

Hello,

My name is Pete St. Tulnoynum, and I run a small farm in Canby, OR with my wife, Claire. I strongly support SB 727 because it both serves Oregon's low-income communities and provides a valuable source of income for my small farm. I've written a short research paper outlining the economic impact of SNAP matching incentives at farmers markets on the viability of my small farm that is attached below.

Oh the Places Your Double Up Food Bucks Dollar Will Go Udan Farm's experience with the economic impacts of farmers market incentives

Over the last decade there has been growing research interest in the local economic development impact of incentives for low-income consumers to shop at farmers markets. Several studies have been published that attempt to quantify these effects using aggregated market data, vendor and consumer surveys, and theoretical models. This paper will draw on current research as well as the first hand experience of a small market farm to look at how farmers market incentive programs help to: 1. reduce healthcare costs for low-income Oregonians, 2. efficiently capture and recycle federal SNAP dollars in Oregon's economy that would otherwise leave the state with minimal impact, 3. support small and mid-sized farm businesses in Oregon as a truly free market subsidy for fresh produce growers.

In this paper we look at the impacts of three different incentive programs; the Federal Supplemental Nutrition Assistance Program (SNAP) benefits, SNAP matching benefits (including Double Up Food Bucks(DUFB)) that provide matching funds up to \$10 per market for customers who use SNAP funds at market, and the Oregon Farm Direct Nutrition Program (FDNP) which provides \$28 in the form of seven \$4 vouchers for low-income seniors and families to spend at farmers markets over the June-Nov. season.

After considering each of these market incentive programs we'll examine how they have aided the development of Udan Farm as a viable business. Udan Farm was started by Claire and Pete St. Tulnoynum in 2015 at the East Multnomah County Soil and Water Conservation District's Headwaters Farm Incubator Program, where we farmed for two years before moving to the Oregon Sustainable Agriculture Land Trust's Natural Harvest Farm in Canby in late 2016. Natural Harvest is a 19 acre property with approximately 2 acres in perennial fruit trees and vines and another acre currently in vegetable production. Udan farm has been certified Organic through Oregon Tilth since 2016. From 2015 through 2017 Pete maintained a full time off farm job, but was able to begin farming full time in late Mar. of 2018. In 2018 Udan Farm sold fruits and vegetables at two farmers markets in Portland, OR; the Lloyd Farmers Market from Mar.-Dec. and the People's Co-op Farmers Market from May-Dec.

We'll conclude with a brief discussion of the potential use farmers markets and market incentive programs can have in addressing food insecurity, healthcare costs, and historic social inequality in food deserts quickly and cheaply.

Market Incentives

SNAP

Both farmers markets that Udan Farm participated in in 2018 have been accepting SNAP payments for several years. Market managers process SNAP payments and give customers \$1 tokens that can be spent with qualifying vendors for whole dollar amounts only. We then work with customers to select items that both meet their needs and give them the best whole dollar value for their tokens. It

is worth noting that this system transfers federal dollars to small vegetable farms (which traditional farm subsidies do not) by empowering consumer choice. This is different from traditional anti-hunger programs where low-income consumers receive boxes of processed foods in which they have little choice. It also differs from traditional subsidies in that customers participate in price setting through their shopping decisions as opposed to government bureaucrats setting reimbursable values for farm activities. These sales have obvious immediate impacts in the form of fresh produce for consumers and money for the farm, but the down stream effects can be harder to see.

A 2018 Study found that the average adult SNAP recipient incurred \$1400 less per year in healthcare cost than a similar low-income adult who did not receive SNAP benefits. For adults with hypertension that number becomes \$2700 per year, and an adult SNAP recipient with coronary artery disease incurs \$4100 less in healthcare costs per year than an equivalent non-recipient. The study suggests that the three main causes for these reductions in costs are decreases in over all stress (with its negative inflammatory health effects) through lowering financial stress, fewer SNAP recipients being forced to choose between buying food and prescribed medications for chronic conditions, and improved nutrition from SNAP purchased foods (Carlson and Keith-Jennings, 2018).

