2018 Agricultural Peak Employment Wage and Practices Survey Results

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Executive summary

Background

The Washington State Employment Security Department's (ESD) Labor Market and Economic Analysis (LMEA) division has conducted an agricultural wage and practice survey annually since 2015, surveying for occupations and activities for which employers have requested temporary foreign laborers through the agricultural recruitment system (ARS). Prior to 2015, LMEA conducted an agricultural wage and practice survey on a biennial basis for select agricultural commodities.

During spring 2016, LMEA began modifications to the annual Agricultural Peak Employment Wage and Practice Employer survey. In addition, in line with U.S. Department of Labor (USDOL) and Employment Training Administration (ETA) Handbook 385 guidance, LMEA developed an Agricultural Peak Employment Wage and Practice Worker survey, and established a methodology for comparing employer and worker survey responses.

Role of State Employment Security Agencies

USDOL provides funding to State Employment Security Agencies (SESAs) to conduct surveys that help its regional offices establish prevailing wages and prevailing or normal and common practices in agriculture. The guidelines to conduct these surveys are contained in ETA Handbooks 385 and 398. ETA Handbook 385 requires SESAs to conduct a prevailing wage survey for any agricultural activity or occupation to which one or more of the following conditions apply:

1. One hundred or more workers were employed in the previous season, or are expected to be employed in the current season;
2. Foreign workers were employed in the previous season, or employers have requested or may be expected to request foreign workers in the current season, regardless of the number of workers involved;
3. The crop activity has an unusually complex wage structure, or there are other factors affecting the prevailing wage which can best be determined by a wage survey; or
4. The crop or crop activity has been designated by the national office as a major crop or crop activity either because of the importance of the production of this crop to the national economy or because large numbers of workers are employed in the crop activity in a number of different areas in the country (ETA Handbook 385, p. I-115).

Key findings

The 2018 Agricultural Peak Employment Wage and Practice Surveys received 48.44 percent and 42.91 percent response rates for the employer and worker surveys respectively, this equates to 781 eligible employers and 1,833 workers responding to the surveys.

In addition, the 2018 prevailing wage finding process identified 306 different combinations of agricultural commodity-activity wage structures, 71 of these combinations meet or exceed USDOL thresholds for wage determinations. Of the 71 combinations of commodity-activity-wage structures that meet USDOL determination thresholds 33 are for apple activities, 5 are for berry activities, 26 are for cherry activities and 7 are for pear activities. Only two commodity-activity wage structures that meet USDOL determination thresholds increased from the previous 2017 iteration wage finding process. These commodity-activity wage structures are Bartlett-Pear-Harvesting, $25 per bin (+$3.00 per bin) and Skeena-Cherry-Harvesting, $0.20 per pound (+$0.03 per pound).

Moreover, no employment practices measures, to include experience requirements, the provision of family housing and minimum productivity standards, passed the prevailing practices or normal and common practices thresholds as the majority of employer survey responses indicated that all three employment practices were either not applicable or skipped the questions..

2018 results

Employer estimates

For estimating the total number of employers to have participated in the production of a given agricultural commodity and employed migrant or seasonal laborers LMEA utilized a log-linear approach to an abundance estimator known as a capture-recapture estimator[1].

This type of population estimator has three general requirements:

1. At least two capture occasions are necessary to generate an estimate. An example of this would be having at least two agricultural survey iteration results available and in the same structural format;
2. The capture occasions occur over a relatively short period of time; and
3. All occasions of the search procedure (e.g., survey iterations) remain conceptually equivalent.

Additionally, this type of estimator takes three universal assumptions:

1. The population in question is finite;
2. Immigration into the population area is negligible. An example of this would be the number of new agricultural employers established on a yearly basis is small; and
3. Mortality rates are negligible, meaning the number of agricultural employers going out of business is small.

Procedurally, this approach to population estimation enables the determination of the probability of employers to experience responding to a survey iteration and therefore the expected number of employers, with regard to a given agricultural commodity, can be formulated and re-expressed as a log-linear model. This model re-expression then allows the fitting of specific linear regressions that have the capacity to estimate the number of employers that did not respond to a survey iteration, controlling survey nonresponse and producing a population estimate of the total number of employers participating in the production of a particular agricultural commodity.

Figure 1 details the models chosen to generate employer populations by agricultural commodity, metrics to assess model fit and 95 percent confidence intervals for each commodity. 2015, 2017 and 2018 employer survey iterations were used to generate employer estimates.

Figure 1. 2018 employer estimates
Washington state, 2019
Source: Employment Security Department/LMEA, 2015, 2017, 2018 Agricultural Wage and Practice Employer Surveys

Commodity	Estimation model	Employer estimate	Standard error	Confidence interval (95%)	AIC*	BIC**
Apple	Mth - Chao	1,210	66	1,092 – 1,352	76	99
Apple, ambrosia	Mt	72	64	21 - > 215	21	24
Apple, braeburn	Mt	191	84	93 - 548	30	38
Apple, cripps pink	Mt	171	58	97 - 376	33	41
Apple, fuji	Mth - Chao	731	131	529 – 1,071	48	65
Apple, gala	Mt	911	80	773 - 1091	61	77
Apple, golden delicious	Mt	545	52	457 - 664	52	67
Apple, granny smith	Mt	491	73	374 - 673	41	54
Apple, honeycrisp	Mt	686	90	540 - 904	51	65
Apple, red delicious	Mt	599	67	488 - 756	49	64
Berry	Mt	333	33	279 - 409	54	67
Berry, blueberry	Mt	214	32	164 - 294	41	52

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[1] For more detailed information see: Rivest, L.P. & Baillargeon, S. (2007). "Rcapture: Loglinear Models for Capture-Recapture in R". *Journal of Statistical Software,* 19(5).

Berry, raspberry		Mt	149	26	110 - 219	56	65
Berry, strawberries		Mh - Poisson	18	17	18 - 29	26	29
Cherry		Mth - Chao	1,047	61	939 - 1179	83	105
Cherry, dark red		Mt	745	57	647 - 871	57	73
Cherry, lapin		Mt	226	38	168 - 326	36	46
Cherry, red		Mt	810	86	665 - 1010	60	75
Cherry, skeena		Mt	250	57	169 - 414	33	44
Cherry, sweetheart		Mt	407	86	280 - 646	37	49
Cherry, yellow		Mt	525	57	430 - 659	49	63
Pear		Mt	717	50	629 - 828	62	78
Pear, bartlett		Mt	678	62	572 - 820	62	77
Pear, bosc		Mt	354	65	255 - 525	36	48
Pear, d'anjou		Mt	500	55	409 - 629	47	61

*Akaike information criterion
**Bayesian information criterion

Employment estimates

The estimation method used for the 2018 survey iteration to estimate total employment by commodity-activity is an iterative proportional fitting procedure, more commonly referred to in survey analysis as a raking algorithm[2].

