

50 States Commemorative Coin



Program Study

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Coopers & Lybrand



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Executive Summary

I. Introduction

On October 20, 1996, Congress passed the United States Commemorative Coin Act of 1996 ("the Act") providing the framework for a possible new series of quarters to commemorate each of the 50 States. The Act requires that the Secretary of the Treasury conduct a study of certain issues and make a determination by August 1, 1997 whether to move ahead with the Circulating Commemorative Coin Program. If the Secretary decides to move ahead with the Circulating Commemorative Coin Program, he can begin issuing the first new quarters on January 1, 1999. If the Secretary believes that the Program should move ahead but cannot begin by January 1, 1999, he must notify Congress when the Program could begin. The Act does not discuss requirements for a response if the Secretary determines that the Program should not be implemented.

As set forth in the Act, the Program would honor each of the 50 States with a quarter emblematic of that State. These Statehood coins would be issued in the order of each State's admission to the Union with designs selected in consultation with State officials. Other factors, such as the number of quarters to be produced under the Program, are left to the discretion of the Secretary of the Treasury. If the Program is implemented, the Government is authorized to make additional proof and uncirculated quality numismatic Statehood coin products.

The Government awarded a contract to Coopers & Lybrand, L.L.P. (C&L) and its subcontractor, Opinion Research Corporation (ORC), to address specific issues contained in the Act, including other factors which the Secretary may consider in the decision-making process. C&L/ORC worked with a multi-disciplinary task force from the Department of the Treasury to conduct this study. This report addresses the Act's requirements through designated focus areas, identifies key questions, and discusses other factors outside of the specific requirements of the Act which are important to the decision-making process.

II. General Assumptions

The Act provides other general guidance and permits the Government to draw other assumptions to further quantify the Program. For the purposes of this Study, the following general assumptions have been made:

- ∅ **Replacement for the Current Quarter.** The Mint would strike only Statehood coins during the life of the Program. When the Program ends, the Government would resume producing the current Washington/Eagle quarters unless otherwise directed by Congress.
- ∅ **No Change to Physical Specifications.** Even though designs on quarters would change, physical size, weight and other specifications would remain uniform to ensure that all quarters can continue to be used in vending machines, telephones and in other transactions.
- ∅ **Five Quarters Each Year for Ten Years.** The Government would produce five different designs each year resulting in a ten-year program life based on our current Union roster of fifty states. If new states join the Union during the Program, the Government would produce quarters commemorating those States in chronological order of their admission.
- ∅ **Reverse Side Changes Only.** To enhance recognition of the Commemorative Statehood coins as a regular circulating quarter, the emblematic designs for each State would be presented on the reverse or Eagle side only. The obverse or Washington side would have minimal, if any, changes.

III. Focus Areas

The Act requires the Study to:

- A. assess likely public acceptance of and consumer demand for the different coins which may be issued under the Program taking into account the length of the Program;
- B. compare the costs of producing the Statehood coins and the revenue that the Program would generate;
- C. assess the impact on coin distribution systems;
- D. document the advantages and disadvantages of different approaches to selecting designs for coins in such a Program; and
- E. note other factors which the Secretary may consider appropriate in deciding upon the feasibility of the Program.

A. PUBLIC ACCEPTANCE AND LIKELY DEMAND

Key Question: Would the American public accept, approve, and use the Statehood quarters?

C&L/ORC designed a telephone interview questionnaire and focus group moderator's guide to ascertain likely public opinion regarding acceptability and potential demand for the proposed Program. C&L/ORC used these tools to conduct more than 2,000 telephone interview surveys and 12 geographically diverse focus groups. The sample size for this telephone market survey was selected to provide a 98 percent confidence level (2 percent margin of error) in the results. Many surveys of public opinion conducted with a smaller sample size provide a 95 percent confidence level. While surveys are constructed to provide the best indicators of current public opinion, they do not guarantee future behavior particularly over a ten-year period.

The results of the market survey showed that 51 percent of the respondents were favorable to such a Program; 38 percent were indifferent to the Program; and 11 percent were unfavorable to the Program concept. The highest approval ratings came from younger demographic groups and households with children. Conversely, the highest disapproval and indifference ratings came from older age groups and households without children.

The most commonly cited themes in a favorable program response involved the educational potential of the coins to promote awareness of the unique historical, geographical and cultural heritage of each State. Unfavorable reactions focused on: (1) why is the Government considering this Program, (i.e. "doesn't the Government have better things to do") and (2) what will the Program cost taxpayers. The market survey data indicates that the Program concept could be popular, if implemented. Since 38 percent of the respondents indicated indifference to the Program concept, effective communications with clear and definite reasons for the Program would be necessary. The communications would also need to effectively the true cost implications of the Program. If the Program was implemented, the Government's effectiveness in public education efforts could have a significant impact on the Program's acceptance.

Key Question: What would be the likely public demand for Statehood quarters?

Of the total respondents in our telephone interviews:

- ∅ 40 percent of the respondents said that there was a good or a fair possibility that they would save the quarters;
- ∅ 35 percent of the respondents said that they would be very likely or almost certain to save the coins; and
- ∅ 25 percent of the interviewees said that there would be little or no chance that they would save the coins.

About 75 percent of the survey population expressed at least some interest in collecting coins and 38 percent of the respondents were indifferent to the proposed Program. Therefore, it appears that about 13 percent of the population (the difference between the 38 percent indifferent population and the 25 percent who expressed little or no interest in the Program), while indifferent to the Program, could be interested in saving quarters.

Of the 75 percent of the respondents who indicated an interest in collecting the quarters, there was a clear preference (by a 2:1 margin) in collecting full sets instead of individual coins. After projecting the survey responses to the adult U.S. population, an estimated 98 million people (51 percent of our sample) would be interested in saving one or more full sets. Of this group, the mean average anticipated collection rate is 7.8 sets per person (50 coins in a set).

Comparison with the Bicentennial program seems to support this collection rate. Our survey has indicated that approximately 34 percent of the American adult public is keeping Bicentennial quarters each. This percentage of Bicentennial quarter collectors approximates the 35 percent of respondents who said that they would be very likely or almost certain to save the Statehood coins.

The pattern of collecting multiple coins or sets is also similar. People in our telephone survey who said that they have saved Bicentennial quarters indicated that they are still keeping an average of 27.5 quarters. This high collection behavior was further reinforced by our focus group members, one of whom acknowledged having more than 400 Bicentennial quarters. Unlike this Program, the Bicentennial program ran for only a year and a half.

B. REVENUE AND COST IMPLICATIONS

Key Question: What are the potential seigniorage amounts which could be expected from this Program?

The Government earns revenue on each coin that is manufactured and circulated by producing coins for a fractional cost of their face value and "selling" them to the Federal Reserve Banks (FRBs) at face value. This difference between a coin's production cost and face value is called "seigniorage". Seigniorage is remitted to the Treasury to reduce the future borrowings which the Government would need to fund its operations and programs. Seigniorage does not directly reduce the deficit. Rather, the interest savings which are realized by having seigniorage reduce borrowings are scored as a budget savings. Increasing production and payout of quarters to the FRBs generates additional seigniorage. If the Program is implemented and results in increased demand for quarters, the Government would need to produce additional quarters to meet regular economic demand which would increase seigniorage revenue.

For purposes of this Study, three seigniorage estimates were developed. These estimates used market survey data to project demand. Using data gathered through the telephone interviews, seigniorage estimates directly attributable to the Program range from approximately \$2.6 billion to \$5.1 billion. The

collection data used for these estimates was extrapolated from individuals who indicated in the survey that there was at least a fair chance that they would save the quarters.

Using the 75 percent of the people who said they may save quarters, the mean average number of quarters saved, and accepted extrapolation methods, the Government projected that seigniorage attributable to this program could be \$5.1 billion. By changing the mean average number of quarters saved by consolidating a small percentage--less than one percent--of extremely high set collectors ("outliers") into a higher probability set, the Government has projected that seigniorage revenues could be \$3.1 billion. Consolidation of outliers is a commonly accepted practice for extrapolating market research data. The Government has developed a more conservative estimate of \$2.6 billion in seigniorage revenue. This approach is based upon an adjusted median average.

Seigniorage revenue estimates attributable to this Program are difficult to project accurately because they involve many uncertainties, including:

1. the lack of a precedent for a U.S. multi-coin, multi-year circulating commemorative coin program;
2. respondents in our surveys attempted to anticipate their future behavior on a ten-year program which is still in the conceptual stage;
3. telephone interviews indicated that a significant portion of the population (38 percent) has not yet formulated an opinion on the Program concept.

If implemented, the extent and success of various promotional activities that the Government may consider to heighten public awareness and interest in the Program may affect actual public opinion and collecting behavior.

This study did not attempt to project the collecting patterns of the population under age 18. However, the Government recognizes that the collecting patterns of this group could impact seigniorage.

C. IMPACT ON PRODUCTION AND DISTRIBUTION SYSTEMS

Key Question: Could the Government meet anticipated production requirements for the new coins while continuing to meet regular economic demand?

If this Program was implemented, the Government would need to produce an adequate number of quarters to satisfy: (1) basic economic requirements; and (2) increased demand which would be attributable to this Program. With increased capacities attributable to currently planned capital improvement programs and developed contingency plans, it appears the Mint could be capable of producing enough quarters to meet the estimated baseline economic demand and the highest Government demand scenario attributable to this Program.

Regular Federal Reserve economic demand estimates are based on a monthly modeling process that projects future coinage needs. The study has used these estimates (1.6 billion in FY 1999 to 2.2 billion in FY 2008) to project baseline economic demand for quarters throughout the production life of the Program.

Estimates of quarter demand directly attributable to this Program vary significantly depending on interpretations of the market research data. Therefore, the Government used a wide range of demand scenarios to assess potential increases in future production requirements. For purposes of the Study, the Government has used a high demand scenario in which the Mint would be required to produce approximately 3.0 billion quarters above the baseline economic demand.

In summary, the Government would have three possible means of meeting production demands:

1. Existing capital improvement programs which have already been programmed and outlined in the Mint's strategic plans (\$32 million).
2. Additional capabilities through investments in new production lines in Philadelphia (\$13 million) and possibly the Denver (\$22 million) production facilities.
3. Contingency plans to meet unexpected spikes in demand through conversion of penny presses (no additional cost), use of overtime (\$1.2 million annually), and use of existing and proposed Washington/Eagle quarter stockpiles (negligible costs).

Key Question: Could the Government ensure equitable availability of each coin to every citizen (particularly in home states)?

Using the current distribution system does not ensure that each Statehood design will be initially available in all parts of the country. For the purpose of this Study, it is assumed that the Government would use the current distribution system to issue and circulate the proposed Statehood quarters. Consideration of alternative approaches to distributing Statehood coins would require extensive revision of existing Federal Reserve System/U.S. Mint working relationships. The Government would rely on the

normal coin ordering and recirculating patterns to distribute the Statehood coins throughout the economy.

We have obtained information from the Board of Governors of the Federal Reserve System regarding historical quarter ordering patterns and recirculation rates. While each Federal Reserve Bank and Branch may not order quarters from the Mint each month, an average of 22 of the 37 locations received quarters in any given month during 1995 and 1996. The Mint would announce production schedules for each design in advance so that Federal Reserve Banks, at their option, can order Statehood quarters that may be relevant to their jurisdictions' interests. This historical behavior and the option of ordering quarters from the Mint during the particular State's production runs could help get more Statehood quarters into circulation into a wider geographic region more quickly.

The participants in our market research efforts indicated that they would not want the Government to change the current monetary system to accommodate this Program. The majority of our focus group participants who expressed an interest in collecting quarters were content to wait for them to appear in circulation through change in retail transactions or at local banks.

To help meet targeted or special demand requests, the Mint has indicated that it would offer bulk distributions to commercial interests. These special request distributions would require a minimum order and would be provided at face value plus the cost of shipping and handling. The Mint has also indicated it would make individual coins available to the members of the general public through a series of numismatic products at retail prices.

D. DESIGN SELECTION PROCESS

Key Question: What are the advantages and disadvantages to the different options available for selecting designs for the Statehood quarters?

As with all U.S. coins and currency, the Secretary of the Treasury would have final approval of each Statehood quarter design. Under the Act, both the Commission of Fine Arts and Citizens Commemorative Coin Advisory Committee would provide recommendations to the Secretary regarding each Statehood quarter design. At issue is the initial design selection and nomination process leading up to this statutory review. The Act requires that for this Program, the Government consult with appropriate State officials regarding the design for that State coin.

There are two primary methods for the obtaining initial Statehood quarter designs. The first method vests primary responsibility for submission of initial designs with the individual States. The second approach is more heavily dependent on the Federal government to manage submission of initial designs. Each method has inherent advantages and disadvantages.

Under the option of more State-level control, there would likely be more participation in the process by individual citizens which would further aid the Government's public awareness and education campaigns.

The disadvantage to a more State-level controlled process includes a lack of national consistency of coin designs, possible submission of unsuitable or uncoinable designs, and logistical issues regarding Federal/State coordination.

Greater Federal management of the initial design submission process would better ensure timely receipt of appropriate and coinable designs consistent with those of other States. The disadvantages to more Federal control of the initial design selection process could include a perceived Federal intrusion into a matter or subject better addressed at the State level.

The Government should consider the level of public involvement in the initial design submission and selection processes. The participants in our telephone interviews and focus groups did not indicate a strong preference regarding who should design the coins. While many people said that public contests would increase awareness of and enthusiasm for the Program, many other people said that it would be fine if the Mint prepared the designs. In fact, more than half of our respondents indicated that the process by which designs were submitted would not have an impact on their participation in the Program.

