Local Foods, Buying Locally, and Other Rural Development Initiatives: Community Education, Analysis, and Evaluation Approaches

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The Four Fs ….

Fads

Fantasy

Facts

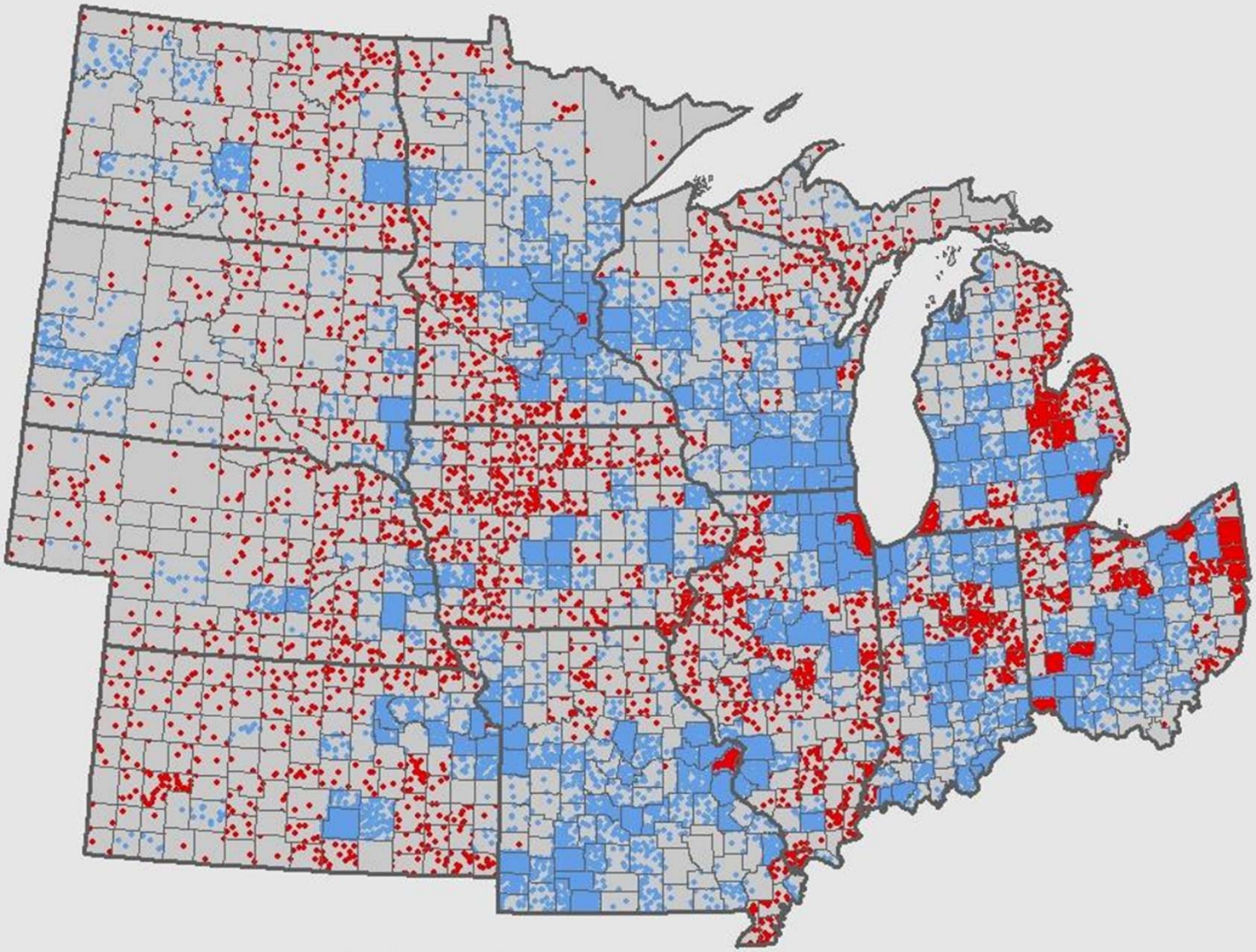
Feasibility

For Instance

Initiatives

