Dates of Publication
Surveys are conducted quarterly:
March, June, September, December

Cost of Food at Home for a Week in Alaska
December 1998
22 Communities Surveyed
Up to three stores in each of 22 communities were surveyed during December of 1998 for the cost of a specific set of food and non-food items. The 104 food items selected were taken, with some modification, from the USDA Low-cost Food Plan which is itself based on a nationwide survey of eating habits of Americans, conducted in 1977-78. In addition, the costs of such items as water, propane and electricity were collected. All costs were adjusted to reflect local sales tax where applicable. Since Wasilla and Palmer were combined in this census, their differing sales taxes were averaged when calculating food costs.

The estimated prices of unavailable food items in various communities were calculated as the expected cost as judged from the prices of all available items relative to the price of those items in Anchorage. The percent of foods unavailable in each community are shown in the survey.

Weekly food consumption rates for a family of 4, children 6 - 11 years, form the basis of the expressed food costs. All other costs are ratios of that cost as calculated from the USDA Cost of Food at Home survey issued September, 1998. The cost for this family of 4 can be calculated from the table by summing the individual members. For smaller families such a sum would be too low and should be adjusted up by 20%, 10% or 5% for families of 1, 2 or 3
persons respectively. Similarly, the sum for larger families would be too high and downward adjustments of 5% and 10% are suggested for 6 and 7 or more member families. These adjustments reflect that some economies may be realized when preparing foods for larger families.

Rows 18 through 22 represent historical food costs. The Anchorage column is a comparison of present to previous Anchorage costs. Similarly the U.S. Average column represents changes in U.S. average prices. A one (1) appearing in the Anchorage column indicates that the current Anchorage cost is 1% higher now than at that date. Therefore, rising food costs are indicated by positive values. The remaining columns are each community's cost relative to Anchorage at that date. For instance, a cell containing a one (1) indicates a community that was experiencing a food cost 1% higher than Anchorage at that date. Note that the dollar value of the U.S. Average is not included in this survey since the methodology is not equivalent.

To see the results of Alaska Cooperative Extension's Food Cost Survey on the worldwide web, point your browser to: http://www.uaf.edu/ces/fcs/
Figure 1 groups communities by food cost and is a useful tool when speculating about the pressures that influence the cost of food throughout Alaska.

From time to time it is interesting to investigate which non-food components of the Food Cost Survey track with food. A simple way to do this is to create a correlation matrix. In essence, perfectly correlated items have a value of 1, such as the cost of food versus the cost of food. Poorly correlated items have a value approaching zero. Table 1 shows the average (mean) of correlations between food and non-food items found in the four surveys of 1998. Because electricity had the highest mean of correlations (0.842) and the smallest mean of standard deviations
(0.028), electricity appeared to be the most reliable single indicator of food costs in a community in 1998. An interesting observation was that propane prices in bulk (P_288) or by 100 pound bottle (P_100) correlated well to one another, but bulk propane correlated much better to food prices. The fact that food and bulk propane have smaller coefficients of variation (100*mean/SD) supports this conjecture.

Table 1. Means and standard deviations of four Pearson correlations matrices for items in the 1998 surveys.

<table>
<thead>
<tr>
<th>ELEC</th>
<th>HEAT</th>
<th>GAS</th>
<th>LUMBER</th>
<th>P_288</th>
<th>P_100</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN</td>
<td>0.842</td>
<td>0.557</td>
<td>0.770</td>
<td>0.810</td>
<td>0.840</td>
</tr>
<tr>
<td>SD</td>
<td>0.028</td>
<td>0.058</td>
<td>0.059</td>
<td>0.074</td>
<td>0.095</td>
</tr>
</tbody>
</table>

Figure 1. The ranked cost of food in communities surveyed during
December 1998.