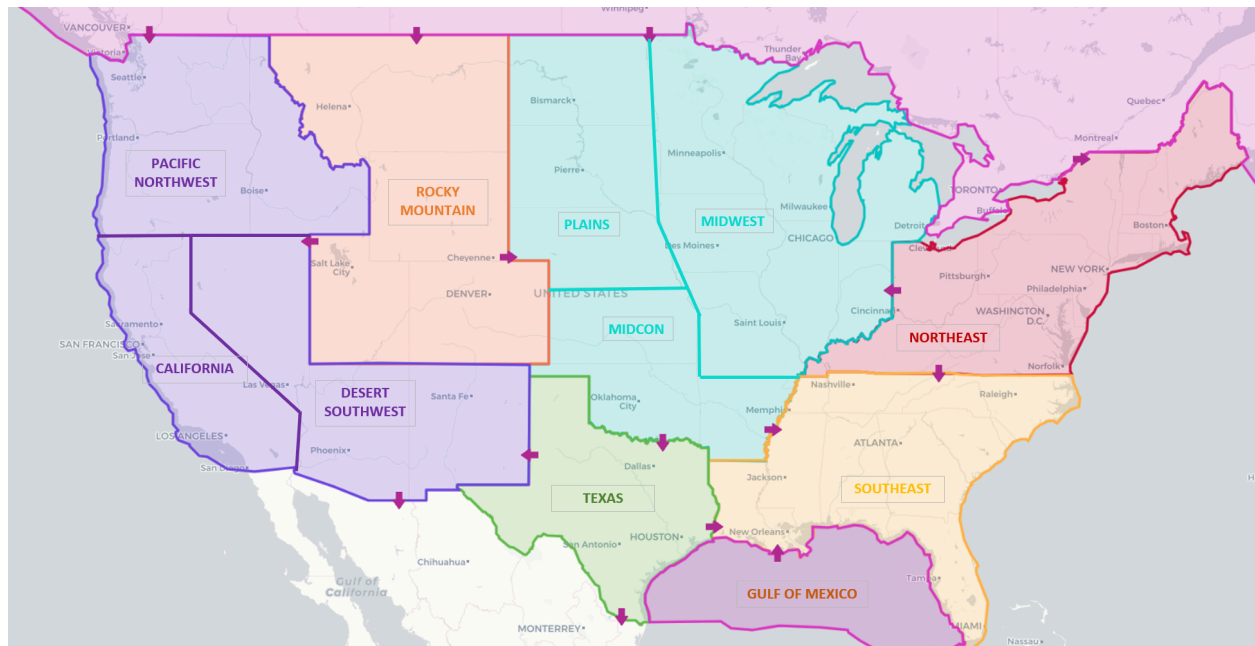


## Model Overview

The map below shows the different regions that match up to the data provided:



- Each region has an associated supply and demand value (expressed as MMcf) and a spot price (cash).
- The supply value minus the demand value is the imbalance for that region (long when positive, short when negative).
- A region will need to drive prices higher to cure shorts (and attract imports) or push prices lower to cure longs (and incentive exports).
- This local imbalance as well as the push and pull between regions is what ultimately determines price.
- The purpose of the model is to establish relevant relationships and correlations that can be used to build a price forecast.
- The goal of the forecast is not to nail the future price perfectly. The goal is to predict the direction and magnitude of the future price change within a reasonable confidence interval.
- Two prices were provided. The regional fixed price and the “cash basis”. The cash basis is the difference between the regional fixed price and the benchmark spot price at Henry Hub.
- The reason for looking at the cash basis instead of the fixed price is that you can establish relationships regardless of the underlying benchmark price. This helps to better relate different time periods.
- However, I would like to examine the fixed price as well in case there is a relevant relationship that is being overlooked. For example, would it be helpful to examine the fixed price as a percentage of the benchmark rather than just looking at the delta.