Field Crops Production

(OMB # 0535-0002)

Calculations for:

 Total responses,

Average response rates, and

Coverage of commodity rates.

October 15, 2015

To calculate the average response rate, OMB Guideline 3.2.2 is used (see below). However, if there is more than one wave of data collection, then the completed cases and in-scope sample cases are summed across the waves. This is shown in the ‘Average Response Rate’ column in the table.

$$RRU= \frac{\sum\_{}^{}C\_{k}}{\sum\_{}^{}\left(C\_{k}+ R\_{k}+ NC\_{k}+O\_{k}+ e\left(U\right)\_{k}\right) }$$

Where Ck = number of completed cases or sufficient partials in kth data collection wave

 Rk = number of refused cases in kth data collection wave

 NCk = number of non-contacted sample units known to be eligible in kth data collection wave

 Ok = number of eligible sample units not responding for reasons other than refusal in kth data collection wave

 Uk = number of sample units of unknown eligibility, not completed in kth data collection wave and

 Ek = estimated proportion of sample units of unknown eligibility that are eligible in kth data collection wave.

The ‘Total Responses’ column in table represents the numerator of the response rate above or the sum of completed cases or sufficient partials over all data collection waves.



The ‘Coverage of Commodity Rate’ is a weighted item response rate as described in OMB Guideline 3.2.3 (see below). It can also be described as the proportion of a key survey estimate that was reported by respondents who completed the survey. The formula used to calculate the ‘Coverage of Commodity Rate’ in the table is:

$$RRW= \frac{\sum\_{}^{}w\_{j}y\_{j}}{\sum\_{}^{}w\_{j}a\_{j}y\_{j}}$$

Where wj = the inverse probability of selection (or initial sampling weight) for the jth completed report

 yi = reported data for key survey item from jth completed report

 ai = non-response adjustment for the jth completed report

The units of survey estimate used to calculate the Coverage of Commodity Rate varies by survey. They are specified in the table below:

|  |  |
| --- | --- |
| Survey | Units of Coverage Rate |
| Sweet Potato Price | Cwt |
| Sugarbeets | Tons |
| Sugar Production Survey | Tons |
| Tobacco Price Inquiry | Lbs. |
| All other surveys listed | Acres |