E. OTHER FACTORS FOR CONSIDERATION

Key Question: What are the other issues and factors that the Secretary may wish to consider in his decision?

There are many unique issues that arise in considering the feasibility of implementing such a Commemorative Coin Program. A detailed analysis regarding the implications resulting from the topics listed below is outside of the scope of the study. However, these factors may be important and may merit consideration by the Secretary in his deliberations.

1. **Unprecedented Change to Coins.** The U.S. Government has always carefully considered changes to the face of its coinage and currency. Historically, the Government has always required a clear, direct link to a single event or memorial date to change circulating coin designs. The 50 States Commemorative Coin Program has no direct link to a single event or memorial date. Implementing this Program would be a significant change in public policy.
2. **Public Awareness/Education.** If the Government were to adopt this Program, an extensive public awareness campaign and marketing effort would likely be required to communicate the nature and purpose of the Program to the general populace. While it is possible and even probable that upfront costs would be more than offset by increased seigniorage revenues, an initial outlay of funds would be required. This study does not attempt to project or capture those costs nor determine who should fund this campaign. Rather, the Study identifies the potential need for "seed" public relations money and administrative resources at the outset of the Program.

3. **Effects of Distribution Uncertainty.** The market research did not address concerns that the public may have if particular designs of Statehood coins were not readily available in their area. The Government would use existing processes for distributing Statehood quarters to the population. This process is heavily reliant on Federal Reserve Bank ordering patterns and normal recirculation of coins through the economy. Under this approach, the Government cannot ensure that all designs will be initially available in every area of the country. While the Mint has indicated that it would offer individual quarters to the general public through various numismatic products at retail prices, the public's reaction to paying a premium for Statehood quarters could not be assessed.
4. **Equality of Individual Statehood Coin Production.** If this program were implemented, actual levels of production of individual Statehood coins will vary due to changing economic forecasts and actual demand. Public sensitivities to unequal production of Statehood coins have not been addressed.
5. **Uncertainties Regarding Production Capacity Flexibility.** If the Program was implemented, the production requirements of the Program in the highest demand scenario could reduce the Government's flexibility to respond to prolonged unexpected demand in the economy and other potential circulating coin programs.
6. **Design Process Uncertainties.** Many options are available for selecting designs for the coins. In some scenarios, States would bear greater responsibility for the process. In other options, the Federal government would have more responsibility. In either case, the Government would need various levels of coordination with and decisions from State officials. Since specific design selection processes are of yet undetermined, the potential administrative burden on both the State and Federal governments can not be assessed.
7. **The District of Columbia, Territories, and Other U.S. Possessions.** The current legislation calls for the Program to honor each of the 50 states; however, the Act is silent regarding the commemoration of the District of Columbia, U.S. territories, and other possessions. There are political and pragmatic implications of including or excluding the District and territories in or from the Program.

I. Introduction

On October 20, 1996, Congress passed the United States Commemorative Coin Act of 1996 ("the Act") providing the framework for a possible new series of quarters to commemorate each of the 50 States. The Act requires the Secretary of the Treasury to conduct a study of certain issues and make a determination by August 1, 1997 whether to move ahead with the Circulating Commemorative Coin Program. If the Secretary decides to move ahead with the Circulating Commemorative Coin Program, he can begin issuing the first new quarters on January 1, 1999. If the Secretary believes that the Program should move ahead but cannot begin by January 1, 1999, he must notify Congress when the Program could begin. The Act does not discuss requirements for a response if the Secretary determines that the Program should not be implemented.

As set forth in the Act, the Program would honor each of the 50 States with a quarter emblematic of that State. These Statehood coins would be issued in the order of each State's admission to the Union with designs selected in consultation with State officials. Other factors, such as the number of quarters to be produced under the Program, are left to the discretion of the Secretary of the Treasury. If the Program is implemented, the Government is authorized to make additional proof and uncirculated quality numismatic Statehood coin products.

The Government awarded a contract to Coopers & Lybrand, L.L.P. (C&L) and its subcontractor, Opinion Research Corporation (ORC), to address specific issues contained in the Act, including other factors which the Secretary may consider in the decision-making process. C&L/ORC worked with a multi-disciplinary task force from the Department of the Treasury to conduct this study. This report addresses the Act's requirements through designated focus areas, identifies key questions, and discusses other factors outside of the specific requirements of the Act which are important to the decision-making process. The designated focus areas are:

1. assess likely public acceptance of and consumer demand for the different coins that may be issued under the Program taking into account the length of the Program;
2. compare the costs of producing the Statehood coins and the revenue that the Program would generate;
3. assess the impact on coin distribution systems;
4. document the advantages and disadvantages of different approaches to selecting designs for coins in such a Program; and
5. note other factors that the Secretary may consider in deciding upon the feasibility of the Program.

B. General Assumptions

Although the Act provides general guidance regarding the proposed Program, the Government found it necessary to incorporate the following general assumptions in order to assess the feasibility of the Program:

- ∅ **Replacement for the Current Quarter.** During the life of the Program, only Statehood quarters will be produced. When the Program ends, the Government will resume producing the current Washington/Eagle quarters unless otherwise directed by Congress.
- ∅ **No Change to Physical Specifications.** Even though the designs on quarters will change, the physical size, weight and other current quarter specifications will remain unchanged to ensure that all quarters can continue to be used in vending machines, telephones and other transactions.
- ∅ **Five Quarters Each Year for 10 Years.** The Government will issue five Statehood coins each year, which will result in a 10-year Program life. This assumption is based on our current Union roster of 50 states. If new states join the Union during the Program, the Government will produce commemorating quarters for those States at the end of the Program in sequential or chronological order of their admission.
- ∅ **Reverse Side Changes Only.** To better ensure recognition of the Statehood coins as a regular circulating quarter, the emblematic designs for each State will be presented on the reverse, or Eagle side, only. The obverse, or Washington side, will have minimal, if any, changes.
- ∅ **Production Facilities.** The Government will continue to produce circulating quarters at the U.S. Mint locations in Denver, CO, and Philadelphia, PA.

Other specific assumptions regarding potential revenue, impact on production and distribution systems, and design criteria are discussed in more detail later in this report.

C. Approach

C&L, under the direction of the Government, worked with a multi-disciplinary team of Treasury officials to formulate a systematic approach to conduct the study. The approach strives to provide the most accurate, objective, and complete information regarding the feasibility of and justification for the Program. The objective of the study is to provide the Secretary with the information he will need to make an informed decision regarding the Program.

The Government and C&L agreed to specific task responsibilities in order to use resources effectively. The Government had overall responsibility for developing an approach and conducting an analysis on the cost and revenue projections and the potential impact on production and distribution systems. C&L reviewed these analyses to assess the reasonableness of each approach. C&L and ORC conducted market research to assess the public's acceptance of the Program concept and potential demand for the coins. C&L also reviewed various options for selecting designs and noting the advantages and disadvantages of each approach. Finally, C&L had overall responsibility for compiling the various elements of this Study into this report.

To assess the overall feasibility of the Program, the Government identified five critical areas that the Secretary may consider in his deliberations regarding the Program: (1) public acceptance and likely demand, (2) revenue and cost implications, (3) impact on production and distribution systems, (4) design selection process, and (5) other factors.

1. Public Acceptance and Likely Demand

The United States does not frequently change the appearance of its circulating coins. During the past 30 years, the only change to American coinage has been the introduction of the Eisenhower and Susan B. Anthony dollar coins and the 1975-76 issue of Bicentennial quarters and half-dollars. These programs have received mixed reviews from the American public: the Bicentennial coins enjoyed high popularity while the Susan B. Anthony dollar coins met with less enthusiasm. If implemented, the Statehood Coin Program commits the Government to a 10-year change in the face of coinage. A significant portion of the Study's market research efforts were designed to obtain data regarding likely public acceptance of the Statehood coins.

Approach: C&L/ORC conducted both quantitative and qualitative research efforts to support the Study. The quantitative study consisted of a telephone survey of 2,032 adults 18 years old and older. The sample size was selected to provide a 98 percent confidence level (plus or minus 2 percent margin of error) and to provide statistically valid subsets of important demographic groups. The survey size allowed us to review the public's overall impression of the Program and analyze the opinions of people who do not consider themselves to be true coin collectors. Each telephone interview lasted about 12 minutes and was conducted from March 17-30, 1997. C&L/ORC designed the survey questions to obtain data that could be tabulated and projected to the full population. That approach provided a basis for anticipating possible collection rates and patterns to help assess demand for the Statehood Coins.

The qualitative effort consisted of 12 2-hour focus groups conducted from April 7-16, 1997 in six different cities (two sessions per city). Each session consisted of 9-12 residents of the city and an ORC moderator. We chose four geographically diverse U.S. cities (Boston, MA; Raleigh, NC; Seattle, WA; and, Dallas, TX) and two Canadian cities (Toronto and Edmonton). We conducted the focus groups in the U.S. cities to validate responses from the telephone surveys and to gain additional insights. The Canadian sessions were conducted to learn about actual impressions of the Canada 125 Circulating Commemorative Quarter Program, which was conducted in 1992 to recognize each of the 12 provinces and territories. Focus group opinions are not statistically valid, but they provide an excellent forum for supporting and amplifying quantitative research findings.

We structured the question topics for both the telephone surveys and the focus groups to discuss the following general topics:

- ∅ Recollection and saving patterns for Bicentennial quarters
- ∅ Overall impression of the Statehood quarters concept and their reasons for liking or disliking the idea
- ∅ The design submission and selection processes and topics for designs
- ∅ Likelihood, extent and reasons for saving Statehood quarters

2. Revenue and Cost Implications

The Government earns revenue with each minted coin placed into circulation. The Government produces coins for a cost that is only a fraction of their face value and then "sells" coins to the Federal Reserve Banks (FRBs) at face value. This difference between the cost of producing a coin and the face value is called "seigniorage." Seigniorage realized on circulating coins is remitted to the Treasury General Fund by the Mint and is used to reduce the amount of future borrowings by the Government to fund its operations and programs. Seigniorage realized on circulating coins does not directly reduce the deficit. Rather, the interest savings that are realized by having seigniorage revenues reduce future borrowings are scored as a budget savings. By increasing the production and payout of quarters to the FRBs, additional seigniorage is recognized. Therefore, if the Program is popular and the public begins to pull these Statehood quarters out of circulation, the Government would need to produce additional quarters to meet regular economic demand, which in turn would increase the seigniorage revenue.

Conversely, there would be costs associated with implementing the Program, including a public awareness/education campaign; design development costs; incremental manufacturing costs for producing multiple designs; and capital investments. A section of this report provides an analysis of the potential costs of the Program against the potential revenue.

Approach: There are inherent difficulties in attempting to project revenue for a conceptual program occurring over a 10-year period for which no true precedents exist. Therefore, the Government decided to project revenues through various demand scenarios resulting in a range of possible revenue estimates. C&L supported that approach. As baselines, the Government prepared estimates based on market research data and other reasonable assumptions based on population growth and possible collection probability percentages.

3. Impact on Production and Distribution Systems

Another critical factor is whether the Government has the necessary physical capacity and distribution system to successfully implement this Program. The Mint must be able to produce enough Statehood quarters to meet economic demand and incremental demand attributable to this Program while averting shortages of quarters or other coin denominations. It is also important to assess the possible implications of this Program, if implemented, to current distribution systems.

Approach: To support its analyses, the Mint used information from various internal and external sources. These sources included its Strategic Plan, capital spending plans, archival and historical information, master production schedules, the Federal Reserve System, industry sources, suppliers, vendors, stakeholders, and other government mints. In summary, the Government adopted the following approach to determine production capabilities under the proposed Program:

- ∅ Document existing capacity from historical production records and individual machines
- ∅ Project baseline demand for clad¹ coins from the current econometric model
- ∅ Identify planned enhancements over the next 10 years and their resulting impact on production capabilities
- ∅ Develop production assumptions and requirements regarding manufacturing capabilities
- ∅ Project production requirements for four scenarios of potential increased demand
- ∅ Identify stress points in production during the life of the Program on the basis of regular and projected incremental demand
- ∅ Develop strategies to address each stress point during the life cycle of the Program

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For purposes of our discussion, "clad" coins will include nickels since nickels, dimes, quarters and half dollars since these coins share the same production equipment. Nickels are technically not clad coins.

If the Program were implemented, accessibility of Statehood quarters to the general public would be a critical success factor. As such, the process through which the FRBs order and payout coins is instrumental. As the United States has traditionally produced only a single design for the quarter, issues regarding identification of coins by design are new considerations. The Government made various assumptions regarding the distribution of Statehood quarters and their potential impact on the FRBs. C&L coordinated these assumptions with representatives of the FRBs and Board of Governors of the Federal Reserve System.

4. Design Selection Process

C&L and the Government will address the advantages and disadvantages of the various alternatives for selecting designs for each of the Statehood coins. The purpose of this study is not to recommend one approach over another. Rather, this report sets forth different approaches.

Approach: Several different options exist for submitting and selecting designs. Some alternatives would maximize public participation to better ensure enthusiasm for the Program; others would limit public involvement and rely on the Government's professional designers.

By using a "decision tree" approach, C&L identified several different options for the design process. The decision tree approach presents various paths along which choices can be made. For example, the first decision point may be whether the Government or the public prepares designs. If the public path is selected, the next decision point is whether to have open competitions or invitations to selected artists. For each scenario in the decision tree, we have identified advantages and disadvantages and augmented the discussion with comments from our market research telephone interviews and focus group participants.

