

The revised Consumer Price Index: changes in definitions and availability

*The Consumer Price Index for January 1987
will incorporate some new series and
will reflect changes in several old series;
the availability of some indexes will be affected*

JOHN L. MARCOOT AND RICHARD C. BAHR

The release of the January 1987 Consumer Price Index (CPI) in February will introduce updated market baskets that reflect population distributions from the 1980 census of population and spending patterns from the 1982-84 Consumer Expenditure Survey. This release will be part of a 5-year program to update the CPI market basket and incorporate numerous technical enhancements.¹

Although the CPI is a measure of price change for a market basket of constant quality and quantity, it also needs to retain its relevance to consumers' experience by pricing items currently purchased. New consumer purchasing patterns occur as a result of changes in a number of factors, such as relative prices, income, tastes, demographic characteristics, technological changes, and population shifts. Thus, periodic revisions of the CPI are necessary to incorporate updated versions of the market basket.

This article is one of a series that provides detailed information about the CPI revision. It highlights the changes that will occur in the availability and in the definitions of indexes. Many of the changes derive from shifts that have occurred in the spending patterns of the American public. Nearly five decades of spending patterns as reflected in the CPI expenditure weighting patterns and the corresponding relative importance of major groups are shown in table 1. A later article will discuss the new expenditure weights in detail.

John L. Marcoot is the manager of the CPI Revision Program and Richard C. Bahr is an economist in the Office of Prices and Living Conditions, Bureau of Labor Statistics.

Item indexes

One clear trend in consumer spending has been a reduction in the relative importance of expenditures for food, especially grocery food. Although it is not immediately obvious from the data in table 1, there have been corresponding increases in importance for new products and services such as video recorders and day care. To ensure the most accurate CPI possible, it has been necessary to allocate more pricing and calculation resources to these new and growing expenditure categories, with the correlative result that proportionately fewer resources will be available for items of declining importance. This means new indexes for previously unpriced products will become available. But it also means that there will be some reduction in product detail for expenditure categories with declining relative importance. The discontinuation of an index does not mean that the item is no longer priced for the CPI. All of the previously priced items will continue to be priced, but with much smaller samples. The relative proportions that these items constitute of the new combined strata (class of similar items) to which they are assigned will also be subject to annual updating through the sample rotation process.²

Exhibit 1 summarizes the definitions for new item indexes and explains the definitional changes that some other indexes are undergoing. These definitional changes arise from the need to combine some previously separate items, the addition of some previously unpriced items, and conceptual or coverage changes which enhance the measurement or interpretation of the index.

Some of the items that are being discontinued as separate

item strata because of their reduced relative importance have significant applications independent of their use in the CPI. To accommodate users of these indexes, BLS will continue to publish a limited number of them as special sub-strata CPI-U indexes. These sub-strata indexes will be based on extremely small samples and will be less reliable than the pre-1987 numbers. Footnote 3 lists the item strata that are being discontinued and indicates whether a corresponding sub-strata index will be available.³

Beginning with the CPI-U for January 1983, BLS adopted an improved method—called rental equivalence—for estimating homeowner shelter costs.⁴ (The change was made in January 1985 for the CPI-W.) The 1987 CPI revision continues the definitional and coverage features associated with that change. In addition, it incorporates two new refinements consistent with that change. First, the new index for materials, supplies, and equipment for home repairs, which combines three more detailed old indexes, will include for pricing only those types of items that would be purchased by tenants and exclude those typically purchased by landlords for major repairs or capital improvements. Second, the rental value of owner-used vacation property is included in lodging while out of town.

The definitional treatment of premium costs for health care insurance will have a change which will affect the structure of the expenditure weights for health insurance, but not the methodology for estimating price changes affecting the costs of health insurance. Beginning with January 1987, the CPI will define the cost of health insurance as the portion of premium payments which is retained by the insurer in the form of profits and operating expenses. The portion of the premium which is either paid directly by the insurer to health care providers or as reimbursements to policyholders will no longer be defined as a health insurance expenditure, but rather as a direct medical care expenditure.

This definitional change will slightly modify the method used for estimating changes in health insurance premiums. An indirect method has been used to estimate the changes in costs of health insurance. The expenditure for health insurance has been defined as total consumer premium pay-

ments. The price change for these premiums has been estimated with a combination of the changes in cost for covered medical services and the changes in premium retained by insurers for operating costs and profit.⁵

The revised definition will result in the portion of the health insurance expenditure that is paid as benefits by the insurer being included in the directly priced medical care strata, for example, physician services, hospital room, and eye care. The result of this treatment is that the expenditure weights of these directly priced medical care strata will be increased, and they will also receive a greater proportion of the price quotations in the CPI. The expenditure weight for health insurance will represent only the portion of the premium retained by the insurers, and changes in its costs will continue to be estimated using an indirect pricing procedure that relies both on CPI changes for covered medical expenses and secondary data on premiums retained by insurers. This definitional change will result in the discontinuation of the index for "Other medical care services."