These numbers don't account for which foods are purchased with SNAP dollars, and there is good reason to believe that by incentivizing the purchase of fresh local produce even greater reductions in healthcare costs could be achieved by both improving nutrition and further minimizing financial stresses. A large proportion of the foods available to SNAP recipients in large chain supermarkets are calorie dense, low-nutrient, high sodium processed foods; even the produce in these stores is typically at least 5 days to several weeks away from the field. At farmers markets the majority of foods available are low calorie, high fiber, nutrient dense, low sodium fruits and vegetables that were harvested in the day or two preceding market. Vitamin and phytonutrient¹ levels in produce decline over time after harvest, so the freshness factor is genuinely important in leveraging reductions in healthcare costs.

SNAP Match

SNAP matching programs at both of our 2018 markets provided up to \$10 worth of matching tokens or cards (differing in color from the SNAP tokens for ease of tracking) to customers who redeemed their SNAP benefits at market. These programs were funded by the DUFB program, private and federal grants, and market booth fees paid by vendors. A 2017 study in Michigan found that markets that participated in both SNAP and SNAP matching programs saw a 1.5 fold increase in sales over markets that only accepted SNAP without matching. This strongly suggests that SNAP matching is successful in both bringing in additional customers and/or increasing the total purchases of the SNAP customers more than SNAP alone would. A 2015 survey of SNAP match beneficiaries at 45 different farmers markets found that 66% of customers felt that market prices were comparable to or less than prices at supermarkets, 73% felt that the market provided a better selection of produce than their usual supermarkets, and 80% felt that the quality of items on offer was better than what they could buy in a supermarket (Goddeeris et al, 2017).

In order to understand the impact of farmers market incentives on the local economy, it is

1 Vitamins are non-mineral nutrients whose absence from a diet produce consistent deficiency diseases. Phytonutrients are non-mineral nutrients that contribute positive health effects but aren't associated with specific deficiencies. Antioxidant pigments such as lycopene and anthocyanins are commonly cited examples, these compounds scavenge free-radicals in the blood stream before they can damage the lining of the arteries, helping to prevent coronary artery disease. The high fiber content of fresh produce helps to scavenge bad cholesterol in the colon thereby lowering serum cholesterol levels and helping to prevent hardening of the arteries. Finally nitrates from dark leafy greens combine readily with fats such as olive oil to form nitro-fatty-acids like the nitroglycerin prescribed to angina sufferers that act to dilate blood vessels and reduce hypertension.

useful to first look at the most likely alternative venue for spending SNAP funds. For most American consumers the default choice for where to buy food is a large chain supermarket. Absent internal financial data from large chain supermarkets we'll compare the labeled state of origin of available produce between a chain supermarket and a farmers market, as well as the business structures of a large chain and a local farm to get a sense for how much of a SNAP dollar spent in each venue is re-spent in Oregon. State of origin data was collected by surveying three sales venues: the produce wet rack at the Safeway in Canby, OR (large chain supermarket), the produce wet rack at People's Co-op Grocery in Portland, OR (control demonstrating wholesale availability of Oregon produce), and the People's Farmers Market (8 farms selling DUFB eligible produce). Surveys were conducted in the week from 31 January to 6 February 2019.

