Using Parcel Data to Update TAZ Households to a Non-Decennial Census Year

Overview

* Challenge:
  * Update households to 2014 to match count year
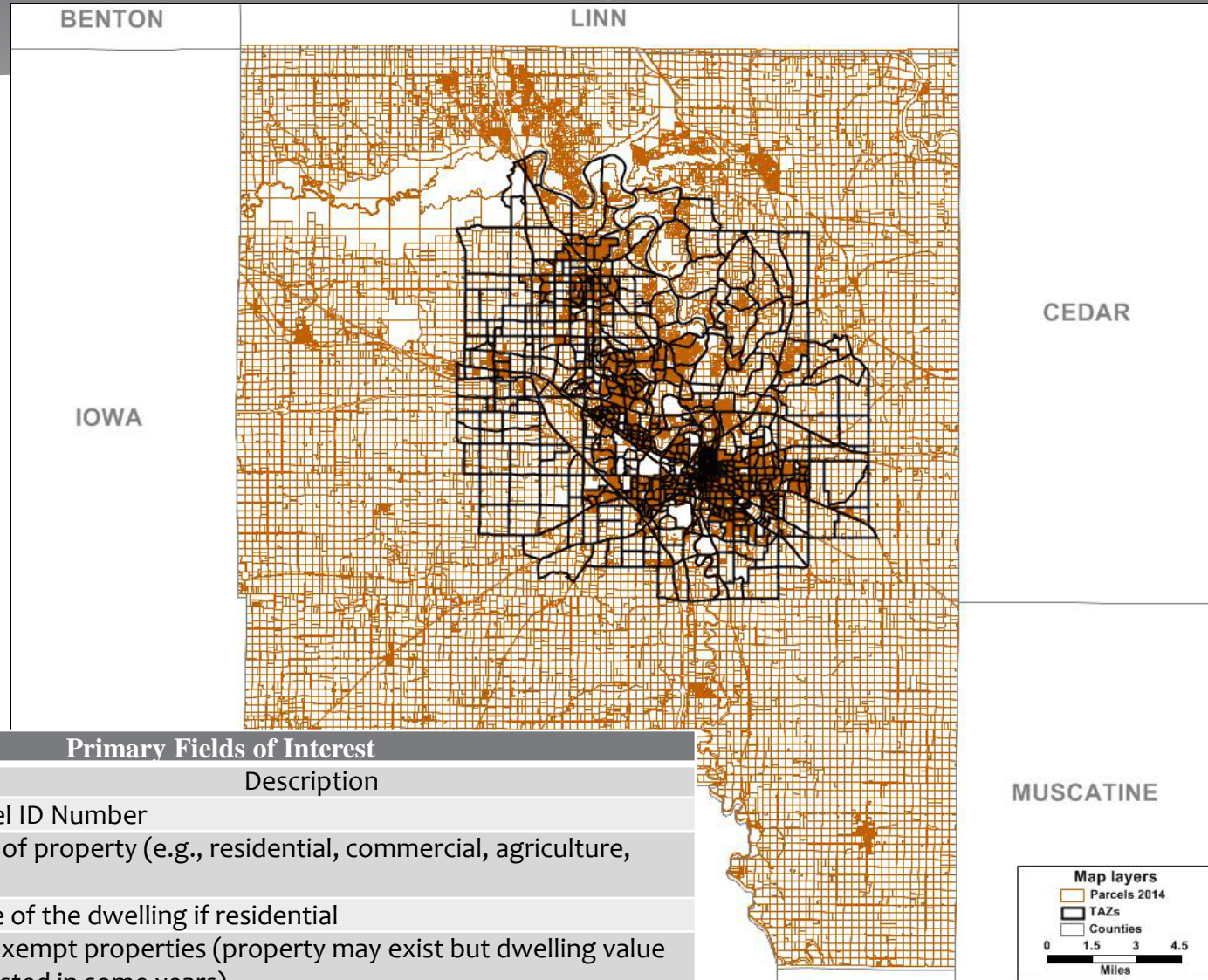   * Potential data sources:
      * Census Block Groups (Blocks not available in 2014)
      * Nielsen Data
      * County Parcel Data
        * Snapshot from each year (2010-2014)
        * Nest within TAZs
        * Up-to-date data

