

May 2018



Agriculture and Agri-Food Labour Market Information Update

Total expenditures for labour in the farm sector:

Update to 2017





About This Report

CAHRC acknowledges the work of Ray Bollman in preparing this **Labour Market Information Update**. Questions on data sources may be directed to RayD.Bollman@sasktel.net. Any comments or discussions may be directed to Debra Hauer (Hauer@cahrc-ccrha.ca).

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Highlights

- The total expenditures for labour in the farm sector was \$5.6 billion in 2017.
- The expenditure for wages of paid employees on farms (including paid employees who are members of the farming family plus non-family individuals, including temporary foreign workers) represented 12% of farm operating expenses in 2017, at the Canada level.
- This share varied between less than 9% in each of the Prairie Provinces to 25% in British Columbia and Nova Scotia. This variation across the provinces is due, at least in part, to the different types of farming operations in each province – fruit (including vineyards) and vegetable farms in British Columbia and large mechanized grain farms in the Prairies.
- The estimated aggregate hours of paid employees, at the Canada level, has fluctuated around 300 million hours in each year since 2000. Most provinces show a generally flat trend in the calculated hours of paid work on farms. No province shows a trend of increasing hours of paid farm labour throughout the 1997 to 2017 period.

Why look at the total expenditures for labour in the farm sector?

Farm labour is becoming a constraint to growth in the agricultural sector¹

How big is the aggregate expenditures for wages by farm enterprises? Is it growing, and where?

The objective of this **LMI Update** is to update the information on the level and trend in the total farm wage expenditures in each province.

Farms are enterprises that are classified by industry sector using NAICS². Farms comprise NAICS 111 = plant production farms and NAICS 112 = animal production and aquaculture firms.

¹ Canadian Agricultural Human Resources Council. (2016) **Agriculture 2025: How the Sector's Labour Challenges Will Shape Its Future** (Ottawa: CAHRC) (http://www.cahrc-ccrha.ca/sites/default/files/files/Labour-Employment/NAT_reportE_final.pdf).

² NAICS is the North American Industry Classification System. For further information see Statistics Canada. (2007) **North American Industry Classification System: 2007** (Ottawa: Statistics Canada, Catalogue no. 12-501) (http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?lang=eng&catno=12-501-X).

Findings³

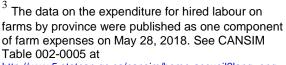
Figure 1

In 2017, the aggregate expenditure for wages and salaries paid to employees on farms was \$5.6 billion at the Canada level (Figure 1). This includes both wages paid to family members and wages paid to non-family employees, including temporary foreign workers.

The expenditure for wages has increased continuously in current dollars (i.e. without an adjustment for inflation).

We then calculated an approximate aggregate hours of work by paid employees on farms by dividing the expenditure for wages by the average hourly wage rate reported by farm employees on Statistics Canada's Labour Force Survey. This calculation shows that the estimated quantity of paid hours

of work in 2017 was about 302 million



http://www5.statcan.gc.ca/cansim/home-accueil?lang=eng.

Total expenditures for farm labour were \$5.6 billion in 2017, Canada

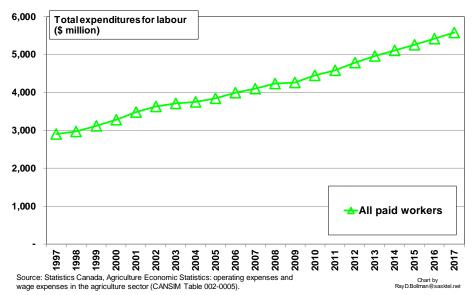
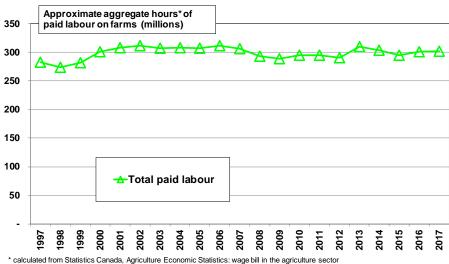


Figure 2 Approximate aggregate hours* of paid farm labour has been about 300 million hours since 2000, Canada



(CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Chart by RayD.Bollman@sasktel.net

hours of work (Figure 2). Importantly, there has been little change since 2000 in the estimate aggregate hours of work by paid employees (family members plus non-family individuals, including temporary foreign workers).

