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Report to the Subcommittee on Treasury and General Government, Committee on Appropriations, U.S. Senate

September 2002

NEW DOLLAR COIN

Marketing Campaign Raised Public Awareness but Not Widespread Use



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New Dollar Coins, 1998-2002

Abbreviations

HDTV high-definition television

NASCAR National Association for Stock Car Auto Racing

TSI The Source International

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United States General Accounting Office Washington, D.C. 20548

September 13, 2002

The Honorable Byron L. Dorgan Chairman The Honorable Ben Nighthorse Campbell Ranking Member Subcommittee on Treasury and General Government Committee on Appropriations United States Senate

If the public uses the dollar coin rather than the dollar note, the government could potentially save up to \$500 million annually, depending on the amount of use. This report responds to your request that we study the United States Mint's (the Mint) marketing program for the new Sacagawea dollar coin, which was required by the United States \$1 Coin Act of 1997.¹

As agreed with your offices, our objectives were to (1) describe the Mint's new dollar coin marketing program costs, the contracts and promotional programs in which the Mint engaged, and the revenues that were generated; (2) assess the barriers the Mint may face in increasing the public's use of the new dollar coin; (3) describe the Mint's future plans to promote the new dollar coin and the extent that these plans address the barriers; and (4) assess the extent that the Mint's 2001 and 2002 reports to Congress on the marketing of the new dollar coin fully and accurately described the marketing programs, the results obtained, and the problems encountered.²

To address our first objective, we obtained and reviewed Mint contracts, progress reports, plans, and other related documents to develop information on the Mint's new dollar coin marketing program costs; the contracts and promotional programs in which the Mint engaged; and the revenues that were generated. To obtain information on and assess the barriers the Mint faces in increasing the public's use of the new dollar coin, we analyzed Mint documents; interviewed officials from the Mint, its

¹31 U.S.C. 5112 and note.

²U.S. Mint, Report to Congress: On the Marketing of the Golden Dollar (Washington, D.C.: Mar. 30, 2001), and Report to Congress: The Golden Dollar, Achievements and Challenges (Washington, D.C.: Mar. 29, 2002).

contractors, and trade associations; and surveyed the Mint's promotional partners, asking them about any problems they encountered during their promotions. We interviewed officials at the Mint, the Federal Reserve Board, and various trade associations and reviewed Mint documents and the 2002 new dollar coin marketing plan to obtain information on the Mint's plans to overcome barriers to increasing commercial use of the new dollar coin. To assess the extent that the Mint's 2001 and 2002 reports to Congress fully and accurately described the marketing of the new dollar coin, results obtained, and problems encountered, we analyzed the reports and compared the information in them with the information we obtained in addressing our other objectives. We also reviewed information on the introduction and circulation of the Susan B. Anthony dollar coin, including hearing transcripts and our previous reports on new dollar coin proposals.³ Appendix I provides further details about our objectives, scope, and methodology.

We requested comments on a draft of this report from the Secretary of the Treasury, the Director of the Mint, and the Chairman of the Board of Governors of the Federal Reserve System. The comments we received are discussed near the end of this letter and reproduced in appendixes III and IV. We did our work in Washington, D.C., between September 2001 and September 2002 in accordance with generally accepted government auditing standards.

Results in Brief

The Mint spent at least \$67.1 million to promote the new dollar coin from 1998 to 2001, including expenditures for a marketing and advertising program; public relations and publicity programs; 23 partnerships with banking, entertainment, retail, grocery, and restaurant chains; and

³U.S. General Accounting Office, New Dollar Coin: Public Prefers Statue of Liberty Over Sacagawea, GAO/GGD-99-24 (Washington, D.C.: Jan. 22, 1999); Coin and Currency Production: Issues for Congressional Consideration, GAO/T-GGD-97-146 (Washington, D.C.: June 26, 1997); A Dollar Coin Could Save Millions, GAO/T-GGD-95-203 (Washington, D.C.: July 13, 1995); 1-Dollar Coin: Reintroduction Could Save Millions If It Replaced the 1-Dollar Note, GAO/T-GGD-95-146 (Washington, D.C.: May 3, 1995); 1-Dollar Coin: Reintroduction Could Save Millions If Properly Managed, GAO/GGD-93-56 (Washington, D.C.: Mar. 11, 1993); A New Dollar Coin Has Budgetary Savings Potential But Questionable Acceptability, GAO/T-GGD-90-50 (Washington, D.C.: June 20, 1990); Limited Public Demand for New Dollar Coin or Elimination of Penny, GAO/T-GGD-90-43 (Washington, D.C.: May 23, 1990); and National Coinage Proposals: Limited Public Demand for New Dollar Coin or Elimination of Pennies, GAO/GGD-90-88 (Washington, D.C.: May 23, 1990).

promotional events with transit agencies. Most of the \$67.1 million was used for a \$40.5 million national advertising campaign featuring an image of George Washington that was designed to build public awareness, generate acceptance, and encourage the new dollar coin's use. The Mint also worked with contractors to stimulate the new dollar coin's use in state and local government operations and used its own staff for marketing activities in federal government facilities, but the Mint did not track the costs for the use of Mint staff. According to the Mint, between January 2000 and December 2001, the new dollar coin had generated approximately \$1.1 billion in revenue and \$968 million in seigniorage.⁴

The Mint faces several barriers in its efforts to increase the public's use of the new dollar coin. The most substantial barrier is the current widespread use of the dollar bill in everyday transactions and public resistance to begin using the dollar coin. As we have reported in the past, until individuals can see that the coin is widely used by others and that the government intends to replace the dollar bill with the dollar coin, they will be unlikely to use the coin in everyday transactions. Increasing use of the coin is especially difficult because retailers will not stock the dollar coin until they see the public using it, the public is unlikely to use the coin until they see retailers stocking it, and banks and armored carriers are reluctant to invest in new equipment to handle the coin until there is wide demand for it. This interdependency of demand, which economists call the "network effect," will be difficult to overcome. Other barriers that hinder wider circulation of the new dollar coin include the following: (1) negative perceptions the public may have of the coin after two failed introductions, (2) lack of public information about the savings to the government from using the new coin, (3) lack of public awareness about the comparative advantages of the dollar coin over the dollar bill, and (4) some people consider the ease of carrying the bill to be more beneficial than the durability of the dollar coin. In addition, firms that promoted the new dollar coin in partnership with the Mint and other commercial users have reported problems with the way that the new dollar coin is distributed, such as (1) the unavailability of the coin at all banks, (2) supplies of new dollar coins that were commingled with the Susan B. Anthony dollar coin, (3) packaging concerns such as coins that are not available in rolls, and (4) higher fees for delivery of new dollar coins compared with dollar notes.

 $^{^4}$ Seigniorage is the difference between the face value of a coin and the coin's cost of production.

The April 2002 Mint marketing plan for the new dollar coin requested \$0.5 to \$1.0 million for the remainder of fiscal year 2002 for researching consumer and distribution barriers and continuing existing promotional efforts, followed by \$10 to \$15 million in fiscal year 2003 for marketing activities to increase use of the new dollar coin. In general, the Mint's marketing plan describes a program that is much smaller in scope than the marketing campaign used to launch the new dollar coin in 2000. The Mint plan addresses some but not all of the barriers to increasing use and recognizes that successfully achieving widespread use of the new dollar coin will be difficult if the dollar bill cocirculates with the new dollar coin. Although the Mint plan identified the key barriers in distribution—such as the unavailability of new dollar coins, commingling, lack of availability of new dollar coins in rolls, and additional fees charged by armored carriers the plan does not specifically outline how those barriers will be dealt with, other than to conduct research. The plan also notes that recent negative media coverage following a Department of the Treasury's Office of Inspector General report recommendation to temporarily suspend the coin's production will be a significant challenge for the Mint's marketing communications and public relations programs, but it does not provide details on how the Mint will counter this negative press.

The Mint's 2001 report to Congress did not fully and accurately describe the costs of the marketing campaign, the results obtained, and problems encountered. The 2002 report gave more details on marketing costs and a fuller description of the problems encountered. However, in the 2002 report, the Mint did not provide a comprehensive analysis of the outcomes and progress in industry sectors in which the Mint promoted the new dollar coin, and the plan did not establish measurable future goals for these sectors.

Overall, although the Mint's marketing program raised awareness of the coin, the new dollar coin is not widely used by the public in everyday transactions. Since the Mint does not have data showing that additional marketing and promotion efforts would have a long-term positive effect on dollar coin use, we are recommending that, aside from honoring its existing promotion agreements and conducting planned research on public acceptance and distribution barriers, the Mint suspend further expenditures for marketing and promoting the new dollar coin until it completes its research and can demonstrate that such expenditures are likely to produce a sustained increase in the coin's use over the long term and/or are necessary to achieve Congress's desire for cocirculation. We are further recommending that the Mint revise its marketing plan to reflect

such an approach and work with Congress to reach agreement on an appropriate funding level. We provided a copy of a draft of this report to the Mint and the Federal Reserve, and they agreed with our recommendations.

Background

The United States \$1 Coin Act of 1997 authorized the new dollar coin to replace the Susan B. Anthony dollar coin, which began production in 1979. Even though the Anthony coin was never widely circulated, it became clear by 1997 that the government's supply of Anthony coins would soon be exhausted. In addition to giving the Mint authority to develop a new dollar coin, the act also specified that the coin be golden in color and have a distinctive edge and tactile and visual features to make it easier to distinguish from the quarter-dollar coin. To ensure that the new dollar coin would be recognized by vending machines and other coin-operated equipment designed for the Anthony dollar coin, the new dollar coin is the same size and has a similar electromagnetic signature⁵ that is similar to the Anthony dollar coin.

The \$1 Coin Act authorized the Secretary of the Treasury, in consultation with Congress, to select the design of the new coin. In May 1998, the Secretary established a Dollar Coin Advisory Committee to consider alternatives and recommend a design concept for the obverse (heads) side of the coin. The final design selected was an artist's rendition of Sacagawea, a Shoshone interpreter who assisted the Lewis and Clark expedition of 1804-06 to the Pacific Ocean.