The Government assessed the potential impact of the proposed Statehood Program on its design development capabilities in a three-step approach. First, the Government developed core assumptions regarding design requirements. Next, the Government determined the required timing for design development for the first State. Finally, the design development process was benchmarked against previous years of high design demand to determine if the 50 States Program requirements could be met.

5. Other Factors

The Act notes specific impact areas that the Study should address to help the Secretary in his deliberations regarding the feasibility of the proposed Program. However, the Act also states that the Study should note other factors which the Secretary may wish to consider.

Approach: The Government/C&L team identified several historical, traditional, and political issues which fall outside of the scope of this study, yet may be relevant to assessing the justification for the Program. The study itemizes these issues for the Secretary's consideration.

II. Key Questions for the Secretary

To address the five focus areas required for this Study, this report documents key questions and responses to help the Secretary form a basis for his decision regarding the feasibility and justification for the proposed Program.

Public Acceptance and Likely Demand

- ∅ Would the American public accept, approve, and use the Statehood quarters?
- ∅ What would be the likely public demand for Statehood quarters?

Revenue and Cost Implications

- ∅ What are the potential seigniorage amounts that could be expected from this Program?

Impact on Production and Distribution Systems

- ∅ Could the Government meet anticipated production requirements for the new coins while continuing to meet regular economic demand?
- ∅ Could the Government ensure equitable availability of each coin to every citizen (particularly in home states)?

Design Selection Process

- ∅ What are the advantages and disadvantages to the different alternatives available for selecting designs for the Statehood quarters?

Other Factors

- ∅ What are the other issues and factors that the Secretary may wish to consider in his decision?

A. Would the American public accept, approve, and use the Statehood quarters?

The results of the telephone survey indicated that 51 percent of our respondents had a favorable impression of the program; 38 percent expressed indifference; 11 percent had unfavorable impressions of the Program. The survey indicated a pronounced trend of higher approval rankings from younger demographic groups, households with children, self-described coin collectors, and individuals who recall the Bicentennial Program. Higher disapproval ratings came from older age groups and households without children. Results by income level did not present a discernible trend. The results of our telephone survey question regarding overall impressions of the Program are presented below:

What do you think of the 50 State Coin proposed Program?	
Very Good Idea	14%
Good Idea	37%
Poor Idea	7%
Very Bad Idea	4%
Makes No Difference	38%

The survey asked respondents about why they thought that the Program was a good or bad idea. Responses varied, but reactions followed these themes:

Positive Themes

- + State Pride / Nice Way to Honor Each State
- + Nice Collectible for Self, Others, Children, or Grandchildren
- + Historical, Heritage, or Educational Significance
- + Time for a Change / Unique Concept / "Just a Neat Idea"
- + Stimulates Interest in Coin Collecting

Negative Themes

- + Concern Over Cost of the Program
- + Government Has Better Things to Do

- + Too Confusing / Too Many Designs
- + Like Coins as They Are / No Need to Change

These themes were supported by comments from our focus group participants.

"I think it's great. I imagine little kids trading. You know, I'll give you a Rhode Island for a Texas or something. I think the educational value is great."

"I think it teaches us about U.S. history. Some people, you know, who do not know what year all the states were admitted. They get to know which one came in what order."

"I like the idea of change. The United States is one of the few countries that hasn't changed its coin or currency to keep pace with the modern world. At the same time, I think it's a neat idea having the charm of the individual histories of the States in some way on the coins. I kind of like that."

"I have children, one's middle school age and one is elementary school age. I think they would be very interested in looking through all the change anyone got to see the different ones. And I think it would be of great interest for school age children."

The focus groups' negative comments centered in two areas. Participants wanted to know why the Government was considering this Program and expressed concerns about the potential cost.

"I was going to ask you why the Government wants to do it. Just to encourage collection of these? Because why should the Government go to the added expense of minting and designing these quarters? I just want to keep Government costs down. Quarters are quarters."

"I think they could spend their time doing something more important."

"What's the motivation behind it?"

The Program concept seems to have broad public acceptance, but many participants in our focus groups wanted to know why the Government was considering this Program and why right now. People asked if the new quarters had anything to do with the new century or millennium or if there was any particular rationale for beginning the Program in 1999. Therefore, if the Government decides to implement the Program, clear and decisive reasons should be presented through the public education/awareness campaign.

Many focus group participants held misconceptions that the Program would cost rather than make money for the Government. While there may be some incremental costs associated with a public awareness campaign and designs for 50 new coins, those costs would be more than offset by the potential revenues that the Government would earn from the public collecting the quarters. If

implemented, the Government should consider communicating the true financial ramifications of the Program as part of a public education/awareness campaign to help allay unfounded fears.

Our telephone survey and focus groups also included questions regarding several aspects of the coin design process. The purpose of these questions was to determine if the public had strong preferences about the design process and to indicate if any of those considerations were sufficient to affect their opinion regarding the Program or their demand for the coins if the Program were adopted.

How important to you, on a scale of 1 to 5, is the process through which designs are <u>submitted</u> ?	Total Population	Possible Collectors
(5) Very Important	27%	29%
(4)	15%	17%
(3)	22%	23%
(2)	8%	9%
(1) Not Important At All	27%	21%
Don't Know	1%	1%

About 42 percent of the total surveyed population indicated that the process through which designs are submitted was felt to be important. About 35 percent said that the process was not important. The importance increases when looking at the responses for those individual who expressed some interest in collecting the coins. This question focused on the process and did not ask respondents who should design the coins or what should be on the designs.

Would public participation in the design selection process make you more or less likely to keep the quarters?	Total Population	Possible Collectors
More Likely	35%	40%
Less Likely	4%	4%
Does Not Matter	61%	56%

More than half of the respondents indicated that public participation would have little impact on their interest in the Program. However, although not a majority, a large percentage of the population indicated that they would be more interested in the Program if there were public participation in the design selection process. The trend is consistent with responses from possible collectors.

In the focus group discussions, we provided participants with prototype designs to show what individual state designs may look like. Participants' responses and reactions to the design process alternatives were consistent with our findings in the quantitative telephone survey.

Question C3 - Which of the following would make a good topic for design?	Total Population	Possible Collectors
Nature and Scenery from the State	60%	62%
State Landmarks	62%	64%
Famous Person from the State	33%	34%
State Emblems such as Flower, Bird, or Tree	57%	60%
State Flag	51%	54%

We asked our market participants to rate various themes for coin designs on a scale of 1 to 5 with higher numbers indicating greater approval. The table above denotes the percentage of people who gave ratings of "4" or "5" which signify high approvals of each of those topics. Our telephone surveys and focus groups both indicated that nature, scenery, and landmarks associated with the State were the most popular subjects. Emblems such as the state bird, tree, or flower also drew favorable responses from at least half of the respondents. Only about half of the respondents expressed overall positive reactions to state flags and only about a third thought that a famous person from the State would make a good subject.

Since many people believe that the coins could be a good educational tool, they have recommended putting historical information about the State on the coins. One particular comment from a focus group participant drew several approving remarks.

"The year that it was admitted to the Union, and maybe the capital of that State. I wouldn't personally think the tree and the bird and all that stuff would be that important, but at least the capital of the State."

We find these themes very consistent with the market research data regarding why people thought that the Program could be a good or bad idea. The concepts of honoring each State, celebrating State pride, historical/cultural/heritage significance, and potential uses as an educational tool for teaching children about geography and a broad range of other subjects were prevalent in our survey responses regarding design content.

Several options exist as previously discussed in this report for obtaining designs for consideration. One option would be to have Government-invited artists or designers develop proposed designs. Another option would leave the design nomination process to the individual States and permit them the flexibility to hold open contests or invite their own selected artists.

Question C6 - Who should design the coins?	Total Population	Possible Collectors
General Public	36%	40%
Selected Artists	29%	31%
The U.S. Mint	26%	26%
None of the Above	1%	0%
Doesn't Matter	27%	22%

Nearly three-quarters of the total surveyed population indicated that the process through which designs are submitted was at least somewhat important. That percentage increases to nearly 80 percent when looking at the responses for those individual who expressed some interest in collecting the coins. This question did not ask respondents who should design the coins or what should be on the designs, but rather queried about the importance of the submission or nomination process.

B. What would be the likely public demand for Statehood quarters?

As shown in the table below, approximately 75 percent of the respondents indicated that there is at least a fair possibility of collecting some of the quarters and more than one-third of the total respondents said

that the chance of saving was very likely or almost certain. About 25 percent of the respondents said that there was little or no chance of them saving quarters.

How likely are you to keep some of the quarters?	
Almost Certain	19%
Very Likely	15%
Good Possibility	20%
Fair Possibility	20%
Little or No Possibility	25%
Don't Know	1%

People who expressed an interest in collecting quarters stated a preference for collecting full sets rather than coins for individual States by a 2:1 margin as shown in the table below. Nearly 47 percent of the total survey population expressed an interest in attempting to collect full sets of coins. This table does not express the likelihood of collecting specific numbers of quarters. Rather, it provides the public's inclination towards collecting full sets or only individual coins of interest.

Would you be likely to try and collect a full set of quarters over ten years or collect only specific states?	
Full Sets	47 %
Specific States Only	23 %
Don't Know	5%
Little or No Possibility of Collecting Quarters	25 %

The market survey included several questions regarding the Bicentennial Program to help support a baseline for possible public reaction to this Program. Approximately the same percentage of people who remember the Bicentennial program expressed at least a fair interest in collecting Statehood quarters as shown in the following table.

	Do you recall the bicentennial quarter?		How likely are you to keep 50 State quarters?
Yes	77%	Fair, Good, Very Likely, or Almost Certain	74%
No	23%	Little or No Possibility or Unsure	26%

The survey also asked people how many Bicentennial quarters they saved and how many they still have. The summarized responses projected to the adult population are presented below.

- ∅ Approximately 66 million Americans (34 percent of the public) initially kept an average of 35.6 coins per person which equates to almost 2.5 billion quarters being temporarily held out of circulation. A follow-up question regarding retention indicates that the respondents are still holding 27.5 coins per person. This behavior projects to nearly 1.8 billion Bicentennial quarters being out of circulation. Slightly more than 2 billion bicentennial quarters were produced. If this saving behavior is correct, only about 200 million Bicentennial quarters are still circulating.
- ∅ The market survey indicated that the mean average number of Bicentennial Quarters saved is 27.5 while the median average number saved is 6 coins per person. These statistics imply that a relatively few number of individuals are holding large quantities of Bicentennial quarters. This pattern was consistent with the focus group discussions.
- ∅ The telephone interview respondents also expressed an inclination towards collecting multiple sets. People who said that they would be more likely to save full sets expressed interest in saving a mean of 7.8 full sets per person and an additional mean of 11.2 quarters in addition to the sets. This multiple coin or set saving behavior is consistent with data gathered in our market survey regarding the Bicentennial Program.

If people save 7.8 sets, they will invest \$100.25 in their Statehood Coin collections. Saving 27.5 Bicentennial quarters represents an investment of less than \$7.00. Although there is a substantial

differences in the monetary commitments to these Programs, the Statehood Coins include 50 quarters issued over 10 years compared with one quarter issued for about 1 1/2 years. The Statehood quarters will also be produced on average nearly 25 years later than the Bicentennial quarters. Therefore, the "investment" in terms of current dollars may be less comparable.

C. What are the potential seigniorage amounts that could be expected from this Program?

Seigniorage revenues attributable to this Program are difficult to project accurately for several reasons including:

- ∅ the lack of a precedent for a U.S. multi-coin, multi-year circulating commemorative coin Program;
- ∅ respondents in our surveys attempted to anticipate their future behavior on a ten-year program which is still in the conceptual stage; and
- ∅ telephone interviews indicated that a significant portion of the population (38 percent) has not yet formulated an opinion on the Program's concept; and
- ∅ if implemented, the extent and success of various promotional activities that the Government may consider to heighten public awareness and interest in the Program may affect actual public collecting behavior.

The Government reviewed the historical experience of other programs, projected various demand scenarios, and considered other factors to determine possible seigniorage levels.

1. Historical Experiences

Both the U.S. and Canadian governments have demonstrated success in marketing, producing, and distributing commemorative circulating coins; however, easy comparisons to the proposed Program are difficult. In 1975-76, the United States launched the Bicentennial Program, which substituted designs on the quarter and half-dollar for a limited period of time. However, many differences between the Bicentennial Program and the proposed 50 States Program limit comparability:

1. The Bicentennial Program lasted only about 1 1/2 years. The proposed Statehood series would last 10 years.
2. The Bicentennial Program consisted of only one new quarter design. The proposed Statehood Program would contain 50 new designs (5 each year for 10 years).

3. The Bicentennial design had a broad, universal appeal. Individual Statehood coins could have differing degrees of popularity depending on the design or population of the State.

The Government of Canada's program to honor each of its 12 provinces and territories with commemorative quarters offers valuable insights and lessons learned but also has limited comparability.

- ∅ The Canadian program lasted only one year in which all 12 designs were marketed, produced, and circulated while the proposed 50 State Program will last ten years.
- ∅ Canada produced only 145 million quarters which amounted to 5.3 coins per Canadian citizen. Since Canada produced 12 different designs for each of the provinces and territories, production outputs were not sufficient for each citizen to obtain one of each quarter. This production schedule made the commemorative coins relatively scarce and all of the quarters were reportedly gone from circulation within one year. Production did not reach the saturation point whereby hoarding would stop and the coins would freely circulate. Therefore, the actual Canadian seigniorage revenue amount was probably less than the amount that could have been realized if production quantities had been greater.