The raking algorithm chosen to estimate total employment by commodity-activity incrementally post-stratifies employer survey responses so that the marginal totals from the survey match (equal) specified marginal control totals, where the sample marginal totals would be the number of employers responding for a particular commodity and the control marginal total are defined as the employer population estimates detailed previously. The raking procedure then results in the production of calibration weights to adjust reported employment. These weights are then multiplied by the reported employment for a given commodity-activity to generate total estimated employment levels.

Figure 2 shows the resulting total estimated employment levels by commodity-activity and density for which LMEA could generate an estimate and fulfill USDOL determination requirements[3]. Additionally *Figure 2* shows total reported employment and percent reported employment by commodity-activity and density.

Figure 2. 2018 employment estimates by commodity-activity
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer Survey

Commodity	Activity	Density	Total reported employment	Total estimated employment	Percent reported employment	USDOL threshold	Determination
Apple	Harvesting	All	9,932	65,358	15%	15%	Yes
Apple	Harvesting	High	1,745	11,895	15%	15%	Yes
Apple	Harvesting	Low	2,527	9,973	25%	15%	Yes
Apple	Harvesting	Medium	2,021	12,663	16%	15%	Yes
Apple	Harvesting-color-pick	All	4,652	29,924	16%	15%	Yes
Apple	Harvesting-color-pick	High	1,200	7,728	16%	15%	Yes
Apple	Harvesting-color-pick	Low	839	2,614	32%	20%	Yes
Apple	Harvesting-color-pick	Medium	1,181	7,563	16%	15%	Yes
Apple	Harvesting-stem-clip	All	3,129	21,524	15%	15%	Yes
Apple	Harvesting-stem-clip	High	468	3,155	15%	15%	Yes

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[2] For more detailed information see: Lumley, T. (2004). "Analysis of complex survey samples". *Journal of Statistical Software, 9(1), 1-19.*

[3] For employment estimates that did not meet USDOL thresholds see *Figure 2* in the supplementary attachment

Apple	Harvesting-stem-clip	Low	369	916	40%	40%	Yes
Apple	Harvesting-strip-pick	All	7,628	52,094	15%	15%	Yes
Apple	Harvesting-strip-pick	Low	1,917	7,929	24%	15%	Yes
Apple	Pruning	All	2,139	11,865	18%	15%	Yes
Apple	Thinning	All	1,482	4,266	35%	15%	Yes
Apple, ambrosia	Harvesting	All	543	3,577	15%	15%	Yes
Apple, ambrosia	Harvesting-strip-pick	All	543	3,577	15%	15%	Yes
Apple, cripps pink	Harvesting	All	694	4,134	17%	15%	Yes
Apple, fuji	Harvesting	Medium	487	3,194	15%	15%	Yes
Apple, gala	Harvesting	High	654	4,101	16%	15%	Yes
Apple, gala	Harvesting	Low	782	2,702	29%	20%	Yes
Apple, gala	Harvesting-color-pick	High	498	2,201	23%	20%	Yes
Apple, golden delicious	Harvesting	Low	1,003	4,926	20%	15%	Yes
Apple, golden delicious	Harvesting-strip-pick	All	3,153	20,359	15%	15%	Yes
Apple, golden delicious	Harvesting-strip-pick	Low	920	4,685	20%	15%	Yes
Apple, granny smith	Harvesting	Low	592	3,439	17%	15%	Yes
Apple, granny smith	Harvesting	Medium	501	3,296	15%	15%	Yes
Apple, granny smith	Harvesting-strip-pick	Low	522	3,155	17%	15%	Yes
Apple, honeycrisp	Harvesting	Low	576	2,331	25%	20%	Yes
Apple, honeycrisp	Harvesting	Medium	638	4,099	16%	15%	Yes
Apple, red delicious	Harvesting	Low	1,195	7,592	16%	15%	Yes
Apple, red delicious	Harvesting	Medium	500	3,019	17%	15%	Yes
Apple, red delicious	Harvesting-strip-pick	Low	1,093	7,221	15%	15%	Yes
Berry	Harvesting	All	2,989	12,106	25%	15%	Yes
Berry, blueberry	Harvesting	All	1,786	5,622	32%	15%	Yes
Berry, raspberry	Harvesting	All	1,013	3,356	30%	15%	Yes
Berry, strawberry	Harvesting	All	458	549	83%	50%	Yes
Berry, strawberry	Packing	All	180	180	100%	100%	Yes
Cherry	Harvesting	All	13,449	40,573	33%	15%	Yes
Cherry	Harvesting	High	1,608	4,986	32%	15%	Yes
Cherry	Harvesting	Low	3,457	10,704	32%	15%	Yes
Cherry	Harvesting	Medium	4,149	12,577	33%	15%	Yes
Cherry	Pruning	All	1,945	5,861	33%	15%	Yes
Cherry	Pruning	Medium	503	1,497	34%	30%	Yes
Cherry	Thinning	All	366	1,032	35%	35%	Yes
Cherry, dark red	Harvesting	All	9,716	29,698	33%	15%	Yes
Cherry, dark red	Harvesting	High	867	2,409	36%	20%	Yes
Cherry, dark red	Harvesting	Low	2,928	8,128	36%	15%	Yes
Cherry, dark red	Harvesting	Medium	2,824	8,577	33%	15%	Yes
Cherry, lapin	Harvesting	All	2,310	8,785	26%	15%	Yes
Cherry, lapin	Harvesting	Medium	584	2,056	28%	25%	Yes
Cherry, red	Harvesting	All	5,173	31,850	16%	15%	Yes
Cherry, red	Harvesting	High	833	5,272	16%	15%	Yes
Cherry, red	Harvesting	Medium	1,794	11,089	16%	15%	Yes
Cherry, skeena	Harvesting	All	2,792	9,832	28%	15%	Yes
Cherry, skeena	Harvesting	High	458	1,542	30%	30%	Yes
Cherry, skeena	Harvesting	Medium	722	2,434	30%	20%	Yes
Cherry, sweetheart	Harvesting	All	4,060	17,543	23%	15%	Yes
Cherry, sweetheart	Harvesting	High	606	2,653	23%	20%	Yes
Cherry, sweetheart	Harvesting	Medium	1,598	6,901	23%	15%	Yes