Six provinces show a general flat trend in the calculated approximate hours of paid labour on farms (Newfoundland and Labrador, Nova Scotia, Quebec, Manitoba, Alberta and British Columbia). See Charts in Appendix A. Three provinces have a general, albeit slight, downward trend in aggregate hours of paid work on farms (Prince Edward Island, New Brunswick and Ontario). No province shows an upward trend throughout the 20-year period from 1997 to 2007 although Saskatchewan shows a downward trend for the first 10 years and then an upward trend for the next 10 years – but only back to the level in 2001-2002.

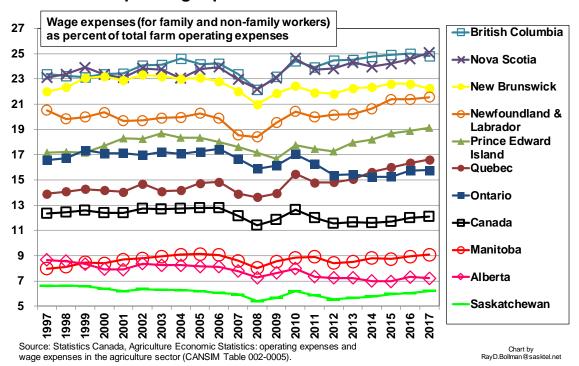
In 2017, wages for paid employees represented 12% of farm operating expenses, at the Canada level (Figure 3). This share has fluctuated between 11% and 13% during the period from 1997 to 2017.

The share of farm operating expenses paid to hired workers is higher in British Columbia and in each of the four Atlantic Provinces. In 2017, 25% of farm operating expenses in both British Columbia and Nova Scotia were paid to hired workers.

In each of the Prairie Provinces, the expenditure on wages for paid employees represented no more than 9% of farm operating expenses during the 1997 to 2017 period.

The share is lower in the Prairie Provinces due to the mechanization of grain production (e.g., large tractors, large air seeders, large combines) and this also means that there are relatively more self-employed farmers relative to paid employees on farms in these provinces.

Figure 3 Wages and salaries for paid labour represent 25% of farm operating expenses in British Columbia and Nova Scotia



Summary

The total expenditures for labour in the farm sector were \$5.6 billion in 2017. These expenditures include wages paid to members of the farming family plus wages paid to non-family individuals, including temporary foreign workers.

The expenditure for wages of paid employees on farms represented 12% of farm operating expenses in 2017, at the Canada level.

This share varied between less than 9% in each of the Prairie Provinces to 25% in British Columbia and Nova Scotia. This variation across the provinces is due, at least in part, to the different types of farming operations in each province – fruit (including vineyards) and vegetable farms in British Columbia and large mechanized grain farms in the Prairies.

The estimated aggregate hours of paid employees, at the Canada level, has fluctuated around 300 million hours in each year since 2000. Most provinces show a generally flat trend in the calculated hours of paid work on farms. No province shows a trend of increasing hours of paid farm labour throughout the 1997 to 2017 period.

Appendix A: Charts by Province

Figure A1

Total expenditures for farm labour were \$27 million in 2017, Newfoundland and Labrador

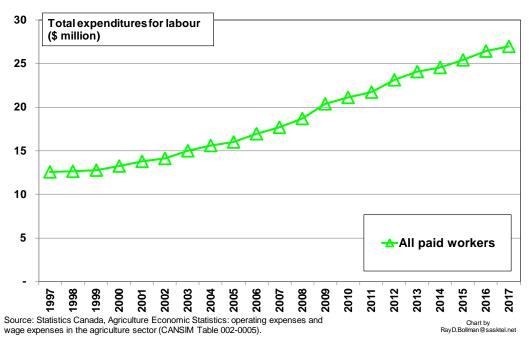
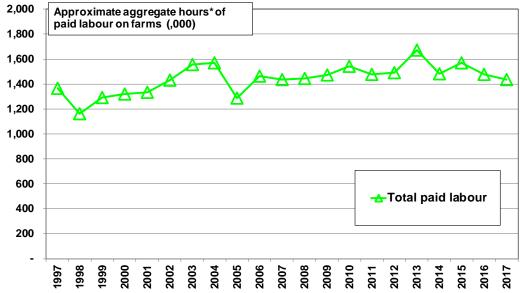


