcommittee, this concludes my prepared statement. I would be pleased to answer any questions at this time.

GAO Contact and Staff Acknowledgements

For further information on this testimony, please contact Lorelei St. James, at (202) 512-2834 or stjamesl@gao.gov. In addition, contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this testimony include Teresa Spisak (Assistant Director), Lindsay Bach, Amy Abramowitz, Patrick Dudley, and David Hooper.

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STATEMENT OF

MARK WELLER

EXECUTIVE DIRECTOR
AMERICANS FOR COMMON CENTS

ON THE

"FUTURE OF MONEY: DOLLARS AND SENSE"

BEFORE THE

HOUSE FINANCIAL SERVICES SUBCOMMITTEE ON
DOMESTIC MONETARY POLICY AND TECHNOLOGY

UNITED STATES HOUSE OF REPRESENTATIVES

NOVEMBER 29, 2012

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www.pennies.org

Mr. Chairman and Members of the Committee, my name is Mark W. Weller and I am Executive Director of Americans for Common Cents. Thank you for inviting our organization to appear at this hearing. I am pleased to submit testimony today concerning the one-cent coin, the use of alternative metals in our coins, and the importance of the penny to America's economy and culture.

Americans for Common Cents (ACC) was established in 1990 to conduct research and provide information to Congress and the Executive Branch on the need to retain the penny. Our organization is broad-based and comprised of, and endorsed by, many of the nation's leading coin and numismatic organizations, charitable organizations that benefit from penny donations, and companies involved in the manufacturing and transport of the penny.

It continues to be prudent to look at ways to make our coins less expensively, and we applaud this subcommittee's work in 2010 directing the Department of Treasury to review the metallic content of our coins. However, in doing so, we need to ensure that Congressional and Mint discussions about alternative metals not become the pretext for an ill-considered decision to remove the penny from circulation. There are three key points I want to share with you today.

1. ACC does not have a position on coin content; our focus is directed solely to the broader fact that consumers benefit with a low denomination coin. The penny is important to the economy. Working families benefit from the penny and America's many charitable organizations thrive on it.

2. Steel is a feasible coin material that has been used successfully in Canada and other countries. We are anxious to see what the Treasury recommends in its report to Congress regarding not just penny composition but also the composition of other circulating coins.

3. A focus on metal content alone ignores the Mint's substantial overhead as well as cost accounting changes made by the Mint that inflate the reported cost of the penny. Metal content is only one component in the rising cost of our circulating coins. In fact, metals actually have become less of a factor as prices have lowered since the 2006 market price highs. Last year, the Mint reallocated costs based on the number of coins produced rather than the traditional accounting of Mint labor costs (based on direct hours). This accounting change unfairly double charges portions of the penny fabrication process since the Mint receives a ready-to-strike blank from the private sector and only a small fraction of the operations on the penny are performed by the Mint.

The findings outlined above, and discussed in more detail below, suggest that Congress certainly is on the right track looking for ways to make our coins less expensively. However, in addition to coin composition, there needs to be some creative thinking about Mint overhead costs and how they are allocated, especially as the volume of circulating coins decreases and overhead associated with discontinued dollar coin production is spread across other circulating coins (even as the dollar coin is not being produced).

CONSUMERS BENEFIT WITH A PENNY, REGARDLESS OF ITS CONTENT

Faith in the strength of the economy and the nation is tied to perceptions about the currency system, and public acceptance is an important criterion for evaluating currency and coinage changes. As ACC has mentioned in previous testimony, the penny has become embroidered into the social and commercial fabric of our society. Any benefits associated with possible cost savings from adoption of alternative metals should not lead to consideration of penny elimination. Our current involvement with the penny has led us to three conclusions about consumer benefits from a low domination coin that I want to share with you.

1. The penny serves as a hedge against inflation. Eliminating the penny will have an impact on inflation, both real and perceived. Even a small increase in inflation mounts to considerable sums since virtually all government outlays (e.g. Social Security, welfare programs, interest on the public debt) and many private sector costs (e.g. wages) are tied, either formally or informally, to the Consumer Price Index.

In 2006, the *Wall Street Journal* editorialized that eliminating the penny would "wave a symbolic white flag before the forces of inflation." They likened taking the penny out of circulation to actions one usually associates with nations like Argentina, Bolivia, and Mexico that periodically degrade their peso currencies and create hyper inflation.

Under the current fragile economic climate, the last thing Congress should do is increase inflationary pressure.

2. In practice, price rounding cannot be fairly done. Consumers will be hit with a "rounding tax" without the penny. The claim that rounding will have no appreciable effect on the consumer is predicated on the notion that there is an equal 10% probability of purchase prices ending in a particular digit. In fact, evidence suggests that the equal probability assumption is false.

