Q. How is Oregon beverage container recycling doing in relation to other states?

A. Oregon is doing very well. As the figure to the right shows, Oregon has bottle and can recycling rates in the mid-80 percent range. This is higher than most other bottle bill states, with the exception of Michigan, where the deposit is 10 cents.

Oregon’s rate, like those in other deposit states, is also much higher than the U.S. beverage container recycling rate. In fact, it is almost twice as high as the national rate of 44%.

However, Oregon’s very high beverage container recycling rate has been declining in recent years, falling from an overall rate of 90% in 1995 to 84% in 2000. This trend is also evident in most other bottle bill states, and nationally, as the figure shows. The national container recycling rate has slipped by ten percentage points since 1992: from 53.2% to 43.5%.

As recycling rates have declined nationally, wasting of glass, plastic and aluminum has increased. The figure to the left shows that annual sales of beverages in PET plastic, glass bottles, and aluminum cans has grown by 36 billion since 1992. Recycling has not been able to keep pace with increasing sales, increasing by only 2 billion a year, whereas wasting has increased by 34 billion. So the declines in Oregon are part of a larger national trend.

Nationally, we think that glass recycling has reached a plateau of about one third of all bottles sold (although this is impossible to confirm since GPI no longer collects recycling data). The recycling rate for aluminum cans has fallen from a high of 65% in 1992 to only 54.5% last year. The PET recycling rate has fallen from almost 34% to 26%, not because we’re recycling less PET but because sales have skyrocketed and recycling hasn’t been able to keep up. I’ll get back to PET later.

This slippage in state and national beverage container recycling rates is due to a number of factors. One is the strong economy: as more people are employed, there is less scavenging for discarded containers. Public education for recycling has diminished in some areas as well, and the public’s attention has shifted to other environmental problems, such as global warming.

But we think that the biggest reason for the drop in recycling rates is the decline in the value of a nickel. Because of inflation, 5 cents no longer serves as the financial incentive that Oregon legislators originally envisioned. A nickel is now worth only 23% of what is was worth when the Oregon bottle bill-- the nation’s first--was implemented in
1971. The nine other states that followed Oregon’s lead—from the mid-seventies through 1986—also chose to stick with the nickel as the refund value, and it hasn’t been raised anywhere except in Michigan. You can see below how the value of the nickel has been shrinking. By 1981, ten years after Oregon’s bottle bill was enacted, the nickel had already lost 55% of its value in 1971 terms; it was worth only about 2.2 cents. Over the next twenty years, inflationary pressures continued—if less sharply—so that by 2001, a 1971 nickel is now only worth about 1.1 cents. Most people will not bend over to pick up a nickel; it’s just not worth it. Will they save an empty bottle or can worth a nickel if they’re walking down the street? Not necessarily: the inconvenience of carrying the container home or to the car may not be worth a nickel—but it probably would be worth it for a dime, for many more people.

If state legislators in 1971 had foreseen the erosion in the value of the nickel and its resulting effect on recycling rates, they might have designed the bill to have stepped increases in the refund value. To keep pace with the original legislative intent—or the true financial incentive of a nickel in 1971—the deposit should have been raised to 10 cents as early as 1980, as the below graph shows. By 1990, it should have been raised to about 15 cents, and by 2000 it should have been raised to 20 cents—or even a quarter to achieve recycling rates above 90%.

So the deposit value should be raised, but not necessarily from a nickel to a 20 cents or a quarter right away—the sticker shock to consumers would be too dramatic. Instead, as Oregon moves forward to re-evaluate and update its bottle bill, it might consider raising the deposit to 10 cents, and then waiting a year or two to see if it has an effect on bringing container recycling rates back up above 90%. If it does not, the deposit could then be raised to 15 cents, for example.
Q. Is there any chance of rescinding the bottle bill in Oregon and trying something new?

A. The bottle bill has tremendous popular support, in Oregon and in nine other states, and I think it would be very difficult to repeal here. Repeal efforts in Massachusetts have failed several times, and though a repeal effort in New York is pending, it seems unlikely.

Critics have called the bottle bill “outdated,” or a 1970s solution to a year 2000 problem, but we think the opposite is true. The Oregon bottle bill was actually way ahead of its time; it was an early and very effective example of producer responsibility. And as you saw in my first slide, it continues to be effective: producing recycling rates ranging from 75% to over 95% (in Maine and Michigan)—while the national rate languishes at 44%. In fact, the national rate would be much lower if not for the ten bottle bill states; they pull the national rate up.