The act also required the Secretary to create a marketing program to promote the use of the new dollar coin by commercial enterprises; mass transit authorities; and federal, state, and local government agencies. The Mint marketing program had three major components, including research to identify market opportunities, a national public awareness and education program that included a national advertising campaign, and a

⁵Coin mechanisms on vending machines use magnetic impulse to distinguish coin denominations. This magnetic impulse is referred to as the coin's electromagnetic signature. Coin mechanisms in many existing vending and transit machines in the United States were already programmed to accept the Anthony dollar coin. To avoid expensive retrofitting costs and to ensure that the new dollar coin could be readily used in vending and transit systems, the Mint developed an alloy that was a different color than the Anthony dollar coin, but that appeared to be the same as the Anthony coin to vending and transit coin mechanisms. After testing over 20 different alloys, the Mint selected an alloy for the new dollar coin that is 77 percent copper, 12 percent zinc, 7 percent manganese, and 4 percent nickel.

business marketing program that was designed to increase commercial use of the new dollar coin in targeted sectors. According to the Mint, the first shipments of the new dollars were sent to the Federal Reserve on January 18, 2000, and the Federal Reserve sent shipments to financial institutions beginning January 26, 2000. The Mint also shipped new dollar coins directly to Wal-Mart stores to support a large, nationwide promotion of the coin that began on January 30, 2000.⁶

While authorizing the production of a new dollar coin, the \$1 Coin Act also provided that the dollar note should not be removed from circulation on the basis of provisions in the act. In authorizing the circulation of both the dollar note and dollar coin, the act did not establish a goal for the number of new dollar coins or establish a level of dollar coin circulation compared with the dollar note. The act also required the Secretary to conduct a study on the progress of new dollar coin marketing program and submit a report to Congress on the results of the study no later than March 31, 2001. The Mint submitted a March 30, 2001, report to Congress.⁷

In reports accompanying the 2002 Treasury and General Government Appropriations Bill, the Senate and House Committees on Appropriations expressed concern that the Mint's 2001 report to Congress did not adequately describe the nature and extent to which the new dollar coin was being used in commerce. The House report directed the Mint to submit a new report by March 31, 2002. In addition, the Senate report accompanying the 2002 Treasury and General Government Appropriations Bill also expressed concern that it had not received information on the contracts and agreements secured between the Mint and nongovernment entities and public relations firms mentioned in the Mint's March 30, 2001, report. The Mint submitted its second report on March 29, 2002.

A Senate committee report and the Conference Report accompanying the 2002 Treasury and General Government Appropriations Bill further

⁶To meet the demand for dollar coins before the new dollar coin was available in late January 2000, the Mint produced 33 million Anthony dollar coins in fiscal year 1999 and 40 million Anthony coins in fiscal year 2000.

⁷U.S. Mint, On the Marketing of the Golden Dollar.

 $^{^8\}mathrm{H.R.}$ Conf. Rep. No. 107-253 at 55 (2001); S. Rep. No. 107-57 at 31 (2001); H.R. Rep. No. 107-152 at 30 (2001).

⁹U.S. Mint, The Golden Dollar: Achievements and Challenges.

directed the Mint to submit a marketing plan to the Appropriations Committees and stipulated that the plan must be approved by the committees before the Mint could draw additional funds from the Mint Public Enterprise Fund to promote the new dollar coin. The Mint submitted its plan, the "Golden Dollar Coin Marketing Plan for Congress," on April 24, 2002.

In March 2002, coins of all denominations made up 5 percent, or \$32.1 billion, of the \$642 billion in currency and coins that were in circulation. The demand for coins from businesses and the general public fluctuates, and the Mint and the Federal Reserve monitor several factors, such as economic growth, coin collection activity, and Reserve Bank coin inventories, to determine the number of coins that will be produced and shipped to the Federal Reserve. The Mint receives orders for coins from Federal Reserve Banks on a monthly basis and normally ships coins directly to Reserve Bank offices. The Federal Reserve provides coins to over 11,000 of the 20,000 U.S. depository institutions, such as banks, savings and loans, and credit unions. Smaller banks that do not order their cash and coins directly from the Federal Reserve obtain cash services through many of the larger banks. In addition to Federal Reserve offices, Reserve Banks use over 100 coin terminals generally operated by armored carriers to store and distribute coins. Besides functioning as Federal Reserve coin terminal operators, the armored carriers wrap and deliver coins for a fee to banks and retail customers to meet public demand. Reserve Banks normally fill coin orders from banks by first paying out previously circulated coin until this inventory is depleted and then by using new coin inventories to meet demand.

To support the introduction and promotion of the new dollar coin, the Federal Reserve departed from its normal policy and held all previously circulated Anthony dollar coins received by Reserve Banks and filled orders only with new dollar coins. However, in January 2002, Reserve Banks returned to their normal practice of filling orders with previously circulated coins. Nevertheless, Reserve Banks will continue filling requests for new dollar coins until their inventories of new dollar coins are depleted. On the basis of the public demand for the dollar coin, the Federal Reserve estimated that, at the end of April 2002, it had over a 1-year supply of dollar coins. Since the older Anthony and new dollar coin have a similar electronic signature and neither the Reserve Banks nor armored carriers have equipment to separate them, the supply of circulated coins consists largely of commingled Anthony and new dollar coins. The Federal Reserve estimated that, as of April 2002, 70 percent of the dollar coin inventory is

commingled Anthony and new dollar coins and about 30 percent is new dollar coins. In its response to a March 2002 Treasury Office of Inspector General report, the Mint said it would temporarily suspend production of the new dollar coin on March 31, 2002, and reevaluate the need for producing coins for general circulation in the first quarter of fiscal year 2003. ¹⁰

In our May 1990 report on proposals to introduce a new dollar coin in the United States, we noted that the government did not successfully manage the introduction of the Anthony dollar coin because the dollar note was not simultaneously eliminated, the coin too closely resembled the quarter, and the coin was not effectively promoted. We identified several key ingredients for a successful conversion, including a reasonable transition period, a well-designed dollar coin, a public awareness campaign, support from the administration and Congress, and withdrawal of the dollar note from circulation. We estimated in April 2000 that replacing the dollar note with a coin would save the government an average of \$500 million a year, because coins last much longer than currency and there are lower government costs to distribute coins than currency. 12

The new dollar coin is profitable on a per unit basis. While it costs the Mint about \$0.12 to produce the coin, the government receives \$1.00 of spending power for each coin, thereby leaving a margin of \$0.88 per coin.

¹⁰U.S. Department of the Treasury, Office of Inspector General, *The Mint Suspends Its FY 2002 Planned Production of Golden Dollar Coins*, OIG-022-066 (Washington, D.C.: Mar. 19, 2002). In a third quarter fiscal year 2002 report to congress on operations, the Mint noted that, because supplies of new dollar coins were sufficient to meet general circulation demand, it had temporarily suspended production as of May 2002, and that production would resume as warranted by future circulating demand. As of August 2002, the Mint had produced 7 million 2002-dated new dollar coins to meet coin collection demand from the public and no 2002-dated coins for general circulation.

¹¹GAO/GGD-90-88.

¹²U.S. General Accounting Office, *Financial Impact of Issuing the New \$1 Coin*, GAO/GGD-00-111R (Washington, D.C.: Apr. 7, 2000).

New Dollar Coin Marketing Program Cost \$67.1 Million and Generated \$968 Million in Seigniorage, but the Coin Is Not Widely Circulated The Mint spent at least \$67.1 million to promote the new dollar coin from 1998 to 2001, including \$62.3 million for four contracts involved with creating the marketing program and advertisements. Of the remaining \$4.8 million, the Mint spent \$0.4 million to conduct public relations events and programs to publicize the new dollar coin's launch that distributed 1,251,000 coins; \$4.4 million for 23 promotion partnerships with banking, entertainment, retail, grocery, and restaurant chains that distributed an estimated 132 million dollar coins; and \$36,000 to conduct promotional events with transit systems that distributed 36,000 coins. Most of the \$62.3 million in contracts for creating the marketing program and advertisements was used for a \$40.5 million national advertising campaign featuring George Washington that was designed to build public awareness, generate acceptance, and encourage the new dollar coin's use. The Mint also worked with contractors to stimulate the new dollar coin's use in state and local government operations and used its own staff for marketing activities in federal government facilities. However, the Mint did not track the costs for the use of Mint staff for these efforts.

Though initial public awareness generated by the advertising was strong, the new dollar coin, like the Anthony dollar coin, has failed to achieve widespread use. Federal Reserve data show a net payout ¹³ of 558 million new dollar coins in 2000, the year the dollar coin was introduced. But, in 2001, demand and public interest in collecting the new dollar coin dropped, and the net payout decreased by 65 percent to 194 million coins and remained at lower levels in the first half of 2002. In May 2002, the Federal Reserve estimated an annualized figure of \$120 million in new dollar coin net payout for 2002. The Mint has estimated that people use the dollar coin in 4 percent of dollar transactions, but Mint data from July 2001 show it to be about 1 percent.

¹³Net payout is the difference between the number of circulating coins paid out to depository institutions and number of circulating coins returned from depository institutions.

Marketing Contractors Conducted Key Components of the New Dollar Coin Marketing Program To create and execute the new dollar coin marketing program, the Mint contracted with outside firms for the three major components of the program: research, business marketing, and a public awareness campaign. The research component, designed to help identify target markets for the new dollar coin before its January 2000 launch, was conducted under a \$1.5 million contract with Marketbridge, a marketing services company. To provide the Mint with the necessary market research data, Marketbridge first analyzed existing Anthony dollar coin use in various industry sectors. Marketbridge also analyzed each industry for potential new dollar coin use by looking at several factors, such as the size of the industry, the average transaction size, and the current coin equipment capability in that industry. Using this market analysis, Marketbridge determined that certain industry sectors, such as food and drink vending, postal machines, transit systems, and car washes, had the highest potential for new dollar coin use. Table 1 provides information on the Mint's marketing program contractors.

Table 1: Marketing Program Contractors as of December 2001

Contractor	Contract period	Services provided	Amount of contract
Marketbridge (formerly named Oxford)	12/02/98-12/31/02	Market research: Identified and prioritized commercial markets with a high potential for new dollar coin use Conducted ongoing research to determine the effectiveness of the new dollar coin business marketing effort	\$1,500,000
Double Eagle ^a	4/02/99-6/30/00	Business marketing: Conducted outreach to vending, transit, and other targeted industry sectors Placed articles and ads in trade journals and attended industry conferences	8,000,000
Fleishman Hillard	5/17/99-6/30/01	Public awareness/education campaign: • Managed national advertising campaign (\$40,507,771) • Conducted public relations and research (\$8,252,825)	48,760,596
Fleishman Hillard	10/01/00-9/30/01	Business marketing: • Conducted outreach in targeted sectors (retail, restaurant, grocery, transit, vending, entertainment, and banking)	4,000,000
Total			\$62,260,596

^aThe Mint determined it was not satisfied and terminated the Double Eagle contract in June 2000. Source: U.S. Mint.

The Mint contracted with Double Eagle in April 1999 to perform business marketing activities that concentrated on outreach to businesses in certain

industry sectors to increase the commercial use of the coin. Double Eagle focused its marketing efforts on businesses with a high potential for using the coin. To persuade these businesses, such as food and drink vending, transit, postal, car wash, and retail industries, to use the new dollar coin, Double Eagle conducted various business marketing activities, including personal sales visits and telephone calls to decision-makers, and attended conventions and meetings. The Double Eagle contract totaled \$8 million. In June 2000, the Mint determined that it was not satisfied with Double Eagle's progress and terminated the contract. In October 2000, the Mint contracted with Fleishman Hillard for \$4 million, to take over the responsibilities for business marketing.

The Mint also secured the services of the Fleishman Hillard communications firm in May 1999 to create and implement the public awareness and education campaign. Fleishman Hillard first conducted public opinion polls and focus groups before the new dollar coin's launch in January 2000 to assess consumer attitudes and create and test the advertising campaign. In tests of potential advertising campaigns, focus group participants generally preferred the "Golden Dollar" to the Sacagawea or Millennium dollar coin. To budget ad dollars and to reach those more likely to use coin-operated technology, such as vending machines and public transit, the Mint established the primary target audience as 18- to 49-year-old adults who live in urban and suburban areas.

