

BEP SMALL PANEL INFORMATION COLLECTION

OMB Control Number: 1520-0009

PURPOSE:

The Bureau of Engraving and Printing (BEP) will add tactile features to American banknotes so that visually impaired people can use their sense of touch to determine the denominations. BEP must ensure that the tactile feature is easily perceptible and distinguishable to visually impaired people. This particular phase of the project will assess the perceptibility and distinguishability of two application technologies the final raised tactile feature (RTF) prototype. The two different types of application methods will be, “Intaglio” and “Coating Embossed.” The BEP has created prototypes, called “coupons,” for each application method. The paper used to make the coupons is similar to the paper used to make real banknotes. These coupons have been laboratory “aged” to simulate worn currency.

RTF Design – The Four-Position Rectangle with “Stop” Pattern RTF design will be tested for the two remaining technology application methods below:

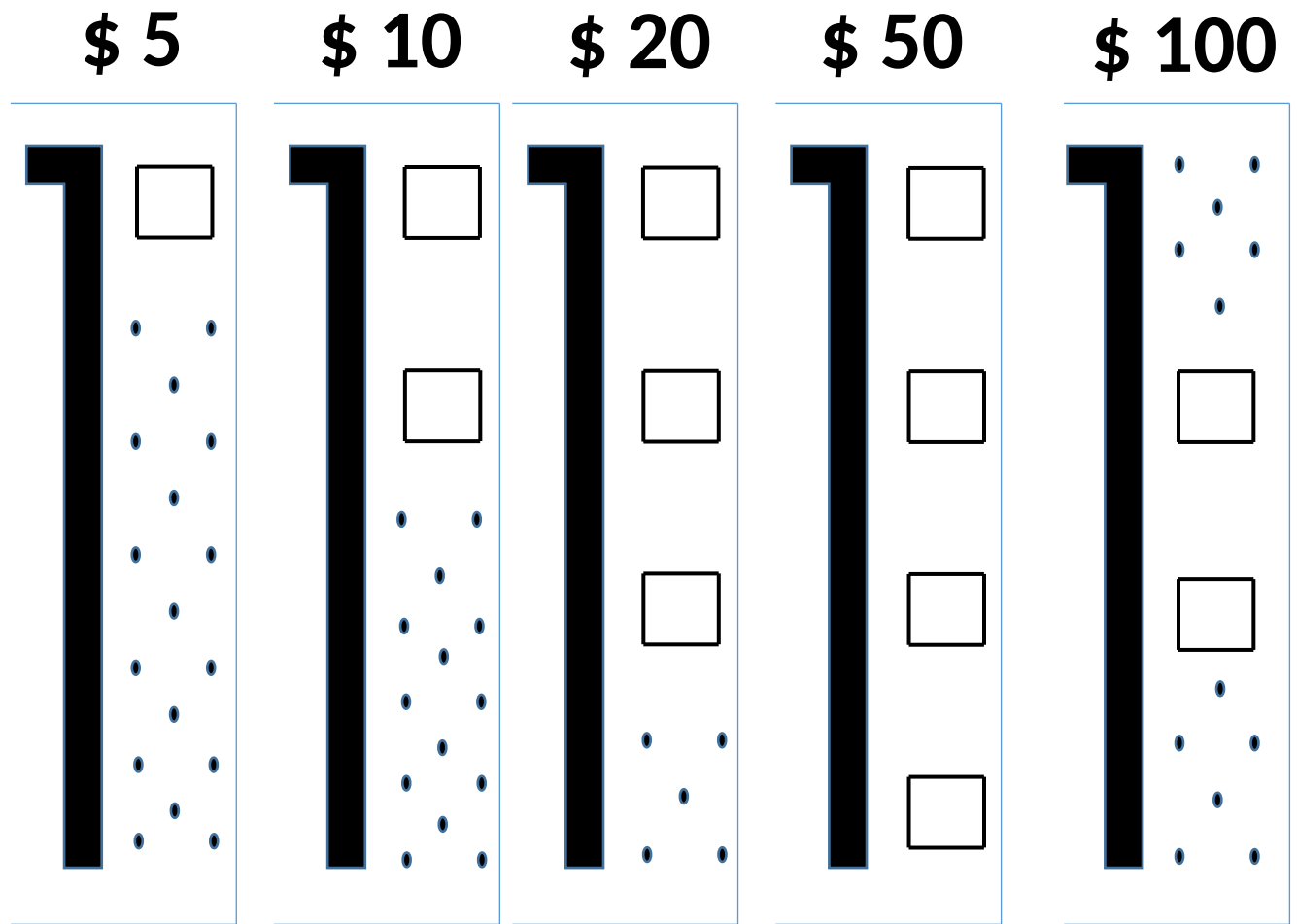
- Intaglio
- Coated-Embossing

The design style will feature on the right side, rectangles followed by a dotted “stop” pattern as follows for both technology applications (sample note below):

- One symbol on the right side starting in the upper corner,
- Two symbols on the right side starting in the upper corner,
- Three symbols on the right side starting in the upper corner,
- Four symbols in the upper right corner,
- Two symbols in the middle with the “stop” pattern on either side.



The configuration of the location on the coupons:



Tactile Sample Sets:

Sample sets A and B represent two different application options for possible tactile features. The sample sets have been subject to a wearing process simulating currency in circulation. The sample IDs (application method) are listed in the table below. The objective of the study is to determine the relative tactility or ease of perception and identification of various samples with the two application methods. We are getting feedback through accuracy tasks, as designed by the subject matter experts at Lighthouse and Westat.

Sample ID/Task	Print Method	Prototype Location/Style
A	Intaglio	Right Side 4-Position Rectangle/"Stop"
B	Coated-Embossing	Right Side 4-Position Rectangle/"Stop"

DESCRIPTION OF RESPONDENTS:

A total of 50-60 blind people will be recruited from both the C-SUN Assistive Technology Conference and among up to seven locations: American Council of the Blind, Arlington, VA; National Federation of the Blind, Baltimore; MD, Department of Veterans Affairs, Washington, DC; National Industries for the Blind, Alexandria, VA; Columbia Lighthouse for the Blind, Silver Spring, MD, National Library Service, Washington, DC; Walter Reed National Military Medical, Center, Bethesda, MD; and other locations will serve as respondents in this project. The respondents will carry out a singular task using specially made coupons, made with paper similar in shape and feel to real banknotes, bearing the six denomination schemes produced by two application methods. The respondents' accuracy will be recorded. The overall time to complete each type of tactile feature will be collected for reference purposes. The respondents will also be asked to rate the ease of determining the tactile feature on a scale of 1 (very difficult) to 5 (very easy).

The test protocol that will be used at these gatherings is based upon the protocol previously developed by Westat, Inc. under contract with the BEP. It has been revised to focus on just one task and is otherwise nearly identical to the protocol that was successfully used by BEP at the California State University at Northridge (CSUN) Technology and Disabilities Conference as well as with several focus groups. This protocol was developed to ensure the method of presenting the various samples to the blind participants and collecting the associated data and comments regarding the samples evaluated provides the most relevant and accurate feedback and data for use by the BEP in refining their tactile feature development effort for the future.

BURDEN HOURS

Category of Respondent	No. of Respondents	Participation Time	Burden
In-Person Testing (Denominating notes by touch)	50-60	30 min.	30 hrs.
Totals			30 hrs.