

To: Pearson Project Internal
From: J. Crawford, Project Manager
Re: Filtering Occupation Pool
Date: 19 June 2017

Background: Per recommendations by O*NET technical officers, we're able to significantly reduce the occupation pool using a rules-based approach, combining O*NET & BLS (Bureau of Labor Statistics) data.

Former Filters: The following filters reduced the occupation pool from 900+ to 501:

- 1) 75% or more of incumbents report having a bachelor's degree or less;
- 2) 75% or more of incumbents report having 2-4 years' relevant experience or less;
- 3) 75% or more of incumbents report having 2-4 years' on-site training or less;
- 4) 75% or more of incumbents report having 2-4 years' on-the-job experience or less

Recommended Filters: O*NET recommended using "SOC Level" occupations only:

- 1) More general, less detailed occupations;
- 2) Reduced pool from 501 to 410 occupations;
- 3) Exclusively "SOC Level" occupations allow integration with BLS data

New Groupings: Integrating BLS data allows us to use the BLS occupation classification system, which categorizes occupations thematically (e.g. "Management", "Healthcare", "Legal", etc.).

New Filters: Using BLS data, the following filters were applied (and may be adjusted easily):

- 1) **Inadvertent:** Merging BLS & O*NET eliminates "Hunter" & "Door-to-Door Salesman" (408);
- 2) **Median Annual Wage:** Removing occupations with median annual wages of \$20,420 (the national poverty income for a family of 3) reduces pool to 395;
- 3) **Total Employees:** Removing occupations with less than 5,000 incumbents, nationally, reduces the pool to 365 (e.g. "Models", "Private Chefs", "Travel Guides");
- 4) **Employment Projections:** Eliminating jobs expected to reduce by more than 5% between 2014 and 2024 reduces the pool to 289 occupations

Major Breakthroughs: By reducing occupations to the "SOC Level", O*NET data may now be compared with BLS data to achieve the following:

- 1) Determine median and average annual salaries (and, in most cases, hourly wage);
- 2) Determine the concentration of occupations at the county level;
- 3) Determine fastest/slowest growing/diminishing occupations;
- 4) Group occupations thematically rather than by industry