



AgTrends Spring Newsletter



In this Spring 2016 edition of the AgTrends newsletter are innovative tools that can help us remain abreast of agricultural patterns and cycles. This knowledge can give us greater insight into migrant student mobility patterns and work activities.

We know the migrant lifestyle is characterized by change, instability, and uncertainty. In our recruiting and service efforts, we are called upon to employ solutions-oriented approaches in order to achieve the most positive outcomes. Therefore, we are always seeking new tools to help achieve our goals.

We hope you will find the instruments, applications, and approaches outlined in this issue of AgTrends helpful in your continued efforts to employ more effective practices and see even better results.

Thank you for all of the work you do,
Michael Maye (IRRC) and Tracie Kalic (GOSOSY)



Innovation Challenge Contest Creates Very Useful Tools for MEP Programs

The USDA and Microsoft teamed up to create an Innovation Challenge Contest that used United States Department of Agriculture (USDA) agriculture production open data to develop on-line tools that can help the American food supply be more resilient in the face of climate change. For more than 100 years, the USDA has compiled data on the farm economy, production, and the health of crops around the country. Several of the winners of the contest created

tools that are very helpful to the Migrant Education Community. Here is a glimpse into four of these tools and the data upon which they are based.

Viewing Local Crop Trends

[FarmPlenty Local Crop Trends](#) shows the top crops, trends, and prices near you.

- Select a point on the map to see information about all the crops grown within a five-mile radius. The crop and price data comes from the USDA NASS and CropScape data sets.
- Click the crosshairs at the top of the page to center the map at your current location.
- Top Crops shows the most popular crops grown in the region last year, sorted by the area that the crop covers within the region.
- Five-Year Trends shows the most prominent price and acreage changes in the region along with historical data for the past five years.
- Crop Details lets you see acreage and historical prices for one of the top crops in the region. The prices are the U.S. total prices for the selected crop, class, and utilization practice.

Using this information, MEP Staff can better understand what crops are becoming more popular or unpopular in the region and anticipate changes in work available in the area.

Agricultural Production & Resource Expenses Near U.S. Urban Areas

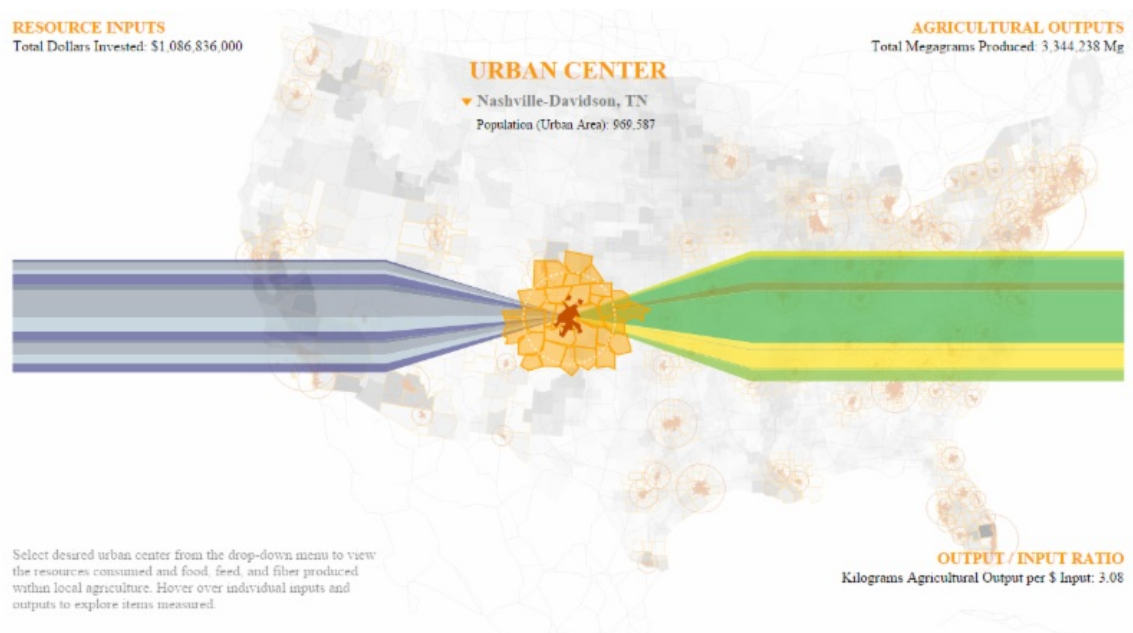
What's Local? is an interactive



visualization tool for exploring agricultural production and resource expenses near U.S. urban areas. It is best viewed with an up-to-date version of the Chrome browser on a desktop computer and can be accessed at the following link: <http://www.landscapemetrics.com/whatslocal>

With What's Local the user can explore an interactive map of the lower 48 states that allows nationwide visualization of: a) county-level aggregated data (grey shades), and b) data for 100 urban areas and their local agriculture (circle sizes).