Figure A2

Approximate aggregate hours* of paid farm labour, Newfoundland and Labrador



^{*} calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A3

Total expenditures for farm labour were \$76 million in 2017, Prince Edward Island

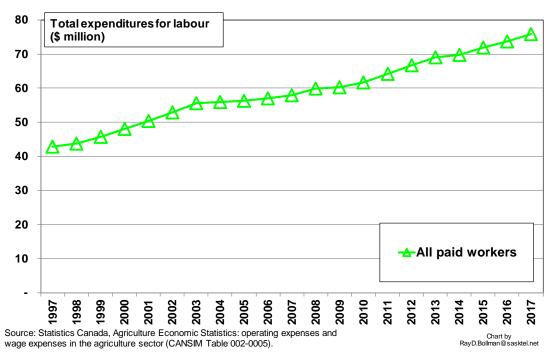
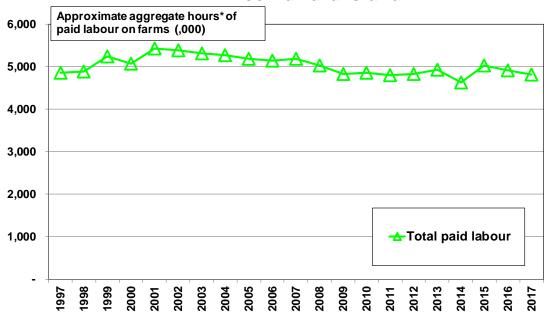


Figure A4

Approximate aggregate hours* of paid farm labour, Prince Edward Island



^{*} calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A5

Total expenditures for farm labour were \$131 million in 2017, Nova Scotia

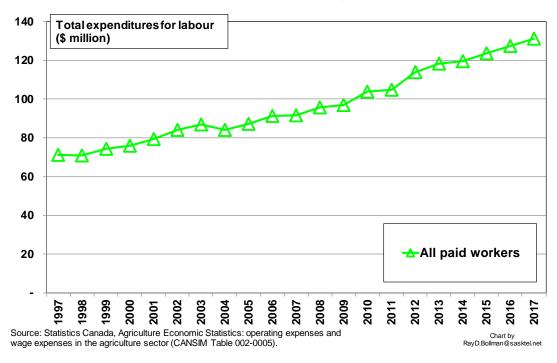
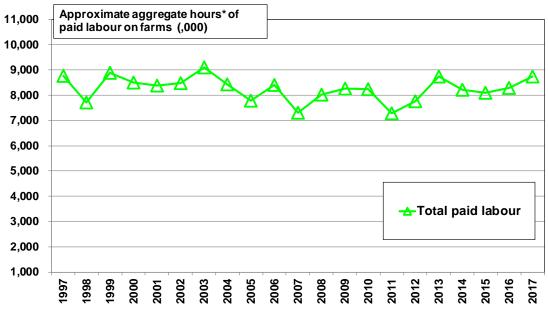


Figure A6

Approximate aggregate hours* of paid farm labour, Nova Scotia



* calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A7

Total expenditures for farm labour were \$103 million in 2017, New Brunswick

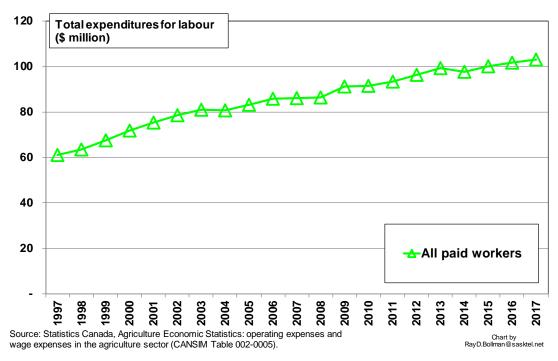
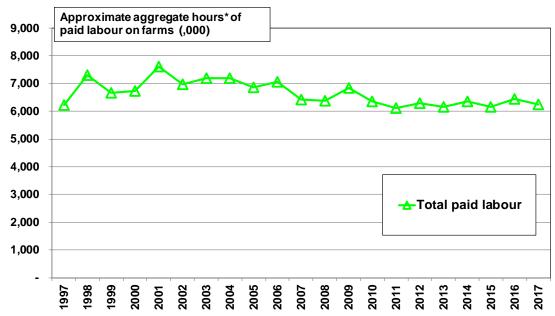


