SAVI
Training Curriculum

MODULE 2E

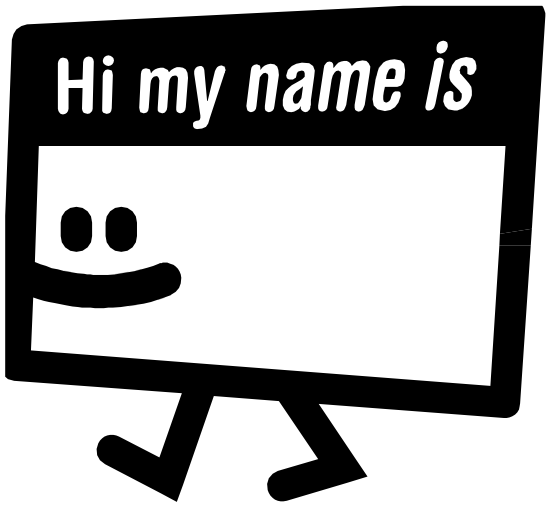
AVOID DATA PITFALLS

Our Agenda

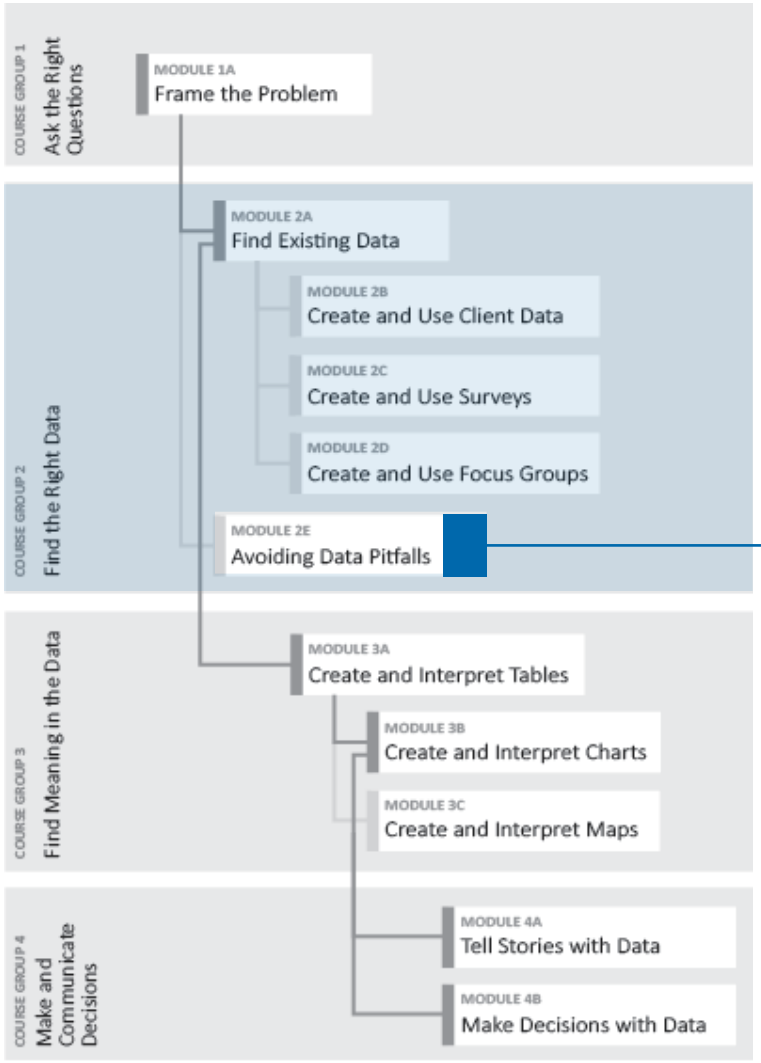
Introductions, Curriculum Overview	5 min
Pitfall #1 – Treating Estimates Like Exact Numbers	20 min
Pitfall #2 – Using Avgs. Without Considering Disaggregation	20 min
Take a break!	5 min
Pitfall #3 – Looking at Trends in Isolation	20 min
Pitfall #4 – Seeing a Trend and Assuming Causation	20 min

Introductions

Let’s share our name, organization, and experience with SAVI.



Where We Are in the Training Curriculum



We are here, learning how to avoid common errors in interpreting data.

What We Will Learn

- How policy changes can affect the numbers
- How outside factors can skew analysis
- To judge the accuracy and reliability of data
- To look beyond an isolated indicator

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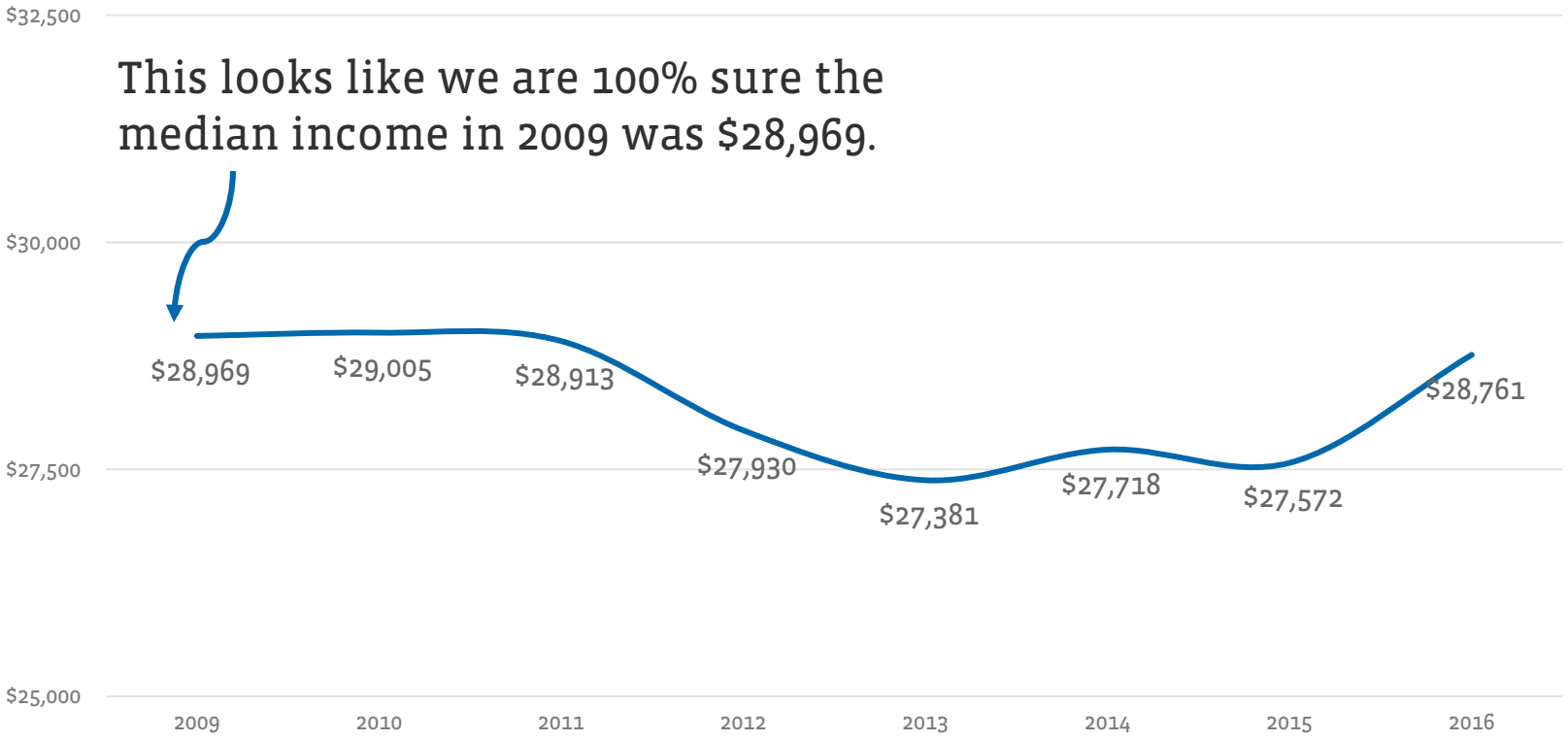
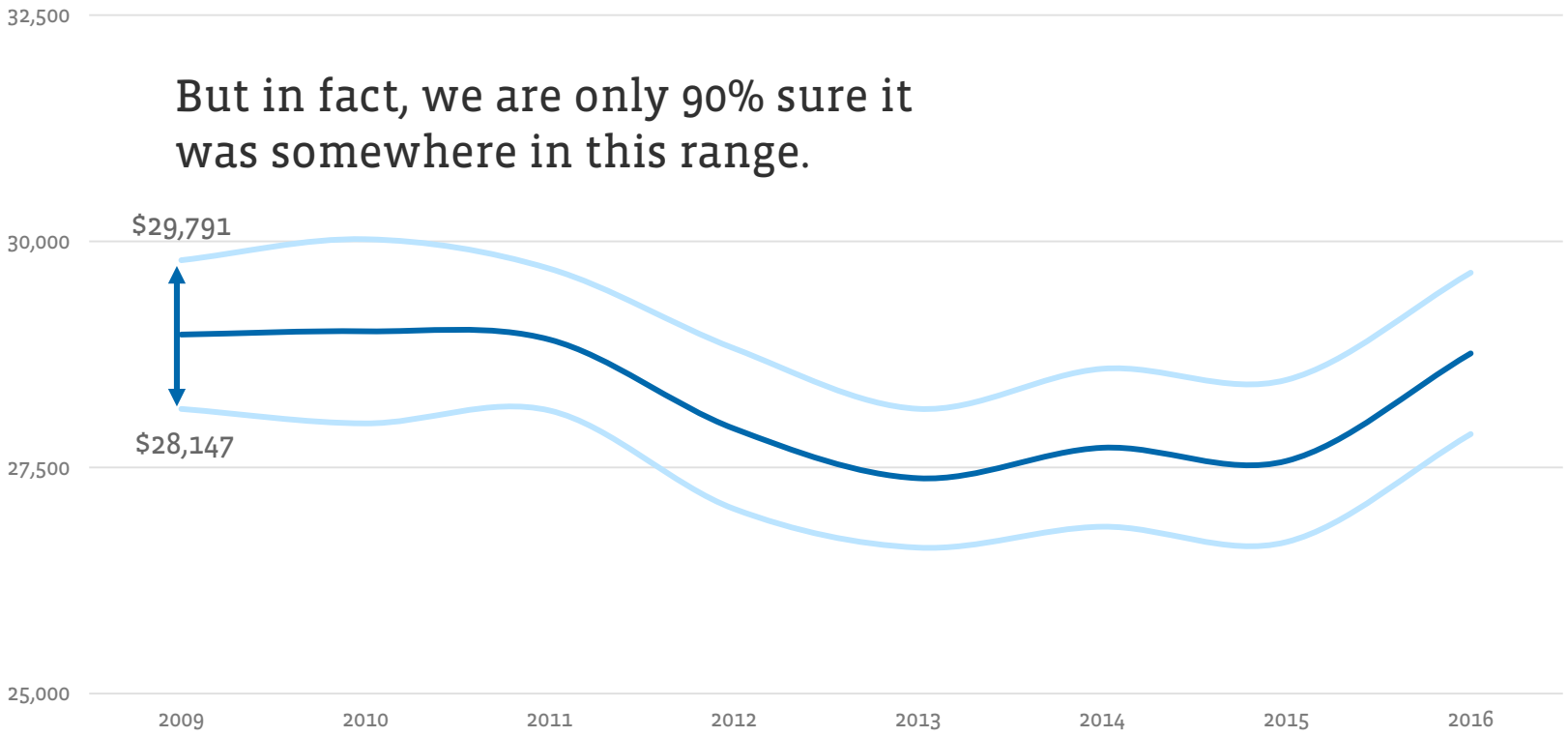
Treating Estimates Like Exact Numbers

