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CHALLENGES AND ACHIEVEMENTS OF THE SACAGAWEA GOLDEN DOLLAR PROGRAM

HEARING

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

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CHALLENGES AND ACHIEVEMENTS OF THE SACAGAWEA GOLDEN DOLLAR PROGRAM

FRIDAY, MAY 17, 2002

U.S. SENATE,
SUBCOMMITTEE ON TREASURY AND
GENERAL GOVERNMENT,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:31 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Byron L. Dorgan (chairman) presiding.

Present: Senator Dorgan.

OPENING STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. This is a hearing of the Subcommittee on Treasury and General Government, Senate Appropriations Committee. My name is Senator Dorgan. We wish to welcome all of you here.

This morning, we are holding a hearing to discuss the Sacagawea Golden Dollar. My children are now teenagers, but when they were younger, we used to play a little game with books that they had called "Where's Waldo." I have outgrown "Where's Waldo" and so have my children, but these days I ask the question, where is the Sacagawea Golden Dollar?

Frankly, since the Golden Dollar was unveiled by the U.S. Mint nearly 2 years ago, I have never received one in change anywhere in the United States. It seems to have nearly vanished, and I regret that. It appears to me that at this point, the use of the Golden Dollar and the introduction of the Golden Dollar has been a failure. The question is why and what can we do about that?

We are coming up on the bicentennial of the Lewis and Clark expedition, one of the great expeditions in human history in my judgment. Unfortunately, when we unveiled the coin with the Mint, the new Sacagawea dollar coin, all of us were interested and pleased at the prospect of this coin becoming common usage in our country and we had high hopes for it. Well over $60 million was spent on an awareness campaign and an advertising campaign.

I believe nearly 1.5 billion coins were minted. I believe slightly over 500 million of those have never been moved in circulation. They rest at the Federal Reserve Board or the Mint. Around 900,000 are in circulation, but apparently put in places that have obscured their view from at least this Senator and most others who I have asked over the recent months. When you ask the question, have you ever received a Sacagawea Golden Dollar in change, al-

most everyone says to me, "No, I never received one in change." Some people do not know what it is and it certainly is not in common use at this point.

So the question is why. What has happened? What can we do about it?

I asked Amy Mossett, who is a North Dakotan, a historian, a member of the Three Affiliated Tribes, and someone who travels around the United States interpreting the wonderful legacy of Sacagawea in a way that is quite extraordinary to join us. I asked if she would come and open the testimony here today.

Then we are going to hear from the Director of the U.S. Mint, Henrietta Holsman Fore; the Director of the Division of the Reserve Bank Operations and Payment Systems, Louise Roseman; and the Executive Director of the Coin Coalition, Jim Benfield.

Let me just provide a few moments of history. On July 8, 1998, the Secretary of the Treasury accepted the Dollar Coin Design Advisory Committee's recommendations that the new dollar coin authorized in the $1 Coin Act of 1997 bear the image of Sacagawea. Sacagawea remains an honored historical figure throughout the United States. Arguably, she played the pivotal role in the success of Lewis and Clark's corps of discovery and the opening of the West.

She was married to French Canadian trader Pierre Charbonneau when Lewis and Clark hired him to accompany the expedition in the fall of 1804. Sacagawea's invaluable contributions to that journey included knowledge of edible plants, recognition of land forms, and the ability to translate Shoshone and communicate with other Western Indian tribes' language.

On October 13, 1805, Captain Clark recognized Sacagawea's significant role in the journey when he wrote in his journal, "The wife of Charbonneau, our interpreter, we find reconciles all the Indians as to our families, as to our friendly intentions. A woman with a party of men is a token of peace." And now, of course, her contributions have been commemorated on U.S. currency.

But this is not just about the circulation of a coin. The reason I recite that is it is also to me the story of Sacagawea, a story that nearly every American knows.

In June of 1999, I hosted a presentation of the Sacagawea Golden Dollar to the North Dakota Indian Tribes at the Mandan Onislant village at the mouth of the Heart, near the intersection of the Heart and Missouri Rivers in North Dakota. Then-Director of the Mint, Phil Deal, came to North Dakota. He came to the site of a Mandan village, which was the site of Chief Sheheke Big White, who came to Washington, D.C., a couple of years following his introduction to Lewis and Clark and met with President Thomas Jefferson. It is quite a historic place.

The Golden Dollar was unveiled at this event and I was proud to be associated with the Sacagawea Golden Dollar campaign and with the initial announcement. I am still proud of that.

But what troubles me is this coin has largely disappeared since its minting and introduction. The question is why. What kind of promotion and advertising was done? What kind of research was done? What kind of focus groups were done that would tell us how

to introduce this and what to introduce so that it would be in common usage in this country?

I asked the Treasury Secretary, Mr. O'Neill, when he testified before this subcommittee a while back, "Mr. Secretary, have you ever received a Sacagawea Golden Dollar coin in change?" He said, "No, I have not. I had to ask for one to get one." So the United States Treasury Secretary has not seen a Sacagawea Golden Dollar coin, either.

I am not expecting that the Golden Dollar coin would circulate in the same manner that a dollar bill would or in the same quantity that a dollar bill would, nor am I calling for the elimination of the paper dollar. I believe that both the Sacagawea Golden Dollar and the paper dollar can simultaneously and successfully circulate in this country and be used in this country.

Let me say that my hope from this hearing is to do two things. One, I want to know what happened to the Sacagawea Golden Dollar. Why was the campaign, so far, not a success? Or said another way, why has the campaign been a failure, and it has, in my judgment, been a failure. Number two, what can we do to change things and allow it to succeed?

So that is what we hope to get at this hearing. Let me thank Amy Mossett. Amy, we appreciate your being here. I asked that you lead off the hearing with a few comments, and as I have indicated, you are a historian at a college in North Dakota, but more important than that, representing the legacy of the Mandan Tribe, you are able to interpret Sacagawea's life in a manner that no one that I know of in our country can.

PREPARED STATEMENT

So let me introduce Amy Mossett from the Three Affiliated Tribes in North Dakota. Amy, you may proceed. Your entire statement will be made a part of the record and you may summarize.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BYRON L. DORGAN

This morning we meet to discuss the future of the Sakakawea Golden Dollar. It is my hope that during this hearing we will learn what happened to the Golden Dollar after the initial flurry of publicity when this beautiful coin was first launched and how we can remove some of the obstacles to getting the Golden Dollar in general and active circulation.

Today we will receive testimony from Amy Mossett, a North Dakotan and member of the X tribe who interprets Sakakawea—who was also a North Dakotan.

Additionally, we are pleased to have testify the Director of the U.S. Mint, Henrietta Holsman Fore the Director of the Division of Reserve Bank Operations and Payment Systems, Louise Roseman and the Executive Director of the Coin Coalition, Jim Benfield.

On July 9, 1998, the Secretary of the Treasury accepted the Dollar Coin Design Advisory Committee's recommendation that the new dollar coin authorized in the $1 Coin Act of 1997 bear the image of Sakakawea.

Sakakawea remains an honored historical figure in North Dakota and throughout the Country. Arguably, she played a pivotal role in the success of Lewis and Clark's "Corps of Discovery" and the opening up of the West. She was married to French-Canadian trader Pierre Charbonneau when Lewis and Clark hired him to accompany the expedition in the fall of 1804. Sakakawea's invaluable contributions on the journey included a knowledge of edible plants, recognition of land forms, and the ability to translate Shoshone and communicate with other western Indian tribes.

On October 13, 1805, Captain Clark recognized Sakakawea's significant role on the journey when we wrote in his journal: "The wife of Shabono our interpreter we find reconciles all the Indians as to our families as to our friendly intentions. A

woman with a party of men is a token of peace." Now her contributions have been commemorated on our U.S. currency.

This is not only about the circulation of a coin. It is the story of Sakakawea—a story every American should know. In June of 1999, I hosted a presentation of the Sakakawea Golden Dollar to North Dakota Indian Tribes at the Mandan On-a-Slant village on the banks of the Missouri River. This village was noted by Lewis and Clark in their journals and the On-a-Slant village is only miles away from where the Corps of Discovery would spend its first winter. I was joined at the event by the former director of the Mint, Phillip Diehl. I was proud to be associated with the Sakakawea Golden Dollar campaign and the initial announcement of this beautiful coin was welcomed by the public throughout the country. It is clear to me that the initial public awareness campaign for the Golden Dollar was a success.

What troubles me, however, is the sense that the Golden Dollar has disappeared.

I recently did a non-scientific survey of my Washington DC staff. Only two people said they had ever received a Golden Dollar for change. One staffer received it through a New York City transit system machine. The other received it at his local 7 Eleven here in the District, but even the cashier was confused about what change he was supplying. At a hearing with the Treasury Secretary in April 2001, I asked him if he had ever received the coin in change. He replied, "No. I had to ask for one."

This is reason for my calling this hearing today.

I am not expecting that the Golden Dollar will circulate in the same volume as the dollar bill, nor am I calling for the elimination of the paper dollar bill. I believe that each can circulate simultaneously and successfully. The data I have seen suggests that there is a strong desire to see the dollar coin in routine circulation. This hearing is designed to have a meeting of the minds and launch new efforts to accomplish that goal.

Additionally, there is a misconception that the Golden Dollar is not in circulation anymore and that it was just a promotional coin. It didn't help when the Mint announced earlier this year that it was halting production of the Golden Dollar and the media jumped on this a proof of the failure of the coin. This clearly indicates that the awareness campaign must be continued and that factually incorrect messages like this need to be nipped in the bud.

I have also been told that many businesses would like to use the Golden Dollar and that they have requested them but received a majority of Susan B. Anthony coins instead.

These are just a few of the obstacles that I know all of you are aware of and are working to address. I am hopeful that we can lay out the obstacles today and also put forth ideas to resolve them.

I want to thank all of the witnesses for coming to testify at today's hearing. I look forward to your testimony and your responses to our questions. More importantly, I look forward to resolving these obstacles and to getting the Sakakawea Golden Dollar in full circulation.

STATEMENT OF AMY MOSSETT, SACAGAWEA RESEARCHER, THREE AFFILIATED TRIBES OF NORTH DAKOTA

Ms. MOSSETT. Thank you. Good morning, Chairman Dorgan. My name is Amy Mossett and I am Mandan and Hidatsa. I am a member of the Three Affiliated Tribes of North Dakota. Two hundred years ago, my ancestors lived along the Knife River near present day Stanton, North Dakota, in a village called Awatixa. That was the same village from which Sacagawea joined the Lewis and Clark expedition and it was the same Hidatsa village that she returned to after that expedition came back through North Dakota in 1806. I am pleased and honored to be here today to provide testimony on the Sacagawea dollar coin.

For the past 15 years, I have researched the oral and written histories of Sacagawea and I present various aspects of that research to audiences all along the Lewis and Clark Trail, audiences of all ages. People are still so mesmerized and fascinated with the story of Sacagawea, this young woman who, as a teenager, a wife, and a mother embarked on an expedition which is now viewed as one of the greatest epic adventures in American history.

Sacagawea's life remains a mystery in the minds of so many and it is that element of mystery that has made her story so compelling. Over the years, I have studied so many aspects of her life and she has become so familiar to me and she has become such an important part of my life, but today, there is only one mystery concerning her that remains in my mind and that causes me to question, what has happened to the Sacagawea Dollar coin?

As I visit audiences across the country, I am quite surprised and perhaps more dismayed that so many people have never touched a Sacagawea dollar coin. They certainly know that the coin exists, but they have never had a Golden Dollar coin in their hand and they have never had a Golden Dollar coin in their pocket.

I was traveling over here just now in a cab and the cab driver was asking me questions about my dress, and when I tipped him with the Golden Dollar coin, he looked at it and said, what is this? I told him it was the Sacagawea dollar coin. It is the first time he had ever seen one.

I was really quite startled just recently when I received some e-mails from friends along the Lewis and Clark Trail that said that the U.S. Mint was halting production of the Sacagawea dollar coin. I now know that that is not true, but I also know that I have made purchases at very few places where I received the dollar coin as change.

In January of 2003, this Nation will be commemorating the 200th anniversary of the Lewis and Clark expedition. When you look at the cast of characters among the Lewis and Clark story, Sacagawea is undoubtedly the biggest star. She is certainly the leading lady of this American epic and she has left a lasting imprint in American history because of her courage and her selflessness, her selfless contributions as an interpreter, a guide, a food gatherer, and most importantly, as a symbol of peace for the Northwest Corps of Discovery.

Today, there are more landmarks, statues, monuments, rivers, parks, schools, women's organizations, Girl Scout organizations, businesses, products named in honor of Sacagawea than for any other woman in American history. All of these memorials and tributes bear an image of Sacagawea that we can carry in our hearts and in our minds. The Sacagawea dollar coin bears an image of Sacagawea that we can carry in our hearts, in our minds, and in our hands.

As we near the kickoff of the Lewis and Clark bicentennial commemoration next January, it would be unfortunate if we missed this one major opportunity to promote the dollar coin and to celebrate this young Native American woman who exemplifies the character and spirit of a true American hero. She demonstrated and now symbolizes courage, tenacity, resourcefulness, wisdom, and strength.

I hope to see more of Sacagawea on the dollar coin as I continue my travels along the Lewis and Clark Trail and beyond, and I thank you, Senator Dorgan, for inviting me and allowing me this opportunity to present testimony on behalf of my Native American friends and relatives from across the country, on behalf of women across the country, on behalf of American teenagers—Sacagawea was a teenager, on behalf of the Three Affiliated Tribes and my fel-

low North Dakotans, and most importantly, on behalf of Sacagawea. Thank you very much.

Senator DORGAN. Ms. Mossett, thank you very much. Let me just say that North Dakota will have its second statue in the Capitol—each State is authorized two statues in the Capitol, and our second statue, which will be a statue of Sacagawea, will be placed in the United States Capitol within the next 2 years or so and my expectation is that you will be here to be a part of that wonderful ceremony.

As you were testifying, I was thinking that I believe the last living full-blooded Mandan Indian was Maddie Grinell, who came to Washington, D.C., at age, I believe, 104 to be participating in the Poor People's March a good many years ago.

PREPARED STATEMENT

We thank you for being with us as a descendant of the Mandan Indians and thank you for your testimony. If you would be willing to stay around for the rest of the hearing in case the photographer would want to get a picture of you with the displays, I would appreciate that. Thank you very much. You are excused.

Ms. MOSSETT. Thank you.

[The statement follows:]

PREPARED STATEMENT OF AMY MOSSETT

Good Morning, Chairman Dorgan. My name is Amy Mossett. I am Mandan and Hidatsa and a member of the Three Affiliated Tribes of North Dakota. Two hundred years ago, my ancestors lived along the Knife River near present day Stanton, North Dakota. They lived in a Hidatsa Village called Awatixa. This was the Hidatsa village that Sakakawea called home before and after she was involved in the Lewis and Clark Expedition from 1804 through 1806. I am pleased and honored to be here today to provide testimony on the Sakakawea dollar coin.

For over 15 years I have researched the oral and written histories of Sakakawea and I present various aspects of my research to many audiences of all ages at many points along the Lewis and Clark Trail. People are mesmerized and fascinated with the story of Sakakawea—the young woman who—as teenager, a wife, and a mother-embarked on an expedition which is now viewed as one of the greatest epic adventures in American History. Sakakawea's life remains a mystery in the minds of many and it is that element of mystery that makes her story so compelling. Over the years, I've studied many aspects of this young woman's life and she has become such a focal point in my life. But today, there is only one mystery concerning her that remains in my mind and causes me to question, "What has happened to the Sakakawea dollar coin?"

As I visit audiences across the country, I am quite surprised and perhaps more dismayed that so many people have never touched a Sakakawea dollar coin. They certainly know the coin exists but they have never had a Golden Dollar coin in their hand or in their pocket. I was quite startled by some recent e-mails from friends along the Lewis and Clark Trail who reported that the U.S. Mint was halting production of the Sakakawea dollar coin! I now know this is not true, but I also know that I have made purchases at very few places where I received the Golden Dollar coin as change.

In January 2003, this Nation will begin commemorating the 200th Anniversary of the Lewis and Clark Expedition. Within the cast of characters of the Lewis & Clark story, Sakakawea is undoubtedly one of the biggest stars—she is certainly the leading lady of this American epic. She has left a lasting imprint in American history because of her courage and selfless contributions as an interpreter, guide, food gatherer, and most importantly, as a symbol of peace for the Northwest Corps of Discovery.

Today, there are more landmarks, statues, monuments, rivers, parks, schools, women's organizations, girl scout organizations, businesses, and products named in Sakakawea's honor than for any other woman in American history. All of these memorials and tributes bear an image of Sakakawea that we can carry in our hearts

and in our minds. The Sakakawea dollar coin bears an image of Sakakawea that we can carry in our hearts, our minds, and our hands.

As we near the kick-off of the Lewis and Clark Bicentennial Commemoration, it would be unfortunate if we missed this one major opportunity to promote the Golden Dollar coin and to celebrate this young Native American woman who exemplifies the character and spirit of a true American hero. She demonstrated and now symbolizes courage, tenacity, resourcefulness, wisdom, compassion, generosity, and strength.

I hope to see more of Sakakawea on the dollar coin as I travel throughout the Lewis and Clark Trail and beyond. I thank you for allowing me the opportunity to present testimony on behalf of my Native American friends and relatives, on behalf of women across this country, on behalf of American teenagers, the Three Affiliated Tribes, North Dakota, and most importantly, on behalf of Sakakawea.

STATEMENT OF HENRIETTA HOLSMAN FORE, DIRECTOR, UNITED STATES MINT, DEPARTMENT OF THE TREASURY

ACCOMPANIED BY DAVID PICKENS, HEAD OF SALES AND MARKETING, UNITED STATES MINT, DEPARTMENT OF THE TREASURY

Senator DORGAN. Let me next call on the Director of the U.S. Mint, Henrietta Holsman Fore; the Director of the Division of the Federal Reserve Bank Operations and Payment Systems, Louise Roseman; and the Executive Director of the Coin Coalition, Jim Benfield.

Let me thank all of you for being with us today. The Senate has a vote starting at 10:30 and that will extend perhaps until ten to or five to 11:00. My hope would be that we could conclude the hearing within the next hour, hour and 10 minutes, so that I can conclude the hearing before the end of the vote.

Let me again state to the Director of the Mint, I appreciate your being here today. This Golden Dollar, of course, is the subject. I seldom ever see one. I certainly never get them in change. But the first question is, why has the campaign thus far failed, and at least that is my judgment. You are welcome to take issue with that. And then what can we do to make it succeed?

Your entire statements will be made a part of the record. What I will do is ask all three of you to testify and then we will have questions. Ms. Fore, why do you not proceed.

Ms. FORE. All right. We will hope, Chairman Dorgan, that you will get one in change soon.

Thank you very much for inviting me to discuss the Golden Dollar program and the United States Mint's efforts to market the Golden Dollar, as well as discuss the challenges that lie ahead. I certainly appreciated Ms. Mossett's presentation and I look forward to our other panelists' presentations also.

As you know, we temporarily suspended circulating dollar production because we have a sufficient number in inventory to meet demand. It is a practical discipline that we use to meet the requirements of monetary usage in the country. We regularly slow production in one denomination or another to meet the demands for coinage. This temporary suspension does not mark the end of the Golden Dollar program. In 2002 we have been producing to meet numismatic dollar coin demand, which has already exceed 12 million dollar coins.

Senator DORGAN. Tell us all what that word means.

Ms. FORE. It is for coin collectors and it means that it is something you can buy. It is a Golden Dollar, but it is packaged in a

way that it is a proof coin or a collector's coin. We have a high demand this year for 2002 numismatic products.

Senator DORGAN. All right.

Ms. FORE. We have a good number of Americans that are collecting coins around the Nation, even in the 50 States Quarter Program, 139 million Americans. So there is a good market out there for coin collecting.

One question keeps coming back to us, which is, how does one define success in a circulating dollar coin program? In the United States One Dollar Coin Act of 1997, we were mandated to put dollar coins in circulation. The Act also specified that the United States Mint adopt a program to promote the use of such coins by commercial enterprises, mass transit authorities, and Federal, State, and local government agencies.

It was an unusual task for the Mint. Typically, we do not market circulating coins. However, knowing the public's reluctance to use dollar coins, the Mint created a market development campaign, including a business-to-business outreach and a public education and awareness campaign. It was designed to, first, integrate Golden Dollars into coin-operated transit and retail operations in an effort to create a reliable means for consumers to receive and use the new coin; second, to promote long-term acceptance by the commercial sector and consumers; and third, to support changes in consumer behavior and stimulate usage in commerce.

Following the Golden Dollar's launch, the Mint entered into partnerships with specific retailers to stimulate everyday Golden Dollar usage. Eight business segments were identified as distribution outlets: Transit, banking, vending, retail, fast food restaurants, grocery stores, entertainment venues, and government institutions. We provided detailed descriptions of these efforts in our reports to Congress in 2001 and 2002.

When I was sworn in as Mint Director in August of 2001, one of my first priorities was to take a hard look at the effectiveness of our Golden Dollar Program, assess our marketing strategies and determine what the next steps should be. We found that the advertising program was successful in reaching targeted audiences and in raising public awareness, but Americans rarely received the Golden Dollars in daily commerce.

According to a January 2001 survey, 51 percent of Americans reported receiving a Golden Dollar in change, but only 37 percent reported using it. A September 2001 poll found that the public is holding two-thirds of the Golden Dollars and not recirculating them.

Following our review, we are still asking ourselves, how does one define success for a Golden Dollar Program? There are a number of yardsticks one could use to measure achievement. Does the American public like the Golden Dollar? Yes. Seventy-two percent support its issuance and 83 percent of Americans are aware of the Golden Dollar.

Is the Golden Dollar profitable for the United States? Yes. In the program's first 2 years, the Mint deposited $953.5 million in revenues from seigniorage from the Golden Dollar Program into the Treasury General Fund. For the first 3 years of the program, we used the historical standard of measuring the number of coins

shipped to the Federal Reserve as a measure of success. Using this standard, the Golden Dollar is successful. One-point-one billion have been shipped to Federal Reserve Banks since January of 2000. In comparison, it took 21 years to ship 920 million Susan B. Anthony dollars to the Federal Reserve.

However, we do not receive the Golden Dollar in change every day. We do not. Can you find it in every cash drawer in America? No. Does every bank in America stock Golden Dollars? No. When we compared it to the $7.5 billion notes used in daily commerce, the Golden Dollar represents at most 4 percent of the daily activity in dollar denominations. Because the Golden Dollar circulates with the dollar note, it is left to the public to decide how many Golden Dollars and how many dollar notes they use and how often.