Figure A8

Approximate aggregate hours* of paid farm labour, New Brunswick



* calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A9

Total expenditures for farm labour were \$1.1 billion in 2017, Quebec

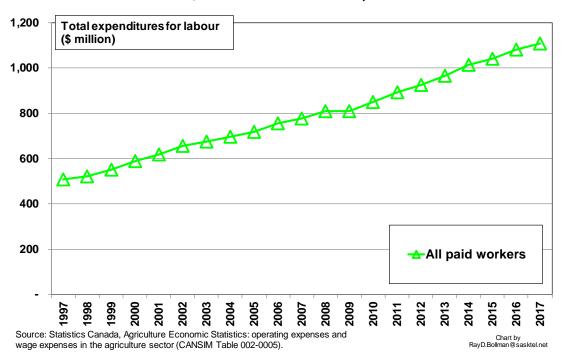
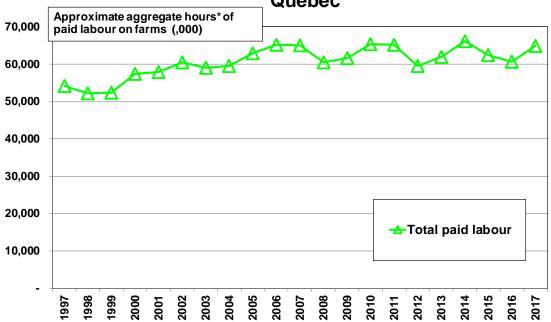


Figure A10

Approximate aggregate hours* of paid farm labour, Quebec



^{*} calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A11

Total expenditures for farm labour were \$1.7 billion in 2017, Ontario

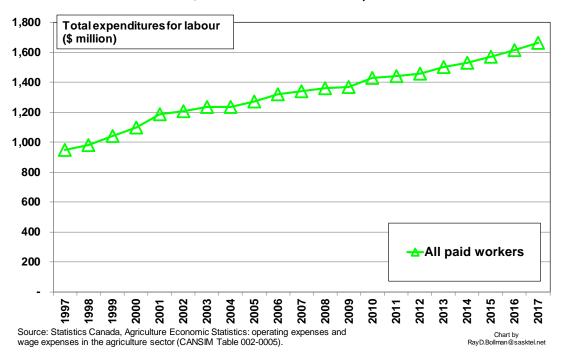
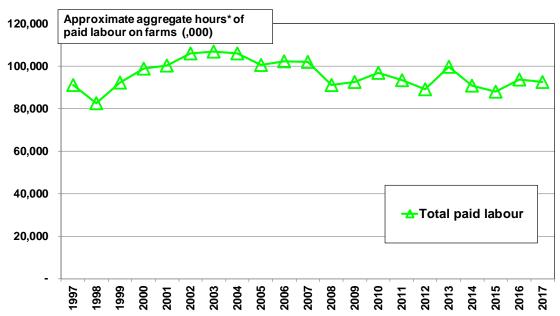


Figure A12

Approximate aggregate hours* of paid farm labour, Ontario



* calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A13

Total expenditures for farm labour were \$441 million in 2017, Manitoba

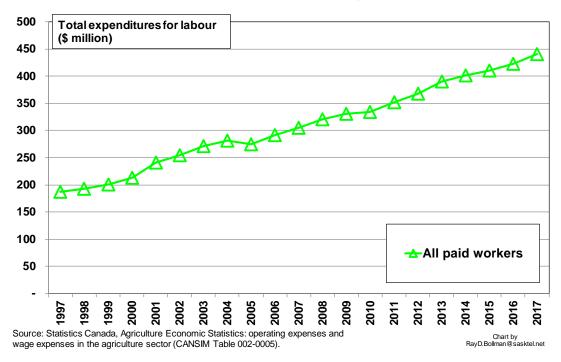
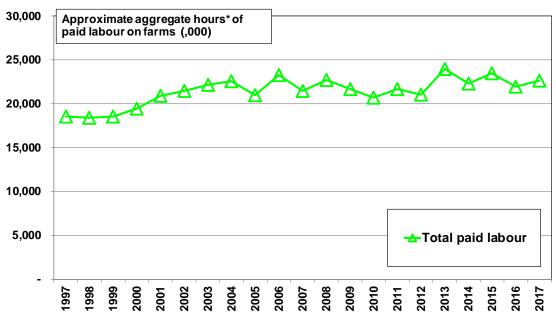