Pitfall #1

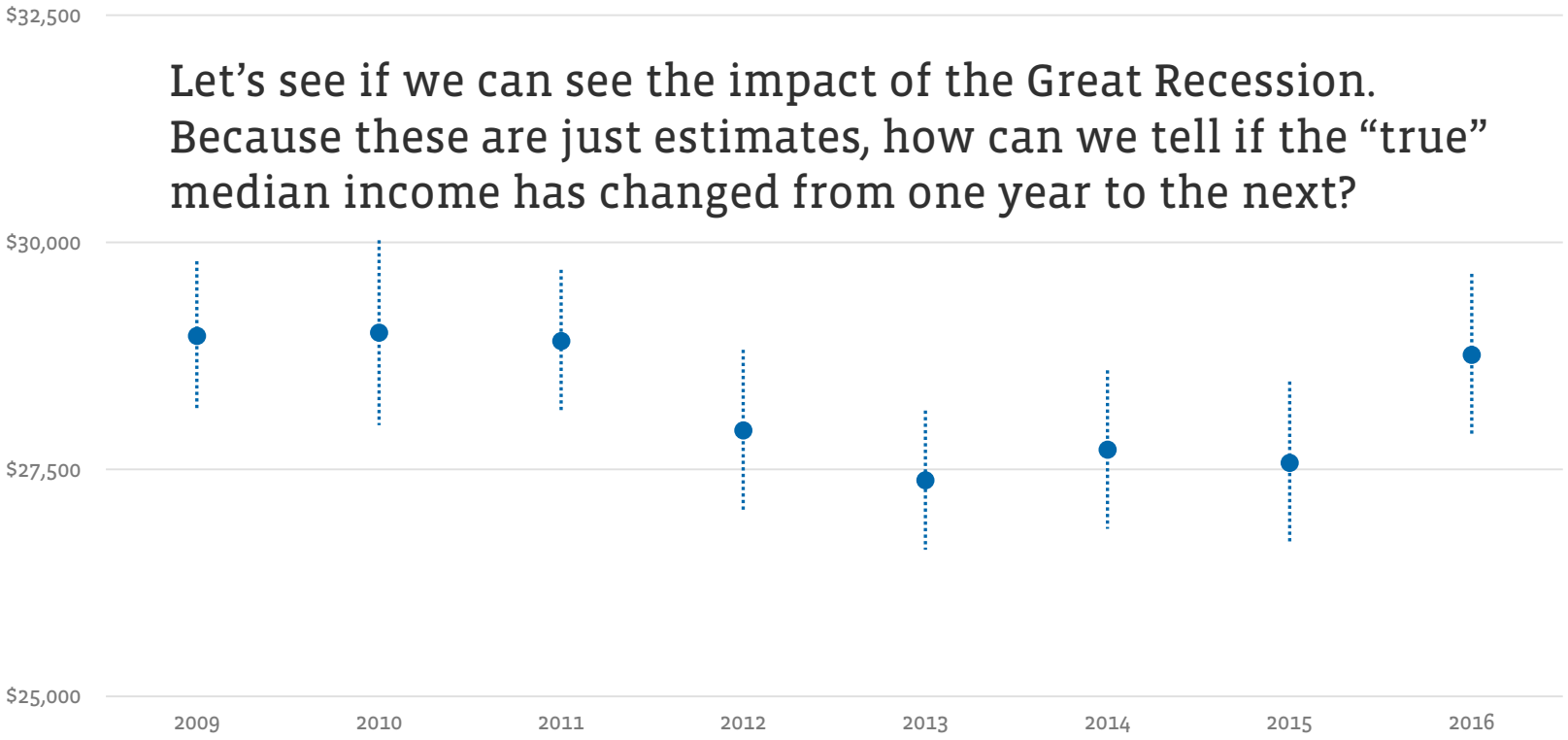
Med. Income in Center Township



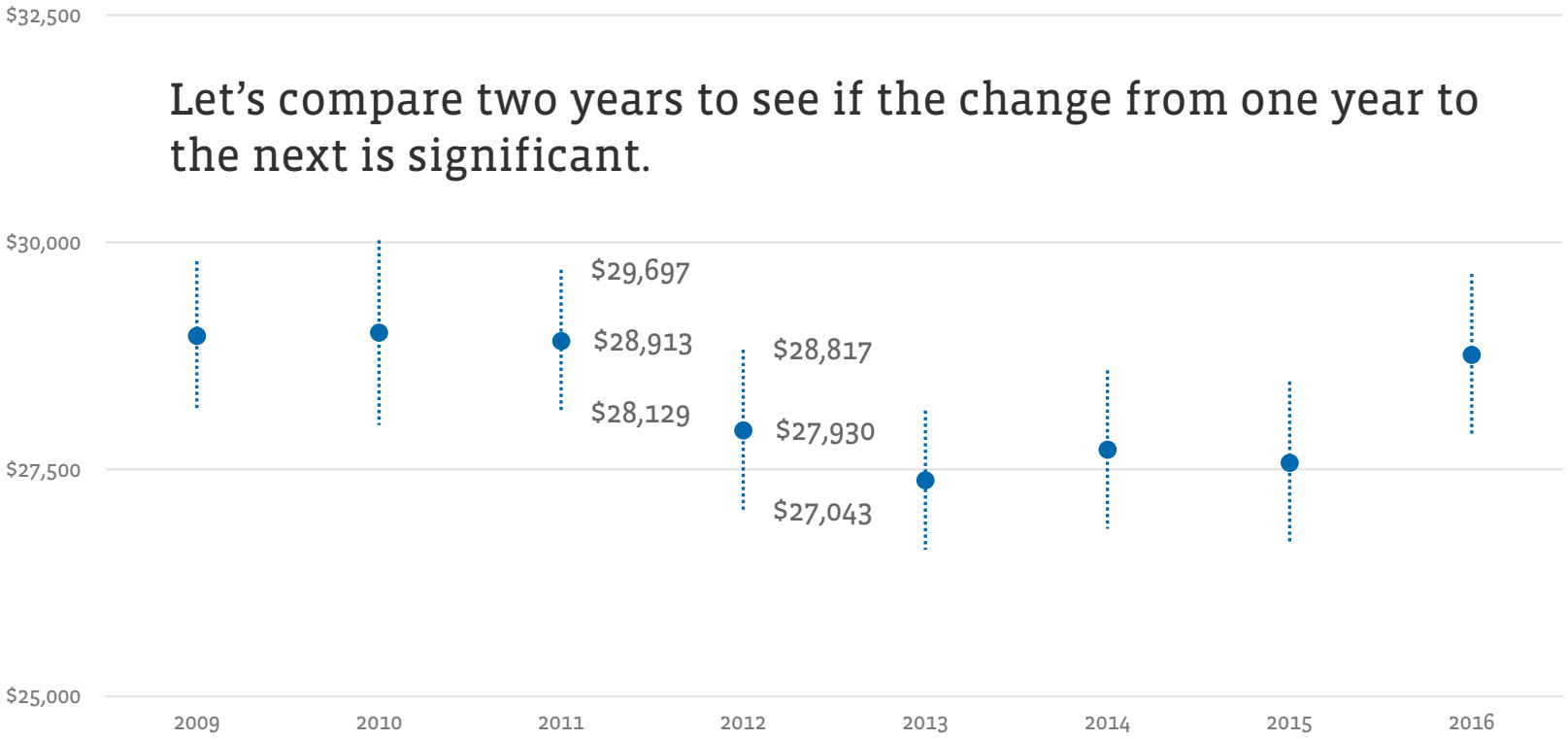
Margin of Error



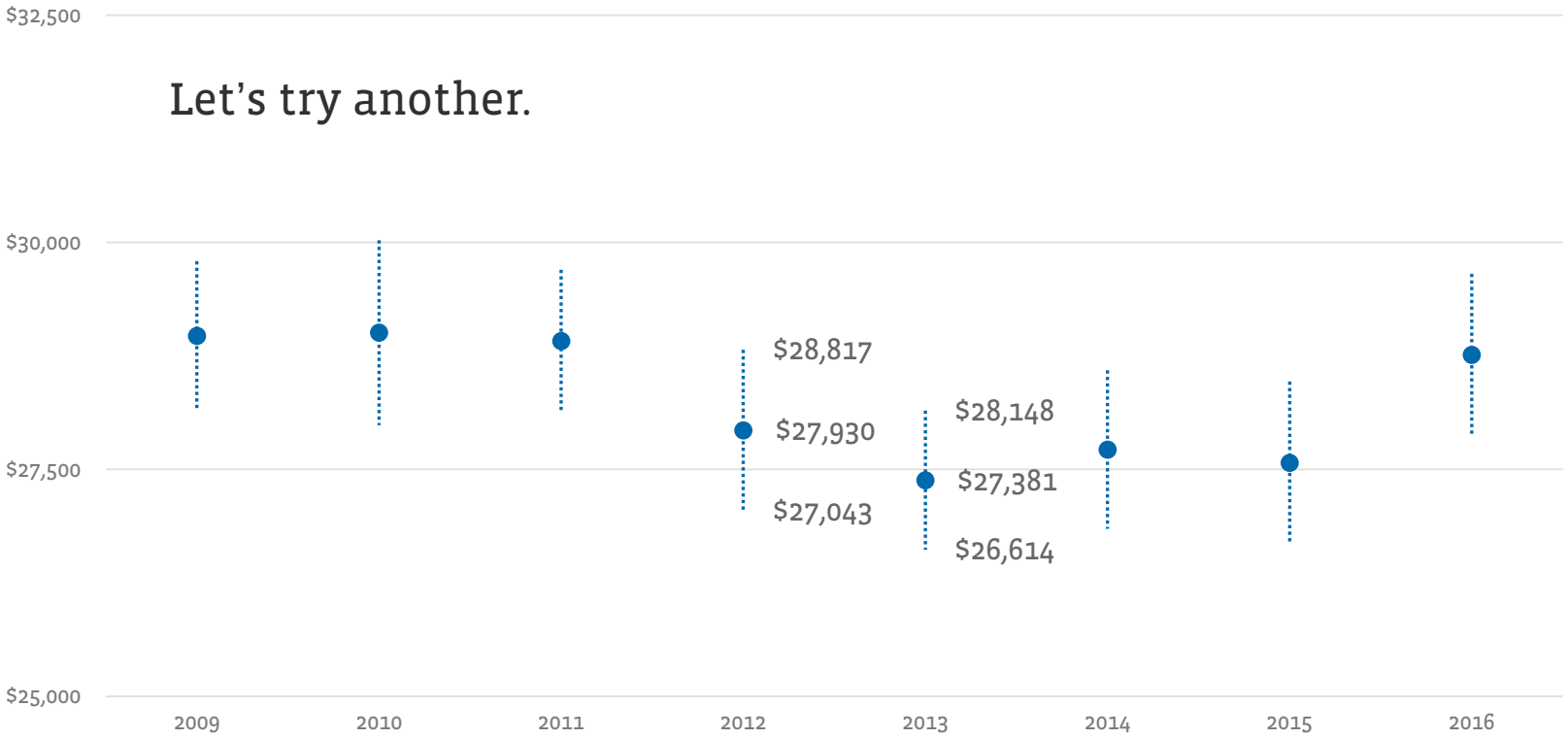
Significant vs. Insignificant



Significant vs. Insignificant

