

# The Economic Impact of Farm-to-School Lunch Programs: A Central Minnesota Example

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# Introduction

- Goal: Local foods into school lunchrooms
- Current research on economic impact is limited – focus only on grower impact
- What is the potential economic impact of farm-to-school programs in Central Minnesota?



# History of Project

- Initiated by a group of interested partners in Central MN
- Needed to determine potential availability and potential use of local foods before economic impact
- Graduate student hired



# Food Service Directors

- Interviewed 3 in the area with a range of experience with and interest in farm-to-school
- What foods willing to use?
- In what volume, form and at what price?



# School Utilization Scenarios

<b>Special Meal</b>	All schools in region source local farm products for a special meal once per month
<b>Unprocessed Substitution</b>	All schools in region source only those products which can be directly used by schools and require no processing
<b>Substitute All</b>	All schools in region source all the available farm products and processing is done by farmers
Developed by University of Minnesota Department of Applied Economics	



# Local Producers

- Interviewed 11 local growers who had previous experience in farm-to-school or who expressed interest
- What foods willing to produce?
- In what volume, form and at what price?



# Price Scenarios

<b>Farm Price</b>	Schools pay the current price received by farmers for their product. Generally this is higher than the price schools currently pay the wholesaler.
<b>School Price</b>	Schools pays farmers the same price they currently pay their wholesaler for the same product. This is generally lower than farmers currently receive.
<b>Intermediate Price</b>	Schools pay farmers a price midway between the current price they pay and the current price farmers receive.
Developed by University of Minnesota Department of Applied Economics	



# Targeted Farm-to-School Foods

- Carrots
- Sweet Corn
- Potatoes
- Apples
- Cabbage
- Beef Hot Dogs
- Oatmeal
- Wild Rice



Potential Farm Product Consumed (in dollars) by Utilization Scenario

Utilization Pricing	Special Meal School Price	Special Meal Farm Price	Special Meal Intermediate Price
<b>Carrots/Whole</b>	\$2,261	\$1,145	\$1,703
<b>Carrots/Processed</b>			
<b>Carrots/Canned</b>			
<b>Carrots/Frozen</b>			
<b>Sweet Corn/Shucked</b>			
<b>Sweet Corn/Unshucked</b>	\$2,717	\$1,167	\$1,942
<b>Potatoes/Russet</b>	\$2,974	\$6,736	\$4,855
<b>Apples</b>	\$3,296	\$3,222	\$3,259
<b>Cabbage/Whole</b>	\$1,381	\$1,125	\$1,253
<b>Cabbage/Shredded</b>			
<b>Beef Hot Dogs</b>	\$5,009	\$8,393	\$6,701
<b>Oatmeal</b>	\$1,057	\$1,243	\$1,150
<b>Wild Rice</b>	\$896	\$1,196	\$1,046
<b>TOTAL</b>	<b>\$19,592</b>	<b>\$24,227</b>	<b>\$21,910</b>
<b>% of Annual Budget</b>	<b>0.47%</b>	<b>0.58%</b>	<b>0.52%</b>

Estimates by University of Minnesota Department of Applied Economics  
 Table replicated from "Farm-to-School in Central Minnesota – Applied Economic Analysis"



# Economic Impact

## Considerations:

- Impact on local growers
- Impact on households
- Impact on current wholesaler



# Farm Price

- Farmers positively impacted equal to new sales to schools
- Wholesalers negatively impacted equal to amount of sales lost
- Households negatively impacted in amount equal to price differential
- Farmers' proprietary income increased to account for profit



# School Price

- Farmers positively impacted equal to new sales to schools
- Wholesalers negatively impacted equal to amount of sales lost
- Farmers' proprietary income decreased to account for lost profit



# Intermediate Price

- Farmers positively impacted equal to new sales to schools
- Wholesalers negatively impacted equal to amount of sales lost
- Households negatively impact by half of price differential
- Farmers' proprietary income decreased to account for lost profit



# Results - Special Meal

Economic Impact of Farm-to-School Programs in Central Minnesota: Special Meal				
	Direct Effect	Indirect Effect	Induced Effect	Total Effect
Farm Price	\$20,381	\$3,693	-\$1,191	\$22,882
		=2,502		
Intermediate Price	\$18,085	\$3,167	\$103	\$21,355
School Price	\$15,795	\$2,673	\$1,479	\$19,948
		=4,152		
Estimates by the University of Minnesota Extension Center for Community Vitality				



# Economic Impact Conclusions

- Total economic impact of farm price is always highest
- Direct and indirect effects are maximized under the school price scenario
- Mix of foods used affects the impact of the program



# Conclusions

- First study to attempt to consider effects on wholesalers and households
- Future research should look at changes in farmer behavior (production functions)
- How farm-to-school program is crafted does matter in terms of the local economy