Over three-quarters of Americans (77 percent) are concerned merchants would raise prices without the penny. And they're probably right. Economists agree on one principle: businesses are guided by a desire to maximize profits. There is no obvious incentive for businesses to set prices in a way that will lead to rounding down.

3. Rounding hurts consumers and will disproportionately affect those who can least afford it. Millions of transactions are conducted each day in the U.S. economy, and with 26% of Americans either not having savings or checking accounts or relying on payday lending services, the amount of cash transactions each day is simply not dismissible.

Federal Reserve studies have shown that people with relatively low incomes (particularly the young, elderly, and minorities) use cash more frequently than individuals with higher incomes.

Since only cash transactions will be subject to rounding, any move to eliminate the penny would be regressive and hurt "unbanked" Americans who have no other option and lack the means to make non-cash transactions.

STEEL IS A FEASIBLE COIN MATERIAL

Multi-ply plated steel compositions have been successfully used by the Royal Canadian Mint (RCM) to manufacture circulating coinage for Canada, as well as for more than two dozen nations, for over a decade. In a February 2012 study, Navigant Consulting examined the raw material cost savings the Mint could achieve through substituting the compositions currently in use with the steel coin compositions successfully used in Canada.[1]

Key study findings include:

- Adoption of multi-ply plated steel for the five-cent, dime and quarter dollars will reduce the per-unit raw material costs of these coins by 89% (five-cent), 84% (dime) and 86% (quarter dollar), based on recent metals prices.
- Applied to historic Mint production of these denominations, raw material savings alone on an annual basis range from $183.8 million to $207.5 million.[2]

Based on these findings, Congress and the Mint should consider changing the composition of its vended coins to multi-ply plated steel. By changing the composition of the U.S. nickel, dime, and quarter-dollar coins from copper-nickel alloy to multi-ply plated steel, the U.S. Mint would incur significantly lower raw material costs approximating $200 million per year based on average production levels.

The Navigant study did not examine potential savings from a steel penny. With current Mint overhead calculations, discussed in more detail below, there did not appear to be adequate material cost savings.

MINT ACCOUNTING AND METAL COSTS - TWO SIDES OF THE SAME COIN

Between 1982 and 2006, seigniorage from the penny earned the Treasury almost $1 billion. Beginning in late 2006, there was a super surge in world wide metals prices caused by market speculation, increased global demand, and supply disruptions that increased penny production costs. Beginning in 2007 and since that time, the price of the primary penny metal, zinc, has dropped by over 50 percent. So while metal prices have stabilized, the reported cost of the penny and nickel has increased dramatically. Why is this so? The Mint has spread costs over a smaller number of circulating coins, and an accounting change by the Mint in 2011 exacerbated the Mint's cost allocation for the penny.

Here's the key point. Metal prices have decreased from their highs of six years ago, and penny production and transport costs have remained relatively constant. But low coin demand, and the allocation of Mint costs across a smaller number of circulating coins, has negatively impacted the penny's reported unit production cost.

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[1] Bosco R, Davis K. Potential Benefits To The United States Mint From Changing The Metallic Content Of Its Vended Coins To Multi-Ply Plated Steel. *Navigant Consulting*. 2012. Available at: http://www.pennies.org/images/pdfs/Navigant_Report_--_February_6_2012.pdf

[2] Detailed cost data for the Mint's current operations is not available and does not permit an evaluation of net cost savings.

The costs of penny metal and per unit fabrication costs have remained relatively constant recently.

The Mint purchases ready-to-strike blanks from an outside supplier. According to a second Navigant Consulting report and testimony shared with this Subcommittee in April 2012, in fiscal year (FY) 2011, the average purchase price paid by the Mint for a ready to strike blank was 1.1 cents.[3] Press reports note this number has remained relatively constant in recent years.

The Mint shipped 4.29 billion pennies during FY 2011 at a reported cost of 2.4 cents per coin (1.1 cent per finished coin blank plus 1.3 cent per coin minting cost). Since 2006 when the reported seigniorage for the penny was positive, these Mint costs, apart from the cost of the finished blank, have increased dramatically. Total penny costs were reported at 1.2 cents per coin in 2006; 1.42 cents in 2008, 1.62 in 2009, and 1.79 cents in 2010.

Mint costs have remained constant in spite of the drop in circulating coin demand.

Mint coin production reports show that the total coins produced dropped from 10.1 billion coins in 2008 to 3.5 billion coins in 2009. While production numbers for total coins produced edged up to 6.4 billion coins in calendar 2010 and around 8 billion coins in 2011 and 2012 respectively, current coin production is down 20 percent from four years ago. Consequently, there is a fixed amount of Mint overhead that is being allocated among a smaller number of coins.