Therefore, we must look at how we define co-circulation. Is 4 percent an acceptable portion of the overall market share? What can we reasonably consider successful? Is it 6 percent? Ten percent? Twenty-five percent? Or is it 50 percent? These challenges are not new to us and they were not unanticipated. However, we could not validate the full impact of our marketing strategies until they were implemented and tested.

Many of the obstacles we encountered were in the distribution process. Typically, the Mint ships coins to the Federal Reserve in bags. While the vending and transit industries prefer to receive dollar coins in bags, retailers order coins in rolls. Armored carriers have been reluctant to invest in equipment that can handle Golden Dollars without some assurance of a return on their investment.

Sometimes it is difficult to get a Golden Dollar at all. Many of the cash ordering systems do not provide for specification of a dollar coin versus a dollar note. As a result, dollar notes are provided.

To address these issues, we have worked closely with the Federal Reserve Bank's Cash Product Office, and in January 2002, they extended a program that they had begun the prior year in distributing Golden Dollars only when customers specify both coins and Golden Dollars as a preference in placing orders.

The commingling of Golden Dollars and Susan B. Anthony dollars is a concern for business sectors. Retailers and the general public do not want Anthony dollars because they are easily confused with quarters. Since the Federal Reserve and armored carriers do not separate Golden Dollars from Anthony dollars, retailers cannot be assured that they will get only Golden Dollars. Therefore, they resist using dollar coins and request dollar notes.

Another hurdle, financial institutions and retailers are charged fees by armored carriers for wrapping and delivering coins, but not for paper currency.

We will continue to work with the Federal Reserve Banks, the financial institutions, and business owners to address coin distribution problems. We will continue to partner with the armored carriers and other major coin handlers to work on issues concerning fees, coin wrapping and bagging, and transportation to facilitate the more rapid distribution of Golden Dollars into commerce.

We are also planning to have a study with the Federal Reserve Bank and the Bureau of Engraving and Printing to determine the feasibility of reducing the number of Anthony dollars in circulation or develop a process to automatically separate Anthony dollars and

Golden Dollars. However, we are mindful that attempts to remove the Anthony dollars from circulation could be very costly. Demonetizing Anthony dollars could result in as much as $900 million in reversed seigniorage. Just the process of sorting and storing them could be expensive, but it would help retailers.

The Mint is not advocating the elimination of the dollar note. We realize that we will not change consumers' spending habits overnight. It is clear we will need to look at the distribution challenges, fees, packaging, and ordering before we spend funds on media buys. Addressing these challenges requires working with our partners to determine an agreed-upon approach.

We are proactively now using the product licensing program to place Golden Dollars in the retail market. We recently signed a licensing agreement with The Source International (TSI), the official licensee of NASCAR. TSI will be designing and racing cars featuring the Golden Dollar and 50 State quarter designs. Golden Dollars will be dispensed at a number of NASCAR racetracks across the country and it is projected to place $10 million into circulation. This agreement requires no outlay of funds by the Mint.

We have also partnered with the U.S. Army Corps of Engineers in support of the bicentennial celebration of the Lewis and Clark expedition. Besides using the image of the Golden Dollar on event materials, we are pursuing opportunities to have Golden Dollars dispensed at retail areas along the expedition route and in association with the celebration.

These are just two examples of strategies being pursued. Most importantly, the Mint will continue to work closely with Congress and the Administration to increase the Golden Dollar's use in daily transactions. Unfortunately, few, if any, Federal Government agencies distribute Golden Dollars. If defense installations across the country used Golden Dollars in their cash registers at base exchanges, commissaries, military banks, and credit unions, if State and local governments and transit authorities actively pursued its acceptance in transit, parking, and on toll roads, and if all domestic agencies used them in cafeterias and gift shops, an additional dynamic distribution channel would be created and the Golden Dollar would circulate more widely and be used more regularly. We look forward to working with Congress and the government entities to encourage use of the Golden Dollar.

Mr. Chairman, the Mint is committed to the Golden Dollar and to improving its co-circulation in commerce. A Golden Dollar is important to save the Nation money, a Golden Dollar to remind Americans of their heritage, and a Golden Dollar to co-circulate. Thank you.

Senator DORGAN. Director Fore, thank you very much.

[The statement follows:]

PREPARED STATEMENT OF HENRIETTA HOLSMAN FORE

Chairman Dorgan, Senator Campbell, members of the Subcommittee, thank you for inviting me here today to discuss the Golden Dollar Program, the actions the United States Mint has taken in marketing the dollar coin, and the challenges that lie ahead.

We have suspended circulating dollar production temporarily as demand has slowed during the recent economic slowdown and because we have a sufficient number of coins in inventory to meet demand. Contrary to some erroneous news reports, this temporary suspension does not mark the end of the program. We are producing

2002 Golden Dollars to meet numismatic demand in rolls, bags, proof sets, and uncirculated sets which has already exceeded 12 million coins. We regularly slow production of one denomination or another based on demand. However, one question has been raised recently that needs to be examined: How does one define the success of a circulating coin program?

Having experienced the public's lackluster acceptance of the Susan B. Anthony dollar, the United States Mint knew that the next dollar coin needed to be different—both in its appearance and in its introduction to the American people. When The United States $1 Coin Act of 1997 became law, it was mandated that—upon the depletion of the Government's supply of Susan B. Anthony dollars—the Secretary of the Treasury place into circulation $1 coins that are "golden in color, have a distinctive edge, and have tactile and visual features that make the denomination of the coin readily discernable."

Congress passed the legislation authorizing a new dollar coin because inventory of the Susan B. Anthony dollar, at that time, was nearly depleted due to increased demand for dollar coins in a strong economy.

For the coin's design, Sacagawea, the young Shoshone woman who assisted Lewis and Clark on their expedition to the West Coast, was chosen for the obverse. Mr. Chairman, I understand there are numerous spellings and pronunciations of Sacagawea's name. I know that in North Dakota "Sakakawea" is preferred. To keep things simple, I am going to refer to the coin as the Golden Dollar.

The $1 Coin Act also specified that the United States Mint, "adopt a program to promote the use of such coins by commercial enterprises, mass transit authorities, and Federal, State, and local government agencies."

This was an unusual task for the United States Mint. Typically, the agency does not market its circulating coinage. However, knowing of the public's reluctance to use dollar coins in the past, the Mint looked for opportunities to encourage use of the new coin in commerce and to build positive awareness and generate public acceptance of the Golden Dollar.

The Mint created a market development campaign for the Golden Dollar Program that included business-to-business outreach and a public education and awareness campaign. These campaigns had several key objectives:

—Integrate the new coin into coin-operated industries, transit, and retail operations in an effort to create a reliable means for consumers to receive and use the new coin.
—Generate positive awareness of the program among consumers.
—Promote long-term acceptance of the coin by the commercial sector and consumers.
—Support changes in consumer behavior and stimulate usage of the Golden Dollar in commerce.

Based on market research, the Mint recognized that in order for consumers to use Golden Dollars, they must have a reliable means to receive them and opportunities to spend them as they would other coins. Therefore, the Mint began a campaign to encourage coin-operated businesses to convert their equipment to accept and dispense Golden Dollars. To make the conversion easier, the Mint created a new alloy to use in the manufacturing of the coin that met the statutory requirement that it be golden in color, but also matched the electromagnetic signature of the Susan B. Anthony dollar. This feat meant that vending machines that were capable of accepting Anthony dollars could accept Golden Dollars without causing operators to spend large sums of money to upgrade and retrofit their machines.

In addition, the Mint worked with retailers in an effort to encourage them to order Golden Dollars as they do other coinage.

When the Golden Dollar was launched, a number of public events were held to generate awareness. In addition, a $40 million media campaign was designed to help promote acceptance of the dollar coin's use by informing the public that Golden Dollars are legal tender and that they could be used along with the $1 note. The program was designed to reach 85 percent of adults between the ages of 18 and 49 nationally at an average frequency of 15–18 times over the course of the campaign. These efforts yielded encouraging results. In July 2000, the target of 85 percent was surpassed—91 percent of Americans polled said they were aware of the Golden Dollar and nearly 72 percent supported its issuance. Another poll was taken in December 2001, approximately 6 months after the ad campaign concluded, and while 72 percent of Americans still supported the Golden Dollar's issuance, public awareness was at 83 percent.

Following the Golden Dollar's launch, the Mint moved from its market development program toward creating partnerships with specific retailers in an effort to stimulate use of the dollar coin in everyday transactions. As part of this program, eight business segments were identified as distribution outlets: transit, banking,

vending, retail, fast food restaurants, grocery stores, entertainment venues, and government institutions.

A few of these business segments regularly use dollar coins—in fact, prefer them to $1 notes. They include transit authorities, vending machine operators, and the U.S. Postal Service. Seventeen of the 20 largest transit systems in the United States distribute and accept the Golden Dollar, and a number of major cities across the country have converted parking meters to accept dollar coins. They include: Chicago, New York City; Philadelphia, Pennsylvania; Dallas, Texas; San Francisco, California; Fort Worth, Texas; Albany, New York; Wilmington, Delaware; Minneapolis/St. Paul, Minnesota; Portland, Oregon; Toledo, Ohio; Arlington, Virginia; Cincinnati, Ohio; New Orleans, Louisiana; and Pittsburgh, Pennsylvania. Vending machine operators not only champion the use of the Golden Dollar; they took an active role in its development.

Many of the Mint's partnerships received much media attention—Safeway, General Mills, and IHOP Restaurants, to name a few—and they achieved some success. The partnership with Wal-Mart resulted in the early distribution of 94.3 million Golden Dollars. However, these efforts alone were not sufficient to sustain the use of the dollar coin in daily commerce.

When I was sworn-in as Director of the United States Mint in August 2001, one of my first priorities was to take a hard look at the Golden Dollar Program and assess which strategies were or were not working, and determine what our next steps would be.

What we found was the advertising campaign was very successful in reaching targeted audiences and raising public awareness of the Golden Dollar but many Americans rarely receive Golden Dollars in daily commerce. But, according to the Coinstar National Currency Poll released in January 2002, while 51 percent of Americans reported receiving a Golden Dollar in change when making a purchase, only 37 percent said they actually used the coin to buy something. Some studies have shown that the public is holding onto two-thirds of the Golden Dollars and not re-circulating them back into the economy.

We also discovered that many of the partnerships, although initially fruitful, had a limited impact on sustained Golden Dollar circulation. Consumer interest in the dollar coins was piqued during the promotion's run, but continued use of Golden Dollars in retail transactions following these promotions has yet to be consistently demonstrated. Instead, Golden Dollars were considered by the public to be rare, unusual, and worth collecting. Most of these coins remain in the public's private collections and do not circulate.

Following our review, we were still asking ourselves the question I posed earlier: How does one define success for the Golden Dollar Program?

The program generates significant revenue. The United States makes 88-cents in revenue from seigniorage on each dollar coin produced. The seigniorage is deposited in the Treasury General Fund and is used to reduce the amount of outstanding interest-bearing public debt. The Mint deposited $2.3 billion in the Treasury General Fund in fiscal year 2000 and $1.5 billion in fiscal year 2001. In the program's first 2 years, the Mint deposited $953.5 million in revenues from seigniorage on the Golden Dollar alone. In addition, these coins represent a considerable capital investment in the resilience of the Nation's circulating money supply. Over their life span—which is estimated to be at least 15 times longer than paper notes once the coins circulate fully—these coins will yield tremendous savings attributable to their durability and utility.

If one uses public awareness as the yardstick, the program was successful by July 2000 when 91 percent of American adults polled said they were aware of the Golden Dollar—6 percent higher than our target. Seventy-two percent of those polled supported the issuance of the dollar coin.

For the first 3 years of the program, the Mint used the historical standard of measuring the number of coins shipped to the Federal Reserve to determine achievement. Using this measure, the Golden Dollar is very successful—1.1 billion have been shipped to Federal Reserve Banks since January 2000. It took 21 years to ship 920 million Susan B. Anthony dollars to the Federal Reserve.

However, when compared to the more than 7.5 billion dollar bills that are used in daily commerce, the Golden Dollar represents 4 percent of daily activity of $1 denominations. Because the Golden Dollar circulates with the $1 note—in accordance with long-standing Treasury Department policy and the program's authorizing legislation—it is left to the American public to decide how many Golden Dollar coins and $1 notes they use and how often.

Based on General Accounting Office studies, "Australia, Canada, Japan, and the major Western European economies all now use a coin for their country's denomination which is closest to the dollar for monetary transactions, at and in many cases

well above, the same level for which Americans use the paper dollar." However, all of these countries also eliminated the equivalent note.

Because it is not our government's policy, we must look at how we define "co-circulation." Given the traditional attitudes and behaviors of Americans about their money, we need to ask ourselves, "Is 4 percent an acceptable portion of the overall market share?"

Clearly we are not satisfied with 4 percent. The Golden Dollar is a circulating coin and should be used regularly in commerce. However, what can we reasonably consider successful? Is it 6 percent? Ten? Fifteen? Twenty-five?

As I mentioned, there are a number of challenges we have identified that have inhibited the distribution and circulation of the Golden Dollar. As you have read in our Marketing Plan, we have developed a strategic approach to increase the potential distribution and use of the Golden Dollar. The challenges we studied were not new to us, nor were they unanticipated. However, we could not validate the full impact of these strategies until after our marketing strategies were implemented and tested.

Many of the obstacles we have encountered occur in the distribution process. Typically, coin distribution from the Mint to the Federal Reserve is in bagged form. While those in the vending and transit industries prefer to receive dollar coins in bags, retailers order coins in rolls. Armored carriers have been reluctant to invest in high-speed rolling equipment that can handle Golden Dollars without some assurance of a return on investment.

Not only can it be difficult to get rolls of Golden Dollars; sometimes it is difficult to get Golden Dollars at all. Many of the cash ordering systems do not provide for the specification of dollar coins versus dollar bills and generally, by default, $1 notes are provided. In addition, many bank teller systems do not easily accommodate the processing of dollar coins, thereby adding to the amount of time it takes to process a transaction and increasing the possibility of inaccuracies.

To address these issues, the Mint has worked closely with the Federal Reserve System's Cash Product Office (CPO). In January 2002, the CPO extended the practice begun in March 2001 of distributing Golden Dollars only to meet dollar coin demand at customers' request. Customers can specify "Golden Dollars only" when placing their orders.

When the Golden Dollar was launched, the Mint established a toll-free phone number to assist businesses in securing Golden Dollars by facilitating dialogues among the Mint, the Federal Reserve Banks, financial institutions, and business owners. The Mint will continue to facilitate this type of interaction among its customers. We also plan to collaborate with armored carriers, large financial institutions, and other major coin handlers to work on issues concerning fees, coin wrapping and bagging, and transportation to facilitate the more rapid distribution of Golden Dollars into commerce.

Another area of focus is on commercial users—coin operated industries, retailers, and other businesses that accept and distribute currency. What we discovered was even if these businesses had access to Golden Dollars, they were not necessarily using them.

The issue of commingling Golden Dollars and Susan B. Anthony dollars also is a concern for some business sectors. Retailers—and the general public—do not want Anthony dollars because they are easily confused with the quarter. Since the Federal Reserve and armored carriers cannot mechanically separate Golden Dollars from Anthony dollars, retailers cannot be assured they will get rolls that only contain Golden Dollars. Therefore, they resist using dollar coins at all and instead request $1 notes. Another hurdle: financial institutions and retailers are charged fees by armored carriers for wrapping and delivering coins, but not for paper currency. They were charged even when the Mint paid for the wrapping of all Mint-issued Golden Dollars from August through December 2000.

We have also heard that, although there are five coin compartments in coin drawers, the perception of retailers is that there is no room for dollar coins in their cash drawers or that they have little space to store coins. Others, such as some convenience stores and fast food restaurants, have special coin and currency security dispensing systems that do not accommodate dollar coins.

In an effort to overcome these barriers, the Mint will be conducting targeted research this year to find ways to improve distribution of Golden Dollars to these businesses. We are also planning to conduct a study with the Federal Reserve Bank and the Bureau of Engraving and Printing to determine the feasibility of reducing the number of Susan B. Anthony dollars in circulation and/or develop a process to automatically separate Anthony dollars from Golden Dollars. However, we are very mindful of the fact that attempts to remove Anthony dollars from circulation could be very costly. Demonetizing Anthony dollars could result in as much as $900 mil-

lion in reverse seigniorage. Just the process of sorting Anthony dollars and storing them would be costly.

Another obstacle we face is overcoming public perception about dollar coins and changing human behavior. To this end, the media also has had an impact on the dollar coin's success. The focus of news stories about the Golden Dollar has shifted dramatically from favorable to erroneous declarations that the Mint is no longer producing Golden Dollars and that it is another Susan B. Anthony dollar.

While the Mint is not advocating the elimination of the $1 note, we are realistic in understanding that the coin is unlikely to circulate in parity with the dollar bill. We also realize we will not change people's spending habits overnight. However, because public awareness is high, we are not planning to spend more money on awareness advertising. We have also determined that we need to resolve the distribution channel challenges before any funds are spent on media buys. Instead, in addition to our research efforts, we are developing promotional efforts that we will utilize to meet the following objectives: (1) Increase sustained circulation of Golden Dollars in focused market segments. (2) Support commercial users' efforts to obtain Golden Dollars and promote their use to customers. (3) Increase knowledge about the Golden Dollar.

Among the ways we will meet these objectives is to identify businesses that are likely adopters of the Golden Dollar and encourage their support in using dollar coins. We can do this by providing point of purchase materials, offering informational materials to educate employees about the Golden Dollar, and facilitating sustained access to Golden Dollars from the Federal Reserve Banks and local financial institutions.

We also are planning to use the Mint's product licensing program to place Golden Dollars in the retail market. We recently signed a licensing agreement with The Source International (TSI), the official licensee of NASCAR. TSI will be designing and racing cars featuring the Golden Dollar and 50 State Quarters coin designs. TSI also will sell die-cast replica racecars and other NASCAR memorabilia and the United States Mint will receive royalty payments from the sale of this licensed merchandise. This agreement requires no outlay of funds by the Mint.

TSI also is a global master licensor and key corporate partner in the National Grand Prix that will be held here in Washington July 19–21. Through our agreement with TSI, the Golden Dollar will be the "Official Coin" of the race and Golden Dollars will be distributed by concessionaires. The pace car for the races will feature the Golden Dollar and the United States Mint has been invited to participate in the race ceremonies. The Mint also will host a sales booth at the Armory with numerous other exhibitors.

Golden Dollars also will be dispensed at a number of NASCAR racetracks across the country in 2002 as part of the TSI agreement. We expect that 10 million Golden Dollars or more could be circulated.

In addition, we are moving forward with our existing agreements with vendors and businesses. For example, in 2001, we entered into an agreement with nine minor league baseball teams to dispense the Golden Dollar at concession stands at their ballparks. We also have partnered with the U.S. Army Corps of Engineers in support of its bicentennial celebration of the Lewis and Clark Expedition. Besides using the image of the Golden Dollar on event materials, we are pursuing opportunities to have Golden Dollars accepted and dispensed in retail areas associated with the celebration.

In our efforts to further educate the public about the Golden Dollar, we will continue to distribute, upon request, promotional materials developed prior to the March 2000 advertising campaign. In addition, we will continue to seek opportunities to inform the media of favorable news regarding circulation of the Golden Dollar and businesses that are successfully using it in commerce. This involves working with trade press and attending key industry meetings and conferences hosted by financial, retail, transit, and coin-operated businesses.

In the longer term, once distribution channels have been addressed, advertising targeting consumer groups will be pursued to encourage use of the coin; what venues readily accept it, such as vending and mass transit; and how they can contribute to its ready circulation.

Most importantly, the United States Mint will continue to work closely with Congress and the Administration to increase the Golden Dollar's use in daily cash transactions.

The General Accounting Office, in its April 7, 2000, report about the dollar coin, noted that "sustained administrative and congressional support would be necessary" in order to have a successful dollar coin program.

Unfortunately few, if any, Federal government agencies distribute Golden Dollars. If every defense installation across the country used Golden Dollars in their cash

registers at base exchanges, commissaries, military banks and credit unions; if State and local governments and transit authorities actively pursued its acceptance in transit, parking and on toll roads; and if all domestic agencies used them in cafeterias and gift shops, an additional, dynamic distribution channel would be created and the Golden Dollar would circulate more widely and be used more regularly.

Mr. Chairman, the United States Mint is committed to the Golden Dollar and to improving its co-circulation in commerce. We continue to research and study the economy, consumer behavior, and our customers' needs to establish an efficient and effective way to increase its use in commerce.

That includes developing and executing a sustainable marketing effort that includes the cooperation and support of commercial and financial institutions, the Administration, and Congress.

We look forward to receiving approval of our marketing plans from the Appropriations Committees—per the 2002 report language—in order to make the Golden Dollar the workhorse it was intended to be: A dollar coin to save the Nation money, a dollar coin to remind Americans of their heritage, and a dollar coin that will co-circulate.

STATEMENT OF LOUISE L. ROSEMAN, DIRECTOR, DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Senator DORGAN. Next, we will hear from Louise Roseman from the Federal Reserve Board. Ms. Roseman, thank you. You may proceed.

Ms. ROSEMAN. Mr. Chairman, thank you for this opportunity to report on the Federal Reserve's activities supporting the Golden Dollar coin. Before I discuss our experience with the Golden Dollar, I thought it may be helpful to first provide a brief overview of the Federal Reserve's role in coin distribution.

One of the Federal Reserve's responsibilities is to ensure that enough currency and coin are available to meet the public's needs. In that role, the Federal Reserve provides cash services to over 11,000 of the Nation's 20,000 banks, savings and loans, and credit unions. The depository institutions that choose not to obtain their cash directly from the Federal Reserve obtain cash services through correspondent banks.

Reserve Banks order coin on a monthly basis and the Mint pays to transport the coin from its production facilities to Reserve Bank offices and to the more than 100 coin terminals that are operated by armored carriers acting for the Federal Reserve. These coin terminals handle nearly 80 percent of the Reserve Banks coin volume and help create an efficient coin distribution system by reducing duplicative processing and transportation between the Reserve Banks and their customers.

Let me turn now to our experience with the Golden Dollar. The Federal Reserve and the Mint worked together to meet the public's strong initial demand for the Golden Dollar following its introduction in early 2000. To support this introduction, the Reserve Banks changed their normal practice of first paying out circulated coin and using new coin to meet the demand once the inventory of previously circulated coin is depleted. Instead, the Reserve Banks paid only Golden Dollars from their introduction in January 2000 through the end of 2001.