There is no other system that functions as effectively as deposit legislation at achieving high recycling rates. Critics often point to curbside as the way to recover containers without placing a burden on industry or consumers, but curbside can’t do it all. An increasing number of beverages are being consumed away from home—where curbside bins aren’t available. Single serving beverage sales at convenience stores are up, and vending machines are everywhere—in offices, parks and plazas, at the mall, in parking garages, airports, train stations—even in school cafeterias. Stadium concessions have switched from fountain drinks to PET and cans as well.

This trend of “immediate consumption” has grown during the last decade, even as curbside access has increased across the country. In 1990, when there were about 3,000 curbside programs serving 15% of the American population, the recycling rate for beverage containers was 53%, as I said earlier. By 2000, the number of curbside programs had more than tripled—to over 9,000—reaching 48% of the American population, yet the beverage container recycling rate fell to 43%. This drop in beverage container recycling did not happen because curbside doesn’t work; it happened because curbside can’t possibly target the increasing quantity of beverages people drink away from home.

This trend is likely to continue, because the beverage industry is looking at new ways to sell us beverages—at the doctor’s office or in a car rental office, for example. It is important to maintain both curbside programs and deposit systems which provide financial incentives to recycle. Of course recycling opportunities in public places should be expanded, and industry is welcome to work on that to remove some of the burden from municipalities, but let’s not dismantle a system that works.

Q: Who are the winners and losers under Oregon’s system?

A. Of course, everyone benefits from increased recycling and reduced litter. Under Oregon’s system, distributors benefit by keeping 100% of the unredeemed deposits, and they are not required to pay grocers a handling fee. I don’t know what the distributors’ costs are to collect and process deposit bottles and cans, but I have calculated that in 2000, they grossed over $28 million in unredeemed deposits plus scrap revenues. (About $11.4 of this was unredeemed deposits; about $16.9 million was scrap revenues). They might be reluctant to give that up.
On the other hand, Oregon grocers are bearing a bigger burden than grocers in other bottle bill states. Oregon is the only state that does not compensate retailers at all for collecting bottles and cans from the public. In other states, per container handling fees range from 1 cent (in Delaware) to 3 cents (in Maine); the average is about 2 cents. Some states (MA, NY, VT, ME) have increased their handling fees over what was originally enacted in response to pressure from retailers and redemption centers. So, as Oregon seeks to update its bottle law, it ought to consider working with distributors and grocers to provide better compensation to grocers.

Grocers should not feel skittish about asking for handling fees: while it is noble of them to provide recycling “as a public service,” it is not their primary line of business, and they do deserve compensation. The beverage packaging industry should absorb some of the costs, to lighten the load on grocers and on taxpayers.

Q. Who should keep unredeemed deposits?

A. Among the bottle bill states, there are two extremes: in Massachusetts, 100% of the unredeemed deposits become the property of the state (through the escheat provision) and on top of that distributors and bottlers pay retailers a 2.25 cent handling fee—so distributors there get the short end of the stick. In Oregon, on the other hand, distributors and bottlers keep 100% of the unredeemed deposits, without paying out any handling fees to retailers.

Most states have some system of cost sharing between these two extremes. In California, the unredeemed deposits become the property of the state, but distributors do pay handling fees. In Iowa, New York, and Vermont, distributors and bottlers keep unredeemed deposits but pay retailers a handling fee. In Connecticut and Maine, distributors and bottlers pay a handling fee, but share unredeemed deposits with retailers. In Michigan, distributors and bottlers do not pay a handling fee; unredeemed deposits are shared by retailers and the state. So as Oregon looks to update the bottle bill, you might want to strive for a cost sharing balance--something between the two extremes I mentioned.

