Adding an Inset Map to your Layout

Utilizing an Inset Map can be an effective way of adding valuable location information to any map layout. In ArcGIS, an Inset Map is added simply by adding a new Data Frame to the map through the Insert menu. In our example, a study is being performed in the counties affected by 2005’s Hurricane Rita.

While this map displays county information, some users of the map could be unfamiliar with this portion of the Gulf Coast. We’ll add an Inset Map to show them where the study area is in relation to states along the coast.
After repositioning the Inset Map to a better location, we can choose which layer will best display location. In our case, we’ll use the States layer that currently exists in the Study Area data frame. Simply click on the layer name to select it, and then drag the layer into the new data frame. Notice the layer is copied into the new data frame without removing it from the original data frame.

For our Inset Map we don’t need to see the entire country, so we can zoom into the Southeastern portion of the US. Now we have some context but cannot be entirely sure as to where the Study Area data frame is located compared to our Inset Map. By opening up the data frame properties of the Index Map’s data frame it’s possible to see there is an option for creating Extent Rectangles, which is exactly what we’ll do.
In the screen capture above, you can see that you can add the extents of one data frame into another. By default, this will be represented as a red square in the map. We have the option to change that frame as well as whether or not we want a leader line. This is especially useful if multiple data frames are being referenced from the same Inset Map.
It may be helpful to adjust the color and thickness of the Study Area data frame, which can also be done through the properties dialogue box. When working with multiple data frames, be sure to remember that map elements (scale bar, north arrow, legend, etc.) will reference whatever data frame is currently active. Make sure you don’t insert a scale bar for the Inset Map when you mean for it to apply to the Study Area!