Local area indexes

As announced in 1984, BLS has allocated the price quotation samples among the 91 pricing areas in a sample design which will produce the most accurate national CPI possible with the funds authorized. The decision to improve the national CPI estimate will reduce the frequency of publication for some areas. Beginning in 1987, semiannual average indexes will replace bimonthly indexes for 12 currently published areas. (See table 2.) These semiannual average indexes, which are the averages of the 6-month periods from January through June and from July through December, will be published with the release of the July CPI in August and the January CPI in February.

The method of calculating the averages for a semiannual average index derives from the one currently used for calculating annual average indexes which BLS publishes at the end of each year. Because monthly and bimonthly indexes are not published in those areas, the first step will be intermediate monthly and bimonthly calculations for use in the average computation. For those items which are priced monthly,

Table 1. The Consumer Price Index market basket by major expenditure group and benchmark year

[Percent distribution]

Major group	Wage earners and clerical workers (CPI-W)						All urban consumers (CPI-U)		
	1939 ¹	1952 ²	1963 ³	1977 ⁴	1984 ⁵	1982-84 ⁶	1977 ⁴	1982 ⁵	1982-84 ⁶
Food and beverages	35.4	32.2	25.2	20.5	21.3	20.1	18.8	20.1	18.0
Housing	33.7	33.5	34.9	40.7	34.9	39.2	43.9	37.7	42.2
Apparel	11.0	9.4	10.6	5.8	5.0	6.5	5.8	5.2	6.6
Transportation	8.1	11.3	14.0	20.2	24.1	21.2	18.0	21.8	18.9
Medical care	4.1	4.8	5.7	4.5	5.6	3.9	5.0	6.0	4.7
Entertainment	2.8	4.0	3.9	3.9	3.9	4.1	4.1	4.2	4.5
Other goods and services	4.9	4.8	5.7	4.4	5.2	5.0	4.4	5.0	5.1

¹ Relative importance for the expenditure survey period 1934-36 updated for price change.
² Relative importance for the expenditure survey period 1950 updated for price change.
³ Relative importance for the expenditure survey period 1960-61 updated for price change.
⁴ Relative importance for the expenditure survey period 1972-73 updated for price change.
⁵ Relative importance for the expenditure survey period 1972-73 with the rental equivalence

approach to homeowners' costs updated for price change. The rental equivalence approach to homeowners' costs was introduced into CPI-U effective January 1983 and into the CPI-W effective January 1985.
⁶ Relative importance for the expenditure survey period 1982-84. Revised indexes which require expenditure weights updated for price change between the survey period and December 1986 will differ from those shown.

Exhibit 1. Title and definition changes in the Consumer Price Index, beginning with January 1987 data