Net payment of dollar coins by the Fed to depository institutions peaked at nearly $95 million in March 2000. Demand remained strong throughout 2000, but declined to an average net payment of $16 million per month in 2001 and is averaging slightly less than $10 million a month so far this year.

The Reserve Banks returned to their normal practice of first paying out circulated coin this January. They have continued to accommodate, however, the request of any depository institution for Golden Dollars only. The Reserve Banks will continue filling requests for Golden Dollars until their inventories of the new coin are depleted, which could be within months.

Most major dollar coin customers, such as the transit authorities and the U.S. Postal Service, however, have been satisfied by shipments of commingled Golden Dollars and Susan B. Anthony dollars.

As you know, legislation requires that the Golden Dollar and Susan B. Anthony dollar have similar metallic properties and be the same size. Because the Reserve Banks and armored carriers do not have processing equipment to distinguish between these two similar coins, excess coins returned to the Reserve Banks cannot be mechanically segregated between the Golden Dollars and the Susan B. Anthony dollars. As the public continues to return its excess dollar coins, the Reserve Banks are accumulating considerable amounts of commingled inventory.

At the end of April, Reserve Banks had sufficient inventories to fulfill all dollar coin orders for nearly a year, assuming demand stays at its current level, even without taking into consideration all the future dollar coin deposits that will be returned to the Fed from the banking industry. This inventory of slightly more than $200 million consists of about 70 percent commingled dollar coins and 30 percent new Golden Dollars that have not yet been paid out to depository institutions.

Normally Reserve Banks strive to maintain about 30 days' payable inventory of coins of all denominations. Because the Reserve Banks are holding such a large inventory of dollar coins, they have not ordered new Golden Dollars since January but will once again begin ordering new dollar coins when their inventories reach levels that they would typically hold.

I appreciate this opportunity to discuss these issues and would be happy to answer any of your questions following the remaining panelist.

Senator DORGAN. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF LOUISE L. ROSEMAN

Thank you for this opportunity to report on the Federal Reserve System's activities supporting the Golden Dollar coin. Before I discuss the Federal Reserve's experience with the Golden Dollar coin, it may be helpful to describe briefly the Federal Reserve's role in coin distribution.

One of the Federal Reserve's responsibilities is to ensure that enough currency and coin are available to meet the public's needs. In that role, the Federal Reserve provides cash services to over 11,000 of the 20,000 banks, savings and loans, and credit unions in the United States. The depository institutions that choose not to obtain their cash directly from the Federal Reserve obtain cash services through correspondent banks. As of March 31, 2002, coin in circulation represented $32 billion, or about 5 percent of the total $642 billion of U.S. currency and coin in circulation.

The U.S. Mint is responsible for manufacturing an adequate volume of coin to meet the public's demand for transactions. It determines annual coin production and monitors Reserve Bank inventories to identify trends in coin demand. The Reserve Banks order coin on a monthly basis and the Mint pays to transport the coin from its production facilities to Reserve Bank offices. In addition, the Reserve Banks use more than one hundred coin terminals to handle nearly 80 percent of the Reserve Banks' coin volume. These coin terminals are operated by armored carriers, acting

for the Federal Reserve, and help create an efficient coin distribution system by reducing duplicative processing and transportation between Reserve Banks and their customers.

The Reserve Banks primarily act as wholesalers by providing coin to depository institutions in minimum quantities of two thousand pieces or more, depending on the denomination. Independent of their role as Federal Reserve coin terminal operators, armored carriers often provide coin in smaller increments and also provide wrapped coin for a fee to depository institutions and retail customers. Depository institutions order coin from the Reserve Banks to meet their customers' demand. Reserve Banks normally fill these orders from their inventories by first paying out circulated coin, and once the inventory of previously circulated coin is depleted, using new coin to meet demand.

Golden Dollar Demand

The Federal Reserve and the Mint worked together to meet high public demand for the Golden Dollar during the first months following its early 2000 introduction. To support the introduction, Reserve Banks changed their normal practice of first paying out circulated dollars and paid only Golden Dollars from January 2000 through December 2001. Net payments of dollar coins to depository institutions peaked at nearly $95 million in March 2000. Demand remained strong throughout 2000 but declined to an average monthly net payment of $16 million during 2001.

The Reserve Banks returned to their normal practice of first paying out circulated coin in January 2002, reflecting their general practice of treating all designs of circulating coin as interchangeable to satisfy requirements for the public's transactions. They have continued to accommodate, however, the request of any depository institution for Golden Dollars only. Reserve Banks will continue filling requests for Golden Dollars until their inventories of new coin are depleted, which could be within months. Most major dollar coin customers, such as transit authorities and the U.S. Postal Service, have been satisfied by shipments of commingled Golden Dollars and Susan B. Anthony dollars. Chart 1 at the end of my testimony illustrates the Reserve Banks' dollar coin payments and receipts since 1976; chart 2 shows net payments since 1998.

Because legislation requires that the Golden Dollar and the Susan B. Anthony dollar have similar metallic properties and the same diameter, and because the Reserve Banks and armored carriers do not have processing equipment to distinguish between the two, excess coins returned to Reserve Banks cannot be mechanically segregated between Golden Dollars and Susan B. Anthony dollars. As the public continues to return its excess dollar coins, the Reserve Banks are accumulating considerable amounts of commingled inventory. At the end of April, Reserve Banks had sufficient inventories to fulfill all dollar coin orders for more than a year, assuming demand stays at its current level, without taking into consideration future dollar coin deposits that will be returned to the Federal Reserve from the banking industry. This inventory consists of approximately 70 percent commingled dollar coins and 30 percent new Golden Dollars that have not yet been paid out to depository institutions. Normally Reserve Banks strive to maintain about thirty days of payable inventory of coins of all denominations. Because Reserve Banks are holding such a large inventory of dollar coins, they have ordered no new Golden Dollars since January 2002, but will begin ordering new coin again when their inventories reach levels they would typically hold.

I appreciate the opportunity to discuss these issues with you and would be happy to answer your questions.

Senator DORGAN. Finally, we will hear from Mr. Jim Benfield. He is the Executive Director of the Coin Coalition. I note in your resume, Mr. Benfield, you were previously a founder of the Daylight Savings Time Coalition, so it seems to me you are coalition-minded.

Mr. BENFIELD. That is right.

Senator DORGAN. Let me ask you to present your testimony, following which we will have some questions.

STATEMENT OF JAMES C. BENFIELD, ON BEHALF OF THE COIN COALITION

Mr. BENFIELD. Thank you very much and thank you for holding this hearing. Again, my name is Jim Benfield and I am speaking

on behalf of the Coin Coalition, which is a group of trade associations and companies who are enthusiastic supporters of the Golden Dollar.

The Golden Dollar is rarely seen in everyday retail transactions and, thus, is perceived as a failure, but in this case, failure is not reality.

In the mid-1990s, the annual business demand for dollar coins was about 60 million per year. Last year, that demand tripled to 180 million. That is a success by any manufacturing measure.

Where are they circulating? In Goshen, Indiana, where Matt Jerlecki's Northern Pride Carwash consumes between 20,000 and 30,000 dollar coins per week. That is well over a million per year.

And in Reading, Pennsylvania, at Goodman Vending, where owner Bill Buckholz needs 1.3 million coins per year to keep his full-line vending and cafeteria operation humming.

Jim Opitz owns two Subway restaurants in Wisconsin. He loves Golden Dollars. They reduce his shortages because coins do not stick together like bills do, and it reduces transaction time at his cash registers. Jim pays out about 200,000 dollar coins a year.

Joe Jacobson operates amusement games, like pool tables and vending machines, in 400 taverns in Wisconsin and he has been converting his machines to accept dollar coins over the past year. All the bartenders, of course, give change in dollar coins, partly because tip revenue goes up.

These are not isolated examples. The word is getting around that dollar coins work. Wall lockers made by American Locker Security Systems are found in amusement parks and ski resorts all over the country, including, I think, Disney World, and they accept dollar coins. They dispense dollar coins in change machines and then those drive the wall lockers.

And there are other industries that, with the slightest bit of encouragement, will jump on board. One untapped market is public pay phones, some of which allow you to call any country in the world for $1, or any city in the United States for 25 cents per minute. The Mint should study these examples and build on them.

But in most of these examples I have just given, a dollar coin replaces not the dollar bill, but rather four quarters. This means less weight to handle for consumers, fewer coins to process for the businessman, and the cost of minting a dollar coin is less than the cost of minting four quarters, so it is a win-win-win.

One area where the Mint should not waste its resources is on the cash retail sector. I have a chart. I do not want to spend too much time on that, but if it was the intention to have coins circulate heavily, then the dollar bill should have been removed. That was the experience of all European countries and every country. We are the only country to ever attempt it with the Susan B. Anthony, and we have tried it twice in a row now. Why? Because retailers do not have room for both cash for the dollar bill and dollar coin in their cash registers. If you look at the design and you study when you spend money, they really do not have a place for the dollar coin. And if a retailer does not stock dollar coin in the morning, you are never going to get it in the afternoon.

We do not expect the dollar bill to be pulled anytime soon, but we continue to hope.

Public opinion is interesting on this subject. When asked, "Do you support replacing the dollar bill with the dollar coin?" you will get a resounding "No," I think maybe 75 to 80 percent. But when told that the government would save over $500 million per year if this were done, then the majority supports the idea, and the GAO estimates these savings at $522 million per year.

Many banks refuse to inventory the Golden Dollar even though there are lots of them in Federal Reserve Banks in inventories. This problem needs to be addressed, and there is a very complex set of reasons why the banks are not crazy about this.

The major barriers right now, the biggest problem, the most phone calls I receive from angry potential users is the mixed Susan B. Anthony. This is not a concern, this is a deal killer, and Ms. Fore addressed this in some detail, so I will skip over those sections. But the SBA should be taken out of circulation either by exporting them to countries that have dollarized their currencies—Ecuador, by the way, just released five million dollar coins on April 15 into their economy—or by melting them down, and the scrap metal from the Susan B's are worth more today than the cost of making them 30 years ago, or 25 years ago. So the government will actually make a profit on melting them down. They will take a loss on the seigniorage, but they will make a profit from the scrap metal.

Another problem, once again addressed by the Mint Director, is packaging. Pennies, nickels, dimes, and quarters are usually paid out by cash retailers. Dollar coins today are paid out by machines and the user, whether it is mass transit or a car wash operator, used to get them in these bags of 2,000 and he would just go to the hopper and pour these guys in. Now, he has to get dozens of little rolls of 25 and break them open, being very careful not to have any paper shards wind up in his machine or it will gum up the works. So this is not only an inconvenience but it is an added cost, so this should be addressed.

To summarize, the dollar coin is extraordinarily convenient for many transactions and its use will continue to grow. The Mint must find ways to provide dollar coins free from Anthony dollars in packaging and quantities that are convenient for its customers. The Mint must learn from the successes that I have talked about and build on them. With a targeted marketing effort, the Mint can double the annual use to almost 400 million coins per year, I believe within the next 2 years, and redouble the usage every 2 years thereafter.

A couple of weeks ago, some reporters declared the dollar coin dead. They are wrong, and like it or not, the Golden Dollar is not going away. Thank you very much.

Senator DORGAN. Mr. Benfield, thank you very much.

[The statement follows:]

PREPARED STATEMENT OF JAMES C. BENFIELD

My name is James C. Benfield, and I am speaking on behalf of the Coin Coalition, a group of 30 trade associations and companies who are strong believers in the Golden Dollar. I am a partner with the consulting firm of Bracy "Tucker" Brown, and I have served as the Coalition's executive director since its founding in 1987.

The Golden Dollar is rarely seen in everyday retail transactions and, thus, is perceived as a failure. But in this case, perception is not reality. The coin is a qualified

success. If it was the intention to have the coin circulate heavily, then the $1 bill should have been removed.

Failure to Remove the $1 Bill.—In other parts of the globe, where the central banking and/or the treasury function are not subjected to legislative oversight, the smallest denomination of currency has been successfully replaced by a coin similar to the Golden Dollar. These countries include all of western Europe (except Italy), Japan, New Zealand, Australia and others. The Golden Dollar would be a tremendous success if the Treasury would take a different position.

Why must the $1 bill be removed? Retailers do not have room for both a $1 bill and a $1 coin in their cash registers. And if the retailer does not stock $1 coins in the morning, they will never enter circulation later in the day. Had the $1 bill been pulled in 1979, the Anthony dollar would have circulated. It might have been unpopular, but it would have circulated.

We don't expect the $1 bill to be pulled anytime soon, but we continue to hope.

Public opinion polling is interesting on this subject. When asked "Do you support replacing the $1 bill with a $1 coin?" you will get a resounding "no." But when told that the government would save over $500 million per year if this were done, then a majority supports the idea.

The General Accounting Office, using an economic model developed by the Federal Reserve, estimates the savings to the government of replacing the $1 bill with a coin to be $522 million per year.

The following three quotes succinctly capture the essence of the importance of removing the $1 bill.

"No one can possibly understand many social phenomena unless he constantly bears in mind the force of habit and social conventions. This is strikingly true in our subject of money. Over and over again in the course of history, powerful rulers have endeavored to put new coins into circulation or to withdraw old ones; but the instincts of self interest or habit in the people have been too strong.——W. Stanley Jevons, Money and the Mechanism of Exchange, 1875

"The experience of this country with the Anthony dollar and the experience of other countries with the introduction of large denomination coins indicates that a successful change in coinage requires broad public acceptance, withdrawal of the equivalent value note, and the government's commitment to a long-range plan for its currency structure."——(draft) The One Dollar Coin Proposal: Impact on Treasury Operations, Department of the Treasury, Office of Planning and Management Analysis, June 30, 1988.

". . . the experience in every foreign country which has introduced a high denomination coin has been that the circulation of the coin must be forced by eliminating the corresponding note. The element of choice must be removed for a coin to succeed. However, I want to reemphasize that the Treasury Department does not endorse the elimination of the dollar bill."——Mint Director Donna Pope before the Senate Banking Committee, June 20, 1990

"As our theory of coin/note substitutions shows, even a well-designed coin is unlikely to succeed unless the government orchestrates the transition. In fact, because of the failure of the Anthony dollar, people will be particularly skeptical of the success of future efforts. Such skepticism will increase resistance to paying any transition costs until businesses and individuals are convinced that the new dollar coin will become widely used. Consequently, future attempts to introduce a dollar coin will likely fail, unless the government organizes a concerted switch to the new currency by a large segment of the economy. The simplest way to do this is to withdraw the dollar bill from circulation."——John F. Caskey and Simon St. Laurent, Journal of Money, Credit, and Banking, The Ohio State University Press, August 1994.

Angry banks.—The Golden Dollar got off to a robust, but troubled start in January 2000. Commercial banks wanted to wait until at least March 2000 to stock the new $1 coins because they wanted to focus on potential Y2K problems, not on a new coin. In December 1999, the Federal Reserve and Mint were almost out of Susan B. Anthony $1 coins and were faced with the prospect of minting even more in January 2000, unless Golden Dollars could be released. The Mint, in fact, did strike and place into circulation 41 million 1999—dated Anthony dollars late in 1999.

The banking community said they would order $1 coins as needed. The Mint, wisely, sought another avenue for distribution—Wal-Mart. That introduction received so much publicity, and the coin was so popular that initial demand could not be met. A marketer's worst nightmare resulted—huge demand, no inventory. Worse yet, the banks were furious at being left with no Golden Dollars to meet consumer demand.

Today, many banks refuse to inventory the Golden Dollar, even though there are plenty of them in Federal Reserve and Mint inventories. This problem needs to be addressed.

Hoarding of Golden Dollars?—This is a non-issue. The public has been hoarding upwards of 500 million 50-State Commemorative quarters every 10 weeks, and there is not a shortage of quarters in circulation. Whatever Golden Dollars have been collected has little bearing on the failure of the retail sector to use them.

Commingled Anthony $1 coins.—The main issue blocking increased use of the $1 coin is the continued presence of Susan B. Anthony $1 coins in circulation. Over half the $1 coins received by many self-service carwash operators and vendors consist of SBA $1 coins.

Consumers hated the Anthony dollar 20 years ago, and they continue to hate the coin today. Many self-service carwash operators are considering shifting back to quarters in their operations. And what few cash retailers are using the Golden Dollar likely will stop unless they can receive only Golden Dollars.

A few months ago, the MTA New York Transit subway system received 500,000 previously uncirculated Anthony dollars. They came in rotting cotton bags covered with rat feces. Those coins continue to sit in the MTA's vaults unopened.

Unless the SBA problem is addressed in a strong, substantive manner, any marketing effort to increase the use of Golden Dollars in the retail sector would be a total waste of time and money.

Consideration should be given to taking the SBAs out of circulation by either exporting them to countries that have dollarized their currencies to some extent (Ecuador placed 5 million Golden Dollars into circulation on April 15, 2002) or by melting the SBAs down, and recovering their metal value, which is worth more now than when the coins were struck. That metal can be recycled into to other circulating coinage.

The aforementioned 1988 Treasury "recommends an exchange of one dollar coins so that the new one dollar coins would replace the Anthony dollars in inventory. The Anthony dollar would be melted down. The exchange would be handled as an accounting entry. Seigniorage realized from the minting of the new one dollar coins would be used to offset any seigniorage loss resulting from the melting of Anthony dollars. This is the same procedure used in accounting for the melting of coins of the other denominations which are no longer current."

When the Bureau of Engraving & Printing began issuing new currency a few years ago, they had a plan for removing old currency. The Mint needs to study that plan.

Packaging.—Another problem is packaging. Most $1 coins enter circulation as change from a bill changing machine, a subway ticket vending machine, a Postal Service stamp vending machine, or a foodservice vending machine. Many of these machines have hoppers into which one pours loose coins. Until recently, the Mint shipped all $1 coins in bags of 2,000. This worked very well. But now the Mint has standardized the shipping of coins in bulk bags. The armored carriers break these large bags, which hold 140,000 $1 coins and weigh 2,500 pounds, down into wrapped rolls of 25 coins each.

So the first thing a businessman has to do is break open the rolls, being careful to remove all the scraps of paper. The coins are then ready for use in the machines. This additional step adds costs and inconvenience to using $1 coins.

The Mint must ship coins that are ready to use and cost efficient for its customers. I have attached two letters from carwash operators who explain this problem in detail.

Mr. Chairman, now for the good news.

In the mid-1990s, the annual business demand for $1 coins was about 60 million per year. In 2001, the demand was about 180 million. In other words, the demand for $1 coins has tripled since the Golden Dollar's introduction. That is a success by any measure.

Dollar coins are being used in large volumes in subway transit authorities, the Postal Service, full-line vending and self-service carwash operators. At least 16 major cities, including New York, Chicago and Philadelphia have or are in the process of fitting on-street parking meters to accept $1 coins.

Cities using or planning to use $1 coins in parking meters: Albany, NY; Baltimore; Chicago; Cincinnati; Clearwater, FL; Dallas; Fort Worth; Minneapolis; New Orleans; New York; Philadelphia; Pittsburgh; Portland, OR; San Francisco; St. Paul, MN; Toledo, OH; Wilmington, DE.

Bartenders in hundreds of taverns are making change with $1 coins for use in pool tables, amusement games and vending machines.

Dollar coins are being dispensed for use in wall lockers at amusement parks and ski resorts.

Even a few retailers have discovered that using $1 coins reduces errors and shortages because they don't stick together like $1 bills, and transaction time is reduced at the counter.

With a highly targeted, low cost marketing effort, I believe the Mint can double the annual usage of $1 coins to almost 400 million coins within the next 24 months and redouble the usage every 24 months, thereafter.

One New Market.—Many public pay phones now allow you to call any country in the world for 3 minutes for $1. Or to call any city in the United States for 25-cents per minute. With phones adapted to accept $1 coins—and placed where they circulate, like the taverns and ski resorts I just mentioned—the quickly dying public telephone industry could be reenergized.

To summarize, the $1 coin is extraordinarily convenient for many transactions and its use will continue to grow. The Mint must find ways to provide Golden Dollars—free from Anthony dollars—in packaging and quantities that are convenient for its customers. The Mint must learn from the successes where the coin is circulating, build on these successes, and develop plans to exploit new market sectors.

To all those reporters who declared the Golden Dollar dead a couple of weeks ago, I have news for you. You got it wrong. Like it or not, the Golden Dollar coin is not going away.

Finally, in the interest of full disclosure, I want to note the following: At various times from November 1998 until September 2001, I served as a paid consultant to Oxford Associates (now MarketBridge), Double Eagle Market Development Company and Fleishman Hillard, Inc., all of whom were consultants to the United States Mint for promotion and marketing of the Golden Dollar.

[From the Wall Street Journal, Feb. 9, 2002]

BANKERS ASSAIL MINT FOR DEAL WITH WAL-MART

Bank tellers at First State Bank in Middlebury, Ind., have recently been going to unusual lengths to fill their coin drawers. While on lunch break, they would sprint to the local Wal-Mart store to buy the government's newly minted $1 coin.

When a bank goes to Wal-Mart to get its money, something odd is going on. In this case, it's a new strategy the U.S. Mint adopted when it issued the new golden-colored dollar, featuring the image of Native American heroine Sacagawea, at the end of January. Prompted by the flop of the Susan B. Anthony coin 20 years ago, the Mint crafted an agreement with Wal-Mart, the Nation's largest retailer, allowing it to essentially have first dibs over most banks on the new coin.

The U.S. Mint says it shipped the coins to 3,000 Wal-Mart and Sam's Club stores and the 12 regional Federal Reserve Banks on the same day, Jan. 27. But it mailed the coins to Wal-Mart, while it sent the coins to the Fed branches by truck. Many community banks are reporting a 5-week wait for the coins that they have ordered from the Federal Reserve. Copyright Dow Jones & Company Inc Feb 9, 2000

Bank tellers at First State Bank in Middlebury, Ind., have recently been going to unusual lengths to fill their coin drawers. While on lunch break, they would sprint to the local Wal-Mart store to buy the government's newly minted $1 coin.

"We thought if we could get 50 or 100 coins, then maybe we could give them to our customers," says Sara Baker, the bank officer that organized the tellers.

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The delay has caused a furor among some bankers, who are embarrassed that they have to send coin-seeking customers to Wal-Mart, and among some business owners, who complain they can't get the coins from banks.

