SUPPORTING STATEMENT B

UNITED STATES MINT
QUANTITATIVE CONSUMER RESEARCH –United States Mint Customer Spend
Trajectory Research – Part II

B. Collections of Information Employing Statistical Methods

1. **Describe (including a numerical estimate) the potential reporting universe and any sampling or other respondent selection methods to be used.**

The sample will include current and lapsed customers and will be divided into multiple cells along the following criteria:

Products Purchased - Divided into purchasers of Annual Sets, Precious Metal coins, Miscellany, and any combination of these three divisions.

Spend Level - Divided into high and low spend (except for Precious Metal customers who are assumed to be high spenders).
- High spend: includes customers whose average annual spend was $500 or more
- Low spend: includes customers whose average annual spend was less than $500

Initial Time Frame – Product/spend segment defined based on spend in two distinct time periods (2005-2007 and 2008-2010). These time frames were chosen in order to capture customers from two distinct periods in time. Between 2005 and 2007, the United States Mint was gaining customers each year and the United States economy was doing well. These trends reversed in 2008 and the Mint began losing customers and the U.S. economy faultered.

Behavioral Changes – Divided into three groups based on changes in total of purchases between first and subsequent time period (either from 2005-2007 to 2008-2010 or 2008-2010 to 2011-2012). The three groups are:
- More/Same – Purchase total in last year of second period (either 2010 or 2012) is the same or more than average of (active-year) totals in years of first period (either 2005-2007 or 2008-2010).
- Less – Purchase total in last year (either 2010 or 2012) of second period is less than average of (active-year) totals in years of first period (either 2005-2007 or 2008-2010).
- Stopped – No longer purchasing U.S. Mint products in last year of second period (2010 or 2012).

 In order to ensure that we get responses from all of the groups we are interested in, we envision the following sampling plan, shown in Figure 1 below.

Figure 1

Sampling Plan

Product Type(s) Purchased in Initial Time Period	Spend Level	Spend Trajectory (Subsequent Time Period)	Sample Cells	Actual Customer Representation (i.e., Universe Counts)
Annual Sets only	High Spend	More/Same	600	1,783
		Less		1,436
		Stopped		5,514
	Low Spend	More/Same		256,448
		Less		94,112
		Stopped		1,006,213
Precious Metals only	(All High Spend)	More/Same	300	18,933
		Less		13,011
		Stopped		266,402
Miscellany only	High Spend	More/Same	600	548
		Less		1,065
		Stopped		30,298
	Low Spend	More/Same		11,956
		Less		6,017
		Stopped		194,701
Annual Sets + Precious Metals	(All High Spend)	More/Same	300	78,146
		Less		68,416
		Stopped		201,138
Annual Sets + Miscellany	High Spend	More/Same	600	3,903
		Less		6,564
		Stopped		11,519
	Low Spend	More/Same		77,474
		Less		64,658
		Stopped		230,929
Precious Metals + Miscellany	(All High Spend)	More/Same	300	5,548
		Less		6,398
		Stopped		46,811
All (Precious Metals + Annual Sets + Miscellany)	(All High Spend)	More/Same	300	146,128
		Less		186,972
		Stopped		229,518
Total			**3000**	**3,272,559**

Most data points and spend trajectories will be reviewed in aggregate by "rolling up" cells in the Sampling Plan and separating cells into the two Initial Time Frames (i.e., 2005-2007 and 2008-2010). Figure 2 shows the specific cells that we plan to analyze.

Figure 2
Analytic Cells

Initial Time	Spend Trajectory	Total Number of

Period	(Subsequent Time Period)	Interviews per Analytic Cell
2005-2007	More/Same	500
	Less	500
	Stopped	500
2008-2010	More/Same	500
	Less	500
	Stopped	500
		3000

We expect to be in field with this survey for approximately 3 weeks.