Cherry, yellow	Harvesting	All	4,411	16,246	27%	15%	Yes
Cherry, yellow	Harvesting	High	563	2,225	25%	20%	Yes
Cherry, yellow	Harvesting	Low	981	3,529	28%	15%	Yes
Cherry, yellow	Harvesting	Medium	899	3,341	27%	15%	Yes
Pear	Harvesting	All	3,350	20,090	17%	15%	Yes
Pear	Harvesting	High	760	2,111	36%	20%	Yes
Pear	Harvesting	Low	916	4,409	21%	15%	Yes
Pear	Thinning	All	471	2,246	21%	20%	Yes
Pear, bartlett	Harvesting	All	2,837	17,419	16%	15%	Yes
Pear, bartlett	Harvesting	High	559	1,619	35%	25%	Yes
Pear, bartlett	Harvesting	Low	668	2,803	24%	20%	Yes

Prevailing wage rates

Figure 3 presents prevailing wages for those commodity activities for which LMEA could generate an estimate and a determination from the results of the 2018 Agricultural Peak Employment Wage and Practice Employer Survey. When prevailing wages are hourly rates lower than the AEWR, employers must pay hired laborers through the ARS or H-2A program the current AEWR. According to federal guidelines, employers who hire laborers through the ARS or the H-2A program can pay the AEWR or the prevailing piece rate to those laborers engaged in commodity activities for which the prevailing wage is a piece rate. Regardless of which pay rate they use, employers who use the ARS or H-2A program to hire laborers must ensure their average hourly wage rate in a given week is equal to or greater than the AEWR, further details on the prevailing wage finding process can be found in *Appendix 1*.

During the summer of 2018, LMEA held stakeholder focus groups with representatives from the agricultural industry in order to further identify factors that may have potential to affect wage rates being paid to those participating in specific commodity-activities. The outcome of these focus groups led LMEA to include two additional questions to the 2018 employer survey. These questions asked respondents to report more specific activities related to apple harvesting and report specific orchard densities for all apple, cherry and pear activities.[4] The addition of these two questions substantially increased the number of different combinations of commodity-activity wage structures reported to the employer survey while drastically reducing the number of commodity-activity wage structures that would qualify for a determination. To accommodate this inverse relationship LMEA, with consultation from USDOL, identified aggregated, or high, levels of commodity-activity wage structures resulting in 306 different combinatory wage structures, of which 71 combinations met or exceeded USDOL wage determination thresholds. *Figure 3* contains four combination levels of commodity-activity wage structures, ranging from generalized high levels (e.g., apple-harvesting-all densities) to detailed low levels (e.g., apple-red delicious-harvesting strip pick-low densities) that all qualify for wage determinations.

For piece rate wages, LMEA surveyed for hourly earnings guarantee, which is the minimum an employer must pay to an agricultural laborer, regardless of activity or amount of work, and the dimension of the base wage unit. For apple and pear base wage units, reported dimensions and base wages were normalized to meet the industry standard linear bin dimension (47" x 47" x 24.5") recorded and identified in 2018 employer job orders. When a reported linear bin dimension differed from the standard linear bin dimension, the cubic inches for the differing linear bin were calculated and the base wage reported was adjusted proportionally to meet the standard linear bin dimension. When bin dimensions were reported by weight LMEA identified the most common bin weight from the 2018 Agricultural Peak Employment Wage and Practice Employer Survey and equated it to the standard linear bin dimension given the commodity in question. The most common bin weights reported were 900 pounds and 1,000 pounds for apples and pears respectively. This enabled LMEA to proportionally adjust the base wage for bin

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[4] Commodity specific harvesting activities and orchard density definitions can be found in *Appendix 3* of this report

dimensions reported by weight to meet the standard linear bin dimension. The result of normalizing base wages and wage unit dimensions drastically increased the number of employers represented in the prevailing wage finding process on average by 43 percent[5].

Figure 3. 2018 prevailing wage rates*
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer Survey

Commodity	Activity	Density	Prevailing wage	Base wage	Wage unit	Hourly guarantee	Dimension	Bonus amount	Bonus unit
Apple	Harvesting	All	$24.50	$24.50	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting	High	$16.00	$16.00	Hour	N/A	N/A	$0.00	No Bonus
Apple	Harvesting	Low	$23.00	$23.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting	Medium	$25.00	$25.00	Bin	$13.00	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-color-pick	All	$27.56	$27.56	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-color-pick	High	$16.00	$16.00	Hour	N/A	N/A	$0.00	No Bonus
Apple	Harvesting-color-pick	Low	$26.00	$26.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-color-pick	Medium	$29.36	$29.36	Bin	$14.12	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-stem-clip	All	$27.00	$27.00	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-stem-clip	High	$26.00	$26.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-stem-clip	Low	$14.00	$14.00	Hour	N/A	N/A	$0.00	No Bonus
Apple	Harvesting-strip-pick	All	$24.50	$24.50	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple	Harvesting-strip-pick	Low	$23.40	$23.40	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple	Pruning	All	$12.50	$12.50	Hour	N/A	N/A	$0.00	No Bonus
Apple	Thinning	All	$13.00	$13.00	Hour	N/A	N/A	$0.00	No Bonus
Apple, ambrosia	Harvesting	All	$19.00	$19.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple, ambrosia	Harvesting-strip-pick	All	$19.00	$19.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple, cripps pink	Harvesting	All	$27.00	$27.00	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple, fuji	Harvesting	Medium	$25.00	$25.00	Bin	$13.00	47x47x24.5	$0.00	No Bonus
Apple, gala	Harvesting	High	$26.00	$26.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple, gala	Harvesting	Low	$27.00	$27.00	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Apple, gala	Harvesting-color-pick	High	$39.00	$36.00	Bin	$11.50	47x47x24.5	$3.00	Bin
Apple, golden delicious	Harvesting	Low	$26.50	$25.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, golden delicious	Harvesting-strip-pick	All	$24.50	$24.50	Bin	$12.50	47x47x24.5	$0.00	No Bonus
Apple, golden delicious	Harvesting-strip-pick	Low	$26.50	$25.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, granny smith	Harvesting	Low	$26.50	$25.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, granny smith	Harvesting	Medium	$26.50	$25.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, granny smith	Harvesting-strip-pick	Low	$26.50	$25.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, honeycrisp	Harvesting	Low	$15.00	$15.00	Hour	N/A	N/A	$0.00	No Bonus
Apple, honeycrisp	Harvesting	Medium	$29.36	$29.36	Bin	$14.12	47x47x24.5	$0.00	No Bonus
Apple, red delicious	Harvesting	Low	$22.50	$21.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Apple, red delicious	Harvesting	Medium	$20.00	$20.00	Bin	$14.00	47x47x24.5	$0.00	No Bonus
Apple, red delicious	Harvesting-strip-pick	Low	$22.50	$21.00	Bin	$0.00	47x47x24.5	$1.50	Bin
Berry	Harvesting	All	$0.60	$0.60	Pound	$12.00	N/A	$0.00	No Bonus
Berry, blueberry	Harvesting	All	$0.75	$0.75	Pound	$11.50	N/A	$0.00	No Bonus
Berry, raspberry	Harvesting	All	$11.50	$11.50	Hour	N/A	N/A	$0.00	No Bonus
Berry, strawberry	Harvesting	All	$0.30	$0.30	Pound	$11.50	N/A	$0.00	No Bonus
Berry, strawberry	Packing	All	$11.75	$11.75	Hour	N/A	N/A	$0.00	No Bonus
Cherry	Harvesting	All	$0.20	$0.20	Pound	$13.00	N/A	$0.00	No Bonus
Cherry	Harvesting	High	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry	Harvesting	Low	$0.21	$0.21	Pound	$12.00	N/A	$0.00	No Bonus
Cherry	Harvesting	Medium	$0.22	$0.22	Pound	$12.00	N/A	$0.00	No Bonus