"Wal-Mart doesn't need any more advantages over a little business like mine," said Bill Taylor, owner of Boiling Springs Hardware & Rental in South Carolina, who tried unsuccessfully to get some dollar coins from his local banks.

The American Bankers Association has fired off an angry letter to the U.S. Mint on behalf of its members, protesting the agreement with Wal-Mart and asking the

Mint to speed delivery to community banks of the golden coins. Dubbed the Golden Dollar by the Mint, the new coin is actually made of an alloy of manganese, brass and copper.

"The U.S. Mint has done an end run around the whole banking system," says Anne McKenna, vice president for finance at Tioga State Bank in Spencer, N.Y. "It's very disappointing."

In fact, the Mint planned the Wal-Mart agreement as a way of encouraging U.S. banks to order the new Golden Dollar coin in larger numbers than their orders for the Susan B. Anthony. And it has worked. The demand for the new coin has reached 200 million in the first month. It took the Susan B. Anthony 4 years to reach that level.

U.S. Mint Director Philip Diehl says he doesn't mind the controversy as long as the coin is a success. "I'd rather have a noisy success than a quiet failure," he says.

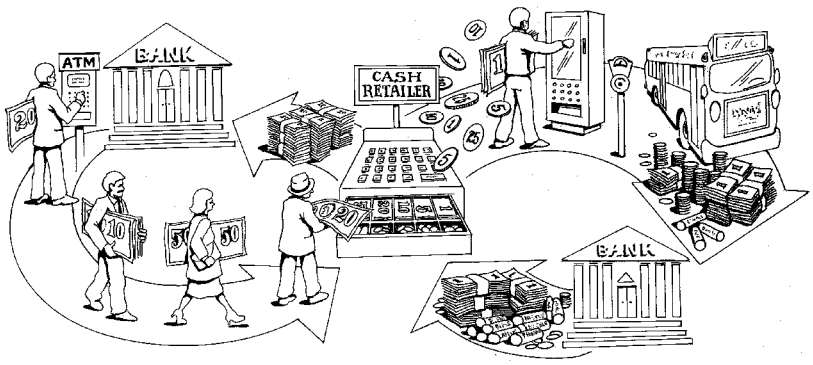
Mr. Diehl says the U.S. Mint got a lukewarm response from most banks when it first approached them about potential demand for the coin last summer. In response, he says, the Mint decided to talk to some retailers about putting the coin into circulation. Only two retailers showed interest: Wal-Mart Stores Inc., of Bentonville, Ark., and 7-Eleven Inc., of Dallas. At the same time, the Mint also crafted an agreement with General Mills Inc. to distribute the coin in selected Cheerios boxes—11 million in all—beginning last month.

Because of the logistical difficulties of distributing coins to its stores, 7-Eleven dropped out of the agreement, says Dana Manley, marketing communications manager for the convenience-store chain. However, Wal-Mart was willing to buy 100 million coins and promote them nationally in its stores.

Wal-Mart spokeswoman Laura Pope says the company was excited to work with the Mint. "Our goal is to offer customers something unique that they can only find at Wal-Mart and Sam's Club stores," she says. Wal-Mart promoted the new coin in a mailing distributed to 90 million customers at the end of January.

The Mint's Wal-Mart strategy seems to have worked, helped by the coin's golden color, to make the new dollar more popular than its Anthony predecessor. Most banks in search of the coin have started referring their customers to Wal-Mart. Even Ms. Baker eventually gave up on her quest to buy coins from the local Wal-Mart for her bank branch.

After 2 days of buying a few coins at a time (each Wal-Mart has its own policy of how many coins it will give out at one time), her tellers rebelled. "Some employees went out and said, 'I could only get three coins and I'm keeping them,'" she says. "Frankly, now we're telling customers to go to Wal-Mart."



Most people get their cash from Automatic Teller Machines (ATMs) or a bank teller window -- usually $10 and $20 bills. These bills are then spent at grocery stores, chain restaurants, convenience and drug stores, for example. During these transactions, coins and $1 bills enter consumers' pockets and purses. Later on, the coins and $1 bills find their way into vending machines, transit fareboxes, parking meters, pay phones, and library copy machines.

Large bills move in one circle -- from banks to consumers to retailers, then back to banks again. At the retail level, coins start at the bank, move to cash retailers, to consumers, to coin-operated machines, then back to the bank. **Thus, if the store manager does not get $1 coins in the morning to make change, consumers will not receive them later that day.**

[From the Washington Post, Jan. 13, 2001]

THE NEW COIN'S GOLDEN YEARS?

Each week, when I take money out of my bank account, I ask for $10 in the new Golden Dollar coins, and then I spend those coins instead of saving them. The Jan. 1 news story "New Dollar Coin Hard to Find" pointed out some hurdles to the coin's success: low demand, hoarding and people's conservative approach to change.

But although the U.S. Mint has learned some lessons from the failed Susan B. Anthony, (a golden color, not silver; a smooth edge, not ridged like the quarter), it seems to be implementing a policy that will hamper the success of the Sacagawea.

When attempting to fulfill my weekly routine of buying 10 of the new dollars for use this week, I was given five Sacagawea dollars and five Susan B. Anthony coins. The teller said that the coin rolls had begun to arrive loaded with the old dollar mixed in, and the bank was forced to distribute the Susan B. Anthony coins with the Sacagawea coins.

Lots of things have to happen before the Golden Dollar becomes a fact of America's everyday expenses. Vending machines, Metro card machines, etc., will need updating, and the paper dollar may even need to be phased out. But until such grand overhauls can be implemented, the Mint should not undercut its own strategy for promoting use of the new dollar by forcing Americans to accept what it has already rejected.

People will not use the new Sacagawea or any other dollar coin until they are forced to for lack of an alternative. Putting the new "Golden Dollar" in cereal boxes and buying expensive ads is a waste of the taxpayers' money.

If the authorities really want to put this coin in circulation, then let them do so aggressively and at the same time phase out paper dollars. Nothing less will ever work.

HI-PERFORMANCE CAR WASH,
Denver, Colorado, February 26, 2002.

Hon. HENRIETTA HOLSMAN FORE,
Director, U.S. Mint, Washington, DC.

ANTHONY DAZZO,
Cash Products Office, Federal Reserve Bank of San Francisco, Los Angeles Branch, Los Angeles, CA 80015.

DEAR MS. FORE AND MR. DAZZO: Hi Performance Car Wash operates about 100 self-service car wash bays at 18 locations in the Denver area. Soon after the introduction of the new Sacagawea Golden Dollar in January 2000, we began to convert our coin operated equipment to dispense, and accept $1 coins.

We now use the $1 coin at nine locations and are in the midst of converting the other locations. Currently, we need to replace 12,000 $1 coins per week (or about 600,000 per year) from Bank One which is served by Loomis Fargo armored carrier. When we have completed converting all locations we anticipate our annual demand to be 1.2 million $1 coins.

Sadly, this business model is being placed at risk because, with the expiration of the December 31, 2001 moratorium, the Federal Reserve is placing SBA $1 coins into circulation. Our customers confuse them with quarters and generally have a visceral dislike for these coins. Our staff is spending hours of valuable time separating the SBA's from the coin shipments we receive.

Additionally, in our last shipment of 12,000 $1 coins, we received 35 pieces of foreign coins, tokens and other U.S. coins. This was an effective surcharge of $35 against $11,965 worth of $1 coins.

I am writing to both the Mint and the Federal Reserve, as you know that many of our issues are handled by one or the other institution—or are shared.

We have learned through Jim Benfield, a consultant to the International Car Wash Association, that the Mint plans to stop shipping $1 coins in bags of 2,000 and, instead will ship $1 coins in bags of 140,000. This is a potential further inconvenience to how we handle $1 coins. We prefer to obtain coins in 2,000 coin bags. We have been told that most if not all armored carriers likely will feed the bulk coins directly from a hopper into wrapping machines. When we receive $1 coins wrapped, we must destroy the wrappers before the coins are emptied into our change machines. Thus, we are paying for a wrapped product, which reduces the productivity of our operation.

Has the Mint or Federal Reserve queried vending operators to learn if they; prefer wrapped, or loose coin. The Mint and Fed may be surprised to learn that the $1

coin is unique, in that most current users prefer loose $1 coin. It appears that most $1 coins are dispensed mechanically rather than by hand.

Although we would prefer to receive loose coin, our top priority is to be able to obtain the Golden Dollar, without the SBA. The wrapped coins are an inconvenience; the SBA dooms our conversion effort to fail.

Many self-service carwash operators I have spoken to have also undertaken the investment of converting their operations to the $1 coin. We all agree that the Mint launched a wonderful campaign to promote the Golden Dollar, but we feel that the government has abandoned this effort. Many other countries of the world have had success with a dollar coin. If the SBA is taken out of the picture, I believe the Golden Dollar will be a success in this country.

The business argument for using the $1 coin in the self-service sector is extremely strong. Yet, the Mint and Federal Reserve seem to be sabotaging this success story by forcing a product (the SBA $1 coin) upon a public that has resoundingly rejected it.

What plans is the Mint making to help our industry? With monthly demand for $1 coins falling, and with ever increasing numbers being consumed by our industry, we feel self-service carwash is one of the best things going for the Golden Dollar movement at this time. We were surprised to see that our industry was not even mentioned in the Mint's report to congress last year.

Please tell me how we can work together to keep the Golden Dollar available. 1 can be reached at (303) 934–4970. I look forward to hearing from you.

Sincerely,

EUGENE J. MILLER,
Owner.

SCOTCH SUPER WASH, INC.,
Oakland, California, February 29, 2002.

Hon. HENRIETTA HOLSMAN FORE,
Director, U.S. Mint, Washington, DC.

ANTHONY DAZZO,
Cash Products Office, Federal Reserve Bank of San Francisco, Los Angeles Branch, Los Angeles, CA 90015.

DEAR MS. FORE AND MR. DAZZO: I am the owner of Scotch Super Wash, which owns and operates seven self-service car washes located in Oakland, Concord and San Ramon, California.

In the Spring of 2001 we converted our entire operation to use the new Golden Dollar only. Until the Fall of 2001 I was receiving the $1 coins in bags of 2,000. Our operation generally must replenish $1 coin inventories at a level of about 10,000 per week.

Now we can get our $1 coins only rolled. I understand that the local Federal Reserve Terminal receives the coins bulk and then rolls them. They are then delivered to our bank (United California bank) via Brinks in rolls. We then have to unroll them for our use.

We like using the $1 coin and we put many into general circulation. However, receiving them rolled is a waste of time and money for us. I have talked to other operators who have converted to the $1 (and some who are planning to do so). Receiving the Golden Dollar rolled is a cloud on the feasibility of this change.

It seems that a local armored carrier could easily package some coins in $1,000.00 bags and make a run of $1,000,000 to $2,000,000 and have them on hand for specified accounts. This would be much easier than rolling $200,000. I would appreciate your considering the needs of large bulk users in the packaging of the Golden Dollar.

Respectfully,

PAUL LIPKIN.

[From the Journal of Money, Credit & Banking, August 1994]

THE SUSAN B. ANTHONY DOLLAR AND THE THEORY OF COIN/NOTE SUBSTITUTIONS

(John P. Caskey and Simon St. Laurent)

No one can possibly understand many social phenomena unless he constantly bears in mind the force of habit and social conventions. This is strikingly true in

our subject of money. Over and over again in the course of history, powerful rulers have endeavored to put new coins into circulation or to withdraw old ones; but the instincts of self interest or habit in the people have been too strong . . .——(W. Stanley Jevons 1875, p. 77)

On July 1, 1979, the U.S. government introduced the Susan B. Anthony dollar coin. The government expected to realize long-run cost savings from replacing dollar bills with dollar coins and it believed the new coin would better serve many private-sector transactions. It expected, for example, the public to discover that the coin would speed small retail transactions and would enlarge the range of services and goods available through vending machines. Accordingly, the government predicted that within a few years the coin would replace the dollar bill in many transactions and eventually might totally replace it.

The public, however, refused to use the coin and the media soon dubbed it the "Susan B. Edsel." 857 million of the coins were produced between 1978 and 1980, but only 430 million are currently in the public domain. A small fraction of these coins circulate; most lie hidden in drawers as souvenir pieces awaiting the distant day they might become valuable collector's items. Over 400 million Anthony dollars are in government storage, to be eventually circulated or, more likely, melted down.

By any criterion, the government's attempt to introduce the Anthony dollar coin was a colossal failure. Because of this failure, the United States stands out among advanced industrialized countries for the unusually low purchasing power of its lowest denomination bill and its highest denomination circulating coin (see Table 1). Some policy analysts claim that this makes vending machine and small retail transactions awkward and wastes government funds, and they advocate that the government try again to introduce a dollar coin. Calls to try again make it imperative to review the Anthony dollar experience as well as the success of coin/note substitutions in other countries to determine where the U.S. government went wrong in its effort.

TABLE I.—THE HIGHEST-DENOMINATION COIN AND LOWEST-DENOMINATION NOTE OF VARIOUS COUNTRIES

Country	Highest Coin	Lowest Note
Australia	A$2 ($1.56)	A$5 ($3.90)
Britain	£1 ($1.69)	£5 ($8.45)
Canada	C$1 ($0.87)	C$2 ($1.74)
Germany	DM5 ($2.90)	DM10 ($5.80)
Japan	¥500 ($3.65)	¥1000 ($7.30)
United States	quarter ($.25)	$1 ($1.00)

SOURCE: The Economist (2/25/89, p. 20). Exchange rates 8/15/91.

The popular explanation for the public's rejection of the coin emphasizes that the new coin too closely resembled the quarter (see Figure 1). Another explanation faults the government for not being more aggressive in marketing the advantages of the new coin to the public. We argue, however, that the fundamental reason the Anthony dollar failed was that the government lacked a sound understanding of the economic theory underlying coin/note substitutions. The government believed that the Anthony dollar would better meet the transaction needs of the public. It therefore concluded that if it offered the Anthony dollar to the public, the public would learn of the coin's advantages and begin to use the coin in place of the dollar bill. This simple view of the coin/note substitution process ignores the presence of "network" externalities in a currency system, which mean that the benefit an individual attains from the use of a particular currency form depends on how many others are also using that currency form. For example, a new high-denomination coin can increase the range of vending machine transactions open to individuals, but only if vending machine owners convert the machines to accept the coin. Vending machine owners can increase sales from converting their machines to accept the coin, but only if the public commonly carries the coin. Similarly, retailers who learn to distinguish quickly the new coin can make small transactions more rapidly, but only if their customers have also learned to distinguish the coin quickly.

FIG. 1. Coins of the United States: Kennedy half-dollar, Anthony dollar, quarter, nickel, and dime

Had the government recognized these network externalities, it would have fundamentally altered its view of the currency substitution process. In the presence of network externalities, an individual who doubts that a new coin will become widely used by others will see little to gain from adjusting to use the coin. Even if an individual believes others will eventually begin to use the coin, he may decide it is better to wait for others to switch before switching himself. If everyone behaves this way, the coin will fail. Thus, it is not sufficient for a government simply to make available a new coin that it believes better serves the transaction needs of the public and expect it to be adopted. Rather, the government may need to provide an incentive for a large block of the public to initiate the conversation to the new coin or, alternatively, the government may need to force the use of the coin by withdrawing the competing bill from circulation.

In this paper, we examine the failure of the Anthony dollar and develop a theory of coin/note substitutions based on the existence of network externalities. We begin, in the following section, by reviewing the relative advantages of coins and bills. In the second section, we outline the failed attempt to replace the dollar bill with the Anthony coin, and we examine the lessons that have been drawn from other countries' successful coin/note substitutions. In the third section, we present a theory explaining why governments must sometimes actively induce the private sector to make a currency substitution even when the private sector stands to gain from the change. We conclude with a brief review of lessons for any future attempt to substitute a coin for the dollar bill.

BILLS VERSUS COINS

A government must consider the relatively advantages of bills and coins in deciding what form a particular currency denomination should take. The main advantage bills have over coins is that they are lighter and more compact, and therefore are easier to carry. Coins, on the other hand, are far more durable than bills, which can bring long-run government budget savings. U.S. coins, for example, have about a 20- to 30-year life span while one dollar bills last only about 1.4 years. Consequently, although $1 bills are cheaper per unit to produce than $1 coins, the additional costs of destroying and replacing them at frequent intervals are high enough so that the government could save about $318 million annually by replacing 75 percent of $1 bills with $1 coins and 25 percent with $2 bills (U.S. GAO 1990). Coins are also easier to sort manually than are bills, making small transactions using coins quicker than transactions using bills (U.S. Senate 1990, pp. 90–91). This advantage is most important for retail stores that make frequent small transactions. It also benefits their customers waiting in lines to make purchases. Moreover, because coins are differentiated by weight and electromagnetic properties, bulk sorting of coins is faster than that of bills (Buetow and Rubin 1991). Coins are also better for automated transactions. Mechanical coin acceptors easily and rapidly differentiate various coins and reject counterfeits, or "slugs," using weight, size, edge, and electromagnetic properties. Although bill acceptors now allow vending machines to take bills up to $20, the cost of the acceptors, the need to dispense coins as change,

and the generally poor quality of low-denomination currency combine to make them expensive and impractical relative to coin acceptors (U.S. Senate 1990, p. 91).

Because of the different relative advantages of bills and coins, businesses and individuals who use coins and bills in different circumstances can disagree over whether a particular currency unit should be produced as a coin or bill. Vending machine operators favor coins, while those in the money transporting business tend to favor bills. Governments prefer to produce coins for small denominations because of the favorable fiscal impact. Among consumers, even women and men, who often carry coins differently, may differ in their preferences for coins relative to bills.

After considering the relative advantages of coins and bills, major contemporary countries have chosen to produce low-denomination currency units as coins and higher denominations as bills. Low-denomination currency units circulate rapidly, making durability and speed of use paramount. Higher-denomination units are used less often, so the light weight and compact form of bills become more important.

Governments tend to keep currency structures relatively stable over time, presumably because events that alter the optimal currency structure are relatively rare or develop gradually. Moreover, there can be significant transition costs associated with changing the currency structure. The longer an established currency structure remains unaltered, the greater these transition costs are likely to be, because a physical payments infrastructure tailored to a particular currency form and the public's familiarity with that currency develop over time.

Inflation is the primary factor that changes a country's optimal currency structure. Following sustained declines in the purchasing power of a currency, countries have often sought to substitute coins for low-denomination bills. A decline in the purchasing power of a bill increases its speed of circulation, as it is more commonly used in smaller transactions.[1] For such transactions, the durability and sorting speed of the currency become important, characteristics in which coins have a relative advantage.

THE SUSAN B. ANTHONY DOLLAR AND THE CANADIAN "LOONIE"

Between 1935 and 1975, the purchasing power of the U.S. dollar fell by 65 percent, and by 1975 the dollar was commonly used in even the smallest transactions. Consequently, in the mid-1970s, the U.S. government decided the time had come to produce a dollar coin, expecting it would eventually replace the dollar bill. That effort failed, and today the Anthony dollar is an insignificant part of the U.S. currency system. Responding to similar developments a decade later, the Canadian government successfully replaced its dollar bill with a coin, popularly known as the "loonie" because of the image of a loon on its face. This section briefly examines these experiences in an attempt to identify the key factors differentiating the Canadian success from the U.S. failure.

The U.S. Experience

Toward the end of the Ford Administration, the U.S. Treasury Department and the Federal Reserve began to argue that inflation had lowered the purchasing power of the dollar to such a degree that a dollar coin would better serve the transaction needs of the economy (Simon 1977).[2] Early in the Carter Administration, the Treasury argued that a "conveniently sized [dollar] coin would be acceptable to the general public and would ultimately gain widespread usage as a circulating medium of exchange" (Blumenthal 1978). The Treasury also calculated that the replacement of the $1 bill by a $1 coin could reduce government costs over the long run by up to $50 million per year in 1979 dollars (U.S. House 1979, p. 47).

In 1975 the Treasury Department commissioned a private research group, the Research Triangle Institute (RTI), to undertake a comprehensive review of the U.S. currency structure and issues linked to the introduction of a dollar coin (RTI 1976). At the same time, the Mint began technical studies on a possible dollar coin. Both the Mint and the Treasury knew that a badly designed coin would not be used voluntarily by the public. Few Kennedy half-dollars circulated, and most of the public

[1] A very high inflation rate can lower the relative advantage of coins. In a hyperinflation, new higher-value currency units must frequently be introduced and older lower-value ones removed as they become worthless. When this process is frequent, the durability of a new currency unit is not important. Consequently, in a hyperinflation coins usually cease to circulate and new currency units are created as bills.

[2] In 1976, the Treasury Department introduced a $2 bill, intended to displace some one dollar bills. Because this new bill was unfamiliar, lacked any place in retailers' cash drawers, and faced severe competition from an unchanged quantity of $1 bills, the $2 bill never circulated widely. Moreover, for the public, the difference between a $2 bill and a $1 bill was apparently too insignificant to warrant the additional denomination (Hough 1978).

had never used an Eisenhower dollar in transactions. The govemment attributed the unpopularity of these coins to their relatively large size and weight.[3] The Mint believed that the public would find a new, smaller, and lighter $1 coin convenient for many transactions. It was confident that such a coin would be accepted by the public and it did not "feel the expenditure of funds for a full public opinion survey would be justified" (U.S. Senate 1979, p. 20).[4]

In planning the new $1 coins design, both the Mint and RTI gave primary attention to the needs of vending machine manufacturers. Since a major advantage of the coin would be its potential use in automated transactions, the coin would have to be compatible with the industry's electrical and mechanical coin sensors. Although the Mint and RTI asked representatives of other economic sectors heavily involved in money handling for opinions on the coin's design, their responses had little effect on the coin's final form. However, the desire to produce a coin suitable for the visually impaired led to the adoption of the eleven-sided ridge on the interior of the coin. An eleven-sided coin had been considered initially, but vending machine manufacturers objected that such a design would make it more difficult to distinguish between coins and slugs (U.S. Mint 1978, p. 8).

The Mint and Federal Reserve gave little thought to how the dollar coin would become integrated into the currency system. Because they were confident that the public would use it if it were made available to them as a currency option, the Mint and the Fed devoted most of their efforts to arranging for the distribution of the coin. They each allocated $300,000 for promotional pamphlets and the employment of a public relations firm. Most of the marketing efforts were aimed at banks and retail businesses, which were expected to play a critical role in distributing the new coin to the public (U.S. GAO 1990, pp. 20–21). Ultimately, however, the Fed and the Mint believed that the success of the coin depended on the individual choices of consumers. This viewpoint was succinctly enunciated by Federal Reserve Board Governor Phillip Coldwell, who explained, "If the American public doesn't find it a useful piece of currency or coin, then it will not circulate. If they do find it useful, it will circulate" (U.S. House 1978, p. 30).