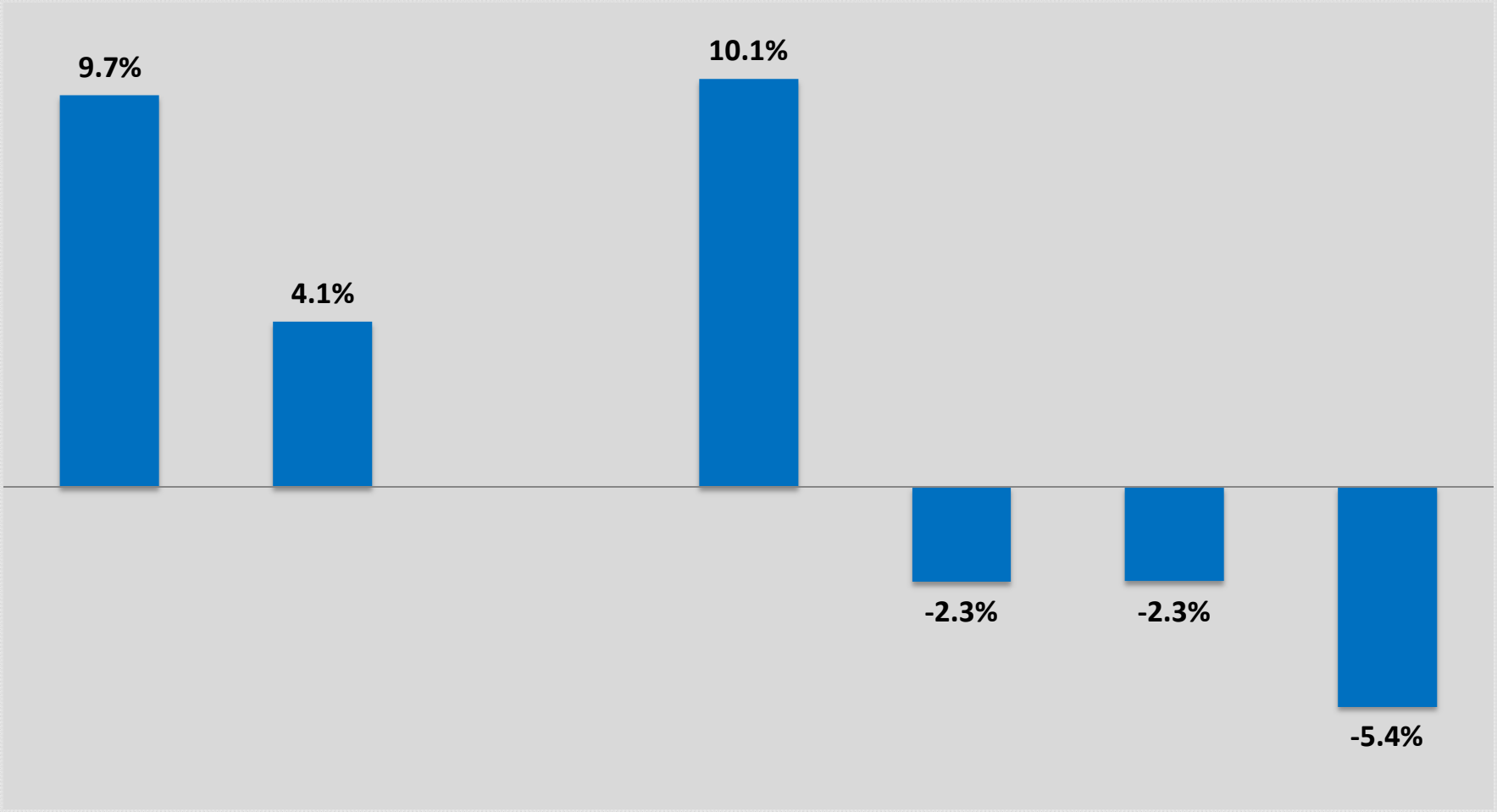
- Ethanol / biodiesel/ advanced fuels & crops
- Wind / solar
- Rural entrepreneurship
- Telecomm -- broadband
- Resort, recreation, & retirement
- Creative “rural” economies
- Viticulture was hot for a time
- Local food systems development & broader buy-local initiatives
- Dutch dairy farmers

