

Response Rates for the Consumer Price Indexes, 2015

This article and the accompanying tables update articles previously published on response rates in the *CPI Detailed Report* for March 1991, and in the January issues of 1993 through 2015.

In an effort to measure the outcome of data collection for the CPI, the BLS calculates response rates. Response rates measure the proportion of completed surveys to those issued and help measure the accuracy of the CPI. Failure of a data unit to respond at either the data collection stage or estimation stage represents a loss of statistical information which dilutes the accuracy of the sample. The BLS publishes response rates annually to assist the data user in judging the accuracy of CPI data.

The BLS calculates response rates for the CPI-U at the data collection and data estimation phases for pricing. The response rate at the data collection phase is the number of responding sample units divided by the number of eligible sample units. A sample unit is eligible if it belongs to the defined target population and if it should provide information for one or more items. The percent of the sample used at estimation is defined as the number of sample units used in estimation divided by the number of eligible sample units.¹

Response rates for 2015 are presented in tables R-1 through R-17. Table R-1 shows response rates for all data included in the CPI-U, U.S. city average, by major group, for all of 2015. Tables R-2 through R-17 show rates for current data collection in selected areas for which indexes are published monthly, bimonthly, or semiannually.

The response rates in tables R-1 through R-17 are separated into commodities and services, and the shelter portion of housing. Commodities and services are further broken down into outlets and quotes. An "outlet" is a generic term that designates the place where prices are collected. A "quote" is a specific item to be priced in a specific outlet. There may be from 1 to more than 50 quotes priced in each outlet.

In table R-1, it is important to note the relatively low percentages of quotes reported,

collected and used in estimation for apparel. Low rates for these items can be partially attributed to the design of the apparel sample. Because seasonal apparel items commonly are in stores only during certain times of the year, most of the apparel sample is doubled, with each half of the sample designated for pricing during part of the year. Thus, at any particular time of the year, a large number of apparel quotes, although eligible, are designated out of season and are not collected.

The response rates at the data collection phase for shelter are separated into three categories. If useable information is obtained, the unit is designated *data reported*. If the assigned unit is located but is unoccupied, the unit is designated *found vacant*. In instances where the unit is eligible but no data are available (for example, refusals or no one at home) the unit is designated *other*.

For additional information on response rates, write to the Bureau of Labor Statistics, Division of Consumer Prices and Price Indexes, Room 3615, 2 Massachusetts Avenue, NE., Washington, DC 20212-0001, or call Bradley Akin at (202) 691-7000, or email him at Akin.Bradley@bls.gov.

¹ Imputed prices, when used in estimation, are counted in this estimate. Beginning in July 2010, the BLS began using rent prices imputed by a non-interview adjustment technique in estimation.

Therefore, nearly all eligible sample units have prices, collected or imputed, that are used in estimation.

Table R-1. Response rates for the CPI-U, U.S. city average, by major group and shelter, 2015

Commodities and Services	Outlets	Quotes								
		Total	Food and Beverages	Housing (excluding shelter)	Apparel	Transportation	Medical Care	Recreation	Education and Communication	Other Goods and Services
Eligible Collected Number Percent Used in Estimation	292,726	1,158,774	465,585	143,573	129,567	143,855	75,235	85,331	72,952	42,676
	274,737	951,135	412,527	124,597	77,507	130,699	36,076	69,289	63,774	36,666
	93.9	82.1	88.6	86.8	59.8	90.9	48.0	81.2	87.4	85.9
Number Percent	266,282	945,948	411,015	124,106	75,883	130,405	35,424	69,016	63,579	36,520
	91.0	81.6	88.3	86.4	58.6	90.7	47.1	80.9	87.2	85.6
Shelter	All Units									
Eligible Number Percent Collected	98,874									
	100.0									
Data Reported Number Percent Found Vacant	70,969									
	71.8									
Number Percent Other	6,752									
	6.8									
Number Percent Used in Estimation	21,153									
	21.4									
Number Percent	98,874									
	100.0									

Table R-2. Response rates for the CPI-U, Chicago-Gary-Kenosha, IL-IN-WI, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	15,482	50,423	Eligible	
Collected			Number	3,657
Number	14,532	39,958	Percent	100.0
Percent	93.9	79.2	Collected	
Used in Estimation			Data Reported	
Number	14,153	39,822	Number	2,462
Percent	91.4	79.0	Percent	67.3
			Found Vacant	
			Number	219
			Percent	6.0
			Other	
			Number	976
			Percent	26.7
			Used in Estimation	
			Number	3,657
			Percent	100.0