In presentations to Congress prior to the introduction of the coin, Mint and Federal Reserve officials predicted that initially only a small percentage of the public would use the coin, but that its use would grow over time as more people became accustomed to the coin and began to see its advantages (U.S. House 1979, pp. 32–33). They estimated that it would probably take 3 to 4 years to achieve widespread circulation.

Congress considered the advisability of the dollar coin over the summer of 1978. After bitter feuding over whom the coin should honor, Congress passed legislation providing for the Anthony dollar and President Carter signed the legislation on October 11, 1978. Production of the coin began 2 months later in Philadelphia. The Mint released the coin with ceremonies and publicity on July 1, 1979. There was such an initial surge of demand that many banks briefly ran out of the coin (Klemesrud 1979).

The honeymoon was short. Despite the Mint's emphasis on designing a coin suitable for vending machines, most machines were not recalibrated to accept it. Vendors had begun updating their machines before the law passed, but only 250,000 of 4 million machines accepted the coin by July 1979 (New York Times, "Machines" 1979; U.S. House 1979, p. 161). The cost for updating old coin acceptors ranged from $25 to $350 per acceptor. Given these costs and doubts about the coin's success, most vendors preferred to wait to see if the coin would become widely used before converting their machines (Reiter 1980a).

The media, the public, and retailers criticized the coin for looking like a quarter, making it hard to distinguish rapidly. Although the Anthony dollar weighs 43 percent more than the quarter, has almost the same size relation to the quarter that the quarter has to the nickel, and has distinctly different engraving than the quarter, none of these differences seemed to matter. Consumers and retailers complained of the coin's similarities to the quarter in size, color, reeded edge, and thickness.

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[3] The Eisenhower dollar coin was introduced in 1971, but the government created the coin only to sell it to the casino industry, which was using its own dollar tokens in slot machines (Rochette 1986). The government never intended the coin for general public use. The Kennedy half-dollar was introduced in 1964, primarily as a commemorative coin honoring the assassinated President. Little concern was given to whether it would circulate or not.

[4] A branch bank of the Federal Reserve Bank of Chicago did commission a marketing study of the attitudes of consumers and retailers toward a new dollar coin. Claude Martin (1980 and 1981), the principal researcher in this study, reported that most of the public and retailers did not perceive a need for the coin and were doubtful that the public would use it. This report, however, was completed after production of the coin was underway and it had no impact on the design or marketing of the coin.

Because many customers did not want the coin, cashiers rarely offered it as change. In fact, some businesses had their cashiers drop the coins into a safe under the register to be returned to the bank, but never used as change (U.S. House 1979, p. 11). Consumers declined to accept the coin from retailers as change, merchants returned the coins to the banks, and the banks, unable to redistribute them to merchants and facing high storage costs, sent them back to the Federal Reserve and did not order resupplies.[5]

Congress held hearings in September 1979 to investigate why the dollar coin was failing. Mint, Treasury, and Federal Reserve officials testified before a hostile Congress that the coin was not yet the failure the public thought it was, and argued for more patience. Stella Hackel, Director of the Mint, defended the coin before Congress, saying:

> We knew it would take time for the American people to get adjusted to a new coin. It is the first change in the size of coinage in 122 years . . . Whenever we reach in our pocket now and find anything larger than a nickel, we assume it is going to be a quarter . . . . But in fact, Congress realized from the committee reports that it would take 3 to 4 years, and it is taking some time. (U.S. House 1979, pp. 49–50)

A Treasury Task Force recommended that the dollar bill be removed from circulation in order to force the public to use the coin, but Congress believed that such a move would be highly unpopular and soundly rejected the proposal (U.S. House 1979, p. 78).

By January 1980, only 291 million of the 750 million dollar coins produced were in circulation. In March 1980, the Mint stopped production as a "temporary measure." The Mint's Assistant Director for Technology claimed that "in no way are we abandoning the coin. . . . We're simply shifting gears a bit. . . . We intend to resume production" (Reiter 1980a). U.S. Post Offices and Defense Department Post Exchanges, in the United States and abroad, tried to place the coin in circulation but, despite these efforts, the coin's circulation spread only slightly (New York Times, "Metal" 1980; "Troops' Use" 1980).

The Mint did not give up for another year. In November 1980 it had a new design ready to try. It proposed changing the color of the coin from silver to bronze and replacing the eagle on the reverse side with a distinctly raised "1" (Reiter 1980c). With the arrival of the Reagan Administration, however, a new Director of the Mint was appointed who promptly dropped the Anthony dollar from the proof set and suspended all research to redesign the coin (Reiter 1981).[6]

The Canadian Experience

Canada's more recent experience in substituting a coin for its dollar bill differs from that of the United States in several respects, but also has significant parallels. In response to the declining purchasing power of its $1 bill, Canada introduced the "loonie" dollar coin on July 1, 1987. Conscious of the rejection of the Anthony dollar by the U.S. public, the Royal Canadian Mint (RCM) devoted considerable attention to the design of the coin, with an eye to minimizing both the conversion costs for vending machines and the learning costs for the public. The Mint decided to make the coin the same size as the Anthony dollar to facilitate compatibility with U.S.-made vending machines. However, unlike the Anthony coin and other Canadian coins, the Canadian dollar coin has a distinctive eleven-sided outer edge and is gold-colored. The outer edges of the coin are slightly arched so that the coin will not skip or slide in vending machines. It was such behavior that led the U.S. vending machine industry to object to the U.S. Mint's initial plan to produce an eleven-sided dollar coin.

In launching the coin, the Canadian govemment heavily marketed its advantages to the public. Despite these efforts and the distinctive appearance of the coin, the public was slow to adopt it. While it co-circulated with the dollar bill, the coin was used in less than 15 percent of all non-machine cash transactions (RCM 1989a, p. 7). The Canadian Mint had expected this and had argued even before legislative approval of the coin that it would not succeed unless the dollar bill were removed from circulation. Following this advice, the Bank of Canada announced in 1988 that it

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[5] The failure of the Anthony dollar emphasizes the limited applicability of Greshman's Law in an economy where the form of the money stock is determined by public demand. The central bank readily exchanged the dollar coin and the dollar bill at the same face value. Since people preferred to hold the dollar bill, they returned the coin to banks which in turn returned it to the Fed. This process took the coin out of circulation. The "bad" money did not drive out the "good," rather the bad money disappeared from the economy.

[6] It is rumored that people in the Reagan Administration viewed the coin unfavorably because they thought it endorsed a feminist ideology.

would begin gradually withdrawing the $1 bill from circulation starting in June 1989. Vending machine owners and transit authorities, believing that the note would be removed, quickly converted their machines—110,000 of 170,000 by May 1989 (RCM 1989a, pp. 5–11).

The announced phasing out of the $1 bill brought complaints from some banks and small businesses (Underwood 1989, pp. 44–45). However, following the Mint's extensive marketing efforts, opinion polls showed that committed opponents of the transition to the coin among the general public were in the minority: one-third opposed the new coin, one-third supported it, and one-third had no feelings either way. Facing a divided public, the government was able to fulfill its promise to withdraw the dollar bill from circulation. Today the "loonie" is the only circulating dollar in Canada.[7]

In 1990, the U.S. General Accounting Office investigated the successful efforts of Canada and five other western industrialized countries to replace low-denomination bills with coins. As part of the study, the GAO asked monetary authorities in the six countries what lessons they had learned from their experiences in converting to coins. According to the GAO (U.S. GAO 1990, p. 23), they offered the following lessons (number of countries indicating lessons learned in parentheses);

—Notes must be eliminated. (6)
—Have a public-awareness campaign. (5)
—Government must expect public resistance and be strong in its campaign to convert. (4)
—Ensure sufficient coins are available. (4)
—Coins must have a distinct appearance. (4)

THE THEORY OF COIN/NOTE SUBSTITUTIONS

With hindsight, it is clear that the U.S. government should have more clearly differentiated the Anthony dollar from the quarter and more extensively marketed its advantages to the public. However, the experience of other countries shows that even a well-designed and well-marketed coin will generally fail to replace a circulating low-denomination bill, unless the government actively induces the public to switch to the new coin. in this section we offer a theoretical explanation for this observation.

The theory is based on the idea that there are significant network externalities in a currency system. These arise from two principal sources. First, there is an externality that arises from the public's familiarity with the most commonly used currencies in a society. Over time people learn to distinguish commonly used currencies very rapidly with only a casual glance. If both parties in a transaction are intimately familiar with the currencies used, the payment is likely to be rapid and accurate. There is an externality, however, because it is not sufficient for only one party to have this familiarity. If the other party needs to examine closely the currencies to verify the accuracy of the payment, the transaction will be slowed. Someone choosing a currency for common retail transactions has an incentive, therefore, to choose currencies with which others are familiar.

A second externality arises from the physical payments infrastructure, including cash registers, money-counting and- wrapping machines, and automated vending machines. A payments infrastructure tailored to a particular currency system speeds payments and increases the range of transactions permitted by the monetary system. This creates an incentive for individuals to use currencies compatible with this infrastructure and for those designing the infrastructure to do so around the currencies widely carried by the public.

Figure 2 illustrates the effect of these network externalities on the benefit to an individual from choosing to use a $1 bill or $1 coin for transactions. The percentage of the public commonly using a dollar bill for transactions is measured across the horizontal axis from left to right. The percentage commonly using a dollar coin is measured from right to left. To reflect positive network externalities, the benefit to

[7] To overcome the objection that carrying several dollar coins would be too heavy, the Canadian government also introduced a $2 bill. About 75 percent of the $1 bills were replaced with $1 coins and the remainder with $2 bills. In the United States, contemporary proposals to replace the $1 bill with a $1 coin generally also include a provision to promote the $2 bill (U.S. GAO 1990). After the $1 bill is removed from circulation, retailers can place $2 bills in the cash drawer slot currently occupied by $1 bills.

the individual from using either currency form increases as the percentage of people also using that currency form increases.[8]

In explaining the implications of network effects, we initially assume for simplicity that everyone in the economy has the same benefit function. Under this assumption, Figure 2 illustrates a case where society's welfare would be maximized if the government produced dollar bills rather than dollar coins: the benefit individuals receive from using the note, assuming everyone else does too, exceeds the benefit they would attain from using the coin.

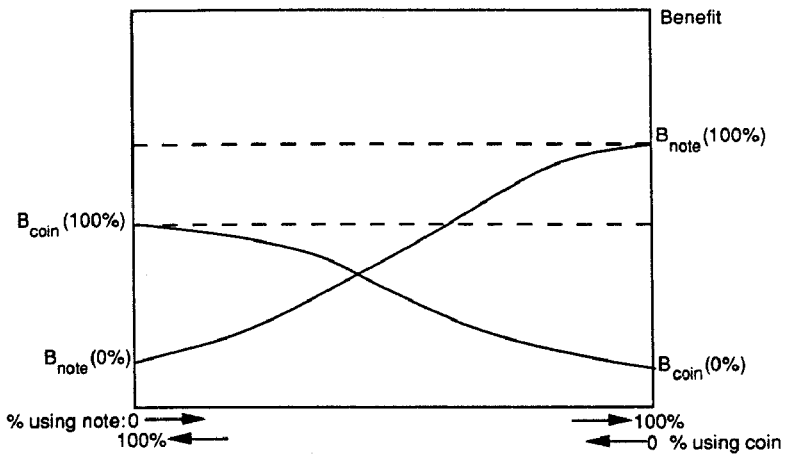

FIG. 2. Network Effects Where Note Is Socially Optimal

As discussed earlier, inflation raises the average value of small retail transactions and increases the use of dollar bills. Because coins are more durable, more rapidly sorted than bills, and more convenient for vending machine purchases, the price increase can increase the relative benefit to producing a particular currency denomination in the form of a coin rather than a bill. The effect of an increase in the price level is illustrated in Figure 3 as shifting the benefit function for a coin up from its original position, B_{coin}, to the new position B'_{coin}. In the illustrated case, the price increase changes the optimal currency structure, whereas before the price increase, the greatest benefit would be attained if society opted to produce a $1 bill. After the increase, the coin would be optimal.

[8] The benefit function can be nonlinear, but we assume the benefit to an individual from using a particular currency form is a constantly increasing function of the percentage of the public also using that currency form.

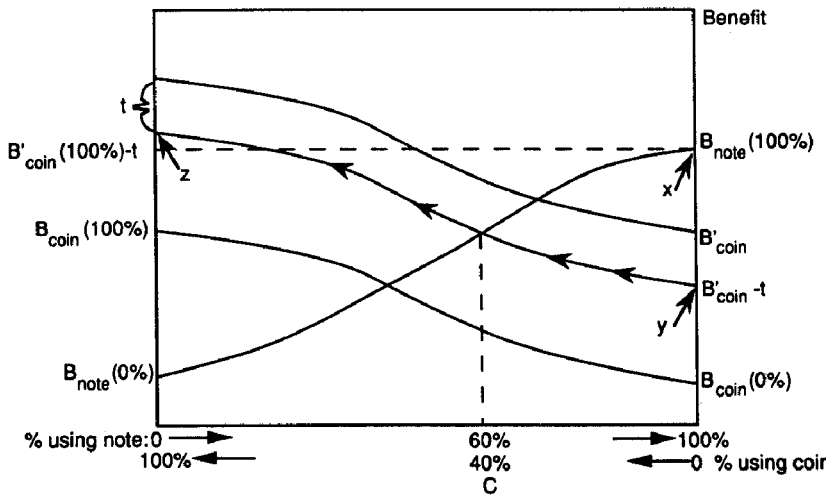

FIG. 3. Network Effects and Transition Paths Where Coin Is Socially Optimal

In deciding whether to switch from a bill to a coin, transition costs should also be taken into account. For consumers, the transition costs are learning to use the new coin quickly and accurately. Businesses also face this cost and in addition, costs associated with adjusting their payments infrastructure, such as converting vending machines to accept the new coin or restructuring cash registers. It is possible that once the transition costs are accounted for, it would not be beneficial for a society to switch to a coin. In Figure 3, the benefit from using the dollar coin after allowing for the transition costs (t) is shown as B'_{coin}–t. In the illustrated case, the transition costs are small enough that it would still be optimal for the society to switch from using the bill to using the coin, that is, *Z* is greater than *X*.

Even though everyone would gain in the illustrated case if the coin were to replace the bill, there is no guarantee that the coin would be adopted in a decentralized decision-making process. This is true for two reasons. First, individual decision makers may doubt that others will also adopt the coin, or, second, they may believe that others will eventually adopt the coin, but think the process will be so slow that it does not pay to switch early. Both of these points can be illustrated in Figure 3. Consider an individual starting out at point *X*. When she evaluates whether she should switch to the coin, she must form an expectation of how many others will also switch. If she expects no others to go along, then she would expect to move from point *X* to point *Y* if she were to switch to the coin, clearly an inferior position. As drawn, even if she expects 20 percent of the population to switch, it would be optimal for her to stay with the note. Only if she expects 40 percent or more of the population to switch, will it be optimal for her to switch as well. This process can lock a society with decentralized decision making into an inferior currency structure.[9] If people doubt others will adopt the new currency, then it does not pay for them to do so either. If everyone thinks this way, the expectations will be correct because they are self-fulfilling.

If the costs associated with switching to the new coin can never be recouped, then it is reasonable for individuals to wait to see what others do before deciding whether they should themselves switch. In the illustrated case, if less than 40 percent of the public switches, then such fence-sitters would stay with the bill. If enough people follow this wait-and-see strategy, the Nash equilibrium remains at point *X* rather than the social optimum *Z*. However, if for some reason 40 percent or more of the public switches to the coin, then there will be a bandwagon effect where the fence-

[9] Farrell and Saloner (1985) present a formal model illustrating this idea with two actors. Postrel (1988) extends the model to cases with more than two actors.

sitters follow in switching. In this case, the equilibrium will be the optimal point *Z*.

Even if everyone in the economy believes that eventually everyone else will switch to using the new coin, it is possible for the economy to remain locked in to using the note. To see this, once again consider the decision facing an individual at point *X*. He can switch to point *Y*, knowing that as others eventually also switch the benefit he obtains from using the coin will gradually increase, illustrated in Figure 3 as a movement along the coin benefit schedule from point *Y* to point *Z*. If the move from *Y* to *Z* is expected to be very gradual, then those who switch early and start the process may end up as net losers. This is because they will experience an early loss as they jump from *X* to *Y*, which must be compared to the present value of the expected gains from moving to point *Z*. If the use of the coin is expected to grow very slowly, or if individuals have high discount rates, early losses could outweigh discounted future gains, and those starting the conversion to the coin would be net losers.[10] Once the gains of later converts are taken into account, however, society as a whole might experience a net social gain.

If early converts to the coin are net losers, it will be optimal for individuals to wait for the transition to be well underway before themselves switching. If everyone adopts this strategy, the process will never begin and the economy would remain locked in to the inferior equilibrium *X*.

If the economy is locked in to an inferior equilibrium, there are a number of noncoercive steps a government can take to try to attain the better equilibrium. If the inertia is caused by individuals' expectations that others may not switch, the government could use propaganda to attempt to change these expectations.[11] Alternatively, the government might try to solicit pledges, committing all to switch at once. If the government is itself a significant proportion of the economy, it could try to start the bandwagon rolling by itself switching to the coin. The government might also try to identify other large economic sectors that could initiate the conversion process, perhaps in concert with the government.[12] It might also start the process by subsidizing those that switch early.

Such noncoercive means could be prohibitively expensive. They also might not work because, unless they completely eliminate individuals' doubts that others will switch, everyone may wait to see if others switch before switching themselves. Moreover, the government may be too small a part of the economy to initiate a bandwagon effect, even if it could find other large economic actors to join it in switching to the coin.

A government can also use coercive means to attain the superior equilibrium. Specifically, the government could force the movement from equilibrium *X* to equilibrium *Z* by withdrawing the note from circulation. In doing so, the government might encounter resistance even if the public stands to gain from the change. Some people, for example, might doubt that the government can or will carry through with its promise to withdraw the note from circulation. Such individuals might resist switching for fear that they will switch, the government will abandon its policy, and others will not switch, leaving the switchers at or near point *Y* in Figure 3. In addition, even if the public does not doubt the government's ability or willingness to carry through with the policy, it might still resist because no one wants to switch first if the move from point *Y* to point *Z* will be slow. Finally, if we drop our assumption that everyone has identical benefit functions, then there could be individuals (such as money transporters) for whom the switch to the coin, even assuming everyone else switches, would lower their welfare. These individuals will nevertheless switch if others do and if network effects are strong enough. However, they would prefer that society stayed with the bill.[13]

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[10] Farrell and Saloner (1986) develop a formal model illustrating this idea. People might expect a gradual coin/note substitution process for several reasons. Perhaps businesses will prefer to wait for their existing payments infrastructure to depreciate or require maintenance before converting it to accommodate the new coin. Moreover, consumers may need to use the new coin numerous times before they learn to distinguish it rapidly, and this learning process may spread through the economy at an uneven rate.

[11] A marketing campaign may also aim to communicate to the public the benefits from switching to the new coin. Without such a campaign, the public might underestimate the gains because the full benefits from the new coin will occur only after the payments infrastructure has been altered, people have learned to use the coin, and the government begins to realize budget savings.

[12] In the case of the Anthony dollar, the government took some of these steps. For example, it encouraged vending machine owners to convert their machines early and it tried to initiate use of the coin by pushing the Anthony coin on soldiers, postal customers, and others.

[13] Because it would distract us from our main point, we do not analyze a general model with differing benefit functions. We should note, however, that such a model could produce a rich

Forcing a new currency system on the public, of course, has its dangers. Governments that do so bear the responsibility of clearly demonstrating that the change benefits the economy as a whole. It is not enough simply to show that the change will result in government budget savings, for these savings could be at the expense of even greater costs in the private sector. A government must also decide on the speed of a forced coin/note substitution. A gradual change could lower transition costs. On the other hand, if the proposed change is too gradual, the public could doubt the government's resolve to follow through with the withdrawal of the bill and might resist initiating the conversion process.

CONCLUSION

The officials responsible for launching the Anthony dollar believed that the new coin would benefit society, and that over time the public would discover this and begin to use the coin in place of the dollar note. Their reasoning, however, failed to recognize and communicate the implications of network effects in the currency system. Consequently, even if they were right about the gains from a coin/note substitution, they did not realize that there would be little incentive for anyone in the private sector to begin using the coin without the assurance that others would follow. They also did not realize that the more slowly people expect the use of the coin to spread, the more likely it is that individuals would not want to initiate the transition process.

To be fair, some governmental measures, such as efforts to place the Anthony dollar into circulation through post offices and to encourage vending machine owners to convert their machines early in the process, did show some implicit understanding of network effects. Moreover, some government officials, prior to the introduction of the coin and contemporaneous with its failure, did suggest that the coin would only succeed if the dollar bill were withdrawn from circulation. No one, however, explained in any detail why this was the case. This led some policymakers to conclude that the need to force the coin on the public through the withdrawal of the note proved the dollar coin did not benefit the public (U.S. House, 1979). Our theoretical analysis shows that this is not a necessary implication. However, because network externalities were neither understood nor explained by the Mint or Federal Reserve, it is not surprising that people drew such an erroneous conclusion. This misunderstanding assured that there was almost no political support for withdrawing the dollar bill.

The low and declining purchasing power of the dollar bill as well as Federal Government budget pressures make it likely that there will be future attempts to replace the dollar bill with a dollar coin. In fact, a lobbyist group is currently pushing for such a change and several legislators have announced their support (Blau 1991). Although it is important not to repeat the design errors of the Anthony dollar, good design alone will not bring success to a future dollar coin. As our theory of coin/note substitutions shows, even a well-designed coin is unlikely to succeed unless the government orchestrates the transition. In fact, because of the failure of the Anthony dollar, people will be particularly skeptical of the success of future efforts. Such skepticism will increase resistance to paying any transition costs until businesses and individuals are convinced that the new dollar coin will become widely used. Consequently, future attempts to introduce a dollar coin will likely fail, unless the government organizes a concerted switch to the new currency by a large segment of the economy. The simplest way to do this is to withdraw the dollar bill from circulation.

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range of results. For example, if network effects were weak and society was composed of a group that benefiued from a $1 bill and a group that benefitted from a $1 coin, the two currency forms could cocirculate in equilibrium. Empirically, however, most cases of co-circulation are explained by restrictions on the availability of the preferred currency form.