County Population Change from 2000-2010

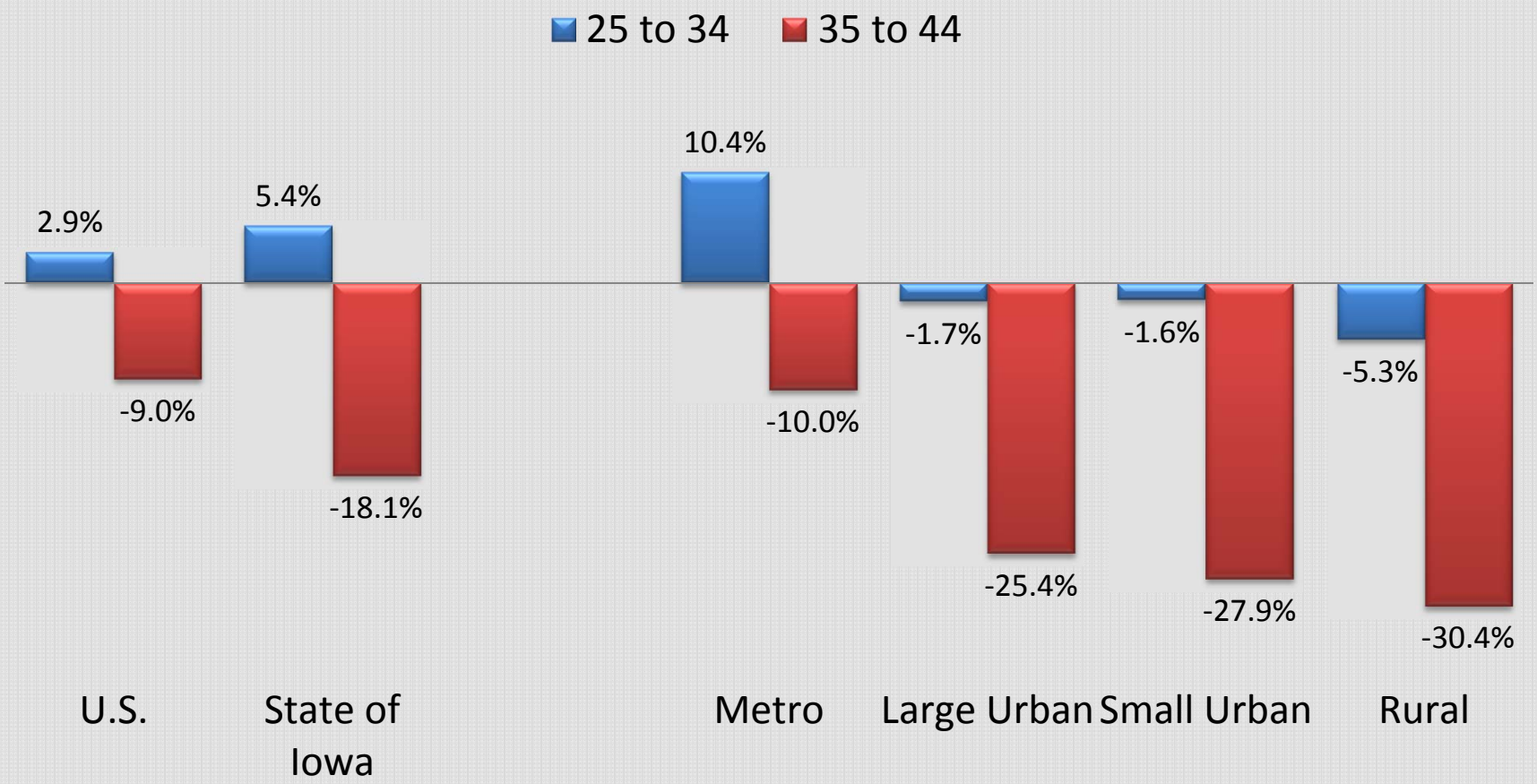


Each dot represents a gain (blue) or loss (red) of 100 residents

Iowa Population Changes, 2000 to 2010 by Levels of Urbanization



Percentage Change in Young Adults, 2000 to 2010, By Level of Urbanization



Iowa Rural Impacts in Recent Years

Plusses

- Biofuels = 900 jobs ethanol & 200 biodiesel jobs
- Wind maintenance & support = 300
- Wind manufacturing = 1,000
- Wind construction & erection = 500
- Windfall farmer spending = ????