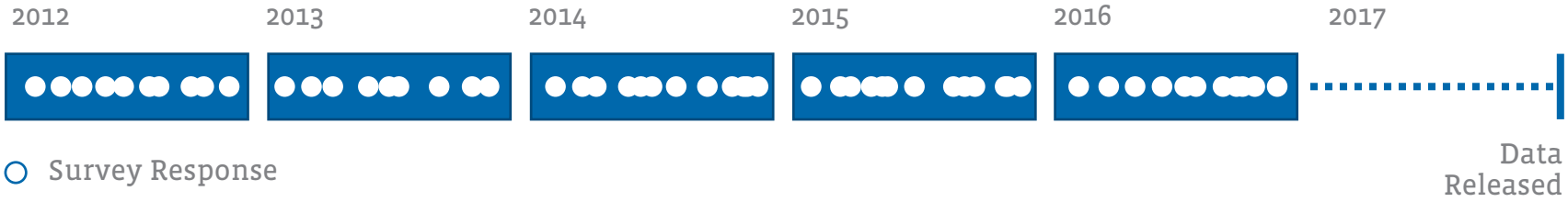


Significant vs. Insignificant



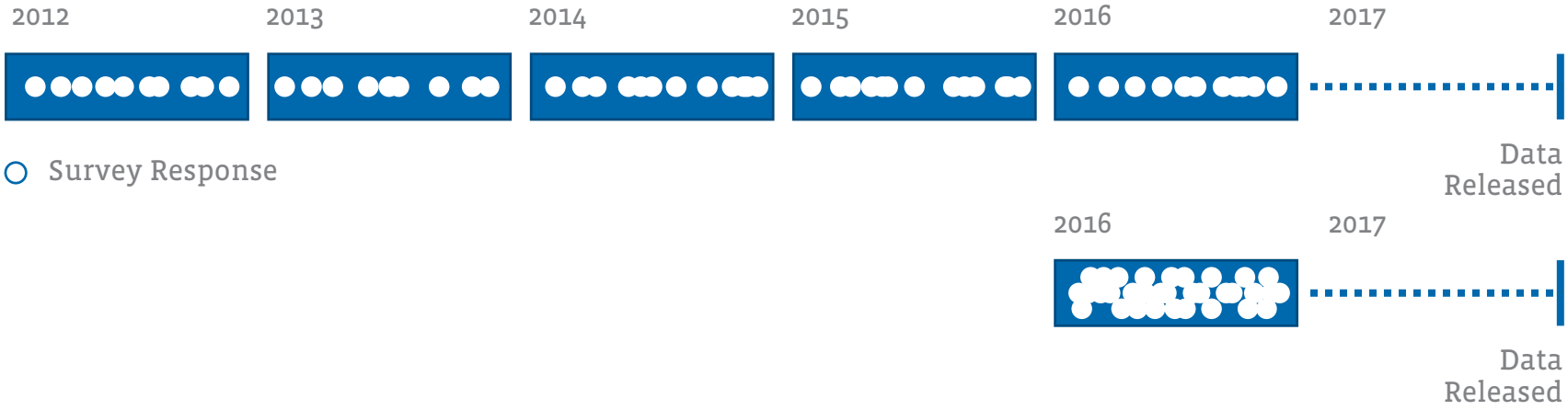
5-Year and 1-Year Estimates

ACS surveys constantly each year. To get reliable estimates for small areas, they combine and average surveys over five years.