New series title	Definition change	New series title	Definition change
Food and beverages			
Fresh other breads, biscuits, rolls, and muffins ¹	Combines "Other breads" and "Fresh biscuits, rolls, and muffins."	Other maintenance and repair commodities (Old title—Miscellaneous supplies and equipment)	Adds hardsurface floor covering and landscaping items not previously priced.
Cookies, fresh cakes, and cupcakes ¹	Combines "Fresh cakes and cupcakes" and "Cookies."	Other household fuel commodities (Old title—Same)	Adds wood, charcoal, and peat not previously priced.
Other bakery products ¹	Combines "Fresh sweetrolls, coffee cake, and donuts" and "Frozen and refrigerated bakery products and fresh pies, tarts, and turnovers."	Other video equipment	Consists of video cameras, recorders, players, cassettes, disks, and related equipment.
Ham ¹	Combines "Ham other than canned" and "Canned ham."	Major household appliances	Consists of index series titles: "Refrigerator and home freezer;" "Laundry equipment;" and "Stoves, ovens, dishwashers, and air conditioners."
Other pork, including sausage ¹	Combines "Sausage" and "Other pork."	Stoves, ovens, dishwashers, and air conditioners	Combines parts of "Stoves, dishwashers, vacuums, and sewing machines" and "Office machines, small electric appliances, and air conditioners."
Other dairy products, including butter ¹	Combines "Butter" and "Other dairy products."	Information processing equipment	Consists of home computers, telephones, and other electronic and office equipment for nonbusiness use.
Oranges, including tangerines (Old title—Oranges)	Adds tangerines.	Other housefurnishings	Consists of index series titles: (1) "Floor and window coverings, infants', laundry, cleaning, and outdoor equipment;" (2) "Clocks, lamps, and decor items;" (3) "Tableware, serving pieces, and nonelectric kitchenware;" (4) "Lawn equipment, power tools, and other hardware;" and (5) "Sewing, floor cleaning, and small kitchen and portable heating appliances."
Other fresh fruits (Old title—Same)	Excludes tangerines.		
Fruit juices and frozen fruit ¹	Combines "Frozen fruit and fruit juices" and "Fruit juices other than frozen."		
Other processed vegetables ¹	Combines "Cut corn and canned beans except lima" and "Other canned and dried vegetables."		
Sweets, including candy ¹	Combines "Candy and chewing gum" and "Other sweets."		
Carbonated drinks ¹	Combines "Cola drinks, excluding diet cola" and "Carbonated drinks, including diet cola."		
Coffee ²	Combines "Roasted coffee" and "Freeze dried and instant coffee."		
Seasonings, condiments, sauces, and spices ¹	Combines "Seasonings, olives, pickles, relish" and "Other condiments."	Sewing, floor cleaning, and small kitchen and portable heating appliances	Combines parts of "Stoves, dishwashers, vacuums, and sewing machines" and "Office machines, small electric appliances and air conditioners."
Miscellaneous prepared foods, including baby food ¹	Combines "Miscellaneous prepared foods" and "Other canned and packaged prepared foods."	Lawn equipment, power tools, and other hardware (Old title—Same)	Adds hand tools.
Distilled spirits (at home) ¹	Combines "Whiskey (at home)" and "Other alcoholic beverages (at home)."	Laundry and cleaning products including soap ¹	Combines "Soaps and detergents" and "Other laundry and cleaning products."
Housing		Household paper products and stationery supplies ¹	Combines "Cleansing and toilet tissue, paper towels, and napkins" and "Stationery, stationery supplies, and giftwrap."
Lodging while out of town (Old title—Same)	Adds the rental equivalence value of owner-used vacation property.	Other household, lawn, and garden supplies ¹	Combines "Miscellaneous household products" and "Lawn and garden supplies."
Materials, supplies, and equipment for home repairs	Combines "Paint and wallpaper, supplies, tools, and equipment," "Lumber, awnings, glass, and masonry," and "Plumbing, electrical, heating, and cooling supplies." Excludes capital improvements and major repair items typically provided by landlords.		

Exhibit 1. Continued—Title and definition changes in the Consumer Price Index, beginning with January 1987 data

New series title	Definition change	New series title	Definition change
Gardening and other household services	Combines "Moving, storage, freight, household laundry and dry cleaning services" with "Gardening and lawn care services," which was previously unpublished.	Physicians' services (Old title—Same)	Adds benefits paid by consumer-purchased insurance.
Indoor plants and fresh flowers		Dental services (Old title—Same)	Adds benefits paid by consumer-purchased insurance.
Care of invalids, elderly and convalescents in the home	Not published initially; will be published when sample is adequate.	Eye care	Includes all consumer out-of-pocket expenses for eye care commodities and services as well as benefits paid by consumer-purchased insurance.
Apparel		Services by other medical professionals	Includes services rendered by therapists, nurses, and other practitioners including both out-of-pocket expenses and benefits paid by consumer purchased insurance.
Men's suits, sport coats, coats, and jackets ¹	Combines "Men's suits, sportcoats, and jackets" and "Men's coats and jackets."	Hospital and related services (Old title—Hospital and other medical services)	Adds previously unpriced outpatient hospital services.
Women's underwear, nightwear, hosiery, and accessories (Old title—Women's underwear, nightwear, and hosiery)	Adds women's accessories.	Hospital room (Old title—Same)	Adds benefits paid by consumer-purchased insurance.
Sewing materials, notions, and luggage	Combines "Sewing materials and notions" with part of "Jewelry and luggage."	Other inpatient services	Consists of other hospital and inpatient services including nursing and convalescent home service, paid out of pocket as well as benefits paid by consumer-purchased insurance.
Watches	Formerly was part of "Jewelry and luggage."	Outpatient services	Consists of emergency room services, laboratory fees, and x-rays, including both out-of-pocket expenses and benefits paid by consumer purchased insurance.
Jewelry	Formerly was part of "Jewelry and luggage." Excludes watches.	Health insurance (unpublished) (Old title—Same)	Portion of premium paid by consumer not paid out in benefits.
Transportation		Entertainment	
New cars (Old title—Same)	Transaction expenditure not reduced by market value of vehicle traded in.	Sport vehicles, including bicycles ¹	Combines "Sport vehicles" and "Bicycles."
New trucks ³	Transaction expenditure not reduced by market value of vehicle traded in.	Other sporting goods ¹	Combines "Indoor and warm weather sport equipment" and "Other sporting goods and equipment" as well as equipment for water sports.
New motorcycles	Transaction expenditure not reduced by market value of vehicle traded in.	Club memberships	Formerly part of "Fees for participant sports."
Used cars (Old title—Same)	Purchase of used cars from the business sector. Excludes value of used cars sold or traded by consumers.	Fees for participant sports, excluding club memberships	Portion of "Fees for participant sports" exclusive of club membership dues and fees.
Automobile registration, licensing, and inspection fees ¹	Combines "State registration," "Automobile inspection," "Local registration" (unpublished), and "Drivers' license."	Fees for lessons or instructions	Formerly part of "Other entertainment services."
Other automobile related fees (Old title—Same)	Adds rentals of vehicle equipment.	Other entertainment services (Old title—Same)	Includes film processing, photographer fees, veterinarian services, pet services, and rental of miscellaneous entertainment equipment.
Other intercity public transportation ¹	Combines "Intercity bus fares" and "Intercity train fares"		
Intracity public transportation ¹	Combines "Intracity mass transit" and "Taxi fare."		
Medical care			
Prescription drugs (Old title—Same)	Adds benefits paid by consumer-purchased insurance.		
Nonprescription drugs and medical supplies (Old title—Same)	Excludes eyeglasses.		