Minuses

- Maytag = -2,500 +
- Electrolux = -1,900 +
- All others: 85 percent of micropolitan job losses and 97 percent of the balance of rural Iowa nonfarm job losses are explained by manufacturing job losses in the last decade
- Total nonmetro losses are -29,300 jobs

Some of What I Have Learned

- Enthusiasm trumps historical experiences to the contrary
- Enthusiasm-curbing research can be met with hostility
- Basic market principles are frequently ignored
- Nonetheless, local leaders are sincere and deserve our best efforts

Addressing This

Work to develop an understanding of how basic market principals are working in their enterprises and in their region

- Maybe the basics of Hustedde, Shaffer & Pulver for understanding regional markets
- Maybe Flora's "Community Capitals "
- Regional economics and comparative advantages
- A discussion of occupational content

What Data Do I Use?

- Lots of IO models both for modeling and for regional data
- BEA, BLS, ERS, Industrial and Ag Censuses
- O*NET
- I LOVE “ON THE MAP”
- Proprietary, government, and own crosswalks and matrices
- Vital statistics
- State administrative data (revenue, local budgets)
- Enterprise data to the extent that they exist or clearly apply
- Few opportunities to use reliable primary data

Generic Buy-Local Initiatives

- Small markets are very sensitive to trade leakages
- Want to promote “buy-local” behaviors
- Often narrowly characterize it as mere shopping
- Is further confounded because there is a pervasive assumption out there that retail sales have a multiplier of 7.0.

Severe Information Limits

We mostly do not have a clue about local spending – all indications are indirectly determined.

- Area pull factors
- Retail trade trends
- Business thresholds
- Household surveys occasionally
- Testimonials and complaints

Alternative is to rely on model data that are also suspect

Approach

- Make sure folks understand where buy-local fits in the regional development toolbox
- Show how much of their regional economy is a function of production and how much is a function of household consumption
- Explain that this is a modeling, not an auditing exercise: there is no reliable baseline; hence, the present leakage situation is a guess and gains or successes are difficult if not impossible to measure.

Mechanics & Outcomes

Area-specific IO model

- Isolate industrial and household imports
- Match those categories with evidence of existing production (can't substitute what you don't produce)
- I specifically exclude agriculture as all land is fully utilized
- I boost the top 20 categories in the industry-to-industry and separately in the household imports by some factor, say 5 percent – prorate to the remaining industries
- Report and explain the findings
- Explain that this requires a lot of assumptions and behavior changes
- Explain, too, that the multipliers work in reverse – they reflect the multiplied through consequences of trade leakages
- Separately may use portions of this approach to isolate potential industry development based on commodity imports that are above national average per-firm thresholds.
- Lastly, exhort sponsors to use this as an opportunity for business and consumer leadership and education

Local Foods

- Local foods have caught hold, as have other buy-local initiatives
- In Iowa
  - Early studies – we were learning and adjusting our methods
  - Several regional studies – a variety of plausible and implausible scenarios
  - In time, the development of basic evaluation methods to help advocates and producers understand the potential for and the limits to regional sales

Local Foods Example: Upper Midwest Study (2010)