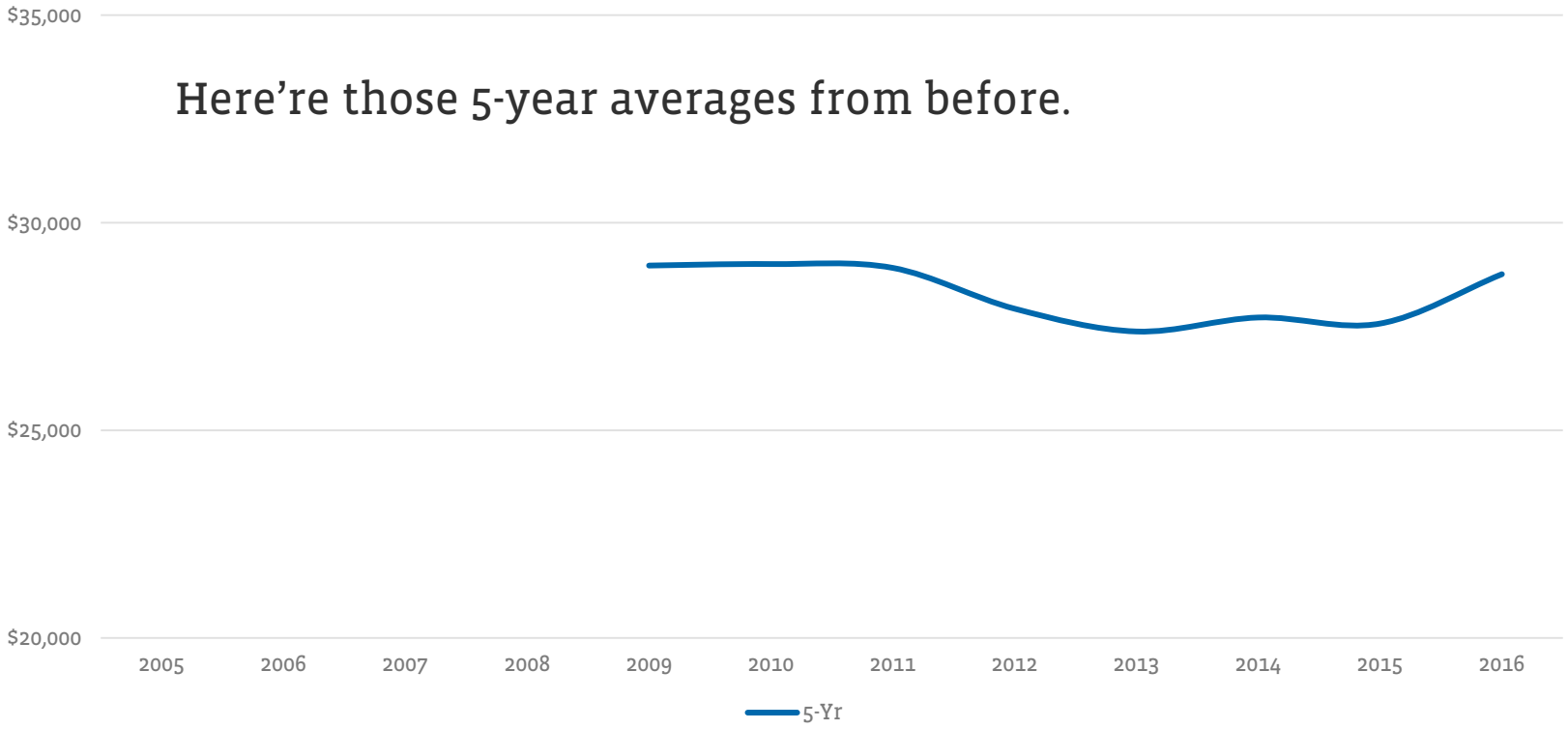


5-Year and 1-Year Estimates

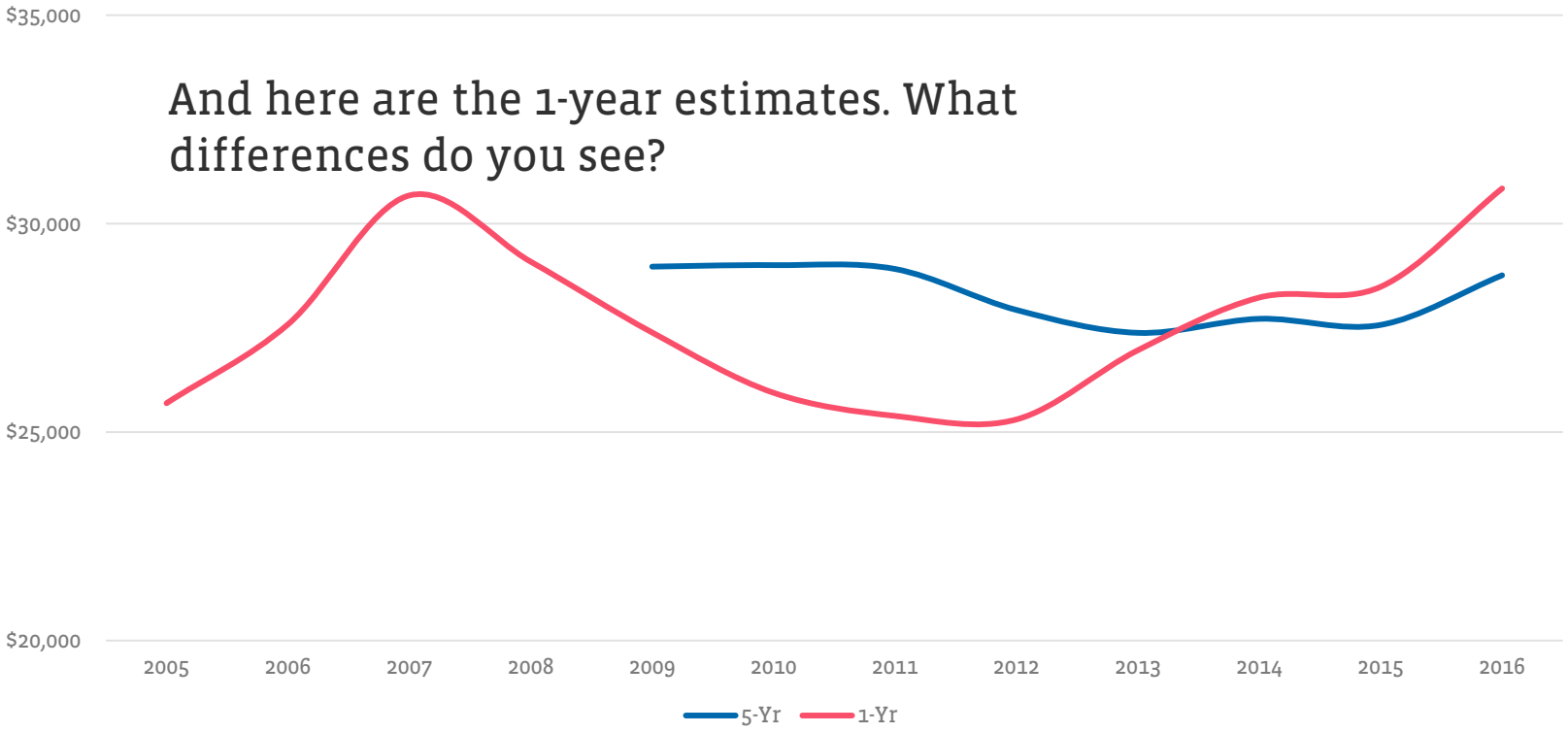
But for areas with larger populations (over 65,000), the ACS releases 1-year estimates.



