## CAPP 30239: 3 Minute Overview

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October 31, 2022

My goal is to use some of my professional background to shed light on a topic that has recently come to the forefront of public debate. Speaking from personal experience, until recently, inflation was a topic reserved for academics and media. However, with COVID-19-induced havoc on prices worldwide, the average citizen has suddenly become more attentive to official government statistics measuring the change in prices for goods and services.

The process government agencies use to report these measures may seem like a black box for many. I hope to be able to explain how these measures are produced, by visualizing it. The way inflation is calculated is conceptually, quite simple. Each month a group of people are surveyed, asked broadly about the goods and services they paid for. For each of those goods and services, there is an associated price (usually an index in relation to a certain date), and weight (the proportion of your total purchases this made up).

Inflation is at levels not seen in decades, and people have taken notice. But what goods and services as of recently have been driving these large changes. And related, what are the goods and services that on average, we spend a larger share of our money on? How have *those* prices changed since the COVID-19 pandemic began? I hope my visualizations can help answer these questions in an engaging and digestible manner.

## 1 Data Visualization Ideas

This first graph idea is based on one found on Slide 177 of the course slides. Already filtering for the items that people spend the largest share of their income, we can show how the relative price of those (presumably important) goods have changed since the beginning of the COVID-19 pandemic. The y-axis will correspond to the index value (February 2020=100), but the thickness of the line will denote the weight (i.e. importance).

The second graph would be looking at the highest weighted goods and services, and creating visuals showing the trend of prices for the items from 2012 to 2022.

The final graph could show the magnitude of change that certain goods and services had during COVID. Where we were in February 2020, The maximum level of price, and where we currently are. Overlaying circles, all different shades of a color, scaled to size could illustrate the story of how varied the changes in prices were.





