Economic Impact of FY 2020 Ohio Food Program, Agricultural Clearance Program, & Executive Order Programs

Prepared for the Ohio Association of Foodbanks

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I. Overview

In state fiscal year 2020, funding was provided for a series of programs to enhance the availability of fresh fruits, vegetables, protein items and shelf staple items to Ohio's 12 Feeding America foodbanks. The two largest programs are the Ohio Food Program which focuses on protein and shelf staple items, and the Agricultural Clearance Program which directs agricultural surplus items from Ohio farmers and growers to the foodbanks. These programs were funded at a combined total of \$24.55 million in FY 2020. The state also provided \$2.8 million in funding for summer meal programs. These programs typically include the Summer Weekend Meal "Backpack" program (which provides weekend meals for children attending summer school), the Summer Rural Delivery Meals Program (which provided eligible families in rural communities with home delivered meal boxes), and the Mobile Farmers Market Program (which provided fresh fruits and vegetables and popular protein items such as peanut butter to families in the Summer Weekend and Rural Delivery programs). However, funding for the summer meal programs in FY 2020 was folded into the Ohio Food Program as the Backpack program was implemented on only a limited basis in FY 2020 while the Rural Delivery and Mobile Farmers Market programs were not held because of the COVID pandemic.

In addition, in FY 2020, an additional \$4.97 million in state funding was provided via an Executive Order from Governor Mike DeWine for purchase of emergency food supplies as a result of the impact of the COVID-19 pandemic. The additional funding provided through the Executive Order was supplemented by a \$1 million Federal Emergency Management Agency (FEMA) grant for additional emergency food purchases. Total funding for all of Ohio's food programs in FY 2020 was \$33.33 million.

Not only do these programs play a vital role in providing much-needed support to Ohio families struggling with the impact of poverty and the continued slow recovery from the recession, but these programs also provide an additional benefit to the state in terms of supporting Ohio's agricultural sector. This report provides a summary of the economic impact of these programs on the state economy.

II. Direct Economic Impact of Ohio Food Support Programs

Table 1 on the following page provides an overview of expenditures, food purchased, and meals provided through each of the three Ohio food support programs in fiscal year 2020.

The data in Table 1 (provided by the Ohio Association of Foodbanks) summarizes the *direct economic impact* of the three food support programs in Ohio. 55.3 million pounds of food was purchased at a total cost of \$21.0 million – a roughly 15% increase compared

to FY 2019. This food is sufficient to provide 46.1 million meals to needy families through Ohio's network of foodbanks (note that based on calculations made by the U.S. Dept. of Agriculture, 1.20 lbs of food is considered to constitute 1 meal). When storage, packing, distribution, and administrative costs are included, total food support program expenditures total over \$25.5 million in FY 2020. The direct economic impact of the food support programs includes the meals provided as well as the income received by the food producers, storage, packing and distribution providers, and administrators of the programs.

Measure	FY20 Ohio Food Program*	FY20 Ag. Clearance Program	FY20 FEMA Emergency Food Program	FY20 Total State Food Support
Total Cost of Food Purchased	\$12,767,384	\$7,355,761	\$905,859	\$21,029,004
Total Pounds of Food Purchased	22,085,573	32,159,776	1,028,752	55,274,101
# of Meals Provided	18,404,644	26,799,813	857,293	46,061,750
Storage, Packing & Distribution Costs	\$1,673,252	\$1,198,410	NA	\$2,871,662
Administrative Costs	\$1,032,006	\$612,248	NA	\$1,644,254
Total Program Costs	\$15,472,642	\$9,166,419	\$905,859	\$25,544,920

Table 1: Summary of Ohio Food Support Programs, FY 2020

* FY20 Summer Food Programs were combined with the Ohio Food Program due to the COVID-19 pandemic.

III. Economic Multiplier Effects

In addition to direct impact, all economic activity also produces indirect and induced effects that are the result of "economic multiplier effects". Multiplier effects are the result of additional expenditures made by those who are suppliers for the food support programs, as well as from purchases made by those who derive income directly or indirectly from the food support programs in Ohio. For example, when a farmer purchases fertilizers for his crops from an Ohio crop nutrient supplier, this supplier will earn profits, make investments in his or her business, and hire employees. These types of effects are termed *indirect economic impact*. In addition, the supplier's employees in turn spend the money they have earned on other items in the local economy, providing additional economic impact, which is termed *induced economic impact*. Finally, the merchants whose goods are purchased by these employees also enjoy an increase in their income, which begins another round of economic "ripple effects".

The economic ripple effects created by the three Ohio food support programs can be measured by using standard economic multiplier models. Multiplier models allow researchers to compute the indirect and total economic impact resulting from a particular economic initiative or industry based upon the inputting of the initial data reflecting the direct economic benefits of the initiative or industry in question. This analysis uses the RIMS II Multiplier Model developed by the U.S. Department of Commerce Bureau of Economic Analysis (BEA). This model is based on national and regional economic data, which is periodically updated by the BEA. The RIMS II model is the most widely used model of its type in the country. The most current RIMS II multipliers available are based upon 2012 national data and 2018 regional data.

