

Office of Personnel Management

§ 591.220

SURVEY AND DATA COLLECTION AREAS—
Continued

COLA areas & reference areas	Survey area
Washington, DC-VA.	Arlington County, Fairfax County, Prince William County, City of Alexandria, City of Fairfax, City of Falls Church, City of Manassas, and City of Manassas Park.

(b) *Rest of the State of Alaska COLA area.* OPM may collect survey data on-site, use alternative indicators of relative living costs (e.g., price and cost information published by the University of Alaska), or both. If the use of alternative indicators would result in a COLA rate reduction, OPM will conduct onsite surveys in one or more locations in the Rest of the State of Alaska COLA area, before making a reduction, to ensure that the reduction is warranted.

(c) *Determining Survey Coverage.* To aid OPM in determining survey coverage, OPM may from time to time conduct surveys of Federal employees in the COLA areas and/or the Washington, DC, area to determine where employees shop and what they spend on certain goods or services and to collect other information related to the price surveys and the calculation of price indexes.

§ 591.216 How does OPM combine survey data for the DC area and for COLA areas with multiple survey areas?

(a) *Washington, DC, area.* For each survey item except shelter, OPM averages separately the prices collected in each of the DC survey areas identified in § 591.215(a) and then averages these average prices together using equal weights to compute an overall average by item for the DC area.

(b) *COLA areas with multiple survey areas.* OPM computes weighted average indexes at the PEG, MEG, and overall level by using the corresponding indexes and Federal employment weights from each survey area within the COLA area.

§ 591.217 In which outlets does OPM collect prices?

OPM collects prices in popular outlets in each survey area. OPM selects these outlets based on their proximity to the housing data collection areas, accessibility by road, physical size, advertising, and other characteristics that reflect sales volume. To the extent practical, OPM prices like items in the same types of outlets in the COLA areas and the Washington, DC, area. As warranted, OPM also may conduct point-of-purchase surveys and select outlets based on the results of those surveys.

§ 591.218 How does OPM compute price indexes?

Except for shelter and energy utilities, OPM averages by item the prices collected in each survey area. For the Washington, DC, area, OPM computes a simple average for each item based on the average prices from each DC survey area. On an item-by-item basis, OPM divides the COLA survey area average price by the DC average price and produces a price index.

§ 591.219 How does OPM compute shelter price indexes?

(a) In addition to rental and rental equivalence prices and/or estimates, OPM obtains for each unit surveyed information about the important characteristics of the unit, such as size, number of bathrooms, and other amenities that reflect the quality of the unit.

(b) OPM then uses these characteristics and rental prices and/or estimates in hedonic regressions (a type of multiple regression) to compute for each COLA area the price index for rental and/or rental equivalent units of comparable quality and size between the COLA survey area and the Washington, DC, area.

§ 591.220 How does OPM calculate energy utility cost indexes?

(a) OPM calculates energy utility cost indexes based on the relative cost of maintaining a standard size dwelling in each area at a given ambient temperature and the cost of other energy uses. Although the dwelling size may vary from one COLA survey area to another, OPM compares the utility cost

for the same size dwelling in the COLA survey area and the Washington, DC, area.

(b) OPM applies the following six-step process to compute a cost index(es) for heating and cooling a standard home to a given ambient temperature and to combine the cost index(es) by energy type (*e.g.*, electricity and natural gas) with cost indexes for other energy uses.

(1) *Step 1.* OPM obtains technical information about the requirements by major energy type for heating and cooling a standard size dwelling, built according to current local building practices and codes in each area, given local climatic conditions (*e.g.*, seasonal temperature and humidity). OPM also obtains similar information for use of energy types in other household operations (*e.g.*, hot water, cooking, cleaning, recreation).

(2) *Step 2.* OPM obtains from the shelter survey, a survey of Federal employees, or other appropriate sources, information on dwelling size and the types and prevalence of heating and cooling equipment and energy types (*e.g.*, electricity, gas, and oil) in each area.

(3) *Step 3.* OPM computes estimates of total home energy requirements by energy type attributable to heating and cooling plus all other household energy uses for the COLA survey area and the Washington, DC, area.

(4) *Step 4.* OPM surveys utility prices for each major energy type appropriate to the area.

(5) *Step 5.* OPM combines the above data to produce for each COLA survey area the cost of maintaining the standard size dwelling at a given ambient temperature and the cost of other household energy uses.

(6) *Step 6.* OPM compares the COLA survey area cost with the DC area cost to produce a price index.

§ 591.221 How does OPM compute the consumer expenditure weights it uses to combine price indexes?

OPM uses the following ten-step process to compute consumer expenditure weights:

(a) *Step 1.* OPM obtains the latest BLS tabulated CES data nationwide and for the Washington, DC, area.

(b) *Step 2.* In both the nationwide and DC area tabulated data, OPM replaces the homeowners' expenditures for shelter with estimated rental values of owned homes that are available elsewhere in tabulated CES data. Note: These replacements are consistent with the rental equivalence approach described in § 591.219.

(c) *Step 3.* OPM selects the central income groups in the nationwide CES tabulation.

(d) *Step 4.* OPM calculates the expenditure shares (*i.e.*, percentages) for each central income group by dividing each of its DEC expenditures by total expenditures for the income group. OPM also calculates expenditure shares for total nationwide expenditures by dividing each nationwide DEC expenditure by total nationwide expenditures.

(e) *Step 5.* OPM computes a democratic distribution of expenditure shares by averaging the central income groups' shares at each DEC and higher level of aggregation.

(f) *Step 6.* OPM computes a set of ratios by dividing each expenditure share of the nationwide democratic distribution by the corresponding expenditure share of the total national distribution.

(g) *Step 7.* OPM computes estimated expenditures for Washington DC for each DC DEC and higher level of aggregation that BLS reported by multiplying the reported expenditure by the corresponding ratio derived in Step 6.

(h) *Step 8.* For each DC DEC and higher level of aggregation that BLS did not report, OPM computes expenditures for DC by distributing the DC expenditure calculated in step 7 using the distribution of expenditure shares derived in step 5.

(i) *Step 9.* As described in § 591.211(c), OPM classifies each DEC and aggregate into PEGs.

(j) *Step 10.* OPM computes expenditure weights by dividing each DEC or aggregate by the total expenditure derived from the DC expenditure computed in step 8. Therefore, the sum of the MEGs, PEGs, and DEC's, will separately total 100, *i.e.*, so that all consumer expenditures in the original tabulation are accounted for.