2. **Describe the procedures for the collection of information including: (a) Statistical methodology for stratification and sample selection, (b) Estimation procedure, (c) Degree of accuracy needed for the purpose described in the justification, (e) Unusual problems requiring specialized sampling procedures, and (g) Any use of periodic (less frequent than annual)data collection cycles to reduce burden.**

The data collected from the study will be analyzed using simple descriptive statistics (e.g., comparison of means). There are no unusual problems and we're only planning on collecting this data one time. As shown in Figure 2, we will have 6 key cells that we will be analyzing. The margin of error on a 50% point estimate at 95% confidence will be approximately 4.5%.

No monetary incentive will be offered to customers. For United States Mint customers, we typically achieve very high response rates (5%-7% for current customers even without an incentive). Based on previous Mint surveys, we do, however, expect response from lapsed customers to be somewhat lower (1%-2%). Although these response rates may appear low compared to large public-use surveys done by Federal agencies, we believe that our sampling procedures, including the detailed stratification plan above, result in data that is useful for the purposes of this study. Because of these response rates, these data may not provide precise population estimates, but rather represent more diverse qualitative inferences, which still serve the purpose of this study.

We keep surveys to a manageable length and keep the surveys interesting.

3. **Describe methods to maximize response rates and to deal with issues of non-response.**

This survey approach is designed to minimize the amount of intrusion and burden that is placed on customers. Accordingly, calls will not be made to them, nor will other "intrusive" measures that normally might be used to maximize response rates. We plan to send e-mail invitations to respondents explaining that participation is totally voluntary and that their feedback will be used to help improve the products and services we offer. . We will send reminders to all customers. Respondents can complete the survey at a time convenient to them.

We ensure that our data provides the most reliable inferences possible by carefully designing the sampling plan with appropriate strata and sample sizes and by weighting the data to account for the survey design and to adjust for differential response rates within strata. Weights are constructed by calculating the appropriate adjustment factor so that respondents within a strata represent the appropriate corresponding population. Our inferences are, nevertheless, limited by the response rates achieved and should be viewed more as diverse qualitative feedback rather than precise population-level inferences.

The use of Web-based surveys to gather data for business decisions is ubiquitous, in part, because it provides a reasonable balance between survey quality, speed, and cost. However, population coverage concerns are always raised when proposing a Web-based survey. Critics of Web-based survey approaches argue that because not everyone has access to the Internet, sampling biases are a concern. However, a recent study by the Pew Research Center estimates that 74% of adults in the U.S. use the Internet (Rainie, 2010), suggesting that Web-based survey approaches have relatively high rates of coverage in general. As a point of comparison, estimates based on data from the National Health Interview Survey suggest that cell phone only rates have increased to 20.2% in 2008 (Blumberg & Luke, 2009), yielding coverage rates of traditional telephone sampling methods similar to those of Web-based methods.

4. <u>Describe any tests of procedures or methods to be undertaken.</u>

The Customer Spend Trajectory survey is being conducted in two phases. Phase I, which we have already conducted, consisted of 16 qualitative in-depth interviews with current and lapsed customers to give us a general idea of how and why customer purchase patterns have changed over time. Going into this research we had an idea of many of the reasons for the drop off in spending based on previous lapsed customer research and anecdotal evidence from the customer contact center and other feedback. However, when planning to do the quantitative survey to obtain hard numbers on the drop off, we wanted to be sure that we gave answer choices that encompassed all of the possible answers – not just the ones we assumed we would hear. Therefore, we conducted the qualitative interviews to really hone the quantitative instrument and to ensure that it is the most comprehensive survey possible designed to give us a more clear and reliable picture of the factors driving purchase-pattern changes in our current (and lapsed) customer base. Please see the attached memo that summarizes the changes made based on qualitative findings.

5. <u>Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s) or other person(s) who will actually collect and/or analyze the information for the agency.</u>

If you have questions related to the review of this collection request, you may contact any of the following individuals at the United States Mint's Sales and Marketing Department:
- Kathy Chiarello – kchiarello@usmint.treas.gov; 202-354-7809
- Rachel Liebov – rliebov@usmint.treas.gov; 202-354-8407

-5-

- Adine Frank (Contractor from National Analysts Worldwide) – afrank@nationalanalysts.com; 215-496-6857