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[5] For more detailed information on the effects of normalizing prevailing wage rates see *Figure 1* in the supplementary attachment

Cherry	Pruning	All	$13.00	$13.00	Hour	N/A	N/A	$0.00	No Bonus
Cherry	Pruning	Medium	$12.00	$12.00	Hour	N/A	N/A	$0.00	No Bonus
Cherry	Thinning	All	$14.12	$14.12	Hour	N/A	N/A	$0.00	No Bonus
Cherry, dark red	Harvesting	All	$0.20	$0.20	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, dark red	Harvesting	High	$0.20	$0.20	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, dark red	Harvesting	Low	$0.21	$0.21	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, dark red	Harvesting	Medium	$0.20	$0.20	Pound	$14.12	N/A	$0.00	No Bonus
Cherry, lapin	Harvesting	All	$0.20	$0.20	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, lapin	Harvesting	Medium	$0.20	$0.20	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, red	Harvesting	All	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, red	Harvesting	High	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, red	Harvesting	Medium	$0.23	$0.23	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, skeena	Harvesting	All	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, skeena	Harvesting	High	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, skeena	Harvesting	Medium	$0.21	$0.21	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, sweetheart	Harvesting	All	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, sweetheart	Harvesting	High	$0.20	$0.20	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, sweetheart	Harvesting	Medium	$0.23	$0.23	Pound	$12.00	N/A	$0.00	No Bonus
Cherry, yellow	Harvesting	All	$0.30	$0.30	Pound	$11.50	N/A	$0.00	No Bonus
Cherry, yellow	Harvesting	High	$0.30	$0.30	Pound	$13.00	N/A	$0.00	No Bonus
Cherry, yellow	Harvesting	Low	$0.25	$0.25	Pound	$13.00	N/A	$0.00	No Bonus
Cherry, yellow	Harvesting	Medium	$0.30	$0.30	Pound	$11.50	N/A	$0.00	No Bonus
Pear	Harvesting	All	$25.04	$25.04	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Pear	Harvesting	High	$25.00	$25.00	Bin	$12.00	47x47x24.5	$0.00	No Bonus
Pear	Harvesting	Low	$25.04	$25.04	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Pear	Thinning	All	$12.00	$12.00	Hour	N/A	N/A	$0.00	No Bonus
Pear, bartlett	Harvesting	All	$25.00	$25.00	Bin	$12.00	47x47x24.5	$0.00	No Bonus
Pear, bartlett	Harvesting	High	$23.49	$23.49	Bin	$11.50	47x47x24.5	$0.00	No Bonus
Pear, bartlett	Harvesting	Low	$25.04	$25.04	Bin	$11.50	47x47x24.5	$0.00	No Bonus

*N/A means not applicable

Prevailing or normal and common employment practices

Regulations contained at 20 CFR Part 655, subpart B, and 20 CFR Part 653, subpart F, define the "prevailing" and "normal and common" practices for seasonal U.S. agricultural workers that USDOL may allow in job orders filed through the ARS.[6]

Prevailing practices

Family Housing

LMEA analyzed the provision of family housing first by crop-variety-activity to identify if there was notable distinction. As those specific crop-variety-activities received similar responses with regard to the provision of family housing, LMEA grouped crop varieties when arraying the data for family housing analysis. For those commodity-activity combinations which had a sufficient sample size LMEA found no variation in the results. It follows that the provision of family housing is not a prevailing practice. *Figure 4* illustrates the percent of estimated employment and employers reported in order to dictate a prevailing practice.

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[6] For more information see *Appendix 2* of this report

Figure 4. 2018 provision of family housing*
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer Survey

Commodity	Activity	Density	Housing	Housing amount (per week)	Percent of estimated employment reported	Percent estimated employers reported
Apple	Harvesting	All	No	N/A	11.46%	21.78%
Apple	Harvesting	All	Missing	Missing	2.27%	5.15%
Apple	Harvesting	All	Yes	$0.00	1.32%	3.52%
Apple	Pruning	All	No	N/A	11.98%	21.69%
Apple	Pruning	All	Missing	Missing	2.69%	5.77%
Apple	Pruning	All	Yes	$0.00	2.64%	3.28%
Apple	Thinning	All	No	N/A	24.14%	24.40%
Apple	Thinning	All	Missing	Missing	5.06%	5.75%
Apple	Thinning	All	Yes	$0.00	3.77%	3.35%
Berry	Harvesting	All	No	N/A	21.39%	25.16%
Berry	Harvesting	All	Yes	$0.00	1.21%	2.38%
Berry	Harvesting	All	Missing	Missing	0.41%	4.42%
Berry	Pruning	All	No	N/A	21.46%	26.19%
Berry	Pruning	All	Yes	$0.00	1.91%	3.17%
Cherry	Harvesting	All	No	N/A	26.44%	24.40%
Cherry	Harvesting	All	Missing	Missing	3.35%	4.11%
Cherry	Harvesting	All	Yes	$0.00	1.96%	2.21%
Cherry	Harvesting	All	Yes	Missing	0.32%	0.40%
Cherry	Pruning	All	No	N/A	22.76%	23.71%
Cherry	Pruning	All	Yes	$0.00	4.35%	1.34%
Cherry	Pruning	All	Missing	Missing	3.62%	6.12%
Cherry	Thinning	All	No	N/A	31.69%	16.67%
Cherry	Thinning	All	Missing	Missing	1.74%	11.12%
Pear	Harvesting	All	No	N/A	10.97%	20.57%
Pear	Harvesting	All	Yes	$0.00	2.88%	3.43%
Pear	Harvesting	All	Missing	Missing	2.31%	4.57%
Pear	Pruning	All	No	N/A	6.90%	21.03%
Pear	Pruning	All	Yes	$0.00	4.11%	4.36%
Pear	Pruning	All	Missing	Missing	2.06%	5.14%
Pear	Thinning	All	No	N/A	11.66%	20.65%
Pear	Thinning	All	Yes	$0.00	5.39%	4.89%
Pear	Thinning	All	Missing	Missing	1.92%	3.80%

