In response to the economic downturn brought on by the spread of COVID-19, Congress has passed a relief plan to help U.S. households facing financial hardships, especially low-income households. According to the current version of the relief plan, each adult whose adjusted gross income is less than $75,000 per year can receive up to $1,200, plus an additional $500 for each child; a joint-tax-filing couple whose income is less than $150,000 can receive up to $2,400, plus an additional $500 for each child.

How long will this relief check support a low-income family? A rough estimate can be made using the Consumer Expenditure Survey data provided by the Bureau of Labor Statistics (BLS). The table shows total average monthly expenditures for the first and second income quintiles, along with the average monthly expenditures on four primary categories of goods and services.

I assume the average number of persons per household is around two—1.7 and 2.1 for the first and second quintiles, respectively. Let’s assume the amount of their relief check ranges from $1,700 (one adult and one child) to $2,400 (two adults). This can cover about three to four weeks of expenditures for the first quintile (which has the lowest income) and about two to three weeks for the second quintile. However, the above estimate is relatively conservative. In response to a financial emergency, households postpone some of their expenditures and purchase only necessities. Obviously, housing and food are essential to people’s lives and account for a large fraction of the total spending (35 percent to 40 percent for housing and around 15 percent for food). If we look at just those two expenditure categories, the relief check amount of $1,700 to $2,400 could sustain a first-quintile household around six to eight weeks or sustain a second-quintile household for four to six weeks.

Though relief checks will provide much-needed assistance to financially distressed households, our simple calculation indicates that the money will not last very long, even for low-income households. To further provide assistance to U.S. households, the current relief plan also extends the coverage of unemployment insurance, which could be more effective in addressing the issues of income shortage. This extended coverage is exactly the policy suggested and advocated by the president of the Federal Reserve Bank of St Louis and many others.

Notes
2 Transportation expenditures are typically a necessity; however, many states across the U.S. are considering or have issued a stay-at-home order, which could reduce the need for transportation significantly.

Average Monthly Consumption Expenditures

<table>
<thead>
<tr>
<th>Average number of persons per household</th>
<th>Total expenditures ($)</th>
<th>Food expenditures ($)</th>
<th>Housing expenditures ($)</th>
<th>Health care expenditures ($)</th>
<th>Transportation expenditures ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First quintile</td>
<td>1.7</td>
<td>2,200</td>
<td>342</td>
<td>879</td>
<td>206</td>
</tr>
<tr>
<td>Second quintile</td>
<td>2.1</td>
<td>3,331</td>
<td>487</td>
<td>1,191</td>
<td>333</td>
</tr>
</tbody>
</table>