Coordinated through the Leopold Center for Sustainable Development

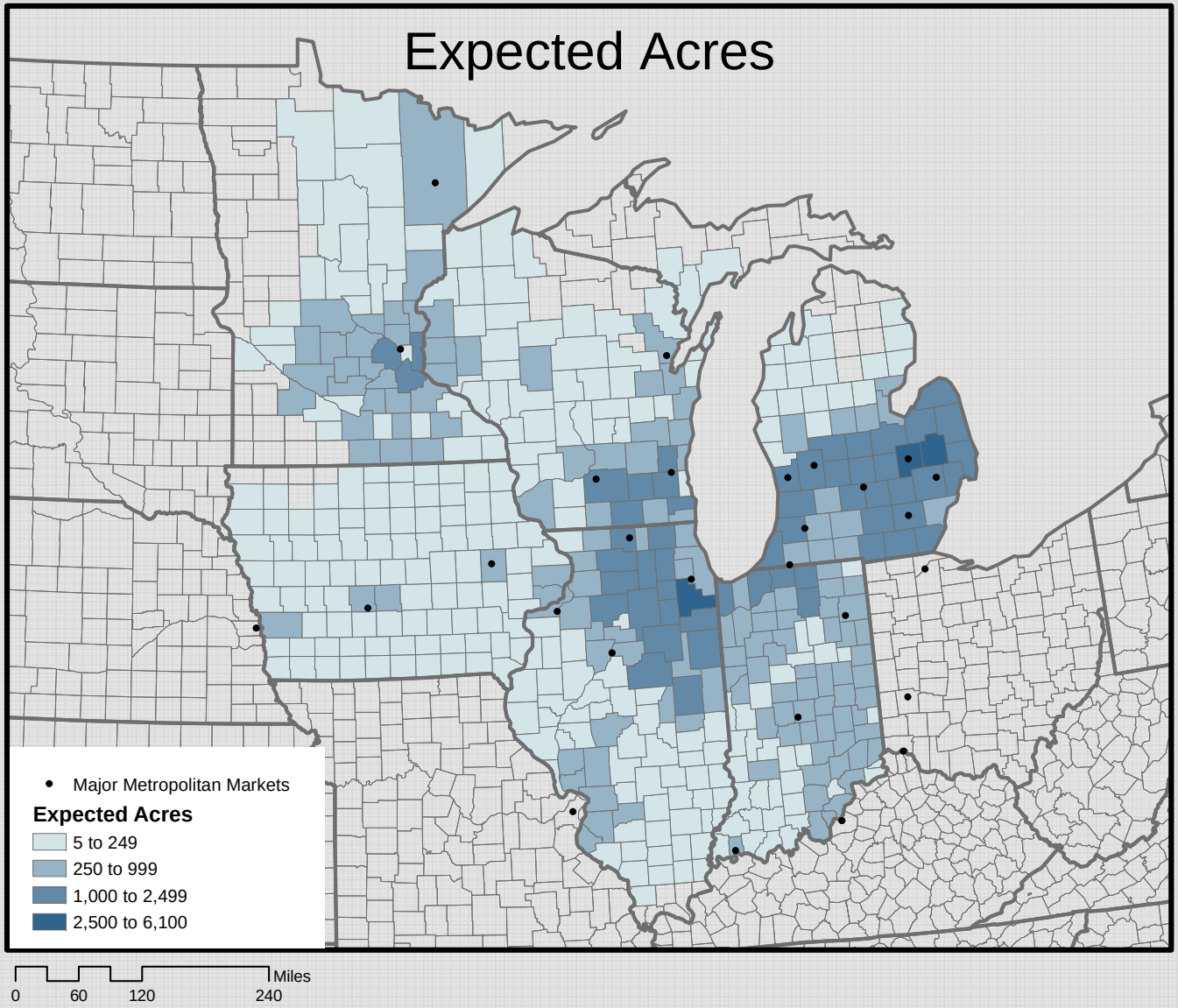
Was based on insights developed from the SW Iowa regional research project

- Iowa, Illinois, Indiana, Minnesota, Michigan, Wisconsin
- Two scenarios involving 28 fresh fruits and vegetables.
- What if …

Scenario: Given metropolitan markets of 250,000 or more, nearby producers work to satisfy major regional metropolitan demand