*N/A means not applicable

Normal and common practices

Experience requirements

LMEA first calculated experience requirements by commodity-activity to determine if there were differences across specific crop-variety-activities. As all specific crop-variety-activity combinations indicated "no experience requirements," LMEA grouped crop varieties when arraying the data for experience requirement analysis. It was found that there was no variation in experience requirements, and that the majority of employers included in the analysis indicated "no months required," or skipped the question. *Figure 5* details the percent of estimated employment and employers reported in order to determine a finding by months of experience required to be employed.

Commodity	Activity	Density	Experience (months)	Total reported employment	Total estimated employment	Employers reported	Estimated employers	Percent estimated employment reported	Percent estimated employers reported
Apple	Harvesting	All	0	6,279	39,361	251	801	15.02%	26.50%
Apple	Harvesting	All	1	396	1,511	29	84	0.95%	3.06%
Apple	Harvesting	All	12	140	349	8	20	0.33%	0.84%
Apple	Harvesting	All	2	109	271	7	17	0.26%	0.74%
Apple	Harvesting	All	3	97	240	6	15	0.23%	0.63%
Apple	Pruning	All	0	1,256	6,078	131	427	16.18%	23.07%
Apple	Pruning	All	1	290	1,418	34	96	3.74%	5.99%
Apple	Pruning	All	2	39	96	5	12	0.50%	0.88%
Apple	Pruning	All	12	20	49	4	10	0.26%	0.70%
Apple	Thinning	All	0	1,043	2,943	106	311	28.90%	27.75%
Apple	Thinning	All	1	143	353	17	42	3.96%	4.45%
Apple	Thinning	All	2	65	162	4	10	1.80%	1.05%
Berry	Harvesting	All	0	2,101	6,899	77	227	28.79%	29.39%
Berry	Harvesting	All	1	122	343	7	20	1.67%	2.67%
Berry	Pruning	All	0	193	563	33	97	20.75%	28.21%
Berry	Pruning	All	1	113	317	6	17	12.15%	5.13%
Cherry	Harvesting	All	0	8,742	26,678	236	748	27.43%	26.48%
Cherry	Harvesting	All	1	978	2,993	27	86	3.07%	3.03%
Cherry	Harvesting	All	12	207	650	8	26	0.65%	0.90%
Cherry	Harvesting	All	2	139	421	4	13	0.44%	0.45%
Cherry	Pruning	All	0	1,061	3,234	113	358	23.89%	23.69%
Cherry	Pruning	All	1	328	987	19	60	7.39%	3.98%
Cherry	Pruning	All	2	27	86	6	19	0.61%	1.26%
Cherry	Pruning	All	12	19	58	5	15	0.43%	1.05%
Cherry	Thinning	All	0	58	181	9	28	28.02%	26.47%
Pear	Harvesting	All	0	2,177	7,487	151	446	25.22%	28.33%
Pear	Harvesting	All	1	291	808	19	53	3.37%	3.56%
Pear	Harvesting	All	3	43	119	4	11	0.50%	0.75%
Pear	Pruning	All	0	468	1,308	82	228	26.52%	27.06%
Pear	Pruning	All	1	100	280	12	33	5.67%	3.96%
Pear	Pruning	All	24	17	47	4	11	0.96%	1.32%
Pear	Thinning	All	0	230	641	34	95	27.03%	26.36%
Pear	Thinning	All	1	51	143	7	19	5.99%	5.43%

Minimum productivity standards

For all commodity-activities with a sufficient sample size to report findings, LMEA did not have any occurrences where minimum productivity standards were normal and common, as the majority of employers either skipped the question or responded as a minimum productivity standard was not applicable. *Figure 6* shows the percent of estimated employment and employers reported for given minimum productivity standards.

Commodity	Activity	Density	Productivity standard	Productivity unit	Productivity frequency	Percent estimated employment reported	Percent estimated employers reported
Apple	Harvesting	All	N/A	N/A	N/A	14.45%	28.61%
Apple	Harvesting	All	3	Bin	Hour	0.10%	0.36%
Apple	Pruning	All	N/A	N/A	N/A	17.52%	30.84%
Apple	Thinning	All	N/A	N/A	N/A	34.15%	34.54%
Berry	Harvesting	All	N/A	N/A	N/A	21.01%	31.97%
Berry	Pruning	All	N/A	N/A	N/A	34.80%	34.12%
Cherry	Harvesting	All	N/A	N/A	N/A	30.26%	29.63%
Cherry	Pruning	All	N/A	N/A	N/A	33.18%	31.73%
Cherry	Thinning	All	N/A	N/A	N/A	35.46%	32.44%
Pear	Harvesting	All	N/A	N/A	N/A	15.12%	27.11%
Pear	Pruning	All	N/A	N/A	N/A	13.32%	30.52%
Pear	Thinning	All	N/A	N/A	N/A	20.97%	30.77%

*N/A means not applicable

Comparing employer and worker survey responses

Little guidance has been given on how to use worker survey responses to compare with employer responses. As a result, LMEA followed advice received from an email communication, dated July 8, 2016, with USDOL to determine how best to use responses. USDOL indicated that, "USDOL does not 'use' worker survey results. Worker surveys are a mechanism by which SESAs can 'validate' or 'verify' the wage survey responses that come in from the growers." LMEA's interpretation of this is that worker responses serve as a mechanism to compare employer responses and submitted ETA 232 forms are based solely on employer responses.

LMEA originally anticipated having a matched employer – employee dataset; however, changes to the worker survey questionnaire to incorporate best practices suggestions necessitated a simpler comparison involving primarily the inspection of employer and worker wage structure.

