

Date: 02/27/2008

Committee: Senate Ways and Means

Department: Education

Person Testifying: Patricia Hamamoto, Superintendent of Education

Title of Bill: SB 2774, SD1 (SSCR2391) RELATING TO EDUCATION.

Purpose of Bill: Establishes a task force within the University of Hawaii to conduct an analysis into the creation of a comprehensive school recycling program; makes appropriation. (SD1)

Department's Position: The Department of Education supports SB 2774, SD1, which establishes a task force within the University of Hawaii to conduct an analysis into the creation of a comprehensive school recycling program. The Department appreciates the lead being taken by the University of Hawaii, College of Social Sciences and looks forward to participating as a member of the task force. The Department defers to the University of Hawaii, College of Social Sciences, as to the priority of this measure. Thank you for the opportunity to testify in support of this bill.



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UNIVERSITY OF HAWAI'I AT MĀNOA

FROM: David Nixon, Associate Professor
TO: Senator Rosalyn Baker, Chair, Committee on Ways and Means
DATE: February 27, 2008
RE: SB2774, SD1

Dear Chair Baker,

Thank you for the opportunity to testify about SB2774, SD1. The Social Sciences Public Policy Center applauds the Secondary School Conference (SSC) for recognizing this important public policy challenge and opportunity. Like the SSC, we recognize the importance of carefully, and honestly assessing the costs and benefits of recycling. The Public Policy Center supports the intention of the bill, and stands ready to offer assistance, but needs to offer two important cautions about its scope and the work requested of the proposed task force.

As part of the Sustainable Saunders Initiative, the Social Sciences Public Policy Center developed and examined a new bottle recycling program in Saunders Hall, in collaboration with a team of graduate and undergraduate students. The findings of that study are attached to this testimony, in the form of a Policy Brief we distributed earlier this year. As the brief makes clear, we achieved dramatic improvements in deposit-bottle recycling when smaller bins were made available at convenient locations, though we did not conduct a cost-benefit analysis, and we did not examine any other aspects of recycling beyond HI5 containers.

Consistent with the report of the Education, Environment and Energy Committee, the Social Science Policy Center is committed to exploring this issue in other settings, and would like to provide "necessary support" for a recycling assessment in the public schools. I envision working with the Secondary Student Conference to assemble one or two teams of high school students in one or two schools, to be directed by a UH student experienced in our bottle recycling effort, and to conduct detailed waste audits before and after implementing a pilot recycling project. The project could be planned during summer 2008, implemented during fall 2008, and a report could be assembled in late fall 2008. This is an approach modeled on our efforts in the Sustainable Saunders Initiative, we still have a number of enthusiastic UH graduate students who I think are well suited to lend their experience in the public schools, and I have experience running a collaborative student-assisted service learning project like this. The project would be a great way to combine the interests and enthusiasm of UH and SSC students towards contributing to the policy dialogue about recycling.

But as the person most likely to take the organizing, researching, and writing burden for such a project, I need to respectfully raise two concerns about the bill. First, it requests a "**comprehensive** assessment of all recycling options," from food waste to paper to non-HI5 plastics and glass. **That is a very broad scope beyond our capacity to support this year.** Our own experience in the Sustainable Saunders Initiative was limited to HI5 bottle and can recycling. We have no expertise in food or paper waste, and getting up to speed sufficiently to direct a comprehensive assessment would require redirection of faculty

teaching time that I cannot spare this year, no matter whether funds were available or not.

Second, the bill mandates that the task force will assemble a “**detailed cost-benefit analysis**” of recycling programs. A cost-benefit analysis of something as important as recycling in every public school is a very serious professional document. Having spent the better part of 6 months writing a 65-page cost-benefit analysis last year, I need to point out that the construction of any such report would also require substantial faculty services from July through December and consequently would require redirection of faculty teaching time (again, requiring funding).

IF the scope of the bill was restricted, by eliminating references to “comprehensive”, and **WITH** the understanding that the study would be focused on only a small number of pilot sites, the Policy Center could carry out the other provisions of the bill with the following resources.

faculty teaching redirection	\$18,000
graduate student support	\$6,500 (\$3,250 per school site)
<u>equipment</u>	<u>\$2,400 (\$1,200 per school site)</u>
total	\$26,900

If, on the other hand, the mandate for the task force were loosened, to replace the phrase “detailed cost-benefit analysis” with “report on the findings of the pilot projects”, or perhaps “summary feasibility report”, I could reduce my role to one of organizing teams and providing advisory direction, so that I could forego the faculty teaching redirection in the above budget. The report, in that case, would be authored by students, in such a scenario, though we could provide some guidance.

Thank you for your consideration.



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POLICY BRIEF

number 02 - September 2007

Workplace Recycling

This policy brief summarizes the findings from a workplace recycling program implemented on the UH Manoa campus, as part of the “Sustainable Saunders Initiative”. Saunders Hall is an office and classroom building housing 175 staff and featuring 5 classrooms that has been designated as a pilot site for testing various sustainability demonstration projects. One project examined workplace recycling. In Spring 2006, 21 beverage container recycling bins were introduced for the first time to the 7-story building. An examination of that experience demonstrates that workplace HI-5 recycling might be a cost-effective way to significantly boost the overall recycling rate in Hawaii.