Exhibit 1. Continued—Title and definition changes in the Consumer Price Index, beginning with January 1987 data

New series title	Definition change	New series title	Definition change
Other goods, services		Legal fees	Consists of the legal fees portion of "Personal expenses."
Tobacco and smoking products (Old title—Tobacco products)		Banking and accounting expenses	Consist of the safe deposit box rental and bank service charge portion of "Personal expenses" plus fees for accounting services not previously priced.
Other toilet goods and small personal care appliances, including hair and dental products ¹	Combines "Products for the hair, hairpieces, and wigs;" "Dental and shaving products;" and "Other toilet goods and small personal appliances."	Funeral expenses	Consist of the funeral services portion of "Personal expenses" plus charges for cemetery lots and vaults not previously priced.
Child daycare/nursery school	Not published initially; will be published when sample is adequate.		
Technical and other tuition	Not published initially; will be published when sample is adequate.		

¹ Historical data available back to January 1978.

² Historical data available back to January 1967.

³ Historical data available back to January 1984.

such as food at home, an intermediate monthly calculation will be prepared for each of the 6 months. These six calculated numbers will be summed and then divided by six to obtain the semiannual index. A similar but more complex technique is used for items priced bimonthly in each area. An intermediate calculation will be compiled for each of the 3 months that items are actually priced during the 6-month period. The monthly calculation for each of the other 3 months will be interpolated by calculating a geometric mean of the months adjacent to the one being estimated. For example, in an area priced in even-numbered months, a January interpolation would be estimated by taking the geometric mean between the indexes calculations for December and February. Interpolations would be made in a similar manner for March and May. The three intermediate numbers for February, April, and June, calculated with collected prices, would be summed with the three interpolations and divided by six to obtain the semiannual average index for the first 6 months of the calendar year.

The calculation of semiannual indexes for areas in which bimonthly items are priced only in odd-numbered months would use the same methodology except that the data for February, April, and June would be interpolated by using the geometric mean between the calculations for their adjacent months. For example, the June interpolation would be estimated from the calculations made for May and July.

Although BLS will calculate semiannual indexes for these 12 areas from intermediate estimates of monthly data, the samples are much too small to produce a reliable bimonthly or monthly estimate of price change. Estimates based on a small number of observations in a single month would be subject to extremely high volatility resulting primarily from

sampling error. The averaging of 6 months of price data increases the reliability of the estimate. The new semiannual index estimates of price change will be as accurate as the old bimonthly index estimates which they replace for the 12 local areas identified in table 2.

The BLS has systematically advised users that local area CPI's (including the new semiannual averages) are subject to substantially more statistical error and variability than the national index. As a result, local indexes should not be used in escalation provisions. Some individuals may have already adopted escalation clauses using one of the local indexes that will change from bimonthly to semiannual publication. After the data for December 1986, it will not be possible to use individual monthly estimates for these 12 areas, and parties to agreements using these indexes may want to agree on some alternative. BLS does not provide contract interpretation assistance but can provide limited technical assistance for transition, if requested by both parties to an agreement.

