

# RESOURCE PAGE

The following content provides you with the tools and concepts you will need to cost out contract proposals and to think strategically about using the information.

## DECIMALS, PERCENTS & AVERAGES

**Decimals.** Review the fact that the first two numbers to the right of the decimal point show hundredths . . . so 12.43 is the same as twelve and forty-three hundredths.

Review the fact that fractions can be expressed in two ways . . . so 12.50 is the same as 12  $\frac{1}{2}$ .

Review the fact that \$0.40 is another way to write 40 cents.

**Rounding off.** When costing out, numbers should be rounded off to the one-hundredth place (two columns to the right of the decimal point). To round off numbers, drop the number in the third column (and everything to its right) if it is four or less or add one to the second column if the number in the third column is five or more.

**For example:** \$3.33333 would be shortened to \$3.33, while \$3.33533 would become \$3.34.

**Percentages.** To find out what percentage A is of B, you divide A by B. The answer will be expressed in decimals. Multiply that number by 100 to convert decimals into percent form.

**For example:** If workers were paid \$6.25 per hour (B) and won a 40-cent per hour raise (A), their percentage increase would be calculated as follows:

$$0.40 \div 6.25 = 0.064$$

$$0.064 \times 100 = 6.4\%$$

You want to know how much a 5% raise would be worth to someone making \$9.00 per hour.

If a number is expressed in percent and you want to find the equivalent dollar and cents value (decimal), you first divide the percentage by 100 to get a decimal form.

$$5 \div 100 = 0.05$$

Then you multiply the comparative dollar value times that decimal figure.

$$0.05 \times 9 = .45 \text{ (45 cents)}$$

**Percentage change.** To figure the percentage change between an original number (A) and a new number (B) . . .

- Subtract A from B to get the difference between them.
- Divide that difference by A.
- Multiply by 100 to get a percentage.

So if Yolanda earned \$16,500 one year and earned \$20,000 four years later, the percentage increase would be . . .

- $\$20,000 - \$16,500 = \$3,500$
- $\$3,500 \div \$16,500 = 0.212$
- $0.212 \times 100 = 21.2\%$

**Average.** A simple average or “mean” is figured by a two-step process:

- Add all the numbers in a group.
- Divide by the number of items in the group.

So if janitors earn \$6.75/hour, supervising janitors \$9.30/hour, and window cleaners \$11.00/hour, the average wage for the three jobs is . . .

- $\$6.75 + \$9.30 + \$11.00 = \$27.05$
- $\$27.05 \div 3 = \$9.02$

Sometimes it would be more accurate to figure a **weighted average** that would show what is most typical for most people.

In the example above, let’s say there are 10 janitors, 2 supervising janitors, and 3 window cleaners. While the average wage for the three jobs was \$9.02, that is much higher than what 10 of the 15 workers actually make. A weighted average would give the most weight to the categories that include the most people.

*To figure a weighted average . . .*

- Multiply the number of items in each group by the rate for that group.
- Add up the results from all groups.
- Divide by the total number of items in all groups.

Using the example above . . .

- 10 janitors x \$6.75 (per hour) = \$67.50; 2 supervising janitors x \$9.30 = \$18.60; 3 window cleaners x \$11.00 = \$33.00
- $\$67.50 + \$18.60 + \$33.00 = \$119.10$   
total pay per hour
- $\$119.10 \div 15 \text{ workers} = \$7.94$   
weighted average hourly pay

That figure clearly gives a more accurate picture of pay among the 15 workers.

Another way to describe a group of numbers such as workers’ pay levels is to use the **median**. That is the number, which is right in the middle of the group, with the same amount of numbers above it and below it.

Consider the following example. .

Aide I	\$6.50
Aide II	\$7.00
Aide III	\$7.25
Custodian	\$7.30
LPN	\$11.00
Cook	\$11.50
RN	\$13.00

The *average* pay (\$9.08) actually is higher than the pay scale for four of the seven classifications because the top three pay levels make the average misleadingly high.

The median pay level would be the custodian’s (\$7.30) because three pay scales are above that and three below it. In this case, talking about the *median* pay level would give a better picture of workers’ typical pay than using the average pay would.