Table R-3. Response rates for the CPI-U, Los Angeles-
Riverside-Orange County, CA, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	21,968	72,903	Eligible	
Collected			Number	6,360
Number	20,596	57,588	Percent	100.0
Percent	93.8	79.0	Collected	
Used in Estimation			Data Reported	
Number	19,763	57,266	Number	4,354
Percent	90.0	78.6	Percent	68.5
			Found Vacant	
			Number	225
			Percent	3.5
			Other	
			Number	1,781
			Percent	28.0
			Used in Estimation	
			Number	6,360
			Percent	100.0

Table R-4. Response rates for the CPI-U, NY-Northern NJ-Long Island, NY-NJ-CT-PA, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	30,918	110,001	Eligible	
Collected			Number	8,121
Number	28,714	89,879	Percent	100.0
Percent	92.9	79.9	Collected	
Used in Estimation			Data Reported	
Number	27,794	87,525	Number	5,733
Percent	89.9	79.6	Percent	70.6
			Found Vacant	
			Number	421
			Percent	5.2
			Other	
			Number	1,967
			Percent	24.2
			Used in Estimation	
			Number	8,121
			Percent	100.0

Table R-5. Response rates for the CPI-U, Phil.-Wilmington-Trenton, PA-NJ-DE-MD, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	5,031	18,466	Eligible	
Collected			Number	2,743
Number	4,777	15,066	Percent	100.0
Percent	95.0	81.6	Collected	
Used in Estimation			Data Reported	
Number	4,641	14,999	Number	2,046
Percent	92.2	81.2	Percent	74.6
			Found Vacant	
			Number	224
			Percent	8.2
			Other	
			Number	473
			Percent	17.2
			Used in Estimation	
			Number	2,743
			Percent	100.0

Table R-6. Response rates for the CPI-U, San Francisco-Oakland-San Jose, CA, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	4,672	18,248	Eligible	
Collected			Number	4,446
Number	4,122	13,893	Percent	100.0
Percent	88.2	76.1	Collected	
Used in Estimation			Data Reported	
Number	3,998	13,827	Number	3,136
Percent	85.6	75.8	Percent	70.5
			Found Vacant	
			Number	211
			Percent	4.7
			Other	
			Number	1,099
			Percent	24.7
			Used in Estimation	
			Number	4,446
			Percent	100.0

Table R-7. Response rates for the CPI-U, Washington-Baltimore, DC-MD-VA-WV, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	6,895	25,286	Eligible	
Collected			Number	3,542
Number	6,608	20,787	Percent	100.0
Percent	95.8	82.2	Collected	
Used in Estimation			Data Reported	
Number	6,382	20,675	Number	2,544
Percent	92.6	81.8	Percent	71.8
			Found Vacant	
			Number	292
			Percent	8.2
			Other	
			Number	706
			Percent	19.9
			Used in Estimation	
			Number	3,542
			Percent	100.0

Table R-8. Response rates for the CPI-U, Boston-Brockton-Nashua, MA-NH-ME-CT, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	4,723	17,820	Eligible	
Collected			Number	2,744
Number	4,407	14,252	Percent	100.0
Percent	93.3	80.0	Collected	
Used in Estimation			Data Reported	
Number	4,250	14,150	Number	1,990
Percent	90.0	79.4	Percent	72.5
			Found Vacant	
			Number	123
			Percent	4.5
			Other	
			Number	631
			Percent	23.0
			Used in Estimation	
			Number	2,744
			Percent	100.0

Table R-9. Response rates for the CPI-U, Cleveland-Akron, OH, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	3,661	14,164	Eligible	
Collected			Number	1,057
Number	3,464	11,567	Percent	100.0
Percent	94.6	81.7	Collected	
Used in Estimation			Data Reported	
Number	3,371	11,504	Number	790
Percent	92.1	81.2	Percent	74.7
			Found Vacant	
			Number	101
			Percent	9.6
			Other	
			Number	166
			Percent	15.7
			Used in Estimation	
			Number	1,057
			Percent	100.0