The use of the new Consolidated Metropolitan Statistical Area (CMSA) definitions, issued by the Office of Management and Budget, resulted in a number of the published areas becoming larger in terms of their sampled geography.⁶ Of the 27 local areas to be published, 5 (Anchorage, Buffalo-Niagara Falls, Honolulu, Milwaukee, and San Diego) did not have changes to the geographic coverage currently being priced by BLS. Only Dallas-Fort Worth became smaller, with Wise County being removed from the official definition.

Several areas have had significant expansions of their sampled geography. For example, the New York area now includes Danbury and other parts of Connecticut; the Philadelphia area has added Wilmington and Trenton;

Table 2. Consumer Price Index sample areas and regions, by size classes, publication schedule, and 1980 and 1970 population weights

Sample areas or counties	Publication schedule	1980 CPI population weight		1970 CPI population weight	
		CPI-U	CPI-W	CPI-U	CPI-W
Northeast region					
Metropolitan areas of 1.2 million and above	Monthly	23.997	22.967	26.521	27.468
New York-Northern New Jersey-Long Island, NY-NJ-CT	Monthly	16.241	15.150	16.743	17.452
New York portion:	Monthly	9.252	8.426	10.006	10.401
Bronx, Kings, New York, Queens, Richmond, Nassau, Orange, Putnam, Rockland, Suffolk, Westchester					
New Jersey portion:					
Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union					
Connecticut portion:					
Fairfield, Litchfield (part), New Haven (part)					
Philadelphia-Wilmington-Trenton, PA-DE-NJ-MD	Monthly	2.920	2.834	2.825	3.023
Pennsylvania portion:					
Bucks, Chester, Delaware, Montgomery, Philadelphia					
New Jersey portion:					
Burlington, Camden, Cumberland, Gloucester, Mercer, Salem					
Delaware portion:					
New Castle					
Maryland portion:					
Cecil					
Boston-Lawrence-Salem, MA-NH	Bimonthly ¹	2.141	1.884	1.737	1.658
Massachusetts portion:					
Bristol (part), Essex, Middlesex (part), Norfolk (part), Plymouth (part), Suffolk, Worcester (part)					
New Hampshire portion:					
Hillsborough (part), Rockingham (part)					
Pittsburgh-Beaver Valley, PA	Bimonthly ²	1.276	1.327	1.403	1.510
Allegheny, Beaver, Fayette, Washington, Westmoreland					
Buffalo-Niagara Falls, NY	Semiannually	.653	.678	.772	.860
Erie, Niagara					
Northeast metropolitan areas of 500,000 to 1.2 million	Monthly	3.579	3.663	4.331	4.473
Northeast metropolitan areas of 75,000 to 500,000	Monthly	3.098	3.124	3.688	3.800
Northeast nonmetropolitan areas of 2,500 to 75,000	None	1.080	1.030	1.759	1.743
North Central region					
Metropolitan areas of 1.2 million and above ³	Monthly	24.608	26.795	26.508	28.663
Chicago-Gary-Lake County, IL-IN-WI	Monthly	13.262	14.685	12.982	14.691
Illinois portion:	Monthly	4.039	4.550	4.436	5.180
Cook, Du Page, Grundy, Kane, Kendall, Lake, McHenry, Will					
Indiana portion:					
Lake, Porter					
Wisconsin portion:					
Kenosha					
Detroit-Ann Arbor, MI	Bimonthly ²	2.363	2.587	2.497	2.833
Lapeer, Livingston, Macomb, Oakland, St Clair, Washtenaw, Wayne					
St Louis-East St Louis, MO-IL	Bimonthly ¹	1.201	1.208	1.376	1.511
Missouri portion:					
Franklin, Jefferson, St Charles, St Louis, St Louis City					
Illinois portion:					
Clinton, Jersey, Madison, Monroe, St Clair					
Cleveland-Akron-Lorain, OH	Bimonthly ¹	1.478	1.675	1.208	1.391
Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, Summit					
Minneapolis-St Paul, MN-WI	Semiannually	1.155	1.228	1.118	1.148
Minnesota portion:					
Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Washington, Wright					
Wisconsin portion:					
St Croix					
Milwaukee, WI	Semiannually	.740	.851	.803	.918
Milwaukee, Ozaukee, Washington, Waukesha					
Cincinnati-Hamilton, OH-KY-IN	Semiannually	.855	.946	.787	.865
Ohio portion:					
Butler, Clermont, Hamilton, Warren					
Kentucky portion:					
Boone, Campbell, Kenton					
Indiana portion:					
Dearborn					
Kansas City, MO-Kansas City, KS	Semiannually	.754	.859	.757	.845
Missouri portion:					
Cass, Clay, Jackson, Lafayette, Platte, Ray					
Kansas portion:					
Johnson, Leavenworth, Miami, Wyandotte					
North Central metropolitan areas of 360,000 to 1.2 million	Monthly	3.189	3.683	3.912	4.320
North Central metropolitan areas of 75,000 to 360,000	Monthly	5.076	5.377	5.360	5.521
North Central nonmetropolitan areas of 2,500 to 75,000	Monthly	3.081	3.050	4.254	4.131