Again, the April 2012 Navigant report detailed these Mint costs.

New Mint accounting rules exacerbate the overhead issue.

On July 16, 1996, the GAO testified before the Domestic and International Monetary Policy Subcommittee regarding the penny's cost. In a three page letter to the GAO, then-Mint Director Diehl strongly objected to a GAO accounting "scenario" that spread Mint costs based on the number of coins produced rather than labor cost, calling the GAO methodology "faulty" and incorrect.

Director Diehl was particularly concerned that the GAO incorrectly added almost $10 million to Mint overhead thereby inflating the cost of the penny. The Mint noted that the GAO's proposed reallocation of cost (based on the number of coins produced rather than labor cost) double charged portions of the penny fabrication process. That is, the GAO assigned penny contractor costs to make the coins for the Mint and then also added significant parts of Mint non-penny costs. It is important to repeat again that the Mint receives the penny in a form ready to be struck directly into legal tender. For the other denominations, the Mint begins with raw metal strip.

It is unfair to apply all the Mint's overhead based on volume when only a small fraction of the operations on the penny are performed by the Mint. This accounting change is particularly troublesome since the penny has accounted for 60 to 70 percent of Mint coin production historically.

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[3] Bosco R. Davis K. Impact Of Eliminating The Penny On The United States Mint's Costs And Profit in Fiscal Year 2011. *Navigant Consulting.* 2012. Available at: http://www.pennies.org/images/pdfs/Navigant_Report_--_April_12_2012.pdf

ADDITIONAL KEY POINTS

Before concluding, it is important to address a couple of questions that have been raised concerning the penny and, more broadly, different metal content for the nickel, dime and quarter.

1. How do you address vending industry concerns? The U.S. vending industry has raised concerns about the potential impact of any changes to coin or currency. These concerns are not unlike those mentioned by the Canadian vending industry early in the planned adoption of Multi-ply, plated steel alloy for Canada's $1 and $2 coins.[4] However, the Royal Canadian Mint worked closely with the vending industry to relieve those concerns.[5]

The key factors in alleviating vending industry concerns appear to be good communication between the RCM and the Canadian vending industry and sufficient time for the transition, including providing coin samples for testing and equipment calibration.

> "Throughout 2010 CAMA represented our industry in frequent dialogue with The Royal Canadian Mint. Questions were raised regarding potential security issues, and consistent and reliable reading of the new multi-ply plated steel coins by coin mechanisms across the country. Release of the new one and two dollar coins was originally scheduled for late 2010 and then the first quarter of 2011. We are pleased to report that The Mint heard the concerns raised, and has confirmed their intention to allow the industry ample time to calibrate their machines prior to the launch of the coins, which is now expected to be early in 2012.
>
> While no one likes the monetary costs associated with this initiative, it should be recognized that it is not unlike other business expense related to technological upgrades. In fact, on the subject of coinage, Canada has faired well with only two significant changes in the past 40 years, while other countries have experienced changes with far greater frequency.
>
> In closing, we are particularly gratified to see senior management at The Mint encouraging stakeholders to "communicate directly with CAMA, as they have been working closely with us on this important initiative".[6]

The Canadian vending industry response to the metal coin change is applicable to the U.S. Like the RCM, the U.S. Mint could provide ample time for the vending industry and other stakeholders including transit, telephone, parking, casinos and others, to test product and calibrate their machines. With a sufficient implementation schedule, CAMA cooperated with the coin alloy change and viewed any monetary costs as they would any other technology upgrade business expense.

According to CANA President Kim Lockie, "The Royal Canadian Mint sought the input of CAMA and will ensure there has been sufficient time for testing followed by the necessary upgrade to coin acceptors

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[4] Canadian Vending Industry Upset with Coin Alloy Changes, *Coin World*, April 19, 2010, p. 68.
[5] Modernizing Canada's Currency: Upcoming Changes to $1 and $2 Coins for CANA Members, Royal Canadian Mint Presentation, Updated October 5, 2010, pages 10 and 20.
[6] Canadian Automatic Merchandising Association Newsletter to members, February 2011, found at http://www.vending-cama.com/INDUSTRY/notices-Feb07-2011.asp

by industry members." CAMA is satisfied with how the Royal Canadian Mint is working with them on timelines for the new $1 and $2 coins, which will hit the streets in early 2012.[7]

2. If Canada ended penny production, why shouldn't the US? While the Canadian situation holds some similarity given the budget constraints faced by the national government, our US situation is different in several ways. First, since Congress has requested a Mint study on saving money through alternative metals, it is prudent to review the Treasury recommendations as part of a broader coinage reform of our circulating coins. Second, and related to the first point, the Canadian Finance Minister acted to stop penny production by executive fiat. Issues about the mix of coin and currency we use should not be made unilaterally without Congressional direction. The Canadians forced the dollar coin on the pubic by pulling the paper dollar. Such an action would meet widespread opposition in the US. Third, unlike Canada, there is still widespread support for the penny in the US. Over two-thirds of the public wants to keep the penny according to a March 2012 Opinion Research Corporation poll commissioned by ACC.