Waste disposal is a continuing public policy problem in Hawaii because discarded trash sullies beaches and collected garbage either fills up landfills or must be shipped out of state. In other states, beverage containers have been shown to constitute an unusually large portion of discarded garbage. In 2002, Hawaii followed the lead of 10 other states and implemented statewide bottle and can recycling, based on a 5-cent deposit program. The most recent Hawaii Department of Health numbers indicate that the statewide recycling rate for bottles and cans has stabilized at a level (68%) that is typical of most other “bottle-deposit” states but still significantly below the state’s goal of 80%.

Over the past few years, the state has worked to improve the recycling rate by making

adjustments to its redemption centers and container count rules, and in October 2007, Honolulu began a pilot program for residential curbside recycling. Curbside residential recycling has been shown to boost overall recycling rates, even in states with bottle deposits.

As part of the Sustainable Saunders Initiative, the UH Social Sciences Public Policy Center conducted a survey of recycling behaviors among the public employees in Saunders Hall. We also participated in a detailed student-run analysis of the waste stream from Saunders Hall.

We asked employees what they did with bottles and cans after they consumed beverages at work, and the fate of those containers appears in the top pie chart of Figure 1. A large proportion (72%) of the empty bottles and cans generated at work were being taken home - presumably to be recycled. Ten percent of the container waste was

Key Findings

- Installation of recycling bins boosted the estimated recycling rate for Saunders Hall **from 81% to 87%**. In so doing, the program cut the number of bottles going into the dumpster by 70%.
- Providing recycling bins at the office captured a large majority (68%) of the bottles and cans that had been previously recycled by individual employees taking their bottles home.

being collected by programs or student groups using the deposits as a fundraising mechanism (labeled as “volunteer recycling” in the pie charts). Assuming every person who took an empty container home ended up recycling it, 82% of the bottles and cans consumed in our pilot workplace were already being recycled at the start of the pilot project.

We carefully scrutinized the contents of the Saunders dumpsters and recycle bins throughout the pilot project, in order to:

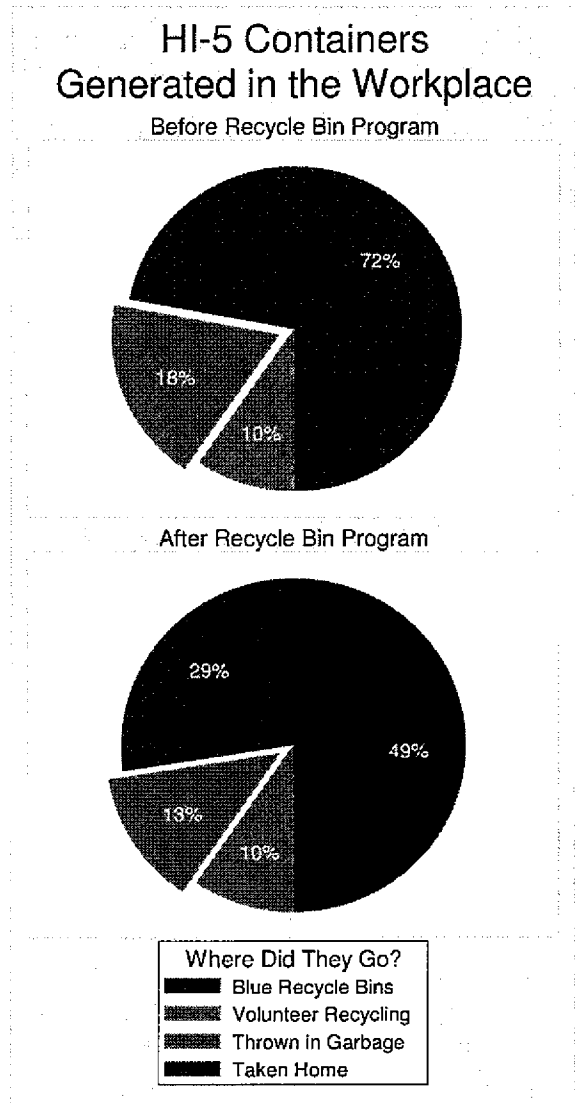
- (a) compare reported recycling rates with actual numbers of container discards in the garbage;
- (b) assess changes in the number of containers discarded in the garbage, once the recycling bins were made available; and
- (c) assess the share of bottles and cans previously recycled at home that are now placed in the Saunders recycling bins.

We carefully compared the survey responses to the actual disposal of bottles we observed in the waste audits, and found that the survey respondents **under-reported** their recycling. Our conclusions about the workplace recycling program are therefore sound, because overreporting is the most likely validity flaw in analyses of survey responses about recycling.

We found that, once workplace beverage container recycle bins were installed, the number of discards in the garbage dropped precipitously (by 70%). The overall estimated recycling rate thus jumped to 87% as a result of the pilot project. While some employees continue to take their containers home, the actual counts from the recycle bins indicate that a large share of the empty bottles and cans generated at work now end up in the Saunders recycle bins.

It is possible to significantly boost the recycling rate and significantly reduce the discard rate by focusing on workplace recycling programs. Such a program likely captures a very substantial portion of the deposits paid by the employees. Workplace recycling programs still may not pay for themselves, but most residential curbside recycling programs don't pay for themselves, either. A careful analysis of the costs versus

benefits for this approach to Hawaii's overall recycling program is warranted.



About the Author

David C. Nixon is an Associate Professor of Public Policy and Public Administration at University of Hawaii. He earned a Ph.D. in political science from Washington University in St. Louis, and specializes in policymaking by appointed officials.

A copy of the survey report on which this Policy Brief is based
can be found at
www.publicpolicycenter.hawaii.edu/reports.html