Table 2. Continued—Consumer Price Index sample areas and regions, by size classes, publication schedule, and 1980 and 1970 population weights

Sample areas or counties	Publication schedule	1980 CPI population weight		1970 CPI population weight	
		CPI-U	CPI-W	CPI-U	CPI-W
Southern region	Monthly	30.097	30.287	27.794	26.289
Metropolitan areas of 1.2 million and above ³	Monthly	10.304	10.279	7.298	7.477
Washington, DC-MD-VA	Bimonthly ¹	1.766	1.489	1.786	1.621
District of Columbia portion: Washington, DC					
Maryland portion: Calvert, Charles, Frederick, Montgomery, Prince Georges					
Virginia portion: Arlington, Fairfax, Loudoun, Prince William, Stafford, Alexandria City, Fairfax City, Falls Church City, Manassas City, Manassas Park City					
Dallas-Fort Worth, TX	Bimonthly ²	1.556	1.793	1.405	1.538
Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant					
Baltimore, MD	Bimonthly ¹	1.124	1.164	1.201	1.316
Anne Arundel, Baltimore, Carroll, Harford, Howard, Queen Annes, Baltimore City					
Miami-Ft. Lauderdale, FL	Bimonthly ¹	1.526	1.267	.831	.783
Broward, Dade					
Houston-Galveston-Brazoria, TX	Bimonthly ²	1.621	1.974	1.147	1.277
Brazoria, Fort Bend, Galveston, Harris, Liberty, Montgomery, Waller					
Atlanta, GA	Semiannually	1.118	1.234	.928	.942
Barrow, Butts, Cherokee, Clayton, Cobb, Coweta, De Kalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, Spalding, Walton					
Southern metropolitan areas of 450,000 to 1.2 million	Monthly	7.938	8.272	7.883	7.539
Southern metropolitan areas of 75,000 to 450,000	Monthly	7.881	7.813	7.700	6.662
Southern nonmetropolitan areas of 2,500 to 75,000	Monthly	3.973	3.923	4.913	4.611
Western region	Monthly	21.299	19.952	19.177	17.580
Metropolitan areas of 1.2 million and above ³	Monthly	14.116	13.548	9.319	8.877
Los Angeles-Anaheim-Riverside, CA	Monthly	6.291	6.201	5.443	5.362
Orange, Riverside, San Bernardino, Los Angeles, Ventura					
San Francisco-Oakland-San Jose, CA	Monthly	3.156	2.855	2.131	1.984
Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma					
Seattle-Tacoma, WA	Semiannually	1.193	1.196	.890	.893
King, Pierce, Snohomish					
San Diego, CA	Semiannually	.987	.803	.855	.638
San Diego					
Portland-Vancouver, OR-WA	Semiannually	.744	.771	.627	.625
Oregon portion: Clackamas, Multnomah, Washington, Yamhill					
Washington portion: Clark					
Denver-Boulder, CO	Semiannually	.929	.945	.750	.725
Adams, Arapahoe, Boulder, Denver, Douglas, Jefferson					
Western metropolitan areas of 330,000 to 1.2 million ³	Monthly	2.787	2.550	4.915	4.561
Honolulu, HI	Semiannually	.320	.296	.344	.327
Honolulu					
Western metropolitan areas of 75,000 to 330,000 ³	Monthly	2.611	2.301	3.028	2.506
Anchorage, AK	Semiannually	.086	.077	.070	.037
Anchorage Borough					
Western nonmetropolitan areas of 2,500 to 75,000	None	1.785	1.553	1.915	1.636
All metropolitan areas over 1.2 million	Monthly	53.922	53.661	46.342	48.497
Midsized metropolitan areas	Monthly	17.493	18.168	21.041	20.893
Northeast: 500,000 to 1.2 million					
North Central: 360,000 to 1.2 million					
South: 450,000 to 1.2 million					
West: 330,000 to 1.2 million					
Small metropolitan areas	Monthly	18.666	18.616	19.776	18.489
Northeast: 75,000 to 500,000					
North Central: 75,000 to 360,000					
South: 75,000 to 450,000					
West: 75,000 to 330,000					
All nonmetropolitan areas 2,500 to 75,000	Monthly	9.919	9.555	12.841	12.121

¹ Odd months (Jan., Mar., May, July, Sept., Nov.).