Apart from process differences, the financial impact from estimated savings in Canada is different than in the US. Finance Canada estimates an $11 million savings by stopping penny production. In a December 2010 Report of the Standing Senate Committee on National Finance, which served as the basis of the Economic Action Plan for 2012, the elimination of the penny was estimated to save $5 million per year. This estimate was based on a cost of 1.5 cents that Finance Canada pays and a production run of a billion pennies annually, spending $15 million and receiving $10 million (the face value of each penny).

In contrast, the US Mint shipped 4.29 billion pennies (valued at $42.9 million) during FY 2011 at a reported cost of $103.1 million (2.4 cents per coin). But a April 2012 Navigant Consulting study found Mint fabrication and distribution costs include fixed components that will continue to be incurred if the Mint eliminates the penny. Navigant estimates this fixed component at $13 million in FY 2011. Plus, there is $17.7 million in Mint overhead allocated to the penny that would have to be absorbed by the remaining denominations of circulating coins without the penny.

Also, under current Mint accounting, the nickel costs eleven cents to manufacture. In response to a 2006 question from Congresswoman Maloney, the Mint put forward a scenario where nickel production doubled without the penny. It's hard to see how you save money by making more nickels that are losing more money. The data bears this out. Applied to FY 2011 cost and shipment data, the Mint would have incurred an additional net cost of $40.4 million without the penny last year.

Navigant concludes that with existing fixed costs, and the nickel substitution scenario outlined by the Mint, eliminating the penny would likely result in increased net costs to the Mint of $10.9 million, relative to the current state.

3. Isn't public support for the penny dropping? To the contrary, national polling over the past two decades has consistently shown that between two-thirds and three-fourths of Americans support keeping the cent in circulation.

Most recently, a March 2012 Opinion Research poll pegged public support for the penny at two-thirds or 67 percent of Americans. In 2006 Coinstar National Currency Poll also found that two-thirds of Americans want to keep the penny as legal tender, virtually the same percentage (65 percent) as in 2001.

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[7] Canadian Vending Magazine, Spring 2011, http://www.canadianvending.com/content/view/2557/136/

Thus, polls conducted by Americans for Common Cents and independent polls[8] such as those by Coinstar, USA Today, and CNN/Time never have shown the level of public support for the penny below 60 percent.

4. So few people use cash these days, would the impact of eliminating the penny will be noticeable? Many local fundraising drives are fueled by pennies. So too are canister collections by charitable organizations such as the Ronald McDonald House, Muscular Dystrophy Association, the Taco Bell Foundation and Salvation Army, among others, who rely heavily on donations from the collection of pennies. These collections prove the penny's value as money.

America's charities are the foundation of our nation's social safety net and help to ensure that people in need get the help they deserve. As our economy declined in the last two years, contributions to charities have dramatically decreased. Knowing this, can there be any doubt that penny drives and other innovative ideas are critical to all charities.

One example from last 2009 is particularly telling. On the 200th anniversary of Abraham Lincoln's birth, the Leukemia & Lymphoma Society celebrated in New York the 1.5 billionth ($150 million) penny collected by school students across the country for the "Pennies for Patients" program. The Leukemia & Lymphoma Society certainly recognizes that every penny literally counts. Indeed, the $150 million collected in their Pennies for Patients program proves that pennies do add up to significant sums. With every life saved from blood cancer, their annual penny drives debunk the nay-sayers, proving the penny's value.

SUMMARY

Today, countries around the world are concerned about the cost of producing quality circulation coins, especially when the cost to produce their coins approaches the face value of the coin. The United States is not alone as countries look at alternative metals and ways to make their coins less expensively. As the Mint and Congress explore options to make coins more cost effectively, several factors should be paramount.

Steel is a feasible coin material that has been used successfully in Canada and other countries. Adoption of multi-ply plated steel for the five-cent, dime and quarter dollars will reduce the per-unit raw material costs of these coins by 89% (five-cent), 84% (dime) and 86% (quarter dollar). Based on recent metals prices, the Mint could save up to $200 million annually by adopting multi-ply plated steel coins.