These data layers can be selected by the user at the bottom left of the main visualization page.



The user can also select and zoom in to specific urban centers to explore their local agriculture. Hovering over inputs and outputs shows census items measured, and comparison of urban centers is facilitated by an option to switch between locations while staying in the zoomed-in format. Clicking on the background national map returns the user back to the national view.

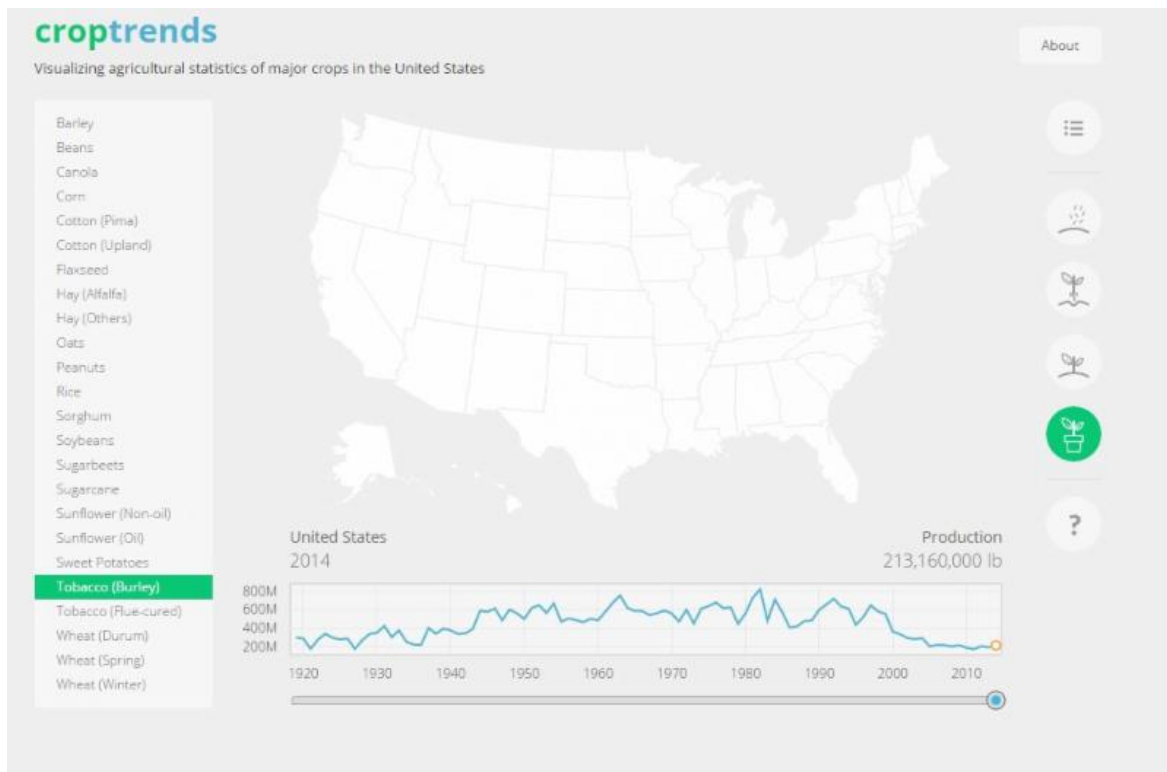
With this tool, consumers can gain a deeper, data-based understanding of what's happening in local food systems, and policy-makers and researchers can easily explore the heterogeneity in agricultural inputs and outputs near urban centers across the diverse U.S. landscape.