Figure A14

Approximate aggregate hours* of paid farm labour,

Manitoba



^{*} calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A15

Total expenditures for farm labour were \$577 million in 2017, Saskatchewan

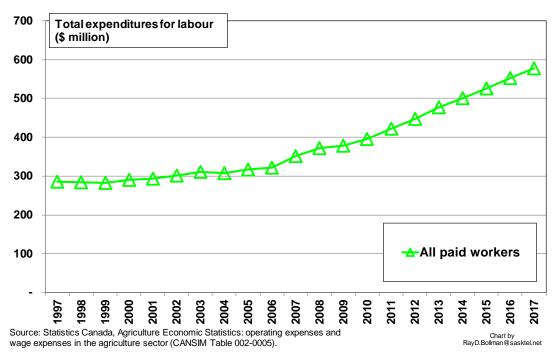
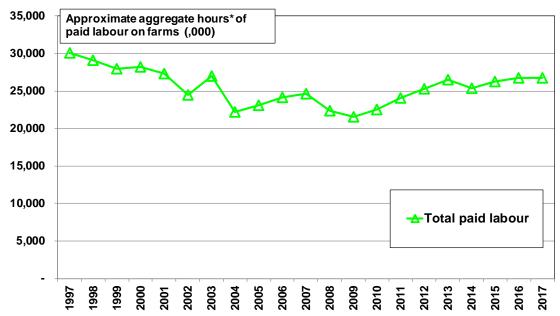


Figure A16

Approximate aggregate hours* of paid farm labour, Saskatchewan



* calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A17

Total expenditures for farm labour were \$758 million in 2017, Alberta

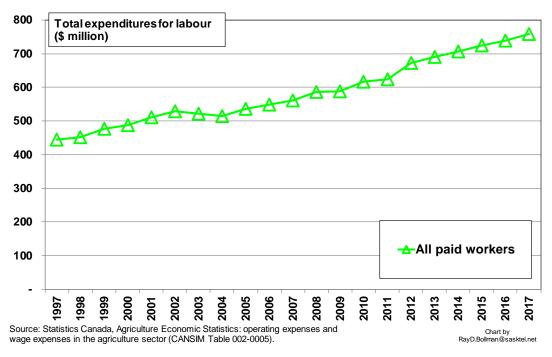
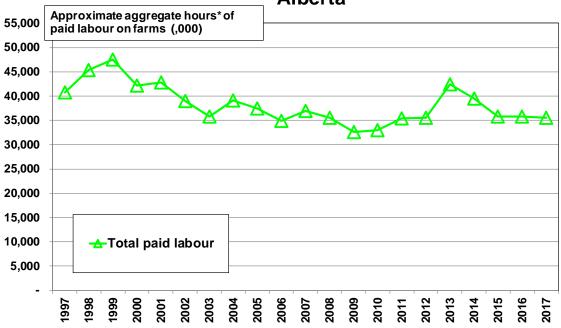


Figure A18

Approximate aggregate hours* of paid farm labour, Alberta



^{*} calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Figure A19

Total expenditures for farm labour were \$692 million in 2017, British Columbia

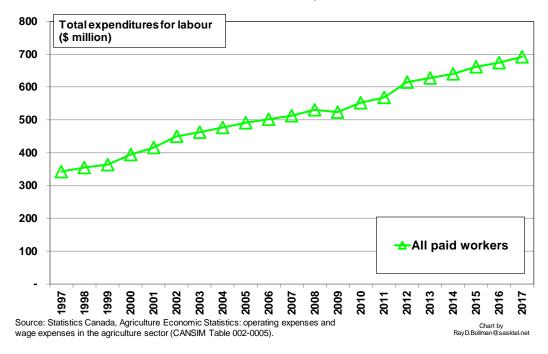
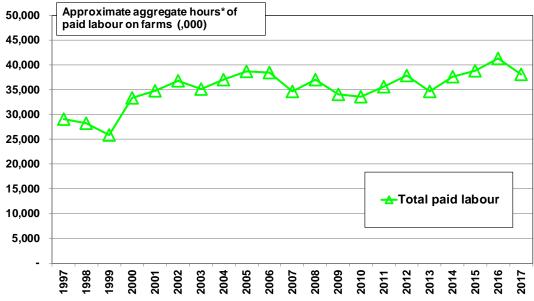