Metal content is only one component in the rising cost of our circulating coins. In fact, metals actually have become less of a factor as prices have lowered since the 2006 market price highs. A focus on metal content alone ignores the Mint's substantial overhead as well as cost accounting changes made by the Mint that inflate the reported cost of the penny and the nickel.

We need to ensure that Congressional and Mint discussions about alternative metals not become the pretext for an ill-considered decision to remove the penny from circulation. The alternative to the penny, rounding transactions to the 5-cent coin, is bad for consumers and our economy. Under the current

[8] A Gallup Organization poll in 1990 and Opinion Research Corporation surveys conducted in 1995, 1996, and 2001 show Americans are persuaded by several factors, such as antipathy toward price rounding. And a 1992 CNN/Time survey conducted by Yankelovich found 74 percent of Americans support keeping the penny in circulation.

economic climate, elimination of the penny would automatically increase inflationary impacts during a period of recessionary pressure.

In addition, Americans overwhelmingly want to keep the penny; 67 percent of Americans support keeping the coin. And finally, no one has explained how we would replace millions of dollars raised by penny charitable drives every year if we didn't have the penny. Notable charities like Ronald McDonald House Charities and the Leukemia & Lymphoma Society rely significantly on small, yet critical, penny contributions.

Government resources and credibility should be devoted to making our coins more cost effectively, not pursuing initiatives that will cause considerable adverse effects.

In these uncertain economic times, the last thing consumers need is price rounding, inflation or reduced charitable assistance. And for those merchants or Americans who don't want their pennies, send them our way. They will be put to good use supporting charities conducting blood cancer research, local food banks, reading programs, and services that have contributed to groundbreaking community programs. The penny is wanted, needed, and appreciated by thousands of organizations and millions of people around the nation.

We look forward to working with Congress and the US Mint during these important discussions to ensure that the one-cent coin is retained.

Testimony of
Thomas A. Schatz
President, Citizens Against Government Waste
Before the House Financial Services Subcommittee on Domestic Monetary Policy
Recommendations on Currency Modernization Measures
November 29, 2012

My name is Thomas A. Schatz and I am president of Citizens Against Government Waste (CAGW). CAGW was founded in 1984 by the late industrialist J. Peter Grace and nationally-syndicated columnist Jack Anderson to build support for implementation of President Ronald Reagan's Grace Commission recommendations and other waste-cutting proposals. Since its inception, CAGW has been at the forefront of the fight for efficiency, economy, and accountability in government. CAGW has more than one million members and supporters nationwide, and, over the past 28 years, has helped save taxpayers $1.2 trillion through the implementation of Grace Commission findings and other recommendations.

CAGW does not accept government funds. Eighty-five percent of the organization's funding comes from individual contributors around the nation. Corporate and foundation gifts account for the other 15 percent.

CAGW's mission reflects the interests of taxpayers. All citizens benefit when government programs work cost-effectively, when deficit spending is reduced and government is held accountable. Not only will representative government benefit from the pursuit of these interests, but the country will prosper economically because government mismanagement, fiscal profligacy, and chronic deficits soak up private savings and crowd out the private investment necessary for long-term growth.

With recurring annual budget deficits of more than $1 trillion and a national debt of $16.2 trillion, the federal government should be reducing spending wherever possible. One painless way to save billions of dollars is to phase out the $1 note and transition to the $1 coin.

The United States is alone among industrialized countries in having such a low value for its paper currency. Canada, the European Union, Japan, and other nations switched to the $1 coin and have experienced cost savings far greater than their initial estimates. The smallest denomination of countries using the Euro is 5 Euro, worth $6.36. In Britain, the 5-pound note, worth $7.93, is the smallest paper currency. In Japan, it is 1,000 yen, or about $12.30.

The Currency Optimization, Innovation, and National Savings (COINS) Act, introduced as H.R. 2977 in the House of Representatives by Rep. David Schweikert (R-Ariz.) and as S. 2049 in the Senate by Sens. Tom Harkin (R-Iowa) and John McCain (R-Ariz.) would require Federal Reserve Banks to stop issuing the $1 note four years after enactment of the legislation or when circulation of $1 coins exceeds 600 million annually, whichever comes first.

The Government Accountability Office (GAO) has issued six separate reports over 22 years stating that billions could be saved from eliminating the $1 note. In its most recent report released in February 2012, the GAO estimated that switching to the $1 coin would save at least $4.4 billion over 30 years, or $146 million per year. This report builds on GAO's March 2011 report, which cited $5.5 billion in savings over a 30-year period.