Safeway in Canby, OR Fresh Produce State of Origin – 1/31/2019

Origin:	Oregon	PNW	Out of State	Foreign	Not Labeled
# of Items	1	1	98	14	23
% of Items	0.7%	0.7%	72%	10%	17%

People's Co-op Grocery in Portland, OR Fresh Produce State of Origin – 2/3/2019

Origin:	Oregon	PNW	Out of State	Foreign
# of Items	32	9	32	14
% of Items	37%	10%	37%	16%

People's Farmers Market Stands in Portland, OR Fresh Produce State of Origin – 2/6/2019

Origin:	Oregon	SW Washington
# of Items	58	6
% of Items	91%	9%

As the first table shows, less than 1.5% of the produce available at the Canby Safeway was labeled as coming from the PNW, with a mere 0.7% labeled as coming from Oregon. We can say with certainty that at least 82% of the produce items at this Safeway had to travel several hundreds or thousands of miles to reach the store. Part of the sale price on these produce items will therefore go to paying for this transportation. Much of this money will necessarily be spent in other states or countries. The labor and input costs to grow, harvest, and pack this produce for shipment to the Canby Safeway will likewise be spent out of Oregon. Safeway inc. is headquartered in Pleasanton, CA, meaning that corporate overhead costs will be paid in California rather than Oregon. Majority ownership of Safeway inc. is held by Cerberus Capital Management of New York, so the profit margin is also leaving Oregon. This leaves only the portion of the sale price dedicated to specific store overhead and employee wages to be captured and recycled in Oregon's economy.

The People's Co-op Grocery functions as an intermediary between a large supermarket and a farmers market because of its stringent buying standards. We included the wet rack at People's in this survey to show that even in the middle of winter there is a wide array of Oregon grown produce available on the wholesale market. There are three reasons that the total number of produce items available is lower at People's: 1. many of the items at Safeway were different varieties of pre-cut mixed vegetables that People's does not offer, 2. People's only carries organic produce whereas Safeway

replicates varieties as conventional and organic, 3. People's is physically a much smaller store. While the total number of items at People's was smaller, the variety of the display was greater than at Safeway.

In contrast, the produce on offer at the People's Farmers Market was 91% grown in Oregon, and 9% grown in SW Washington. All of the produce at PFM was grown within 100 miles of the market and 91% was transported exclusively within Oregon. Liability insurance is the only out of state cost that Udan Farm pays to move our produce to market. In any given year Udan Farm spends between 80-90% of business expense dollars (rents, materials, utilities, equipment, services etc.) in Oregon, and as profit taking partners we spend 70-80% of the farm's profits in Oregon supporting ourselves. As beginning farmers² we are not currently able to engage in long-term savings, so at least 75% of our total sales are re-spent in Oregon each year. While there is obviously some variation in these percentages from farm to farm and year to year they are reasonably representative of small beginning market farms. The PFM is a project of People's Co-op Grocery in Portland and employs an Oregon resident as a .75 FTE benefited market manager, so all administrative and physical overhead costs of the market are spent in Oregon. Likewise, the Lloyd Farmers Market is a subsidiary of the Hollywood Farmers Market, which operates two markets in Portland. The Hollywood farmers market employs a full time benefited manager and a .75 FTE assistant manager.

FDNP

The Oregon Farm Direct Nutrition Program is administered through the state, rather than at the market level. Farmers must complete a brief training program in order to accept FDNP vouchers and then receive a unique four digit identifier to be used in redeeming FDNP vouchers. Qualifying low-income seniors and families enrolled in the Women, Infants, and Children (WIC) program receive seven \$4 vouchers that can only be spent with qualifying farms (not usable in stores). It is important to note that no change can be given for these vouchers, so they have to be spent in \$4 increments. Of the three incentives discussed here FDNP was the easiest for us to observe its efficacy in bringing in customers who would not otherwise have shopped at the market. A typical FDNP transaction begins something like this:

Customer: "I found this place on a list that I got. Can you take these green check things(FDNP vouchers)?"

Farmer: "Yep, we can help you with that"

Customer: "So how do I do this?"

Farmer: "You just pick out the things you want, and we'll work with you to figure out how much will use up your coupon."

While we didn't track the number of these conversations, our experience is that our first interaction with an FDNP shopper almost always begins along these lines. This suggests that the majority of redeemed FDNP dollars succeed in bringing a shopper to farmers market who would otherwise have gone to a supermarket.

