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Examining the Effects of a \$.07 per Meal Investment on Local Economic Development, Lunch Participation Rates, and Student Preferences for Fruits & Vegetables in Two Oregon School Districts





## **AUTHORS/RESEARCH TEAM**

Deborah Kane Sarah Kruse, PhD Michelle Markesteyn Ratcliffe, PhD MSEI Stacey Ananda Sobell, MPH Nell Tessman, MS

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Whole Foods Market

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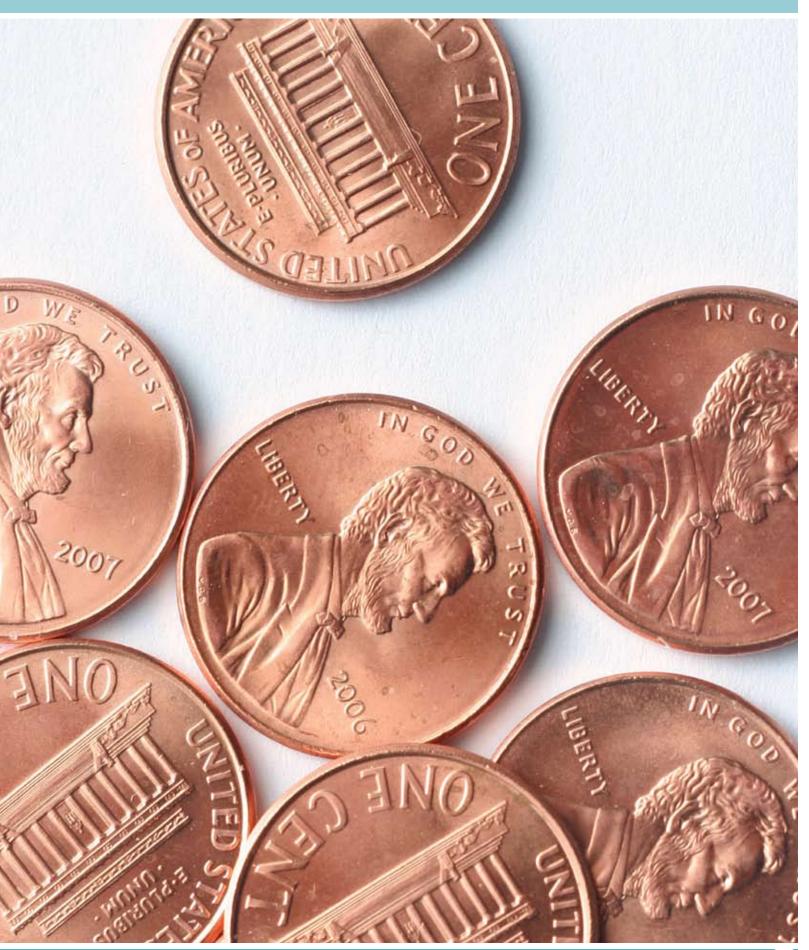
## The \$0.07 Question

## What if schools had an additional \$.07 per meal to spend on buying local foods for the lunch line?

During the 2008-2009 school year, researchers at Ecotrust set out to answer this question, placing particular emphasis on evaluating the economic effects of increased procurement of local foods.

Based on financial data provided by the Oregon Department of Education, schools in Oregon spent about \$1.31 per meal on food costs during the 2008-2009 school year after paying for labor, overhead, and other non-food related expenditures.\(^1\) In 2009, as the Oregon Legislature debated whether to allocate state funding to increase schools' purchasing power for foods grown, processed and manufactured in Oregon, the question at hand was whether an additional investment of just pennies per meal could provide significant economic benefit to the state. Beyond economic effects, researchers also explored the potential public health benefits of bringing more local products into the lunch room.

 $<sup>{\</sup>ensuremath{\mathsf{I}}}$  Oregon's food costs are generally in line with national averages.





## Farm to School

Efforts to increase the amount of locally or regionally produced foods in the school cafeteria are often referred to as "farm to school" programs. While individual farm to school programs are shaped by their unique community, geographic region, and scope, the National Farm to School Network defines farm to school as "a program that connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health, and nutrition education opportunities, and supporting local and regional farmers."<sup>2</sup> As both the term and concept grow in popularity, it has broadened further to include scholastic institutions ranging from childcare facilities to colleges and universities, and juvenile detention centers. Typically, farm to school efforts now also emphasize bringing healthy products from regional food processors and manufacturers into school cafeterias in addition to fresh fruits and vegetables.

The benefits of farm to school programs are considered to be numerous and varied. They include strengthening children's and communities' knowledge about, and attitudes toward, agriculture, food, nutrition, and the environment; increasing children's participation in the school meals program and consumption of fruits and vegetables; increasing market opportunities for farmers, fishers, ranchers, food processors and food manufacturers; and supporting economic development across numerous sectors.<sup>3</sup> With a growing local foods movement in the United States and backing from the Obama administration, interest in, and support for, these programs is at an all-time high. Yet the challenges to implementing farm to school programming are significant.

<sup>&</sup>lt;sup>2</sup> As of 2010, it is estimated that there are well over 2,000 such programs in all 50 states. For more information, visit www.farmtoschool.org.

<sup>3</sup> www.farmtoschool.org

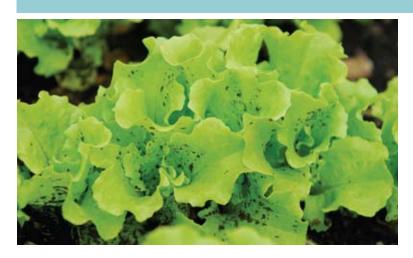
On the supply side, these challenges include lack of knowledge and information about how to connect with potential buyers, and inadequate distribution channels for farmers and food producers. School districts that wish to source and serve more local foods may encounter infrastructural, regulatory, and economic barriers to participation. Examples include ill-equipped kitchens for preparing whole fruits and vegetables; regulations at federal, state, and/or local levels that discourage the purchase of local foods; and tight budgets that make it difficult for districts to afford the cost of whole foods as well as the labor necessary to prepare and serve them to students.

To tackle these barriers, a virtual army of farm to school advocates nationwide pursue strategies such as working with the agricultural community and food distributors to bridge the gaps between food producers and school food service, working with food processors to create minimally processed products that are cost-effective and efficient for schools to serve, and securing external funding to support complementary agriculture and garden-based educational programs.

Policy solutions have been sought at every level, from incorporating nutrition guidelines in school district wellness policies to city and county local food initiatives and state and federal legislation. At the federal level, a National Farm to School Program was authorized in statute in the 2004 Child Nutrition Reauthorization, but never received federal funding, and the 2008 Farm Bill introduced a "geographic preference" that allowed school meal programs to specify a preference for local foods in their bid language. However an analysis conducted by the School Nutrition Association found that the federal meal reimbursement for the 2008-2009 school year fell \$.33 short of the estimated average cost to prepare a school meal, suggesting that most districts struggle just to operate in the black.<sup>4</sup>

In a recent historic step forward for school meal reform, Congress passed the Healthy, Hunger-Free Kids Act (S. 3307) in December 2010. The Act will upgrade nutritional standards for school meals by increasing the federal reimbursement rate for school lunches by \$.06 per meal for districts who comply with federal nutrition standards. This is the first real reimbursement rate increase in more than 30 years, although many advocates suggest that it is not enough to keep pace with the rising costs of food, energy, and labor. Notably, the act also awards \$5 million per year in mandatory funding starting in October 2012 for farm to school programs and activities via a competitive grant and technical assistance program (up to \$100,000 per project) designed to increase the use of local foods from small- and medium-size farms in schools.

<sup>4</sup> School Nutrition Association (SNA), Saved By the Bell (2008). Saved by the Lunch Bell: As Economy Sinks, School Nutrition Program Participation Rises





## **Oregon as a Case Study**

In tandem with national efforts related to school lunch reform, states are also increasingly interested in policy approaches. Indeed, as of November 2010, at least 33 states have farm to school legislation supporting diverse strategies, from budget appropriations and grant programs to local purchasing preferences and promotional events.

Recognizing that Oregon's school districts faced a number of systemic challenges implementing farm to school programs, during the 2007 legislative session, Ecotrust and its partners pursued a legislative agenda to institutionalize farm to school concepts in the state of Oregon, introducing a trio of bills designed to transform the school lunch program around the state. While none of these bills passed in 2007, they *did* inspire the Oregon Department of Agriculture (ODA) to create a new farm to school position (the first new position at ODA in more than twenty years). In 2008, legislators passed a bill creating position authority for a farm to school and school garden coordinator in the Oregon Department of Education Child Nutrition Program, making Oregon the first state in the nation with a farm to school position in both its departments of agriculture and education.

One of the bills introduced in 2007, House Bill 3476 (HB3476), would have allocated up to \$.07 per meal to incorporate Oregon agricultural products. This sum was chosen as a reimbursement rate for the proposed legislation for multiple reasons:

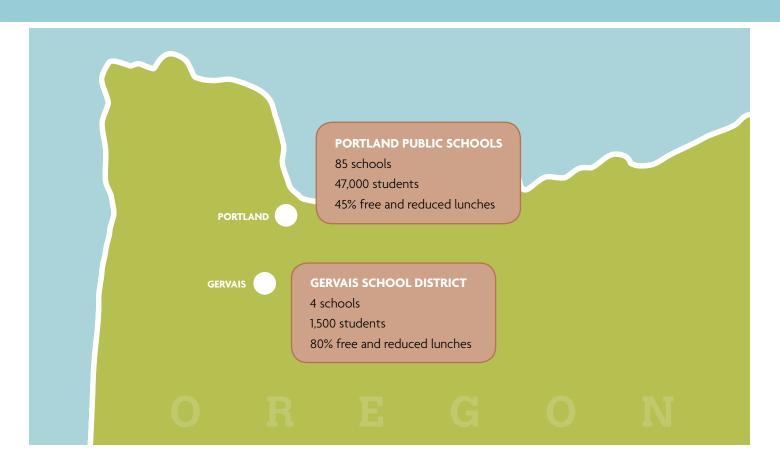
- It represents the cost of one half of a fruit or vegetable serving;
- \$.07 cents was within the range of allocations provided by other states: CA (\$.13), WA (\$.04), PA (\$.13), IN (\$.07), MA (\$.06), WI (\$.05);
- \$.07 cents was viewed as significant enough to engage producers, as many growers and processors have shied away from supplying schools with product, not only due to complex public purchasing requirements, but because selling to schools has historically been associated with low prices and small profit margins;
- \$.07 cents also represented a number significant enough to school districts to justify the additional paperwork necessary for tracking and reimbursement of increased local purchases.

This history and a keen interest on the part of Oregon advocates and legislators to allocate state funding to the procurement of local foods inspired this research project and the questions: **Could 5.07 make a difference? And if so, what difference?** 

In anticipation of the 2009 legislative session, Ecotrust secured grant funding from the Kaiser Permanente Community Fund at the Northwest Health Foundation to establish an empirical base of evidence reflecting the efficacy of the proposed legislation by facilitating a "test run" of HB3476. Through this project, *Upstream Action in the Lunchroom*, Ecotrust provided a \$.07 per meal subsidy to two Oregon school districts during the 2008-2009 school year for the express purpose of incorporating more Oregon-grown fruits, vegetables, and minimally processed (canned, frozen, etc.) products into the lunchroom, as well as allowing for the purchase of main dish meal items that contain locally produced foods. Additionally, we sought to pilot specific educational and promotional activities in each district to support the changes in the cafeteria.

A main objective of the research project was to test and refine operational procedures for how school districts might use and track such a subsidy to help streamline the implementation phase should the proposed legislation (later termed House Bill 2800—the Oregon Farm to School and School Garden Bill; see Appendix A for full text of legislation) pass in 2009. Another primary objective was to evaluate the effects of this subsidy and complementary school and community-based efforts on school lunch participation rates, children's fruit and vegetable consumption, and the local economy.





# Two Oregon Districts: Portland Public Schools and Gervais

*Upstream Action in the Lunchroom* targeted two Oregon school districts: Portland Public Schools (PPS) and Gervais School District. Located in Multnomah County, PPS is Oregon's largest urban district, with 85 schools and approximately 47,000 students. Gervais School District, with 4 schools and approximately 1,500 students, is located in rural Marion County, about an hour south of Portland.

PPS and Gervais were chosen for several important reasons. They both serve significant populations of vulnerable students as measured by high percentages of children eligible for free and reduced meals. In 2008, 45 percent of students attending PPS were eligible for free and reduced lunches; in Gervais, 80 percent were eligible, one of the highest rates in the state. They occupy opposite ends of the spectrum in terms of size and urbanization. PPS represented a large, urban sample serving approximately 20,500 lunches per day and Gervais provided an important comparison as a small, rural district serving about 1,000 lunches per day.

We hypothesized that different procurement regulations would apply in each district and that we would need to engage differently scaled agricultural operations to meet the food demands of each district. Further, Portland was already committed to local buying and had implemented a Harvest of the Month program in 2007 prior to the pilot program investment, while Gervais had minimal farm to school activity prior to joining the pilot. However, nutrition service directors in both districts had already demonstrated farm to school leadership and were committed to program execution, lending the initiative crucial on-the-ground support.

# Developing the Farm to School Programs: Harvest of the Month and Local Lunch

Increasing students' access to, awareness of, and knowledge about Oregon-grown fresh fruits and vegetables and minimally processed foods was a major goal of the farm to school programs. We hoped that the development of the programs would also provide the two state agencies charged with promoting farm to school in Oregon and other local and statewide farm to school leaders with the opportunity to work together to take the first steps towards statewide collaboration, and promote a cross-disciplinary, whole-systems approach to local procurement, farm to school programming, and health.