There is ample reason to believe that GAO's most recent cost-savings estimate is too low. Prior GAO estimates relied on a replacement ratio of 2:1 coins to notes. This is consistent with the experience of most other modern economies that have made the transition from low denomination paper currency in previous decades. The replacement ratio most likely to occur

would therefore generate far greater savings than the GAO's current estimate, which relies on a 1.5:1 replacement ratio.

Most of the cost savings associated with coins come from their comparative durability. The Bureau of Engraving and Printing produces approximately 3.4 billion $1 bills each year, each of which costs 4.2 cents to manufacture and lasts 40 months. By comparison, the $1 coin costs between 12 and 20 cents to produce, but has a lifespan of 30 years or more. The $1 coin also saves money because it is cheaper to handle and process.

Many private-sector businesses have already benefited from $1 coins. Mass transit agencies have found that processing $1 coins costs 83 percent less than processing $1 bills. In addition, vending machine operators have determined that $1 coins save their industry $1 billion a year. Other benefits include savings on the processing of money by banks and businesses. Coins cost 30 cents per thousand pieces to process at Federal Reserve Banks, compared to 75 cents per thousand for $1 notes. Coins are also much more difficult to counterfeit.

Beyond saving money, there are many other advantages to the use of $1 coins. Unlike $1 bills, $1 coins are 100 percent recyclable. Scrap metal from the production process, and coins that become too damaged for circulation, are melted and re-formed into strip metal for minting new coins. Conversely, $1 bills have a far more negative impact on the environment. Each year, around 3.2 billion $1 bills are removed from circulation due to wear and tear. The majority of these bills are shredded and deposited into landfills, creating millions of pounds of waste.

The arguments against the $1 coin, therefore, are not about saving money. They are about sentiment, nostalgia, and stubbornness. A January 2011 poll conducted by the Tarrance Group and Hart Research found that, when informed of the potential cost savings, 65 percent of

Americans support replacing the $1 bill with the $1 coin. Any deficit-reduction measure on which two-thirds of Americans agree should be at the forefront of the fiscal cliff deliberations.

Some people believe the $1 coin will force them to carry more coins. That is not the case around the world and would not be true in the United States. In fact, it would result in fewer coins being used. For example, it takes eight quarters to pay for one hour at a parking meter in Washington, D.C. Two $1 coins would replace those eight quarters. The frustration of trying to put a $1 bill into any machine would be eliminated.

Among other reasons for the failure of Congress to pass legislation to eliminate the $1 bill, Crane Paper Company, the Treasury's sole supplier of currency paper, is located in Massachusetts, in the congressional district next to former House Financial Services Chairman Barney Frank (D-Mass.). Massachusetts senators Scott Brown (R) and John Kerry (D) co-sponsored S. 1624, the Currency Efficiency Act of 2011, which would limit production of $1 coins. Local interests should not supersede the needs of the taxpayers.

There is also a bureaucratic turf war over the $1 coin. The Federal Reserve and the U.S. Mint are required by law to remove barriers to the $1 coin's circulation. However, the Federal Reserve issues the United States' paper currency and doesn't like the competition from the $1 coin, which is issued by the Mint. The Fed's leaders have instituted regulations and red tape that restrict access to $1 coins for banks, businesses, and individual Americans. Under current law, the Federal Reserve is responsible for determining the amount of $1 notes necessary for commerce and the Secretary of the Treasury determines the amount of $1 coins necessary to meet the needs of the United States. The Federal Reserve banks distribute notes and coins to commercial banks to meet the demand of retailers and the public. While $1 notes are re-

circulated at high rates, about 1.1 billion $1 coins are held in storage by the Federal Reserve banks because, according to senior Federal Reserve officials, of the limited public demand. As the aforementioned Tarrance Group and Hart Research poll demonstrates, any perceived lack of demand for these coins is due to a lack of public awareness about the potential cost savings of $1 coins.

Finally, using a $1 coin is the only way that taxpayers can directly help to reduce the deficit. An individual cannot directly cut a program or raise taxes, but each person can do something to help save hundreds of millions of dollars each year by ditching $1 bills and using $1 coins.

The daunting fiscal challenges being faced by the federal government require immediate action to adopt dramatic reductions in spending. Phasing out the $1 bill for the $1 coin should be an easy decision for elected officials in Washington, who claim to be looking everywhere for ways to reduce the record deficit and debt. It truly is time to look under the proverbial seat cushion for loose coins.

Thank you for the opportunity to provide this testimony.

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COMMITTEE ON
FINANCIAL SERVICES

Congress of the United States

House of Representatives

Washington, DC 20515–0305

December 18, 2012

Lorelei St. James, Director
Physical Infrastructure Issues
Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. St. James:

Thank you for your recent appearance before the House Domestic Monetary Policy Subcommittee on November 29, 2012. Your testimony was informative and helpful. In this time of severe federal deficits it is incumbent upon each member of Congress to look for every opportunity possible to save the government and taxpayers' money.