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Senator DORGAN. Amy Mossett, why do you not pull your chair up in the middle of that table, if you would.

Let me begin a series of questions to try to understand what we have heard and perhaps what we have not heard. Director Fore, how much money was spent on the promotion or advertising for the Golden Dollar coin?

Ms. FORE. As you mentioned in your opening remarks, a little over $60 million, $62.3 million, was for three firms in four separate contracts covering a period of approximately 2 3/4 years. The first one was a contract for market research and partnerships and advertising. It was a little over $4 million and it was to increase cir-

culation in seven sectors: retail, fast food restaurants, grocery, transit, vending, entertainment, and banking.

The second was the largest contract, $48 million, that included a $40 million advertising campaign with George Washington. It was to oversee public relations and promotions.

The third contract was for $8 million and it was to develop and execute a sales and marketing plan for coin-operated retail and banking businesses.

The fourth was $1.5 million to identify and prioritize means and opportunities for increasing circulation.

To my right is David Pickens, the head of our Sales and Marketing area for the Mint. He has prepared a forward-looking marketing plan for moving forward in thinking through what the opportunities are for the future.

Senator DORGAN. I will ask Mr. Pickens a question in a moment.

First of all, Ms. Fore, we have, as I understand it, minted 1.5 billion Golden Dollar coins. But I understand that roughly 500 million-plus have not been put out into circulation and the Federal Reserve Board has how many in stock at this point, Ms. Roseman?

Ms. ROSEMAN. A little over 200 million.

Senator DORGAN. Tell me, what does that mean, that the Federal Reserve Board has 200, 250 million coins? Where do you have them?

Ms. ROSEMAN. The inventory is largely in the Reserve Bank offices around the country and some of our coin inventory are actually located at various armored carriers that we contract with to act as coin terminals for us.

Senator DORGAN. And so you respond to a request from a bank in Mott, North Dakota, or Devils Lake, North Dakota, or Toledo, Ohio, and you send currency out based on their request. If they request dollar bills, dollar coins, is the request that specific?

Ms. ROSEMAN. Yes. They would request either notes or coins.

Senator DORGAN. And so the fact that you now have over 200 million in inventory that is not out there in circulation, that is because people are not requesting it, is that correct, or the banks are not requesting it, member banks?

Ms. ROSEMAN. Yes, and I should clarify. The inventory we have is a combination of both Golden Dollars and the Susan B. Anthonys.

Senator DORGAN. So it is not an inventory that is described as one coin versus another, it is commingled?

Ms. ROSEMAN. Part of it is commingled. About 70 million or so are Golden Dollars that we have gotten from the Mint that we have not yet paid out. The rest of it are coins that we have received back in from the banking industry, and when we receive it back in, they are commingled.

Senator DORGAN. Okay. Now, I started this hearing saying I think it is a failure at this point because I have never received one in change. I do not know of many people that have ever received one in change. The Secretary of the Treasury has never received one in change. Amy Mossett paid a taxi driver today in a Golden Dollar coin and he had no idea what it was.

So my contention is that this is a failure. Mr. Benfield, you say no, it is not a failure, and Ms. Fore, you say, well, how do you de-

fine success? So let us try to figure out whether this is a success or a failure because a marketing strategy that Mr. Pickens may want to employ certainly has to understand what has happened up to this point.

Director Fore, do you think that what has happened so far is a success or a failure?

Ms. FORE. I think it has been a success in some ways. People like the coin. I think it has been successful in terms of bringing in seigniorage into the United States Treasury.

Where it is not a success is in circulation. It is not in everyday commerce and what we need to try to improve is that people have easy access to the coin, that they receive it in everyday transactions and that they have places to use it. Coins, after all, are to be used in everyday trade and commerce in this country. So that is what we need to get to for it to be a complete success. It is a partial success, but it is not a full success.

Senator DORGAN. Mr. Benfield, you say it is a success and you describe some car washes and various things. I guess my own feeling is that you define success in large part with respect to the Mint if you are going to develop a new coin for widespread circulation, you define success by whether that coin becomes a part of widespread circulation. With respect to the Golden Dollar coin, the answer is, no, absolutely not. It is not part of widespread circulation. Am I wrong about that?

Mr. BENFIELD. Well, my members would love customers to be able to walk in and have the coin already in his or her pocket. That is not the case. That is disappointing. But let me give you a little more of a picture of how the coin works.

Jim Stansfield, LaCrosse, Wisconsin, and also Zog's Vending in Appleton, Jim Stansfield is in Toro, which makes the lawnmowers. That is where they are manufactured. He told me, he says, "Jim, I love this coin. I make 30,000 dollar coin sales per week." I said, "Wow, 30,000 sales per week. What is your replacement? What do you have to go replace from the bank?" He says, "Oh, 2,000 or 3,000." Well, I am disappointed because I like them to create more demand and more seigniorage and wish more of them were walking away, but if you contemplate the implications of what is going on there, it is fabulous.

It means that people are putting a $10 bill into a bill changer. They will get eight dollar coins, eight quarters. They will buy their sandwich and a bag of chips and a soft drink. Then they go back to their work station and they will keep those dollar coins at their work station. They will not take them home and spend them. Why? Because when they go back in the afternoon for their candy bar, that dollar coin is fast, it works every time, all the time. They have a longer break because they are not standing in lines.

Jim Stansfield, he is not going back to have to count boatloads of dollar bills in his cash room. He is taking back fives, tens, and twenties and he is not having to replenish quarters and deal with mountains of quarters. So he is dealing with dollar coins instead of mountains of quarters and he is processing five, ten, and twenty dollar bills instead of a dollar coin. He is a happy camper.

Senator DORGAN. I understand that, but that is anecdotal. I could tell you of someone who loved the Edsel, just loved it, but

that would not suggest the Edsel was a success. It was a failure. I guess my point is, if the Golden Dollar coin is a way to replace four quarters in someone's pocket, why are they not rushing to the system to say, get these four quarters out of my pocket and get me a Golden Dollar coin? You cannot find the Golden Dollar coin.

Mr. Benfield, do you have a coin dish in your bedroom?

Mr. BENFIELD. There are two kinds of people in the world. There are spenders and savers. I happen to be a spender and I personally have put about 8,000 dollar coins into circulation. I have never gotten one in change, either, because I never accept the dollar bill in change. I always make sure I have enough dollar coins to make that exact transaction.

Senator DORGAN. I see. I was just curious whether you have one of those little dishes where at the end of the day you put your coins.

Mr. BENFIELD. No little dish.

Senator DORGAN. You do not?

Mr. BENFIELD. No.

Senator DORGAN. You are unusual.

Mr. BENFIELD. I am a spender.

Senator DORGAN. I understand that, but you cannot spend between the time you go to bed and wake up.

Mr. BENFIELD. Oh, I see what you are saying. Actually, you caught me. You are a really good cross examiner. I do have a beer mug on a rail around our dining room. We live in a craft revival house, and it is a Chicago Symphony beer mug because my dad was in the Chicago Symphony and it says George Shulte and the coins go in there.

Senator DORGAN. See, I knew you had that, and I have never visited your——

We have not met before, have we?

Mr. BENFIELD. No, no, no, this is not staged.

Senator DORGAN. The reason I ask that question is that at lot of the coins we make, not just Golden Dollars, end up in somebody's dish or cup someplace and they cannot go to a bank to redeem them. I mean, they have got to go order some paper rolls someplace or go to a machine at a grocery store that takes a certain percentage. That is a different issue, but when people have all of this change moving around that they then take out of the system, you have to replace it because you need sufficient coinage of all types, right?

Ms. FORE. Correct.

Senator DORGAN. Now, Mr. Benfield says that one of the reasons that the Golden Dollar coin is probably not in great circulation is there is no place in the cash register for it. Did the Mint contemplate that? Or I wonder if Congress when it considered the legislation did. Did you talk to retailers about how they would deal with the cash register issue?

Ms. FORE. Yes. The Mint did at that time. I believe that most cash drawers have a spot that they can put Golden Dollars in, dollar coins. What most cashiers do is put rolls of coins in that slot, so that slot is used to put their rolls in for breaking apart and filling up the other bins. So if we can get them to get in the habit

of using that as their dollar coin slot, then we have gone a step forward here.

Senator DORGAN. So let us assume that I am a retailer and I say, what I want to do is I want to use Golden Dollar coins routinely. I like them. I want my customers to feel good about getting a Golden Dollar. So in my business, I want to use Golden Dollar coins. How hard is that for me to do?

Mr. BENFIELD. Let me answer. I mentioned this fellow, Jim Opitz. When I called him and when I first talked to him in Wisconsin, he says, "I am never going back to dollar bills. This is fabulous." And I said, "Will you talk to me? When somebody comes in and gives you seven or eight dollar bills, do you pay those out first and then use the dollar coin as reserve?" He said, "Oh, no, no, no, no. The dollar bills go under the cash register. I only pay out dollar coins. I deposit all dollar bills. That is where the efficiency comes, and I cannot ask my cashiers to pay dollar bills sometimes and pay dollar coins sometimes or they will get confused."

I talked to Southern Wisconsin Foods, a chain of 19 Burger Kings, and they allow their store manager to make the decision. About half of them use dollar coins. And I said, what about dollar bills? They are retired and deposited when they come in. So what they do is, this dollar bill, it does not go up here. They take this clip out. They put the spare rolls not here, but over here, and the fifth position is now used for dollar coins.

Senator DORGAN. My question was more specific than that. I run a business in a small town someplace and I want to use Golden Dollars and I want to use a lot of them. How hard is that, because then I want to go to my local bank and I want them to contact Ms. Roseman and the Federal Reserve and I want a steady supply of Golden Dollars for my cash register. Some will say it is impossible.

Mr. BENFIELD. I got a call yesterday from Galveston, Texas, a small—and I forget, Zigler, I think the guy's name is—who runs a small family-owned restaurant and he loves the Golden Dollars and he pays out about 6,000 or 7,000 per week, I think, or several thousand per week. He says, "Jim, I cannot get Golden Dollars. When I get a box of 1,000, I get about 400 or 500 Susan B.s," and that is what the numbers are, over half. I have had some guy say, "I got 1,500 and I got 873 Golden Dollars."

Senator DORGAN. Ms. Roseman, why can you not separate them when you send them out? If the bank, reflecting the interest of a small business who says, "I want Golden Dollars," the bank comes to you, to the Federal Reserve Board and says, "I want Golden Dollars. I want a bag of 2,000." Why can you not accomplish that?

Ms. ROSEMAN. Well, today, the way we handle coin orders—we get the deposits in the bags that Jim had shown you, 2,000. We will weigh that bag to make sure it is within our tolerance and we will pay it out. We will not do any processing of the coins today at all. Now, if——

Senator DORGAN. Why?

Ms. ROSEMAN. Because there is really no need to. We are trying to minimize the cost to the government of coin distribution.

Senator DORGAN. Yes, but if you have commingled coins, Susan B. Anthony and Golden Dollar coins, and your member bank—the

Fed serves its member banks, serves at the pleasure of its member banks.

Ms. ROSEMAN. Well——

Senator DORGAN [continuing]. Wants a good number of Golden Dollars, why will you not separate them and send them the Golden Dollars?

Ms. ROSEMAN. Well, we currently have no technology or processing equipment that is capable of doing that.

Senator DORGAN. Why do you not get it?

Ms. ROSEMAN. There has not been a demand thus far for that. I guess one issue that we would need to confront is if we did separate out the Susan B. Anthonys, what to do with them if they are not going to be used as circulating coin.

Mr. BENFIELD. A Treasury study in 1988, in fact, suggested melting them down, so I am not making this up. This is something that existed in an internal Treasury study.

Senator DORGAN. I understand that, but it is a different issue. The issue of retiring the Susan B. Anthony was not what I was asking about. If the Fed has an accumulation of coins which include Susan B. Anthonys and Golden Dollars and I am a business person and I go to my bank and my bank goes to the Federal Reserve Board, which is there to service the banks, and says, "I want Golden Dollars," and all you have is commingled coins, my question is, why will you not satisfy the requirements of the local bank? They want Golden Dollars.

Ms. ROSEMAN. We have traditionally treated all designs of a particular denomination as pretty much interchangeable for transactional purposes. For the same reason, we do not try to segregate out different State quarters, where there are a number of people who are still looking for, say, the Delawares or whatever for their collection. We say that for that program, the same way we do with the Golden Dollars, when each new State comes out, we will issue only that State for a period of time to be able to meet the initial demand, but as we get them back in, they are all commingled and that is what we subsequently provide.

We have taken that tact with all denominations of coins, that we will try to support initial introductions of either the State quarter or the Golden Dollar, but as we build up these inventories, assuming that they are all legitimate coins for transactional purposes, we just treat them as interchangeable for that respect.

Senator DORGAN. I want to come back to that, but Director Fore, how many Susan B. Anthony dollars are in circulation? How many were minted?

Ms. FORE. Nine-hundred-and-twenty-three million were minted.

Senator DORGAN. So about two-thirds of the Golden Dollar were minted, right? The dollar coin are 1.5 billion, Susan B. Anthony represents about two-thirds of that?

Ms. FORE. Yes, and the Susan B. Anthonys tend to be located in certain geographic areas in the United States, so they have concentrations.

Senator DORGAN. How long has it been since you have received a Susan B. Anthony dollar in change?

Ms. FORE. I am a Postal Service customer, so I am one of the lucky ones who has received Golden Dollars and Susan B. Anthonys.

Senator DORGAN. But outside of the Postal Service?

Ms. FORE. Maybe 5 or 10 years.

Senator DORGAN. And that describes the fact that the dollar coin is not in great use and the Susan B. Anthony was largely described as a failure by everybody. Would most all of you agree the Susan B. Anthony was a failure?

Mr. BENFIELD. Although technically, of all the dollar coins ever made by the United States Mint, the Susan B. Anthony was the most successful. It is far more successful than the Eisenhower dollar.

Senator DORGAN. Mr. Benfield, you just have trouble with the word "failure," do you not?

But I think almost everyone believes that the reason we went to the Golden Dollar and tried to develop a new coin was the Susan B. Anthony coin was not working.

Mr. BENFIELD. That is true.

Senator DORGAN. It was not in circulation. It was too close to the size of a quarter, it looked like a quarter, and people did not use it. Am I wrong about that?

Ms. FORE. That is correct.

Senator DORGAN. All right. And if that is the case and we have 900 million of them having been minted somewhere out there in circulation and Ms. Roseman has them somewhere deep in some darkened vault commingled with Susan B. Anthonys and she's never ordered equipment to try to separate them if some business and bank wants them separated, then how do you create a success of this if Mr. Benfield says, this is a great thing for some businesses who want these coins, but you actually cannot get these coins in the way you want them? When you order Golden Dollars, you do not want to get from the Federal Reserve Board gunny sacks full of money that has some Susan B. Anthonys, some Golden Dollars. So——

Mr. BENFIELD. As recently as the past year, though, when there were lots of Golden Dollars—Cross Sinclair is a cash manager for the NT and New York City Transit, and they, by the way, pay out four million per month, so they are a huge user. Occasionally, their armored carrier would call up, and you just could see the wheels turning. They had these Susan B. Anthonys sitting back gathering dust forever. Wow. Here is the opportunity to get rid of these guys after 20 years.

They would say, "Cross, we do not have any dollar coins handy right now, but would you mind taking some all Susan Bs?" It is New York. He does not care. "Sure, I will take them for you." So he was one of the chief minglers, if you will, in the country. The Fed and the armored carriers were still shoveling out fewer Susan B. As a matter of fact, within the past 6 months, he got 500,000 pure Susan B's in rotting cotton bags like this, covered with rat feces.

Senator DORGAN. From where?

Mr. BENFIELD. From CDC. That is a nickname of a huge armored carrier in the New York City area. And he says, "I have not asked my employees to touch those coins."

Senator DORGAN. Would an armored carrier have kept them in inventory? They would not have done that, would they?

Mr. BENFIELD. The armored carrier, understand——

Senator DORGAN. I mean, a carrier transports.

Mr. BENFIELD. The armored carrier manages a coin terminal——

Senator DORGAN. Oh, I see.

Mr. BENFIELD [continuing]. For the Federal Reserve. So that was Fed coins.

Senator DORGAN. Director Fore, was the decision early on the Golden Dollar to begin an exclusive marketing arrangement through Wal-Mart a mistake?

Ms. FORE. I do not think it was a mistake. Since I was not in this position at that time, maybe I could turn to David Pickens, who was.

Senator DORGAN. Mr. Pickens?

Mr. PICKENS. The Mint believes that it was not a mistake. The intent then was when you are introducing a new product to get it out quickly, and about $96 million in Sacagawea dollars were distributed through the Wal-Mart arrangement. We felt it got them out weeks ahead of when they may have been available through the Federal Reserve.

Senator DORGAN. I am going to submit a few questions to you in writing on that subject.

Let me ask the question of Director Fore, have you considered bringing the Susan B. Anthony coin back in and doing as Mr. Benfield suggests, melting them down and making some money, so that you have only one dollar coin left in circulation?

Ms. FORE. Yes.

Senator DORGAN. Have you studied that issue?

Ms. FORE. We have, and we are working on it now as there are several options for how to do this. We have to separate them. We have to figure out where we are going to place them. Working with the Federal Reserve Bank, we would try to see what the options were and come up with something that might be a viable alternative.

Senator DORGAN. Do you have a time on that analysis? Are you active in that study now and does that study include, if you decide not to pull the Susan B. Anthony out of circulation, to see if we can find a way to require the Fed to actually segregate those coins for distribution purposes?

Ms. FORE. We certainly could look at all of that. Perhaps we could submit to you the questions that we would be looking into and see if you had any supplementals.

Mr. BENFIELD. I know that you cannot back the Susan B's easily from a final user all the way back through the system. That is difficult. But a lot of vendors, car wash operators, cash retailers like the ones I have mentioned, when they get dollar coins, the first thing they do is they gather their family around. They throw them out on the table and they do all the sorting. They only use Golden Dollars. They put all the Susan B's back in a bag, take it back, deposit it to the bank, which then goes back to the armored carrier,

and I have got a sneaking suspicion that the armored carrier throws them back into a big bin with other Golden Dollars, they rewrap them, and they send them right back with the next shipment back to that retailer again.

So there is separation going on every day, if there could be a way that they could manage the separation exercise that is being done by private citizens.

Senator DORGAN. Two questions. The minting of these Golden Dollars, the Sacagawea Golden Dollar, is at 10 million coins this year, is that correct?

Ms. FORE. Right now, we are at 12 million. We will probably move above 13 million.

Senator DORGAN. All right. With a coin that has had 1.5 billion produced, you have reduced production levels—this 10, 12, 14 million production level is not a robust level to increase circulation, is it?

Ms. FORE. No. As you mentioned earlier, we have quite a few Golden Dollars in inventory, about 300 million. So we would first hope to run down those inventories. So if any orders come in, we are ready.

Senator DORGAN. Director Fore, you also said in your testimony that it is up to the public how many they use, how often they use it, but it really cannot be up to the public if they cannot find them, would you not agree with that?

Ms. FORE. Yes. The public has to be very proactive to get a Golden Dollar. They have to ask for it.

Senator DORGAN. I am only one person, but if I had the opportunity to get a Golden Dollar in change today and use it later in the day, I would enjoy that opportunity and do it gladly, but I know that will not happen today. So when you say it is up to the public, it cannot be up to the public if this is not in wide circulation, and that relates to the structural issues that have been raised here today, going back to both the Fed—I think you have a quantity of coinage that does not readily lend itself to satisfying the order from a bank responding to a customer, is that not the case?

Ms. ROSEMAN. Well, if you look at what our experience has been to date, for the first 2 years, essentially, the Reserve Banks only paid out Golden Dollars, and even going into this year, where a depository institution explicitly asked for Golden Dollars, we will give them Golden Dollars as long as we still have any of them segregated in our inventory.

Senator DORGAN. In rolls?

Ms. ROSEMAN. In bags.

Senator DORGAN. In bags, 2,000?

Ms. ROSEMAN. Yes.

Senator DORGAN. Okay.

Ms. ROSEMAN. And so I am not sure how much that issue has really affected the overall demand, because for the first 2 years, we have only paid Golden Dollars. This year, if they ask, we will provide Golden Dollars and the demand has still, as far as our net payments, gone down dramatically since the initial introduction.

Mr. BENFIELD. There is kind of a running joke among some coin insiders on how to deal with the Susan B. Anthony and one of them is to just simply announce that you are going to melt them

down, melt down what is already readily identifiable, put out a press release and say, let us destroy all those Susan B. Anthonys, and let the public go hoard them as collectibles, and they will probably do half the job for us.

Senator DORGAN. Mr. Benfield, we will consider that.

Here is what I would like to do. A vote has just begun in the Senate and I will have to go vote at some point here.

First of all, I would like to have the Mint provide for me a report, if you would within the next 30 days or so, prior to our work on our appropriations bill in which we will consider appropriations for the Mint, I would like you to provide for me a report on the future strategy with respect to the Sacagawea Golden Dollar coin. What is your marketing strategy, promotional strategy, how will you work with the various entities in our country to find a way to make this dollar more widely accepted and used? If you would submit that to me within 30 days, that would be very helpful, and we will be able to consider that.

I would also like, if I could from the Federal Reserve Board, to get a report with respect to your coinage inventory, the kind of orders you are getting from banks, and how you are satisfying those orders and whether there is an issue of commingling. You heard Mr. Benfield say, and I have in my notes, as well, anecdotal evidence from people who say, "I have to order a lot of dollar coins in order to get the sufficient stock of Sacagawea Golden Dollars that I need because I get intermingled coins with Susan B. Anthony and Sacagawea Golden Dollar coins."

Well, that is not a way of satisfying the demand, and I think in order for this coin to be successful—and I want it to be successful—we are going to have to make it easy for people to get them, easy for business, easy for banks. Then I firmly believe that once this coin is in wide circulation, people will enjoy the opportunity to handle them and use them. It, as Mr. Benfield says, can replace four quarters and can be used in vending machines. We do need some support and some work in those areas, as well, including, as I understand it, the Washington, D.C. subway system, and even some Federal agencies, which I am going to work on as a result of this hearing.

Amy Mossett, you have heard all of this. What is your impression of what you have heard this morning?

Ms. MOSSETT. I think it is hopeful that the Sacagawea dollar will continue to be in circulation and I think, in listening to everything here, it is apparent to me that there are things that can be done to put this dollar into circulation. Back in Newtown, North Dakota, with our Tribal Business Council, we are presenting a resolution asking the tribe to encourage all of our tribal businesses to use the dollar coin. I was surprised to find out, for example, that our casino does not use the dollar coin. But I think the issue of the ease of obtaining the coin is a main concern, and if it is made easier for retailers and businesses to obtain the coin, then I think we will see more in circulation.