A. Agricultural Clearance Program

Table 2 provides a slightly more detailed overview of the direct economic impact of the Agricultural Clearance Program. The BEA economic multiplier model utilizes different multipliers for different categories of farm products. Table 2 also shows that 27.2 million (82%) of the total 32.2 million in produce purchased through the ACP was from Ohio farms in FY 2020 at an expenditure of \$5.82 million, which was 79% of the total \$7.35 in ACP food purchases in FY 2020.

Table 2: Agricultural Clearance Program Total and Ohio-Sourced FY 2020 Fruit,
Vegetable, and Other Food Purchases

Commodity	Total Pounds Purchased	Total Cost	Ohio Pounds Purchased	Ohio ACP Cost
Vegetables & Melons	30.0 million	\$6.70 million	25.4 million	\$5.31 million
Fruit & Berries, Eggs & Protein	2.2 million	\$0.65million	2.16 million	\$0.51 million
Total	32.2 million	\$7.35 million	27.2 million	\$5.82 million

The data in Tables 1 and 2 can be used with the RIMS II multiplier model in order to compute the total (direct + indirect) economic of the Agricultural Clearance Program on Ohio's economy in FY 2020. In order to compute the economic impact, the economic multipliers will only be applied to the \$5.82 million in Ohio-based ACP purchases. Table 3 provides a summary of this impact, showing the direct and indirect economic impact on output in the state of Ohio as well as the income generated, and number of jobs created.

Agricultural Clearance Program	Direct Economic Impact	Indirect Economic Impact	Total Economic Impact
Food Purchases			
Total Value of Output	\$7.4 Million		
Value of Ohio Output	\$5.8 Million	\$5.2 Million	\$11.0 Million
Income			\$3.0 Million
Employment			155 Jobs
Storage, Distribution &			
Administration			
Value of Output	\$1.8 million	\$2.1 million	\$3.9 million
Income			\$1.2 million
Employment			27 jobs
Ag Clearance Total			
Value of Output	\$7.6 million	\$7.3 million	\$14.9 million
Income			\$4.2million
Employment			182 jobs

 Table 3: FY 2020 Economic Impact of the Ohio Agricultural Clearance Program

The data in Table 3 show that the \$5.8 million of direct food purchases from Ohio providers through the Agricultural Clearance Program in FY 2020 led to an additional \$5.2 million in output produced across the state, for a total increase in output of \$11.0 million. \$3.0 million in additional income was generated across the state, and 155 jobs were created. In addition, \$1.8 million of expenditures on storage, packing, distribution, and administration resulted in an additional \$2.1 million in output across the state, along with \$1.2 million in additional income and 27 additional jobs. In sum, in addition to providing 26.8 million meals to needy Ohioans in FY 2020, the Agricultural Clearance Program also added a total of \$14.9 million in output across Ohio, generated \$4.2 million in income, and led to the creation of 182 jobs.

B. Ohio Food Program

Table 4 shows the results of applying the RIMS II economic multiplier models to the data in Table 1 relating to the Ohio Food Program. The multipliers for the BEA economic category "Community food, housing, and other relief services" were used to compute the economic impact of the Ohio Food Program as these commodities were not purchased from farmers, as is the case with the Agricultural Clearance Program. In addition, not all food purchased under the Ohio Food Program is from Ohio providers. FY 2020 Ohio Association of Foodbanks data showed that \$6,235,325 of OFP food purchases were from Ohio providers. Economic multiplier effects will be computed based on the Ohiosourced purchases only. Note that the economic impact from storage, packing, distribution, and program administration activities was identical under the two programs. The economic impact of the Ohio Food Program in FY 2020 is shown in Table 4.

Ohio Food Program	Direct Economic Impact	Indirect Economic Impact	Total Economic Impact
Food Purchases			
Total Value of Output	\$12.8 Million		
Value of Ohio Output*	\$6.2 Million	\$7.4 Million	\$13.1 Million
Income			\$3.9 Million
Employment			127 Jobs
Storage, Distribution &			
Administration			
Value of Output	\$1.8 million	\$2.1 million	\$3.9 million
Income			\$1.2 million
Employment			27 jobs
OH Food Program Total			
Value of Output	\$8.0 million	\$9.5 million	\$17.0 million
Income			\$5.1 million
Employment			154 jobs

Table 4: FY 2020 Economic Impact of the Ohio Food Program

* The FY20 cost of \$6.2 million in OFP Ohio-sourced food purchases is based on data from the Ohio Association of Foodbanks.