The \$40.5 million paid advertising campaign that was developed to communicate to this target audience included 11 weeks of ads on television nationwide and print, radio, transit, and Internet ads. The paid advertising campaign, which began in March 2000, accounted for approximately two-thirds of the contracted new dollar coin marketing program expenditures between 1998 and 2002. The media plan for the advertising campaign featuring an image of George Washington was designed to build positive awareness, generate acceptance, and encourage the coin's use. The television ads reached an estimated 92 percent of the target audience an average of 15 times.

The ad featured the image of George Washington from the dollar bill; however, the Mint reported that, according to Treasury officials, it could not point directly to the advantages of the dollar coin over the dollar bill in its television advertising campaign. One television ad proposal, for example, had a scene showing a dollar bill being rejected from a vending machine. According to Mint officials, that part of the ad was not approved and was never aired because some Treasury officials thought that it

negatively portrayed the dollar bill. Current Mint officials said that a former Mint Director participated in the meeting in which the ad was discussed, and that they do not know which Treasury officials were at the meeting. Current Mint officials also said the policy to avoid direct comparisons of the dollar coin to the dollar bill was not a formal written policy. According to a current Treasury official, the \$1 Coin Act authorizing the new dollar coin called for both the dollar coin and the dollar note to cocirculate and Treasury interprets that to mean that it should not favor the coin or the note. The Treasury official said that the Mint and the Bureau of Engraving and Printing are sister agencies that can create public awareness campaigns for new coins and notes without directly comparing the advantages and disadvantages of each.

As part of the marketing program, the Mint and Fleishman Hillard also developed a public relations campaign to support the new dollar coin's launch, which included a float in the Macy's Day Parade in November 1999. The new dollar coin was also featured in promotions with Coinstar, a company that operates supermarket-based coin-counting machines; the Wheel of Fortune game show; and General Mills's Cheerios. These promotions resulted in the distribution of 1,251,000 coins and cost \$413,500, according to Mint data.

The Mint also formed a retail partnership with Wal-Mart to distribute the dollar coin as change at its 2,900 Wal-Mart and Sam's Club stores throughout the United States beginning in January 2000. In addition to the Wal-Mart agreement, between 2000 and 2001, the Mint created a number of promotion partnerships in many of the targeted industry sectors with potential dollar coin circulation. As table 2 indicates, the Mint formed 23 promotion partnerships to stimulate use of the new dollar coin. Most of the estimated 132 million dollar coins distributed during the promotions were to customers in the retail, banking, entertainment, restaurant, and grocery industries.

Table 2: Mint Promotions Distributing New Dollar Coins, Ranked by Number of New Dollar Coins to Be Distributed

Promotion (23 partnerships)	Industry	Number of new dollar coins to be distributed	Mint promotion cost	Number of coins to be distributed for each \$1 in Mint promotion cost
Wal-Mart	Retail	94,000,000	\$2,603,000	36.11
Allfirst Bank	Bank	13,500,000	66,000	204.55
SFX Entertainment	Concerts	10,000,000	480,000	20.83
SFX Entertainment	Concerts	5,000,000	450,000	11.11
IHOP	Restaurant	3,500,000	300,000	11.67
Safeway	Grocery	1,600,000	6,000	266.67
Vitamin World	Retail	1,140,000	100,672	11.32
Wolf Trap	Concerts	1,000,000	100,000	10.00
Paramount King's Dominion	Amusement	510,000	44,880	11.36
Sovereign Bank	Bank	510,000	44,880	11.36
Anaheim Angels	Major league baseball team	490,000	34,300	14.29
Norfolk Tides	Minor league baseball team	300,000	18,000	16.67
New Orleans Zephyrs	Minor league baseball team	265,000	13,250	11.36
Trenton Thunder	Minor league baseball team	177,500	11,000	20.00
Ogden Raptors	Minor league baseball team	57,000	5,016	16.14
Mahoning Valley Scrappers	Minor league baseball team	70,000	5,900	11.36
Erie Sea Wolves	Minor league baseball team	70,000	5,800	11.86
South Bend Silver Hawks	Minor league baseball team	70,000	5,800	12.07
Augusta Greenjackets	Minor league baseball team	64,500	5,676	12.07
Montana Rockies Rail Tours	Travel and tourism	50,000	6,000	11.36
Idaho Falls Padres	Minor league baseball team	38,000	3,344	8.33
Donna Reed Festival	Local community festival	30,000	5,000	6.00
L.A. Dodgers	Major league baseball team	23,000	50,000	0.46
Total		132,465,000	\$4,364,518	30.35

Note: According to the Mint, three of the minor league baseball teams, the New Orleans Zephyrs, the Ogden Raptors, and the Norfolk Tides have promotions for the new dollar coin that extended into the 2002 season.

^aThese data were developed on the basis of the Mint's dollar coin distribution goal from each promotion agreement. Many promotion agreements required the promotion partner to submit reports to the Mint on the number of coins distributed, but the Mint did not keep track of these reports or verify the number of new dollar coins distributed during each promotion.

Source: U.S. Mint.

In general, the Mint said it tried to achieve a ratio of 10 new dollar coins distributed for every dollar in marketing costs. The Mint reported that the promotions, on average, distributed 30 dollar coins for every dollar in marketing cost. However, the actual number of new dollar coins distributed may have been more or less than the number shown, because the Mint did not track the actual number of coins distributed by each promotion partner.

The Mint also marketed to state, local, and federal governments to increase the use of the new dollar coin. For example, the Mint and Fleishman Hillard conducted promotional events to increase the use of the coin in the transit systems in New York, Chicago, Philadelphia, and San Diego. The promotional events included a giveaway of free new dollar coins to transit riders for fare card purchases and radio and newspaper coverage of the promotions. The transit promotions resulted in the distribution of about 36,000 new dollar coins to transit riders. According to the Mint, the transit promotions cost \$36,000 in media and promotional items. In addition, as part of the Mint marketing effort targeting state and local governments, the Mint also worked with bridge and road authorities to increase the use of the new dollar coin in tollbooths and encouraged cities to convert parking meters to accept the coin. The Mint also conducted marketing events using its own staff to stimulate use in the federal government facilities' retail operations, such as cafeterias. For example, the Mint conducted a new dollar coin day's event at the Pentagon during which about 56,000 new dollar coins were distributed, but the Mint did not track the associated costs for the use of Mint staff.

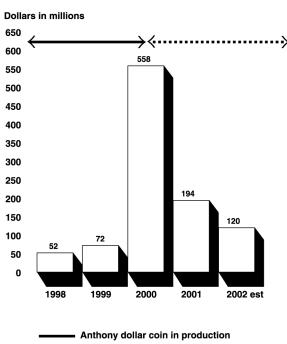
The total cost of the new dollar coin marketing contracts, 23 partnerships, and launch and transit promotions was \$67.1 million, excluding costs associated with using Mint staff.

The Mint's Marketing Program Did Not Result in Wide Circulation

The Mint's new dollar coin marketing program raised public awareness of the new coin but did not produce long-term increases in circulation. Regular surveys conducted by Fleishman Hillard to monitor the impact of the new dollar coin marketing program indicated that the advertising campaign and other marketing activities considerably increased public awareness. According to the surveys, about 27 percent of the public was aware of a new dollar coin in July 1999, shortly after the final dollar coin design was announced. By July 2000, after the national advertising campaign, awareness had increased to 91 percent. A December 2001 poll, which is the latest available public opinion poll on new dollar coin awareness, showed that public awareness of the dollar coin remained relatively high, about 83 percent. ¹⁴

As shown in figure 1, the demand for dollar coins as measured by net payout to banks from the Federal Reserve peaked during the year that the new dollar coin was introduced and has since decreased significantly. Net payout of the Anthony dollar coin from the Federal Reserve was \$72 million in 1999, the year before the new dollar coin's release. However, with the introduction of the new dollar coin in 2000, net payout and demand for dollar coins increased sharply to \$558 million. But, in 2001, demand and public interest in collecting the new dollar coin dropped, and net payout decreased by 65 percent to \$194 million and remained at lower levels in the first half of 2002. In May 2002, the Federal Reserve estimated an annualized figure of \$120 million in new dollar coin net payout for 2002.

¹⁴On the basis of the Coinstar National Currency Poll, December 2001. In survey awareness questions, the Mint asked respondents if they had seen or heard of the new dollar coin, and the Coinstar survey asked if they were familiar with the coin.



New dollar coin in production

Figure 1: Federal Reserve Net Payout of Susan B. Anthony and New Dollar Coins, 1998-2002

Note: To meet demand for dollar coins before the new dollar coin was available in January 2000, the Mint produced 33 million Anthony dollar coins in late 1999 and 40 million Anthony dollar coins in early 2000.

Source: Federal Reserve.

As of January 2002, the Mint said that it had produced 1.4 billion new dollar coins and had about 300 million in inventory. According to the Mint, from January 2000 to December 2001, it released approximately 1.1 billion new dollar coins into circulation that generated approximately \$968 million in seigniorage after subtracting costs. According to the Federal Reserve, it received approximately 980 million and paid out 964 million new dollar coins during this period. ¹⁵ The Federal Reserve held about 248 million

 $^{^{15}}$ During this period, the Mint shipped approximately 980 million new dollar coins to the Federal Reserve system and another 117.7 million directly to non-Federal Reserve locations such as Wal-Mart for a total of 1,097,700,000 new dollar coins (we rounded this figure to 1.1 billion).

dollar coins in inventory as of December 2001. 16 As indicated in table 3, the number of dollar coins shipped to the Federal Reserve peaked with the coin's introduction in 2000 and dropped significantly during the following 2 fiscal years.

Table 3: Number of Dollar Coins that the Mint Shipped to Federal Reserve Banks, Fiscal Years 1998-2000

Numbers in millions							
	Dollar coins shipped, by fiscal year						
	1998	1999	2000	2001	2002 (estimate)	Total 1998-2002	
Susan B. Anthony dollar coin	0.0	33.0	40.0	0.0	0.0	73.0	
New dollar coin	0.0	0.0	979.0	88.5	30.2	1,097.7	
Total	0.0	33.0	1,019.0	88.5	30.2	1,170.7	

Source: Department of the Treasury, Office of Inspector General, *The Mint Suspends Its FY2002 Planned Production of Golden Dollar Coins*, OIG-022-066 (Washington, D.C.: Mar. 19, 2002).

Public Resistance Is the Greatest Barrier to Increased Use of the New Dollar Coin The Mint faces a number of barriers in its efforts to increase public use of the new dollar coin, the most substantial of which is the widespread use of the dollar bill in everyday transactions and public resistance to start using the dollar coin. Encouraging people to switch to using the dollar coin is especially difficult because retailers will not stock the dollar coin until they see the public using it; the public is unlikely to use the coin until they see retailers stocking it; and banks and armored carriers are reluctant to invest in new equipment to handle the coin until there is wide demand for it. This interdependency of demand, which economists call the "network effect," will be difficult to overcome. Other countries, such as Australia, Canada, and Japan and many European countries, have successfully introduced a similar denomination coin but only by phasing out the note of the same value. Other barriers that hinder wider circulation of the new dollar coin by the public include potentially negative public perceptions of a dollar coin after two failed introductions, insufficient public understanding of dollar coin savings to the government and other advantages of the dollar coin's use, and the weight and bulk of the coin. For commercial users, additional

¹⁶Federal Reserve inventories include both Susan B. Anthony and new dollar coins.

barriers limit the coin's use. Among these are commingling with the Anthony dollar coin, the coin's unavailability at some banks, packaging concerns, and higher delivery fees. Problems unique to individual promotion partners also created barriers to the new dollar coin's use.