The worker sample was selected based using a simple random sampling method, where unemployment insurance (UI) claimants were identified as having worked during 2017 primarily in either North American Industry Classification System (NAICS) codes 111331 (apple orchards) and 111339 (other noncitrus fruit farming).

The 2018 worker survey was created to be administered via phone and as a field survey (paper). Unlike the 2017 worker survey the 2018 survey was not distributed via a web application as this mode yielded few responses. *Figure 7* outlines the number of workers responding by commodity and survey mode.

Figure 7. 2018 worker survey responses by commodity and survey mode
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer and Worker Survey
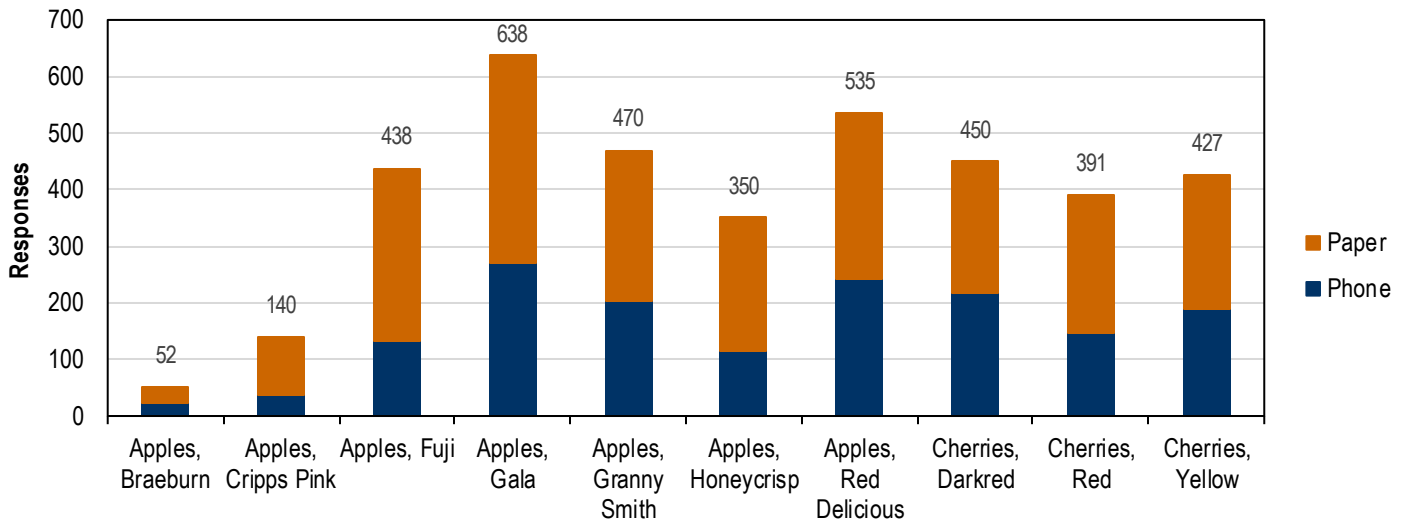
Apple and cherry wage rate and wage structure comparison

In order to draw a comparison between worker and employer wage structure responses, LMEA employed the Kruskal-Wallis rank sum test (a non-parametric ANOVA)[7]. This test does not require the assumption that the distributions follow a normal curve, nor does it assume equal variance among groups (e.g., employer and worker survey responses). Under the assumption that distribution shapes are similar between groups, the Kruskal-Wallis test serves as a sum of ranks test, where the null hypothesis is the "type" of distribution of the given groups (commodity-activity-wage structure) is the same with only a difference in their central location and therefore originate from the same population. If the samples share the same type of distribution, then the Kruskal-Wallis test can informally be considered to compare the medians; however, if the samples come from different types of distributions (e.g., one is left skewed, one is right skewed or one has a much larger variance than the other) then the Kruskal-Wallis test may imply the type of distributions are dissimilar.

For apple and cherry harvest, a standard significance level of 0.01 was chosen to assess the results of the Kruskal-Wallis test. As *Figure 8* indicates, the majority of commodity-activity-wage structures fail to reject the null hypothesis, meaning the majority of commodity-activity-wage structures between the employer and worker surveys are not significantly different with regard to the type of wage structure distribution. However, seven of the wage structures must be rejected in favor of the alternative, implying the type of distribution for these seven wage structures are dissimilar.

Figure 8. Comparison of 2018 employer and worker harvesting wage rates and wage structures
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer and Worker Surveys

Commodity-Activity-Wage Structure	P Value	Chi Square	Results	Employer Median	Worker Median
Cherries, Darkred, Piece Rate	0.000102	15.096770	Reject Null	$4.00	$4.00
Cherries, Yellow, Piece Rate	0.074105	3.189680	Fail To Reject Null	$6.00	$6.00
Cherries, Red, Piece Rate	0.035540	4.419041	Fail To Reject Null	$4.00	$4.00
Apples, Gala, Piece Rate	0.000000	84.817814	Reject Null	$25.00	$26.00
Apples, Granny Smith, Piece Rate	0.000000	44.086015	Reject Null	$24.50	$26.00

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[7] For more information see: Hollander, M. & Wolfe, D. (1973)," Nonparametric Statistical Methods". New York: John Wiley & Sons. Pages 115–120

Apples, Braeburn, Hour	0.724707	0.124027	Fail To Reject Null	$14.12	$14.12
Apples, Cripps Pink, Hour	0.000324	12.925868	Reject Null	$16.00	$14.12
Apples, Fuji, Hour	0.056889	3.625826	Fail To Reject Null	$14.12	$14.10
Apples, Gala, Hour	0.106521	2.605092	Fail To Reject Null	$14.12	$14.12
Apples, Honeycrisp, Hour	0.000000	39.067481	Reject Null	$15.00	$15.00
Apples, Honeycrisp, Piece Rate	0.000002	23.006481	Reject Null	$30.00	$36.00
Apples, Braeburn, Piece Rate	0.302424	1.063475	Fail To Reject Null	$23.00	$22.00
Apples, Fuji, Piece Rate	0.582077	0.302888	Fail To Reject Null	$28.00	$28.00
Apples, Red Delicious, Piece Rate	0.239556	1.383202	Fail To Reject Null	$20.00	$20.00
Cherries, Red, Hour	0.114997	2.484163	Fail To Reject Null	$14.00	$12.13
Cherries, Darkred, Hour	0.023475	5.132979	Fail To Reject Null	$14.12	$14.00
Apples, Cripps Pink, Piece Rate	0.145541	2.118376	Fail To Reject Null	$27.00	$30.00
Apples, Red Delicious, Hour	0.030444	4.684060	Fail To Reject Null	$14.12	$14.12
Apples, Granny Smith, Hour	0.518994	0.415892	Fail To Reject Null	$14.12	$14.00
Cherries, Yellow, Hour	0.000001	24.920479	Reject Null	$14.00	$12.88

Apple and cherry employment practices comparison

For employment practices, LMEA calculated the percent of worker reported employers where workers reported provision of family housing, experience requirements and minimum productivity standards. LMEA held this percent to the same standards as the employer responses, and determined if it fit either the double-majority rule or the 33 percent indicative of a normal and common practice.[8] The worker survey was structured for workers to report on the number of employers they worked for and the number of employers who met the conditions of each employment practice question. *Figure 9, Figure 10* and *Figure 11* detail the percent of employers reporting and worker reported employers to have indicated employment practices. Additionally, none of the worker or employer responses for employment practices were high enough to claim a prevailing practice or a practice normal and common.