## CONSUMER PRICE INDEX

**Consumer Price Index.** The CPI is a figure published by the U.S. Department of Labor that is supposed to show changes in the cost of living by measuring changes in prices for housing, food, transportation, clothing, and other items.

Both national and regional figures are available. National data is available from the U.S. Department of Labor's Bureau of Labor Statistics (BLS) at <http://stats.bls.gov/hlpcont.htm> or by phone at (202) 691-6569.

The BLS also reports changes in the CPI for major metropolitan areas and compiles data by occupation, industry and geographical area. This information can be obtained from <http://stats.bls.gov>

Many state governments track local changes in the CPI. Try contacting your state's Department of Budget or Finance.

For a number of reasons, the CPI may not provide a good indication of the increases your members actually have faced or will face during the next contract. But since the CPI is the only nationally recognized measure of inflation, it is often used by management, unions, and the news media to compare bargaining proposals with workers' increased expenses.

The CPI is also used to calculate increases in the cost-of-living allowance (COLA) in contracts with COLAs.

The CPI uses prices in the years 1982-84 as the starting point, and considers those prices as 100. Prices 10 percent higher than those levels, then, would mean a CPI of 110. Prices double 1982-84 levels would mean a CPI of 200.

For your purposes, you won't be comparing today's CPI to the one for 1982-84 but to the CPI for some more recent year. You can make the comparison in three steps:

- Subtract the old CPI from the new one to get the amount of change.
- Divide the amount of change by the old CPI.
- Multiply by 100 to get a percentage.
- So if the CPI was 338.50 last July 1 and this July 1 it is 346.77 . . .
- $346.77 - 338.50 = 8.27$
- $8.27 / 338.50 = 0.0244$
- $0.0244 \times 100 = 2.44\%$  increase in the CPI.

**The following are some of the key types of calculations negotiating committees have to make.**

### WORKWEEK CONVERSIONS

**Converting between hours, days, weeks, and months.** The chart shown here is based on a 40-hour workweek. You would have to create your own for people whose basic workweek or workday is different.

<b>Forty Hour Work Week Equivalents</b>				
	Hour	Day	Week	Month
Day:	8	_____	_____	_____
Week:	40	5	_____	_____
Month:	173.3 (2080÷12)	16.7 (260÷12)	4.33 (52÷12)	_____
Year:	2080 (40X52)	260 (5X52)	52	12

## PERCENT vs. FLAT DOLLAR COMPARISON

**Comparing percentage increases and flat dollar increases.** Percentage increases widen pay gaps among members because the highest paid members receive the greatest dollar increase.

**Example:** Worker A makes \$7 per hour; Worker B makes \$14. So Worker B now makes \$7 more than Worker A.

If each worker gets a 10% raise, Worker A will make \$7.70 per hour, while Worker B will make \$15.40 per hour. Worker B now makes \$7.70 more than Worker A.

**In contrast,** if each worker gets a flat 75 cent raise, Worker A will now make \$7.75 and Worker B \$14.75. Worker B will now make \$7.00 more than Worker A. Thus showing that flat dollar increases reduce pay gaps.

## ANNUAL COST to PER HOUR CONVERSIONS

**Converting annual cost (per worker) to per hour cost (per worker).**

If a benefit will cost \$X per worker per year, you would divide by the average hours per worker per year to get a dollar (or cents) per hour figure.

If you know cost per worker per hour, you would multiply by average hours per worker per year to get an annual cost per worker.

## COMPARING BENEFIT DOLLARS & VALUE

**Comparing the value of one benefit (such as an added holiday) to another (such as a certain size raise).**

One way to compare different benefits is to figure their value in cents per hour or dollars per year.

**Example:** Management officials say they cannot agree to both a 5 cent per hour raise and three extra paid holidays, but that they could accept one or the other. For a worker making \$8 per hour, which is worth more money?

The holidays would be worth . . .  
 $3(\text{days}) \times 8(\text{hours}) \times \$8 = \$192$  per year  
 $\$192 \div 2080$  (work hours per year) = 9 cents per hour per worker.

A raise in the basic pay rate also means a raise in Social Security tax paid by the employer, overtime pay, and other costs, but even so, the holidays clearly could cost the employer more than the 5 cent raise.