Public Resistance to Using New Dollar Coin Is the Most Substantial Barrier

Our previous work and the early experience with the new dollar coin have shown that the most substantial barrier is public resistance to switch to using the dollar coin rather than the dollar bill in everyday transactions. To overcome this resistance, the Mint will have to persuade businesses, consumers, and suppliers to change at the same time. Increasing the coin's use is especially difficult because of the network effects previously discussed, which will be difficult, if not impossible, to overcome with the dollar bill in circulation.

Economists have noted that this phenomenon is not limited to dollar bills and coins. For example, researchers noted in a February 1998 Federal Reserve paper that network effects may help explain why the public, despite apparent advantages, was switching so slowly from paper-based forms of payment to electronic forms of payment. Network effects may also help explain the country's slow adoption of high-definition television (HDTV). Until demand reaches a certain level, television stations are reluctant to make the investments in the new equipment that is necessary to transmit HDTV; consumers, in turn, are reluctant to purchase HDTV sets until more stations are transmitting HDTV signals. Similarly, until a sufficient number of new dollar coins are in circulation, retailers and other businesses that handle a lot of coins may not be willing to spend the time and money needed to carry them.

We have reported public resistance to new dollar coins in previous studies. For example, in May 1990, we evaluated the acceptability of the dollar coin to replace the dollar note by reviewing survey data and interviewing the

¹⁷Osterberg and Thomson, Federal Reserve Bank of Cleveland, "Network Externalities: The Catch-22 of Retail Payments Innovations," *Economic Commentary* (Feb. 15, 1998).

¹⁸Mark Wynne, Federal Reserve Bank of Dallas, "The Economics of One Dollar," *Southwest Economy* (July/August 1997); Caskey and Laurent, "The Susan B. Anthony Dollar and the Theory of Coin/Note Substitutions," *Journal of Money Credit and Banking* (August 1994); Lotz and Rocheteau, "On the Launching of a New Currency," *Journal of Money Credit and Banking* (August 2002); and Gupta, Jain, and Sawhney, "Modeling the Evolution of Markets with Indirect Network Externalities: An Application to Digital Television," *Marketing Science* (1999).

public and industry associations.¹⁹ In this study, we found public resistance to a dollar coin in the United States. Nearly all of the general public and private-sector respondents indicated that the dollar note would have to be eliminated for a dollar coin to circulate successfully. These respondents uniformly believed that if a dollar note and dollar coin were both available at the same time, the public would choose to use the note.

For our May 1990 report, we also contacted officials in other industrialized countries and found that most of the countries that had introduced highdenomination coins faced public resistance to the change. Officials in these countries said that a high-denomination coin could not be introduced successfully unless the note of similar value was withdrawn. For example, officials in the United Kingdom said that as long as the equivalent note circulates, the public would resist new coins. Similarly, French officials said the public accepted their new coin only when the note was demonetized. Mint, Bureau of Engraving and Printing, and Treasury officials said, in our 1990 report, that the experience of many of the European countries in successfully replacing a note with a coin of similar value might not be a valid indicator of the prospects the United States would have in mandating a dollar coin. These officials said that because of basic differences in these countries, such as a parliamentary form of government that made it easier to impose unpopular changes on the public, a central banking system with more control over banks, and a smaller scale of coin and currency, it would be much harder for the United States to successfully replace a dollar coin with a dollar note.

More recently, four of the European countries we reviewed in our 1990 report joined eight other European Union countries on January 1, 2002, and introduced 56 billion new euro coins into circulation, which included 1-euro and 2-euro coins and a 5-euro note. (For more information on the euro coins, see table 4.)

In a March 1993 report on the dollar coin, we described Canada's experience in introducing a dollar coin in June 1987. Canada stopped issuing the equivalent dollar note in June 1989. We reported that the public resisted the coin initially, but 3 years after the note was withdrawn, according to public opinion survey data, only 18 percent disapproved of the

¹⁹GAO/GGD-90-88.

²⁰GAO/GGD-93-56.

coin. Similarly, businesses and associations we surveyed in the grocery, transit, and vending industries said that the majority of public resistance lasted from 3 months to 2 years. Officials in Canada said that the decision to withdraw the dollar note from circulation was based on the experiences of other countries, including the United Kingdom and Australia, as well as on the failed introduction of the Anthony dollar coin in the United States.

More recently, we analyzed the use of coins and notes in countries that make up the G-7 (see table 4) and found that the United States is unique in attempting to cocirculate a high-denomination coin and note of the same value. Consumers in Germany, France, and Italy have the choice of 1-euro and 2-euro coins, but there is not a note of equal value to compete with the coins. The lowest value euro note is the 5-euro note. Japan, the United Kingdom, and Canada have succeeded in introducing high-denomination coins by withdrawing the note of similar value.

Table 4: Circulation of Highest Value Coins and Lowest Value Notes in G-7 Countries

Value in U.S. dollars				
G-7 countries	Highest denomination coin circulating	Value	Lowest denomination note circulating	Value
Germany (euro)	2 euro	\$1.98	5 euro	\$4.95
France (euro)	2 euro	1.98	5 euro	4.95
Italy (euro)	2 euro	1.98	5 euro	4.95
Japan	500 yen	4.18	1,000 yen	8.40
United Kingdom	2 pound	3.06	5 pound	7.65
Canada	2 dollar	1.32	5 dollar	3.30
United States	1 dollar	1.00	1 dollar	1.00

Source: GAO analysis of currency conversion rates, June 27, 2002.

Other Barriers Limit the Public's Use of the New Dollar Coin Another barrier to wider circulation is the potential negative public perception of the dollar coin because the government has tried and failed to introduce successfully both the Anthony and the new dollar coin. A March 2002 Treasury Inspector General report recommending that the Mint temporarily suspend production of the coin resulted in additional negative media stories. The Mint said that some of these reports incorrectly concluded that the Mint had ceased to produce all new dollar coins.

Another obstacle is that the Mint, in its advertising, did not fully explain to the public dollar coin savings to the government. A December 2001 survey, the latest available, showed that the public would more strongly favor the dollar coin when the savings were explained. When asked if they would be in favor of replacing the dollar bill with the new dollar coin, 68 percent of the respondents who opposed such a plan said they would favor the replacement if doing so would save the government and taxpayers \$500 million a year.

Another barrier, an informal Treasury restriction on the Mint prohibiting it from comparing the advantages of the dollar coin directly with the dollar bill in consumer advertisements, hindered the Mint in explaining to consumers why they should switch to the dollar coin. One television ad proposal, for example, showed a person at a vending machine reacting to a dollar bill being rejected. According to Mint officials, that part of the ad was not approved and was never aired because some Treasury officials thought that it negatively portrayed the dollar bill. Current Mint officials said that they did not participate in the meeting in which the ad was discussed, and that although the policy to avoid direct comparisons to the dollar bill is not a formal written policy, they believe that the policy is still in effect. According to a current Treasury official, the \$1 Coin Act authorizing the new dollar coin called for both the dollar coin and the dollar note to cocirculate, and Treasury interprets that to mean that it should not favor the coin or the note. A Treasury official said that the Mint and the Bureau of Engraving and Printing are sister agencies that can create public awareness campaigns for new coins and notes without directly comparing the advantages and disadvantages of each.

The Mint faces another barrier in convincing the public that the durability and other benefits of the new dollar coin outweigh the ease of carrying the dollar bill. As we reported in 1990, focus groups recognized the durability of a dollar coin but cited negative aspects of the coin, such as the bulk in transporting the coin. We further noted that consumer associations said the coin would be bulky and would add weight to wallets and pockets. In the last available public survey conducted by the Mint in July 2001, 1-1/2 years after the new dollar coin was introduced, respondents said they were much more likely to use the dollar bill. They also said they were more likely to

²¹Coinstar National Currency Poll, December 2001.

keep or save the dollar coin, show it to friends or family, or give it as a gift than spend it on everyday items. 22

Distribution Problems Limit Use and Hinder the Promotion of the New Dollar Coin

In addition to public resistance, the Mint also faces barriers in distributing the new dollar coin. Promotion partners and other commercial users reported that supplies of new dollar coins are commingled with Anthony dollar coins. This commingling of the Anthony and new dollar coin, which occurred more frequently in 2001 and 2002, adversely affected some promotions that prominently featured the new dollar coin. For example, in 2001, a national restaurant chain changed all of its menus to feature a menu item called the "Golden Dollar" pancake, but, in some cities, the restaurant chain had difficulty obtaining supplies of the coin to support the promotion. In some cases, the banks had a supply of dollar coins, but half of the coins were new golden dollar coins and half were silver-colored Anthony dollar coins. Commingling occurs when Anthony and new dollar coins are used in commerce and later are processed by Federal Reserve Banks and armored carriers. Machines used in the coin distribution system are not able to separate the two coins because they have a similar electromagnetic signature.

Businesses also reported difficulty in obtaining a reliable supply of new dollar coins. For example, in its assessment of a large new dollar coin promotion with a national grocery chain, Marketbridge noted that the coin was not always available from armored carriers. Some of the distribution problems occurred because some armored carriers lack adequate equipment. According to the Mint, to handle high volumes of new dollar coins, Brinks, a large armored carrier, would have to invest \$40,000 for coin-rolling machines in many of its 154 branch office locations around the country. Other armored carriers, according to the Mint, would also likely need to upgrade equipment to handle high volumes if the dollar coin became popular.

Although the Wal-Mart promotion served to distribute over 90 million new dollar coins, there were also early reports of availability problems related to the promotion. In their discussions with the Mint in late 1999, banks asked the Mint to delay the launch of the new dollar coin until March 2000 because expected year 2000 problems would require the banks to

²²Mint Survey, July 2001.

concentrate on these problems in January and February, 2000. The Mint agreed to delay the launch of the new dollar coin until March. However, in December 1999, the Mint announced the partnership with Wal-Mart and began to distribute the coins to Wal-Mart in January 2000. The publicity surrounding this launch created public demand for the coin at banks throughout the country. Bank customers who requested the coin could not always find them, and soon the banks had a significant backlog of orders for the coin with the Federal Reserve. The Mint and the Federal Reserve, responding to delays in the new dollar coin's distribution to banks, such as community banks, credit unions, and savings and loans, set up a temporary Direct Shipment Program beginning March 1, 2000. The program gave banks the ability to place orders on the Internet for up to 2,000 new dollar coins in rolls and have them shipped directly from the Mint. However, according to the Mint, only a small percentage of the banks that received a letter on the direct ship program had ordered coins a month after the program began. Bank officials said that these initial shortage problems were limited to the first few months of the new dollar coin's launch in 2000.

According to the Mint, some businesses were also reluctant to order dollar coins because they were charged higher delivery fees by the armored carriers. The armored carriers generally charge additional amounts to retailers and other businesses for delivery of dollar coins because they weigh more than paper dollars. For example, some carriers charged \$2 per \$1,000 box to deliver rolled dollar coins compared with \$0.25 cents for the equivalent value in dollar bills.