Ecotrust, food service directors from both districts, and a diverse array of stakeholders, including Oregon State University
Extension researchers, staff from the Oregon Departments of
Education and Human Services, Food Stamp Nutrition Educators, and the Oregon Department of Agriculture's Farm to School
Program Manager, worked together to determine the best ways to increase access to Oregon-grown foods in the Portland and Gervais school districts (given available resources and constraints), as well as how to best implement, oversee, and gather data on cafeteria changes occurring in the districts. These meetings were some of the first in which local and statewide efforts to promote local fruits and vegetables in the school environment came together and they resulted in two primary strategies for how to spend the \$.07 at each district in the 2008-2009 school year.

The first was via a Harvest of the Month program: Each month, one locally grown fruit or vegetable was highlighted within the school environment and served in school lunches on select Harvest of the Month days. Both Portland and Gervais developed year-long Harvest of the Month programs highlighting different products to reflect their locations, nearby farming communities, student populations, and kitchen facilities. Since Portland had already established a Harvest of the Month program in 2007, a second strategy was a Local Lunch program, piloted only in Portland, featuring meals made entirely of regionally grown and minimally-processed foods, including main dishes. Product sourcing and development for main dish items involved collaboration with the Oregon Department of Agriculture's Farm to School Program Manager at the time, Cory Schreiber, acclaimed chef and founder of Portland's renowned local foods restaurant, Wildwood. Once a month, on "Local Lunch Days," all featured menu items were produced locally. A third strategy involved targeting the funds towards other local purchases that would be featured on the lunch menu on a regular basis.

To support the local foods offered in both districts, the project also included efforts to educate students, families, school staff, and the greater community with messages about cafeteria changes, specifically about the Harvest of the Month and Local Lunch programs.

In conjunction with project partners, the intervention activities Ecotrust undertook to support Portland's Harvest of the Month and Local Lunch programs and Gervais' Harvest of the Month program included the development of:

- Informative school lunch menus for students and families;
- Information to be included in school newsletters, via a communication to principals called *The Administrator's Connection*, and also shared with school garden educators via the Portland Farm and Garden Educators Network;
- Promotional materials for Harvest of the Month and Local Lunch, including calendars, posters, and logos.



Breakfast (listed in green) includes an entrée, fruit or juice & 1% or nonfat milk. Lunch includes an entrée, FRESH fruits & vegetables, grain choice & 1% or nonfat milk. 3 Breakfast - Oatmeal / Breakfast - Waffles w/ Breakfast - Breakfast Wrap Strawberry Cup Energy Bar Lunch Lunch Lunch Turkey Frank w/ Whole Nachos w/ Chili and Rotini w/ Meat Sauce Wheat Bun Cheese Macaroni n Cheese Variety Bar / Low Fat Milk Variety Bar / Low Fat Milk Variety Bar / Low Fat Milk HARVESTOFTHE 9 Early Release Day 8 10 Breakfast - Egg & Breakfast - Yogurt / Mini MONTH Breakfast - Oatmeal / Bagel Cheese Biscuit Crackers & Cheese Breakfast - Omelet NO SCHOOL Lunch Lunch Lunch Lunch Pizza Variety Turkey Gravy Whole Grain Chicken Corn on the Cob INSERVICE Whole Wheat Roll Oven Fried Chicken Nuggets Variety Bar / Low Fat Milk 13 14 16 17 Breakfast - Bagel Breakfast - Tac-Go Breakfast - Oatmeal / Breakfast - Breakfast Breakfast - Yogurt / Energy Bar Wrap Muffin Lunch Lunch Lunch Lunch Lunch Chicken Patty w/ Pizza Variety Teriyaki Dippers / Rice Beef Tostada Chicken Fried Steak Whole Wheat Bun Variety Bar / Low Fat Milk HARVEST of the 20 21 23 Early Release Day 22 24 Breakfast - Cheese Breakfast - Bacon Egg MONTH JONES APPLE Breakfast - Cinnamon Breakfast - Oatmeal / Breakfast - Cinnamon Glazed Omelet Scramble Crackers & Cheese Tastries French Toast Lunch Lunch Lunch Lunch Lunch Picnic Lunch - Burger Pizza Variety Nachos w/ Chili and Whole Wheat Chicken Deli Sandwich Choice w/ or Turkey Frank w/ Whole Cheese Whole Wheat Bun Nuggets Wheat Bun Variety Bar / Low Fat Milk 27 30 28 31 Breakfast - Muffin Breakfast - Yogurt / Mini Breakfast - Pancake on Breakfast - Cheese Breakfast - Oatmeal / Lunch Omelet Energy Bar Muttin a Stick Pizza Variety Lunch Lunch Lunch Lunch Menu subject to change due to Turkey Gravy Cheese Burger w/ Whole Spaghetti w/ Meat Sauce Chicken Fajita or Soft price and availability of items. Beef Taco Whole Wheat Roll Wheat Bun Harvest Cookie Variety Bar / Low Fat Milk Variety Bar / Low Fat Milk



## HARVEST OF THE MONTH

### HARVEST CALENDAR





TOMATOES

- OCTOBER -



APPLES

- NOVEMBER -



BRUSSELS SPROUTS

- DECEMBER -



WINTER SQUASH

- JANUARY -



POTATOES

- FEBRUARY -



PEAR

- MARCH -



FROZEN STRAWBERRIES

- APRIL -



GREEN BEANS

- MAY -



ASPARAGUS

- JUNE -



RADISH

Further, Ecotrust sought widespread community support for the changes in the cafeteria by hosting a "Local in the Lunchroom" media event and kick-off celebration for the program in September 2008 at Atkinson Elementary in Portland. The event was attended by more than 100 key stakeholders, including local and state legislators, members of both school boards, district superintendents, food service staff, media, educators, food producers, and youth.

The Gervais District had key differences from PPS: smaller size, less concentrated student population, and little prior experience implementing farm to school. This led to different implementation strategies in each district, and generally fewer promotional components in Gervais. For example, we provided financial backing for the design of teacher activity sheets with suggested classroom and garden activities to accompany featured Harvest of the Month items in Portland. These activity sheets, aimed at grades K-2 and 3-5, were co-developed by members of the Eat. Think.Grow. coalition, including Growing Gardens, OSU Extension Service, Portland Public Schools, and Abernethy Elementary

Garden of Wonders, and posted on PPS's website.<sup>5</sup> They were created as a result of the extensive community support PPS already had for farm to school at that time.

In addition, in an effort to achieve a broader reach for the farm to school program in the Portland Public Schools district, Ecotrust developed and implemented a Community Partner Program through which we engaged seven grocers and one hospital cafeteria in Portland to promote the district's Harvest of the Month program with signage and point-of-purchase promotion. We were unsuccessful at garnering grocers' interest in a similar promotion for the Gervais School District area because of the small percentage of shoppers that Gervais students and their families comprise in that part of the Willamette Valley. Community partners used templates provided by Ecotrust, along with their own ingenuity and creativity to create original promotions to highlight and complement Portland's efforts. A more detailed description and analysis of the Community Partner Program can be found later in this report.





<sup>&</sup>lt;sup>5</sup> http://eatthinkgrow.pps.k12.or.us/.docs/pg/10079





#### GEOGRAPHIC LOCATOR

The Harvest of the Month asparagus comes to us from John Walchli of Walchli Farms in Hermiston, Oregon.

#### ASPARAGUS FACTS

When do we plant it? Asparagus may be planted from seed in mid-spring in deep beds or from "crowns" (one year old roots) in deep trenches.

When do we harvest it? It takes 2-3 years for a new asparagus plant to be ready for full harvest. Then it will produce yearly in April, May and June.

How does it grow? Stalks come up from underground stems. They grow at different rates and must be harvested by hand. Asparagus is a perennial plant, meaning that it produces year after year without having to replant it.

How do we eat it? Asparagus can be steamed, grilled, roasted, blanched and sautéed. It is commonly used in soups, salads and is most popular as a side dish. What part of the plant do you eat? The stem.

#### Why do we need it?

Asparagus is full of folate, which is a vitamin that helps us make new cells. It also is a great source of Vitamin C and antioxidants, which fight cancer.

#### More interesting facts:

- The Greeks and Romans, who considered asparagus a delicacy, first grew it 2,500 years ago. They also used it for medicinal purposes by crushing the tips of asparagus and using it to reduce pain from insect stings and infections.
- Asparagus can grow as fast as one inch per hour up to 12 inches in a single day! You can actually watch it grow!
- Their stalks can be white, purple or green.

#### ACTIVITY

#### **Eating Our Colors**

FOR GRADES 3-5

#### Materials:

Chalkboard or dry-erase board

Color wheel: make your own with a cut-out circle of cardboard divided into sections of each color group. Cut a cardboard spinner that goes on top of the circle. Punch a brad through both the circle and the spinner, keeping it loose enough that the spinner can spin.

#### Procedure:

- 1) Make a list of the students' favorite fruits and vegetables.
- 2) Make a list of all the colors of the fruits and vegetables that the students have listed.
- 3) Draw columns for these color categories: red, orange/yellow, green, blue/purple, white/brown.
- 4) Point out that it is important to eat a variety of colors because different colored fruits and vegetables help our bodies in different ways. Write down what each color does for our body:

RED - For a healthy heart and good memory function. Water melon Blood oranges. Cherries Red apples Red beets Cramberries Tomatoes Radiahes Red onion Strawberries Dhubarb VELLOW/ORANGE
- For healthy vision and a strong immune system.
Apricot Mango
Nectarines.
Carrots
Peaches
Lemons
Gold beets

Sweet potatoes

Corn

GREEN - For strong bones and healthy teeth. Spinach Lettuce Asparagus Kowi Cucumber Peas Green beans Pears Green cabbage Zucchini

BLUE/PURPLE
- Prevents cancer and
helps with healthy
aging.
Blackberries
Blueberries
Plums
Prunes
Raisins
Purple carrots
Purple asparagus
Grapes
Purple cabbage

Purple peppers

WHITE/BROWN

- Healthy heart and strong immune system Banana
Brown pears
Gaerlic
Garger
Turnips
Potatoes
Onions
White corn
White peaches
Cauliflower

5) Spin the color wheel and when it lands on a color have a student say a fruit or vegetable that is that color and what that color does for our bodies. Repeat with several students.













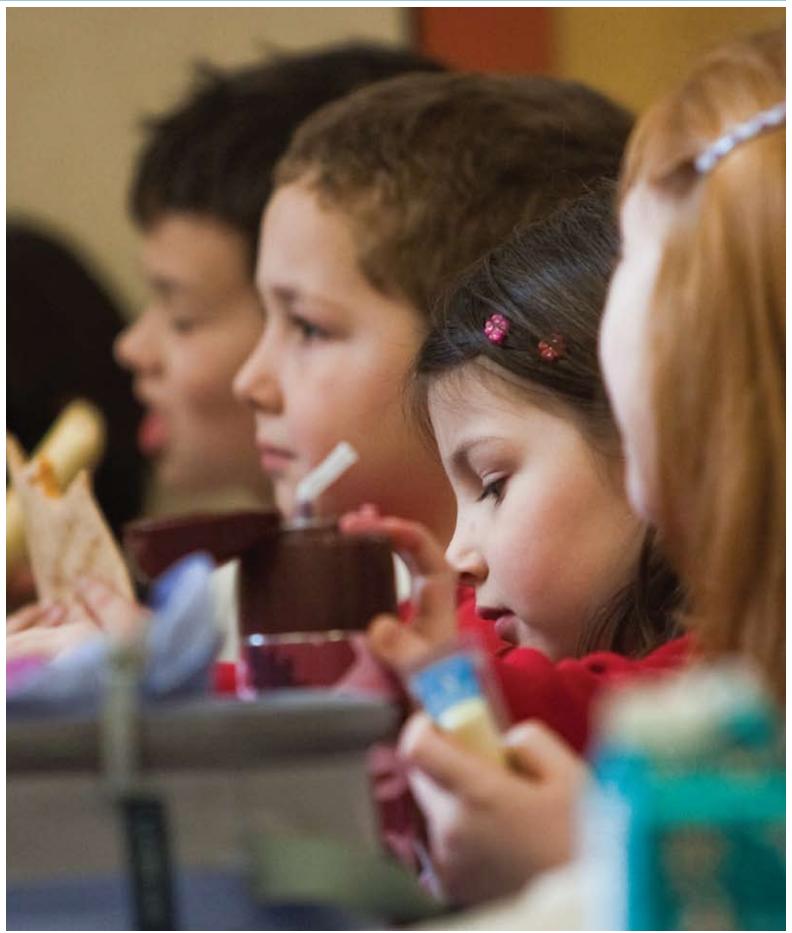
# Evaluating the Impact of Upstream Action in the Lunchroom

As noted, successful farm to school programs have diverse and broad impacts on the communities they serve. In an idealized form, they increase participation in the school meals program, helping nutrition services departments with their bottom lines, expanding the variety of healthy foods served, and increasing children's consumption of fresh fruits and vegetables and other healthy foods. At their best, these programs also increase child and community knowledge about, and attitudes towards, agriculture, food, and the environment, while supporting local farmers and food producers and pumping money into the local economy.