² Even months (Feb., Apr., June, Aug., Oct., Dec.).

³ Includes areas not identified separately.

NOTE: The size class boundaries have changed since 1978. As shown above, the boundaries between the midsized and small areas are variable. Previously, the limits were 1.25 million and above; midsized—385,000 to 1.25 million; small—75,000 to 385,000; and less than 75,000.

Boston now includes some parts of New Hampshire; the Chicago area has three additional counties including Kenosha, WI; Houston has added Galveston; Los Angeles includes Riverside-San Bernardino; and San Francisco includes San Jose. Table 2 contains a complete list of counties for each local area with a published CPI.

Table 2 also shows the population for both the CPI-U and CPI-W in each of the publication areas as a percentage of their respective total U.S. 1980 urban population. If these weights are compared with the weights shown for 1970, one can ascertain the degree of relative population change in each area since 1970. For example, the weight for the CPI-U population in the Northeast region declined from 26.521 in 1970 to 23.997 in 1980. This decline reflects the faster growth rate of the population of the South and West in recent years, compared with the Northeast. Even though the New York area has expanded since 1970, its relative population weight has declined.

The population weight for the San Francisco-Oakland-San Jose area has become larger than that for the Detroit-Ann Arbor area. Based on population growth since 1970 and the expansion of its definition, the San Francisco area has superseded the Detroit area as the fifth largest area covered by the CPI indexes. For that reason, the San Francisco area, beginning with data for January 1987, will be published monthly while the Detroit area will be published bimonthly (even-numbered months). The publication of indexes for Cleveland are changing from even-numbered months to odd-numbered months, D-size (that is, urban areas with populations under 75,000) strata indexes will not be published in the Northeast and West, and indexes will no longer be published for the Scranton-Northeast Pennsylvania area.

Both the CPI-U and the CPI-W for January 1987 will be

linked to the present series of each index as of December 1986 to provide a continuous series. For most indexes, the linking will be accomplished by setting the index levels of the revised CPI with the updated expenditure weights and samples equal to those published for the present series in December 1986. Each index will move upward or downward from the December 1986 level in accordance with subsequent changes in prices. The local area indexes which are calculated and published for the odd-numbered months will be linked to their present series in November 1986 and subsequent changes in prices measured from that point in time. For new items and for those items that have undergone significant definition changes, indexes will be introduced with November or December 1986=100.

As in the past, BLS will publish selected indexes using the old expenditure weights for 6 months after the issuance of the revised CPI. Unlike earlier revisions, these overlap indexes will be calculated from the updated item, outlet, and area samples and will differ from the revised indexes only by their expenditure weights. As a result of a number of enhancements made in the CPI during this and the previous revision, the costly activities of replacing the entire set of item, outlet, and area samples prior to the issuance of the revised CPI have been eliminated. Substantial cost reductions in the revision process were achieved by replacing only those item, outlet, and area samples which were necessary for estimating a CPI based on the 1980 population and the 1982-84 market basket of expenditures. In earlier revisions, the 6-month overlap old series indexes used not only the old expenditure weights but also the old item, outlet, and area samples. The base period for the revised CPI for January 1987 will be 1967=100, the same as for the present index. □

—FOOTNOTES—

¹ See John L. Marcoot, "Revision of the Consumer Price Index is now under way," *Monthly Labor Review*, April 1985, pp. 27-38, for a fuller description of the revision and its enhancements.

² See *BLS Handbook of Methods: Volume 2—The Consumer Price Index*, Bulletin 2134-2 (Bureau of Labor Statistics, 1984), p. 12, for a description of the current rotation process. The post-1986 CPI will have an even broader rotation process as described in Marcoot, "Revision of the Consumer Price Index," pp. 34-35.