In that regard, it is noteworthy that GAO has now reported or testified seven different times over the past 22 years that replacing the $1 note with the $1 coin will save billions of dollars for our country. Your most recent report cited potential savings to be at least 4.4 billion over thirty years. Ms. Beverly Lepine, Chief Operating Officer of the Royal Canadian Mint, testified that Canada realized ten times greater savings than they had estimated from replacing the $1 note with a $1 coin, which was equally significant and insightful.

During the hearing we discussed several key factors in GAO's analysis, including the Federal Reserve's rapid increase in estimated $1 note lifespan and re-running GAO's model to reflect a shorter timeframe for completing the transition to dollar coins; I appreciate your willingness to do so. As indicated during the hearing, this is one of those issues that can save money and do so without cutting one program or raising one tax, so I want to make sure we have assessed the full range of estimated savings and cost variables as accurately as possible. I know you and the GAO share that goal and Congress appreciates the professional, thorough, and independent job that you do. I look forward to your eighth report, which should address the following concerns:

SAVINGS

Transition Costs: GAO cited U.S. Mint estimates that it would take the Mint four years to manufacture the additional $1 coins needed to replace $1 notes in circulation. Former Mint

Director Philip Diehl testified, and Mint financial statements verify, that the Mint manufactured more than 28 billion coins in 2000 only half of which were pennies, and further stated that the Mint had additional capacity for 2 billion more.

The Mint is currently on target to manufacture about 9 billion coins in calendar year 2012, with about 6 billion of these being pennies. Furthermore, given the 1.5:1 replacement ratio and the 5 billion $1 coins in circulation today as stated in the 2011 GAO report, it appears that about 9 billion new coins will be required to replace the approximately 9.5 billion $1 notes in circulation. Whether the Mint's capacity to make 23 billion coins as stated by Acting Mint Director Peterson or 28 billion coins as stated by former Mint Director Diehl, it would appear the Mint has the capacity to produce the $1 coins necessary in one year, or at most two.

I respectfully ask the GAO to re-run its analysis using a one year and a two year transition period to give us a more accurate assessment of transition costs.

Replacement Ratio: In its 1995 report GAO stated that the replacement ratio of 1.5:1 was very conservative. Furthermore, in its 2011 report GAO stated "changing our estimate of the replacement ratio of coins to notes from our current estimate of 1.5:1 to our 2000 estimate of 2.0:1 increases the net benefit to the government to about $8.9 billion over thirty years, or about $3.4 billion more than our base estimate. Moreover, in 1995 GAO stated "we believe that our 1.5:1 ratio of coins to notes is conservative considering the experience of other countries which had replacement ratios of 1.6:1 – 3:1.

From the testimony of Ms. Lepine, the Chief Operating Officer of the Canadian Mint, it is clear that the replacement ratio Canada used was in fact 140% lower than the actual ratio as demonstrated by the 600 million coins required as opposed to the government estimate of 250 million. Even with a greater ratio the Mint would still have the capacity to replace the $1 note with the $1 coin within a one to two year period.

I respectfully ask the GAO to re-run its analysis using a ratio greater that the very conservative 1.5-1 ratio.

Lifespan of the $1 note: The lifespan of the $1 note is a significant variable on the projected savings from the $1 coin. For the past twenty years the FRB cited $1 note lifespan as 13 to 18 months, and more recently 18 to 24 months. Over the last two years, however, the FRB states that the lifespan of the $1 note has increased nearly 300% -- informing the GAO in 2011 that the $1 note lasts 40 months and in 2012 that it lasts 56 months. This amazing increase in the lifespan of the $1 note in just two years has neither been documented nor verified. Furthermore, during this time the FRB's own regional bank websites cite the lifespan of the $1 note as approximately 24 months.

I respectfully ask that the GAO re-run its analysis using the 24 month lifespan of the $1 note.

Thank you for your continued independent and thorough work that produces the important analysis from which Congress endeavors to make the best possible decisions on behalf of our citizens and taxpayers. I look forward to your response.

Sincerely,

David Schweikert
Member of Congress

Questions for the Record
From The Honorable David Schweikert
To Lorelei St. James, Director, Physical Infrastructure,
Government Accountability Office

November 29, 2012, Hearing on
The Future of Money: Dollars and Sense

1. What are the net benefits to the government of replacing the $1 note with a $1 coin using a 1-year and a 2-year transition period?