To assess the effects of this project on the Portland and Gervais school environments and on the local economy, we collected detailed information from each district on the types, amounts, and prices of local products purchased as well as data on student participation rates in the National School Lunch program for the 2008-09 school year. In Portland, we also conducted surveys and focus groups with a limited sample of students, measuring their knowledge, attitudes, and behaviors related to fruits and vegetables served as part of the Harvest of the Month program. In addition, we evaluated our pilot Community Partner Program to assess its long-term feasibility, its potential for community impact, and how it might be reformulated for long-term success. Finally, to capture important anecdotal experiences, we conducted monthly interviews with food service directors from both districts.







### **Effects of Local Purchases on the Oregon Economy**

We assessed the economic effects of the \$.07 investment on purchasing by the two districts using primary data from Portland Public Schools and Gervais to conduct an input-output analysis.

More specifically, we collected data from both districts on all local food purchases made during the 2008-2009 school year, using an Excel spreadsheet similar to the one in Table 1. This included data from 91 schools serving approximately 22,000 lunches per day. For each food purchase, the school districts recorded the vendor/brand, item description, purchase unit (e.g., flat, package, loaf, etc.), price per purchase unit, total units purchased, and total amount spent. For a representative sample of Harvest of the Month, Local Lunch, and generic local purchases, see Table 2, on pages 18-19.

We then conducted an input-output analysis using IMPLAN (IMpact analysis for PLANning) Pro software, a widely-used economic input-output model developed by The Minnesota IMPLAN Group, Inc., and economic input data from the 2008-2009 school year. Input-output analysis depicts the inter-industry relations of an economy (i.e., the linkages among businesses, households, and the government in terms of sales, spending, and employment). It is based on the premise that when new money enters an economy, a portion of it is re-spent, thereby creating additional economic effects.<sup>6</sup>

**Table 1: Local Procurement** 

| VENDOR/<br>BRAND | PPS ID# | ITEM DESCRIPTION                                     | PURCHASED<br>UNIT | SERVINGS PER<br>PURCHASED UNIT | PRICE PER<br>PURCHASED UNIT | TOTAL UNITS<br>PURCHASED |
|------------------|---------|--|-------------------|--------------------------------|-----------------------------|--------------------------|
| Truitt Bros      | 84-0056 | *HOM* Green Beans, Canned<br>(45 serv/can)           | CS                | 271                            | \$20.6300                   | 30                       |
| Truitt Bros.     | 84-5003 | Pears, Canned, Truitt *LOCAL<br>LUNCH* (52 serv/can) | CS                | 312                            | \$29.2900                   | 270                      |

<sup>6</sup> I-O models are static and do not account for adaption to change over time. They generally assume constant returns to scale, homogeneous sector output, no supply constraints, no change in technology or prices, and no substitution between factors. Given this, I-O models may potentially overestimate impacts.

Input-output analysis uses a matrix representation of an economy (in this case, Oregon's economy) to estimate the effect of changes in one industry on other industries and the economy as a whole. There are several measures of this effect:

- Direct effects: purchases by schools in farming/ranching and food processing sectors
- Direct job creation: in these production and processing sectors
- Indirect effects: purchases of supplies and materials by farmers, ranchers and food processors to produce goods being purchased by schools (e.g., farm or processing equipment)
- Indirect job creation: in these indirectly related sectors
- Induced effects: household spending resulting from income earned by business owners and employees in the directly and indirectly affected businesses (e.g., food or medical services).
- Induced job creation: in sectors benefiting from this increased household spending

| TOTAL SERVINGS<br>PURCHASED | TOTAL COST<br>OF GOODS | OREGON<br>GROWN | OREGON<br>PRODUCED | OREGON<br>PACKED | WA. GROWN,<br>PRODUCED,<br>PACKED | CA. GROWN,<br>PRODUCED,<br>PACKED |
|-----------------------------|------------------------|-----------------|--------------------|------------------|-----------------------------------|-----------------------------------|
| 1449026.54                  | \$618.90               | 1               | 1                  | 1                | 0                                 | 0                                 |
| 84240                       | \$7,908.30             | 1               | 1                  | 1                | 0                                 | 0                                 |

Table 2: Examples of Local Food Purchased with Kaiser Permanente Community Fund Grant Money

| MONTH                   | MENU/FOOD ITEM   | MANUFACTURER     | VENDOR           | PRICE PER UNIT | # OF UNITS | COST OF<br>GOODS |
|-------------------------|------------------|------------------|------------------|----------------|------------|------------------|
| SEPTEMBER               |                  |                  |                  |                |            |                  |
| Harvest Item (Gervais)  | Peaches          | Jones Farm       | Jones Farm       | \$16.50        | 5          | \$82.50          |
| Harvest Item (Gervais)  | Tomatoes         | Jones Farm       | Jones Farm       | \$0.99         | 62         | \$61.38          |
| Harvest Item (Gervais)  | Cantaloupe       | Jones Farm       | Jones Farm       | \$0.42         | 171        | \$71.82          |
| Harvest Item (Gervais)  | Broccoli         | Jones Farm       | Jones Farm       | \$0.59         | 30         | \$17.70          |
| Harvest Item (Gervais)  | Cauliflower      | Jones Farm       | Jones Farm       | \$0.59         | 10         | \$5.90           |
| Harvest Item (Gervais)  | Plums            | Jones Farm       | Jones Farm       | \$17.00        | 3          | \$51.00          |
| Harvest Item (Gervais)  | Apples           | Jones Farm       | Jones Farm       | \$10.00        | 7          | \$70.00          |
| Harvest Item (Gervais)  | Watermelon       | Jones Farm       | Jones Farm       | \$0.39         | 180        | \$70.20          |
| Harvest Item (Portland) | Cucumber         | Pacific Coast    | Pacific Coast    | \$28.00        | 36         | \$1,008.00       |
| OCTOBER                 |                  |                  |                  |                |            |                  |
| Harvest Item (Gervais)  | Apples           | Jones Farm       | Jones Farm       | \$10.00        | 26         | \$260.00         |
| Harvest Item (Gervais)  | Corn on cob      | Jones Farm       | Jones Farm       | \$0.25         | 400        | \$100.00         |
| Harvest Item (Gervais)  | Cucumbers        | Jones Farm       | Jones Farm       | \$0.80         | 175        | \$140.00         |
| Harvest Item (Gervais)  | Berries          | Jones Farm       | Jones Farm       | \$16.00        | 42         | \$672.00         |
| Harvest Item (Gervais)  | Tomatoes         | Jones Farm       | Jones Farm       | \$0.99         | 90         | \$89.10          |
| Harvest Item (Gervais)  | Cauliflower      | Jones Farm       | Jones Farm       | \$0.59         | 25         | \$14.75          |
| Harvest Item (Gervais)  | Broccoli         | Jones Farm       | Jones Farm       | \$0.59         | 20         | \$11.80          |
| Harvest Item (Gervais)  | Watermelon       | Jones Farm       | Jones Farm       | \$0.39         | 145        | \$56.55          |
| Harvest Item (Gervais)  | Cantaloupe       | Jones Farm       | Jones Farm       | \$0.42         | 30         | \$12.60          |
| Harvest Item (Portland) | Corn on cob      | Schlechter Farms | Schlechter Farms | \$17.50        | 199        | \$3,482.50       |
| Harvest Item (Portland) | Corn on cob      | Pacifc Coast     | Pacific Coast    | \$12.00        | 172        | \$2,064.00       |
| Local Lunch             | Quesadilla       | Don Poncho       | FSA              | \$11.75        | 405        | \$4,758.75       |
| Local Lunch             | Shredded Cheddar | Tillamook        | FSA              | \$54.33        | 162        | \$8,801.46       |
| Local Lunch             | Salsa            | Pacific Coast    | Pacific Coast    | \$27.00        | 84         | \$2,268.00       |
| Local Lunch             | Butter for corn  | Tillamook        | FSA              | \$13.91        | 28         | \$389.48         |
| Local Lunch             | Tortilla Chips   | Don Poncho       | FSA              | \$16.02        | 130        | \$2,082.60       |
| Local Lunch             | Canned Pears     | Truitt Brothers  | FSA              | \$29.29        | 270        | \$7,908.30       |

| монтн                   | MENU/FOOD ITEM                           | MANUFACTURER          | VENDOR                | PRICE PER UNIT | # OF UNITS | COST OF<br>GOODS |
|-------------------------|--|-----------------------|-----------------------|----------------|------------|------------------|
| NOVEMBER                | NOVEMBER                                 |                       |                       |                |            |                  |
| Harvest Item (Gervais)  | Table Grapes                             | Broadacres            | Broadacres            | \$1.00         | 500        | \$500.00         |
| Harvest Item (Portland) | Parsnip                                  | Pacific Coast         | Pacific Coast         | \$24.00        | 255        | \$6,120.00       |
| Local Lunch             | Baked Chicken<br>Drumsticks w/pear glaze | Draper Valley Chicken | SP Provision Meat Co. | \$39.60        | 220        | \$8,712.00       |
| Local Lunch             | Roasted Carrots                          | Pacific Coast         | Pacific Coast         | \$10.58        | 116        | \$1,227.28       |
| Local Lunch             | Canned Green Beans                       | Truitt Brothers       | FSA                   | \$20.63        | 30         | \$618.90         |
| Local Lunch             | Whole Wheat Rolls                        |                       | Goodyman              | \$1.46         | 8,779      | \$12,817.34      |
| DECEMBER                |  |                       |                       |                |            |                  |
| Harvest Item (Gervais)  | Romanesco Cauliflower                    | Happy Harvest Farm    | Happy Harvest Farm    | \$1.00         | 500        | \$500.00         |
| Harvest Item (Gervais)  | Celery                                   | Happy Harvest Farm    | Happy Harvest Farm    | \$0.70         | 40         | \$28.00          |
| Harvest Item (Gervais)  | Green Beans                              | Truitt Brothers       | Truitt Brothers       | \$13.50        | 3          | \$40.50          |
| Harvest Item (Portland) | Cabbage                                  | Pacific Coast         | Pacific Coast         | \$8.40         | 125        | \$1.050.00       |
| OTHER ILLUSTRATIVE LO   | CAL PURCHASES                            |                       |                       |                |            |                  |
|                         | Bean & Rice Burrito Filling              | Organic Fresh Fingers | Organic Fresh Fingers | \$66.00        | 150        | \$9,900.00       |
|                         | Chicken Noodle Soup                      | Truitt Brothers       | Truitt Brothers       | \$57.89        | 100        | \$5,789.00       |
|                         | Vegetable Stir Fry                       | Flavor Pac            | Flavor Pac            | \$33.17        | 200        | \$6,634.00       |
|                         | Canned Corn                              | NORPAC                | NORPAC                | \$24.05        | 100        | \$2,405.00       |
|                         | Vegetarian Chili                         | Truitt Brothers       | Truitt Brothers       | \$40.09        | 430        | \$17,238.70      |
|                         | Watermelon                               | Sam Pollock           | Sam Pollock           | \$5.00         | 1,830      | \$9,150.00       |
|                         | Fresh Strawberries                       | Unger Farms           | Unger Farms           | \$12.50        | 671        | \$8,387.50       |
|                         | Fresh Grapes                             | Unger Farms           | Unger Farms           | \$16.00        | 115        | \$1,840.00       |

The sum of the direct, indirect, and induced effects is the total economic effect. The sum of the direct job creation, the indirect job creation, and the induced job creation is the total job creation.

It should be noted that jobs include both full- and part-time jobs. While a full-time job typically provides more income, part-time jobs are critical to the economy and the many families that are able to achieve the equivalent of full-time jobs or more by combining part-time jobs. For more information on IMPLAN, please see <a href="https://www.implan.com">www.implan.com</a>.

Using data collected from the districts on all local purchases made during the 2008-2009 school year, researchers determined which purchases were inspired by the pilot program investment and used these data to assign each food purchase to one of IMPLAN's industrial sectors. While IMPLAN contains 509 county-level industrial sectors<sup>7</sup> (updated annually), we considered only the 39 sectors relevant to food production and processing. Of these 39 sectors (see Figure 1), only some are relevant to purchasing by schools (e.g., most schools would not purchase from the 'wet corn milling' or 'oilseed farming' sectors). We determined that 15 sectors were affected by PPS and/or Gervais purchases during the 2008–2009 school year.

It should be noted that we conducted a basic analysis and did not have the data or resources to conduct a net analysis. In the basic analysis, we presume that the direct expenditures are new expenditures that prompt additional production. This would be in contrast to substituting incentive funds for funds already being spent on school meals and producers substituting regular production, which they may export or sell elsewhere in the Oregon economy, for production they do for the local schools.

Figure 1:39 Food Sectors

Oilseed farming

Grain farming

Vegetable and melon farming

Fruit farming

Tree nut farming

Sugarcane and sugar beet farming

All other crop farming

Cattle ranching and farming

Dairy cattle and milk production

Poultry and egg production

Animal production - except cattle and poultry

Commercial Fishing

Flour milling and malt manufacturing

Wet corn milling

Soybean and other oilseed processing

Fats and oils refining and blending

Breakfast cereal manufacturing

Sugar cane mills and refining

Beet sugar manufacturing

Chocolate and confectionery manufacturing

Nonchocolate confectionery manufacturing

Frozen food manufacturing

Fruit and vegetable canning

Fluid milk and butter manufacturing

Cheese manufacturing

Dry-condensed- and evaporated dairy product

Ice cream and frozen dessert manufacturing

Animal (except poultry and seafood) processing

Poultry processing

Seafood product preparation and packaging

Bread and bakery product manufacturing

Cookie-cracker- and pasta manufacturing

Tortilla manufacturing

Snack food manufacturing

Coffee and tea manufacturing

Flavoring syrup and concentrate manufacturing

Seasoning and dressing manufacturing

All other food manufacturing

Soft drink and ice manufacturing

 $<sup>7\,\</sup>text{IMPLAN}$  sector classification is based on the U.S. Census Bureau's North American Industry Classification System.