2. Factors Affecting Seigniorage Revenues

To calculate seigniorage estimates according to different scenarios, we used a common set of data and assumptions as discussed below.

a. Market Survey Results

We categorized survey respondents into three broad categories: (1) those who would be inclined to save full sets, (2) those who are more interesting in saving coins from particular states, and (3) those who have little or no interest in saving the quarters. Within each of the two saver categories, we further subdivided the respondents by their likelihood to collect coins as seen in the table below:

Possible Behavior Patterns	...Will Save Full Sets	...Will Save Specific States Only	... Will Save No Coins	Total
Almost Certain ...	16%	3%	---	19%
Very Likely ...	12%	4%	---	16%
Good Possibility ...	13%	7%	---	20%
Fair Possibility ...	11%	9%	---	20%
** Will Not Save **	---	---	25%	25%
Total Possibility ...	52%	23%	25%	100%

We also asked respondents how many quarters or sets that they thought that they would save for their own purposes or to give them as gifts. The responses are shown in the table below:

Possible Behavior Patterns Expressed in Quantity of Full Set or Individual # of Coins	...Will Save # of Full Sets	... Set Savers will Save # of Coins From Specific States in Addition to Full Sets	...Will Save # of Coins from Specific States Only	... Will Save No Coins
Almost Certain ...	10.10	14.20	9.20	---
Very Likely ...	7.50	10.90	15.20	---
Good Possibility ...	7.20	10.30	10.00	---
Fair Possibility ...	5.20	7.70	6.80	---

These estimates have high statistical reliability, i.e., if we were to conduct another survey under similar circumstances, we could expect the same results. However, these data report what people say they will

do over a period of time. Therefore, the data should be considered as inputs for estimates of seigniorage rather than as estimates by themselves for several reasons:

1. We projected population and responses to a current estimate of the U.S. adult population. The U.S. population is expected to increase throughout the life of the Program, providing a larger collecting market for the coins.
2. We only surveyed adults 18 years and older. Consequently, responses are projected to the adult population. There are approximately 50 million people in the country between the ages of 5 and 17. If these young people collect the quarters, the seigniorage impact could be significant.
3. Some respondents indicated that they would collect extremely large quantities of complete sets of quarters--500 sets in some cases. It is possible that these very large numbers are optimistic. Five hundred complete sets amount to 25,000 quarters and a \$7,500 investment over the course of the Program. Ten sets amount to 500 quarters and a \$125 investment. While this behavior is certainly possible, it may not represent a likely scenario for an average citizen. Still, many people in the focus groups and telephone interviews expressed specific reasons for collecting large numbers of sets of coins such as to give to each of their children or grandchildren. This behavior was supported by some focus group members who acknowledged having hundreds of Bicentennial quarters. Therefore, some propensity for saving large quantities of the same coin does exist.

b. Behavior Probability Percentages

The process of translating statements of purchase intent into a useful prediction of purchase behavior has been studied in some detail. Available research deals with a wide range of products and services aimed at both consumer and industrial markets. A major finding of this research is that no single set of adjustments to statements of purchase intent produces accurate market estimates in all cases. The probability that purchase intent will translate into action in a specific time period is higher for non-durable products than for durable products. For reasons discussed below, coins should be treated as a non-durable product for this purpose.

- ⊘ Awareness of the coins would be to be high. Promotional efforts would provide part of this awareness. Media attention might occur and the continuing introduction of new coins would reinforce the Program. This would not be another brand or revision of a consumer product. It would be a new product..
- ⊘ Accessibility of the product would be high. Given appropriate production, these coins would literally be delivered to the consumer and might be found in a pocket or purse.
- ⊘ The unit cost of purchase is small, i.e. \$0.25 for one coin, \$1.25 for a set over a year and \$12.50 over 10 years. Because of the unusual nature of the delivery system for receiving the "products", the appearance of any real expenditure is minimized.

- ∅ There is little financial risk to "buying" the quarters. People could start saving quarters and then return the coins to circulation if they subsequently change their mind.
- ∅ There will be no competition for the coins. If one wishes to save these coins, there is little in the way of a competitive decision involved. There is only one brand, with one set of features, available in one size.

Given these factors, the Canadian experience, the confirming qualitative research and the positive acceptance of the concept by the public, we have assigned a reasonably high probability of action to the intent statements used in this market research study. Taking into account these factors and inherent biases that all surveys may have, the Government accepted the following probability percentages recommended by C&L and ORC:

Likelihood	Assigned Probability
Almost Certain	80%
Very Likely	60%
Good Possibility	40%
Fair Possibility	20%
Little or No Possibility	0%

Weighting the different likelihoods of collecting with these assigned probabilities also closely track to actual experience cited from the Bicentennial Program.

	Likelihood of Saving Statehood Quarters	Assigned Probability	Weighted Average
Almost Certain	19%	80%	15.2%

Very Likely	16%	60%	9.6%
Good Possibility	20%	40%	8.0%
Fair Possibility	20%	20%	4.0%
Little or No Possibility	25%	0%	0.0%
% of Collectors in Total Population			36.8%

Projected Survey Population	190170000.00
Percentage of respondents who recall Bicentennial Program	77%
	146430900.00
Percentage of respondents who recalled Program and saved quarters	45%
	65893905.00
Percentage of total projected population that saved Bicentennial quarters	34.7%

While comparison with the Bicentennial Program does not provide conclusive evidence of the total percentage of collectors in the general public, it does offer some insights, possible historical links to an actual program, and another element of data consistency to the survey and probability percentages. The purpose of this comparison is not attempt to quantify the number of coins that may be saved, but rather to gauge the percentage of the public that may be inclined towards collecting quarters.

c.

Population Growth

As noted above, the market survey results are projected to a current population figure. However, census data projects that the U.S. population is likely to increase at a rate of about one percent per year for the next several years. Since coins typically last decades in circulation, the Government believes that it is

reasonable to assume that individuals currently not included in today's population will become collectors at some point during the lifetime of the coins.

For purposes of calculating demand estimates from the market research data, C&L/ORC projected the adult population to 190,170,000 people in 1995. Government projections of the adult population during the life of the Program range from 201,800,000 in 1999 to 220,600,000 in 2008 or an average of 211,200,000 during the life of the Program. To account for this additional element of the population, the Government has extrapolated the survey results to the incremental increase in people. The Government has assumed that these individuals will exhibit similar collecting patterns to the individuals in the survey and the 1995 projected population. This population adjustment factor is included in each seigniorage projection scenario discussed below.

d. Individual Coin Savers

Seigniorage revenues would be largely impacted by individuals who will save full sets of quarters. However, a smaller group of individuals (23 percent of our surveyed population) has indicated that they would be interested in saving coins for specific States only. Further, many people who said that they would save full sets expressed interest in collecting additional coins from specific States. The Government has assumed that the public will save the average or mean number of additional coins in each scenario.

3. Seigniorage Projection Scenarios

The Government is presenting seigniorage revenue projections as amounts attributable to the overall Program rather than to the 10-year production period. This differentiation is important since even though the quarters will be produced during ten year period, the FRBs may not order all of those quarters from the Mint in that time frame. Since seigniorage is measured when the FRBs order coins from the Mint, not when the coins are produced, program revenue rather than annual revenues are easier to ascertain.

a. Mean Behavior Projected to Entire Population

The table on the following page presents a demand and seigniorage scenario based on a projection of the actual responses of our telephone interview process adjusted by population factors. Based on these responses, extrapolations, and adjustments, seigniorage revenues attributable to this Program could reach \$5.1 billion. This projected amount is based on several factors.

∄ All individuals who expressed some likelihood of collecting coins will do so in the assigned probability likelihood.

- ∅ No quarters will be saved by individuals who said that there is little or no possibility that they will collect quarters.
- ∅ People would save multiple complete sets in the quantities that they indicated in the survey.
- ∅ A complete set consists of 50 coins, and all savers will be able to complete each full set.

In this scenario, the members of the general public who have expressed an interest in collecting the quarters will save an average of 7.8 complete sets. This scenario may appear optimistic, but 70 percent of the full set savers indicated that they would likely save multiple sets. Another view of saving multiple sets is presented in the table below:

How many full sets do you think you will save for yourself or others?		Would you be saving these quarters for yourself, as gifts, or both?	
Multiple Sets	36%	Self and As Gifts	42%
Only One Set	15%	Gifts Only	17%
Will Save Individual Coins Only	23%	Self Only	16%
Little or No Chance of Saving Quarters	25%	Little or No Chance of Saving Quarters	25%

These responses support the concept that about 40 percent of the population has expressed at least a fair possibility of interest in collecting multiple sets. Further, the percentages of the population who indicated that they would likely only keep one set and the respondents who said that they would collect the quarters for themselves only are 15 and 16 percent, respectively.

b. Adjusted Mean Behavior

The second scenario, presented in the table on the following page, presents a seigniorage estimate based on an alternative view of the mean approach. In this estimate, the Government has calculated an adjusted mean that truncates the extremely high responses into a more finite and more feasibly possible collecting behavior. The Government is assuming that any individual who indicated that they would collect more than 50 complete sets would succeed in collecting only 50 sets. A collection of 50 full sets of quarters still amounts to 2,500 quarters and an investment of \$625. Some respondents said that they

would collect 500 sets (at a related cost of \$6,250). As previously discussed, this behavior may not be realistic.

This adjustment affects only 1 percent of the respondents in our survey but has a substantial impact on projected revenue estimates. Based on this adjusted mean behavior and assigned probability percentages, the Government estimates \$3.1 billion in seigniorage revenues.

c. Adjusted Median Average Behavior

The Department of the Treasury Office of Economic Policy (OEP) has also projected possible seigniorage revenues based on an adjusted median average to reflect an alternative, more conservative approach to estimating collecting behaviors. Using a median average approach de-emphasizes the wide range of stated anticipated collection behaviors. Since a pure median approach may overly discount real demand for multiple sets, OEP has applied a modified approach to the median which partially accounts for multiple set saving behavior. Using this approach, OEP estimates that seigniorage revenues attributable to the Program could be \$2.6 billion.

d. Summary Coins Per Person

The scenarios presented above assign various probability percentages to the behavior that people indicated they would follow in conjunction with the Program. This weighting resulted in a projection that approximately 37 percent of the population will actually collect quarters. However, this 37 percent has indicated an interest in collecting multiple sets, if the Program were implemented. These multiple set savings patterns yield a per capita number of coins when applied to the whole population. The following table summarizes these behaviors in terms of the overall population.

	Population	Coins Per Person	Total Coins	Potential Seigniorage
Mean Average	211.2 million	120.00	25.3 billion	\$5.1 billion
Adjusted Mean Average	211.2 million	73.00	15.4 billion	\$3.1 billion
Adjusted Median Average	211.2 million	61.00	13.0 billion	\$2.6 billion

In context, the effect of every adult person in the country saving a single coin per year equates to \$400 million in seigniorage over the course of the Program.

e. Collecting Behavior of Young People

The C&L/ORC survey focused on adult respondents and projected responses to the adult population. However, as noted above, 52 million people between the ages of 5 and 17 could represent a potentially large demand element for the commemorative quarters. Although results of the survey indicated the highest approval ratings for the Program among the youngest age groups surveyed and comments from focus group participants indicated that school age children would likely be very excited about new coins, it is difficult to quantify their behavior. In context, if all 52 million young people between the ages of 5 and 17 collected one full set of quarters during the life of the Program, the Government would recognize about \$500 million in seigniorage revenues.

4. Cost of Production

The Government has prepared the revenue computations based on a seigniorage level of \$0.2020 per quarter. This figure was provided by the Mint on the basis of its cost of operations and its annual financial audit. Possible changes to the cost of producing the commemorative circulating quarters are discussed in the next chapter. However, the Government believes that the incremental cost of producing a commemorative quarter would be minimal for these reasons:

- ∅ The Mint would use the same equipment and processes to produce the commemorative quarters that it currently has or has already accounted for in its long-term strategic plans for ongoing, regular coin production.
- ∅ Any additional cost of developing production-ready designs and other special costs would likely be more than offset by the increased demand and resulting seigniorage from the coins.

The Mint would have to acquire additional equipment to meet possible high demand estimates under a couple of scenarios discussed in detail in the next section. However, the overall cost of the new equipment would be minimal in comparison to the seigniorage revenues that the additional quarters would generate. Further, the cost of producing the quarters would be spread over a large quantity in determining a unit cost for the quarters. As a result, the Mint anticipates that the unit cost of the quarter would actually decrease in high demand scenarios and with conversely increasing seigniorage revenues.

D. Could the Government meet anticipated production requirements for the new coins while continuing to meet regular economic demand?

This section of the Study addresses the key requirement to determine if the Mint could continue to meet the regular economic demand for circulating and meet demand for Statehood coins if the Program is implemented. The Philadelphia and Denver Mints are the only facilities capable of producing the high volumes of circulating coins required to support the demands of the Federal Reserve System. It is not feasible to produce circulating coins in the other Mint facilities because they are not properly equipped.

The Study outlines legislative changes which have enhanced the Mint's ability to react to changing demand scenarios, current and possible capital investment plans, and contingency plans that the Mint could use to meet unexpected levels of economic demand.

1. Background

In late 1995, Congress enacted into law provisions that fundamentally changed the way the Mint finances its operations, plans and executes capital budgets, and procures goods and services, including capital equipment. These changes converted the Mint's circulating coinage operations from annual appropriations to self-financing through a revolving fund financed by seigniorage profits generated by supplying circulating coinage to the Federal Reserve. The 1995 law also waives all rules and regulations under the Federal Acquisition Regulations (FAR) governing the procurement of goods and services required to produce and distribute circulating coinage.