Based on information from the U.S. Mint, neither a 1-year nor a 2-year transition period is feasible to produce the approximately 9 billion $1 coins necessary to replace the $1 note. According to U.S. Mint officials, production would be limited to 500 million $1 coins in the first year and 1.5 billion in the second year. Depending on the actions taken during these 2 years, production during the third year could be as high as 9 billion. If production in the third year were at 9 billion, then we estimate the net benefit to the government would be about $4.5 billion over 30 years (or about $150 million per year on average).[1]

According to U.S. Mint officials, it could possibly transition in 2.5 years, but it would cost approximately $12 million. When we reported in 2011, the U.S. Mint had sufficient capacity to produce $1 coins, in large part, because the recession had decreased demand for other coins. Since that time, the U.S. Mint has stopped producing $1 coins for circulation, reduced its workforce by moving from three shifts per day to two shifts, and moved the stamping presses formerly used to make $1 coins into penny production. In addition, orders for other coins have increased as the economy has improved. As a result, less capacity is available for immediate $1-coin production. According to U.S. Mint officials, in order to ramp up production of $1 coins, the agency would need to hire approximately 120 new employees and upgrade equipment. Specifically, it would need to purchase and install up to 9 burnishing machines and 12 edge-lettering machines. The estimated time to hire new employees and purchase and install this new equipment is up to 2 years, according to U.S. Mint officials.

Furthermore, the effect of the length of the transition period has less impact on the total costs and benefits than the total number of $1 coins produced over 30 years. A faster transition has very little effect on the total number of coins produced and the transition costs incurred by the U.S. Mint, which are small relative to the total net benefits over 30 years.

2. What is the net benefit to the government if a replacement ratio greater than 1.5 coins to 1 note is used?

[1]For comparison, my testimony reports a net benefit of $4.4 billion over 30 years, or an average of about $146 million per year. Adjusting the coin production levels during the transition to account for the new limitations at the U.S. Mint would lower this estimate to about $4.3 billion over 30 years, or an average of about $142 million per year. We used this adjusted production timeline while answering questions 2 and 3 below.

We estimate that a replacement ratio of two $1 coins for each $1 note would result in a net benefit of approximately $7.3 billion over 30 years (or about $242 million per year on average).[2] Given the U.S. Mint's available production explained above, the transition in this scenario would last 5 years and would require continued production of $1 notes during that time to avoid a shortage of $1-denominated currency. However, as we explained in our 2011 report, we consider a ratio of 1.5 coins for each note to be more realistic for the needs of the economy.[3] If fewer coins than 2 are needed for each note, excess coins would not be demanded into circulation and the benefits of the transition to a $1 coin would not be as high as we calculated under this scenario. Moreover, the excess coins would be held in storage, contributing to the large stockpiled inventory of $1 coins.[4]

3. What is the net benefit to the government if the lifespan of the $1 note were 24 months as stated on the FRB's own regional bank websites?

If the lifespan of the $1 note were 24 months, the estimated net benefit to the government of replacing the $1 note with a $1 coin would be approximately $6.2 billion over 30 years (or about $205 million per year on average). Similar to the result above, a shorter note lifespan means that the transition period would be extended to 5 years and the production of some $1 notes would need to continue during this period.

However, available evidence indicates that the lifespan of a $1 note is now over 50 months. According to the Federal Reserve, information on any regional bank's website citing a lifespan of 24 months is dated and incorrect. According to a Federal Reserve official, the lifespan of the $1 note has increased in recent years because of enhanced technology that the agency uses to evaluate the fitness of notes. When notes are circulated through the Federal Reserve System, they are evaluated for fitness: notes that are deemed to be too worn are destroyed and notes that are deemed to be in good condition are returned to circulation. In the past, many notes were destroyed not because they were too worn but because they were not faced correctly when they passed through the processing equipment. Over the past few years, the Federal Reserve has made technical improvements to its equipment to prevent this problem. This has resulted in a lower "shred rate" and, subsequently, a longer average life for $1 notes.

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[2]We used the same 2-to-1 replacement ratio that we used in our 2000 analysis of the net benefits of $1 note replacement. We arrived at the 2-to-1 ratio based on the experiences of other countries at that time. See GAO, *Financial Impact of Issuing the New $1 Coin*, GAO/GGD-00-111R (Washington, D.C.: Apr. 7, 2000).

[3]GAO, *U.S. Coins: Replacing the $1 Note with a $1 Coin Would Provide a Financial Benefit to the Government,* GAO-11-281 (Washington, D.C.: Mar. 4, 2011).

[4]In my testimony, I noted that approximately 1.4 billion $1 coins were stored with the Federal Reserve as of September 30, 2011.