Executive Summary of Environmentally Preferable Purchasing Study for Creighton University

Background: This study focused on identifying perceptions, attitudes and behaviors of employees who are the decision makers for purchasing office supplies. Creighton was one of five universities to participate in the study. This research was funded by a United States Environmental Protection Agency (EPA) grant where the ultimate outcome of understanding these perceptions and attitudes could possibly lead to recommendation altering policy and purchasing practices. The study was conducted by the Nebraska Business Development Center (NBDC) at the University of Nebraska at Omaha (UNO), in conjunction with procurement and sustainability officials at Creighton University.

The initial survey was developed from extant literature and local focus groups. The survey was tested and a follow-up focus group was conducted. Surveys were all administered anonymously via email link. Initial surveys were sent in the early summer of 2014. **Messages** (fact sheets) providing **education** and **encouragement** about environmentally preferable purchasing of office supplies along with **reducing** the use of supplies and **planning** purchases were created by NBDC and sent by the Creighton purchasing department to their office supply purchasers approximately monthly. The survey was administered a second time after six messages. In the spring of 2015, nine new messages were created and sent approximately twice per month. 15 messages were sent in all. The survey was administered a final time in the summer of 2015. Changes in knowledge, perceptions, attitudes and behavior were measured between the initial and final survey. Environmental outcomes from purchases were also measured by comparing purchases in the fall 2014 (July – December) to those of the previous fall 2013, and comparing purchases in the spring 2015 (January – June) to those in the spring 2014.

Results of the surveys clearly show that purchasers of office products are willing to "buy green."

- 86% of respondents believe Creighton has an Environmental or Sustainability policy, up from 78% in the initial survey.
- 87% believe sustainable purchasing should be an objective of this policy.
- Cost savings and performance are seen as critical criteria for making purchases.
- By gaining just a little more knowledge, 92% definitely or probably will "buy green," an increase of 24% from the initial survey.

Leadership is lacking

- In the final survey, 43% report that buying sustainable products is not brought up, but 55% say it is somewhat or strongly encouraged. In the initial survey, 50% said it is not brought up.
- 90% report there is very little or no chance of being rewarded for sustainable purchasing, about the same as
 in the initial survey.
- In both surveys, 25% report they don't know who is designated to handle any of the sustainability tasks.
- 50% report that they could use more knowledge about sustainable purchasing, but it wouldn't really be beneficial to their job. Initially 36% were in this category.

Increased knowledge and pro-environmental behavior were accomplished through messaging

- 62% report at least fair knowledge of sustainable purchasing in the final survey; only 39% were in that category initially
- 78% say they would likely be able to follow a policy to order once or twice per week. Deliveries of only one day per week, instead of five days per week, would save 3.5 tons of CO₂ emissions/year (for a 29 mi. roundtrip per delivery, using nativeenergy.com calculator).
- In both surveys, respondents would pay an average of 12% more for recycled paper tablets over non-recycled tablets of the same quality.

¹ Grant Number NP 97744101 Environmentally Preferable Purchasing – Implementation, Motivation, and Measurement University of Nebraska at Omaha 2013-14

Environmental outcomes were achieved, primarily because Creighton ordered fewer office products than the previous year. One of the primary themes of the messages was to use less. Savings of \$16,846 were achieved. The papercalculator.org was used to calculate the environmental savings:

- 55 tons of wood
- 491 million BTUs of energy
- 38.3 metric tons greenhouse gas emissions
- 343,146 gallons of water
- 28,884 lbs of solid waste

Policy recommendations:

- Purchase only 30% recycled content copy paper and eliminate the option to purchase virgin paper from PayLESS. In the 2014-15 academic year, 57.87 tons, of virgin paper (containing no recycled content) were purchased through PayLESS. A policy of purchasing only 30% recycled content paper would result in savings of:
 - 65 tons of wood
 - 187 million BTUs of energy
 - 163 metric tons (MT) greenhouse gas emissions,
 - 194,775 gallons of water
 - 13,039 pounds of solid waste

Under the current pricing, virgin paper is \$30.46/case and Creighton spent \$77,105 during 2014-15 year. If the price of 30% recycled paper was 10% higher (\$33.51), and the same amount of paper was purchased, it would cost \$7,711 to make this change. Note that in the surveys, respondents indicated they were willing to pay up to 12% more for the environmentally preferable product. Even at the price of \$33.51/case, if Creighton continues to use less paper at the rate of 25%, as was done between academic years 2013 and 2014, Creighton could switch to 30% recycled content paper and save money.

- 2. **Reduce office product deliveries to once per week**. This will result in environmental savings of 3.5 MT CO₂/yr. In addition, it will lower labor and transportation costs for the vendor. Negotiate using these vendor savings to lower the cost of 30% copy paper. Reducing the number of days when office products are delivered also has the advantage of encouraging departments to control inventory and be more organized, avoiding unnecessary purchases. Inventory control is an easy and effective way to help reduce waste, according to EPA Toxic Release Inventory national data. It would be important to communicate a new schedule of delivery clearly and often as the change occurs, touting its environmental benefits.
- 3. Provide more leadership and recognition about sustainable purchasing. The results of the survey clearly show that people are willing and interested in sustainability and environmentally preferable purchasing. While the messaging portion of this project provided education and encouragement, there must be leadership from administration through departments and communicated to office professionals. Although they are willing, they are not receiving any recognition nor being held accountable for purchasing sustainable products. On-going messages are desirable. A series of short messages that can be included in internal, electronic newsletters for this purpose have been provided. It is also critical to conduct conversations about the importance of sustainability among leadership at Creighton, and to consider it when making purchasing and other decisions.