Congress enacted these changes to allow the Mint to operate in a more business-like fashion, less constrained by the requirements of traditional Federal budgeting, appropriations, and procurement processes. As a result, over the past 18 months the Mint has made significant changes in the way it plans, executes, funds, and acquires capital equipment, supplies, and services for its circulating coinage operations in order to modernize and streamline its operations and to expand and make more reliable its production capabilities.

These changes in procedures, processes, and plans have a direct effect on the Mint's capacity to meet demand related to the Program, if implemented. For example, before enactment of the Mint's revolving fund legislation, the Mint found it very difficult to execute capital investment plans. Due to increasing Federal budgetary constraints, the Mint's appropriations were often insufficient to meet Federal Reserve demand for circulating coinage. Because the Mint did not always receive supplemental funding to meet increased demand, funding for additional coinage production occurred from limited capital budgets. Therefore, the Mint could not reliably execute its capital investment plans, and the Mint's production capabilities and its efficiencies deteriorated as a result.

With the new revolving fund, the Mint has a reliable source of funding to finance the production of coinage sufficient to meet Federal Reserve requirements. The Mint can now more quickly adjust production schedules to reflect changes in the economic forces that drive coin demand. The revolving fund also provides a reliable source of funds to support the Mint's capital investment plans. Finally, the FAR procurement waiver allows the Mint to more quickly execute its master production and capital

investment plans by streamlining the acquisition of all inputs, services, and capital equipment needed for circulating coinage operations.

Since enactment of the revolving fund legislation in 1995, the Mint has developed an integrated 5-year capital investment plan covering three lines of business. Execution of this 5-year plan began in a modest way in FY 1996 and accelerated in FY 1997. The plan covers capital investments exceeding \$100 million in circulating and numismatic/bullion production capacity and other areas necessary to support core mission activities.

2. Approach

The Government's approach to determining whether sufficient manufacturing capacity exists to support both currently projected baseline economic demand and the incremental increase in demand attributable to the Program include the following steps: (a) document existing capabilities, (b) project additional baseline demand, (c) identify planned enhancements, (d) develop manufacturing assumptions, (e) estimate incremental demand, and (f) identify potential stress points and develop countering strategies.

a. Document Existing Capabilities

To support its existing capabilities, the Mint documented actual historical production in terms of overall production capacity. These production records indicate that the Mint has produced an average of nearly 2 billion quarters per year over the past 3 years and more than 20 billion coins in 1996. However, the Mint acknowledges that that level of production was not sustainable and was vulnerable to equipment breakdown risks.

b. Project Additional Baseline Demand

The Government maintains an economic model to project anticipated baseline demand for each denomination of coin for several years in the future. The model is updated monthly on the basis of such variables as gross domestic product, consumer price index, retail sales, personal savings trends, and average work weeks. For reference, a copy of the most recent model which uses February 1997 economic data is shown on the following page. This econometric model represents the best possible approach to assessing future baseline demand. We have also noted, however, that the model projects significantly fewer quarters for the next several years (approximately 1.5 billion per year for the next 3 years) than was produced in the past 3 years (nearly 2.0 billion per year). The Mint confirmed that this lower projection is the current baseline estimate for coin demand over the next several years.

It is exceedingly difficult to accurately project specific coinage requirements for a future time period. Unknown factors such as an unexpectedly robust economy or a recession have dramatic impacts on

coinage needs. Therefore, demand requirements based on this model, while representing the best available data at this time, are the best estimates at this time.

c. Identify Planned Enhancements

Although the Mint has the capacity to produce sufficient coins to meet the Nation's coinage needs at the present time, future baseline economic demand will likely exceed the Mint's current capabilities. The Mint has developed various strategies to meet these anticipated needs. Two initiatives, "Sustain 20 Billion Coins" and "24 Billion Coins by 2002", are discussed later in this report.

d. Develop Manufacturing and Production Assumptions

To help assess the potential impact of the proposed Program on its current and projected capabilities, the Mint made various assumptions regarding coin production as noted below:

∅ **Serial Production.** Coins will be produced serially. Once a run of a particular state coin has been completed, it would not be reproduced. Producing five quarters per year means that each coin would have a production run of approximately ten weeks assuming even quantities of each design. By implementing this approach, States can know when their coins are due to be launched and can begin planning design contests or other promotional activities as desired. Production schedules are shown on the following page.

∅ **Initially Even Planned Quantities.** The Mint would plan production schedules each year to produce equal amounts of the five quarters each year and would not pro-rate production based on the State's relative population to other States scheduled for the same year. This assumption is particularly relevant since most people indicated that they would be interested in collecting full sets of quarters rather than from individual States only. If actual economic demand fluctuates during the year, the Mint would adjust production runs scheduled for later in the year. As a result, quantities produced two different States will differ due to economic demand only.

Production or re-striking of prior coin designs is by both authorization and cost. Production of previous year coin designs requires special authorization, and is uncommon. Production of "same year" earlier coin designs would not require special authorization, but die production cost would be an essential consideration. At \$50 per die and 250,000 coins per die, dies represent a variable cost in the manufacturing process that can be controlled. The optimal approach would be to have sufficient dies to produce anticipated demand, with as few surplus dies as possible. In order to accommodate fluctuations in demand, the Mint would adjust the number of dies for subsequent designs. This approach would minimize the die inventory that needs to be on hand, and ultimately reduces cost.

e. Estimate Incremental Demand and Effect on Reserve Capacity

The Government developed various assumptions for incremental coin demand attributable to the Program and compared these amounts to its reserve capacity. Reserve capacity is the difference between the Mint's production capabilities and anticipated baseline demand in any given year. As demand increases, reserve capacity decreases if no actions are taken to upgrade production capabilities.

The Government expects that the 50 States Program, if implemented, would generate at least a minimum increase in demand for quarters over the next 10 years. Because the exact amount of increased demand and increased production needs is difficult if not impossible to project for a 10 year period, the Government has identified four possible demand scenarios against which capabilities and options can be compared. The Government's tables are based on annual seigniorage levels. The equivalent number of quarters are shown in the table below:

Seigniorage Level	Number of Quarters
\$3 billion	1.5 billion
\$4 billion	2.0 billion
\$5 billion	2.5 billion
\$6 billion	3.0 billion

f. Identify Potential Stress Points & Develop Countering Strategies

The Government's analyses focuses on the identifying and addressing possible stress points in its manufacturing capacity. The figures shown in this section of the report plot possible levels of incremental demand against a backdrop of production capacity. Stress points occur when reserve clad (and particularly quarter) capacity is either marginally sufficient or insufficient to meet total anticipated demand. Since public behavior patterns are still unknown at this time, actual stress points and their timing cannot be definitively identified. However to support this analysis, the Government has developed assumptions to identify when and how stress points could occur so that countering strategies can be developed in advance of the situation.

2. Government Approach to Meeting Demand

The table on the following page summarizes the Government's approach to meeting coin demand attributable to economic demand and incremental demand for Statehood coins if the Program is implemented.

a. Capital Investment Plans and Circulating Coinage Capacity

Circulating coin production capacity is based on two separate product lines, pennies and clad coins (nickel, dimes, quarters, and half-dollars). Distinguishing between these product lines is important because the equipment requirements to manufacture each type are significantly different. The Mint purchases penny blanks from an outside source and coins them in its production facilities. Therefore, the only major production equipment required for penny production is coining presses. By contrast, a clad coin production line consists of one blanking press, one annealing furnace washer/dryer system, multiple upset mills, multiple coining presses, and a variety of material handling systems.

Historically, annual circulating coin demand consists of 70 percent pennies and 30 percent clad denominations. This trend has been very consistent, usually within just a few percentage points. The Mint's current production capacity is configured to accommodate this pattern. Future strategic capacity and infrastructure improvements and capital investment plans are also consistent with maintaining these shares.

For circulating coinage production, the Mint's capital investment plans are targeted on two primary objectives: (1) to modernize existing manufacturing capabilities sufficient to ASustain Annual Production Capacity of 20 Billion Coins≅ (without use of overtime) and (2) to expand annual production capacity to A24 Billion Coins by 2002" (without use of overtime).

In each 1995 and 1996, the Mint produced 20 billion circulating coins. However, the Mint achieved these production levels by using significant amounts of overtime and with substantial amounts of wear and tear on the production equipment caused by the lack of sufficient preventative maintenance. Moreover, at several points in this 2-year period of peak production, the Mint was vulnerable to failures in key production equipment (e.g., blanking presses and annealing furnaces) where equipment had been pushed beyond its aging capacity. In addition, the overtime contributed significant manufacturing costs to the production of coins as well as having an effect on the production employees after sustained periods of working the additional time.

Therefore, the Mint developed Objective (1) above to ensure that the Mint's manufacturing processes could sustain production at the 20 billion coin level without vulnerability in these key processes. Objective (1) also recognizes the "hard" and "soft" costs associated with extensive use of overtime for production workers. These include the higher costs of overtime pay as well as the higher incidence of on-the-job injuries and greater difficulty of enlisting employees for overtime work when overtime is required for extended periods of time. The Mint's capital investment plan commits approximately \$29 million in support of Objective (1) through 2001. These funds have been approved by Mint management and are included in the Mint's budgets for 1997-2001.

Objective (2) was developed in anticipation of growth in coin demand above the 20 billion coin level and reflects Federal Reserve projections that demand could reach 24 billion coins early in the next decade. Coin demand projections 5 years into the future inherently involve considerable uncertainty. Therefore, the Mint has developed capital improvement plans in support of this objective, with the flexibility to delay implementation and track trends in coin demand over the next several years. Significant increases in baseline coin demand or approval of a circulating commemorative program could lead Mint management to approve spending in support of Objective (2) as early as the last quarter of FY 1997. The Mint's capital investment plan earmarks \$3 million for this objective.

b. Circulating Capacity and a Commemorative Quarter Program

As previously stated, the Mint's circulating coinage capacity is separated into penny and clad coinage production. For the sake of simplicity, this Study assumes that only clad coinage capacity is relevant to the question of capacity for a circulating commemorative quarter program. Figure 1 illustrates the total clad coinage capacity of the Mint over the 10-year life of the proposed Program, based on the Mint's capital investment plan (Objectives 1 and 2 above). Figure 1 also includes the current baseline projection of clad coinage demand over this 10-year period.

Figure 2 focuses on the reserve capacity illustrated in Figure 1. Each year's projected baseline clad coinage demand is subtracted from clad coinage capacity; thus, Figure 2 illustrates the reserve capacity that would be available to meet incremental demand generated by a circulating commemorative program. Figure 2 demonstrates that, as baseline demand for clad coinage grows through 2001, reserve capacity shrinks. Then, in 2002, when the Mint brings on additional production capacity under its "24 billion coins" objective, reserve capacity increases. In the out-years, reserve capacity shrinks again as baseline demand for clad coinage continues to grow.

Figure 3 illustrates the effect of accelerating the implementation of the "24 billion coins by 2002" objective. If the Mint decided to proceed with the "24 billion capacity" objective by September 1997, this additional capacity would be available to the Mint by October 1999. This would have the effect of adding additional clad coin capacity of 700 million coins per year beginning in the year 2000. The Mint would not be required to order any "special equipment" in the effort to reach the 24 billion production level. Any equipment purchased to reach this increased production capacity is considered standard in the minting industry.

Figure 4 illustrates the updated reserve capacity situation by accelerating implementation of the 24 billion capacity objective by 1999. In this scenario, reserve capacity reaches a peak in the year 2000. Reserve capacity after 2000 gradually decreases as projected baseline demand for clad coinage increases. Reserve capacity in this scenario is sufficient to satisfy incremental quarter demand at the \$3 billion incremental seigniorage level through 2004, and at the \$4 billion level through 2002. The table on the following page summarizes these two objectives, additional capacity that the Mint can implement if coin

demand is determined to exceed current capabilities, and contingency plans that the Mint can draw upon to meet higher than expected baseline demand.

(1)

24 Billion Plus

If the Program were implemented and if initial demand for new quarters exceeds levels sufficient to generate \$3 billion and \$4 billion in incremental seigniorage, (that is, on the order of 1.5-2 billion additional quarters above baseline), the Mint would have to increase clad capacity by bringing on an additional clad coin production line for quarters at the Philadelphia Mint. This scenario will be referred to as "24 Billion Plus", or "24B+". The primary components in a new production line would include one high speed blanking press system, one annealing furnace washer/dryer system, three upset mills, eight high-speed coining presses, a complete materials handling system, and other miscellaneous equipment. A new clad coin production line under the 24B+ scenario would have the effect of increasing clad capacity by 1.2 billion quarters annually.

Figure 5 demonstrates the impact of implementing 24B+ on reserve clad capacity. With the implementation of the 24B+ scenario, resulting clad coinage capacity will be sufficient to sustain production at the \$3 billion seigniorage level throughout the Program, at the \$4 billion level through 2007, at the \$5 billion level from 2000-2005, and at the \$6 billion level during 2000-2003.

The cost for a new production line under this scenario would be approximately \$13 million, and would be justified by the increased production requirements and funded by increased seigniorage levels. The lead-time for installing a new production line, if necessary, is approximately 20 months. So, with the flexibility in the Mint's revolving fund authorization outlined earlier, a decision to proceed by April 1998 would realize the increased capacity by January 2000.