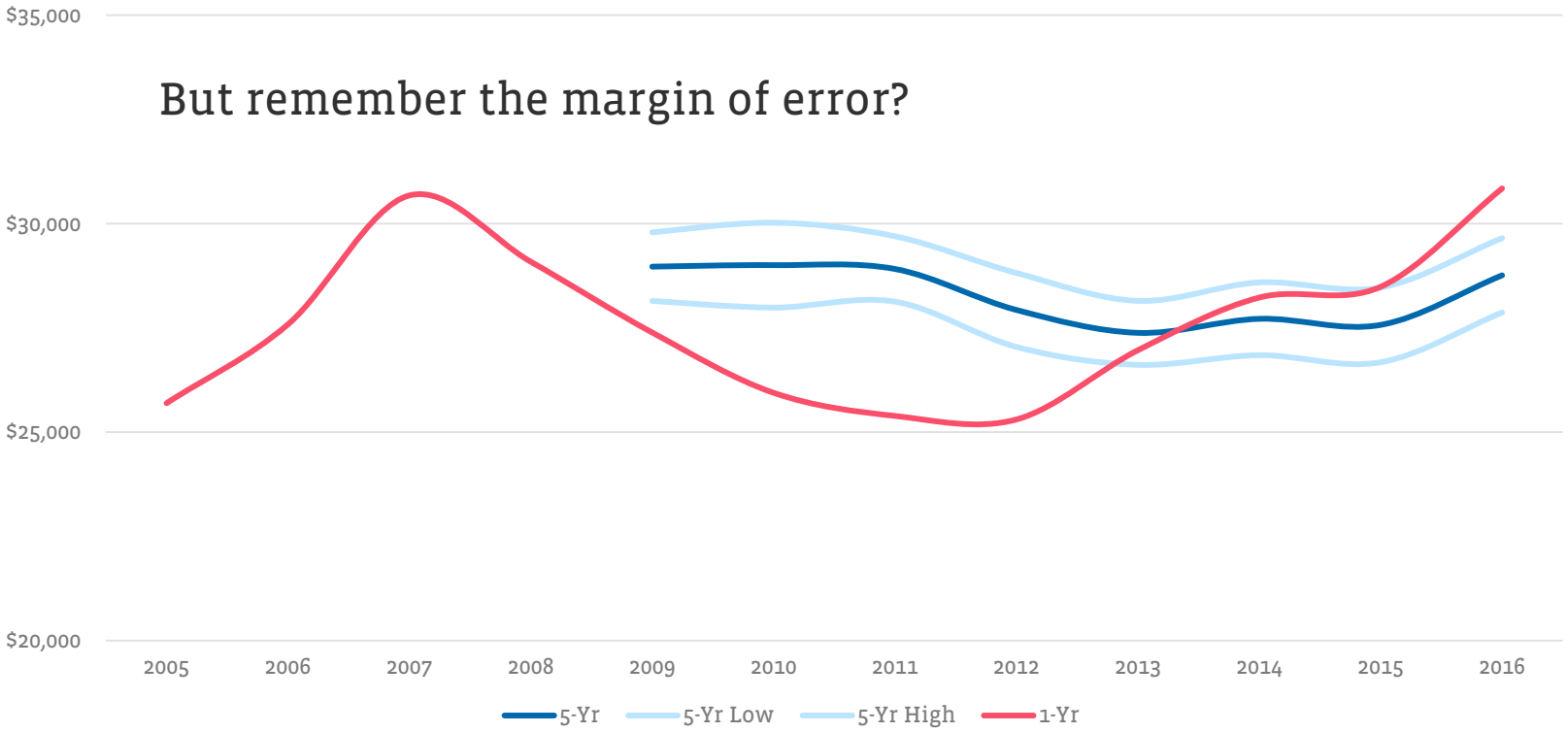
Comparing 1- and 5-Year



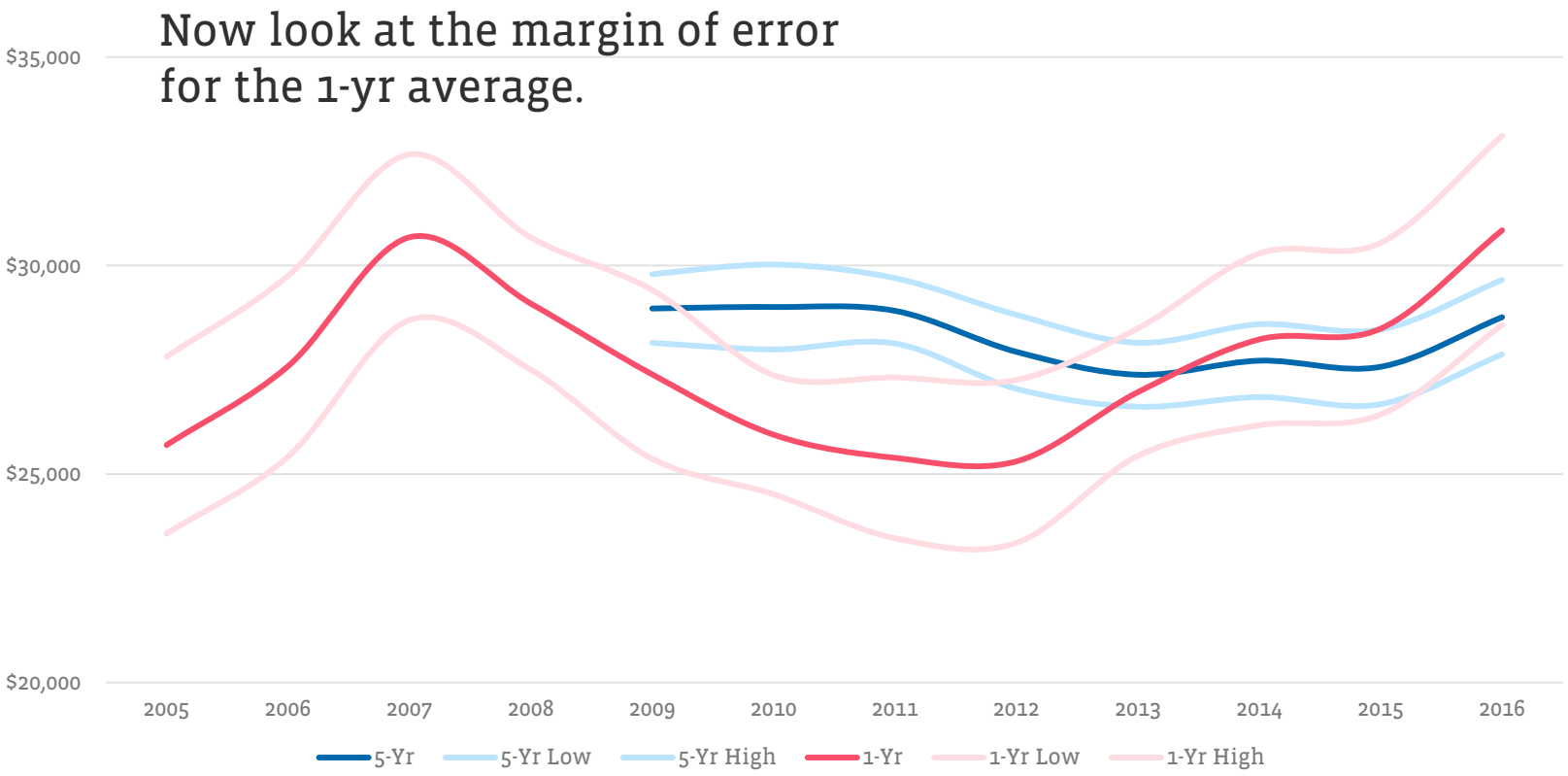
Comparing 1- and 5-Year



Comparing 1- and 5-Year



Comparing 1- and 5-Year



Comparing 1- and 5-Year

	1-Yr	1-Yr MOE	5-Yr	5-Yr MOE	
2009	27,389	+/-2,024	28,969	+/-822	2.5x
2010	25,943	+/-1,428	29,005	+/-1,018	1.4x
2011	25,388	+/-1,927	28,913	+/-784	2.5x

Comparing Geographies

	Estimate	Margin of Error
Marion County, Indiana	43,369	+/-540
Center township, Marion County, Indiana	28,761	+/-892
Census Tract 3501, Marion County, Indiana	26,328	+/-5,685
Block Group 3501.01	25,547	+/-3,873
Block Group 3501.02	32,083	+/-14,686

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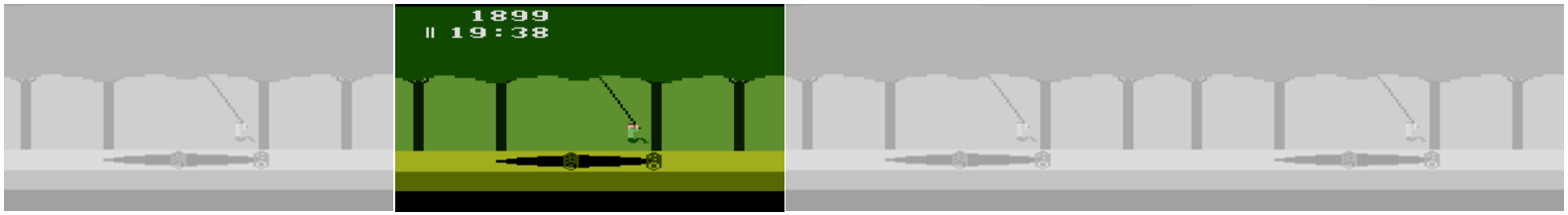
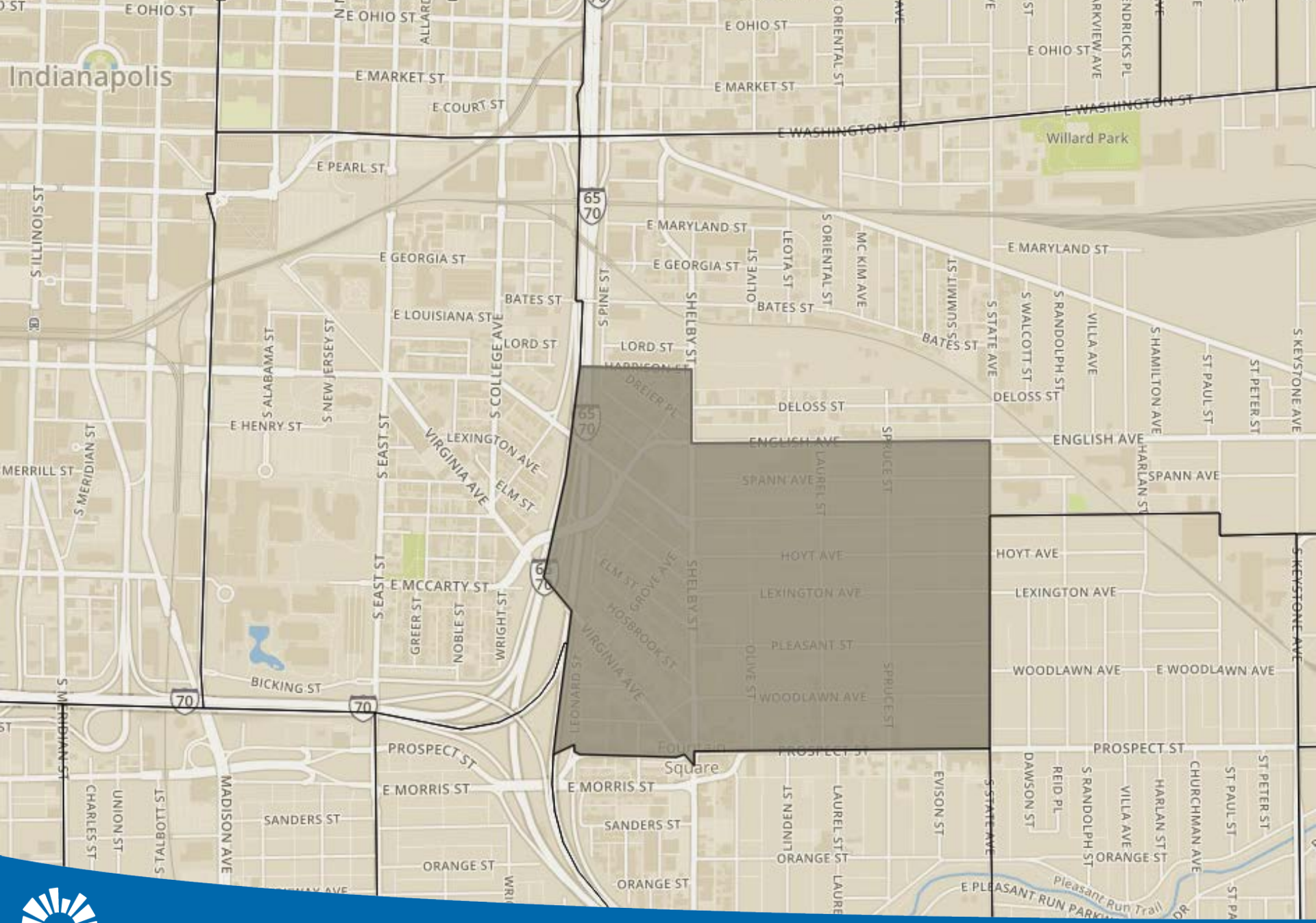
Using Averages Without Considering Disaggregation