A Marketbridge report also noted that some businesses wanted a greater choice of coin packaging options and quantities. While large-volume coinoperated businesses, such as car washes, might want coins in large bags, and other businesses might want a full box of 1,000 coins, smaller businesses attempted to obtain coins wrapped in rolls of 25 dollar coins, but could not always find them. To make rolls of dollar coins more available and reduce the cost to businesses for obtaining coins, the Mint, from August to December, 2000, contracted with outside companies to have 282,240,000 dollar coins wrapped in rolls at a cost of \$927,982. These Mint-wrapped rolls were to be provided to businesses by armored carriers and financial institutions without those businesses being charged for wrapping. Though the coin-wrapping contract increased the supply of new dollar coins in rolls, the Mint found that some businesses were still subject to other armored carrier fees such as for moving and storing the coin. Some Mint officials said that the wrapping of dollar coins in rolls by Mint contractors might have created more problems because the armored

carriers were not forced to develop a rolling capability. Without proof of demand for the new dollar coin, armored carriers were reluctant to invest in new equipment to roll dollar coins, even when demand for the coin was high in the first half of 2000.

Many of these distribution barriers were identified in a Marketbridge promotion progress report in August 2001. As table 5 indicates, of the distribution problems identified by Marketbridge, commingling and difficulty in finding coins were the most common by far.

Table 5: New Dollar Coin Distribution Problems Identified in Telephone Calls to the Mint from January to August 2001

Problem reported	Percentage reported	
New dollar coin commingled with Anthony dollar coin	44	
New dollar coin not available when requested	43	
Excess fees charged for new dollar coin delivery	5	
Late delivery or no delivery of new dollar coin	5	
Wrong coins delivered	3	
Total	100	

Source: Marketbridge analysis of telephone calls made by Mint promotion partners to Fleishman Hillard.

To evaluate the extent that these barriers affected promotion partners, we sent surveys to 10 large promotion partners that had agreements with the Mint to promote the new dollar coin. In our survey of these large promotion partners, we attempted to obtain information on the extent that barriers such as commingling hindered the success of their new dollar coin promotions. Seven promotion partners completed the survey. When asked the extent that commingling hindered the success of their promotions while they were in progress, 2 of the partners said to a very great extent, 1 said to a great extent, and 4 said to no extent. When asked if commingling hindered the use of the new dollar coin in their business after the promotion, when dollar coin use became less frequent, only 1 said to a very great extent, 1 said to a great extent, 3 said to no extent, and 2 did not know or said not applicable because the promotion was still in progress at the time of the survey. In contrast to public reports, only 2 promotion partners said that they had difficulty obtaining new dollar coins for their promotions. In general, when asked the extent that coin-wrapping fees and

shipping costs hindered their promotions, most of the survey respondents said these problems had little or no effect.

Our promotion partner survey also indicated that while the promotions distributed new dollar coins, it is unlikely that they had resulted in a long-term increase in the coin's use. We asked the 7 firms how frequently customers used the new dollar coin to make purchases during the promotion. One of the promotion partners said very frequently, 1 said frequently, 3 said sometimes, and 2 said very infrequently. The survey indicated even lower levels of use after the promotion. When asked if customers were using the coin to make purchases after the promotion, 1 said sometimes, 3 said infrequently, 2 said very infrequently, and 1 did not know or said not applicable because the promotion was still in progress at the time of the survey. No promotion partner said customers were using the coin to make purchases frequently or very frequently after the promotion. A majority of promotion partners agreed that the dollar bill would need to be eliminated for the public and businesses to accept and regularly use the new dollar coin.

In addition, in its promotion program assessments, Marketbridge found indications that use of the new dollar coin was not sustained in these businesses during and after the promotions. For example, in its assessment of a national grocery chain promotion, Marketbridge noted that the average number of dollar coins distributed decreased over time from 3,600 per month at the beginning of the promotion, to 1,400 per month 60 days into the promotion, to 600 per month toward the end of the promotion. About 8 months after the promotion began, the average number of dollar coins distributed had dropped to 340 per month.²³

Results of Marketing Efforts in Government Sector Were Mixed

The Mint promoted the use of the new dollar coin in the government sector, but the results of these efforts were mixed. For example, the Mint contacted local transit authorities to increase awareness of the new dollar coin and increase the number of transit systems using it. As part of this transit marketing effort, the Mint, working with Fleishman Hillard in selected cities, created promotional events that included a giveaway of free new dollar coins to transit riders, radio promotions, media coverage, and

²³Marketbridge interviewed 30 stores for the grocery chain promotion assessment; however, this is not a statistically representative sample, and the results cannot be projected to all 1,200 stores.

attendance by local officials. For example, the Mint distributed about 12,000 new dollar coins to transit riders in New York; 12,000 coins in Chicago; 6,000 coins in Philadelphia; and 6,000 coins in San Diego.

The Mint said that many of the largest transit systems retrofitted or purchased new equipment and have the capability to use the dollar coin. In April 2002, the U.S. Federal Transit Administration reported that 19 of the largest 20 transit system agencies accept the dollar coin in either their bus or rail systems.²⁴ The Federal Transit Administration found that buses in the Washington Metropolitan Area Transit Authority, the fifth largest transit system, accepted dollar coins in buses but the subway system did not. The Federal Transit Administration also found that the Bay Area Rapid Transit system, the twelfth largest transit system, did not accept the dollar coin in either bus or rail. Mint officials said that they were not able to make progress in increasing the use of the dollar coin in these two transit systems. The Mint also worked with state and local bridge and road authorities to increase the use of the new dollar coin in tollbooths and encouraged cities to convert parking meters to accept the coin. (For more information on the use of the dollar coin in state and local government transit systems and tollbooths, see app. II.)

According to Mint officials, the Mint used its own staff to conduct marketing events to stimulate the new dollar coin's use in retail operations, such as cafeterias within federal facilities. For example, the Mint conducted a new dollar coin event at the Pentagon. According to the Mint, this promotion distributed about 56,000 new dollar coins. Mint officials also met with officials on military bases to discuss the dollar coin's use, but these meetings did not result in formal promotional programs or increase new dollar coin circulation.

As part of its federal government marketing efforts, the Mint also sought to increase the number of postal vending machines using the new dollar coin but had limited success. In December 1998, before the coin's launch, a Mint contractor study noted that the U.S. Postal Service had approximately 11,000 stamp vending machines that distributed dollar coins. However, in April 2002, over 2 years since the introduction of the new dollar coin, the Postal Service still had only 12,000 of its 34,000 vending machines able to

²⁴U.S. Department of Transportation, On the Benefits and Feasibility of Implementing Transit and Toll Road Fare Card Technology Capable of Accepting the Sacagawea Dollar (Washington, D.C.: April 2002).

distribute the dollar coin as change. The Postal Service said that it was only able to upgrade an additional 1,000 vending machines between 1998 and 2002 because it lacked the funds to upgrade or replace the older machines. Despite the lack of progress, the Mint said that the Postal Service is still the largest distributor of dollar coins. In general, the Mint did not track the costs for the use of its own staff for marketing efforts to federal government agencies.

The Mint's Marketing Plan Identifies but Does Not Provide Details on How It Will Address Barriers to Increased Coin Use In general, the Mint's April 24, 2002, marketing plan for fiscal years 2002 and 2003 describes a program that is much smaller in scope than the marketing campaign used to launch the new dollar coin in 2000. The Mint plan provides a listing of most of the barriers to increasing new dollar coin use. In addition, the plan notes the importance of conducting research and gives a description of planned research regarding consumer resistance, distribution barriers, and sustaining use of the coin by businesses. Although the plan estimates that the dollar coin is used in 4 percent of dollar transactions, the plan does not lay out a specific market share or net payout goal for fiscal year 2003. As is consistent with previous studies, the Mint plan also notes that successfully achieving widespread use of the new dollar coin will be difficult if it cocirculates with the dollar bill. However, the plan does not discuss specifically how to address interdependent demand or network effects. The plan also notes that the recent negative media coverage of the new dollar coin will be a significant challenge for the Mint's marketing communications and public relations programs, but the Mint does not explain in detail how it will counter this challenge. Although the plan notes potential government savings, it does not provide a strategy for explaining dollar coin government savings to the public or for directly comparing the advantages of the dollar coin with those of the dollar bill.

A key element of the new marketing plan is a description of the barriers that hinder the distribution and circulation of the new dollar coin. Although the Mint's plan identifies the key barriers in the distribution channel, such as the unavailability of coins, commingling, the lack of availability of new dollar coins in rolls, and additional fees charged by armored carriers, the marketing plan does not specifically outline how the Mint will address those barriers. Instead, the Mint calls for research on barriers in the first phase of the new plan that would be conducted in collaboration with the Federal Reserve Bank System, banks, armored carriers, and commercial users.

Although the Mint plan notes that cocirculation with the dollar bill is a barrier, the Mint does not provide much detail on the nature and extent of the barrier or how it will attempt to overcome public resistance. In addition, the Mint does not fully describe previous attempts in other countries to cocirculate a high-denomination note and coin. The plan does not include any information on network effects or indicate how an understanding of the network effects in currency and coins and other payment systems could improve future marketing strategy.

The Mint plan includes some future programs to market to consumers that are designed to increase public demand for the coin. However, the plan does not describe how these programs will help the Mint overcome specific barriers and increase new dollar coin circulation. For example, included in the plan section on increasing sustained circulation is a description of a licensing agreement with The Source International (TSI). The intent of the agreement is to build brand awareness for the Mint and the new dollar coin among National Association for Stock Car Auto Racing (NASCAR) fans. Under the TSI agreement, in the 2002 Cadillac Grand Prix in July and in one race each year from 2003 to 2008, TSI will have one car with an image of the new dollar coin on the hood and a Web site address for the Mint on the rear spoiler. The agreement also calls for TSI to sell die cast replica models of the new dollar coin racing car. The Mint also said the agreement would require no outlay of funds and the Mint will receive royalty payments from each new dollar coin model car sold. 25 The Mint said that TSI will also make an attempt to have new dollar coins dispensed as change to spectators for cash purchases during each race. While the TSI agreement could increase new dollar coin brand recognition and awareness at one race each year and with model car sales, the plan does not describe how the agreement would contribute to an increase in the coin's widespread use and circulation.

The Mint also has an existing product licensing program that encourages the placement of products related to coin collection into the retail market. In addition, the Mint plans to work with the Department of the Army's Corps of Engineers on new dollar coin promotion activities such as placing a new dollar coin image on brochures associated with the Lewis and Clark Bicentennial activities that will occur along the expedition's route from

²⁵Under an existing licensing program, the Mint currently receives royalty payments for placing numismatic-related products, such as storybooks, magnifiers, and coin albums, into the retail market. The U.S. Forest Service is an example of a government agency with a licensing program. It receives royalties for allowing private enterprises to use the Smokey the Bear and Woodsy Owl images.

2003 to 2006. Although these programs could increase awareness of the new dollar coin among coin collectors or those visiting Corps of Engineer facilities, the Mint plan does not provide much detail on how these marketing programs would increase the public's use of the coin in everyday transactions.