Figure A20

Approximate aggregate hours* of paid farm labour, British Columbia



* calculated from Statistics Canada, Agriculture Economic Statistics: wage bill in the agriculture sector (CANSIM Table 002-0005) divided by Statistics Canada, Labour Force Survey, average wage of paid employees in agriculture (CANSIM Table 282-0072).

Appendix B, Table B1

Appendix b	•	ie D		0	D '	10	074-004	-													
Total expenditures for		the farm	sector,	Canada a		nces, 19	2003		2005	2006	2007	2000	2000 1	2040 I	2011	2012	2012	2014	2015	2016	2017
	1997	.000			2001	LUUL	2000	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
0	Aggregate								0.651	0.000	4404	4.000	4.00=	4.450	4.500	4 =00	4.000	F 407	F 050	F	
Canada Newfoundland & Labrador	2,900	2,975	3,117	3,281	3,485	3,628	3,712	3,749	3,851	3,989	4,104 18	4,239 19	4,267 20	4,456 21	4,588 22	4,786 23	4,962 24	5,107 25	5,253 25	5,416 26	5,579 27
Prince Edward Island	13 43	13 44	13 46	13 48	14 50	14 53	15 56	16 56	16 56	17 57	58	60	60	62	64	23 67	69	70	25 72	26 74	76
Nova Scotia	71	71	74	76	79	84	87	84	87	91	92	96	97	104	105	114	118	120	124	127	131
New Brunswick	61	64	67	72	75	79	81	81	83	86	86	86	91	92	93	96	99	98	100	102	103
Quebec	507	522	552	590	618	658	674	698	718	755	778	809	810	851	894	925	967	1,015	1,041	1,082	1,109
Ontario	947	979	1,041	1,096	1,188	1,205	1,234	1,234	1,270	1,320	1,340	1,360	1,367	1,428	1,443	1,457	1,501	1,531	1,569	1,616	1,665
Manitoba	187	192	200	213	241	254	271	281	275	292	305	321	331	334	352	368	390	402	410	422	441
Saskatchewan	285	284	282	290	294	301	311	308	317	321	352	372	378	395	422	448	477	501	526	552	577
Alberta	444	452	477	488	510	529	521	515	536	549	562	586	589	617	623	673	690	707	725	740	758
British Columbia	343	355	364	395	415	451	463	477	492	501	513	530	524	553	569	615	627	639	662	675	692
	AVERAGE annual hourly wages for full-time (i.e., 30 or more hours per week) paid workers on farms, 15 years and over, both sexes (CANSIM 282-0072)																				
Canada																\$18.49					
Newfoundland & Labrador	\$9.23	\$10.90	\$9.91	\$10.02	\$10.32	\$9.89	\$9.64	\$9.93	\$12.47	\$11.62	\$12.30	\$12.94	\$13.82	\$13.69	\$14.72	\$15.49	\$14.39	\$16.56	\$16.17	\$17.85	\$18.74
Prince Edward Island	\$8.83	\$8.98	\$8.71	\$9.48	\$9.28	\$9.82	\$10.47	\$10.61	\$10.85	\$11.09	\$11.16	\$11.88	\$12.50	\$12.69	\$13.36	\$13.83	\$14.01	\$15.06	\$14.27	\$14.99	\$15.77
Nova Scotia	\$8.12	\$9.21	\$8.36	\$8.94	\$9.46	\$9.93	\$9.55	\$9.97	\$11.19	\$10.86	\$12.54	\$11.91	\$11.73	\$12.62	\$14.41	\$14.67	\$13.53	\$14.56	\$15.29	\$15.36	\$15.01