Pitfall #2


Indianapolis
E OHIO ST
E MARKET ST
E COURT ST
E WASHINGTON ST
Willard Park
E PEARL ST
65
70
E MARYLAND ST
E GEORGIA ST
BATES ST
E LOUISIANA ST
LORD ST
S PINE ST
SHELBY ST
S ORIENTAL ST
MC KIM AVE
LEOTA ST
OLIVE ST
S SUMMIT ST
S STATE AVE
S WALCOTT ST
S RANDOLPH ST
VILLA AVE
S HAMILTON AVE
ST PAUL ST
ST PETER ST
S KEYSTONE AVE
DELOSS ST
ENGLISH AVE
SPANN AVE
HARLAN ST
SPRUCE ST
LAUREL ST
HOYT AVE
LEXINGTON AVE
PLEASANT ST
WOODLAWN AVE
E WOODLAWN AVE
PROSPECT ST
E MORRIS ST
SANDERS ST
ORANGE ST
DAWSON ST
REID PL
EVISON ST
LINDEN ST
CHURCHMAN AVE
Pleasant Run Trail
E PLEASANT RUN PARKWAY
DREIER PL
ELM ST
GROVE AVE
HOSBROOK ST
VIRGINIA AVE
LEONARD ST
S ILLINOIS ST
S MERIDIAN ST
S ALABAMA ST
S NEW JERSEY ST
S COLLEGE AVE
S EAST ST
LEXINGTON AVE
ELM ST
E HENRY ST
MERRILL ST
E MCCARTY ST
GREER ST
NOBLE ST
WRIGHT ST
BICKING ST
70
PROSPECT ST
E MORRIS ST
SANDERS ST
ORANGE ST
CHARLES ST
UNION ST
S TALBOTT ST
MADISON AVE
Square

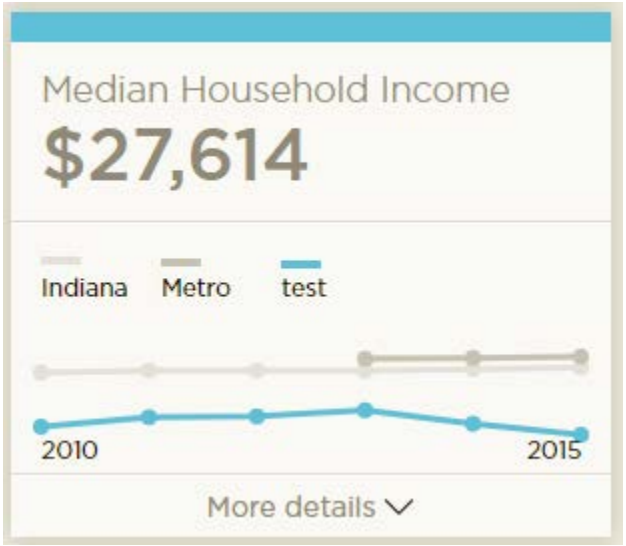
Can we measure the changes in this neighborhood?

Income Since 2010

- Let's go to Community Profiles to find this trend.

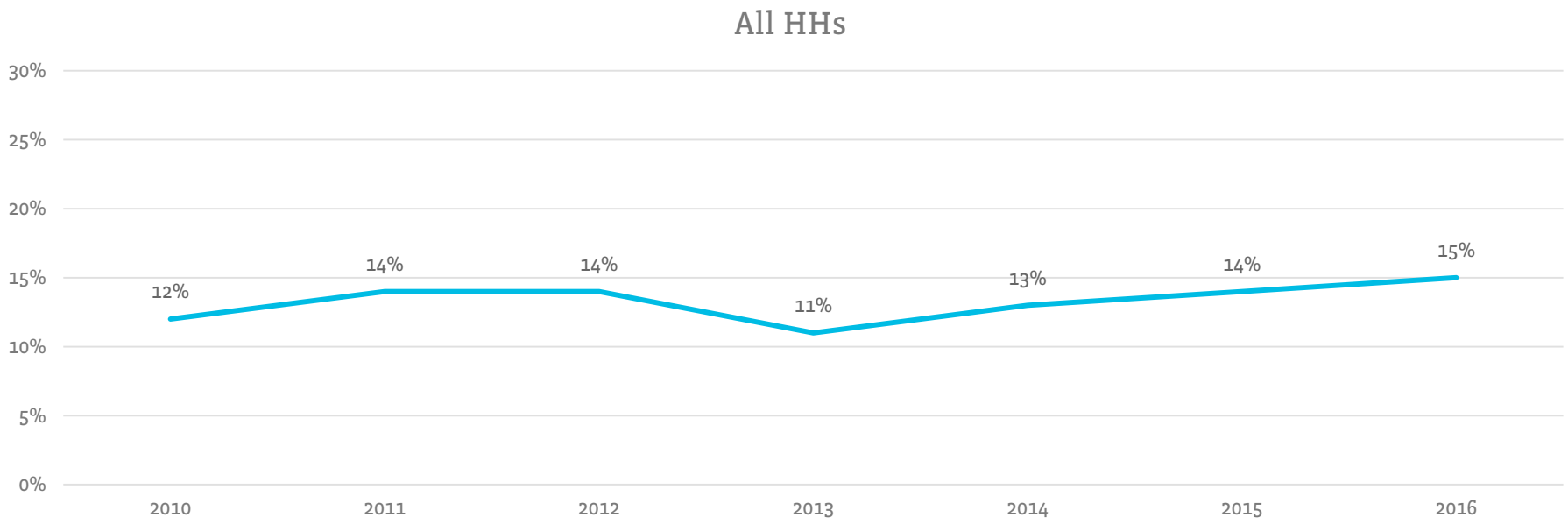
Income Since 2010

- Median income is much lower than the metro area and has declined since 2010. Not what we expected.
- So is the anecdotal narrative of gentrification false?



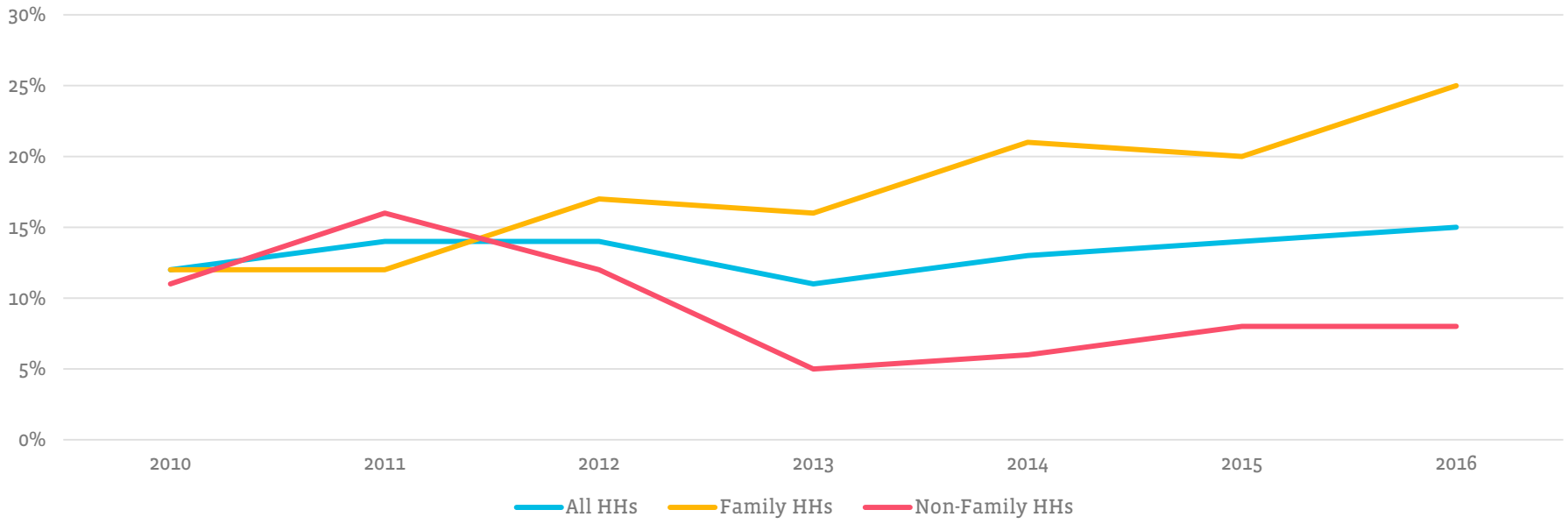
A Closer Look at Income

- Instead of median for all households, let's look at the percent of households earning at least $75K.



A Closer Look at Income

- We can disaggregate further. Let's break it up by household type.



