Contribution of Wheat Production to the Washington Economy T. Randall Fortenbery* and Timothy P. Nadreau**

Washington agriculture is one of the more diverse agricultural sectors in the United States. The total value of Washington agricultural production in 2014 was \$10.1 billion. Animals and their products accounted for just under \$3 billion, and Crops represented another \$7.2 billion. Fifty-five different commodities were produced in the state but the top 16 accounted for over 90% of total production value. Apples (18.7%), milk (16%), cattle (9.3%), and wheat (8.2%) were the top four revenue generating agricultural commodities in Washington. Wheat has also consistently ranked between the number 1 and number 4 agricultural export over the last several decades.

Washington's wheat production value in 2014 was roughly \$715 million, with about 88 percent being exported. As a result, the economic impacts of wheat production are substantial for the state as a whole, and are particularly important to rural areas in Eastern Washington. This summary highlights some of the more important contributions of wheat producers to the State of Washington.

Note from Table 1 that the total value of the State's wheat operations in 2014 was \$1.3 billion, and supported nearly 7,000 Washington jobs. This occurred despite 2014 wheat sales slipping nearly 30% due to lower wheat prices (Table 2 and Figure 1).

Table 1

Output and employment contributions of wheat production to the Washington economy 2014

Washington Wheat Exports	\$625,500,000
Indirect Output (earned from business to business transactions)	\$459,750,300
Induced Output (earned from spending for personal activity)	\$172,587,300
TOTAL ECONOMIC OUTDUT	¢1 257 027 (00
TOTAL ECONOMIC OUTPUT	\$1,257,837,600
	\$1,257,837,000
Direct Employment	\$1,257,837,800 1,904

TOTAL EMPLOYMENT 6,860

Source: WSU SES IMPACT Center

wheat acres, yield, production, prices, and value from 2010 - 2014							
Year	Acres harvested (000)	Yield (bu/acre)	Bushels Produced (000)	Price (\$/bu)	Value Produced (000)		
2010	2,285	64.7	147,890	\$6.24	\$925,265		
2011	2,345	71.6	167,880	\$6.80	\$1,134,673		
2012	2,165	66.6	144,125	\$8.06	\$1,162,209		
2013	2,175	66.9	145,530	\$6.97	\$1,014,032		
2014	2,250	48.2	108,460	\$6.59	\$714,858		

Table 2 Wheat acres, yield, production, prices, and value from 2010 - 2014

Source: USDA ERS & NASS

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By exporting \$625.5 million of wheat in 2014, Washington's wheat farmers added nearly \$1.3 billion to the state economy. This occurred in two ways: farmer purchases of farm business inputs (everything from seed and fertilizer to business services including accounting and legal fees), and the personal purchases of both farmers and their employees (eating in local restaurants, attending a local sporting event or movie theatre, etc.). As illustrated in Table 1, wheat farmer's purchases of business inputs, and subsequent business-tobusiness sales, generated \$459.8 million of economic activity in 2014. Thus, every new dollar coming into the state because of wheat exports contributed an additional \$0.73 in spending by businesses supporting the needs of wheat farms and their business partners.

In addition to providing revenue to other businesses through business-to-business transactions, sales were also generated through wheat farmers and their employees purchasing personal products and services. The value of offfarm purchases by Washington wheat producers and their employees generated another \$172.6 million in 2014. This translates to about \$0.30 of additional businesses activity from serving the needs of the households of farm employees. All total then, every dollar from wheat exports resulted in another \$1.03 in economic activity throughout the state, much of in it in the rural communities where the grain producers operate.

The decline in wheat production between 2013 and 2014, from 145 million bushels to 108 million bushels, coupled with the decline in wheat prices caused the value of exports to fall in 2014. This decline in exports caused less money to flow into the state and supported fewer workers than in previous years. Total direct employment supported by wheat exports amounted to roughly 1,900 jobs. The indirect employment stemming from the business-to-business transactions of wheat farmers and their vendors accounted for almost 3,840 additional jobs. The household-to-business transactions resulting from farmers and their employees buying personal products and services supported another 1,120 jobs. Total 2014 employment supported by the new wheat dollars in the economy amounted to 6,860 jobs (See Table 1).