Figure 9. Comparison of 2018 employer and worker family housing responses*
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer and Worker Surveys

Commodity	Housing	Housing (per week)	Percent employers reporting	Percent employers indicated by workers
Apples	Missing	Missing	16.76%	38.22%
Apples	No	N/A	70.88%	60.98%
Apples	Yes	$0.00	11.47%	N/A
Apples	Don't - know	Missing	N/A	0.19%
Apples	Yes	$10.00	N/A	0.15%
Apples	Yes	$30.00	N/A	0.19%
Cherries	Missing	Missing	13.10%	42.92%
Cherries	No	N/A	77.00%	56.53%
Cherries	Yes	$0.00	7.03%	N/A
Cherries	Yes	Missing	1.28%	N/A

*N/A means not applicable

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[8] For more information on the double majority rule or the 33 percent rule see *Appendix 2* of this report

Figure 10. Comparison of 2018 employer and worker experience requirements responses
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer and Worker Survey

Commodity	Experience (months)	Percent employers reporting	Percent employers indicated by workers
Apples	0	82.29%	88.76%
Apples	1	9.51%	7.32%
Apples	2	2.30%	0.19%
Apples	3	1.97%	0.95%
Apples	12	2.62%	0.65%
Cherries	0	84.23%	87.74%
Cherries	1	9.32%	6.92%
Cherries	2	1.43%	0.24%
Cherries	12	2.87%	0.47%

Figure 11. Comparison of 2018 employer and worker productivity standards responses *
Washington state, 2019
Source: Employment Security Department/LMEA, 2018 Agricultural Wage and Practice Employer and Worker Surveys

Commodity	Productivity	Standard	Productivity unit	Productivity frequency	Percent employers reporting	Percent employers indicated by workers
Apples	Yes	$3.00	Bin	Hour	1.18%	N/A
Apples	N/A	N/A	N/A	N/A	92.94%	85.48%
Cherries	N/A	N/A	N/A	N/A	93.29%	89.62%

*N/A means not applicable

Appendices

Appendix 1: Prevailing wage rate finding process

Prevailing wage finding process

ETA Handbook 385 provides guidelines for determining the prevailing wage in each agricultural activity or occupation. According to federal guidelines and found in *Figure 12*, the suggested sample size in terms of the percentage of total domestic employment decreases as the level of total domestic employment in each activity increases.

Figure 12. U.S. Department of Labor prevailing wage rate threshold requirements
Washington state, 2019
Source: U.S. Department of Labor, Employment and Training Administration, Handbook No. 385: p. I-114

Level of estimated employment in commodity activity area	Percent needed to make a determination
100 – 349	100%
350 – 499	60%
500 – 799	50%
800 – 999	40%
1,000 – 1,249	35%
1,250 – 1,599	30%
1,600 – 2,099	25%
2,100 – 2,999	20%
3,000 or more	15%

After collecting wage information for agricultural commodities and activities, LMEA calculates the prevailing wage rate according to one of two rules. The first is the 40 percent rule, which states that if there is one pay rate paid to 40 percent or more of domestic seasonal employment for a given commodity activity, then that rate becomes the prevailing wage. If two separate wage rates are paid to 40 percent of domestic seasonal employment for a given commodity activity, then both are considered prevailing.

The second is the 51 percent rule. This rule requires arraying wage rates in descending order and counting the cumulative level of domestic seasonal employment, until 51 percent of domestic seasonal employment is covered. If there is not a single unit of payment (e.g., hour, bin) SESAs are to determine which payment unit is applicable to the largest level of employment and then determine the prevailing wage rate according to either the 40 percent rule or the 51 percent rule.

As required by USDOL, LMEA identified the prevailing wage rates based on responses to the 2018 employer survey according to federal guidelines contained in ETA Handbook 385. Because a raking algorithm was used to estimate the level of total domestic seasonal employment, the total estimated level of domestic seasonal employment was used to identify and establish the prevailing wage rates.

Appendix 2: Estimating prevailing or normal and common practices

Per ETA Handbook 398, SESAs are required to determine the conditions of employment for U.S. seasonal workers in each agricultural activity surveyed. This portion of the survey is to ensure employers who hire foreign workers, "conform the job offer to conditions and standards which are 'prevailing,' 'normal,' or 'common' practices or standards of other employers who hire U.S. workers in the same area and in the same occupation" (ETA Handbook 398, p. II-5).

The concept of a "prevailing practice" has a specific quantitative threshold. If at least 50 percent of all employers who also employ at least 50 percent of all U.S. workers in a given activity engage in a practice, then it is prevailing.[9] This is referred to as the "double-majority" rule. The following practices are subject to the prevailing threshold:

1. The provision of family housing
2. Transportation and subsistence costs
3. Frequency of payment

However, the quantitative threshold for normal and common standards is not specified in ETA Handbook 398. Instead, normal and common are defined as:

> …situations which may be less than prevailing, but which clearly are not unusual or rare. The degree to which a practice is engaged in (or a benefit is provided) should be determined to be close to what is viewed (and measured) as "prevailing," but the degree by which the practice or benefit is measured and degree of proof needed to establish its acceptability for H-2A purposes is not as formal or stringent as "prevailing" calls for (ETA Handbook 398, p. II-7).

When setting the quantitative threshold for normal and common practices or benefits, USDOL's Regional Administrators (RA) use their discretion. The following practices are subject to the "normal and common" threshold:

1. Minimum productivity standards
2. Provision of tools and equipment
3. Occupational qualifications (e.g., experience requirements)
4. Positive recruitment of U.S. Nationals.

