

Using “Heads up” Digitization and GIS to Calculate ERU Square Footages

Aerial photographs are acquired via the Polk County Assessor’s office each year. The aeriels are flown each spring usually in early April while the trees are in “leaf off” condition allowing greater visibility with less interference by vegetation. The airplane flies at an altitude of 4000 feet more or less using a digital sensor to acquire the color picture data. Each pixel in the digital photo equates to about 0.4’ on the ground so each pixel in the digital photo is approximately 4.8” by 4.8” square at ground scale. This is more than enough resolution to reasonably digitize or draw objects at true scale in order to create GIS feature classes. GIS is short for Geographical Information System. A GIS enables its user to map and keep track of any kind of useful tabular data within a database while displaying that same data as a feature depicted on the computer screen or on a map. (*See picture below*)



If there isn’t sufficient detail in the aerial orthophoto, sometimes an even different product called oblique aerial imagery can be used to clear up shadows and or questions about impervious surfaces. (*See Pictures below*)

Looking at Subject property from the East:



Looking at Subject property from the West:



Looking at Subject property from the South:



Looking at Subject property from the North:



After the features are “digitized” a GIS analysis can be performed to determine the exact ERU’s to be billed. *(Completed ERU analysis in GIS)*