(2)

24 Billion Plus Plus

If the Program were implemented and if demand were to continue at or above levels sufficient to generate \$4-5 billion in incremental seigniorage, (i.e., incremental quarter demand of 2-2.5 billion quarters per year), the Mint would have the option of implementing a second scenario referred to herein as the "24 Billion Plus Plus" or "24B++". In this scenario, analogous to the 24B+ scenario, the Mint would install a new clad coin production line at the Denver Mint. Due to greater logistical obstacles in Denver, however, the lead-times are longer and the costs are higher than for the 24B+ scenario. The total cost to install a new quarter production line in Denver would be approximately \$22 million (1997 dollars). A decision on the implementation of 24B++ would need to be made before August 2001 for production with the new line to begin by January 2004. Figure 6 represents the increased capacity with implementation of 24B++ by 2004.

Figure 7, then, plots four lines onto the clad coin capacity graphic of Figure 6. These lines represent estimates of the incremental annual quarter demand under four scenarios related to a proposed circulating commemorative program:

- ∅ demand for quarters increases over the 10-year Program sufficient to generate an additional \$3 billion in seigniorage
- ∅ demand increases sufficient to generate an addition \$4 billion in seigniorage
- ∅ demand increases sufficient to generate an addition \$5 billion in seigniorage
- ∅ demand increases sufficient to generate an addition \$6 billion in seigniorage

Figure 7 illustrates that with the acceleration of the A24 Billion Capacity objective to 1999 and implementation of the A24B+≅ by 2000, capacity for clad coinage is sufficient to accommodate projected demand for circulating commemorative quarters through 2008 under the \$3 billion and \$4 billion seigniorage scenarios. With the exception of 1999, demand at the \$5 and \$6 billion levels can be accommodated throughout the Program with implementation of 24B++ by 2004.

(3) 1999 - Conversion of Dime Production to Bliss Presses

To meet demand at the \$5 and \$6 billion levels in 1999, the Mint could convert a portion of its one-cent reserve capacity (on Bliss presses) to the production of dimes, freeing up additional capacity for production of other clad denominations. One-cent reserve coining press capacity in those years is sufficient to accommodate both the \$5 billion and \$6 billion scenarios based on current baseline demand forecasts.

Dime production on Bliss presses is a time-tested and proven capability. In fact, Philadelphia is currently employing Bliss presses in the production of dimes. Some 1.4 billion dimes were produced on Bliss presses during 1996 in Philadelphia. The production rates for dimes and cents on Bliss presses are fungible; substitution yield is approximately one-for-one. Since it requires only a change of dies, it is also essentially a no-cost conversion.

c. Contingencies

Because of the inherent difficulties in accurately projecting coin demand, it is prudent to make contingency plans to ensure that increases in baseline demand above those currently projected by the Mint's econometric model and possible higher-than-expected demand for circulating commemorative quarters if the Program were implemented can be accommodated. In the event of such circumstances, the Mint has the following contingency plans:

(1) Stockpiling

The Mint could plan to increase production of clad coinage in 1998 in order to build clad inventories for draw-down to meet demand in 1999-2001. Under current demand projections and production schedules through FY 1998, the Mint expects to have 4.3 billion clad coins in the combined Mint-FRB inventory (including an estimated 2.0 billion quarters) at the beginning of FY 1999, approximately 1.4 billion more (including an estimated 900 million quarters) than the combined Mint-FRB preferred baseline inventory. The Government estimates that the Mint could add another billion clad coins to inventory by increasing production in 1998.

(2) Overtime

All scenarios presented above assume no use of overtime. The Government's planning approach is to hold overtime production in reserve as a cushion against unexpected actual demand or production shortfalls. The Government estimates that the Mint could produce an additional one billion clad coins per year in this manner. However, this level of production is not sustainable for more than one or two years.

(3) Use Additional Reserve Cent Capacity

The Mint could also move an additional portion of dime production to the one-cent production line to accommodate additional demand if necessary. The Government estimates that by shifting additional dime production to Bliss presses, an additional capacity to produce 500 million quarters above the \$6 billion seigniorage demand level can be realized in 1999. Additional capacity from shifting dime production to the one-cent production line is estimated to be 1-2 billion quarters per year for 2000-2008.

Figure 8 illustrates that, with the accelerated implementation of the A24 billion capacity objective, and under the 24B+ and 24B++ scenarios, the Mint will have sufficient reserve capacity to produce clad coinage at the \$5 and \$6 billion incremental seigniorage from 2000 through the remainder of the Program, if implemented. As discussed above, by converting a portion of the reserve Bliss capacity to dime production in 1999, production of clad coinage at the \$6 billion level can be sustained from 1999 to 2008. The Government believes that any requirement for additional capacity beyond this level in the later years of the Program if implemented could be accommodated by the contingency methods described above. The Mint's revolving fund and procurement waiver provide sufficient flexibility and resources to execute, in a timely fashion, any of these options for expanding clad coinage production to meet projected demand for both the baseline forecast and the \$6 billion incremental seigniorage scenario for the proposed Program.

E. Would Distribution Processes Provide Equitable Availability of Each Coin to Every Citizen (Particularly in Home States)?

1. **Overview of Current Process**

Coinage distribution from the Mint follows three channels as illustrated in Figure 9: the Federal Reserve System (FRS), bulk sales to distributors and commercial interests (including banks), and direct sales to individuals. For circulating coinage, the FRS acts as a conduit for the supply of newly-minted coins to the economy. The FRS supplies commercial banks with circulation coinage, which in turn supply businesses, and ultimately individuals. In addition to supplying circulating coins for the economy, the Mint sells an extensive range of coins and coin products in bulk quantities to a broad network of bulk distributors and purchasers, as well as directly to individual collectors and the general public.

a. Circulating Coin Distribution through the Federal Reserve System

The FRS comprises 12 District Banks and 25 Branch Banks. The Federal Reserve Banks (FRBs) get their coinage supply in three ways: recirculated coinage deposits received from commercial banks, transfers from other FRBs coordinated by the Mint, and new coins from the Mint.

The Mint's Federal Reserve Liaison Staff (FRLS) maintains a close working relationship with the Cash Officers of the 37 FRBs and Branches. In addition, a meeting is held quarterly by the Board of Governors on current and future Mint/FRS coinage matters.

(1) Ordering and Shipping

At the end of March each year, FRBs submit coin orders to the Mint's FRLS for the next fiscal year. The orders specify quantities by denomination, month, and individual bank. Working on the basis of the annual order, the FRBs have the option to revise their monthly coin orders at the end of each month for one month out. There is also enough flexibility in the ordering system to allow FRBs to add, cancel, or change destinations for shipments during the month preceding planned shipment.

The Mint manufactures and ships five denominations of coins to 109 Federal Reserve locations, consisting of 37 FRBs and Branches and 72 offsite locations. In FY 1995 and FY 1996, the Mint arranged more than 7,000 coin shipments totaling almost 40 billion coins. The Mint also arranges for coin transfers between FRBs to serve as a normal balancing mechanism for moving coins from an area where there may be a surplus to an area where a need exists.

(2) Coin Demand Forecasting

Coin demand is measured by the net payout by the FRBs. Net payout is defined as the difference between the amount of coins paid by the FRBs to commercial banks and the amount of coins received by the FRBs from commercial banks. The Mint forecasts demand for coins with an economic model using variables that exhibit strong historical correlations with the Nation's demand for coins; can be reasoned by economic theory; and satisfy statistical practices.

Annual coin demand is subject to seasonal variation. Demand is at its highest during the second quarter of the year as the banking system builds inventories in anticipation of heavy merchant demand for the summer vacation season. The first and third quarter demand is lower and then increases again in the fourth quarter in anticipation of high retail activity leading up to the year-end holidays.

(3) Circulation through the economy

FRB payout ratios provide valuable information on the velocity of coins, e.g., how quickly they circulate through the system, as well as on the extent or degree of recirculation for each denomination. In FY96 the quarter had a ratio of 88%, indicating that only 12% of the quarters paid out by the FRBs were newly-produced quarters. Measuring and tracking these ratios is important because a substantial shift could have significant impact on production requirements and capacity.

New coin orders from the Mint and payout rates also vary from district to district and branch to branch. Demand for new coinage by regional FRBs is subject to demand and usage patterns, economic factors, and individual district and regional FRB policies and procedures.

Inventories of coins are held and maintained by the various Federal Reserve banks and branches and by the Mint. Inventory levels are measured monthly and are a function of the coin demand forecast and prevailing payout patterns. They are estimated through joint planning and discussions by the FRBs and the Mint.

b. Other Current Distribution Channels

To help meet targeted needs of large customers and individuals, the Mint has developed a bulk distribution system, a customer order fulfillment center, and various retail product options.

(1) Bulk Distribution

Since the early 1980s, the Mint has maintained a domestic and international bulk distribution capability to complement its direct marketing of numismatic coins and distribution of circulating coins through the FRS. The Mint's current bulk distribution network included more than 700 domestic bulk purchasers, 18 billion coin authorized purchasers (wholesale distributors), and 25 international distributors on six

continents. The Mint's current bulk sales consist primarily of numismatic and commemorative coins. In 1995/96, the Mint conducted over \$300 million in domestic and international bulk sales to banks, national and regional retailers, precious metal dealers, and numismatic retailers, comprising more than 15 million coins. Domestic and international bulk sales are supported by an integrated program of national and regional media campaigns, including paid and earned advertising, point-of-purchase promotional materials, leveraged marketing allowance, generic and cooperative advertising and promotional tie-ins.

(2) Customer Order Fulfillment

The Mint's Office of Marketing maintains one of the Nation's largest and most extensive direct marketing capabilities and has one of the highest response rates in the industry. With a direct marketing database that includes over 1.5 million coin collectors, the Mint conducts a sophisticated direct mail promotional campaign for coins and coin products. Direct mail offerings to collectors typically take the form of highly customized coin program promotional offerings and product catalogues. The Mint conducts on the order of 12-15 different direct mail campaigns each year totaling more than 20 million pieces of mail. This direct mail outreach is complemented by integrated direct advertising using electronic and print media, in-bound telemarketing, and public relations information campaigns.

Mint representatives handled more than 138,000 in-bound telephone calls in 1996 with the use of a state-of-the-art call distribution system and automated voice response technology, with an additional 120,000 calls handled by telemarketing firms under contract to the Mint. In 1995/96, the Mint received, processed, and fulfilled 3.7 million individual orders for some 9 million coin products, comprising more than 50 million coins.

The Mint maintains a permanent retail capability with sales outlets in the Mint facilities at Philadelphia and Denver, as well as at the Bureau of Engraving and Printing and Union Station in Washington, D.C. In addition, Mint products are sold through a large network of domestic and international financial and retail outlets. This existing market retail structure, along with the Mint's extensive direct marketing capabilities, would allow the Mint to meet requests and requirements from individual collectors.

The Mint's Customer Service Center is responsible for responding to customer requests and inquiries and for the processing of bulk and individual orders. Consistent with the Administration's emphasis on customer service, the Mint's Customer Service effort has been designated as a priority activity of the Mint. Over the last fiscal year, the Customer Service Center has pursued best-in-business practices, finding multiple ways to incorporate achievement of the highest standards into daily workflow practices. In 1995 and 1996, the National Quality Research Center (NQRC) at the University of Michigan conducted scientific random-sample surveys of the Mint's numismatic customers and their assessments of the Mint's products and services. Results of these studies demonstrate the Mint's strength in addressing customer issues and requests. Both NQRC surveys found that the Mint had the highest customer satisfaction ratings ever awarded a government agency, and it was ranked among the premier companies worldwide.

2. Proposed Distribution of Circulating Commemorative Quarters

a. Overview

The Government would distribute circulating commemorative quarters using the existing and proven distribution system and mechanisms. That is, state commemorative quarters would be issued into circulation through the FRS, be available for sale in bulk quantities to banks and commercial interests, and be sold to individuals at a premium in various product offerings.

It should be underscored that among these working assumptions, perhaps the most important is "A quarter is a quarter." This assumption means that neither the Mint nor the FRS would make any attempt to distinguish the Statehood quarters from Eagle quarters or among the 50 different State designs. This approach applies to bagging, rolling, and distributing quarters for circulation.

b. Public Opinion

The use of the "a quarter is a quarter" approach and existing distribution processes was reaffirmed through the market research conducted by C&L/ORC. Respondents indicated that this Program if implemented should not change conventional distribution systems. The majority of people in our focus group discussions said that they would expect to find the circulating commemorative quarters in change from retail transactions and from banks. Some specific comments regarding distribution are listed below:

"I do it as a fun thing. It's no traumatic experience if I don't get them all, it's just the fun of collecting. But it would have no great effect if I don't. I would like to fill them all, but if I don't, I don't."

"I think I'd just collect them if they came in my change. Like I don't think I'd go looking for them. I think I'd probably look in my change when I got coffee or something."

"I would probably lose interest if they were really hard to find."

Most negative comments about using the current distribution process centered around the possibility that citizens may not be able to get quarters representing their state or that large-scale hoarding would make all of the quarters harder to find. If production schedules take into consideration both economic demand and an allowance for increased interest in the Statehood quarters, these concerns could be somewhat mitigated.

c. Inventory Management

(1) 1998 Washington Quarters Stockpiles

For planning purposes, the Mint would retain an inventory of 1998-dated Washington quarters to serve as a buffer or cushion against unexpectedly high demand in the first years of the Program. In the event of such demand, the 1998 quarters would be issued into circulation to ensure that sufficient quarters are available to support commercial transactions. In the event the 1998 quarter buffer is not needed at the outset of the Program, the coins could be issued at any time during the series.