Table R-10. Response rates for the CPI-U, Miami-Fort Lauderdale, FL, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	1,040	5,603	Eligible	
Collected			Number	1,380
Number	1,008	5,117	Percent	100.0
Percent	96.9	91.3	Collected	
Used in Estimation			Data Reported	
Number	994	5,114	Number	1,142
Percent	95.6	91.3	Percent	82.8
			Found Vacant	
			Number	74
			Percent	5.4
			Other	
			Number	164
			Percent	11.9
			Used in Estimation	
			Number	1,380
			Percent	100.0

Table R-11. Response rates for the CPI-U, St. Louis,
MO-IL, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	972	5,163	Eligible	
Collected			Number	674
Number	946	4,620	Percent	100.0
Percent	97.3	89.5	Collected	
Used in Estimation			Data Reported	
Number	928	4,598	Number	469
Percent	95.5	89.1	Percent	69.6
			Found Vacant	
			Number	37
			Percent	5.5
			Other	
			Number	168
			Percent	24.9
			Used in Estimation	
			Number	674
			Percent	100.0

Table R-12. Response rates for the CPI-U, Dallas-Fort Worth, TX, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	1,439	6,029	Eligible	
Collected			Number	1,701
Number	1,393	5,467	Percent	100.0
Percent	96.8	90.7	Collected	
Used in Estimation			Data Reported	
Number	1,369	5,420	Number	1,281
Percent	95.1	89.9	Percent	75.3
			Found Vacant	
			Number	104
			Percent	6.1
			Other	
			Number	316
			Percent	18.6
			Used in Estimation	
			Number	1,701
			Percent	100.0

Table R-13. Response rates for the CPI-U, Detroit-Ann Arbor-Flint, MI, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	4,056	15,472	Eligible	
Collected			Number	2,081
Number	3,583	12,016	Percent	100.0
Percent	88.3	77.7	Collected	
Used in Estimation			Data Reported	
Number	3,477	11,934	Number	1,189
Percent	85.7	77.1	Percent	57.1
			Found Vacant	
			Number	146
			Percent	7.0
			Other	
			Number	746
			Percent	35.8
			Used in Estimation	
			Number	2,081
			Percent	100.0

Table R-14. Response rates for the CPI-U, Houston-Galveston-Brazoria, TX, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	3,861	13,313	Eligible	
Collected			Number	1,400
Number	3,506	10,499	Percent	100.0
Percent	90.8	78.9	Collected	
Used in Estimation			Data Reported	
Number	3,381	10,432	Number	1,011
Percent	87.6	78.4	Percent	72.2
			Found Vacant	
			Number	91
			Percent	6.5
			Other	
			Number	298
			Percent	21.3
			Used in Estimation	
			Number	1,400
			Percent	100.0

Table R-15. Response rates for the CPI-U,
Pittsburgh, PA, 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	3,081	11,345	Eligible	
Collected			Number	819
Number	2,987	9,773	Percent	100.0
Percent	96.9	86.1	Collected	
Used in Estimation			Data Reported	
Number	2,902	9,718	Number	630
Percent	94.2	85.7	Percent	76.9
			Found Vacant	
			Number	84
			Percent	10.3
			Other	
			Number	105
			Percent	12.8
			Used in Estimation	
			Number	819
			Percent	100.0

Table R-16. Response rates for the CPI-U,
Phoenix-Mesa, AZ., 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	2,998	11,621	Eligible	
Collected			Number	1,381
Number	2,817	9,385	Percent	100.0
Percent	94.0	80.8	Collected	
Used in Estimation			Data Reported	
Number	2,719	9,261	Number	1,003
Percent	90.7	79.7	Percent	72.6
			Found Vacant	
			Number	90
			Percent	6.5
			Other	
			Number	288
			Percent	20.9
			Used in Estimation	
			Number	1,381
			Percent	100.0

Table R-17. Response rates for the CPI-U,
Atlanta, GA., 2015

Commodities and Services	Total		Shelter	All Units
	Outlets	Quotes		
Eligible	4,134	14,273	Eligible	
Collected			Number	1,819
Number	3,969	11,408	Percent	100.0
Percent	96.0	79.9	Collected	
Used in Estimation			Data Reported	
Number	3,861	11,361	Number	1,448
Percent	93.4	79.6	Percent	79.6
			Found Vacant	
			Number	107
			Percent	5.9
			Other	
			Number	264
			Percent	14.5
			Used in Estimation	
			Number	1,819
			Percent	100.0