ANNEX: HOW TO CALCULATE THE “REAL” WAGE

The current dollar value refers to dollars in the year they were received or paid, unadjusted for inflation. If you want to figure out the real wage, or compare the purchasing power of wages from year to year, wages need to be adjusted by taking inflation into account.

You can calculate your real income or real wage by using the Consumer Price Index (CPI) reported monthly by the Bureau of Labor Statistics (BLS). The CPI shows overall changes in prices of all goods and services bought for use by urban households. User fees (such as water and sewer service) and sales and excise taxes paid by the consumer also are included. The index does not include income taxes and investment items, such as stocks, bonds, and life insurance. There are two indexes, the CPI-U for all urban consumers and the CPI-W for urban wage earners and clerical workers.

If you are a wage earner and you know your wage in two different years and the consumer price index for those years, you can see how much ground (if any) has been gained or lost from the first year to the later one. (The index with the most up-to-date figures is available from the BLS, at (202) 691-7000 or at [http://www.bls.gov/cpi/](http://www.bls.gov/cpi/).) For instance, if you know this:

<table>
<thead>
<tr>
<th>Month and Year</th>
<th>Your Wage</th>
<th>CPI-W</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 1990</td>
<td>$13.39</td>
<td>129.90</td>
</tr>
<tr>
<td>August 2010</td>
<td>$21.24</td>
<td>213.88</td>
</tr>
</tbody>
</table>

You can figure out your real wage in August 1990 in terms of August 2010 prices:

- **Multiply:** Old wage times new price index
  \[
  13.39 \times 213.88 = 2,863.85
  \]
- **Divide:** Previous answer by the old price index
  \[
  2,863.85 / 129.90 = 22.05
  \]

$22.05 is your purchasing power - how much the August 1990 wage ($13.39) can buy in August 2010.

To find out how much purchasing power you gained or lost during the 20 years:

- **Subtract:** Purchasing power in August 2010 of the old wage minus the new wage
  \[
  22.05 - 21.24 = 0.81
  \]
- **Divide:** Previous answer by purchasing power in August 2010 of the old wage
  \[
  0.81 / 22.05 = 0.0367 \approx 3.7\%
  \]

(Move the decimal point two places to the right to get a percentage.) Your real wage has fallen by 3.7% in 20 years. In August 2010, you are earning 96.3% of what you earned 20 years ago, in terms of purchasing power.