Explore USDA Data in a Whole New Way

[croptrends](#) is a simple yet powerful web application that visualizes statistical data of major crops in the United States. It was carefully designed and built to help farmers and researchers:



- discover how agricultural statistics for each crop have changed over time
- explore how statistical data can vary across the United States or within a state
- view a list of counties or states ranked according to statistical data for easy comparisons



Helping Explain the History and Future of the United States Food Market

A dynamic and responsive web app to extrapolate, crowd source, cross-reference, and visualize agricultural data sets:

<http://usda-app.thallotech.com/>

VAIS- This interactive application incorporates weather information, production data from the NASS

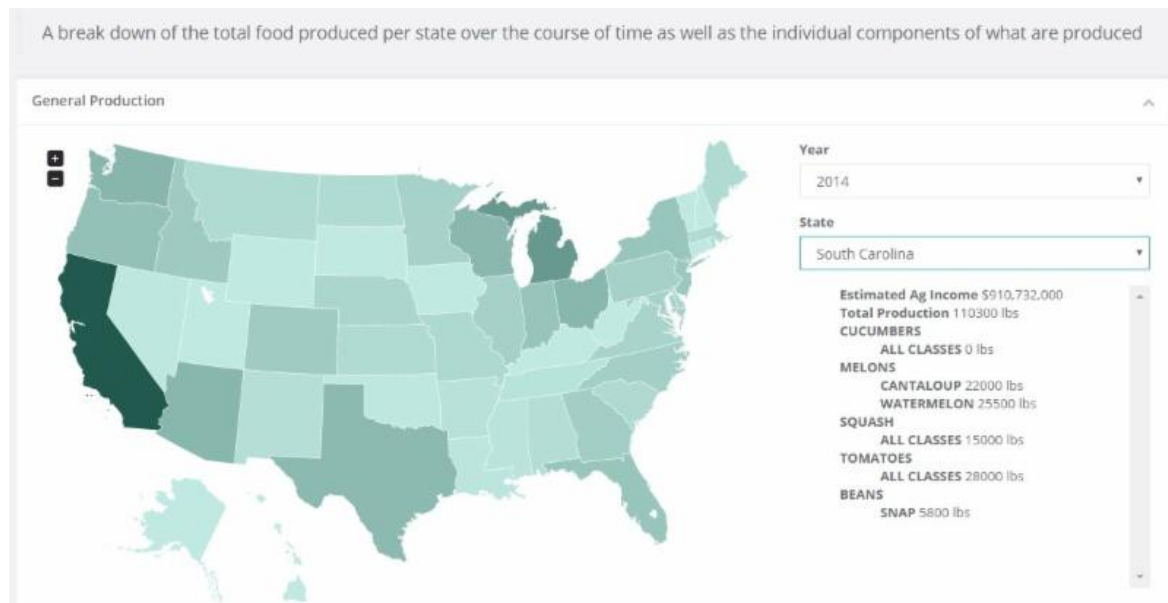


VAIS - Visualized Agriculture

A dynamic and responsive web app to extrapolate, crowd source, cross-

database, and crowd-sourced pricing data to create a meaningful picture of the United States food market. VAIS provides easily accessible, time-series, nation-wide data to help researchers address the vulnerability of the food system by visualizing how the nation's food supply and production are changing as a direct result of climate change, consumer demand, and productivity. Utilizing the application, agricultural workers will make more informed decisions regarding the production and distribution of produce across the

United States. Integrating data from multiple sources is vital to the resiliency of America's food supply and our application is a great way to begin addressing the challenges ahead of us.



The datasets used to create these four tools can be found at this link:

<http://research.microsoft.com/en-us/projects/azure/cdi2.aspx#datasets>

Microsoft created an additional tool that combines lots of relevant farm information from sources such as the CropScape, VegScape, National Agriculture Statistics Service (NASS) reports and others into a Farm Dataset Database. This tool can be accessed at this link:

<http://innovationchallenge.azurewebsites.net/#NassTab>

The full report on all of the challenge winners can be found here:

<http://usdaapps.devpost.com/>

Using Data to Ensure Program Effectiveness

Keeping up with current agriculture data helps migrant programs across the country learn to predict and understand changes in agriculture as well as migration patterns for eligible youth and their families. The following resources are an excellent source for this type of agriculture information.

NASS Crop Reports

National Reports <http://quickstats.nass.usda.gov/>

State Statistical Reports http://www.nass.usda.gov/Statistics_by_State/

Agriculture Census Reports

Query the Census of Agriculture database to retrieve customized tables with Census data at the national, state and county levels as far back as 1997. [Click here to access the Quick Stats database..](#)

CropScape

<https://nassgeodata.gmu.edu/CropScape/>

This site offers interactive maps showing crops produced across the country. Reports and queries can be created for specific areas.