This is a good place to mention that many low-income Oregonians, especially FDNP eligible seniors and families, face serious logistical challenges in shopping such as: lack of a personal vehicle

² The USDA defines any farm in its first decade of operation as a beginning farm. This reflects both that learning to operate a farm requires climbing several steep learning curves and the necessity of simultaneously developing markets while financing equipment purchases and infrastructure development. Farms typically take several years in a market to develop a loyal customer base and to adjust cropping strategies to meet the demands of specific markets.

or driver's license, health challenges that limit mobility, needing to care for family members, or having limited time off from work, to name a few examples. During the period of 2018 that FDNP benefits could be redeemed there were 27 weeks for which recipients got seven vouchers. Our experience with the current structure of the FDNP program is that most FDNP recipients spend their entire allotment of vouchers in 1-3 markets. By substantially increasing the total FDNP benefit and distributing it in \$2 instead of \$4 vouchers (allowing for increased flexibility in purchasing) we believe that the program would have greater impact for FDNP recipients, and encourage them to become more regular market shoppers. Ideally FDNP would also include an educational campaign to inform recipients about other market incentives they qualify for to ensure that this program is giving shoppers and vendors the greatest possible benefit.

Incentive Impact

As mentioned above beginning farms face a host of challenges as they work towards long-term viability. Before we started Udan Farm Pete had been working in market gardening for four years, Claire had been working in produce retail for seven years, and we had spent a year working together on several small farms to begin integrating our skill sets. The table below shows Udan Farm's sales totals for our first four years to give context for how market incentives helped us grow in 2018.

Udan Farm sales totals by year rounded to the nearest thousand

2015	2016	2017	2018
\$17,000	\$17,000	\$27,000	\$48,000

In our first two years we worked to find markets that were a good match for our business philosophy and that had sufficient demand for the kinds of produce that we wanted to grow. In 2017 we were able to move to stable long-term farm land and begin expanding our crop list to meet market demand. In 2018 we turned a corner and the farm was able to cover not only business expenses, but the majority of our personal expenses as well. The following table shows our total 2018 sales as well as our total sales for each of the three incentives.

Udan Farm 2018 sales totals broken down into market incentive pools

Total Sales	Market	SNAP	SNAP Match	FDNP	Total Incentives
\$47,831.55	\$46,705.15	\$2447	\$3024	\$744	\$6215
100%	97.6%	5.1%	6.3%	1.5%	12.9%

In 2018 Pete was able to leave a job with Portland Community College (which has since been filled) and work full time on the farm. Without the \$6215 in incentive sales, Pete would have had to look for outside work for at least part of the year, drastically slowing the growth of our farm business. We can safely say that market incentives were critical to creating a new job on our farm.

Market farming is an inherently hyper-local business. Organic fertilizers and composts are very heavy and bulky which makes transporting them any great distance prohibitively expensive for small farmers. As mentioned by Goddeeris et al 80% of farmers market customers feel that they can get higher quality vegetables as farmers markets than at stores. In addition to being fresher, one of the primary reasons for this is that market farms can grow varieties that have been selected for optimal eating quality and adaptation to specific regions rather than being standardized for mechanical harvest and long-distance transportation. The majority of our seed is purchased from small farms in western

Oregon that maintain these varieties to be optimized for our growing conditions. When we buy farm equipment we need to know that we have ready access to replacement parts and qualified mechanics so that if it breaks when we need it the most we can have it up and running again as quickly as possible. This means developing relationships with local dealers. The table below lists the top six businesses with whom Udan Farm spent money in 2018. The first five are privately and locally owned companies that operate exclusively in Oregon and the sixth is a non-profit that operates internationally, but which has all of its administrative staff located in Oregon.