I think one of the things as far as the public holding on to the dollar coin, there certainly has to be a reason for that, and it is probably because they do not know what the future of the dollar

coin is and so they are hanging onto the coins that they do get instead of spending them.

Senator DORGAN. Thank you.

Let me ask one additional question. The 500-plus million coins that are not now in circulation, part of those coins are coins intermingled with Susan B. Anthonys. Part of them are at the Fed in bags with only Sacagawea Golden Dollars in the bags. And then part of them are still at the Mint, is that right? What quantities——

Ms. FORE. Correct, and ours are only Golden Dollars.

Senator DORGAN. What quantities remain at the Mint?

Ms. FORE. About 300 million.

Senator DORGAN. All right. And as a result of that, you have decreased production to roughly 12 million coins?

Ms. FORE. That is right.

Senator DORGAN. And that is not an "I give up" strategy?

Ms. FORE. That is not a——

Senator DORGAN. An "I give up" strategy?

Ms. FORE. Oh, absolutely not.

Senator DORGAN. In light of that, then, if you will provide me with the report so that we can evaluate where do we go from here. I want all of us to think through this.

This coin was developed with great fanfare at substantial cost and with great hope. My own view, despite Mr. Benfield's irrepressible optimism, my own view is that it has failed at this point and I want it to succeed. I believe you all do, as well.

So what I hope will come from this hearing is a kind of a wake-up call to all of us to say this coin exists. We want this coin to be part of our coinage in this country and widely circulated and widely used. I especially want it to become a significant part of our coinage and circulation leading up to the bicentennial of the wonderful Lewis and Clark expedition and I hope this hearing can be a catalyst to rivet all of the attention that needs to be paid to this issue.

I want to insert in the record a statement from Senator Campbell, who was unable to be with us this morning.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BEN NIGHTHORSE CAMPBELL

Thank you Chairman Dorgan. Good morning, I too would like to welcome our witnesses here today.

Today we will hear from all parties involved in the circulation of the Sacajawea $1 coin.

Historically, we haven't had much success with the dollar coins, the Susan B. Anthony or the 1969 Eisenhower dollar. Collecting a coin is one thing, spending it every day is another. When the Sacajawea coin was released in 2000, the common expression was that "everybody wants one, but nobody wants two."

According to the March 29, 2002 Mint report to Congress, the Mint spent $62.3 million to promote the dollar coin and that amount was just to persuade Wal-Mart, Coin Star, SFX entertainment, International House of Pancakes and others to use the dollar coin in their establishments or facilities.

I would presume that a great deal of this amount was for awareness. What we are looking for now is not awareness, but answers on how to get the coin to co-circulate with the $1 note and to determine what percentage of the circulating market will determine if the coin is successful.

I look forward to your testimonies to address these issues and possibly some type of resolution to the problems.

Thank you.

[CLERK'S NOTE.—We have received a written statement that will be included in the record.]

PREPARED STATEMENT OF THE INTERNATIONAL CARWASH ASSOCIATION

The International Carwash Association and the Car Wash Industry

Founded close to 50 years ago, the International Carwash Association (ICA) represents over 3,000 members who own and operate over 18,000 car wash facilities and detail shops across the country and around the world. Over 90 percent of ICA member car wash facilities are family-owned and operated small businesses. ICA also represents over 400 suppliers, manufacturers, and distributors to the car care industry.

The International Carwash Association serves as the official voice of the car wash industry, providing marketing, market research, public relations, and advertising support programs, car wash safety training programs, and special bulletins for its members. ICA also serves as the industry liaison with automobile manufacturers, publishes a monthly newsletter and provides access to an annual Membership Directory & Buyer's Guide, as well as coordinating the ICA Annual Convention & Exposition and management seminars held throughout the world.

As a Nation of over 135 million cars, the American car care industry has expanded into a multi-billion dollar annual industry. In the United States, the car care industry employs an estimated 500,000 people. There are an estimated 75,000 car wash operations in the United States; of these, 30,000 are coin-operated, self-service facilities. One community car wash can serve more than 100,000 customers each year.

The Dollar Coin and Customer Service at Car Wash Facilities

The car care industry has been an ardent supporter of the new Golden Dollar coin since its inception. Of the various segments of the professional car care industry, the coin-operated, self-service car washes and in-bay automatic car washes, have the ability to automatically receive and dispense the new Golden Dollar coin.

The car care industry was quick to support the introduction of a new dollar coin because of its distinctive look. The golden appearance of the new dollar coin makes it easily distinguishable from the quarter. That single factor alone was responsible for car wash operators to begin retrofitting their facilities to accept the Golden Dollar. Previously the Susan B. Anthony (SBA) coin had not been used in our industry because it was easily confused with the quarter. The car washes most readily suited to the dollar coin are those that do not employ customer service attendants. As a result, car wash operators were concerned, and this concern has since been borne out, that the confusion between the SBA and the quarter would create customer dissatisfaction. This is made more problematic when the customer interaction is limited to coin-dispensing equipment, with no opportunity for operators or attendants to help the customer distinguish the SBA from the quarter. Complaints to our customer service telephone lines and vandalism to our coin changing equipment provide clear evidence of the problem with the SBA.

The migration from accepting a single coin (the quarter) to accepting multiple denominations of coins is both time-consuming and expensive. The equipment required to accept multiple coin denominations requires a significant investment to purchase and install. Petty cash reserves must be more than quadrupled. Nonetheless, the coin-operated car washes began this conversion process based upon the Mint's marketing campaign for the new Golden Dollar coin and a belief that we would not be faced with the unpleasant customer service issues created by the SBA.

he Need for an Uncontaminated and Bulk Supply of Golden Dollars

The conversion process at car wash facilities was progressing with strong commitment until the concern with the SBA turned into a reality. Orders for the Golden Dollar became contaminated with inclusion of the SBA and immediately our customers became angry because they believed they were being "shortchanged" by our change machines. It appears that the Mint was successful in educating the public to believe that the dollar coin was golden in color, not silver, but the Mint has failed to ensure the availability of Golden Dollars, free of SBA contamination. It has also failed to support the needs of businesses relying on the dollar coin for commerce.

Today, faced with contaminated Golden Dollar orders, car wash operators across the country have stopped their conversion process. These, as well as other coin-operated businesses that order and dispense the dollar coin as an essential component to their business models, can not be expected to make additional investments in conversions until the Mint gives a clear signal that the new Golden Dollar will be the

only dollar coin received when Golden Dollar-only orders are placed at our financial institutions. For those of us relying on coin-operated equipment to provide our business services, this decision is not an easy one. Do we abandon the financial commitment we have made to the Golden Dollar's acceptance and return to dispensing and accepting only quarters at our self-service facilities? How do we respond to the dissatisfaction expressed by our customers who have accepted the Golden Dollar and have been enjoying the ability to use a single coin to purchase services, but who will have to return to using four coins for the same services? Certainly an unacceptable option, one contrary to best business practices, would be to dispense random combinations of SBA and Golden Dollar coins, accepting customer dissatisfaction and their confusion between the SBA and the quarter.

The contaminated supply of Golden Dollar coins is causing more than just customer relations nightmares for our service sector. When an operator receives dollar coins from a local bank, they are received from the armored carrier wrapped in rolls, not loose in bulk. These business people are primarily owner/operator small businesses whose time is already at a premium. Under the current delivery system, they must take the time to unwrap the coin rolls, manually separate the SBA coins (because the SBA has the same diameter as the Golden Dollar, automated sorting equipment will not work), and make another trip to the bank to buy more Golden Dollar coins to meet their petty cash requirements. This process is repeated as much as four to five times before, for example, 2,000 Golden Dollars are secured from an initial $2,000 purchase. It is not at all unusual for 50 percent, or as much as 85 percent, of the coinage to be the SBA. A car wash operator may purchase, and manually process, as many as 5,000 dollar coins just to get 1,000 Golden Dollars. And this process is repeated every week to meet our petty cash demands.

One car wash operator in Denver planning conversions at 14 car wash facilities has stopped after completing 9 conversions. If the inconvenience and burden on a small business resulting from SBA-commingling with Golden Dollar deliveries were not enough, calls on his customer service line have certainly discouraged him from making conversions at the remainder of his locations.

A survey of nine operators who have converted 24 coin-operated, self-service car washes to accept the new Golden Dollar indicates that 35,000 Golden Dollars are put into circulation each week! These are not the Golden Dollars dispensed, some of which are used at the car wash facility; these are the Golden Dollars leaving our facilities and being used elsewhere in our local economies. That amounts to 1,820,000 Golden Dollars being placed into circulation each year by 9 small businesses alone. Based on the Mint's estimate of a profit of $0.82 per Golden Dollar sold, that represents revenues to the national treasury of $1,492,000. Imagine for a moment that the more than 30,000 coin-operated, self-service car washes, with reliable sources of the Golden Dollar, would convert to the new Golden Dollar. One segment of the car wash industry could circulate 2,275,000,000 Golden Dollars each year! That's one segment of one industry! That represents the potential of $1.8 billion in revenues to the national treasury.

A Commitment to the Golden Dollar with a Golden Dollar-Only Policy

Car wash operators are surely not alone in their struggle with the barriers to conversion created by the contaminated supply of the Golden Dollar. The customer dissatisfaction and business costs related to the current dollar coin delivery system are both unnecessary and easily solved. To help the coin-operated, self-service business sector help make the Golden Dollar a real success, the Mint must respond to the contamination issue and the needs of those businesses that both rely on the dollar coin and are in the best position to enhance its circulation. The Mint's efforts to promote the Golden Dollar must now become more attentive to the practical, business needs of the coin-operated, self-service sector of our economy that relies on Golden Dollar-only dispensing.

Orders for dollar coins placed at local financial institutions must be delivered without contamination by the SBA and in bulk format. To further avoid confusion in the general public, the SBA should be taken out of circulation for purposes of commerce. The SBA should become the collector's item, not the Golden Dollar. To this end, the SBA should not be delivered by the Federal Reserve to local financial institutions.

Golden Dollar-only deliveries, in bulk, based on Golden Dollar-only requests at local financial institutions where small businesses bank, will result in the use of the Golden Dollar not only at our car wash facilities and other coin-operated, self-service facilities, but also at retail businesses throughout our communities. As part of one industry sector with great potential to help place the Golden Dollar into circulation and promote public use and acceptance, car wash operators will do their part, but

reliable, business-friendly sources of Golden Dollars will be essential to our success and the success of the dollar coin.

ADDITIONAL COMMITTEE QUESTIONS

Senator DORGAN. I want to thank all of you for being here. Amy Mossett, thank you not just for coming today but for keeping the spirit of Sacagawea alive as you travel around the country. Director Fore and Mr. Pickens, thank you. Ms. Roseman, thank you for representing the Federal Reserve Board. And Mr. Benfield, thank you for being an optimist.

[The following questions were not asked at the hearing, but were submitted to the Agencies for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HENRIETTA HOLSMAN FORE

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

Question. During the recent hearing before the Senate Appropriations Subcommittee on Treasury and General Government, the United States Mint Director testified that the United States Mint and the Federal Reserve are working together to increase the circulation of the Golden Dollar by defining options and resolving issues in several key areas that are barriers to increasing circulation. These key areas and related matters are discussed in more detail in the United States Mint's responses to the following Questions for the Record.

After receiving Congressional approval, the United States Mint proposes to focus on eliminating four of the five barriers to increasing the circulation of the Golden Dollar during the next 18–24 months. We will work with our partners, the Federal Reserve Banks, armored carriers, financial institutions, and commercial users to ensure that businesses can obtain Golden Dollars.

As we proceed, we are mindful of the recommendation by the House Appropriations Subcommittee on Treasury, Postal Service, and General Government that the United States Mint make all applicable modifications and improvements to its Golden Dollar marketing plan based on the results of the current General Accounting Office (GAO) studies and on all other pertinent economic and policy factors prior to the plan's implementation.

Why were these obstacles not considered and addressed before the initial launch of the Golden Dollar?

Answer. Many of the obstacles were considered and discussed at the Financial Institutions Advisory Council (FIAC). The United States Mint and Federal Reserve formed FIAC as a forum for financial trade associations concerning the Golden Dollar. Members included the American Bankers Association, America's Community Bankers, Independent Community Bankers of America, and the National Association of Federal Credit Unions. The Federal Reserve's Cash/Fiscal Product Office was also represented. Although this group identified some issues, plans were not made to address them all.

While the FIAC considered the issues associated with wrapping and ordering options, its efforts did not go far enough to totally eliminate these obstacles. The three remaining barriers (commingling, extra fees and co-circulation) were not considered or specifically identified as barriers limiting circulation. We now believe that the following barriers may contribute to limited circulation of the Golden Dollar:

—*Commingling.*—The Federal Reserve Banks and armored carriers currently receive commingled Golden Dollars and Susan B. Anthony dollars from depository institutions. Retailers reject using the Susan B. Anthony dollars because they too closely resemble the quarter. They are reluctant, therefore, to order dollar coins if they cannot be guaranteed Golden Dollars. Transit authorities and the Postal Service however, have accepted commingled dollar coins. We did not anticipate commingling as being a problem because the FIAC believed that collectors would have pulled the Susan B. Anthony dollars from circulation once they knew that the coin was no longer in production.

—*Bags versus rolls (Wrapping capacity).*—Different industries want the coins packaged in formats that satisfy their business needs. Retail commerce will usually request wrapped coins. Armored carriers told us that they were reluctant to invest in modern, high-speed rolling equipment without assurance of a return on their investment. We could not guarantee sustained levels of circulation for the coin in every geographic region. Therefore, the armored carriers con-

tinued to use older technology to wrap the dollar coin. To meet the initial peak demand when the United States Mint first introduced the Golden Dollar, it contracted with a private vendor to supplement the rolling capacity of the armored carriers. Given current circulation of the dollar coin, the armored carriers can meet demand with existing equipment.

—*Extra fees.*—Financial institutions and retailers are charged fees by carriers for wrapping and transporting coin. We expected that this barrier would not present a problem because it is the industry practice to pay wrapping fees for coin. However, our research and advisory groups did not anticipate that the market would simply decline to pay this fee because they had an enormously powerful alternative in the one-dollar currency note.

—*Ordering options.*—Some commercial banks' cash ordering systems do not provide for the specification of dollar coins versus dollar bills and, by default, bills are generally ordered. Between the United States Mint and the Federal Reserve System, we were unaware of the deficiencies in some of the cash ordering systems when we launched the coin.

—*Co-Circulation with Dollar Bill.*—Historically, research consistently indicates that a dollar coin would have limited success when co-circulated with the dollar bill in the majority of market segments. Because the Treasury Department is committed to supporting both the dollar note and coin, the United States Mint and the Federal Reserve System will work under this longstanding policy to find ways to increase the Golden Dollar's sustained use in commerce.

Question. Does the United States Mint have adequate resources and staff to direct a marketing effort to increase circulation of the Golden Dollar?

Answer. The United States Mint will assess any additional resource requirements based on the approved marketing plan submitted for Congressional approval. However, as advised by Chairman Istook in his May 20, 2002, letter, the United States Mint is waiting to review the GAO study on the Golden Dollar that is scheduled to be completed in late summer. Upon receipt, the United States Mint will review, and if appropriate, revise its marketing plans for fiscal year 2003 to consider GAO's recommendations and all other pertinent economic and policy factors before resubmitting them to Congress.

Question. What would be the pros and cons to contracting this effort to a private firm that specializes in marketing?

Answer. The biggest benefit to be derived from contracting this effort to a private firm is the opportunity to draw upon the expertise of a company with extensive experience in the field of marketing. Of course, there is an expense associated with hiring this expertise from the private sector.

Question. During the initial launch of the Golden Dollar, Wal-Mart was a major participant. That partnership resulted in the distribution of 94.3 million Golden Dollars. What is their role today? What has changed and why?

Answer. Once the original agreement was fulfilled, Wal-Mart did not express any interest in continuing to drive the use the new dollar coin in its operations. Specifically, given the difficulty in obtaining the coin from local financial institutions, Wal-Mart felt that there was insufficient customer demand to warrant the continued use of the coin in its daily commerce. In addition, the Golden Dollars were being privately shipped to Wal-Mart, outside of normal distribution channels, during the promotion period. This process was too costly and too cumbersome to be sustained in normal business. It is more expensive for Wal-Mart to use Golden Dollar coins than dollar notes due to shipping expenses and extra wrapping fees charged by carriers.

Question. What were the goals of the initial marketing campaign? How were they met? What are the goals of the new marketing campaign?

Answer. In 2000, the United States Mint created and executed a marketing campaign for the Golden Dollar Program that had several key objectives:

—Generate positive awareness of the program among consumers.

—Promote long-term acceptance of the coin by the commercial sector and the public.

—Support changes in consumer behavior and stimulate usage of the Golden Dollar in commerce.

This campaign yielded encouraging results for Golden Dollar awareness and acceptance. In July 2000, 6 months after launching the new dollar coin, 91 percent of Americans polled were aware of the Golden Dollar.[1] However only 37 percent said they have actually used the coin to make a purchase.[2]

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[1] Fleishman-Hillard Consumer Awareness, Acceptance and Potential Use Tracking Survey—July 2000.

[2] Coinstar National Currency Poll dated January 8, 2002.

The United States Mint has proposed a 2-year plan that, if approved by Congress, would focus its efforts and investments on eliminating four of the distribution barriers while proactively participating in selected programs to improve circulation of the Golden Dollar coin. We tentatively plan to focus on usage in military, federal, state, and local government agencies, and large urban transportation districts, as well as in selected private sector activities and at retail establishments such as NASCAR events and retail businesses located on the Lewis and Clark expedition route.

Question. Can Public Service Announcements be used to aid the circulation of the Golden Dollar?

Answer. While public service announcements can create and maintain public awareness, studies have shown that they do little to influence or change public behavior. To increase the circulation of Golden Dollars, the United States Mint's marketing campaigns have tried to educate consumers and help change their behavior.

Because the Mint's studies show that public awareness of the Golden Dollar is already high, we do not believe that public service announcements are the most effective use of resources at this time. We will continue to monitor this and reevaluate this decision if events warrant.

Question. What were the needs of the initial promotion partners in terms of packaging (rolled vs. bags), availability, commingling, storage and delivery expenses? How would the United States Mint rate itself in meeting these needs?

Answer. The initial Golden Dollar promotions were in support of the Wal-Mart and the Small Bank Programs. Our partners required the following for their promotional efforts:

—All coins were to be in rolls.
—All coins were readily available to meet the promotional requirements.
—There were no commingling issues during the promotional efforts because Golden Dollars were distributed directly from the United States Mint.
—There were no storage issues because each promotional partner received limited quantities as required for each promotion.
—The United States Mint paid for all distribution and promotional expenses.

We performed well in meeting the needs of our original promotional partners. Because the Mint's efforts are to promote a successful dollar coin that circulates through traditional distribution channels, we do not believe that direct shipment programs are the most effective use of resources at this time. We will continue to monitor this and reevaluate this decision if events warrant.

Question. It is my understanding that the former United States Mint Director went around to all federal agencies requesting their adoption of the Golden Dollar in their service centers and restaurants. All, including the Senate, said no thanks. According to your recently submitted marketing report, encouraging the use of the Golden Dollar through government agencies is one of your ideas for increasing circulation. How will you approach this differently than the past Director?

Answer. The former Director of the United States Mint did visit many federal Government agencies to encourage their use of the Golden Dollar. These meetings did not create sufficient interest in using the coin. As you requested at the hearing, the United States Mint would welcome your support and the help of Congress in requesting that federal agencies and the military use the Golden Dollar.

Question. What can be done to remove the Susan B. Anthony dollar coin from circulation?

Answer. To eliminate commingling of dollar coins the United States Mint would engage in a two-step process. The first step would be to remove Susan B. Anthony dollars from the existing inventories of dollar coins. The second is to take the necessary steps to ensure that inventories are replenished only with Golden Dollars.

Remove Susan B. Anthony dollars from circulation

The technology exists to rapidly sort items by color, density, temperature, heat capacity, optical refractive index, or electromagnetic field intensity. The United States Mint could acquire the necessary sorting capacity to automatically separate the Susan B. Anthony dollars from the Golden Dollars.

If Congress adopts this program, sorting could take place with privately contracted companies, armored carrier coin depots, or non-profit companies. This sorting program is expected to run for 2 years, however, this time frame could be reduced or extended based on the success of the program. The percentage of Susan B. Anthony coins removed from circulation depends on the demand for the dollar coin and the velocity of payments and receipts between the Federal Reserve and the depository institutions. Our current projections indicate that after 2 years, approximately 90 percent of the dollar coins in circulation will be Golden Dollars. The cost

associated with program is being analyzed and will be documented in the United States Mint's Golden Dollar report to Congress.

As Susan B. Anthony coins are removed from the inventories, the United States Mint would replenish dollar coin supplies with Golden Dollars as the Federal Reserve Banks order more coin. Susan B. Anthony coins returned to the United States Mint as "uncurrent coin" would be melted and reworked into other denomination coinage. The United States Mint will buy back the Susan B. Anthony coins from the Federal Reserve Banks at face value. However, as I mentioned in my testimony, we are mindful of the fact that attempts to remove Anthony dollars from circulation could be costly. Demonetizing Anthony dollars could cost in the hundreds of millions of dollars in reverse seigniorage. Just the process of sorting Anthony dollars and storing them could be expensive.

Sorting and melting Susan B. Anthony coins is likely to increase collector demand and therefore increase the likelihood that the public will remove the remaining coins from circulation. This would have the effect of removing additional Susan B. Anthony coins from circulation and further increase the ratio of Golden Dollars coins in commerce.

Issuing only Golden Dollars when dollar coins are ordered from the Federal Reserve or their coin terminals

The long-standing policy of the Federal Reserve is to pay re-circulated coin first before using new coin to fill orders. However, the Federal Reserve Banks and their coin terminals have modified their standard coin distribution policy to support the Golden Dollar program. If Congress approves this plan, the Federal Reserve Banks will be able to continue this practice.

Question. Does the Federal Reserve have the storage capacity to do so?

Answer. According to the Federal Reserve Banks, if Congress approves the commingling plan referenced in the answer to the above question, the Susan B. Anthony coins could be melted and used for other coinage rather than stored in inventory.

Question. What can the Federal Reserve do to ship/distribute more Golden Dollars and fewer Susan B's?