#### **Preliminary Analysis**

In spring 2009, assisted by Bruce Sorte, a community economist at Oregon State University, we used local purchasing data from Portland Public Schools (PPS) and Gervais available from the first part of the 2008-2009 school year to conduct a preliminary analysis to assess the effects of Oregon-grown, -produced, and/or -packed food (local food) purchasing by the two districts on the overall state economy. The intent was to inform the legislature of the potential economic effects that House Bill 2800, the Farm to School and School Garden Bill, could have on the Oregon agricultural community and other economic sectors in time for the 2009 legislative session.<sup>8</sup>

Even though the analysis was based on data from less than half of the school year and was conducted using economic input data from 2007, it had a significant and immediate effect on public policy related to school food, not only within the state of Oregon, but also in other states, and nationally. In terms of Ecotrust's statewide policy advocacy, the preliminary economic analysis was a highly influential tool used in the development of informational campaign materials and oral and written testimony to the legislature, and was cited numerous times in the media. The results of the preliminary analysis are not included in this report. We conducted the same analyses on data from the entire school year, the results of which follow.

#### **Purchasing Data**

Table 3 and Figure 2 summarize the distribution of total local food purchases by industrial sector. Given that dairy products are so perishable, many Oregon school districts already purchase the bulk of their dairy from state-owned companies such as Alpenrose and Darigold. Since fluid milk and butter manufacturing purchases (\$842,135) accounted for almost half (43%) of total purchases (\$1,966,400), we calculated the percentage of total purchases attributed to each sector with and without the fluid milk and butter manufacturing sector.<sup>9</sup>

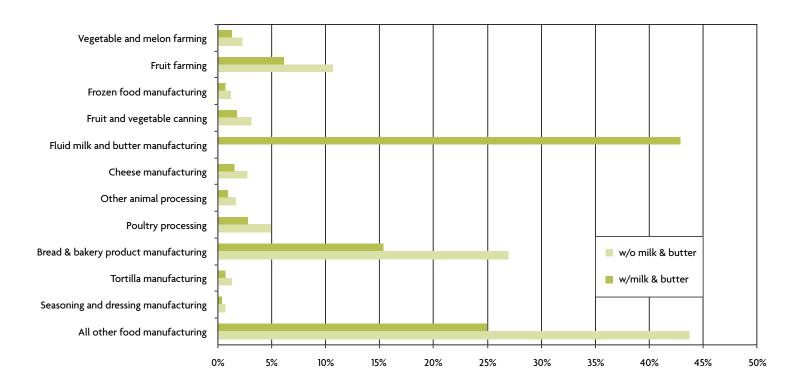
<sup>8</sup> Note that while the pilot program in PPS and Gervais and the proposed legislation, HB 2800, were similar in that they invested pennies per meal to stimulate increased purchases of local products, they also had some key differences: (a) the pilot only assessed school lunch purchases (HB 2800 included reimbursements for both breakfast and lunch programs), (b) the pilot extrapolated using data from only two districts (HB 2800 was statewide), (c) the pilot included a reimbursement of \$.07 for lunch (HB 2800 included \$.15 for lunch and \$.07 for breakfast), (d) the pilot covered a more limited period of time, (e) the pilot did not include a federal dollars match, (f) the pilot made no specific grants to school gardens or other curricular enhancements (although select promotions were implemented to support cafeteria changes with limited resources).

<sup>9</sup> Note that for categorization purposes, the Fluid Milk and Butter Manufacturing sector includes purchases of both fluid milk and butter. However, Portland Public Schools and Gervais School District actually purchase very little butter; the bulk of these purchasing amounts is for fluid milk.

Table 3: Local (Oregon) purchases by Portland Public Schools and Gervais (2008–2009)

| INDUSTRY  | PPS LOCAL<br>PURCHASES | GERVAIS LOCAL PURCHASES | TOTAL LOCAL PURCHASES | % OF<br>TOTAL | % OF TOTAL<br>(w/o MILK &<br>BUTTER |
|---|------------------------|-------------------------|-----------------------|---------------|-------------------------------------|
| Vegetable and melon farming                                       | \$24,040               | \$1,371                 | \$25,411              | 1.3%          | 2.3%                                |
| Fruit farming   | \$117,934              | \$2,486                 | \$120,420             | 6.1%          | 10.7%                               |
| Cattle ranching and farming                                       | \$628                  | -                       | \$628                 | 0.0%          | 0.1%                                |
| Poultry and egg production  | \$106                  | -                       | \$106                 | 0.0%          | 0.0%                                |
| Animal production, except cattle and poultry                      | \$62                   | _                       | \$62                  | 0.0%          | 0.0%                                |
| Fats and oils refining and blending                               | \$5,503                | -                       | \$5,503               | 0.3%          | 0.5%                                |
| Breakfast cereal manufacturing                                    | \$5,337                | _                       | \$5,337               | 0.3%          | 0.5%                                |
| Frozen food manufacturing   | \$13,473               | -                       | \$13,473              | 0.7%          | 1.2%                                |
| Fruit and vegetable canning                                       | \$34,757               | -                       | \$34,757              | 1.8%          | 3.1%                                |
| Fluid milk and butter<br>manufacturing                            | \$842,135              | \$6,246                 | \$848,381             | 42.9%         | n/a                                 |
| Cheese manufacturing  | \$30,318               | -                       | \$30, 318             | 1.5%          | 2.7%                                |
| Animal processing, except poultry and seafood                     | \$18,371               | -                       | \$18,371              | 0.9%          | 1.6%                                |
| Poultry processing  | \$55,450               | _                       | \$55,450              | 2.8%          | 4.9%                                |
| Bread and bakery product manufacturing                            | \$303,321              | \$195                   | \$303,516             | 15.4%         | 26.9%                               |
| Tortilla manufacturing  | \$14,144               | -                       | \$14,144              | 0.7%          | 1.3%                                |
| Flavoring syrup and concentrate manufacturing                     | \$113                  | -                       | \$113                 | 0.0%          | 0.0%                                |
| Seasoning and dressing manufacturing                              | \$7,756                | -                       | \$7,756               | 0.4%          | 0.7%                                |
| All other food manufacturing                                      | \$492,953              | -                       | \$492,953             | 24.9%         | 43.7%                               |
| TOTAL   | \$1,966,400            | \$10,298                | \$1,976,698           |               |                                     |
| <b>TOTAL</b> (without fluid milk and butter manufacturing sector) | \$1,124,265            | \$4,052                 | \$1,128,317           |               |                                     |

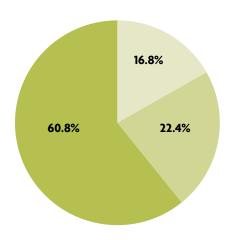
Figure 2: Total local (Oregon) purchases by Portland Public Schools and Gervais (2008–2009)<sup>10</sup>



<sup>10</sup> Only industrial sectors that made up  $\ge 1\%$  of total purchases without the fluid milk and butter manufacturing sector are included in this figure.

## Figure 3: Food purchases (not including commodities credit) by PPS (2008–2009)

Figure 3 contrasts local food purchases by Portland Public Schools (\$1,966,400) with total food purchases (\$5,019,995), not including USDA Foods (formerly known as commodities).



## Figure 4: Value of food purchases (including commodities credit) by PPS (2008–2009)

Figure 4 contrasts the local food purchases with the total value of the food purchases (\$5,809,167), which includes a \$789,172 "credit" in the form of commodities. While PPS has some discretion over how this credit is used, it must be used for donated agricultural commodities purchased by the U.S. Department of Agriculture under price support and surplus removal legislation. Therefore, PPS may not be able to obtain local food with this credit.

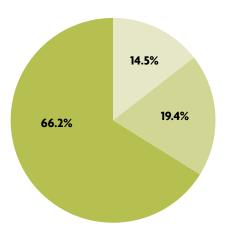
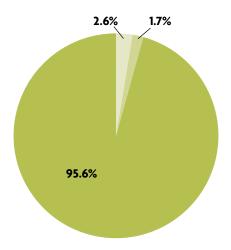




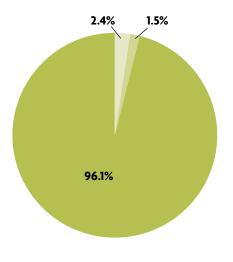
Figure 5: Food purchases by Gervais (not including commodities credit, 2008–2009)

Figure 5 contrasts the local food purchases by the Gervais School District (\$10,298) with the total food purchases (\$235,771).



## Figure 6: Value of food purchases by Gervais (including commodities credit, 2008–2009)

Figure 6 contrasts the local food purchases with the total value of the food purchases (\$264,385), which includes a \$28,614 "credit" in the form of commodities. As with PPS, since this credit must be used for donated agricultural commodities purchased by the U.S. Department of Agriculture under price support and surplus removal legislation, Gervais may not be able to obtain local food with this credit.





#### **Results**

Findings from this analysis provide important information on the types of local products purchased by these districts and the types of programs or strategies used to incorporate those products into the school meal program, the methods used to procure the products, and the effects that those purchases had on the overall state economy. During the 2008-2009 school year, a total of \$160,750.02 of the Kaiser grant money was invested in the two districts to increase their purchasing power for local food.

In examining the purchases made by each district, it is clear that funds for local purchases were used differently by PPS and Gervais. In terms of the types of products purchased, PPS used the pilot program investment across multiple categories (e.g., fruits and vegetables, proteins, grains and baked goods, cheese, etc.), while Gervais focused primarily on fresh fruits and vegetables. However, Gervais did greatly expand the varieties of fruits and vegetables offered over previous years thanks to the pilot

program funds. To promote their local purchases, PPS, as a district already involved in farm to school programming, expanded upon existing promotions by creating a new promotion: Local Lunch. Gervais, newer to farm to school, focused instead on developing their first Harvest of the Month program for the district.

Both school districts also leveraged the investment to purchase locally produced items that cost slightly more than items they had previously been purchasing non-locally, such as salsa. In terms of the method of procurement, new vendor relationships were formed at both schools, but Gervais focused primarily on direct purchases from farmers, while PPS used the pilot program investment to conduct direct purchases with local farmers and to procure local products through mainstream distribution channels, thus signaling a preference for local procurement in diverse ways, and influencing all aspects of the food system, not just direct market sales.





Looking at the effects that these purchases had on the wider economy, Table 4 presents the IMPLAN results for the total economic output, value added, and employment effects from all local purchases (i.e., Oregon grown, produced, and/or packed) made by PPS and Gervais during the 2008-2009 school year, excluding the fluid milk and butter manufacturing sector. The output numbers are the most common way to measure economic activity, although they include a fair amount of double counting, as the value of inputs are added repeatedly in each level of processing. The value-added numbers consider income

and are a measure of the output/value added that is attributable to the sector being considered. Both output and value-added dollars are nominal (or stated in some time period, like 2008-2009). Employment or job numbers are "real," since salaries/wages are often adjusted to account for inflation, but are not differentiated for full- versus part-time work.

The table also includes the IMPLAN results for the economic multipliers, which capture the effect of a change in the food processing sectors (i.e., the purchase of local foods) on other industrial sectors and/or on the state economy as a whole.

Table 4: Economic effects of Oregon purchases by Portland Public Schools and Gervais (2008-2009) without fluid milk and butter manufacturing sector

| INDUSTRY    | DIRECT      | INDIRECT  | INDUCED   | TOTAL       | MULTIPLIER |
|-------------|-------------|-----------|-----------|-------------|------------|
| Output      | \$1,168,063 | \$683,424 | \$323,971 | \$2,175,458 | 1.86*      |
| Value added | \$293,883   | \$338,291 | \$196,110 | \$828,284   | 2.82       |
| Employment  | 7 jobs      | 6 jobs    | 4 jobs    | 17 jobs     | 2.43**     |

<sup>\*</sup>The 1.86 output multiplier can be interpreted as follows: For each dollar spent initially by school districts, successive rounds of spending lead to another \$.86 of spending, for an overall increase of \$1.86 dollars to the Oregon economy.

<sup>\*\*</sup>The 2.43 employment multiplier can be interpreted as follows: For each job created by school districts purchasing local foods, successive rounds of economic activity create another 1.43 jobs, for an overall increase of 2.43 jobs in Oregon.

It is possible that the multipliers would be higher if the fluid milk and butter manufacturing sector was included in the analysis; however, from an incentive program perspective, inclusion of this sector may not be appropriate for the Oregon context. More specifically, since a substantial amount of fluid milk is already being purchased locally by school districts, an incentive program for local purchases would not likely see new spending locally in this sector. For this reason, we believe that the analysis excluding the fluid milk and butter manufacturing sector is a conservative, yet more realistic, analysis.

The IMPLAN input-output analysis indicates that local (i.e., Oregon grown, produced, and/or packed) food purchasing by public schools has a substantial effect on the overall state economy. We found that an initial investment of \$160,750.02 to Portland Public Schools and Gervais School District during the 2008-2009 school year inspired total purchases of \$461,992.10 in local foods. This is because schools leveraged the funds available to them to substitute locally produced items for items they had been buying outside the state.

Table 5 depicts how the concept of "inspired purchases" worked in one particular instance involving three-bean chili. On a typical day when schools served chili, they had been buying the majority of the food for the meal from outside the state. However, when we provided a per-meal reimbursement and prioritized local buying, we saw that it was indeed possible to keep more school food dollars in the Oregon economy. A relatively small investment, in this case \$.07 per lunch served, can inspire trade substitutions that result in more money staying in the Oregon economy.