(2) First-In, First-Out Processing

With the serial production of the Statehood quarters, the Mint would issue the state quarters from inventory on a first-in, first-out basis. This means that (with the exception of inventory held to satisfy bulk demand) existing state coin inventories would be cleared before subsequent state coins are issued. For example, all of the Delaware quarters would be shipped before any Pennsylvania quarters would be shipped.

d. FRB Quarter Supplies

Regarding FRB orders for circulating Statehood quarters for distribution to commercial banks, it is expected that the FRBs would order quarters for circulation purposes, without regard to the specific State designs if the Program were implemented. The circulating quarters would be ordered by the FRBs and shipped by the Mint in the conventional manner.

To accommodate possible FRB demand for specific State designs (especially designs of States served by individual FRBs), the Mint would provide the regional FRBs with advance information about production schedules and likely periods of availability. If they choose to do so, FRBs could order quarters during the time specific State designs are to be shipped.

f. Possible Issues of Widespread Availability

Ordering patterns from the FRBs are erratic and difficult to project. Some FRBs order coins from the Mint frequently while others have sufficient recycling of coins within their districts to minimize the need to order. As a result, if FRBs do not order coins every 10 weeks (the approximate average anticipated production run for each quarter), some state coins may not be initially available in those regions until free, unrestricted circulation transpires across districts.

The Board of Governors of the Federal Reserve System has provided us with historical records regarding the 37 Federal Reserve Banks and Branches ordering patterns from the Mint during 1995 and 1996. During this two year period,

∅ an average of 22 of the 37 locations ordered quarters from the Mint in any given month;

- ∅ monthly orders from an individual Bank or Branch ranged from 0.8 to 32.0 million quarters; and
- ∅ six Banks or Branches did not order any quarters directly from the Mint during calendar years 1995 and 1996 and were able to rely on recycled quarters to meet demand.

Even if FRBs and Branches do not regularly receive new quarters directly from the Mint, it is possible that they receive new issues through intra-Bank transfers. Therefore, between direct orders, transfers, and recycling of coins received from other areas, there is a reasonable chance that the Statehood quarters would eventually have broad availability through circulation. Further, if FRBs know production schedules for particular State designs in advance, they could manage their inventories and orders to request coins during those periods.

Although it is possible that each State design may not be widely available in every area initially, the Government has developed plans to accommodate targeted demand.

- ∅ **Published Production Schedules-** To provide an equitable regional distribution the Government will ship the State coins out as they are produced on a first in first out basis and would advise the FRBs of the production/shipment schedule. The quarter bags would be marked according to the date of issue. A production schedule would be published that would indicate which quarter designs are being shipped within a defined time period. FRBs interested in specific designs could, if they choose, order quarters within the defined time periods to increase the probability of receiving a particular design.
- ∅ **Commercial Demand** - While the FRS would continue to distribute quarters to commercial banks as in the past, the Government will set aside an inventory of each of the state quarters. These quarters will be available for bulk purchase in minimum quantities by commercial interests. The commercial entities would be responsible for arranging their own transportation from the Denver or Philadelphia Mint.
- ∅ **Individual Demand** - Individuals who wish to obtain specific coins will be able to purchase them directly from the Government in a matrix of collector sets.

g. Additional Distribution Options

(1) Bulk Distribution of Circulating Commemorative Quarters

The Mint plans to develop a program to make available bulk quantities of specific state quarters for purchase by banks and other commercial interests. These could be used for dissemination into commerce for promotional, incentive, or educational purposes, or for use in state or local civic events. Bulk quantities would be available for purchase, with a minimum order amount, at face value plus the cost of handling.

The Mint would hold an inventory of each of the State quarters for a limited time to satisfy bulk purchase demand. Bulk purchases would be subject to availability. At the end of the bulk purchase order window for each quarter, any remaining quarters would be issued into circulation.

Likely bulk purchasers would include the Mint's traditional network of numismatic coin dealers, authorized bullion purchasers, and domestic and international distributors. All indications from domestic and international dealers have been very positive. Moreover, the bulk purchase offering presents an interesting opportunity for participation by commercial entities that are not traditional bulk coin buyers.

(2) Sale of Circulating Commemorative Quarters to Individuals

In keeping with the Mint's ongoing promotional campaign for coins and coin products, the Mint would make available for sale to collectors and the general public a broad matrix of collector-edition proof, uncirculated, and silver proof coins and sets. These could range from low-end individual state coins in uncirculated quality to high-end silver proof complete collections obtained by subscription.

The Mint would also make available for purchase a variety of 50 State quarter collecting kits and accessories to encourage and assist collection and to contribute to education about the States and coinage. These could include a variety of collection frames and display cases, albums, books, folders, and display maps. Availability of these options could play a pivotal role in the ultimate success of the Program based on the results of two questions in our telephone interview study.

Would you be more likely to collect quarters if you had an album or folder to keep them in?	For all quarters for a given year	For all 50 quarters
Yes	64%	57%
No	34%	40%
Don't Know	2%	3%

These products would be offered to retailers and coin dealers as well as to the Mint's customer database by way of periodic direct mail offerings and in annual catalogs. Both the qualitative and quantitative research suggest that these products may have broad acceptance and possible demand.

h.

Impact on Commercial Banks

Where do you think that you would get these commemorative quarters? (multiple responses permitted)	
Banks	62%
Change in Retail Transactions	32%
Gifts or Family/Friends	18%
The Mint	16%

Because many respondents indicated that they would expect to obtain the Statehood quarters from their local bank, the Government has considered the impact on banks' daily operations and developed an approach to help banks in this capacity. The Mint would undertake a large-scale, integrated public awareness effort to support and assist commercial banks in handling public inquiries about acquiring State quarters. The Mint would work collaboratively with the American Banking Association (ABA) to produce and disseminate materials for banks and their customers, including information about how to obtain Statehood quarters from circulation or directly from the Mint. Materials could include brochures/pamphlets, stand-up counter-cards, posters, decals, bank kits, etc. The Mint has extensive experience in providing such materials to banks and retail distributors of its numismatic and bullion products. The Mint would also be prepared to arrange seminars in conjunction with annual ABA conventions and other activities.

The bank information campaign will also be supported by the Mint's national and state public relations campaigns, educational programs, direct response advertising and mail campaigns. This campaign could increase the profitability of the overall Program by increasing sales of numismatic versions of the State coins.

F. What are the advantages and disadvantages to the different alternatives available for selecting designs for the Statehood quarters?

1. **Critical Success Elements**

We believe that any successful design selection process must achieve four critical objectives.

- ∅ Public Acceptance
- ∅ Logistical Timing
- ∅ Design Suitability
- ∅ Design Consistency

In the following subsections, we discuss each of these critical success elements.

a. Public Acceptance

If the Program were implemented, public acceptance of the designs could play a critical role in determining the Program's ultimate success. If the public likes the designs on the coins, they may be more likely to save or collect them. In which case, the Government would need to produce more coins to meet regular economic demand to make up for the quarters being pulled from circulation. Producing additional quarters would result in increased seigniorage revenue to the Federal Government. Conversely, designs which do not meet public approval would not only be less likely to be collected, but could also result in adverse publicity for the Government.

If the Program were implemented, several methods could exist to better ensure public acceptance of the Statehood coins:

- ∅ Solicit public opinion regarding their openness to new designs.
- ∅ Determine which topical areas the public would like to see depicted on the coins.
- ∅ Determine public attitudes towards being involved in the design submission and selection processes.

b. Logistical Timing

Any design selection process must adhere to timelines and milestones necessary to begin producing the coins by a certain date. Therefore, while full and lengthy public participation in the design submission and selection processes may be desirable and popular, the Government must insist on some constraints for an effective and practical design approval, development and implementation process. For these

reasons, the Secretary may consider an option discussed later that provides for more Federal control over the early stages of the design submission process.

The Government estimated the following design approval and development schedule to begin producing the first new quarters by November 1, 1998 to initiate a January 2, 1999 launch date if the Secretary decides to move forward with the Program:

- ∅ June 1, 1998 - Secretary submits final approved design to the Mint for development and production
- ∅ November 1, 1998 - Mint begins live production runs
- ∅ January 2, 1999 - Program launch date

If the Secretary approves and adopts this Program by August 1, 1997, the first design (for the State of Delaware) must be ready for delivery to the Mint engravers in 10 months. Because the coins will be designed and produced on a staggered basis at the rate of roughly one every 2 1/2 months, the timeframes for later issues will be more relaxed.

c. Design Suitability

Design suitability consists of two factors. First, the coin designs must be physically producible. The Mint must make this determination based on metal flow requirements and the level of detail contained in the designs. Second, the design must have universal appeal and avoid controversial or sensitive subjects. The Government and its traditional designers recognize these needs and have experience in developing coins with classic, popular styles. If the design submission and selection processes are expanded to a broader base of State and/or citizen participation, issues of design suitability become more relevant. For example, U.S. circulating and commemorative coins have almost exclusively followed a tradition of not featuring living people. These guidelines and other necessary guidance would need to be communicated to the designing and selecting bodies.

d. Design Consistency

If the Program were implemented, the Government has rightly expressed a need to achieve a balance of design consistency and individuality. While each State coin should be designed to portray its own unique heritage as a part of the Nation as a whole, each coin must be recognizable as a quarter so as not to confuse the public and retain the integrity of the coinage system. In addition, the Government must insist on certain content and inscriptions to meet legal requirements. The Government must communicate guidelines effectively. Guidelines should be decided by the Secretary with input from the Mint and should consider market research data and public opinions and preferences.

1. Communicate that only certain features are to be changed (e.g. only one side)
2. Supply a template with all of the required inscriptions which lays out the dimensions and space that the designs can occupy.
3. Communicate preferred topical areas to potential submitters based on the market research studies.

In addition to the consistency guidelines, the Government should release other guidance which will help ensure the coinability of designs and ultimate approval by Government officials.

2. Discussion of Possible Alternatives

As we have noted, there are several means of submitting and selecting designs for each quarter. In this section, we discuss various "macro-aspects" of choosing a design selection process and then provide observations regarding the advantages and disadvantages of major options within each broad area.

a. Process Control

If the Secretary decides to implement the Program, he can exercise one of two possible broad options for controlling the design submission and approval process. First, the Federal Government can control the design process and receive consultation and advice from State officials on preferred content. Second, States can control the entire process with less initial involvement from the Department of the Treasury. The Department's role in this second option would be to provide coinability guidelines and overall program guidance and oversight. We will discuss the advantages of both options in the following subsections.

(1) Federal Control Option

One option would have the Federal Government maintain a more active role in the design preparation stages with appropriate consultations with State officials regarding preferred or desired subject matter for their coins. One possible sequence of events is presented in the table on the following page.

Under this option, Mint engravers would prepare designs for consideration with consultation with State officials. Prior to submitting the designs to State residents for consideration, the Mint could submit its designs to the Citizens Commemorative Coin Advisory Committee, the Commission on Fine Arts, and the Secretary of the Treasury for approval of each design. At this point, the Government could conduct a public opinion survey and ask State residents to vote on their favorite choice among the pre-approved designs. The Government could turn over the results of the balloting to the State for their own announcement and publicity purposes. One of our focus group participants came up with a similar thought independently:

"Let's hope they'll just hire one firm to commission the art work from. You know, each state gets a choice of four, and they can circulate it throughout the newspaper or something like that and then give the people the option to either mail in something or call up something or whatever. That may be a fair way of doing it."

The Canadian Mint administered its public design competition centrally. This was a very daunting task as Canada issued all 12 of its commemorative coins in one year. The Canadians believe that the benefits of central control outweighed the negative aspects. We should also note that when we asked the Canadian Mint about lessons learned from their experience, they indicated that administering twelve programs in one year was "a bit much".

Advantages: (1) Coinability issues can be complex. It may be difficult to clearly and fully explain all of the issues and requirements to States for their onward communication to potential artists. (2) Government control over the design submission process can better ensure ultimate approval of the design and prevent uncomfortable decisions by the Secretary. If the Secretary has the option of pre-approving multiple designs, then the winning design selected by the public should face no opposition. (3) The Government can recognize some efficiencies in the process and should be able to expedite time frames if its own artists design the sketches rather than relying on various State processes. By having Mint artists prepare designs early in the process, some buffer time is afforded for unforeseen circumstances. On the time frame presented, this buffer occurs during April 1998 for the first design. (4) While the respondents in our survey efforts and focus groups indicated that public participation in the design submission process would likely heighten interest and awareness, the sentiment against Government-submitted designs was not strong. Many respondents simply did not care how designs were submitted.

Disadvantages: (1) The Government would be required to prepare up to 25 sketches per year for the Program. Mint officials recognized the extent of this endeavor but maintained that it was well within their capabilities. (2) Many respondents indicated that public contests for designs would be extremely popular, particularly among schoolchildren. Government control over design submission processes could eliminate a particularly valuable public awareness and public relations tool to promote the Program. (3) The Government would need to develop a cost-effective, politically-sensitive, means of tallying public responses in public voting. Many options for this process exist including the use of 800 or 900 telephone numbers.

(2) State Control Option

One option is for each State to be responsible for its own process and one individual, perhaps the Governor, would be the Federal Government's point of contact. Each State would then have the flexibility to implement its own approach. State control of the process could potentially lengthen the period needed for submitting and selecting designs. A possible time frame is presented on the following page.

Participants in our focus groups uniformly agreed that the public should be involved in the selection process, but that the submission process may not be all that important.

"But there has to be control over the States, the Federal government saying you can't do this, or you can't do that, or it has to be one of these four things or whatever."

"The public should state a preference, not have absolute decision."

"I do think it would be nice when you go to vote to have something that's fun."

