

The background features a complex geometric pattern of overlapping triangles and polygons in various shades of blue, yellow, and purple. On the left side, there is a small, semi-transparent inset of a map showing a grid of land parcels, likely representing a local food source analysis.

Analyzing Local Food Sources with ArcGIS

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GIS AND FOOD POLICY – Making smarter decisions

Why GIS is essential to Food policy decision making?

High demand in Maricopa county for creating data and analysis tools for study of food systems.

Using the Arcgis Platform to produce more informed analysis.

Our stakeholders and project needs

- **Project Needs –**
- **1. Create high quality updated data from local and national sources.**
- **2. Create resilient and easy to use web tools that allow for dynamic user input.**
- **3. Create effective models that allow our diverse stakeholder and user community to tweak parameters and make better food access decisions.**

Our stakeholders and project needs

- **Our Stakeholders –**
- **1. Maricopa County Public Health**
- **2. City of Phoenix**
- **3. ASU School of Sustainability**

Application Development

- **Why we chose the Arcgis Platform.**
- **Our Application needed to be intuitive and plugin free.**
- **We chose the Arcgis JavaScript API for its expandability and its ease of use in working with models and geoprocessing services.**
- **Application was designed for an audience of public health professionals/analysts and tweaked with their input**

Application Functionality

- The Application was comprised of a map viewer that allowed users to view a variety of data sources including grocery stores, farmer's market, food trucks, among other.
- We used bootstrap to make the application responsive and easy to use.
- Users have the ability to print out custom maps and reuse them for publications.
- The app also leveraged several custom geoprocessing services, that were developed using modelbuilder.
- These models allowed for dynamic user input (custom kml , csv) and also enabled us to provide geospatial policy feedback in near real time.

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Ongoing development

We see this project as an ongoing effort that meets the evolving needs of our stakeholders.

Future cohorts and groups improve the application by refining the models and code, in addition to providing ongoing data development .

Some of the modules currently in active development are Food Score, dynamic site selection, routing tool.

The background features a vibrant blue gradient. On the left side, there are several overlapping geometric shapes in shades of purple and yellow. These shapes include triangles and quadrilaterals, some of which have a subtle grid pattern. The overall composition is modern and abstract.

Questions