Unlike the earlier new dollar coin marketing program, the new plan does not envision a large national advertising campaign directed at the public. The plan calls for research on public resistance to the new dollar coin before a full marketing program is implemented to stimulate consumer use of the new dollar coin. The Mint plan requests \$0.5 to \$1.0 million in fiscal year 2002 followed by \$10 to \$15 million in fiscal year 2003 for a program to maintain the new dollar coin's presence in the marketplace. The plan calls for a continuation of ongoing promotions and, following research, the identification of key target markets before marketing activities are implemented. Mint officials said that transit and vending, in addition to governments, are likely markets to target.

The Mint plan does include some plans for a public relations and a media outreach program to overcome negative consumer perception. However, the plan does not provide any specifics on how it will overcome recent negative media coverage or the public's impression that the coin may have been discontinued. The plan does not address the advantages of including a description of dollar coin savings to the government in its marketing communications or discuss any restrictions on directly comparing the advantages of the dollar coin with those of the dollar bill. Mint officials said that the official policy is for cocirculation of both the dollar coin and note and that the Mint did not describe dollar coin savings to the government in its marketing because the savings could only occur if the dollar bill were withdrawn from circulation. Treasury said that it interprets cocirculation to mean that marketing programs for the coin or note should not directly compare the advantages of the dollar coin with those of the dollar note.

A key element of the plan is an assessment by the Mint of the progress made in new dollar coin circulation. The Mint plan attempts to first establish the existing level of dollar coin circulation by comparing the number of new dollar coins in circulation with the number of dollar bills in circulation. The Mint marketing plan estimates that people used the dollar

coin in about 4 percent of dollar transactions. ²⁶ To arrive at this number, the Mint took data from a public opinion poll²⁷ and then estimated that about one-third of the 850 million coins distributed to the public, or about 300 million coins, were actually used and in circulation. The Mint's estimate of 300 million coins in "circulation" was then calculated to be about 4 percent of the 7.5 billion in dollar bills in circulation.

Other Mint surveys indicate that the new dollar coin market share as a percentage of all dollar transactions may be lower. For example, a July 2001 public opinion survey was conducted by the Mint to test the impact of the new dollar coin marketing program. Among other survey questions, respondents were asked the number of dollar bills and dollar coins they received and spent in the last few days. Respondents said that in July 2001, they received 25 and spent 24 dollar bills. In contrast, respondents said they received 0.2 new dollar coins and spent 0.3 new dollar coins. This equates to a new dollar coin share of about 1 percent of all dollar transactions. The Mint plan does not set goals in market share, net payout, or number of dollar coins for fiscal year 2003.

The increase in the number of dollar coins shipped to the Federal Reserve from 1999 to 2000 did not have a measurable effect on the number of dollar notes in circulation. The Federal Reserve said that the number of dollar notes in circulation increased from 1999 to 2000 at the same time that dollar coin shipments were increasing and that changes in demand for dollar notes is normally due to fluctuations in economic activity. The Federal Reserve said that it was unlikely that the slight decrease in the number of dollar notes in circulation, from 7.65 billion in 2000 to 7.64 billion in 2001, could be attributed to the new dollar coin, and that the decline was more likely due to a drop in economic activity in 2001.

The Mint plan includes some actions to promote the use of the new dollar coin in certain targeted markets. For example, the Mint plan indicates it will try to increase circulation of the new dollar coin in federal agencies

²⁶As of January 2002, the Mint said that it had produced 1.4 billion new dollar coins and had 300 million in inventory. The 1.1 billion remaining new dollar coins were shipped to the Federal Reserve Banks. Of these 1.1 billion new dollar coins, approximately 850 million were distributed to banks and other depository institutions and 250 million remained in Federal Reserve inventory.

 $^{^{27}}$ Hart and Teeter Poll cited in the *Financial Times*, September 8, 2001. The poll indicates that two-thirds of the public are holding onto coins, but this is not the same as two-thirds of the dollar coins.

and on military bases, but the plan does not explain the lack of success in increasing the use of the new dollar coin in federal agencies or provide specific objectives or programs for how the Mint will increase circulation. The plan also states that the Mint intends to honor existing agreements with several minor league baseball teams. The Mint lists the teams and notes that the agreements with minor league teams distributed over 1 million coins. Despite the noted potential in dollar coin distribution and past promotions with baseball teams, beyond honoring several existing agreements, the Mint does not include additional baseball team marketing activities in its future marketing plan.

The Mint plan also states that it will explore opportunities in parking meters, toll roads, and transit systems but no data are given on how the Mint chose these as potential markets or how much each of these markets might yield in increased new dollar coin circulation or at what cost. Although the Mint through its contractors, previously evaluated and identified the markets with a high potential for new dollar coin use, the plan does not fully incorporate this information into its analysis.

Another key element of the new marketing plan is a description of the barriers that hinder the distribution of the new dollar coin. The Mint has identified the key barriers in the distribution channel, which moves the dollar coin through the Federal Reserve Bank System, banks, and armored carriers to commercial users, such as retailers. It states that unavailability of the coins at banks, commingling, and the lack of availability of new dollar coins in the right mix of bags and rolls are obstacles to stimulating commercial use of the new dollar coin. In addition, the Mint identifies other distribution barriers, such as the additional fees charged by armored carriers for coins compared with fees charged for bills, and other perceived barriers, such as the lack of room in the cash drawer.

To address distribution barriers, the plan calls for research. Research on barriers in the distribution of the new dollar coin would be conducted in collaboration with the Federal Reserve Bank System, banks, armored carriers, and commercial users. In addition, the plan calls for a collaborative study with the Federal Reserve on the feasibility of using machines to separate the Anthony and new dollar coins that are commingled. The plan states that the research on distribution barriers is intended to help the Mint validate its understanding of the barriers and identify ways to overcome them. However, the plan does not indicate what effect the removal of barriers would have on circulation. For example, if the Mint resolved the commingling problem, the plan does not indicate

whether this would lead to an increase in use of the dollar coin. Table 6 shows a summary of the Mint's plans to address the key barriers.

Table 6: Summary of Actions in Mint Marketing Plan to Address Barriers

Barrier	Planned actions			
Consumer resistance	 Research consumer new dollar coin attitudes and behavior. Conduct media outreach to change negative public perception. Honor existing promotions with sports teams in three minor league cities. Encourage use in industries in which coins are used, such as in vending and transit. Stimulate use in federal, state, and local governments. Feature new dollar coin in one NASCAR race each year until 2008. Promote the new dollar coin with the Army's Corps of Engineers during Lewis and Clark Bicentennial from 2003-06. 			
Distribution channel problems	 Collaborate with Federal Reserve and armored carriers to address commingling issue and other problems such as upgrading coin processing equipment and higher coin delivery fees. Address commingling by conducting a study on ways to separate Anthony and new dollar coins. 			

Source: Mint Marketing Plan, April 2002.

The 2001 and 2002 Mint Reports to Congress Did Not Fully Describe the Marketing Program, Results, or Problems Encountered As required by the \$1 Coin Act of 1997, which authorized the new dollar coin, the Mint provided a report on the progress of the marketing of the new dollar coin on March 30, 2001. However, the Mint's 2001 report did not provide details on the nature and extent to which the new dollar coin was being used in commerce; provide full information on contracts and agreements that the Mint had engaged in to market the new dollar coin, including the costs of the marketing campaign; or give a detailed description of the barriers that the Mint encountered. The 2002 report, which was directed by the House report accompanying the Treasury's 2002 appropriations act, gave more information on demand for the coin, contracts and promotional agreements with nongovernment entities, marketing costs, and a fuller description of the distribution and other problems encountered. However, in the 2002 report, the Mint did not provide a comprehensive analysis of the nature and extent of coin use, describe the outcomes and progress made in increasing Federal Reserve

²⁸U.S. Mint, On the Marketing of the Golden Dollar.

²⁹U.S. Mint, The Golden Dollar, Achievements and Challenges.

net payout in all of the industry sectors in which marketing efforts were targeted, or establish measurable future goals for these sectors.

The 2001 Mint Report Did Not Contain Information on Use of the Coin

The Mint's March 2001 report provided an overview of the public awareness and business marketing programs during 2000, but the report did not fully describe the nature and extent of the new dollar coin's use in commerce, all of the promotional efforts used by the Mint, or the barriers encountered. According to the 2001 report, in the first year of the coin's production, the Mint produced over 1.2 billion new dollar coins and released into circulation over 700 million of these coins. However, there is no information in the 2001 report that shows how many of these coins were actually used in commerce.

The 2001 report noted that the Mint collects information on a regular basis to quantify marketing program progress, but the report did not provide an analysis of this information. The Mint report also said that the growing list of promotional agreements is evidence that the public is using the new dollar coin, and that people are collecting the coin, but the 2001 report did not quantify the amount of sustained increases in circulation generated by the promotions.

There is a very limited citing of survey data that might provide some insight into public acceptance and use in the 2001 report. The report cited survey data showing that, rather than using the coin, 66 percent of the public said that they were saving the coins. The report briefly noted that, in late 2000, 29 percent of the surveyed adults said that they would prefer to receive the coin in change instead of the dollar bill. The survey data on preference for receiving change is somewhat useful, but they do not give any indication of what portion of these people will use the coin once they have received it as change. The 2001 report also noted that a May 2000 survey showed that 57 percent of the public would likely use the new dollar coin for everyday transactions as the coin becomes commonly circulated. This is one of a number of indicators collected in the survey; however, this is information that was, at the time, almost a year old, and the survey is limited because it shows the likelihood of use when the coin at some point in the future becomes "commonly circulated." The same Mint survey had information that indicated low public use of the coin, but these data were not included in the 2001 report. For example, the survey showed that in May 2000, 33 percent of those surveyed had received the coin and, of these, only 21 percent were at least somewhat likely to spend the new dollar coin on everyday items.

The 2001 report provided an overview of the public awareness program, but it did not provide information describing the details of the use of contractors for advertising and public relations or the costs for these contracted activities. The report noted that the Mint had targeted eight industries and had entered into partnership agreements with commercial entities to promote the new dollar coin. However, although the report provided examples of these promotion agreements, it did not provide a comprehensive list of the promotion agreements, the promotion target for the number of new dollar coins to distribute, or the cost to the Mint for each promotion.

The 2001 report provided a generally positive picture of the new dollar coin and made only a brief mention of the barriers to increasing its use. For example, the Mint noted the challenges presented by the failure of the Anthony dollar coin and also noted that some banks and financial institutions were reluctant to order the new dollar coin.