Knowing that our initial investment of \$160,750.02 inspired \$461,992.10 of local food purchases, we analyzed the economic benefit of having \$461,992.10 circulate throughout the Oregon economy. As noted above, we found that the \$461,992.10 had an economic multiplier effect of 1.86, which suggests that every dollar we spend on school food encourages an additional \$.86 of spending amongst suppliers and households.





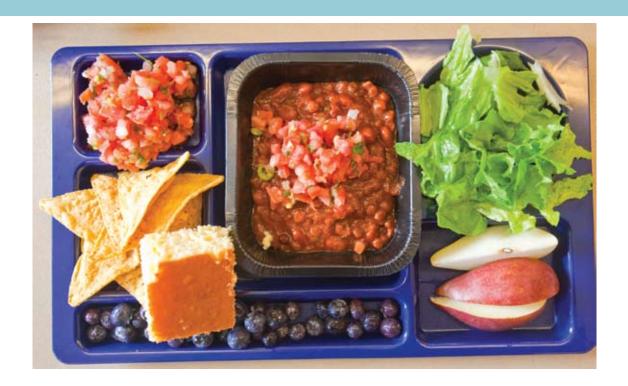


Table 5: Local Lunch Day at Portland Public Schools

| ON ANY OTHER DAY |  |                                      |  |  |  |
|------------------|--|--------------------------------------|--|--|--|
| ITEM             | VENDOR   | PRICE/SERVING                        |  |  |  |
| Chili            | JTM (Ohio)<br>USDA commodity beef                                      | \$0.45                               |  |  |  |
| Cheese           | Land-O-Lakes (MN)<br>USDA commodity cheese                             | \$0.06                               |  |  |  |
| Salsa - canned   | Rio Viejo<br>(FSA Private Label)                                       | \$0.03                               |  |  |  |
| Tortilla Chips   | Mission (national brand)<br>(FSA)                                      | \$0.06                               |  |  |  |
| Blueberries      | USDA commodity fruit   | \$0.01                               |  |  |  |
| Pears            | Pacific Coast Fruit Co.<br>Location Unknown                            | \$0.19                               |  |  |  |
| Lettuce          | Pacific Coast Fruit Co.<br>Location Unknown                            | \$0.04<br>(no labor needed)          |  |  |  |
| Cornbread        | Clackamas Bakery   | \$0.16                               |  |  |  |
| Total spent      | (\$20,500) Outside the state In-state vendors In-state raw ingredients | \$1.00<br>\$0.52<br>\$0.48<br>\$0.16 |  |  |  |

| ON LOCAL LUNCH DAY |  |                                      |  |  |  |  |
|--------------------|--|--------------------------------------|--|--|--|--|
| ITEM               | VENDOR   | PRICE/SERVING                        |  |  |  |  |
| Chili              | Truitt Bothers Inc.<br>Salem, OR                                       | \$0.56                               |  |  |  |  |
| Cheese             | Tillamook Cheese<br>Tillamook, OR                                      | \$0.20                               |  |  |  |  |
| Salsa - fresh      | Pacific Coast Fruit Co.<br>Locally prepared                            | \$0.14                               |  |  |  |  |
| Tortilla Chips     | Don Poncho<br>Salem, OR  | \$0.13                               |  |  |  |  |
| Blueberries        | Willamette Valley Fruit Co.<br>Salem, OR                               | \$0.21                               |  |  |  |  |
| Pears              | Walter Wells and Sons<br>Hood River, OR                                | \$0.28                               |  |  |  |  |
| Lettuce            | Pacific Coast Fruit Co.<br>Local Product                               | \$0.01<br>(labor required)           |  |  |  |  |
| Cornbread          | Clackamas Bakery   | \$0.16                               |  |  |  |  |
| Total spent        | (\$34,645) Outside the state In-state vendors In-state raw ingredients | \$1.69<br>\$0.00<br>\$1.69<br>\$1.69 |  |  |  |  |

#### **Lessons Learned**

We gleaned important lessons about local purchasing not only by examining the results of the economic analysis, but also by using information from personal interviews with food service directors at each district to provide important details and context. Key findings from these interviews about the types of products purchased and the methods used to procure and serve them include:

- Schools that are just beginning to make local purchases will probably first incorporate more locally grown fruits and vegetables. Not only are these generally easy to source and substitute, local versions may sometimes be cheaper, and fresh fruits and vegetables are easy to promote to parents and to the local community/media.
- Schools that have some experience with local purchasing will have the knowledge and background to move the funds into other categories, including main dish products, such as meat, bread, and dairy.
- Smaller districts may find it convenient and beneficial to connect with local farmers directly, while larger districts may find it more convenient to go through their regular mainline distributor and specify a local preference.
- There is a learning curve. For example, Gervais has developed relationships with local farmers and worked to solve problems such as too many slugs in the romanesco and squished marionberries on the bottom of boxes. In the process, Gervais also discovered that cost-competitive, sweet, delicious celery was available from a local farmer.
- Increased interest in local purchasing should lead to the creation of new, school-specific products, such as local veggies pre-cut to certain sizes and processed products, such as vegetarian chili (e.g. Portland Public Schools worked with Truitt Brothers, Inc. in Salem to create a three-bean chili for the lunch line).
- Serving locally grown fresh fruits and vegetables often involves more labor/time for lunch staff, as they may be unfamiliar with and/or lack the proper equipment to prepare products.

The purchase of our products by Portland Public Schools and Gervais led directly to meaningful incremental tonnage for growers and meaningful additional employment in our operations.

- Peter Truitt, Truitt Bothers Inc., Salem, OR

Key findings about the potential effect of these purchases on the economy gleaned from both the economic analyses and from the interviews with food service directors include:

- A state investment will likely affect local fresh fruit and vegetable growers immediately.
- Over time, we can expect that certain local purchases will become institutionalized (as is the case with PPS, which now uses regionally farmed and milled wheat in all of its breads, buns, and pizza dough) and that state funds will be used to purchase products in other categories, such as protein, grain, and dairy.
- A range of between \$.07 per meal (as in the pilot program) and \$.15 per meal (HB 2800) is likely needed as a minimum incentive to try out new products and offset the added time and labor that may be necessary to find, prepare, and serve them.
- Schools can easily funnel the money through a mainline food service distributor, and the more that these companies experience requests for local products, the more likely they are to expand their local purchases and product offerings, with direct implications for the scale and effects of farm to school programming nationwide.



#### **Results from a School Food Service Providers Survey**

Spurred on by the economic recession and the need for real-time data and an evidence-based rationale to support 2009 legislative efforts promoting HB 2800, Ecotrust, with the consent of Kaiser Permanente Community Fund grantors, decided to also conduct a wider economic analysis of Oregon school food service providers in early 2009. In an effort to better understand how Oregon schools might use the funding proposed under HB 2800, Ecotrust sent an online survey to more than 300 schools across the state. Eighty-three individuals responded, representing school districts all over the state — rural, urban, large, and small. We asked respondents:

If you were given an additional \$.15 for every lunch served in your district for the specific purpose of buying more Oregon products, in which categories would you be most likely to seek out Oregongrown, -processed, or -manufactured products?

The same question was asked for an additional \$.07 for every breakfast served. We found that with an additional \$.15 per meal for lunch, respondents said they would be most likely to purchase fresh fruits, fresh vegetables, cheese, fluid milk/butter, and beef. Similar results were found for the additional \$.07 cents for breakfast, with fresh fruits, fresh vegetables, fluid milk/butter, bread and bakery products, and poultry/eggs showing up as the top categories.

We then used the survey results to inform a second economic effect analysis, again, done in collaboration with colleagues at Oregon State University. We allocated the estimated total value of HB 2800 across spending categories using the survey results. For example, the average respondent stated they would use 26 percent of their state reimbursement to purchase fresh fruit for lunch, so we allocated 26 percent of the total estimated funding coming from the bill to fresh fruit purchases.

We used six different scenarios to estimate economic benefits under a variety of potential spending behaviors by schools, and in half of these scenarios, we assumed that there would be a federal match requirement, as proposed in HB 2800. The results for all six scenarios can be seen in Table 6. It is difficult to estimate precisely how schools would use the state investment called for in HB 2800 or to what degree we would see an immediate, catalytic effect. Nonetheless, our analysis showed that across all scenarios considered, the state could expect immediate benefits across multiple sectors of the Oregon economy. These additional results from school food service staff across Oregon supported the preliminary findings from PPS and Gervais and provided tangible models of the potential benefits that a statewide investment to support the purchase of more Oregon foods in Oregon schools could provide. The information from this analysis was a vital resource in our efforts to advocate for more state funding for school food.

Table 6: HB 2800 Economic Development Opportunity Six Different Scenarios —All positive gains

|                                   | SCENARIO 1                          | SCENARIO 2                           | SCENARIO 3                                       | SCENARIO 4                                     | SCENARIO 5  | SCENARIO 6                                      |
|-----------------------------------|-------------------------------------|--------------------------------------|--|--|---|---|
|                                   | No 'inspiration' & no federal match | No 'inspiration'<br>w/ federal match | 50% 'inspired'<br>increase & no<br>federal match | 50% 'inspired'<br>increase w/<br>federal match | 100% 'inspired'<br>increase & no<br>federal match | 100% 'inspired'<br>increase w/<br>federal match |
| ESTIMATED DIRECT SPENDING         |                                     |                                      |  |  |   |   |
| HB 2800<br>(estimated for 1 year) | \$9,790,000                         | \$9,790,000                          | \$9,790,000                                      | \$9,790,000                                    | \$9,790,000                                       | \$9,790,000                                     |
| Federal Match                     | _                                   | \$9,790,000                          | _  | \$9,790,000                                    | _   | \$9,790,000                                     |
| 'Inspired' increase               | _                                   | _                                    | \$4,895,000                                      | \$4,895,000                                    | \$9,790,000                                       | \$9,790,000                                     |
| TOTAL                             | \$9,790,000                         | \$19,580,000                         | \$14,685,000                                     | \$24,475,000                                   | \$19,580,000                                      | \$29,370,000                                    |
| ESTIMATED<br>ECONOMIC OUTPUT      |                                     |                                      |  |  |   |   |
| Direct                            | \$9,790,000                         | \$19,580,000                         | \$14,685,000                                     | \$24,475,000                                   | \$19,580,000                                      | \$29,370,000                                    |
| Indirect                          | \$5,576,005                         | \$11,152,010                         | \$8,364,008                                      | \$13,940,013                                   | \$11,152,010                                      | \$16,728,015                                    |
| Induced                           | \$2,581,065                         | \$5,162,130                          | \$3,871,598                                      | \$6,452,663                                    | \$5,162,130                                       | \$7,743,195                                     |
| TOTAL                             | \$17,947,070                        | \$35,894,140                         | \$26,920,605                                     | \$44,867,675                                   | \$35,894,140                                      | \$53,841,210                                    |
| ESTIMATED<br>EMPLOYMENT           |                                     |                                      |  |  |   |   |
| Direct                            | 73                                  | 146                                  | 110  | 183  | 146   | 219   |
| Indirect                          | 60                                  | 120                                  | 90   | 150  | 120   | 180   |
| Induced                           | 26                                  | 52                                   | 39   | 65   | 52  | 78  |
| TOTAL                             | 159                                 | 318                                  | 239  | 398  | 318   | 477   |
| ESTIMATED<br>TAX REVENUE          |                                     |                                      |  |  |   |   |
| TOTAL                             | \$718,798                           | \$1,437,596                          | \$1,078,197                                      | \$1,796,995                                    | \$1,437,596                                       | \$2,156,394                                     |

## **Student Participation Rates in the School Meal Program**

To assess the impact of the farm to school pilot programs on participation rates by students in the lunch programs at each district, we collected data from each district on attendance and participation for each day of the 2008-2009 school year. We used existing records collected by each school as part of their regular procedures, thus the data was not specifically geared towards the needs of this project. PPS and Gervais used vastly different systems to collect data. Much of the data from Gervais proved unreliable. As a result, we chose to analyze only the data from Portland Public Schools.

Over the 2008-2009 school year in PPS, the Harvest of the Month Program (HOM) occurred twice a month from September to November and January to May, and once a month in December, while the Local Lunch Program (LL) occurred once a month from October to November and January to May on the same day as the HOM Program. As mentioned previously, HOM days featured a local item (cucumber, corn on the cob, parsnip, cabbage, potato, pear, frozen mixed berries, radish, and asparagus) grown by Oregon farmers as part of the school lunch. On LL days, 100% of the school cafeteria menu (excluding condiments) was sourced regionally from food producers in Oregon, Washington, or Northern California. See the table below for a list of HOM and LL foods and the dates they were served at PPS in the 2008-2009 school year.