New Brunswick	\$9.80	\$8.70	\$10.13	\$10.69	\$9.88	\$11.28	\$11.27	\$11.24	\$12.11	\$12.16	\$13.42	\$13.55	\$13.35	\$14.41	\$15.28	\$15.31	\$16.08	\$15.36	\$16.24	\$15.76	\$16.49
Quebec	\$9.38	\$10.00	\$10.54	\$10.28	\$10.66	\$10.87	\$11.41	\$11.73	\$11.43	\$11.59	\$11.97	\$13.39	\$13.15	\$13.03	\$13.71	\$15.53	\$15.63	\$15.34	\$16.65	\$17.87	\$17.10
Ontario	\$10.39	\$11.87	\$11.27	\$11.08	\$11.84	\$11.35	\$11.55	\$11.64	\$12.62	\$12.92	\$13.15	\$14.91	\$14.77	\$14.72	\$15.42	\$16.32	\$15.05	\$16.83	\$17.83	\$17.22	\$17.99
Manitoba	\$10.09	\$10.44	\$10.80	\$10.95	\$11.50	\$11.86	\$12.26	\$12.48	\$13.09	\$12.55	\$14.20	\$14.13	\$15.27	\$16.12	\$16.25	\$17.48	\$16.29	\$18.03	\$17.47	\$19.22	\$19.47
Saskatchewan	\$9.47	\$9.77	\$10.10	\$10.27	\$10.75	\$12.30	\$11.50	\$13.86	\$13.73	\$13.29	\$14.30	\$16.61	\$17.54	\$17.55	\$17.58	\$17.70	\$17.98	\$19.77	\$20.02	\$20.66	\$21.57
Alberta British Columbia	\$10.89 \$11.79	\$9.96 \$12.56	\$10.04 \$14.10	\$11.57 \$11.85	\$11.92 \$11.95	\$13.56 \$12.26	\$14.54 \$13.16	\$13.19 \$12.89	\$14.29 \$12.72	\$15.73 \$13.04	\$15.23 \$14.82	\$16.51 \$14.30	\$18.05 \$15.40	\$18.71 \$16.47	\$17.64 \$15.99	\$18.94 \$16.24	\$16.26 \$18.09	\$17.92 \$16.99	\$20.24 \$17.03	\$20.69 \$16.32	\$21.35 \$18.16
									•		\$14.82	\$14.30	\$15.40	\$16.47	\$15.99	\$16.24	\$18.09	\$10.99	\$17.03	\$10.32	\$10.10
	Approxima							amily mer	•												
Canada	282.4	274.2	282.3	301.3	307.9	311.6	307.1	308.6	307.3	311.7	306.0	293.2	288.9	294.7	295.2	290.9	309.9	303.8	295.1	301.2	301.7
Newfoundland & Labrador	1.4	1.2 4.9	1.3	1.3	1.3	1.4	1.6	1.6 5.3	1.3	1.5	1.4	1.4	1.5 4.8	1.5 4.9	1.5 4.8	1.5 4.8	1.7 4.9	1.5	1.6	1.5 4.9	1.4
Prince Edward Island Nova Scotia	4.9 8.8	4.9 7.7	5.2 8.9	5.1 8.5	5.4 8.4	5.4 8.5	5.3 9.1	5.3 8.4	5.2 7.8	5.1 8.4	5.2 7.3	5.0 8.0	4.8 8.3	4.9 8.2	7.3	4.8 7.8	4.9 8.8	4.6 8.2	5.0 8.1	4.9 8.3	4.8 8.7
New Brunswick	6.2	7.7	6.7	6.7	7.6	7.0	7.2	7.2	6.9	7.1	6.4	6.4	6.8	6.4	6.1	6.3	6.2	6.4	6.2	6.4	6.3
Quebec	54.1	52.2	52.4	57.3	57.9	60.5	59.1	59.5	62.9	65.1	65.0	60.4	61.6	65.3	65.2	59.6	61.9	66.2	62.5	60.6	64.9
Ontario	91.1	82.5	92.3	98.9	100.4	106.2	106.8	106.0	100.6	102.2	101.9	91.2	92.6	97.0	93.6	89.3	99.7	91.0	88.0	93.9	92.5
Manitoba	18.5	18.4	18.5	19.5	20.9	21.4	22.1	22.6	21.0	23.3	21.5	22.7	21.7	20.7	21.7	21.1	23.9	22.3	23.5	22.0	22.7
Saskatchewan	30.1	29.1	27.9	28.2	27.4	24.5	27.0	22.2	23.1	24.2	24.6	22.4	21.5	22.5	24.0	25.3	26.5	25.3	26.3	26.7	26.7
Alberta	40.8	45.3	47.6	42.2	42.8	39.0	35.8	39.0	37.5	34.9	36.9	35.5	32.6	33.0	35.3	35.6	42.4	39.5	35.8	35.7	35.5
