Web-Based Parcel Viewer

The Maricopa County Assessor’s Office annually notices and administers more than 1.7 million real and personal property parcels. Basic responsibilities include locating and identifying all taxable property in Maricopa County, establishing a value for all property subject to taxation, listing the values of all property on the assessment roll, and applying all legal exemptions.

The Challenge

The Maricopa County Assessor’s Office needed to modernize its parcel visualization app to make it easier for parcel assessors, real estate agents, appraisers, and other interested parties to review notional boundaries, jurisdictions, zoning, and ad valorem valuation in Arizona’s Maricopa County.

“We needed a parcel viewer application that could help staff and the public identify, classify, and value real property parcels within Maricopa County, Arizona,” said geographic information system (GIS) programmer analyst Kacie Baker. “We wanted the application to serve up several years of aerial photography [and] zoning and flood layers along with links to third-party services.”
Within two months, the Maricopa County Assessor’s Office modernized its parcel visualization app, making it easier for stakeholders to review notional boundaries, jurisdictions, zoning, and ad valorem valuations.

The Solution

Baker and her team built the parcel viewer using the developer edition of Web AppBuilder for ArcGIS and extended its capabilities using ArcGIS API for JavaScript.

“Web AppBuilder for ArcGIS did a lot of the start-up work for us,” Baker said. “It gave me a structure and saved a whole bunch of time, as it is streamlined and easy to use. It allows me to customize as I need. I had to incorporate the Assessor’s Office standards for color scheme and certain images, so I had to customize.”

The Results

Within a two-month time frame, Baker and her team were able to build and code the web app they needed. She broke down the app’s search capability by categories, then added aerial photographs and basemaps to show zoning and flood lines and other options for each parcel. The app allows users to draw on it, to personalize their visualization experience, and it serves as a reference guide. Baker added a feature called My Location Finder so that users, such as assessors in the field, can click a GPS icon and zoom to their location.

Changing from the old public-facing maps was a bit difficult at first, but as people learned to use the new site, they appreciated its advanced functionality. For example, a buffer tool shows how many residential or commercial parcels are within a certain area. Users can export addresses for all those parcels. This tool is especially useful to owners and their representatives who are working with city permitting.

“We’re getting a positive response,” Baker said. “People regularly email us to say that the site is clean and easy to use. We continue to collect feedback to make the app even more valuable in the future.”

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Kacie Baker
Maricopa County Assessor’s Office