Table 7: Portland Public Schools HOM and LL Days

|           | ном             |             | LL  |      |
|-----------|-----------------|-------------|---|------|
| монтн     | ITEM            | DATE(S)     | MENU  | DATE |
| September | Cucumber        | 10th & 24th | _   | _    |
| October   | Corn on the cob | 8th & 22nd  | Cheese quesadilla w/Tillamook cheese and Don Pedro tortillas  | 22nd |
| November  | Parsnip         | 5th & 19th  | Draper Valley Farms roasted chicken w/pear glaze  | 19th |
| December  | Cabbage         | 10th        | _   | _    |
| January   | Potato          | 8th & 21st  | Cascade natural beef cheeseburger w/Tillamook cheese  | 8th  |
| February  | Pear            | 13th & 25th | 3 bean (grown in the NW) vegetarian chili by Truitt Bros.   | 25th |
| March     | Mixed berries   | 2nd & 18th  | Grilled cheese sandwich w/Tillamook cheese on a bun made w/sustainably grown Shepherd's Grain flour | 18th |
| April     | Radish          | 8th & 23rd  | Pizza by Portland's own Roadrunner Pizza on crust w/sustain-<br>ably grown Shepherd's Grain flour   | 23rd |
| Мау       | Asparagus       | 13th & 27th | Zenner all beef hot dog on a bun made w/sustainably grown<br>Shepherd's Grain flour                 | 27th |

Although PPS did engage in some generic local purchases outside of the HOM and LL programs (i.e., not tied to either promotion), the bulk of their local purchasing was targeted towards these two promotions, and thus researchers reviewed changes in participation rates on HOM and LL days vs. other days of the school year, in addition to examining changes over time. This section analyzes lunch participation data from PPS over the 2008–2009 school year to determine whether there was a difference in participation rates on HOM or LL days, as compared to all other school days, as well as changes over time.

## **Data and Methodology**

Over the 2008-2009 school year, 80 PPS schools collected data on total attendance; absences; eligibility for free, reduced, and paid lunches each day; and claimed lunches in each of these categories. These data were used to determine the average daily participation rate of students eligible for free, reduced, and paid lunches. Of the schools collecting data, 28 (35 percent) were elementary schools (grades K-5), 32 (40 percent) were elementary/middle schools (grades K-8), 10 (12.5 percent) were middle schools (grades 6-8), 9 (11.3 percent) were high schools (grades 9-12), and 1 (1.3 percent) included all grades, K-12.

We calculated average participation rates by dividing the number of students claiming free, reduced, and paid lunches by the number of students eligible to claim these lunches. The total participation rate is the sum of the free, reduced, and paid participation rates. This method, which is equivalent to taking a weighted average of the participation rates for each school, accounts for differences in school size.

 $<sup>1\!\!1</sup>$  We did not calculate average participation rates on HOM or LL days in June, as there were no HOM or LL days in that month.

## **Results**

In examining the data collected from all 80 PPS schools, we found that the total participation rate for all schools was higher on HOM or LL days than on all other days in September, December, and January, while the total participation rate was lower on HOM or LL days than on all other days in October, November, and February to May. The largest difference in participation rates occurred in October (LL: cheese quesadilla with Tillamook cheese and Don Pedro tortillas, HOM: corn on

the cob), when participation on HOM or LL days was 4.5 percent lower than on all other days (see Table 8). Separate analyses of elementary, middle, and high schools, as well as non-traditional schools, revealed similar results. Participation over the duration of the year rose and declined slightly, but we did not find that participation rates increased significantly as compared to previous years.

**Table 8: Overall percentage participation** 

| HOM OR LL DAYS |       |         |       |       |
|----------------|-------|---------|-------|-------|
| монтн          | FREE  | REDUCED | PAID  | TOTAL |
| September      | 38.8% | 6.8%    | 15.5% | 61.0% |
| October        | 39.6% | 6.6%    | 16.0% | 62.2% |
| November       | 39.5% | 6.8%    | 15.8% | 62.1% |
| December       | 40.9% | 7.1%    | 15.7% | 63.7% |
| January        | 40.7% | 7.0%    | 16.7% | 64.4% |
| February       | 41.5% | 6.8%    | 14.8% | 63.0% |
| March          | 50.0% | 8.1%    | 18.0% | 76.1% |
| April          | 41.5% | 6.5%    | 15.3% | 63.2% |
| May            | 42.0% | 6.5%    | 14.9% | 63.3% |
| June           | _     | _       | _     | _     |

| ALL OTHER DAYS |         |       |       |  |  |
|----------------|---------|-------|-------|--|--|
| FREE           | REDUCED | PAID  | TOTAL |  |  |
| 37.9%          | 6.6%    | 15.4% | 59.9% |  |  |
| 41.8%          | 7.0%    | 17.8% | 66.7% |  |  |
| 40.1%          | 6.9%    | 15.8% | 62.8% |  |  |
| 39.1%          | 7.0%    | 16.6% | 62.7% |  |  |
| 40.9%          | 7.0%    | 15.8% | 63.6% |  |  |
| 41.2%          | 6.9%    | 15.5% | 63.6% |  |  |
| 49.8%          | 8.1%    | 18.9% | 76.8% |  |  |
| 42.1%          | 6.7%    | 15.6% | 64.4% |  |  |
| 41.8%          | 6.5%    | 15.1% | 63.4% |  |  |
| 40.7%          | 6.1%    | 14.7% | 61.5% |  |  |

We also compared participation rates by students claiming free, reduced, and paid lunches to see if there were any changes depending on the students' meal program eligibility category. We hypothesized that the participation rates for students claiming paid lunches could be more responsive to the food on the cafeteria menu than the participation rates for students claiming free or reduced lunches (who already participate at

much higher rates in the school meal program). However, this hypothesis does not appear to be supported by the data. For students claiming paid lunches, participation rates were higher on HOM or LL days than on all other days in only three out of nine months, as compared to four months for students claiming reduced lunches and five months for students claiming free lunches (see Table 9).

Table 9: Difference in overall participation on HOM or LL days and all other days

| % PARTICIPATION ON HOM OR LL DAYS minus % PARTICIPATION ON ALL OTHER DAYS |       |         |       |       |
|---|-------|---------|-------|-------|
| монтн   | FREE  | REDUCED | PAID  | TOTAL |
| September   | .09%  | 0.2%    | 0.0%  | 1.1%  |
| October   | -2.2% | -0.4%   | -1.8% | -4.5% |
| November  | -0.6% | -0.1%   | 0.0%  | -0.7% |
| December  | 1.8%  | 0.1%    | -0.9% | 1.0%  |
| January   | -0.2% | 0.0%    | 0.9%  | 0.7%  |
| February  | 0.3%  | -0.2%   | -0.7% | -0.6% |
| March   | 0.1%  | 0.0%    | -0.9% | -0.7% |
| April   | -0.6% | -0.2%   | -0.3% | -1.1% |
| May   | 0.2%  | 0.0%    | -0.3% | -0.1% |

## Interpretation

In examining participation rates in PPS's lunch program during the 2008-2009 school year, we had hoped we might see a relatively quick increase in participation rates in addition to the higher participation on HOM and LL days as compared to all other days, and that participation rates would be more responsive for students claiming paid lunches. The analysis did not show this to be the case, and in some instances revealed the opposite to be true.

It is generally understood by those in the farm to school community that to be successful, a program must not only make changes to the food that is served in the cafeteria, but also back up those changes by connecting them to the classroom and community. The program did not include consistent district-wide educational or promotional components to support the changes in the cafeteria simply because resources were not available to support such efforts (e.g., taste testing new foods multiple times is a proven strategy to get children to try new foods as well as develop a preference for them, but such an effort across 87 schools would require a massive deployment of money and labor). Furthermore, while there was some community support provided in PPS via a Community Partner Program with local retailers, resources were not abundant enough to create a robust program with a wide reach. Thus, it is not clear that students, school staff, or parents were aware of the changes taking place in their school cafeterias, or of the benefits to student and community health.

In hindsight, it may have been unreasonable for us to expect to so guickly reverse a trend that has been at least 40 years in the making in terms of changing consumer preferences and school lunch programs' attempts to compete with, or at least track, some of the offerings from fast food restaurants. It is likely to take at least a decade or two of concentrated effort to reverse the commercial push for foods higher in salt, sugar, and fat. There are many potential explanations for why this change will require a great deal of energy and financial resources over many years. They include issues such as student willingness to try new foods and the speed of the lunch line—it is difficult to "sell" students on an unfamiliar item when there is little time to educate them about new foods and without multiple opportunities for them to try the new item before committing—as well as a single menu item being offered rather than multiple choices (students at PPS often perceived this negatively), and also contextual factors that we did not assess for (such as the availability of complementary nutrition education and promotion activities, and whether or not schools have open campus policies).

# **Student Fruit and Vegetable Consumption**

We also evaluated the impact of the farm to school pilot program on knowledge, attitudes, and behaviors related to the consumption of fruits and vegetables featured as part of that program in Portland Public Schools (PPS) using a student survey. Due to limited resources, we did not conduct a similar survey in Gervais.

The purpose of the survey was to assess the impact of the PPS Harvest of the Month (HOM) program during the 2008-2009

school year on students' attitudes towards fruits and vegetables featured as part of the HOM program between January and May 2009, as well as students' consumption of those fruits and vegetables at home and at school. Over the 2008-2009 school year, the HOM Program occurred twice a month from January to May, and included Oregon-grown potatoes, pears, frozen berries, radishes, and asparagus. Table 10, on the following page, shows the HOM fruits and vegetables that were served during the 2008-2009 school year and the dates they were served.

Figure 7: A Page from the Student Survey



#### Radish

| Do you like this food?                       | OYES                        | ONO                       | OI don't know          |
|--|-----------------------------|---------------------------|------------------------|
| 2. How often do you eat this food AT SCHOOL? | O More than once<br>a month | O Once a<br>month or less | OI have Never tried it |
| 3. How often do you eat this food AT HOME?   | O More than once a month    | O Once a month or less    | OI have Never tried it |



#### Asparagus

| 1. Do you like this food?                    | OYES                        | ONO                       | OI don't know             |
|--|-----------------------------|---------------------------|---------------------------|
| 2. How often do you eat this food AT SCHOOL? | O More than once<br>a month | O Once a<br>month or less | OI have Never tried<br>it |
| 3. How often do you eat this food AT HOME?   | O More than once a month    | O Once a month or less    | OI have Never tried it    |

Between February 6 and March 10, 2009, Ecotrust staff distributed pre-surveys to a convenience sample of approximately 300 upper-elementary students at four PPS schools: four classrooms at Abernethy Elementary School, two classrooms at Buckman Elementary School, four classes at Clarendon-Portsmouth K-8 School, and three classrooms at Roseway Heights K-8 School. These schools and classrooms were chosen based on principals' and teachers' expressed interest in, and support of, the HOM program.

Few of the results from this survey were found to be statistically significant. This finding, in addition to the non-random sampling technique and small sample size led us to elect not to publish the survey findings in this report. However, we do believe that for these reasons, larger investments and more targeted research is needed to help illuminate the connections between the cafeteria, the classroom, and the community.

Table 10: Portland Public Schools HOM and LL Days

|           | Harvest of the Month |             | Local Lunches   |      |
|-----------|----------------------|-------------|---|------|
| монтн     | ITEM                 | DATE(S)     | MENU  | DATE |
| September | Cucumber             | 10th & 24th | _   | _    |
| October   | Corn on the cob      | 8th & 22nd  | Cheese quesadilla w/Tillamook cheese and Don Pedro tortillas  | 22nd |
| November  | Parsnip              | 5th & 19th  | Draper Valley Farms roasted chicken w/pear glaze  | 19th |
| December  | Cabbage              | 10th        | _   | _    |
| January   | Potato               | 8th & 21st  | Cascade natural beef cheeseburger w/Tillamook cheese  | 8th  |
| February  | Pear                 | 13th & 25th | 3 bean (grown in the NW) vegetarian chili by Truitt Bros.   | 25th |
| March     | Mixed berries        | 2nd & 18th  | Grilled cheese sandwich w/Tillamook cheese on a bun made w/sustainably grown Shepherd's Grain Flour | 18th |
| April     | Radish               | 8th & 23rd  | Pizza by Portland's own Roadrunner Pizza on crust w/sustain-<br>ably grown Shepherd's Grain flour   | 23rd |
| Мау       | Asparagus            | 13th & 27th | Zenner all beef hot dog on a bun made w/sustainably grown<br>Shepherd's Grain flour                 | 27th |





# Going Beyond the Cafeteria: The Community Partner Program

As a program meant to have an impact far beyond the reach of the school walls, Upstream Action in the Lunchroom also explored potential community components to complement the efforts of the two districts. Portland Public Schools (PPS) benefitted from messages about healthy local foods being echoed in the wider community via a Community Partner Program that featured PPS's Harvest of the Month in local stores. Eight community partners in the Portland metropolitan area, from supermarkets to local food co-ops and even a hospital cafeteria (see list of partners in Figure 8), signed on to promote PPS' Harvest of the Month program through complementary promotions, including posters, signs, recipes, demos, discounts, and more. Partners were provided with packets that included a CD with digital merchandising materials for in-store printing, including the PPS HOM program logos, HOM 2008-2009 posters in various sizes, signage corresponding to each monthly featured fruit or vegetable, and recipes and sample copy (including key messages and fun facts) for each monthly harvest. Partners also received bi-monthly communications with reminders and information about upcoming HOM fruits and vegetables and ideas for how to creatively promote the program.

**Figure 8: Community Partner Program participants** 

## **COMMUNITY PARTNERS INCLUDED:**

Alberta Co-op

Bales Thriftway Marketplace

Food Front Co-op

Kaiser Permanente Interstate Campus cafeteria

New Seasons Market

People's Co-op

Safeway

Whole Foods Market



## **Evaluation**

From December 2008 through May 2009, an Ecotrust intern, Nell Tessman, gathered observational data from the eight participating partners and analyzed the program as part of her graduate thesis for Portland State University. The observational data included numbers and types of Harvest of the Month (HOM) signage used in individual stores, the numbers and types of promotions occurring in the stores, as well as examination of any other materials or activities occurring as a result of participation in the program. Tessman conducted interviews with seven individuals from six of the participating partners regarding their participation in the program, as well as their ideas and recommendations for future incarnations of the program. She also interviewed two employees of Portland Public Schools (PPS) Nutrition Services regarding their impressions of the program and ideas for the upcoming school year.