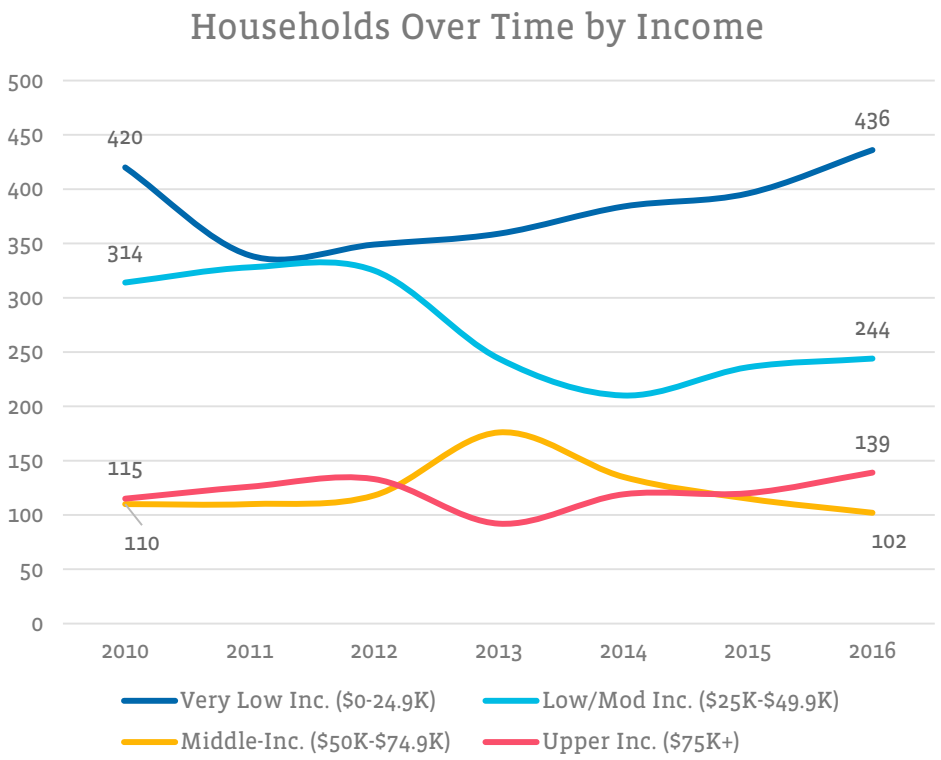
Population Since 2010

- Let's go to Community Profiles to find this trend.

Population Since 2010

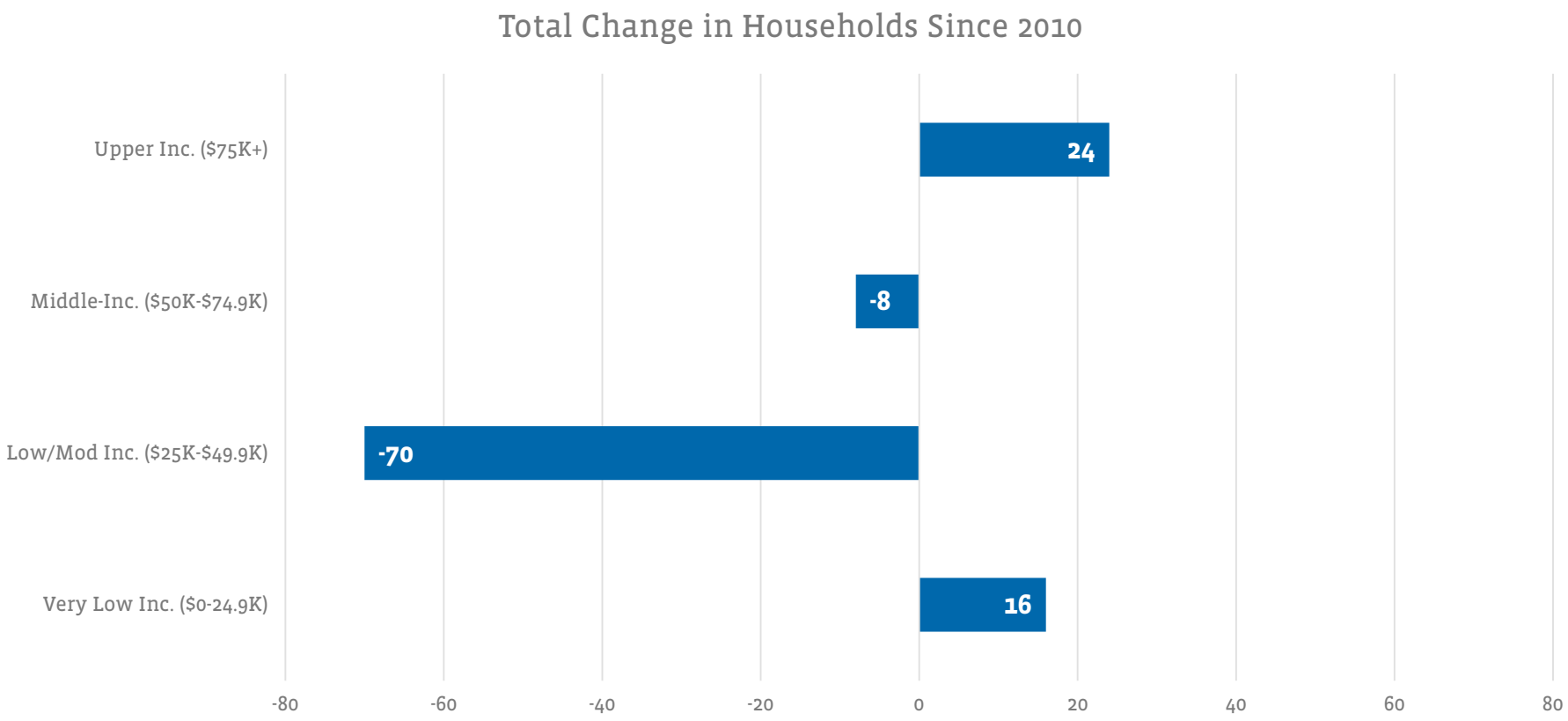
- Population has fallen since 2010, from an estimated 2,533 to 2,311.
- So is Fountain Square not really experiencing increased pressure in the housing market? It doesn't look like a "desirable" neighborhood according to this stat.

A Closer Look at Population

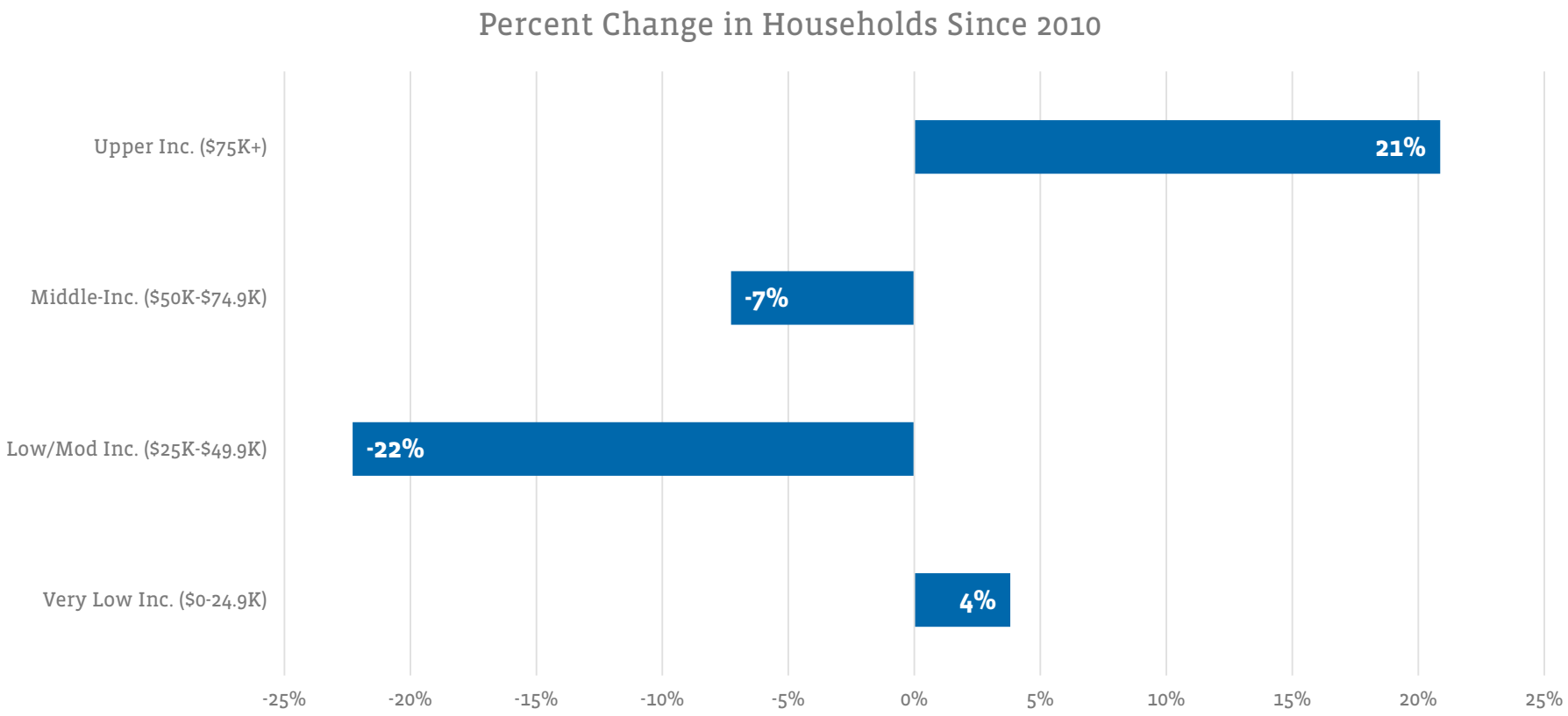


- Very low income
- Low/mod income
- Middle income
- Upper income

A Closer Look at Population



A Closer Look at Population



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Take a break!