The 2002 Report Was More Detailed but Did Not Explain What Needs to Be Done to Increase Coin Circulation The Senate committee report and the conference report for the Treasury's fiscal year 2002 appropriations directed the Mint to submit a marketing plan concerning its promotional efforts relating to the new dollar coin to the Appropriations Committees and stipulated that the plan must be approved by the committees before the Mint could draw additional funds from the Mint Public Enterprise Fund to promote the dollar coin. The Mint's March 2002 report provided an overview of the public awareness and business marketing programs, but there was still limited information on the nature and extent of the coin's use in commerce. The Mint did provide an estimate of the percentage of new dollar coins used compared with the dollar bill. As previously noted, the Mint has stated that, on the basis of survey estimates and the number of new dollar coins in circulation, people use the dollar coin in 4 percent of dollar transactions. This figure is a very rough estimate, and it does not give a full evaluation of dollar coin use that can be used to make future decisions on marketing programs. The Mint, however, through contractors, collected information in public surveys on a regular basis that was not used in the 2002 report, and these survey data may have been more useful. For example, one of these surveys was conducted in May 2000 and May and July, 2001, to help the Mint assess a number of key questions, such as consumers' likelihood for saving and using the dollar coin as well as the number of new dollar coins used

relative to the dollar bill. Respondents to the July 2001 survey indicated that they used the dollar coin in about 1 percent of dollar transactions.³⁰

The 2002 report gave a much more comprehensive description of the use of nongovernmental contractors for advertising and public relations and the costs for these contracted activities. Unlike the 2001 report, the 2002 report provided an appendix, which contained a list of promotion agreements with commercial entities in which the Mint engaged. In addition, the Mint provided, for each promotion agreement, the goal for the number of new dollar coins to distribute and the cost to the Mint to implement each promotion. As previously mentioned, the Mint did not consistently monitor the actual number of coins distributed, therefore, we were not able to substantiate the exact number of coins that were actually distributed.

Unlike the 2001 report in which the Mint provided a generally positive picture of the new dollar coin, the 2002 report described in more detail the barriers to increasing use of the new dollar coin. For example, the Mint described commingling of the Anthony and new dollar coins as a significant barrier. But, the plan did not indicate what effect on circulation would result from resolving the commingling issue. The 2002 report also gave additional information on other reported barriers, such as the availability of rolls of new dollar coins, extra fees for delivery and handling, and public resistance to switch to using the new dollar coin instead of the dollar bill. However, the 2002 report did not provide information on how it will overcome these barriers or what effect on overall circulation could result from removing the barriers.

Conclusions

Although the Mint's \$67.1 million marketing and advertising program to promote the new dollar coin to the public significantly raised awareness of the coin, it is not widely used by consumers in everyday transactions. In addition, the Mint does not have data showing that increased marketing and promotion efforts would have a long-term positive effect on dollar coin use as long as the coin cocirculates with the dollar note.

³⁰Results from the July 2001 survey were based on 1,018 interviews with adults 18 years or older in the continental United States from July 20-22. Respondents were asked whether they had received or spent the new dollar coin and the dollar bill in the past few days. We did not determine the quality of these data from the survey.

While the Mint said it could assist armored carriers in purchasing equipment to roll dollar coins or pay for directly shipping to businesses new dollar coins that are not commingled with Anthony coins, this would not necessarily mean that the public would demand or use the coin. As a result, continuing to spend funds for these programs may not result in increased use of the new dollar coin. However, recognizing Congress's desire for cocirculation of the dollar coin and the dollar note, it appears reasonable for the Mint to conduct planned research to further assess distribution barriers and determine the appropriate steps and costs that are necessary to resolve these barriers.

Recommendations for Executive Actions

Because the Mint does not know whether additional marketing is likely to increase use and past efforts have had limited effects, we recommend that aside from honoring existing promotion agreements and conducting planned research on public acceptance and distribution barriers, the Director of the Mint suspend further expenditures for marketing and promoting the new dollar coin until research is completed and the Mint can demonstrate that such efforts are likely to increase long-term coin circulation and/or are necessary to achieve Congress's desire for cocirculation. We further recommend that the Mint revise the marketing plan it submitted to Congress to reflect such an approach and work with Congress to reach an agreement on an appropriate amount of funds to use for these activities.

Agency Comments and Our Evaluation

We provided copies of the draft of this report for comment to the Secretary of the Treasury; the Director of the Mint; and the Chairman, Board of Governors of the Federal Reserve System. On August 30, 2002, we received written comments from the Director of the Mint, which are reprinted in appendix III, and on August 23, 2002, we received written comments from the Director of the Division of Reserve Bank Operations, Federal Reserve Board, which are reprinted in appendix IV. The Secretary did not provide comments.

The Director of the Mint said that the Mint generally concurred with the findings and recommendation in our report. The Mint Director also offered some additional comments on the barriers that we identified and how the Mint plans to address them. The Mint Director said the Mint agrees that there is no available evidence that the elimination of distribution barriers would have a long-term positive effect on dollar coin use. She said the Mint

would examine several possible research approaches to study the removal of distribution barriers, but it would not invest substantial funds until it can support the expenditures. The Mint Director also said the Mint will conduct research to identify and further assess the barriers to the new dollar coin's use in daily commerce. The Director said the Mint would incorporate the results of that research and an understanding of network effects into a revised new dollar coin marketing plan, as we recommended.

The Mint Director also commented on the different approaches our report discussed that were used to calculate the level of new dollar coin circulation. The Director noted that the Mint's 4 percent figure is based on the number of dollar coins issued as a percentage of the number of dollars issued and the other measure cited in our report is based on the number of new dollar coins used in financial transactions as a percentage of the number of dollars used in financial transactions. We believe that the latter estimate of 1 percent may be a more representative measure of the coin's actual use by the public because it is based on a nationally representative public poll conducted for the Mint that asked questions specifically about the number of dollar coins and notes used in transactions in the past few days. Nevertheless, while we recognize that there are various measures with which to gauge the public's use of the new dollar coin, neither approach cited in the report indicated widespread use.

In addition, the Director said that a major deficiency of the Anthony dollar coin was that people avoided using it because they were unable to distinguish it from a quarter-dollar coin. In our past reports, we cited this as one barrier, but also reported that the continued circulation of the dollar bill was the most substantial barrier to the Anthony dollar coin's use.

The Director of the Division of Reserve Bank Operations, Federal Reserve Board, said that the Federal Reserve concurred with our recommendations.

We are sending copies of this report to the Chairmen and Ranking Minority Members of the Senate Committee on Banking, Housing, and Urban Affairs; the House Committee on Financial Services; and the Subcommittee on Treasury, Postal Service, and General Government, House Committee on Appropriations; the Secretary of the Treasury; the Chairman of the Board of Governors of the Federal Reserve System; and other interested parties. We will also make copies available to others on request. In addition, this report will be available at no charge on the GAO Web site at http://www.gao.gov.

Major contributors to this report were Brad Dubbs, John S. Baldwin, Emily Dolan, Bess Eisenstadt, Susan Michal-Smith, Walter Vance, and Greg Wilmoth. If you or your staff have any questions, please contact me on (202) 512-2834 or at ungarb@gao.gov.

Bernard L. Ungar

Director, Physical Infrastructure Issues

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Objectives, Scope, and Methodology

In studying the United States Mint's marketing of the new dollar coin, our objectives were to (1) describe the Mint's new dollar coin marketing program costs, the contracts and promotional programs in which the Mint engaged, and the revenues that were generated; (2) assess the barriers the Mint faces in increasing the public's use of the new dollar coin; (3) describe the Mint's future plans to promote the new dollar coin and the extent that these plans address the barriers; and (4) assess the extent that the Mint's 2001 and 2002 reports to Congress on the marketing of the new dollar coin fully and accurately described the marketing programs, the results obtained, and the problems encountered.³¹

To obtain information regarding marketing program contracts, promotional programs, costs, and revenues, we interviewed officials from the Mint and the Federal Reserve System and managers from the marketing program contractors. We also collected and reviewed marketing program contracts, progress reports, plans, promotion agreements, press releases, and other related documents from the Mint and contractors. In addition, we requested information from the U.S. Postal Service on dollar coin use in vending machines and reviewed a Department of Transportation report on dollar coin use in transit systems and toll roads, but we did not independently verify the data from those agencies. Although we reviewed signed promotion agreements to determine the number of promotions the Mint conducted, the Mint did not provide documentation that would enable us to verify the actual number of coins distributed during each of the promotions. Our review did not include a financial audit of the marketing program. Also, we did not conduct an audit of paid advertising expenditures or audit the media to determine if all of the ads ran as planned. We also did not conduct a review of the contract award process or a review of how internal controls were applied during contract management.

To evaluate the barriers to increasing dollar coin circulation, we reviewed our previous reports, and the laws and congressional hearings related to the new dollar coin; interviewed officials from the Mint, Mint contractors, and the Federal Reserve; examined Mint and contractor marketing documents, reports, and surveys; obtained information on high-denomination coins and notes from industrialized countries; and

³¹U.S. Mint, Report to Congress: On the Marketing of the Golden Dollar (Washington, D.C.: Mar. 30, 2001), and Report to Congress: The Golden Dollar, Achievements and Challenges (Washington, D.C.: Mar. 29, 2002).

Appendix I Objectives, Scope, and Methodology

interviewed businesses and trade associations. We also sent questionnaires regarding barriers to increased circulation to 10 promotion partners that distributed new dollar coins. We focused on these large promotion partners because these firms represent all of the targeted industry sectors and make up 99 percent of the total promotion partner distribution goal. Seven of the 10 promotion partners responded to our survey. We did not survey the other promotion partners because of resource limitations and because most of the other promotions were with minor league baseball teams in smaller cities that had coin distribution goals of under 300,000 dollar coins. In interviewing businesses and associations, we contacted those we believed were most affected by the introduction of a new dollar coin, including bank trade associations, a trade association representing coinoperated businesses, and armored carriers. We also reviewed articles on the Susan B. Anthony dollar coin and interviewed the authors of these articles. Further, we obtained data on the highest value coins and lowest value notes used by the G-7 countries as of June 27, 2002.

To obtain information on the Mint's plans to overcome the barriers to increased dollar coin circulation, we interviewed officials from the Mint, Federal Reserve, Mint contractors, and trade associations and reviewed Mint documents and the 2002 new dollar coin marketing plan. We also reviewed our previous reports and studies on the dollar coin. We then identified specific actions in the Mint plan and analyzed the extent that these actions address the barriers identified in our review.

To determine the extent that the 2001 and 2002 Mint reports to Congress fully and accurately described the marketing of the new dollar coin, results obtained, and problems encountered, we interviewed Mint officials and reviewed the reports. We also reviewed marketing program contracts, progress reports, plans, promotion agreements, and other related documents from the Mint, contractors, and the Federal Reserve. We then compared the information on marketing programs, costs, barriers, and use in the 2001 and 2002 reports with the information obtained in our review. We used some of the data on awareness and use from regular Mint surveys conducted during the marketing of the new dollar coin; however, we did not conduct a comprehensive review of the methodology used in these surveys. Our review did not include an audit of the contracts or promotion partner agreements noted in the Mint reports.

We did our work from September 2001 to September 2002 in Washington, D.C., in accordance with generally accepted government auditing standards.

State and Local Governments: Dollar Coin Use Data in the Largest Transit Systems and Toll Roads

From market research, the Mint and its contractors determined that within the state and local government sectors, transit system authorities and toll roads had good potential for dollar coin use. As shown in table 7, in April 2002, 19 out of the 20 largest transit systems accepted new dollar coins in either bus or rail modes.