Q. What is the best method for redeeming beverage containers?

A. There is regional variation, so there is no “best method.” Oregon should look at what other states have done, and pick and choose the elements that might work here. One option to consider is to allow certified redemption centers to collect bottles and cans, as is done in most other bottle bill states. Oregon and Michigan are the only states to limit redemption to retail stores. This both places a burden on retailers, and limits the opportunities available to consumers. No one likes to stand in long lines to redeem containers at grocery stores. Some of the pressure can be lifted from retailers through dedicated redemption centers, and by certifying convenience stores or other independent business owners to act as redemption centers. In Maine, the 3 cent handling fee has provided a real financial incentive for “Mom & Pop” businesses to open redemption centers; there is a very high concentration of redemption centers for the small population in the state. There are similarities between Maine and Oregon—both are large rural states—so perhaps that is an option to consider. On the other hand, a retailer-led redemption system does increase foot traffic in the store, so some retailers might not want to give it up to their competitors.
Q. Should Oregon’s bottle bill be expanded to include other containers?

A. Yes. The quantity and type of beverage containers sold has changed radically in the last decade. The total number of aluminum cans and PET and glass beverage bottles sold annually has increased by 36 billion since 1992—a 26% increase in eight years. Some of this increase comes from population growth (in fact Oregon’s population has grown by 20% since 1990), but on a national level at least, much of this increase comes from consumption of so-called “new age” beverages that did not exist when Oregon’s bottle bill was enacted. This includes non-carbonated bottled water, ready-to-drink iced teas, and sports drinks.

As the graph on the right shows, national sales in these categories have increased from 4.7 billion to 15.1 billion per year. Their share in the total beverage market has risen from just over 3% in 1993 to almost 9% in 1999—a tripling in market share in six years. Not only are quantities sold rising, but the place of consumption has changed, too, as I mentioned earlier. Many of these single-serving beverages are being sold for immediate consumption at convenience stores and other public places, away from home and the curbside bin.

The majority of the bottled water and sports drinks are packaged in PET, which has strong market demand. The iced tea is primarily in glass, but won’t necessarily always be. Aluminum cans comprise a smaller amount of the “new age” increases.

You can see from the graph on the left how these non-carbonated, immediate consumption containers have affected the amount of PET and aluminum wasted nationally. From 1992 to 2000, annual PET beverage container recycling increased by 140 thousand tons, but PET wasting increased by four times that much: 557 thousand tons—and remember, this happened while national curbside access tripled.

When fruit drinks, wine and liquor are added in, “non-eligible” (or non-
carbonated) beverage containers comprise about 20% of the total U.S. beverage market. One can extrapolate from national figures to determine the non-eligible container tonnage currently being landfilled in Oregon. If one assumes a 50% recycling rate for non-bottle bill containers (and this is an area where better data collection would be useful), then approximately 9,800 tons of beverage containers are being not being recycled annually in Oregon.

Two states have already updated their deposit laws to include these containers: Maine in 1990 and California in 2000. Wine and spirits are also redeemable in Vermont and Iowa. Oregon can draw lessons from the experience of these states when considering expansion of the bottle bill: which containers to include and exclude, at what level to set the deposit, how to schedule implementation, how to deal with labeling and distribution to combat interstate fraud, how to work with the different retailers, bottlers and distributors affected, etc.

Q. Of the various ways to update Oregon’s bottle law, how would you rank them in terms of importance?

A. It depends on your goals. Is it strictly to increase tonnage recovered? Or is it to increase tonnage while also improving relations with the beverage and retail industries? Is improving consumer convenience a goal?

In terms of tonnage, I have calculated that an estimated 21 thousand tons of containers were wasted, or not recycled, in Oregon in 2000. This includes 11,414 tons of unredeemed deposit containers that were disposed of, according to the state’s triennial waste composition and disposal survey, and approximately 9,800 tons of non-deposit containers, as I mentioned a moment ago (although this figure is not firm).

So, by the numbers, a roughly equivalent number of containers could be recovered by targeting non-carbonated containers (through expansion), or by taking measures to boost the recycling rate of currently eligible containers up above 95%. The latter could most likely be done by raising the deposit to ten or fifteen cents.

Increasing redemption options for consumers—through certified redemption centers—might also raise redemption rates for carbonated beverages currently covered by the law. Instituting a handling fee could facilitate the opening of more redemption centers, and could provide retailers with greater incentive to provide efficient and clean redemption areas.

So, it may be a political or practical question of what you are able to accomplish in Oregon with all of the parties involved. Providing retailers with a handling fee in exchange for including non-carbonated beverages in the deposit law might be an acceptable compromise.

The Container Recycling Institute would be happy to provide further assistance to all interested parties in Oregon, as you re-examine the state’s very successful container deposit law.