Top 6 businesses where Udan Farm spent money in 2018 ranked by \$s spent

<u>Locally Owned Oregon Business</u>	<u>UF '18 \$s Spent</u>	<u>Purchases</u>
Naomi's Organic Farm Supply	\$1443.63	Fertilizer, tools, seed, propagation supplies
Wilco	\$1332.34	Tools, hardware, canning supplies, irrigation fittings
Canby Rental and Equipment	\$1050.29	Equipment, supplies, rentals
Clark's Lawn and Garden	\$965	Equipment, repairs, rentals
OBC Northwest	\$933.95	Greenhouse and propagation supplies
Oregon Tilth (Oregon Non-profit)	\$929.95	Certification Services

Beginning small farms require many years of near total investment to grow and stabilize as businesses. The average age for a farmer in Oregon is now 60 years old, and farmers over 55 currently control nearly 2/3 of Oregon's farmland (OSU Center for Small Farms, 2016). The next couple of decades will see a massive turnover in farm operations in Oregon, making programs that increase the viability of beginning farms extremely important to preserving Oregon's vibrant rural culture and farm economy.

Farmers market incentive programs work to increase quality of life for low-income Oregonians, reduce healthcare costs for those Oregonians most likely to receive subsidized healthcare, capture federal SNAP dollars that would otherwise leave the state with minimal impact to be recycled in Oregon's economy, and support small farms as they grow and create jobs.

Future Potential

At the present moment farmers markets are largely seen in the American public consciousness as being the realm of the wealthy, health nuts, and white people. To some extent this can be explained by the fact that successful farmers markets are often located in high-income areas that may lack good public transportation or just feel “unwelcoming” to low-income shoppers. Some of this may also come from the fact that low-income shoppers often have more pressing demands on their time and money than more affluent shoppers, and need to be able to buy non-food items in the same trip at low cost. Farmers markets and organic produce are often derided as being “too expensive” by people who don't patronize them, but as Goddeeris et al found, nearly two thirds of SNAP recipients shopping at farmers markets said that prices were no higher than the supermarket, while three quarters said that selection and quality were better. In developing countries, on the other hand, there may not be any supermarkets, but there are sure to be farmers markets. This is because a full and thriving farmers market can be completely set up in two hours and taken down in an hour without the need for any fixed infrastructure and associated overhead.

We suggest that farmers markets could be used to begin addressing the issue of food deserts in cities quickly and cheaply with a few small tweaks from how they are typically organized now. These

suggestions are based in issues we observed as vendors in past years at the Woodlawn Farmers Market in Portland's rapidly gentrifying historically black Woodlawn neighborhood and at the Rockwood Farmers Market in Gresham's Rockwood neighborhood, one of the poorest and most racially diverse neighborhoods in Oregon.

1. Working with local businesses and community groups to identify local food deserts that are located near mass transit routes and businesses selling essential non-produce items, and once an area has been identified working with these stakeholders to identify peak traffic times and unmet consumer demand around which to structure the market. A 2013 study found that 35% of Surveyed SNAP customers at farmers markets planned to shop at nearby businesses, with an average estimated expenditure of \$33 (Community Science, 2013)
2. Hiring a market manager who is part of the community to be served. This will make the market manager more able to anticipate and respond to the needs of the market's potential consumer base, and minimize their social distance from local business and community leaders.
3. Recruiting as many vendors as possible from the local community. In communities of color this may be challenging as in 2014 98% of US farmland was owned by white people who collected 97% of farm profits (Horst & Marion, 2018). We believe that this should be viewed as an opportunity to address historic inequities with beneficial economic impact, rather than as an insurmountable barrier.
4. Making basic healthy dry/processed foods and essential sundries available at market if no nearby local business already sells them. A market could do this either by allowing local vendors to buy these wholesale and resell them at a reasonable price or, with a small endowment, the market could purchase these wholesale and hire local community members to sell them during market.
5. Advertising market incentives!!!

Markets in these food deserts would be perfectly situated to maximize the benefits outlined in the previous sections of this paper most particularly reductions in subsidized healthcare costs and economic stimulus in areas that need it the most.

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