Advantages: (1) Relinquishing responsibility to the individual states for conducting the Program potentially relieves the Federal Government from detailed and cumbersome oversight of daily aspects of each state's individual programs. (2) States and their citizens may have more sense of ownership and in the overall Program which would further generate excitement. (3) States will likely be more adept at implementing a grassroots level program or inviting appropriate artists to participate.

Disadvantages: (1) This is a Federal program with Federal fiduciary responsibility. Thus, the Federal Government will be left trusting individual States to conduct submission and selection programs that will not produce adverse publicity to the Department of the Treasury or the Federal Government. (2) States must be held accountable to strict time frames and program guidelines to ensure meeting required production schedules and launch dates. (3) It is likely to be more time-consuming and more expensive to run 50 separate and autonomous design selection programs than a centrally controlled process.

3. **Design Selection Process Alternatives**

Figure 10 illustrates various design process alternatives. The flowchart shows several decision points that must be addressed in developing the process. The Government can use this model to consider the many different tracks that the submission and selection processes can take. We have noted several of these decision points with a numeric citation that relates to the subsections below. In these subsections, we describe the option noting advantages and disadvantages of each approach. Using this analysis, the Government can assess options by mixing and matching selection choices to determine the most advantageous overall approach. The Federally controlled option discussed above would follow the flowchart from Steps 3 to 6 to 8.

a. (1) Public Design Contests

If decisions are left to the individual states, we envision two scenarios whereby individual States might solicit designs. One option would be to hold public design contests. In doing so, States would need to develop or designate a group or organization to lead the effort and then launch a promotion campaign to introduce the concept and contest. These contests would need to be closely coordinated initially with the

Federal Government to ensure that submitted designs meet required specifications. The Federal Government may be able to accomplish this objective by preparing and issuing a standard kit to each state that contains the design requirements and guidelines and recommendations on how to conduct such a contest.

Both Canada and Great Britain report tremendous success in using public contests to solicit potential designs. Through the help of an extensive media blitz, Canada received more than 12,000 submissions, ranging from children's drawings to artist's renditions for the 12 province and territory coins. Since Canada did not conduct any preliminary market research on the public's acceptance of the concept, the design competition mobilized Canadian citizens' interest in the coins.

After announcing that the reverse design of the British 1997 Two Pounds coin would be chosen from entries in an open public competition, the Royal Mint was very pleased at the scale of public interest and enthusiasm for that program. The Royal Mint received more than 1,200 entries that were reviewed by an independent panel similar to the CCCAC.

We also asked our focus groups about preferable means of obtaining designs. The participants generally agreed that public contests were a good idea and would boost enthusiasm for the Program. Several people recommended that schools actively participate in the design programs to further interest among our youngest citizens.

Advantages: (1) Public design contests have proven appeal and can help significantly increase interest in the final products. (2) Designs are more likely to be truly emblematic of the states.

Disadvantages: (1) Public design contests can be time-consuming to develop and implement, and judging could be a cumbersome process. (2) Public designs may contain subject matter that the Government may find unsuitable for the Nation's coinage.

b. (2) Invitations to Selected Artists

The second option for States to obtain design topics is to invite a select group of artists to submit designs.

Advantages: (1) The quality of designs is likely to be higher than from a general public competition. (2) The Program would be significantly easier to develop and implement. (3) The judging process would likely be considerably easier.

Disadvantages: (1) Shutting out the general public from the design process may create some backlash to the overall Program or may reduce enthusiasm. (2) States could allow the selection of artists to become "political" and create difficulties for the Federal Government.

A possible compromise that would combine the best attributes of these first two options would be to solicit general public ideas for topics rather than specific designs. The State could make the question open-ended to the public and submit the most popular ideas to a select group of artists for developing designs based on those suggestions. State could also elect to combine these first two options by inviting artists to participate with the general public. By proactively seeking artists' participation, the States can better ensure that a higher quality selection of finalists designs are available.

c. (3) Government Prepared Designs

A third option is for the Federal Government to prepare a single or multiple designs for each state. The Government could produce multiple designs and then offer those selections to the State for consideration by their officials or the general population. The other option is for the Government to produce a single design. On the Design Selection Process Alternatives Flowchart, there is no line connecting the Government's single design to a selection or ranking process. We do not believe that it would be advisable to include a single Government design in a public assessment or ranking process. We would envision that if the Government were to develop a single design, its purpose would be as a fallback position in case the final design submitted by the State proved to be uncoinable for any reason.

Advantages: (1) A Government-prepared design will ensure coinability and consistency with other styles. (2) Government-prepared designs would be less time consuming to judge and evaluate. (3) The Government will be better able to control time frames and ensure that milestones are met.

Disadvantages: (1) The public may resent the Government's intrusion into what may be perceived as a state process and may lose interest in the Program. (2) Government designs may be criticized as being less emblematic of the States. (3) The design development process will be considerably more extensive for Government personnel, possibly requiring multiple State designs at the same relative time.

d. (4) Narrowing the Field

Whether the source of the designs is the general public or selected artists, a State central body would need to reduce potentially thousands of entries into a manageable number. If the general public submits either design topics or actual designs, the central body or their designated organization would need a process and reasonable time frame to assess the proposals and move into the next stage. If the State decides to solicit ideas for designs, one or a few topical ideas must be communicated to the selected artists. If deciding to solicit actual designs, the State would need to elect whether to select one single drawing or multiple choices. The advantages and disadvantages of each are discussed in the following sections. We do not believe that Government-prepared designs should be subject to this process.

e. (5) Selecting a Single Design

One option available to the State in reviewing submissions is to choose a single design as its nomination to Federal decision-makers. Even though the public may have been involved in the design submission process, this decision effectively blocks them from participating in the design selection process.

Advantages: (1) Submitting a single design eliminates the need, time, and cost associated with potentially having a second public contest or poll to select the nominee design. (2) The State may be less vulnerable to criticisms of its selection if the alternative selections are not common knowledge.

Disadvantages: (1) Limiting public participation in the selection of designs may have an adverse effect on the coin's popularity, (2) A single State nomination rather than a range of ranked alternatives increases the possibility that a Government-created design must be used because of coinability or other concerns about the submitted design. States could mitigate this risk by consulting with Government officials about specific designs and coinability issues.

f. (6) Selecting Finalists

The other option is for States or the Federal government to select or designate a number of finalist designs from the pool of entries submitted. The number of finalist entries can vary although the number should represent a manageable volume for evaluation purposes. If the Government prepares multiple designs, States may include these ideas in the pool of finalists. By doing so, the ranking bodies will have at least one entry that is guaranteed to be coinable. Nevertheless, while including Government-submitted designs in a pool of finalists is possible, it is probably not advisable.

Advantages:(1) Multiple designs increase the chances that the final chosen design will be acceptable and coinable. (2) Finalist designs offer the opportunity for the public to participate in the final decision. (3) Multiple finalist designs with a subsequent decision process will relieve the burden on State officials to identify and forward a single design directly to the Mint.

Disadvantages: (1) Identifying finalist designs adds another step and more time to the process. (2) The public may not relate to any of the finalists and may request other options.

The Government will likely require the flexibility to modify designs to better ensure coinability. We expect that the Government will want to closely coordinate these design modifications with State officials.

g. (7) Central Body Ranks Finalists

Once a group of finalist designs are determined, each State will need to develop a process for ranking the selections. We believe that two alternatives are feasible. First, the State can appoint a panel to review and rank selections. The panel could be made up of any combination of government officials, representatives from the artistic and/or historical communities, and members of the general public.

Advantages: (1) Ranking decisions can be made more swiftly. (2) The State can avoid implementing a potentially cumbersome and time-consuming public campaign. (3) Chances are enhanced that the rankings will reflect coinability and sensitivity concerns.

Disadvantages: (1) Lack of public participation may prompt questions regarding the propriety of the selected design. (2) Lack of public participation in the decision-making process may result in decreased interest in the Program. (3) Selecting panel participants may be an involved process in itself.

h. (8) Public Voting Ranks Finalists

The second alternative would entail public solicitation. The State could conduct a survey or balloting to rank finalists. Any process involving general public participation could become cumbersome. The State would need to develop a campaign to distribute designs of the numbered or named finalist drawings to be accessible to all residents. Newspapers may serve as a good media for this purpose.

Advantages: (1) This method would likely ensure the most public buy-in into the Program. (2) The overall visibility of the Program would be enhanced. (3) Political agendas can be somewhat circumvented.

Disadvantages: (1) A public selection and ranking process may be very time and resource consuming. (2) The people's choice may not be coinable or may be politically or traditionally sensitive.

i. (9) Mint Director Selects Final Design

At some point in the process, selection(s) will be submitted to the Director of the Mint for Federal approval. The Director of the Mint will help decide on coinability issues before submitting design(s) to the CCCAC, FAC, and Secretary of the Treasury for their recommendations or approval. The Director may also have a standby design available. We would recommend using the feedback from the market research study to determine overall themes for the Government's fallback designs.

5. Design Execution

The design execution process takes the approved design concept through to the production of coinage for circulation. The table on the following pages details the steps and timing which would be required to meet a January 2, 1999 launch date if the Program were implemented. As noted, the design execution process takes 32 weeks from final design approval by the Secretary to the release of the first coins into circulation.

With the release of the first coins in the series scheduled for January 2, 1999, the process indicates that the first design must be ready by the week of May 25, 1998. This does not represent an expedited process and would be representative of the process and timing required for all ensuing State designs.

a. Engraving Capacity

The Mint maintains a full-time, seven-member engraving staff at the Philadelphia Mint. The Mint Engraving Staff has extensive experience, and the Government believes that the extra effort required to produce the required plaster models, reduction hubs, and production dies for the Program would not exceed the staff's current capabilities.

Each year, the Mint Engraving Staff prepares designs for producing several different coins. A typical year may include the following workload:

- ∅ Changing the dates on the obverse of each circulating coin (five design changes)
- ∅ Changing the dates on the obverse of each American Eagle coin (nine design changes)
- ∅ Producing two new commemorative coins as specified by legislation (four new designs)
- ∅ Producing medals to honor the President of the United States, the Secretary of the Treasury, and the Director of the Mint approximately every 4 years (six new designs)

This standard workload amounts to up to 24 new designs per year, excluding the effects of the proposed Program. The Program, if implemented, would add five new designs per year, resulting in a total standard of annual workload of up to 29 designs.

To benchmark its capabilities, the Government analyzed the Mint's new design execution for FY 1994. 1994 was the year in which many of the Atlanta Olympic Commemorative Coins were designed. In 1994, the Mint executed a total of 50 designs, approximately double the standard workload anticipated under the 50 States Program. (The 50 design changes executed included only 10 date changes and 40 new designs.)

Taking into consideration the nature of commemorative coin legislation already approved by Congress, and efforts on the part of the CCCAC to regulate new commemorative programs, the Government does not believe that there are any stress points on the horizon that would present challenges above and beyond the 1994 performance. Accordingly, it appears very likely that the Mint's Engraving Staff would have the capacity to produce the incremental number of additional designs required by this Program, if implemented.

G. What are the other issues and factors that the Secretary may wish to consider in his decision?

There are many unique issues that arise in considering the feasibility of implementing such a Commemorative Coin Program. A detailed analysis regarding the implications resulting from the topics listed below is outside of the scope of the study. However, these factors may be important and may merit consideration by the Secretary in his deliberations.

1. **Unprecedented Change to Coins.** The U.S. Government has always carefully considered changes to the face of its coinage and currency. Historically, the Government has always required a clear, direct link to a single event or memorial date to change circulating coin designs. The 50 States Commemorative Coin Program has no direct link to a single event or memorial date. Implementing this Program would be a significant change in public policy.
2. **Public Awareness/Education.** If the Government were to adopt this Program, an extensive public awareness campaign and marketing effort would likely be required to communicate the nature and purpose of the Program to the general populace. While it is possible and even probable that upfront costs would be more than offset by increased seigniorage revenues, an initial outlay of funds would be required. This study does not attempt to project or capture those costs nor determine who should fund this campaign. Rather, the Study identifies the potential need for "seed" public relations money and administrative resources at the outset of the Program.
3. **Effects of Distribution Uncertainty.** The market research did not address concerns that the public may have if particular designs of Statehood coins were not readily available in their area. The Government would use existing processes for distributing Statehood quarters to the population. This process is heavily reliant on Federal Reserve Bank ordering patterns and normal recirculation of coins through the economy. Under this approach, the Government cannot ensure that all designs will be initially available in every area of the country. While the Mint has indicated that it would offer individual quarters to the general public through various numismatic products at retail prices, the public's reaction to paying a premium for Statehood quarters could not be assessed.
4. **Equality of Individual Statehood Coin Production.** If this program were implemented, actual levels of production of individual Statehood coins will vary due to changing economic forecasts and actual demand. Public sensitivities to unequal production of Statehood coins have not been addressed.
5. **Uncertainties Regarding Production Capacity Flexibility.** If the Program were implemented, the production requirements of the Program in the highest demand scenario could reduce the Government's flexibility to respond to prolonged unexpected demand in the economy and other potential circulating coin programs.
6. **Design Process Uncertainties.** Many options are available for selecting designs for the coins. In some scenarios, States would bear greater responsibility for the process. In other options, the Federal government would have more responsibility. In either case, the Government would need various levels of coordination with and decisions from State officials. Since specific design

selection processes are of yet undetermined, the potential administrative burden on both the State and Federal governments can not be assessed.

7. **The District of Columbia, Territories, and Other U.S. Possessions.** The current legislation calls for the Program to honor each of the 50 states; however, the Act is silent regarding the commemoration of the District of Columbia, U.S. territories, and other possessions. There are political and pragmatic implications of including or excluding the District and territories in or from the Program.