Allocates production relative to dense populations

- Begins with metros of 250,000 or more as significant demand centers
- Determine potential personal consumption of items chosen for assessment
- Determine the capacity to produce
- Disregards state boundaries
- Allows demand from nearby or bordering metros
- Weighting considering both a propensity to produce (small farms) and the capacity to produce (crop land)
- Explicitly accounts for the disincentives of distance – simple gravity calculations are included
- Allocates production in space
- Provides county level estimates (that can then be summed back to the state level)
- Impacts and offsets were then estimated using modified IO models for the states



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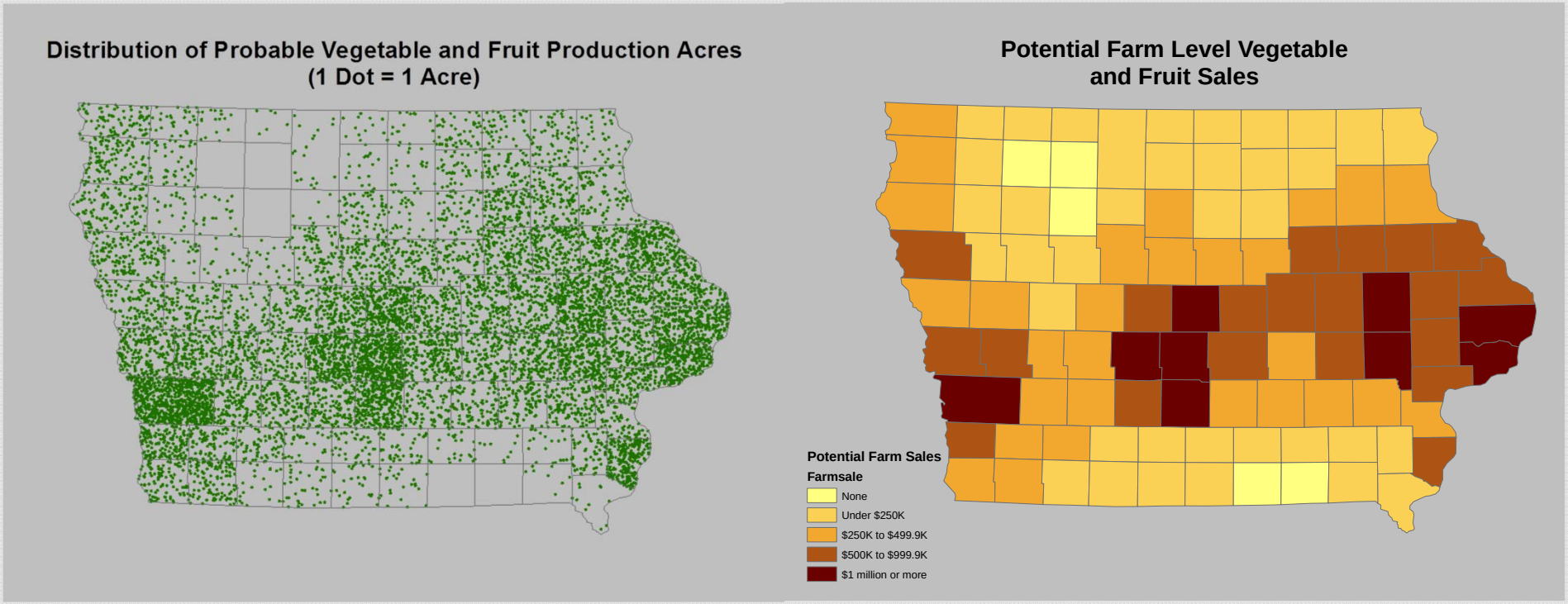
Repeated the process for Iowa considering all nearby metros using a 100 mile maximum threshold



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Outcomes

- Slowly reviving basic methods for evaluating these initiatives
- Great opportunity to provide regional economics education
- Assist in declaring “impact” boundaries and in producing content to inform policy development
- Intersection of program development and utility principles

Broadly, What We Are Not Doing

- Determining feasibility let alone desirability
- Compiling benefits within the traditional meaning of the term
- Estimating “Returns on Investments” especially regarding state or local subsidies
- Proving that one form of production is superior to another
- Picking winners or losers
- Telling them what to do

Thank you

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