Answer. As discussed in the answers above, sorting and exchanging circulating Susan B. Anthony dollars with Golden Dollars, while maintaining an inventory of strictly Golden Dollars for shipments to financial institutions, would significantly reduce if not eliminate, the commingling problem for those businesses whose banks are serviced by the Federal Reserve. In addition, the Federal Reserve System has temporarily modified its long-standing coin distribution policy and is currently shipping only Golden Dollars when filling orders to financial institutions. As referenced in our prior response, it will be able to continue this practice if Congress approves the plan to eliminate commingling.

Question. I understand that retail businesses, particularly those in self-service, are not able to secure uncontaminated (a mix of Sakakawea and Susan B) supplies of the Golden Dollar. For example, in order to meet a weekly demand of $1,000 to $2,000 in Golden Dollars, one coin operated car wash owner reports having to make on average four trips to his local bank, manually separating out the Susan B. Anthony coin from the roll of dollar coins during each trip. On average, this operator will have to purchase $5,000 in dollar coins to secure $1,000 in Golden Dollars. These same operators report that they have stopped making investments in their conversion of change equipment to accept the dollar coin until the contamination issue is solved. Of course, those operators who have made the commitment and invested in the conversions are incurring significant costs of doing business resulting from the contamination issue.

Answer. As referenced in prior questions, if directed by Congress, we have a plan that would significantly reduce, if not eliminate, the commingling of the Susan B. Anthony dollar with the Golden Dollar. If Congress authorizes this process, bags and rolls of pure Golden Dollars will be more readily available to businesses.

Question. What can the United States Mint do to help secure an uncontaminated supply of Golden Dollars for the self-service sector and coin-operated businesses?

Answer. If directed by Congress, there is a plan to eliminate the commingling of the Susan B. Anthony dollar with the Golden Dollar. If Congress authorizes this process, bags and rolls of pure Golden Dollars will be more readily available to businesses.

Question. Can financial institutions still order uncontaminated supplies of Golden Dollars directly from the United States Mint at the same cost as they pay the Fed?

Answer. No. The United States Mint does not have the infrastructure to efficiently distribute circulating coins directly to financial institutions.

Question. What role can the Fed play in securing an uncontaminated supply of Golden Dollars when it receives an order from a financial institution like a local bank or a small business?

Answer. The plan to significantly reduce, if not eliminate, the commingling of Susan B. Anthony and Golden Dollars, if directed by Congress, will ensure a steady supply of Golden Dollars to those banks serviced by the Federal Reserve. In order for this plan to be successful, the Federal Reserve will need to order Golden Dollars from the United States Mint as demand dictates and distribute only Golden Dollars to its customers.

Question. How can the Fed, working with the custodians who deliver orders to banks for the Golden Dollar, help create a reliable, uncontaminated supply of the Golden Dollar?

Answer. This question has been answered in our responses to questions above.

Question. What more can be done to encourage armored carriers like Brinks to invest in the equipment necessary to roll the Golden Dollar?

Answer. Brinks and other armored carriers will develop and install adequate capacity to process and distribute the Golden Dollar coin if they are assured that the coin will circulate and be ordered consistently by the banks. In other words, the armored carriers have indicated that they will make an investment to increase their dollar coin processing capacity if they believe that they will get adequate business to offset their investment and make a reasonable profit. They currently are reluctant to invest capital in dollar rolling equipment because they do not believe there will be sufficient, sustained business to justify the expenditure. The coin depots have adequate capacity to handle current demand for dollar coins.

Question. The Federal Reserve Bank states that within months, their inventories of Golden Dollars could be depleted. With approximately 250 million Golden Dollars currently in their inventories, how is this likely?

Answer. According to the Federal Reserve Banks, since it has re-instituted its policy of filling all orders for dollar coins with only Golden Dollars, its remaining inventory of non-commingled Golden Dollars is expected to last no more than 2 to 3 months. The United States Mint will manufacture additional Golden Dollars as required to meet the demand of the Federal Reserve Banks.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

Question. Since the Golden Dollar coin is still not circulating to its maximum capacity, what plans and expenditures do you have in mind for the future?

Answer. We will focus our efforts and investments on eliminating four of the distribution barriers while actively participating in selected programs to improve circulation of the Golden Dollar coin. We plan tentatively to focus on usage in military, federal, state, and local government agencies, and large urban transportation districts, as well as for selected private sector sustainable activities and at retail establishments.

Question. The United States Mint spent $62.3 million to promote the Dollar coin, what exactly did we get in return for this vast expenditure?

Answer. The United Sates Mint contracted with three firms to help educate the public about the Golden Dollar and raise awareness of its availability and utility. This effort included:

—*Fleishman-Hillard.*—Spending $4 million during 2000–2001 for the purpose of conducting market research, develop partnerships, and handle advertising campaigns.

—*Fleishman-Hillard.*—Spending $48.8 million during 1999–2001 for the purpose of overseeing public relations and promotional efforts. This included a $40 million advertising buy for the George Washington advertising campaign.

—*Double Eagle.*—Spending $8 million during 1999–2000 for the purpose of developing and implementing a marketing and sales plan.

—*Marketbridge—(formerly Oxford).*—Spending $1.5 million during 1998–2002 for the purpose of conducting early market analysis and market research to determine the effectiveness of our marketing efforts (surveys).

As a result of all the Mint's efforts, and in no small part due to the success of the investments listed above, the Mint has returned over $1 billion to the General Fund from the seigniorage from the Golden Dollar since the inception of the program.

Question. In the past, we haven't had good luck with our Dollar coins, what evidence do you have now that would indicate that the American people would like to have this coin and that they actually plan to use it in their daily business?

Answer. While we understand that the Golden Dollar will never achieve the same velocity as our one-dollar currency note while co-circulating, the coin has potential when being used for transit districts, small purchases, and vending. If we can overcome some of the major barriers preventing general circulation today, then the public may accept the coin in everyday use. The future report from the GAO may shed more light on this question.

QUESTIONS SUBMITTED BY SENATOR JACK REED

Question. Director Fore, some believe that the Sakakawea Dollar coin has not been successful because people prefer to use the dollar bill. Others believe that the coin has not been circulated sufficiently. What steps does the United States Mint believe should be taken to foster greater use of the Sakakawea Dollar coin? Does the United States Mint believe that the paper dollar must be eliminated in order for the dollar coin to succeed?

Answer. In order to foster greater use of the dollar coin, the United States Mint believes that it is necessary to eliminate the barriers and increase circulation in certain key markets as previously noted in our responses.

Historically, research consistently indicates that a dollar coin would have limited success when co-circulated with the dollar bill in the majority of market segments. Because the Treasury Department is committed to supporting both the dollar note and coin, the United States Mint and the Federal Reserve System will work under this longstanding policy to find ways to increase the Golden Dollar's sustained use in commerce.

Question. Director Fore, can you elaborate a bit on what further plans the United States Mint has to promote the dollar coin in the future?

Answer. The United States Mint seeks to eliminate the barriers preventing the coin from being distributed widely. These barriers include the inability of businesses to receive rolls or bags as preferred, the commingling of Golden Dollar and Susan B. Anthony coins, the fees incurred in rolling and transporting coins, the inadequate commercial bank ordering systems which do not differentiate between coin and paper dollars, and the co-circulation of dollar coins and notes.

The United States Mint's plan, if approved by Congress, would focus efforts and investments on eliminating the distribution barriers we can control while proactively participating in selected programs to improve circulation of the Golden Dollar. We tentatively plan to focus on usage in military, federal, state, and local government agencies, and large urban transportation districts, as well as selected private sector retail establishments and events.

Question. Director Fore, what are your thoughts regarding assertions that the Federal Reserve Bank did not adequately distribute the dollar coin at the beginning of the rollout process, and therefore quite possibly contributed to a lack of interest in the coin?

Answer. After the first 6 months, the Federal Reserve Banks were able to fill all orders for Golden Dollars as they were received. The Federal Reserve Banks did everything within their power to meet orders coming in from financial institutions. However, during the first 6 months of the program, demand for the Golden Dollar exceeded supplies coming from the United States Mint. Many Federal Reserve Banks were required to implement an allocation program in order to achieve an equitable distribution of Golden Dollars from their limited inventory.

In addition, the United States Mint's decision to bypass the banking industry and distribute coins directly to Wal-Mart stores may well have contributed to the lack of enthusiasm on the part of the banks to embrace the Golden Dollar.

The United States Mint now is committed to sustainable, long-term, cost effective distribution approaches. Thus, working with the banking industry and the Federal Reserve System is essential to our new approaches.

QUESTIONS SUBMITTED TO LOUISE L. ROSEMAN

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

Question. What can be done to remove the Susan B. Anthony dollar coin from circulation?

Does the Federal Reserve have the storage capacity to do so?

What can the Federal Reserve do to ship/distribute more Golden Dollars and fewer Susan B's?

Answer. The Susan B. Anthony (SBA) dollar coins could be removed from circulation with a program in which the Mint reacquires SBAs that have been placed into

circulation. The premise of such a program is that the public's total demand for dollar coins would increase if unmixed Golden Dollars were available rather than commingled SBAs and Golden Dollars. In general, an evaluation of such a program would need to consider the seigniorage that would be gained from greater circulation of Golden Dollars in relation to the operational and other costs the program would incur. Further, an evaluation would need to consider the potential for savings to society from an overall increase in the use of dollar coins relative to bank notes.

The Federal Reserve's role in coin distribution is generally to hold and distribute coins to meet the needs of the public. The Reserve Banks perform this function by providing coin to depository institutions, which, in turn, meet the needs of their customers. As a result, if a program to remove SBAs from circulation were implemented, the Reserve Banks would no longer have a reason to hold these non-circulating coins in their vaults.[1]

There are several key issues that need to be addressed as part of an evaluation of a program to withdraw SBAs. First, there needs to be an effective technology to sort SBAs from Golden Dollars. Currently the Reserve Banks have no equipment that can mechanically distinguish between these coins. The Federal Reserve understands that the Mint is researching potential technologies that could sort commingled coins. Second, the program will, at a minimum, involve transportation and some storage of SBAs. For example, SBAs would need to be shipped from Reserve Bank facilities back to the Mint to be stored or destroyed.

Third, there are different methods by which the Mint could pay the Federal Reserve for SBAs that it reacquires. One approach would be for the Mint to pay Reserve Banks directly for the SBAs that the Reserve Banks return to it. Under a second approach, which we understand that the Mint is suggesting, the Mint would pay Reserve Banks for SBAs that it acquires by exchanging new Golden Dollars for SBAs. Either approach would address the issue of removing the SBAs from the Reserve Banks' inventories and books once they are no longer used to meet the public's demand for dollar coins. The first approach, however, would enable the Reserve Banks to better manage their coin inventories by allowing them to order Golden Dollars only to the extent necessary to meet demand. An exchange of SBAs for Golden Dollars would not address the very large inventories that have built up in the Reserve Banks, unless demand for the dollar coin were to increase significantly due to the withdrawal of SBAs from circulation. It is not clear the extent to which withdrawal of SBAs from circulation would affect demand for dollar coins.

Neither payment approach would pose a material economic cost to the government. In the first approach, all other things held constant, the Reserve Banks would invest the proceeds they receive from the Mint in government securities. The present value of the earnings stream on these securities would equal the value of payments made by the Mint for the SBAs, and would be returned to the Treasury over time as part of the Federal Reserve's excess earnings. Thus, the earnings on the securities in which the Mint proceeds are invested would offset the reverse seigniorage. In the second alternative, we understand that the Mint would not recognize reverse seigniorage on the SBAs returned to it and would not recognize seigniorage on the Golden Dollars used in the exchange.

Overall, if the Congress authorizes the Mint to undertake and fund a program to withdraw SBAs, the Reserve Banks will cooperate fully. As part of the comprehensive program, the Reserve Banks would resume paying out only Golden Dollars as depository institutions order them.

Question. I understand that retail businesses, particularly those in self-service, are not able to secure uncontaminated (a mix of Sakakawea and Susan B.) supplies of the Golden Dollar. For example, in order to meet a weekly demand of $1,000 to $2,000 in Golden Dollars, one coin operated car wash owner reports having to make on average four trips to his local bank, manually separating out the Susan B. Anthony coin from the roll of dollar coins during each trip. On average, this operator will have to purchase $5,000 in dollar coins to secure $1,000 in Golden Dollars. The same operators report that they have stopped making investments in their conversion of change equipment to accept the dollar coin until the contamination issue is solved. Of course, those operators who have made the commitment and invested in

[1] All circulating coins, regardless of design, are legal tender and satisfy the need for coins used in transactions. The Reserve Banks do not have the storage capacity to hold indefinitely non-circulating coins. As of May 31, 2002, Reserve Banks reported that coins filled 69 percent of dedicated coin storage capacity in their vaults and coin terminals. Demand for coins is seasonal, and Reserve Bank coin inventories are low going into summer months. During the fall and winter of 2001–2002, more than 90 percent of Reserve Bank dedicated coin storage capacity was filled.

the conversions are incurring significant costs of doing business resulting from the contamination issue.

What role can the Fed play in securing an uncontaminated supply of Golden Dollars when it receives an order from a financial institution like a local bank or a small business?

How can the Fed, working with the custodians who deliver orders to banks for the Golden Dollar, help create a reliable, uncontaminated supply of the Golden Dollar?

Answer. As explained in the answer to the first question, Reserve Banks could resume issuing only Golden Dollar coins to depository institutions if the SBAs are sorted and exchanged for new Golden Dollars. While the Reserve Banks provide wholesale cash services directly to depository institutions that account for the large majority of the nation's coin volume, about half of the nation's 20,000 depository institutions obtain their cash through correspondent banks.[2] In addition, coins circulate among depository institutions, retail establishments, and armored carriers for long periods without being handled by a Reserve Bank. Consequently, we would expect some SBAs to continue circulating in commerce even if Reserve Banks sort all SBAs from their deposits.

The Federal Reserve informally surveyed its largest depository institution customers about their customers' demand for dollar coins. The ten survey respondents represent large correspondent banks that provide coins to depository institutions not served by Reserve Banks. All respondents reported that their organizations do not have equipment to sort dollar coin designs, and nine of them would not invest in sorting equipment because it would increase expenses and create operational issues not justified by customer demand. The respondents reported that their largest volume customers that most frequently order dollar coins, such as the transit authorities, vending companies, and U.S. Postal Service, do not prefer one coin design to another; other customers occasionally want only Golden Dollars, but not in quantities sufficient to justify investing in sorting equipment.

Question. What more can be done to encourage armored carriers like Brinks to invest in the equipment necessary to roll the Golden Dollar?

Answer. Reserve Bank customers report that their large-volume users of dollar coins want coins in 2,000-piece bags, while smaller-volume retail customers use rolls of dollar coins. The Federal Reserve understands that most armored carriers have wrapping equipment that can roll all denominations of coin. The Mint reports, however, that armored carriers would need to invest in additional high-speed wrapping equipment if demand for rolled dollar coins significantly increases.

Question. The Federal Reserve states that within months, their inventories of Golden Dollars could be depleted. With approximately 250 million Golden Dollars currently in their inventories, how is this likely?

Answer. The Federal Reserve does not have 250 million Golden Dollars in inventory; rather, Reserve Banks held approximately 203 million in total dollar coins as of May 31, 2002. Based on an April 2002 survey of all Reserve Bank offices, the Federal Reserve estimates that at most 30 percent, or 60 million, of the coins are unmixed Golden Dollars. At current payment rates, Reserve Banks would exhaust their unmixed Golden Dollar inventories in about 3 months. Because Golden Dollar inventories are not evenly distributed across the country, it is likely that some Reserve Bank offices will exhaust supplies before others. Reserve Banks will begin ordering new Golden Dollars again after they have paid out previously-circulated mixed dollar coins and reduced inventories to normal levels.

Question. Will the Federal Reserve commit to aiding in the effort of circulating the Golden Dollar?

Are you prohibited legislatively?

Will you agree to sit down with the U.S. Mint and coordinate efforts?

Answer. The Federal Reserve will continue to coordinate with the U.S. Mint to support circulation of Golden Dollar coins to satisfy our customers' requirements and is not legislatively prohibited from doing so.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

Question. Does the Federal Reserve System have a direct role in the distribution of the Golden Dollar other than providing cash services to the banks, savings and loans, and credit unions?

Answer. The Federal Reserve does not have a direct role in the distribution of Golden Dollars other than providing cash services to depository institutions. Cur-

[2] The Reserve Banks do not provide cash services directly to businesses.

rently about half of the nation's depository institutions, accounting for the large majority of coin volume, deal directly with the Reserve Banks.

Question. Is there more of a problem in the distribution of the Golden Dollar than any of the other coin denominations?

Answer. To support the introduction of the Golden Dollar coin, the Reserve Banks varied their normal distribution policies for the first 2 years after the introduction and paid out only new Golden Dollar coins rather than first paying out previously circulated coin. Consequently, as of the end of May, Reserve Banks held about 203 million dollar coins in inventory, less than 60 million of which were segregated Golden Dollars. This dollar coin inventory is more than six times the Federal Reserve's target inventory of 30 days-payable, or about 20 to 30 million for dollar coins.

Similarly, the Reserve Banks modified their distribution policy to meet public demand for the Fifty State Commemorative Quarters Program. As each new quarter design is issued, the Reserve Banks pay out the new design for a short period—typically two to three weeks. After collector demand is satisfied, however, about 600 million quarters are added to the circulating stock every 10 weeks. These additional coins exceed amounts needed to meet transactional demand. Consequently, Reserve Bank inventories of quarters continue to grow and occupy significant portions of their dedicated coin storage space.

Question. What is the cost associated with transporting coins especially the Golden Dollar to and from the Federal Reserve?

Answer. Depository institutions pay the transportation cost of coin to and from Reserve Banks and the U.S. Mint pays the transportation cost of coin to Reserve Banks. The Federal Reserve, therefore, has no specific information about coin transportation costs.

Question. Has the Federal Reserve considered investing in processing equipment that could separate the Golden Dollar and Susan B. Anthony dollar coins?

Answer. We understand that the Mint is investigating sorting equipment that it would acquire; if the Mint acquired the equipment, the Mint and Federal Reserve would work collaboratively to locate it wherever it would be most cost-effective from a transportation, processing, and storage perspective.

QUESTIONS SUBMITTED TO JAMES C. BENFIELD

QUESTIONS SUBMITTED BY SENATOR BYRON L. DORGAN

Question. Mr. Benfield, you are here today on behalf of approximately 30 trade associations and companies who are strong supporters of the Golden Dollar. What benefits would be gained by these companies if there was wide distribution of the Golden Dollar?

Answer. The savings are unique to each company or industry sector, depending on how change is obtained from banks and how cash receipts are counted processed and deposited at banks.

For example, all $1 bills received in thousands of municipal bus fare boxes must be hand straightened. If $1 coins were received instead, the collective savings to all transit agencies would exceed $100 million annually, according to an analysis by University of Chicago economist George McCandless.

Some municipal parking authorities are converting on-street parking meters to accept $1 coins because $1,000 worth of quarters weighs 50 pounds while $1,000 worth of $1 coins weighs only 17 pounds. The total reduction in number of coins and weight would bring significant savings in processing of revenue while bringing convenience to consumers.

The National Association of Convenience Stores is a member of the Coin Coalition because it advocates the removal of the penny from circulation. Using $1 coins instead of $1 bills in addition to removing pennies from circulation would reduce transaction time at the point-of-purchase.

Two fast food operations in Wisconsin have discovered that standardizing their cash registers in favor of $1 coins speeds transaction. Subway restaurant owner Jim Opitz found that fewer errors were made because $1 coins do not stick together.

Question. Mr. Benfield, in your testimony you suggest that distribution could be improved by specific targeting with a concurrent low cost marketing effort. How did you make that assessment?

Answer. My views are based in part on my work with the Mint's marketing consulting firms, Oxford Associates (now known as MarketBridge), Double Eagle and Fleishman Hillard. Oxford Associates identified the self-service carwash industry as having the largest potential for growth in the use of $1 coins of any market sector.

By that time, I also had previous experience working with a carwash operator in Windsor, Connecticut, who had converted a family-owned operation to use Susan B. Anthony $1 coins.

Working with Double Eagle and the publisher of the Self-Service Carwash News, we prepared a 20-page special edition on "New Money"—$1 Coin and More!" The core of the publication was a 9,500 word article on the new Golden Dollar written and researched by Tom Coutre, a successful operator in the Chicago area. The feature article was complemented by a strong opening letter from Mint Director Philip Diehl, an article on the new $10 and $5 bills, and several full-page advertisements from the leading coin mechanism manufacturers in the carwash industry.

The publisher later told me that reader response from this publication was the strongest of any issue he had ever printed.

The proof of the special edition's success was the conversion by dozens of carwash operators of their retail locations, many of which operate only with $1 coins. Some operators are now placing more than 1 million $1 coins into circulation annually.

The total cost to the Mint for this publication was under $10,000. The cost-benefit to the government was staggeringly positive.

This type of model can be replicated with other industry sectors.

Who should pay for the costs?—The Mint should fund these projects from profits realized from the sale of Golden Dollars into the marketplace.

What can your coalition do to help this endeavor?—Coin Coalition members can help to identify businessmen who currently are using the Golden Dollar in their operations. We also will bring 15 years of experience on this issue to the table to make the Mint's marketing efforts more targeted and effective.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

Questions. Other than eliminating the Golden Dollar [$1 BILL????], do you have suggestions on how to increase the circulation of the Golden Dollar?

Answer. The Mint, working with various trade associations and individual entrepreneurs and governmental entities, should create demonstration projects to test and prove the viability of $1 coin usage in new markets, such as coin Laundromats, public pay phones, cafeterias, vending break rooms, commissaries and post exchanges operated at government and military facilities. Some research already exists ON pilot programs in these sectors. I believe they can be brought to fruition, studied and sold to a broader market for a modest investment by the Mint.

Questions. Since the Golden Dollar has surpassed the Susan B. Anthony by a surmountable amount, what do you consider as success or failure for the Golden Dollar? What do you base your findings on?

Answer. As I testified on May 17, the demand for SBAs during the mid-1990s was about 60 million per year. The demand during 2001 was about 180 million, or triple the 1990's baseline for the SBA. With a sustained marketing plan over the next 5 years, the annual movement of Golden Dollars entering circulation should increase to at least 600 million.

CONCLUSION OF HEARING

Senator DORGAN. This hearing is recessed.

[Whereupon, at 4:27 p.m., Friday, May 17, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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