³ The following item strata are being discontinued, but a corresponding sub-strata index will be available:

Other breads	Other pork
Fresh biscuits, rolls, and muffins	Frankfurters
Fresh cakes and cupcakes	Bologna, liverwurst, salami
Cookies	Other lunchmeats
Crackers and bread and cracker products	Lamb and organ meats
Fresh sweetrolls, coffee cake, and donuts	Butter
Frozen and refrigerated bakery products and fresh pies, tarts, and turnovers	Other dairy products
Ham other than canned	Frozen fruit and fruit juices
Pork sausage	Other fruit juices
	Cut corn and canned beans except lima
	Other processed vegetables
	Candy and chewing gum
	Other sweets

Margarine	Other laundry and cleaning products
Other fats, oils, salad dressing	Cleansing and toilet tissue, paper towels, and napkins
Nondairy substitutes and peanut butter	Stationery, stationery supplies, and gift wrap
Roasted coffee	Men's suits, sport coats, and jackets
Instant and freeze-dried coffee	Men's coats and jackets
Seasonings, olives, pickles, relish	Boys' coats, jackets, sweaters, and shirts
Other condiments	Boys' suits, trousers, sport coats, and jackets
Miscellaneous prepared food and baby foods	Girls' coats, jackets, dresses, and suits
Other prepared foods	Girls' separates and sportswear
Whiskey at home	State automobile registration
Other alcoholic beverages at home	Products for hair, hair pieces, wigs
Household linens	
Curtains, drapes, slipcovers, sewing materials	
Soaps and detergents	

A sub-strata index will not be available for the following items:

Canned ham	Lumber, awnings, glass, masonry materials
Cola drinks excluding diet cola	Plumbing, electrical, heating, cooling supplies and equipment
Other carbonated drinks	
Paint, wallpaper supplies, tools, equipment	

Other property maintenance and repair commodities
 Stoves, dishwashers, vacuums, and sewing machines
 Office machines, small electric appliances, and air conditioners
 Miscellaneous household products
 Lawn and garden supplies
 Moving, storage, freight, household laundry, and dry cleaning
 Boys' furnishings
 Girls' underwear, nightwear, hosiery and accessories
 Sewing materials and notions
 Driver's license
 Automobile inspection
 Intercity bus fares
 Intercity train fares
 Intracity mass transit
 Taxi fare
 Anti-infective drugs

Tranquilizers and sedatives
 Circulatory and diuretics
 Hormones, diabetic drugs, biologicals, and prescription medical supplies
 Pain and symptom control drugs
 Supplements, cough and cold preparations, and respiratory agents
 Eyeglasses
 Other professional (medical) services
 Other hospital and medical care services
 Sports vehicles
 Bicycles
 Indoor, warm weather sport equipment
 Other sporting goods and equipment

Dental and shaving products
 Other toilet goods and personal care appliances

Cigarettes
 Other tobacco products and smoking accessories

⁴ See Robert Gillingham and Walter Lane, "Changing the treatment of shelter costs for homeowners in the CPI," *Monthly Labor Review*, June 1982, pp. 9-14; and "Changing the Homeownership Component of the Consumer Price Index to Rental Equivalence," *CPI Detailed Report*, January 1983, pp. 7-11, for descriptions of the rental equivalence method.

⁵ See Marcoot, "Revision of the Consumer Price Index," pp. 36-37.

⁶ Because of time constraint, the CPI area samples were drawn on preliminary new Consolidated Metropolitan Statistical Area (CMSA) definitions obtained from the Office of Management and Budget (OMB). When the official definitions were issued, several had been modified slightly. The most notable difference is that Racine, WI, was sampled as a separate area in the Class C (population of 75,000 to 385,000) stratum, whereas the final OMB definition for the Milwaukee CMSA included Racine. Similarly, Monroe County, MI, was dropped by OMB from the Toledo definition and added to Detroit.

Theories of worker satisfaction

Job satisfaction or, in its broader form, work satisfaction, is a difficult entity to define even in simplistic terms. For the individual worker, it exists when the perceived benefits of the work exceed the perceived costs by a margin deemed by the worker to be adequate under the circumstances. It is not, however, a static state and is subject to influence and modification from forces within and outside of the immediate work environment. One school of thought . . . examines the problem in terms of its extrinsic or intrinsic orientation, that is whether the worker is primarily concerned with work as a means to provide fulfillment outside of the job, or finds fulfillment in the work itself, the former perhaps tending to be more of a working-class value and the latter more of a middle-class one. Furthermore, job satisfaction is not the unitary or integrated state that the name would imply. There are multiple facets to the working state, some of which are more satisfying, or perhaps more acceptable, and others less. Job satisfaction at best describes in comparative terms some integrated mean of that state at some point in time. There is no absolute on some infinite scale. At best, we can state that at this particular time one is more satisfied with some aspect of one's job than at some other time.

—T. M. FRASER
*Human Stress, Work and Job Satisfaction:
 A Critical Approach* (Washington, International
 Labor Office, 1983), p. 24.