* Goal:
  * Process parcel data to count growth in residential housing units from 2010 to 2014

Johnson County Parcel Data

Primary Fields of Interest	
Field	Description
PPN	Parcel ID Number
PropClass	Type of property (e.g., residential, commercial, agriculture, etc.)
DwellValue	Value of the dwelling if residential
ExemptCode	Tax exempt properties (property may exist but dwelling value not listed in some years)

Processing

* DwellValue
    * Value of residential property if not exempt
    * Only exists for residential parcels with an existing dwelling
    * One parcel for each unit
* ExemptCode
    * 2010 tax exempt residential properties did not have a DwellValue or ExemptCode
    * Classification changed by 2014
    * Added 2014 ExemptCode to 2010 parcel layer. Then, added exempt properties to the 2010 total.
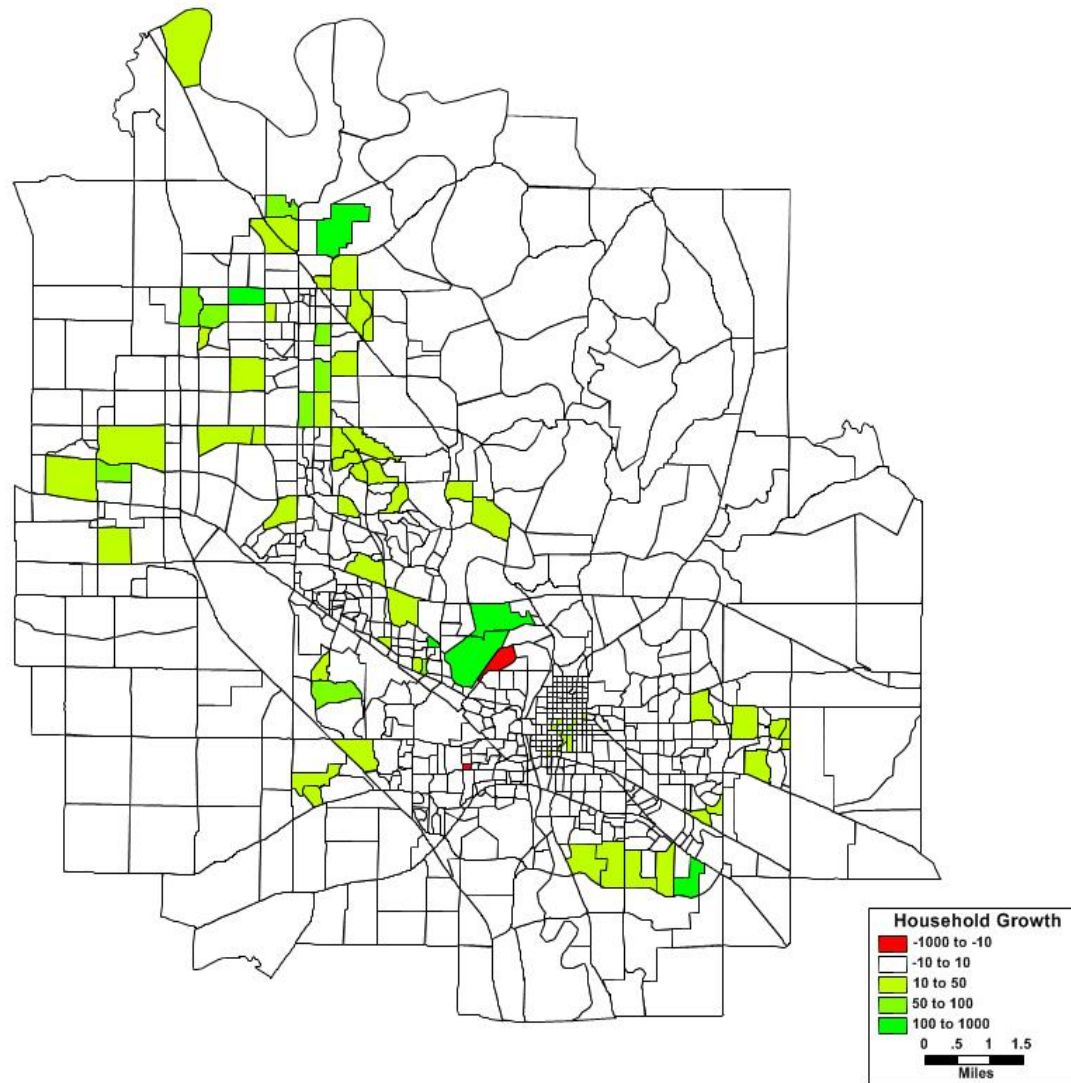
Processing (con't)