Obviously, these figures would not necessarily determine your bargaining strategy. You may feel you can win both the raise and the holidays. Or, knowing that management is willing to give holidays worth 9 cents per hour, your members may prefer to drop the holiday proposal but bargain for a larger raise than the 5 cents management offered.

Certain kinds of benefits may be considered more valuable by particular groups of workers despite the comparisons of dollar value. For

instance, some workers may simply prefer more paid time off to extra raises. No matter what your strategy, however, you should know, as management will, how the dollar values compare.

**Comparing percentage increase in one category (such as wages) to percentage increase in another (such as profits or supervisors' pay).**

*For example*, annual profits have increased from \$1 million to \$1.27 million. Using the procedures shown in previous sections for calculating percentage increases, that would mean a 27 percent jump. If, meanwhile, workers' pay has increased only 2 percent, you could point out in all your communications materials that profits are growing 13½ times faster than wages.

### **FRONT LOADING vs. BACK LOADING OF WAGE INCREASES**

**Comparing increases received now (front loading) vs. increases received later (backloading).**

In a multi-year agreement, you need to know not just the total percentage or dollar increase but the way it will be spread out. The principle to remember is that increases now are worth more than increases later because increases now continue to be paid over a longer period.

*Example:* A worker making \$9 per hour would receive raises under a proposed three-year contract A of 10 cents /10 cents /10 cents. Is that worth the same as offer B of 5 cents/5 cents/20 cents, since by the end of the contract the total raise will be 30 cents per hour either way?

**The answer is no.** During the first year under proposal A, the worker will receive 5 cents per hour more than under B. During the second year, the worker will be receiving 10 cents more per hour than under proposal B. Under both proposals, pay for the third year would be the same.

$$\text{A} - (.10 \times 2080 = 208) + (.20 \times 2080 = 416) + (.30 \times 2080 = 624) = \$1248$$

$$\text{B} - (.05 \times 2080 = 104) + (.10 \times 2080 = 208) + (.30 \times 2080 = 624) = \$936$$

### **CALCULATING TOTAL COSTS**

**Calculating labor costs as a percentage of total costs or as a percentage of revenues.**

Using the method of figuring percentages, you may be able to show that labor costs are only a small percentage of the total money that the employer spends or takes in.

You also may be able to show that percentage increases in labor costs are smaller than percentage increases in other costs or in revenues.

**Calculating the overall percentage increase that the total package is worth.**

Sometimes management officials want the total package to appear to be worth as much as possible so they can show how generous they are. In other cases, they may try to underestimate the package's value to show how tough they were in dealing with the union.

***The basic method for calculating total dollar increases for the work force is as follows:***

- Multiply the dollar value of each contract gain times the number of workers who will enjoy that gain.
- Add those totals to obtain the total dollar value of all contract gains for all workers.

***To obtain an overall cents per hour figure . . .***

- Divide the total annual dollar increase by the average number of hours employees work each year.

***Two ways to figure total percentage increase would be as follows:***

- Compare the total annual cost of workers' pay and benefits in the last year of the old contract with the total annual cost in the last year of the new contract.
- Compare total cost of all years of the old contract with total cost of all years of the new contract.

#### **Always Check Management's Figures**

Don't ever accept management's figures at face value. For example:

- Are they using inaccurate numbers for pay scales, number of employees in particular classifications, etc.?

- Are they counting the cost of employee *positions* that are not currently filled?

- Are they including labor costs for employees who are not part of the SEIU-represented unit?

- Are they adding into labor costs expenses which really belong in another category such as administration?

- Are they assuming unrealistically large future increases in categories such as cost of living allowance or health insurance premiums?

- Are they ignoring the *benefits* to the employer from money they will invest under the new contract?

Can you develop estimates to show that:

- More money spent on training will mean more productive employees?

- Higher pay, better benefits, and greater job rights would result in reduced turnover, which means lower total recruiting and training costs and reduced downtime for getting new employees up to speed?

- Improved pay and working conditions means improved morale, which means improved productivity. Increased time off, for example, may not necessarily result in a net cost increase because it could mean that workers will be more productive while they are on the job?