Data Insights Award Nomination Washington

Washington Data Insights Award Nomination: Washington State Peak Employment Wage and Practices Surveys

Contact Information of Individual Submitting Nomination

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Agency Name: Washington State Employment Security Department

Washington State Peak Employment Wage and Practices Survey

The Washington State Employment Security Department (ESD) (Labor Market and Economic Analysis/Program Evaluation Research & Analysis unit/Joshua Moll) annually, in accordance with federal mandates and broad USDOL guidelines, conducts agricultural establishment and worker surveys to aid regional offices in establishing prevailing wages and prevailing or normal and common employment practices, with the mission to help U.S. employers fill jobs while mitigating adverse impacts to U.S. and foreign agricultural laborers. To achieve this goal ESD/LMEA developed a robust survey instrument, implemented a comprehensive two-stage population estimation system and derived a stable prevailing wage and prevailing or normal and common employment practices determination procedure. The highly impactful characteristics of this system is its capacity to estimate establishment and occupational-activity populations at the crop-variety level, resulting in detailed prevailing wage rates for approximately 26,226 certified foreign agricultural workers during fiscal year 2019 and any U.S domestic agricultural workers in corresponding occupational-activities.

Provide a statement of results, accomplishments, impacts, and any other appropriate information that demonstrates why the nominee's efforts described in question #1 were an exceptional contribution. Response (400 word limit).

Annually, since 2015, ESD/LMEA has conducted the Washington State Peak Employment Wage and Practices survey, surveying occupational-activities for which agricultural employers have requested temporary foreign employment through the agricultural recruitment system (ARS). During 2018, ESD/LMEA tested the use of three survey iterations and developed a systematic methodology to estimate both establishment and occupational-activity populations at the crop-variety level of detail. Through consistent survey administration practices and survey form development, ESD successfully identified a feasible population estimation methodology, utilizing a loglinear approach to an abundance estimator known as capture-recapture. This approach to survey administration and population estimation enabled ESD/LMEA to determine the probability of agricultural establishments experiencing a survey iteration, regarding given agricultural commodities, which was then re-expressed as a log-linear model. This model re-expression allowed the fitting of specific linear regressions that have the capacity to estimate the population of agricultural establishments that did not experience a survey iteration, controlling for survey nonresponse and producing stable population estimates. This accomplishment is impactful as only 8 states/territories of 54 in the nation were able to produce wage structure findings for the ARS. Moreover, ESD/LMEA identified 71 detailed agricultural wage structures while the remaining 7 states/territories cumulatively identified 18 wage structures.

Provide a brief description of the nominee's significant contributions in any one of the other two areas listed under "criteria" that you did not focus on above. Response (400 word limit).

As ESD’s mission and vision is to provide our communities with inclusive workforce solutions to ensure Washington has the nation’s best and most future ready workforce, the advancements in survey administration practices and population estimation methodologies, detailed previously, has increased the workforce and labor market information functions of ESD/LMEA by providing individuals and customers, such as public policy administrators, agricultural establishments and agricultural employment seekers, more detailed agricultural wage and employment practices information to include piece rate wage distributions, externalities and factors that affect employment wage structures for Washington State’s top agricultural commodities and the role temporary foreign agricultural employment plays in Washington State’s economy. Moreover, the structured survey methodology employed by ESD/LMEA aids in providing value to customers by ensuring the safety and fair compensation of agricultural employment and fulfilling the labor needs of agricultural establishments. Additionally, all econometric analysis performed to accomplish these results were carried out and developed using open source R software and can be used by

any other state workforce agency, after adapting the analytical code and outlining state specific survey breadth.

Examples of work

WA - 2018 Agricultural Survey Results 2020.pdf (1004.1KB)
WA - 2018 Agricultural Survey Results supplementary attachment 2020.pdf (872.2KB)
WA - 2018 Agricultural Peak Employment Wage and Practice Employer survey 2020.pdf (786.5KB)
WA - Agricultural Survey Establishment Estimation 2020.pdf (502.8KB)
WA - Agricultural Survey Employment Estimation 2020.pdf (1.1MB)
WA - Admin Approval 2020.pdf (71.6KB)