British Columbia	29.1	28.2	25.8	33.3	34.8	36.8	35.2	37.0	38.7	38.4	34.6	37.1	34.0	33.5	35.6	37.8	34.7	37.6	38.9	41.4	38.1
	Total opera			er rebates	•	•															
Canada	23,511	23,933	24,737	26,465	28,124	28,463	29,243	29,407	30,096	31,171	33,756	37,128	36,079	35,324	38,300	41,404	42,664	43,962	44,837	45,067	46,169
Newfoundland & Labrador Prince Edward Island	61 249	64 255	64 266	65 272	70 276	72 290	75 298	78 305	79 307	85 317	95 329	102 348	104 361	103 348	109 367	115 387	119 385	119 383	119 384	124 390	125 397
Nova Scotia	308	304	311	326	343	353	366	365	367	382	400	431	420	346 422	367 442	478	365 487	363 499	511	519	523
New Brunswick	277	284	292	310	329	337	349	351	360	377	391	411	418	408	426	441	445	437	443	449	463
Quebec	3,649	3,707	3,865	4,160	4,399	4,475	4,777	4,925	4,875	5,088	5,590	5,940	5,817	5,499	6,047	6,242	6,425	6,502	6,511	6,620	6,676
Ontario	5,712	5,851	6,000	6,406	6,942	7,099	7,169	7,224	7,359	7,573	8,050	8,553	8,466	8,392	8,869	9,469	9,727	10,055	10,286	10,267	10,556
Manitoba	2,343	2,372	2,364	2,538	2,771	2,895	3,040	3,099	3,011	3,223	3,551	3,999	3,869	3,776	3,951	4,372	4,578	4,563	4,694	4,719	4,857
Saskatchewan	4,320	4,293	4,284	4,551	4,764	4,747	4,929	4,888	5,132	5,301	5,927	6,880	6,661	6,380	7,221	8,077	8,403	8,690	8,820	9,167	9,285
Alberta	5,127	5,276	5,718	6,148	6,459	6,321	6,324	6,235	6,569	6,756	7,227	8,071	7,702	7,735	8,492	9,313	9,537	10,131	10,412	10,114	10,496
British Columbia	1,465	1,527	1,573	1,689	1,772	1,873	1,917	1,937	2,037	2,070	2,195	2,392	2,262	2,261	2,377	2,510	2,558	2,582	2,658	2,700	2,791
	Expenditu			•	ent of tota	•	• .	ses after r	ebates	40	40	44	10	40	10	40	10	10	10	10	40
Canada	12	12	13	12	12	13	13	13	13	13	12	11	12	13	12 20	12	12	12	12	12	12
Newfoundland & Labrador Prince Edward Island	21 17	20 17	20 17	20 18	20 18	20 18	20 19	20 18	20 18	20 18	19 18	18 17	20 17	20 18	20 17	20 17	20 18	21 18	21 19	21 19	22 19
Nova Scotia	23	23	24	23	23	18 24	19 24	23	18 24	18 24	23	22	23	18 25	24	24	18 24	24	24	19 25	25
New Brunswick	23	23	23	23	23	23	23	23	23	23	22	21	23	22	22	22	22	22	23	23	22
Quebec	14	14	14	14	14	15	14	14	15	15	14	14	14	15	15	15	15	16	16	16	17
Ontario	17	17	17	17	17	17	17	17	17	17	17	16	16	17	16	15	15	15	15	16	16
Manitoba	8	8	8	8	9	9	9	9	9	9	9	8	9	9	9	8	9	9	9	9	9
Saskatchewan	7	7	7	6	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6
Alberta	9	9	8	8	8	8	8	8	8	8	8	7	8	8	7	7	7	7	7	7	7
British Columbia	23	23	23	23	23	24	24	25	24	24	23	22	23	24	24	24	25	25	25	25	25
Source: Statistics Canada					Table 002-																

Source: Statistics Canada, Agriculture Economic Statistics, CANSIM Table 002-0005.