* Apartment Classification:
  * "A 2011 Iowa Supreme Court ruling in Krupp Place 1 Co-op, Inc. v. Board of Review opened the door for landlords to reclassify apartments as cooperatives. If organized properly, the landlords in a cooperative stand to save thousands of dollars in taxes, paying roughly half as much as apartments classified with a commercial assessment." (http://www.thegazette.com/supreme-court-splits-on-iowa-city-cooperative-rental-housing-cases-20150516)
  * Added 2010 PropClass to 2014 parcel layer. Then, removed properties that had changed classification from commercial to residential
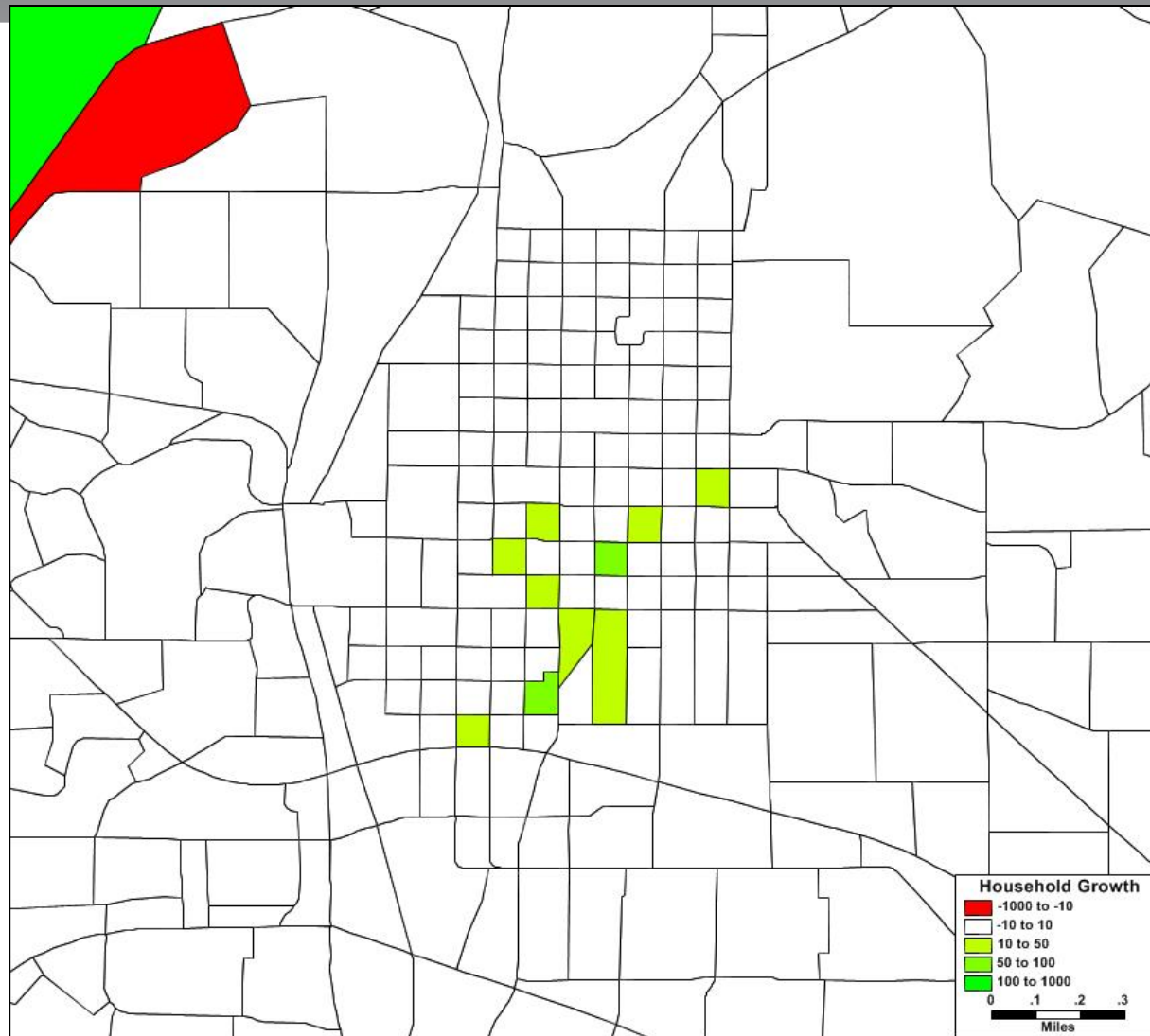* Manual Checks
  * Edits to 8 TAZs
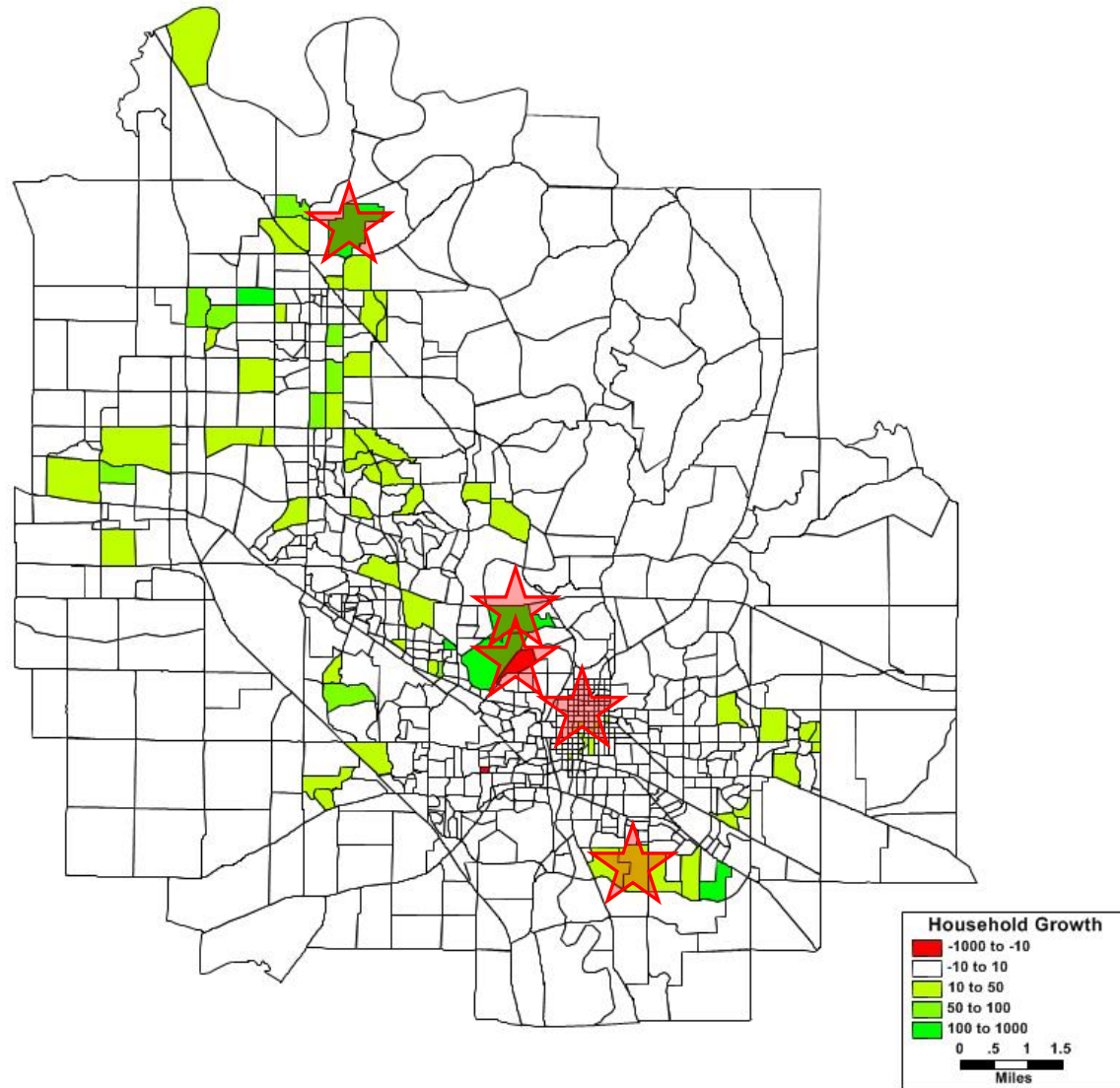 * Types of Errors: mobile home parks, university housing, false parcels