The most common types of promotion employed by the partners were those supplied as pre-made templates by Ecotrust, including PPS HOM calendars and individual signs/posters for specific HOM featured fruits and vegetables (see Figure 11). In addition, some partners posted information about the program to their website and some made available HOM recipe cards produced by the Oregon Department of Agriculture's Farm to School Coordinator, Cory Schreiber. Community partners also created several unique promotions inspired by their own ingenuity and creativity.

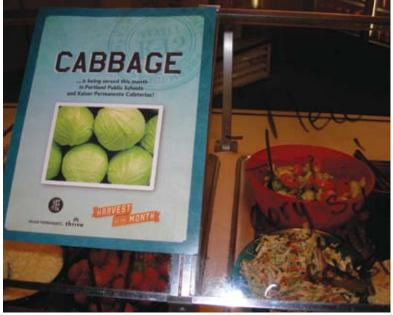
Figure 9: Examples of Promotions

| PARTNER                                     | PROMOTION  |
|---|--|
| New Seasons Market                          | Each month, New Seasons Market promoted the Harvest of the Month item at their "Solutions" demo space, located at the front of the store. During the demo, they posted the HOM signage for the produce item for a given month, and made a HOM binder available, which was divided into each month of the school year, and included all of the HOM images and recipes, as well as relevant New Seasons Market recipes featuring the same fruit or vegetable. New Seasons Market also promoted the Harvest of the Month item in their deli "Farm Plate Special" (see photo on 43). |
| Kaiser Permanente<br>Interstate Campus Café | One or two days each month, the Kaiser Café served the HOM recipe for a given month alongside other cold or hot lunch items. The café also posted a large HOM calendar at the back of the café, and when serving a HOM recipe, also posted that month's HOM signage and provided copies of the recipe to their customers.  |
| Whole Foods Market                          | During the month of January, Whole Foods Market partnered with a Portland elementary school, Sabin, for a "Baked Potato" promotion, in which proceeds were donated to a local school. The event was advertised in the store and on the store's website, and included materials and signage related to HOM and Whole Foods Market's partnership with Portland Public Schools and Ecotrust in supporting HOM. Whole Foods Market also created chalkboard replications of the HOM calendar in one of their stores (see photo on page 42).   |
| People's Co-op                              | People's Co-op used the HOM signage for individual fruits and vegetables, and also posted a HOM calendar on the co-op's bulletin board. People's also created their own HOM "passport" that local children could exchange for free produce (see photo on page 45).   |





Many stores displayed the HOM monthly signage in their wet produce sections, next to the appropriate fruit or vegetable, as in this photo from Food Front Co-op.



Kaiser Permanente prepared and served HOM recipes on their cafeteria line, accompanied by signage and recipes (e.g., a cabbage coleslaw and a berry buckle).

It was beyond the scope of this project to measure the impact that these promotions had on community members' perceptions of PPS's HOM program, but the program did result in many innovative and promising ideas for similar programs in the future, such as the People's Co-op HOM passport. Insights and recommendations for future iterations of the program based on Tessman's store observations and a series of interviews with partners and PPS Nutrition Services staff are outlined below.

# Recommendations for Improvements to the Community Partner Program

# 1. CLARIFY THE MESSAGE AND MOTIVATION FOR THE PROGRAM

Each of the partners had varying understandings of the motivation behind the creation of the program, ranging from encouraging the community to purchase more locally grown foods, to encouraging healthier eating habits, to just generally supporting the activities taking place in Portland Public School cafeterias. In many cases, these understandings were based on a basic understanding of HOM, which was then integrated into each business's or organization's own priorities. These understandings were also influenced by who the partners perceived as the audience (i.e. children shopping with their parents, parents, or the broader community).

In some ways, this was an advantage, as it allowed for flexibility within the program. However, it limited the impact the program had on improving the partners' understanding of HOM. The message of the program and the relationship of retailers and organizations to HOM needs to be clear. The message should also inform the partners of the motivation for the program, and of the audience or audiences for the promotions. This clarification will help differentiate the program from other promotions taking place in stores and other venues, allowing the program to stand out from what the business or organization is already doing.

# 2. INCREASE VISIBLE CONNECTION TO STUDENTS, SCHOOLS, FARMS, FARMERS, AND SOCIAL JUSTICE

The Harvest of the Month promotional templates provided as part of the Community Partner Program featured prominent photos of produce, but the only connection to schools was the PPS logo, which may or may not be recognizable to community members. Many partners expressed the need for the program to draw more explicit connections to the schools and to students via messaging and photos. This is an important point in examining the Community Partner Program in the larger framework of farm to school and sustainability. The partners supporting the program were more likely to continue and even increase participation in the program if they had visual, personal experiences to connect their work in the retail environment to the bigger picture with schools and farms.

One partner explained: "The materials used in future incarnations of the program should highlight both the interconnected nature of the local food system, and the connection of the food system to student health and knowledge, through visual imagery as well as brief, informational materials." In addition, the materials could do more to highlight the importance of the program in the context of social justice. A further way to address food access issues would be to pursue partnerships with retailers that serve more diverse and/or lower income communities.

# 3. DEVELOP ADDITIONAL PARTNERSHIPS WITH ORGANIZATIONS, BUSINESSES, AND INSTITUTIONS WORKING TOWARDS A SIMILAR CAUSE

Several partners suggested developing additional partnerships with organizations and coalitions working towards a similar cause in order to expand the reach of the program. These connections could include local government, farmers' markets, and other businesses and organizations in the community, providing information about the program to a more diverse audience while promoting the program. As one partner noted in discussing events taking place at her store, "[t]he times we have brought in a larger diversity of socioeconomic status and regions of Portland are when we partner with other organizations." That partner recognized that partnering with a wider range of organizations, businesses, and institutions increased the diversity of people served by a promotion or an event, expanding the promotion or event's networking capacity, as well as its ability to support social justice in the community.

# 4. INCREASE VISIBILITY OF THE PROGRAM IN THE MEDIA

Over the course of the study, only one media article was written about the Community Partner Program. Additionally, only two of the partners included the HOM on their websites. Several partners specifically mentioned an interest in increasing the visibility of the program in the media as a key advantage of participating in the program. Businesses and organizations want to be recognized for giving back to the community through their support of programs like HOM, and the media provides a forum for this acknowledgment. The materials provided could include general press release templates and other informational materials that partners could employ to increase the media visibility of the program using their own resources.

# 5. WORK MORE INTENSIVELY WITH PARTNERS

Partners also expressed an interest in a specific training or information session that included the individuals responsible for implementing the promotion, such as produce staff. Partners also showed an interest in receiving a specific plan of action for conducting the promotion, including signage locations, promotional calendars, etc. One partner expressed a desire for an interactive HOM website specifically for community partners that could include relevant resources and clear information about the intent of the program. Other partners highlighted additional ways they could support HOM, including tabling at in-store events and/or providing discounts and/or other financial support for teachers/schools interested in purchasing produce for in-class demonstrations or taking students on a field trip to a local farm, etc.

# 6. PROVIDE PRINTED MATERIALS

While printing materials for use by all stores was beyond the budget of this project, partners expressed that pre-made signage (e.g., laminated signs, table tents for cafes) would be ideal. Many expressed support for wider dissemination of the People's Co-op fruit and vegetable "passport" and the development of kid-friendly recipes for HOM.

# 7. PROVIDE GREATER EMPHASIS ON IN-PERSON OPPORTUNITIES FOR PARTNER INVOLVEMENT

Partners expressed a desire to be more involved with the program in the schools. Suggestions were to help arrange visits to schools to eat lunch, assist in a garden, etc. (one of these was arranged with Whole Foods Market staff and was very successful).

# The \$0.07 Answer

At the beginning of this project, researchers asked whether an investment of \$.07 per meal could stimulate two different Oregon school districts to purchase more Oregon foods.

Specific emphases were placed on what the potential impact of this investment would be on the greater Oregon economy as well as student consumption of, and knowledge about, Oregon fruits and vegetables, and minimally processed products.



The results show clearly that provided with more money for the express purpose of purchasing more Oregon-grown, processed, or manufactured foods, school districts can and will expand the varieties and types of local products offered, with an initial focus on fresh fruits and vegetables that can later be expanded to include main dish offerings as schools become more comfortable with local purchasing. Results also show that districts can successfully accomplish local purchasing using a variety of methods, such as direct purchasing from farmers or using a mainline distributor, and that there is a learning curve and a cost associated with serving new foods, and particularly with preparing scratch foods.

Our economic analyses show that local school food purchases not only support local jobs and have the potential to increase output in food producing and processing sectors, but may also create jobs in other sectors and increase output in the broader state economy through the economic multiplier effect. Moreover, the business relationships built between school districts and local farms through the purchase of local foods are likely to persist and may strengthen. Relationships between school districts and local farms support the production of healthier, tastier, and more nutritious food for school children as well as provide long-term revenue streams for local farmers (for whom a little more production may be enough to take their farms from being unprofitable to profitable).

While the evidence from the purchasing data collected via this research project revealed clear impacts on each district's patterns of procurement, as well as on the wider economy, data collected on other aspects of the project, including lunch participation rates, student attitudes and consumption of fruits and vegetables, and the impact of the program on community perceptions and support, presented less clear results. Despite this, the long-term development potential that such an investment can have on a school community and on a region's foodshed is noteworthy. Throughout Ecotrust's history working in the field of farm to school, we have consistently found that a small investment of money and other resources to get a school district's farm to school programming off the ground (or help push it to the next level), supported by staff expertise and assistance, plants the seeds for long-term success and expansion of local purchasing and accompanying promotions in the district. For example, Portland Public Schools (PPS) has made major strides since the culmination of this project, with more than 30 percent of its purchases now benefitting local farms and food producers.

PPS has continued to focus on increasing its purchases of fresh fruits and vegetables from local farmers as well as preserved, canned, and frozen foods produced in the Northwest, to benefit its students and support the community. In addition to Harvest of the Month, the Local Lunch program has evolved into *Local Flavors*, which highlights regionally grown food

throughout PPS's menu more often and is a natural extension of PPS's efforts to serve more healthy, local foods. Furthermore, PPS has been able to make some significant changes to its district-wide menus that increase the options for healthy, regionally sourced food, such as serving 100 percent locally sourced whole-grain bread products at all 85 of its schools, developing a locally produced pizza, and in the 2010-2011 school year, eliminating both highly processed chicken nuggets and ranch dressing from their menu.

For all of these reasons and many others, PPS is now recognized as a national leader in farm to school programming as a member of School Food FOCUS<sup>12</sup>, a national initiative that helps large urban school districts—those with 40,000 or more students—procure more healthful, sustainably produced and regionally sourced food, so that children may perform better in school and be healthier in life.

Gervais has also continued to expand its programming in a dramatic fashion, increasing its local purchasing practices and featuring a monthly Harvest of the Month fruit or vegetable, and recently acting as a model to other local districts, Woodburn and North Marion, who partnered to co-promote the same Harvest of the Month campaign in their districts for the first time in the 2010-2011 school year.

One of the key lessons overall is that no matter how large an economic investment is made, it is imperative that changes in the cafeteria are supported by changes in the classroom and community. And indeed, this is often where resources are most lacking. Yet it is clear that children, teachers, and parents must be aware of and informed about these changes and also able to understand the impact that the food purchasing decisions made by their districts have on the health of students, the community, the economy, and on our food system. Without education and promotion, students, parents, and others may be primed to not only be unsupportive of school food, but to criticize school meal programs. This speaks to the great need for support and integration with a diverse array of community partners and support for these programs at many levels, including a particular focus on food- and garden-based education and support from local media.

Can \$.07 make a difference? We believe the answer is yes. What kind of difference? That depends on how investments in school food are managed and allocated. With the recently enacted Healthy, Hunger-Free Kids Act (S. 3307) and farm to school programs receiving nationwide support, the time is ripe for investing in a strong foundation that will ensure that the economic and health benefits from these programs will be transferred into tangible and lasting results for the community.

**UPDATE** During the 2011 legislative session, a revised version of the Farm to School and School Garden bill introduced in 2009 received unanimous support from both the Oregon House and Senate. The 2011 version of HB 2800 appropriates \$200,000 to the Oregon Department of Education to administer a competitive grants pilot program in two medium-sized Oregon school districts. The majority of the funds will reimburse these school districts an additional 15 cents per school lunch to buy Oregon foods, while 12.5% will support school garden teaching activities. See Appendix B to view the full text of the 2011 legislation.

12 www.schoolfoodfocus.org

# APPENDIX A 2009 VERSION OF HB 2800

## House Bill 2800

Sponsored by Representatives CLEM, KOTEK; Representatives BAILEY, BOONE, CANNON, GARRETT, GELSER, GILLIAM, GREENLICK, HARKER, HOLVEY, KAHL, KRIEGER, MATTHEWS, NATHANSON, READ, ROBLAN, SCHAUFLER, SHIELDS, J SMITH, TOMEI

#### SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure as introduced.

Directs Department of Education to provide reimbursements to school districts that serve Oregon food products as part of United States Department of Agriculture's National School Lunch Program or School Breakfast Program. Directs department to award grants for development of food-based and garden-based educational activities.

Allocates moneys from Administrative Services Economic Development Fund to State Department of Agriculture for purposes of reimbursements and grants.