Table 7:	Transit Agencies	Accepting the	New Dollar Coin	as of April 2002
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Rank	Transit agency	Urbanized area	Accepts dollar coin	
1	Metropolitan Transportation Authority	New York, N.Y.	yes	
2	Regional Transportation Authority	Chicago, III.	yes	
3	Los Angeles County Metropolitan Transit Authority	Los Angeles, Calif.	yes	
4	Massachusetts Bay Transport	Boston, Mass.	yes	
5	Washington-Metro	Washington, D.C.	Bus only	
6	Southeastern Pennsylvania Transportation Authority	Philadelphia, Pa.	yes	
7	San Francisco Municipal Rail	San Francisco, Calif.	yes	
8	New Jersey Transit	New York, N.Y.	yes	
9	Metro Atlanta Rapid Transit Authority	Atlanta, Ga.	yes	
10	Maryland Mass Transit	Baltimore, Md.	yes	
11	King County Department of Transportation	Seattle, Wash.	yes	
12	Bay Area Rapid Transit	San Francisco, Calif.	Not accepted	
13	Metro Transit – Harris County	Houston, Tex.	yes	
14	Tri-County Metro District	Portland, Oreg. & Vancouver, Wash.	yes	
15	Metro-Dade Transit Agency	Miami, Fla.	yes	
16	Port Authority of New York	New York, N.Y.	yes	
17	The Greenbus Company	New York, N.Y.	yes	
18	Regional Transportation District	Denver, Colo.	yes	
19	Port Authority of Allegheny County	Pittsburgh, Pa.	yes	
20	Metro Transit	Minneapolis, Minn.	yes	

Note: Transit agencies' ranking from Federal Transit Administration data, National Transit Database 2000.

Source: Federal Transit Administration and the U.S. Mint.

The Mint also targeted toll roads for some of its marketing efforts. Table 8 shows some data on dollar coin use in 20 large toll road operators as of December 2001.

Appendix II State and Local Governments: Dollar Coin Use Data in the Largest Transit Systems and Toll Roads

Table 8: Dollar Coin Use in Toll Road Operators, as of December 2001

Rank	Name of toll operator	City, state	Total toll lanes	Actively distribute in manual lanes	If operate ACMs, do they accept?
1	Florida Department of Transportation Turnpike	Tallahassee, Fla.	693	No	No
2	Illinois State Toll Highway Authority	Downers Grove, III.	484	No	Yes
3	New York State Thruway Authority	Albany, N.Y.	357	Yes	No
4	New Jersey Highway Authority	Woodbridge, N.J.	324	No	No
5	Oklahoma Turnpike Authority	Oklahoma City, Okla.	284	No	Yes
6	Mass. Turnpike Authority	Boston, Mass.	236	No	No
7	Harris County Toll Road Authority	Houston, Tex.	218	Yes	Yes
8	Orlando-Orange County Expressway Authority	Orlando, Fla.	185	Yes	Yes
9	MTA Bridges and Tunnels	New York, N.Y.	150	Yes	N/A
10	Transportation Corridor Agencies	Santa Ana, Calif.	126	No	Yes
11	Ohio Turnpike Commission	Berea, Ohio	118	Yes	N/A
12	Maine Turnpike Authority	Portland, Maine	88	Yes	Yes
13	Port Authority of NY & NJ	New York, N.Y.	65	No	N/A
14	South Jersey Transit Authority	Hammonton, N.J.	52	No	No
15	Delaware Turnpike Administration	Newark, Del.	43	No	N/A
16	Dulles Greenway (TRIP II)	Sterling, Va.	30	No	N/A
17	Detroit International Bridge Co.	Detroit, Mich.	27	Yes	N/A
18	Indiana Department of Transportation-Toll Road Division	Granger, Ind.	20	Yes	No
19	Delaware River Port Authority	Camden, N.J.	16	No	N/A
20	Delaware River & Bay Authority	New Castle, Del.	13	No	N/A

Legend: ACM Automatic Coin Machine N/A Not Applicable

Source: U.S. Mint contractor analysis.

Comments from the United States Mint



DEPARTMENT OF THE TREASURY UNITED STATES MINT WASHINGTON, D.C. 20220



August 30, 2002

Bernard L. Ungar Director, Physical Infrastructure Issues United States General Accounting Office Room 2A10 441 G Street, N.W. Washington, D.C. 20548

Dear Mr. Ungar:

We have reviewed the General Accounting Office's (GAO) draft report, "New Dollar Coin, Marketing Campaign Raised Awareness but Not Widespread Use," and generally concur with its findings.

The report recommends that the United States Mint suspend further expenditures to market and promote the Golden Dollar until it has performed research and analysis that can support a plan that is likely to increase the coin's long-term circulation or is necessary to achieve Congress's desire for co-circulation. We believe that this recommendation is consistent with the Senate Committee Report's expectation that the Mint would not draw funds from its Public Enterprise Fund to promote the Golden Dollar until the Mint has an approved marketing plan. We generally agree that it would be inappropriate to expend public funds on such endeavors until we have performed the market research, completed the necessary analysis, coordinated proposed strategies and funding levels with the Department and Congress, and revised the plan we laid out in our June 17, 2002, Report to Congress, entitled "Golden Dollar: Overcoming Barriers to Circulation" (Golden Dollar Plan) accordingly.

The report also specifically identifies several major concerns in the Golden Dollar program that are within the scope of the Mint's authority to address, either on its own or in collaboration with other public or commercial entities. These concerns, and the United States Mint's responses to them, are as follows:

• Constraints posed by barriers against the supply of the dollar coin.

The GAO report confirms the existence of barriers on the supply side of the dollar coin circulation model. In particular, it noted that (1) the coin is not readily available at banks; (2) the Golden Dollar and the quarter-like Susan B. Anthony dollar coin (SBA) are regularly commingled, which effectively nullifies the deficiencies in the SBA that the Golden Dollar was designed to overcome; (3) currency ordering

^{*} The SBA's major, broadly recognized deficiency is that people avoid using it largely because they are unable to readily distinguish it from a quarter-dollar coin. To overcome this deficiency, 31 U.S.C. § 5112(b) requires that "[t]he dollar coin shall be golden in color, have a distinctive edge, have tactile and visual features that make the denomination of the coin readily discernible " However, as long as the banking system commingles SBAs with Golden Dollars, people will continue to receive both coins in their

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systems do not facilitate the ordering of dollar coins; and (4) the wrapping, handling, and shipping costs associated with using the dollar coin can make it considerably more expensive than the paper dollar for some commercial users.

<u>United States Mint Response</u>: As the GAO report confirms, there is ample evidence of the existence of these barriers. The United States Mint acknowledges that it has no empirical evidence to suggest that the elimination of these barriers will actually increase circulation of the Golden Dollar coin. However, some increase in demand for the Golden Dollar might result if the United States Mint were to increase the coin's availability through the elimination of these barriers. For instance, if the United States Mint worked with the Federal Reserve Banks to remove SBAs from inventories and deposits, the availability of the Golden Dollar might increase because the Federal Reserve Banks would have to order additional Golden Dollars to meet dollar coin demand. Still, we cannot predict the magnitude of any such increase in demand, nor whether such an increase in demand would result in a sustained growth in dollar coin use.

Although the United States Mint can take measures to eliminate the four barriers enumerated above, we believe that it will be difficult to formulate a research methodology that could predict the likely results in quantifiable terms. Therefore, we intend to explore several options to address this problem. For instance, we will consider contracting the services of an expert or consultant that has the professional acumen to design such a methodology. Another potential alternative would be to take an incremental approach—that is, we could seek to eliminate these barriers in particular markets by employing pilot programs in which we would closely monitor costs relative to measurable increases in dollar coin circulation. An additional option is to compose a panel of government, industry, and academic leaders to examine this issue. Any of these approaches will cost some money to pursue. However, the Mint generally concurs with the GAO report's recommendation and will not make a substantial investment in any of these approaches until it has developed a sound business case that supports such expenditures.

• Constraints posed by the public's attitude toward the dollar coin.

The report notes that there is a cultural bias against the use of a dollar coin. It specifically concludes that (1) negative perceptions, (2) lack of information about the cost and benefits of using the coin, (3) lack of awareness of the coin's advantages, and (4) the ease of carrying a paper equivalent of the same denomination foster this cultural bias.

<u>United States Mint Response</u>: The United States Mint will procure the services of a private firm to conduct an independent study to identify and assess the barriers to utilizing a dollar coin in daily commerce. Three target groups will be interviewed: consumers, commercial vendors, and distribution channel personnel. We plan to have the contractor begin this independent study in October and expect it to be completed by the end of the calendar year. We will adjust the Golden Dollar Plan in accordance with the results of this study.

change. Consequently, until we minimize commingling, many people will continue to avoid using dollar coins in general.

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• Constraints posed by lack of demand for the dollar coin.

The report recognizes the significance of the "network effect" and its importance to the dollar coin's gaining a foothold in circulation. The report specifically acknowledged the dilemma that the public is not likely to demand the coin until it is more readily available.

<u>United States Mint Response</u>: Economists' and the GAO report's acknowledgements of the validity of the "network effect" suggest that one way to overcome the substantial public resistance to using the dollar coin is to simultaneously persuade businesses, consumers, and suppliers to change their procedures and usage habits. There must be sustainable channels for successful distribution of the Golden Dollar. Accordingly, in developing a marketing strategy to overcome the lack of demand for the Golden Dollar, the Mint will modify its Golden Dollar Plan to ensure that it also focuses on ways to take advantage of the "network effect."

In addition to the concerns cited in the report, we agree with the report's recommendation that the United States Mint should honor existing promotional agreements that were aimed at encouraging circulation of the new dollar coin. We also will consider entering into new agreements that are consistent with the approved Golden Dollar Plan when they are supported by strong business cases indicating that they are likely to contribute to the Plan's objective to effect measurable, sustainable, and long-term increases in Golden Dollar circulation, or when they are necessary to achieve Congress's desire for co-circulation. As outlined in the Golden Dollar Plan, the United States Mint also will continue to pursue efforts with the Postal Service, the military and transit agencies to facilitate the continued and expanded use of the Golden Dollar in their retail and related financial operations. We would welcome the Congress's support in these endeavors.

Finally, we wish to clarify one item in the GAO report: the distinction between a currency's circulation and its velocity. The Mint has reported that the Golden Dollar represents about four percent of the \$1 currency now in circulation, while the report indicates that the Golden Dollar represents only about one percent of the \$1 currency's velocity. The Mint's four percent circulation figure is based on the number of dollar coins issued as a percentage of \$1 currency issued. The report's one percent velocity figure, on the other hand, presumably represents the number of financial transactions in which a dollar coin is used as a percentage of \$1 currency used in all such transactions.

I would like to take this opportunity to extend our sincere appreciation to you and your colleagues in the General Accounting Office for their comprehensive assessment of the Golden Dollar program.

Sincerely

R-Henrietta Holsman Fore

Director

United States Mint

Comments from the Federal Reserve Board of Governors



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM WASHINGTON. D.C. 20551

LOUISE L. ROSEMAN DIRECTOR DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

August 23, 2002

Mr. Bernard L. Ungar Director, Physical Infrastructure Issues United States General Accounting Office Washington, D.C. 20548

Dear Mr. Ungar:

Thank you for the opportunity to comment on the General Accounting Office's draft report *New Dollar Coin Marketing Campaign Raised Awareness but Not Widespread Use.* The GAO recommended that marketing expenditures for the golden dollar only be incurred if it can be demonstrated that such efforts are likely to increase the coin's long-term circulation. We believe this is a reasonable standard to also apply to other significant expenditures that are intended to increase the circulation of the golden dollar coin.

We have provided technical comments to the report under separate cover.

Sincerely,

(543012) Page 46 GAO-02-896 New Dollar Coin

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