The data in Table 4 show that the \$6.2 million of direct food purchases from Ohio providers through the Ohio Food Program in FY 2020 led to an additional \$7.4 million in output produced across the state, for a total increase in output of \$13.1 million. \$3.9 million in additional income was generated across the state, and 127 jobs were created. In addition, \$1.8 million of expenditures on storage, packing, distribution, and administration resulted in an additional \$2.1 million in output across the state, along with \$1.2 million in additional income and 27 additional jobs. In sum, in addition to providing 18.4 million meals to needy Ohioans in FY 2020, the Ohio Food Program added \$17.0 million in output across Ohio, generated \$5.1 million in income, and led to the creation of 154 jobs.

C. Summer Backpack, Emergency Executive Order, and FEMA Food Assistance Programs.

Table 5 shows the results of applying the RIMS II economic multiplier models to the data in Table 1 relating to the Summer Backpack Program and the COVID-related Emergency Executive Order and FEMA grants provided in FY 2020. These additional food programs were largely rolled into the Ohio Food Program but the Ohio-sourced purchases from these programs were not included in the figures shown in Table 4 above. The analysis of these supplemental food assistance programs used the same multipliers as were used to estimate the impact of the Ohio Food Program. A total of \$2,334,986 in additional food assistance was purchased through Ohio suppliers as result of these additional funds. Economic multiplier effects are computed based on the Ohio-sourced purchases only. The data in Table 5 show that the \$2.3 million of direct food purchases from Ohio providers through the Summer Backpack, Executive Order and FEMA programs in FY 2020 led to an additional \$3.1 million in output produced across the state, for a total increase in output of \$5.4 million. \$1.6 million in additional income was generated across the state, and 52 jobs were created. When the \$895,000 in operational and program administration expenditures are included, the FY 2020 Backpack, Executive Order and FEMA programs added a total of \$7.3 million in output across Ohio, generated \$2.2 million in income, and led to the creation of 65 jobs.

Backpack, FEMA and Executive Order	Direct Economic Impact	Indirect Economic Impact	Total Economic Impact
Food Purchases			
Total Value of Output	\$6.2 Million*		
Value of Ohio Output	\$2.3 Million	\$3.1 Million	\$5.4 Million
Income			\$1.6 Million
Employment			52 Jobs
Packaging, Distribution			
& Administration			
Value of Output	\$0.9 million	\$1.0 million	\$1.9 million
Income			\$0.6 million
Employment			13 jobs
Additional Food Total			
Value of Output	\$3.2 million	\$4.1 million	\$7.3 million
Income			\$2.2 million
Employment			65 Jobs

 Table 5: FY 2020 Economic Impact of Summer Backpack Program, Emergency

 Executive Order and FEMA Grant

* \$6.2 Million is based on \$4.97 million total of the Executive Order + \$1 million FEMA Grant + \$269,000 spent on the backpack program (the remainder of FY 2020 summer funding was included in the Ohio Food Program figures shown in Table 4.

D. FY 2020 Ohio Food Assistance Program Summary

Table 6 below shows the cumulative economic impact when all of the State's FY 2020 food assistance programs shown in Tables 3, 4 and 5 are added together. Table 6 includes the Ohio-based purchases from:

- 1) The Agricultural Clearance Program
- 2) The Ohio Food Program
- 3) The Summer Backpack Program
- 4) The Executive Order for Emergency Food Purchases relating to the COVID-19 pandemic
- 5) The \$1 million FEMA grant for food purchases relating to the COVID-19 pandemic

All Ohio Food Assistance Programs	Direct Economic Impact	Indirect Economic Impact	Total Economic Impact
Food Purchases			
Total Value of Output	\$26.4 Million		
Value of Ohio Output	\$14.4 Million	\$15.7 Million	\$29.5 Million
Income			\$8.6 Million
Employment			335 Jobs
Transportation, Storage			
& Administration			
Value of Output	\$4.5 Million	\$5.2 Million	\$9.7 Million
Income			\$2.9 Million
Employment			66 Jobs
Food Assistance Totals			
Total Value of Output	\$30.9 Million		
Value of Ohio Output	\$18.9 Million	\$20.9 Million	\$39.2 Million
Income			\$11.5 Million
Employment			401 Jobs

 Table 6: FY 2020 Total Economic Impact of All Ohio Food Assistance Programs

The data in Table 6 show that the \$26.4 million of direct food purchases through the Agricultural Clearance Program, the Ohio Food Program, the Backpack program, the Emergency Executive Order ,and the FEMA grant in FY 2020 included \$14.4 million of food purchases made from Ohio providers. These Ohio-sourced food purchases led to an additional \$15.7 million in output produced across the state, for a total increase in output of \$29.5 million. \$8.6 million in additional income was generated across the state, and 335 jobs were created. When expenditures on storage, packing, distribution, and program administration are included, the FY 2020 Agricultural Clearance Program Ohio Food Program, Backpack program, Executive Order and FEMA grant added \$39.2 million in output across Ohio, generated \$11.5 million in income, and led to the creation of 401 jobs, in addition to the direct benefits of providing 46.1 million meals to needy Ohioans.