SESAs do not use the same sampling universe for every practice surveyed to make a prevailing or normal and common determination. Of the practices listed previously, SESAs are required to survey both H-2A and non-H-2A employers about the following:

1. Provision of tools and equipment
2. Provision of family housing
3. Frequency of payment

SESAs are required to survey only non-H-2A employers concerning the following practices:[10]

1. Transportation and subsistence costs
2. Positive recruitment of U.S. Nationals
3. Occupational qualifications

The employers to be surveyed and the threshold to be used are less clear for productivity standards. Additional guidance from USDOL led us to survey both H-2A and non-H-2A employers, and to apply the "normal and common" threshold, for productivity standards.

Prevailing practices

According to USDOL guidance, a practice or standard must apply to half of all employers who also hire half of all workers in our sample in order to be considered prevailing (the double-majority rule). The only practice or benefit

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[9] Regulatory definitions, see: 20 CFR 655.103(b) and 20 CFR 655.1300(c)

[10] For more information, see: 20 CFR 655.122, § 655.150-158, and § 655.1305

included in the 2018 survey that is subject to the prevailing threshold is the provision of family housing. For our prevailing practice recommendations, we used the same sample size rules used to estimate prevailing wages.

Family housing

LMEA, following guidance from USDOL, surveyed for all family housing offered and the cost associated on a weekly basis. ETA Handbook 398 states:

> In arriving at a determination as to whether the provision of family housing is a prevailing practice, RAs and SESAs must look beyond the threshold question on the basic availability of housing which is suitable for families. They must also determine whether it is the active practice of employers to offer this housing as a benefit to migrant workers who need and request it.

Transportation and subsistence costs and frequency of payments

ESD did not include questions about transportation and subsistence costs on the 2018 survey. ETA Handbook 398 states the following about transportation and subsistence costs:

> H-2A employers must offer to advance transportation and subsistence costs (or otherwise provide them) to U.S. workers when it is the prevailing practice of non-H-2A employers in the area and occupation to do so (or when transportation is advanced for H-2A workers) (ETA Handbook 398 p. II-10).

In addition, 20 CFR 655.1305(e)5 states:

> During the period of employment that is the subject of the labor certification application, the employer will… Provide transportation in compliance with all applicable Federal, State or local laws and regulations between the worker's living quarters (i.e., housing provided by the employer under 20 CFR 655.104(d)) and the employer's worksite without cost to the worker.

It is our understanding that the language in ETA Handbook 398 and 20 CFR 655.1305 require employers to provide advance transportation and subsistence costs. [11] Therefore, we did not survey employers about the advancement of transportation or subsistence costs in the 2018 survey.

LMEA also did not include questions related to the frequency of payment on the 2018 survey. According to 20 CFR 655.122(m):

> The employer must state in the job offer the frequency with which the worker will be paid, which may be at least twice monthly or according to the prevailing practice in the area of intended employment, whichever is more frequent.

Due to the language included in the regulation, making reference to a minimum requirement of twice a month, LMEA decided to not include questions on the 2018 survey related to the frequency of payment.

Normal and common practices

There is no quantitative threshold for normal or common practices specified in ETA Handbook 398. As a result, we followed advice received in an email communication, dated January 5, 2016, with the CNPC to arrive at our normal and common practices recommendations for minimum productivity standards and experience requirements.

According to this guidance, at least 33 percent of employers in a sample must report engaging in a practice before the practice is considered "normal and common." However, LMEA received no instruction regarding the percentage of employers who must use a specific standard (e.g., 4 bins/day, or 3 months of experience) in order to

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[11] In addition, see: 20 CFR 655.122

determine maximum allowable standards in H-2A job orders. As a result, LMEA decided that the next step should be to determine the most common quantifiable standard reported.

Minimum productivity standards

For all commodity-activities with a sufficient sample size to report findings, LMEA did not have any occurrences by commodity-activity where minimum productivity standards were normal and common, as the majority of the employers either skipped the question or answered "no."

Experience requirements

ETA Handbook 398 states that experience requirements (occupational qualifications) are subject to the normal and common threshold.

> In determining the appropriateness of occupational qualification, the Regional office should consider normal, accepted practice of non-H-2A employers in the same or comparable occupations and crops as a first step (ETA Handbook 398, pp. II-13 – II 14).

Reference checks

As of April 2019, there have been no requirements or guidelines that require a normal and common practice determination for employee references. LMEA was notified that USDOL previously challenged employers on the reference requirement issue and lost the case before an administrative law judge. The decision indicated that, if experience requirements are deemed "normal and common," the USDOL must allow employers to require a reference in their job orders when they choose to do so. Although LMEA collected information on reference checks for the 2015 survey iteration, given the administrative law judge decision that employers must be allowed to require references when they chose to, LMEA did not include the question for the 2018 surveys.

Provision of tools and the positive recruitment of U.S. Nationals

LMEA did not include questions about the provision of tools on the 2018 survey. ETA Handbook 398 states the following about the provision of tool:

> Normally, employers must provide, without charge, all tools, supplies, and equipment to the workers, if they are required to perform the tasks described in the job offer … Absent a specific, justifiable, approved request from an employer, the RA must require that employers provide necessary tools, supplies and equipment without charge to the worker (ETA Handbook 398 pp. II-9).

In addition, 20 CFR 655.122(f) states that, "The employer must provide to the worker, without charge or deposit charge, all tools, supplies, and equipment required to perform the duties assigned."

LMEA also did not include questions on the 2018 surveys related to the positive recruitment of U.S. Nationals. Since the majority of employers report bypassing the ARS for the recruitment of domestic workers, almost all job orders received in the state of Washington go through the H-2A system. We know that the recruitment of U.S. Nationals is a requirement of the H-2A system. Therefore, we did not survey employers about the positive recruitment of U.S. Nationals.

Appendix 3: Glossary of terms

<u>Harvesting – strip – picking</u>

Harvesting all fruit on every tree in the orchard.

<u>Harvesting – color –picking</u>

Selectively harvesting fruit based on color or maturity.

<u>Harvesting – stem – clipping</u>

Selectively harvesting fruit then clipping the stem of the fruit down to avoid punctures or damage.

<u>Apple orchard densities</u>

Low density: less than 600 trees per acre.

Medium density: 600 to 800 trees per acre.

High density: more than 800 trees per acre.

<u>Cherry orchard densities</u>

Low density: less than 200 trees per acre.

Medium density: 200 to 300 trees per acre.

High density: more than 300 trees per acre.

<u>Pear orchard densities</u>

Low density: less than 150 trees per acre.

Medium density: 150 to 200 trees per acre.

High density: more than 200 trees per acre.