Declares emergency, effective July 1, 2009.

#### A BILL FOR AN ACT

Relating to Oregon Farm-to-School and School Garden Program; creating new provisions; amending section 1, chapter 21, Oregon Laws 2008; limiting expenditures; and declaring an emergency.

### Be It Enacted by the People of the State of Oregon:

- SECTION 1. Section 1, chapter 21, Oregon Laws 2008, is amended to read:
- Sec. 1. (1) The Department of Education shall establish the Oregon Farm-to-School and School Garden Program. Through the program, the department shall:
  - (a) Provide reimbursements to school districts that serve Oregon food products as part of the United States Department of Agriculture's National School Lunch Program or School Breakfast Program;
  - [(a)] (b) Assist school districts that participate in the United States Department of Agriculture's National School Lunch Program or School Breakfast Program in [utilizing] using Oregon food products [and produce] from school gardens;
  - [(b)] (c) Promote [food-] food-based and garden-based educational activities in schools and school districts [that participate in the United States Department of Agriculture's National School Lunch Program or School Breakfast Program];
  - [(c)] (d) Provide information to school districts on how farm-to-school and school garden projects may help implement wellness policies mandated by the United States Department of Agriculture;
  - [(d)] (e) Assist school districts in incorporating farm-to-school and school garden projects into wellness policies mandated by the United States Department of Agriculture;
  - [(e)] (f) Work with the State Department of Agriculture, agricultural organizations, state institutions of higher education and other regional organizations and community-based organizations to develop farm-to-school related programs; and
  - [(f)] (g) Perform other activities necessary to facilitate the success of the Oregon Farm-to-School and School Garden Program.
  - (2)(a) A school district may be reimbursed for purchasing Oregon food products by applying to the Department of Education for reimbursement and showing that food for which

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- (A) Was produced, packaged, packed or processed in Oregon;
- (B) Was used in meals that are part of the United States Department of Agriculture's National School Lunch Program or School Breakfast Program; and
  - (C) Met or exceeded federal standards for the nutritional content of school meals.
- (b) The Department of Education shall provide reimbursement in an amount equal to 15 cents for every school lunch and seven cents for every school breakfast.
- (c) A school district may not use any moneys received under this subsection to supplant purchases of food products with federal moneys.
- (d) The Department of Education shall consult with the State Department of Agriculture to develop rules and standards related to the implementation of the reimbursements described in this subsection.
- (3)(a) A school or school district may apply to the Department of Education for a grant to be used for food-based and garden-based educational activities in schools and school districts.
- (b) The Department of Education shall consult with the State Department of Agriculture to determine the recipients and amounts of grants awarded under this subsection.
- (c) An applicant for a grant may not receive more than \$20,000 in grants per biennium under this subsection.
- (d) The Department of Education may not award more than 150 grants per biennium under this subsection.
- [(2)] (4) The State Board of Education shall adopt rules that establish the criteria to determine the eligibility for a grant awarded under subsection (3) of this section and may adopt any other rules necessary for the administration of this section.
- [(3)(a)] (5)(a) For the purpose of paying the costs of the Department of Education of administering the Oregon Farm-to-School and School Garden Program, the department may accept contributions of moneys and assistance from any source, public or private, and agree to conditions placed on the moneys not inconsistent with the duties of the department under this section.
- (b) Any moneys received by the department under this subsection shall be placed in the Department of Education Account. Moneys specifically received for reimbursements described in subsection (2) of this section and for grants described in subsection (3) of this section shall be credited for those purposes.
- SECTION 2. The amendments to section 1, chapter 21, Oregon Laws 2008, by section 1 of this 2009 Act first apply to food purchased on or after the effective date of this 2009 Act.
- <u>SECTION 3.</u> (1) There is allocated to the State Department of Agriculture from the Administrative Services Economic Development Fund the amount identified in subsection (2) of this section.
- (2) Notwithstanding any other law limiting expenditures, the amount of \$22,580,000 is established for the biennium beginning July 1, 2009, as the maximum limit for payment of expenses by the State Department of Agriculture and the Department of Education from the Administrative Services Economic Development Fund for the following purposes:
- (a) \$19,580,000 for the reimbursements described in section 1 (2), chapter 21, Oregon Laws 2008.
- (b) \$3,000,000 for grants to be used for food-based and garden-based educational activities, as described in section 1 (3), chapter 21, Oregon Laws 2008.

| 1 | (3) The allocation of moneys from the Administrative Services Economic Development            |
|---|---|
| 2 | Fund under this section is subject to the requirements in section 4, Article XV of the Oregon |
| 3 | Constitution, for deposit of specified amounts of the net proceeds from the Oregon State      |
| 4 | Lottery into the Education Stability Fund and into the Parks and Natural Resources Fund       |
| 5 | and shall be made only after satisfaction or payment of:                                      |

- (a) Amounts allocated to Westside lottery bonds issued under ORS 391.140 or to the reserves or any refunding related to the Westside lottery bonds in accordance with the priority for allocation and disbursement established by ORS 391.130;
- (b) All liens, pledges or other obligations relating to lottery bonds or refunding lottery bonds that are due or payable during the biennium beginning July 1, 2009; and
- (c) Amounts required by any other pledges of, or liens on, net proceeds from the Oregon State Lottery.

<u>SECTION 4.</u> This 2009 Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this 2009 Act takes effect July 1, 2009.

# APPENDIX B 2011 VERSION OF HB 2800

## Enrolled

# House Bill 2800

Sponsored by Representatives CLEM, KOTEK; Representatives BARNHART, BOONE, DEMBROW, FREDERICK, GARRETT, HOLVEY, KOMP, MATTHEWS, READ, SCHAUFLER, J SMITH, Senators BONAMICI, DEVLIN, DINGFELDER, EDWARDS, JOHNSON, PROZANSKI, ROSENBAUM, SHIELDS (Presession filed.)

#### AN ACT

Relating to Oregon Farm-to-School and School Garden Program; creating new provisions; amending ORS 336.426; appropriating money; and declaring an emergency.

## Be It Enacted by the People of the State of Oregon:

### SECTION 1. ORS 336.426 is amended to read:

- 336.426. (1) The Department of Education shall establish the Oregon Farm-to-School and School Garden Program. Through the program, the department shall:
- (a) Assist school districts that participate in the United States Department of Agriculture's National School Lunch Program or School Breakfast Program in [utilizing] using Oregon food products and produce from school gardens;
- (b) Promote [food-] food-based, agriculture-based and garden-based educational activities in school districts [that participate in the United States Department of Agriculture's National School Lunch Program or School Breakfast Program];
- (c) Provide information to school districts on how farm-to-school and school garden projects may help implement wellness policies mandated by the United States Department of Agriculture;
- (d) Assist school districts in incorporating farm-to-school and school garden projects into wellness policies mandated by the United States Department of Agriculture;
- (e) Work with the State Department of Agriculture to develop farm-to-school related programs; and
- (f) Perform other activities necessary to facilitate the success of the Oregon Farm-to-School and School Garden Program.
- (2) The State Board of Education may adopt any rules necessary for the administration of this section.
- (3)(a) For the purpose of paying the costs of the Department of Education of administering the Oregon Farm-to-School and School Garden Program, the department may accept contributions of moneys and assistance from any source, public or private, and agree to conditions placed on the moneys not inconsistent with the duties of the department under this section.
- (b) Any moneys received by the department under this subsection shall be placed in the Department of Education Account.

SECTION 2. (1) A school district may apply to the Department of Education for a grant to be used by the school district to:

- (a) Reimburse the school district for costs incurred by the school district to purchase Oregon food products described in subsection (3) of this section; and
- (b) Fund food-based, agriculture-based and garden-based educational activities in school districts.
  - (2) For a grant received under this section:
- (a) 87.5 percent of the moneys of the grant must be used for reimbursements as described in subsection (1)(a) of this section; and
- (b) 12.5 percent of the moneys of the grant must be used for the educational activities described in subsection (1)(b) of this section.
- (3)(a) For the portion of a grant that is allocated for reimbursements, a school district shall be reimbursed for the costs incurred by the school district to purchase Oregon food products that were:
  - (A) Purchased on or after the date the school district received the moneys for the grant;
  - (B) Produced or processed in Oregon; and
- (C) Used in meals that are part of the United States Department of Agriculture's National School Lunch Program.
- (b) For Oregon food products that satisfy the requirements of paragraph (a) of this subsection, reimbursements shall be in an amount that equals the lesser of:
- (A) The amount paid per meal by the school district to purchase the Oregon food product; or
  - (B) Fifteen cents for every school lunch.
- (c) A school district that receives moneys for reimbursement as provided by paragraph (b) of this subsection:
  - (A) Must use the moneys to purchase foods produced or processed in Oregon; and
- (B) May not use the moneys to supplant purchases of food products with federal moneys, but may use the moneys to pay for the difference in cost between food products that are of higher quality and food products that are allowed to be purchased with federal moneys.
- (4) For the portion of a grant that is allocated for educational activities, a school district shall use the moneys for costs directly associated with the educational activities, including staff time, travel costs and equipment purchased for the activities.
- (5) The Department of Education shall consult with the State Department of Agriculture to determine the recipients and amounts of grants awarded under this section. Preference shall be given to school districts that:
  - (a) Propose farm-to-school projects or school garden projects that:
  - (A) Are well designed;
  - (B) Incorporate positive changes in food purchasing;
  - (C) Promote healthy food activities;
  - (D) Have clear educational objectives;
  - (E) Involve parents or the community; and
  - (F) Have high potential for job creation;
  - (b) Represent a variety of sizes and geographic locations; and
- (c) Serve a high percentage of children who qualify for free or reduced price school meals under the United States Department of Agriculture's National School Lunch Program.
- (6) The Department of Education must award at least two grants per biennium under this section.
- (7) The Department of Education shall consult with the State Department of Agriculture to develop rules and standards related to the grants awarded under this section.
- (8) The Department of Education may expend for the administrative costs incurred under this section no more than two percent of all moneys received by the department for the grant program.

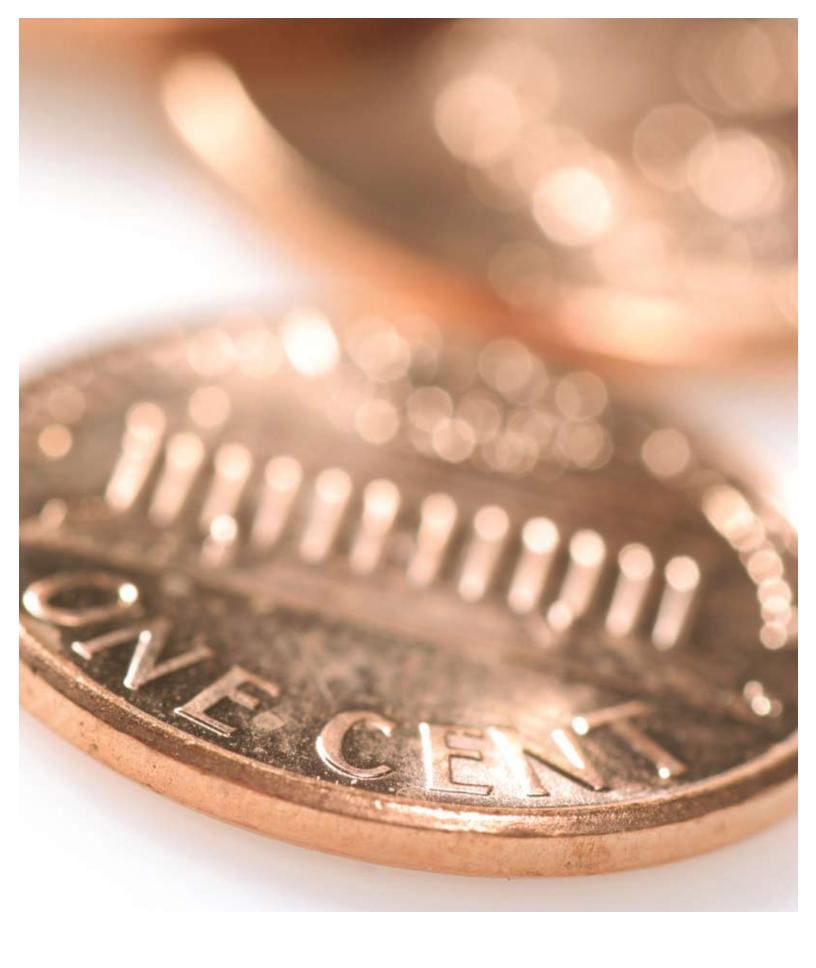
SECTION 3. In addition to and not in lieu of any other appropriation, there is appropriated to the Department of Education, for the biennium beginning July 1, 2011, out of the

General Fund, the amount of \$200,000 for the grant program described in section 2 of this 2011 Act.

SECTION 4. This 2011 Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this 2011 Act takes effect July 1, 2011.

| Passed by House June 22, 2011            | Received by Governor:                  |
|--|--|
|  | , 2011                                 |
| Ramona Kenady Line, Chief Clerk of House | Approved:                              |
|  | , 2011                                 |
| Bruce Hanna, Speaker of House            |  |
|  | John Kitzhaber, Governor               |
| Arnie Roblan, Speaker of House           | Filed in Office of Secretary of State: |
| Passed by Senate June 24, 2011           | , 2011                                 |
|  |  |
| Peter Courtney, President of Senate      | Kate Brown, Secretary of State         |





Ecotrust
721 NW Ninth Avenue
Portland, OR 97209
(503) 227-6225 www.ecotrust.org

