Utility Allowance Methodology

Summary

The utility allowance is based on both the consumption and rates of utilities. Utility consumption data is supplied by HUD’s Utility Schedule Model, while utility rate data is collected by THDA. Utility allowance adjustments are made if the projected monthly expenditure for a utility increased or decreased 10% or more from the previous year. The utility allowance remains the same as the previous year’s utility rate if the increase or decrease in rates is below 10%. The cost of utilities is calculated for electricity, natural gas, liquified petroleum gas (propane), water, wastewater and trash.

This year, THDA collected information on the primary utility providers serving the county seats of each county. May 2020 rates (and seasonal rates, if available) from each provider were used to determine the average monthly consumption cost for each utility. Monthly consumption costs were calculated using HUD’s Utility Schedule Model. Updates to the 2020 utility allowances were made when the average cost of the current rates increased or decreased 10% or more from the 2019 rates. Additional information on the HUD Utility Schedule Model can be found on the following HUD website.


Electricity

Electricity rates are collected along with customer service fees and the TVA Fuel Cost Adjustment (FCA). FCA is the mechanism TVA uses to help recover largely uncontrollable fuel and purchased power costs. A variety of factors affect these costs, including weather and global supply and demand issues.

Natural Gas

Natural gas rates are collected along with customer service fees and the Purchase Gas Adjustment (PGA). A detailed explanation of the PGA can be found on the following American Gas Association website. http://www.aga.org/our-issues/issuessumaries/Pages/PurchasedGasAdjustments.aspx. If the natural gas provider utilizes seasonal rates, the weighted average of the rates was used to determine the average consumption cost.
Liquefied Petroleum Gas (Propane)
Liquefied Petroleum Gas rates were calculated based on the national average and a sample of state rates. To view the progression of propane prices over time, visit the following link from the U.S. Energy Information Administration: http://www.eia.gov/petroleum/heatingoilpropane/. Weekly updates run until the end of heating season, meaning the propane price used was from the last week of March 2020.

Water and Wastewater
Water and Wastewater rates were collected along with customer service fees and applicable taxes. In 2016, HUD significantly revised its water and wastewater consumption estimates, greatly affecting the allowance amounts. These revised estimates remained in the 2020 model as well.

The utility model's projections for household water and wastewater usage are identical, and are uniform regardless of location. With this in mind, the 2015 and 2016-20 household water consumption projections are listed side-by-side for comparison.

<table>
<thead>
<tr>
<th>2015 Water Usage</th>
<th>2016-2020 Water Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 bedrooms: 4,680 gallons</td>
<td>0 bedrooms: 3,438 gallons</td>
</tr>
<tr>
<td>1 bedrooms: 5,200 gallons</td>
<td>1 bedrooms: 3,820 gallons</td>
</tr>
<tr>
<td>2 bedrooms: 6,800 gallons</td>
<td>2 bedrooms: 6,367 gallons</td>
</tr>
<tr>
<td>3 bedrooms: 8,400 gallons</td>
<td>3 bedrooms: 10,188 gallons</td>
</tr>
<tr>
<td>4 bedrooms: 10,000 gallons</td>
<td>4 bedrooms: 14,008 gallons</td>
</tr>
<tr>
<td>5 bedrooms: 11,600 gallons</td>
<td>5 bedrooms: 17,829 gallons</td>
</tr>
</tbody>
</table>

Household usage of water and sewer, then, is now 54 percent higher for a 5 bedroom unit than it was several years ago, and 40 percent for a 4 bedroom unit. Conversely, estimated water usage has been revised downwards for 0 to 2 bedroom units.

The best way to explain this change is that the 2016-20 versions of the HUD model project that a 5 bedroom unit holds, on average, 7 residents, and a 4 bedroom unit holds, on average, 5.5 residents. Previously there had been no such assumption; in 2015, the per-person gallon estimate was simply multiplied by the number of bedrooms. Incidentally, the per-person gallon estimate was lowered after 2015, based on the HUD model's usage of the Tennessee state average (rather than the U.S. average used in 2015).
Trash
In most cases, a monthly flat fee is charged for trash service. If provider information was unavailable for a specific county, data from TNHousingSearch.org was used. Based upon provider rates and TNHousingSearch.org data, a state average was calculated and used for counties where no data were available.

Range/Microwave and Refrigerator Fees
To determine the range and refrigerator fees for 2020, data was collected from online ads across the state. An average price was calculated from the data for each appliance and then divided by twelve to determine the monthly fee.