Household Growth from 2010 to 2014

Downtown Household Growth from 2010 to 2014

Household Growth from 2010 to 2014

2010 Aerial Photo

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

2014 Aerial Photo

Silver Maple Trail
Linden Ln
Cougar Ct
Ironwood Ln
Poplar Ln
Cypress Cir
Fox Run
Plum Cir
Cedar Vista Ln
Locust Dr
Alder Dr
Cedar Springs Dr
Red Oak Dr
Catalpa Ln
Ash Ct
N Front St

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

2010 Aerial Photo

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2014 Aerial Photo

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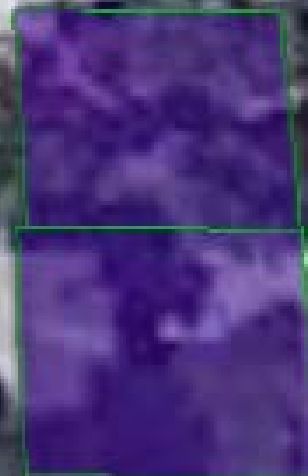
2014 Aerial Photo

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

2010 Aerial Photo

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

Image USDA Farm Service Agency

2014 Aerial Photo

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

2010 Aerial Photo

Red = 2014 Only
Blue = 2010 Only
Purple = Both 2010 and 2014

2014 Aerial Photo

Red = 2014 Only

Blue = 2010 Only

Purple = Both 2010 and 2014

Control Total Checks

City	Parcel Household Growth 2010-2014	ACS Household Growth 2010-2014 (5-yr estimate)	ACS Population Growth 2010-2014 (5-yr estimate)	Census Population Annual Estimates	Pop:HH Ratio in 2010	If ACS/Pop used for growth divided by Pop:HH
Coralville	554	49 (+/- 293)	1,491 (+/- 48)	1,407	2.24	666/628
Iowa City	1,115	1,089 (+/- 609)	3,839 (+/- 58)	5,410	2.31	1662/2342
North Liberty	1,139	639 (+/- 393)	2,614 (+/- 39)	1,863 (*4,705 based on 18,228 in 2015 special census)	2.18	1199/855
Tiffin	181	19 (+/- 107)	-65 (+/- 300)	478	2.26	-29/212
University Heights	7	65 (+/- 83)	103 (+/- 223)	71	2.18	47/33

Iowa City Multifamily Housing Checks

Household Type	Number of New Units	Address	Accuracy
Apartments	14	451 E Burlington St	Correct
Apartments	32	501-511 S Gilbert St	Correct
Apartments	12	603 S Dubuque St	Correct
Apartments/Mixed Use	26	201 E Washington St	Incorrect – 25 units
Apartments	12	40 S Johnson St	Correct
Townhouses	5	941-965 Ball St	Correct
Apartments	27	1112-1164 Swisher St	Correct
Duplex	2	351-353 Westbury Ct	Correct

Final Thoughts

* Parcel data can be a useful source for updating household data to a non-decennial census year
    * Up-to-date data
    * Nest within TAZs
* Know your data - Spot checking the results is essential because laws and data recording methods can change over time