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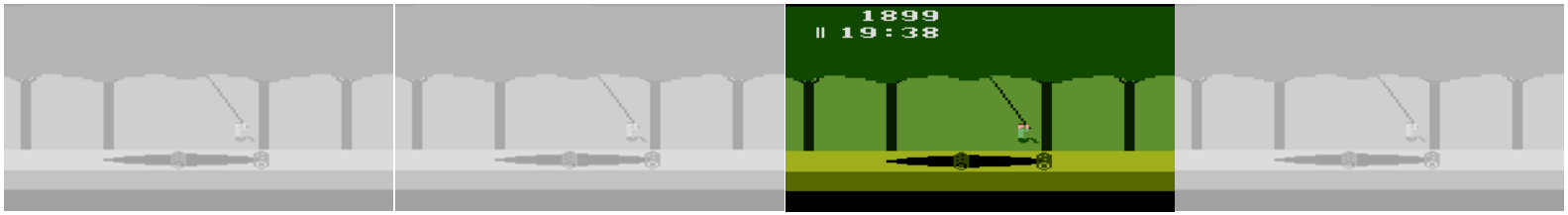
Looking at Trends in Isolation



Pitfall #3

An Exercise

- Let's imagine half of us are residents of the Near Eastside and half of us are residents of the Near Westside.
- We are all wondering how our respective neighborhoods are performing in terms of vacancy rate.

An Exercise

- Let's look at IndyVitals to see how these two neighborhoods' vacancy rates have changed since 2010.

The Isolated Trend

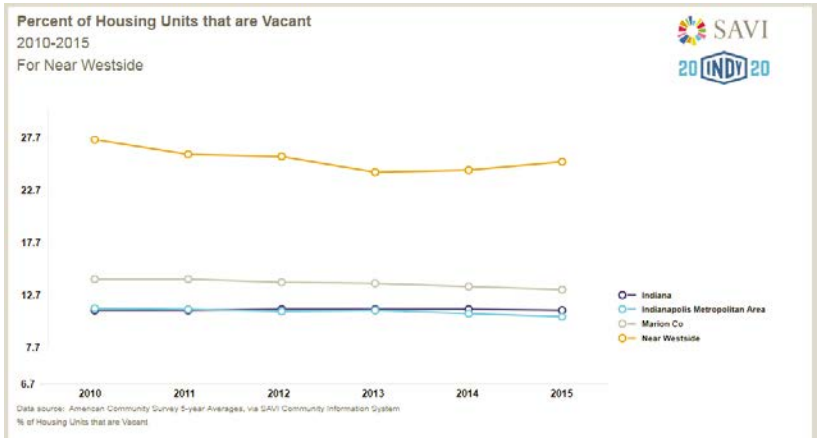
Near Westside

Near Eastside

Deeper Context: Time

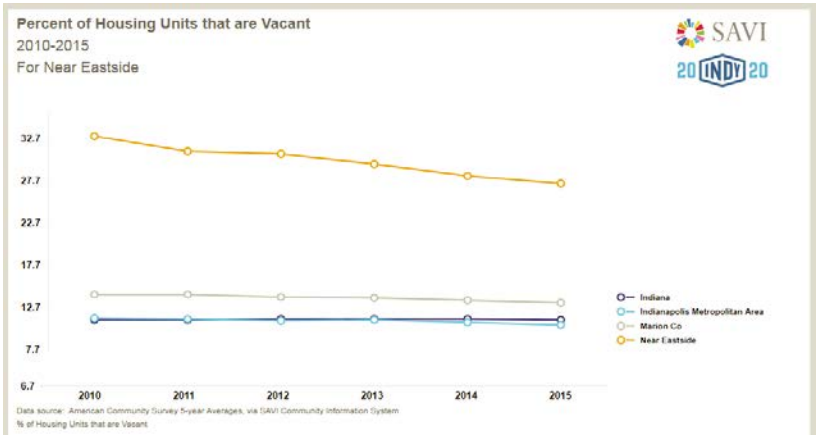
Near Westside

Vacancy Rate 26% -2pt



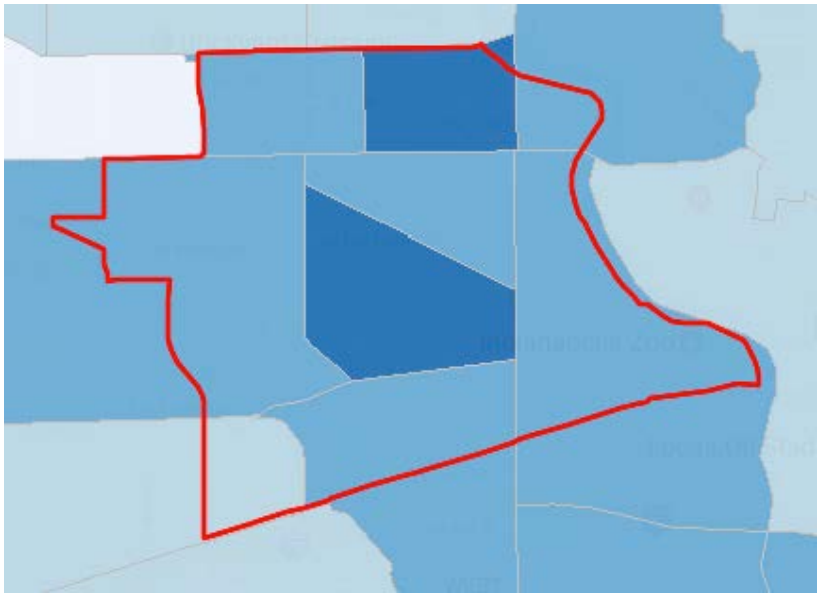
Near Eastside

Vacancy Rate 27% -6pt



Deeper Context: Geography

Near Westside

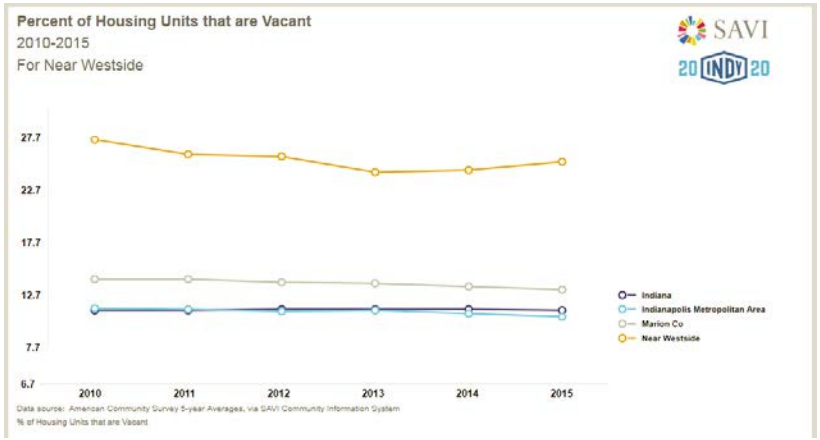


Near Eastside

Broader Context: County

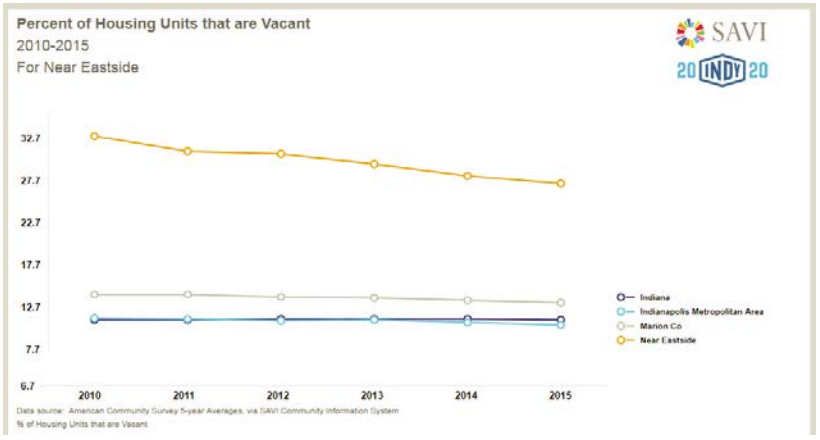
Near Westside

Vacancy Rate | 26% | -2pt



Near Eastside

Vacancy Rate | 27% | -6pt



Broader Context: Similar Neighborhoods

Neighborhood	Vacancy 2010	Vacancy 2015	Change
Arlington Woods	23.20%	20.27%	-2.9%
Crown Hill	36.92%	32.70%	-4.2%
Fountain Square	33.76%	32.18%	-1.6%
Mapleton / Fall Creek	35.87%	29.90%	-6.0%
Martindale - Brightwood	26.53%	25.23%	-1.3%
Meadows	41.09%	17.99%	-23.1%
Near Eastside	33%	27.38%	-5.6%
Near Northside	27.40%	22.59%	-4.8%
Near NW - Riverside	32.69%	30.03%	-2.7%
Near Westside	27.57%	25.50%	-2.1%
Median Change	-3.6%		
Mean Change	-5.4%		

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Seeing a Trend and Assuming Causation

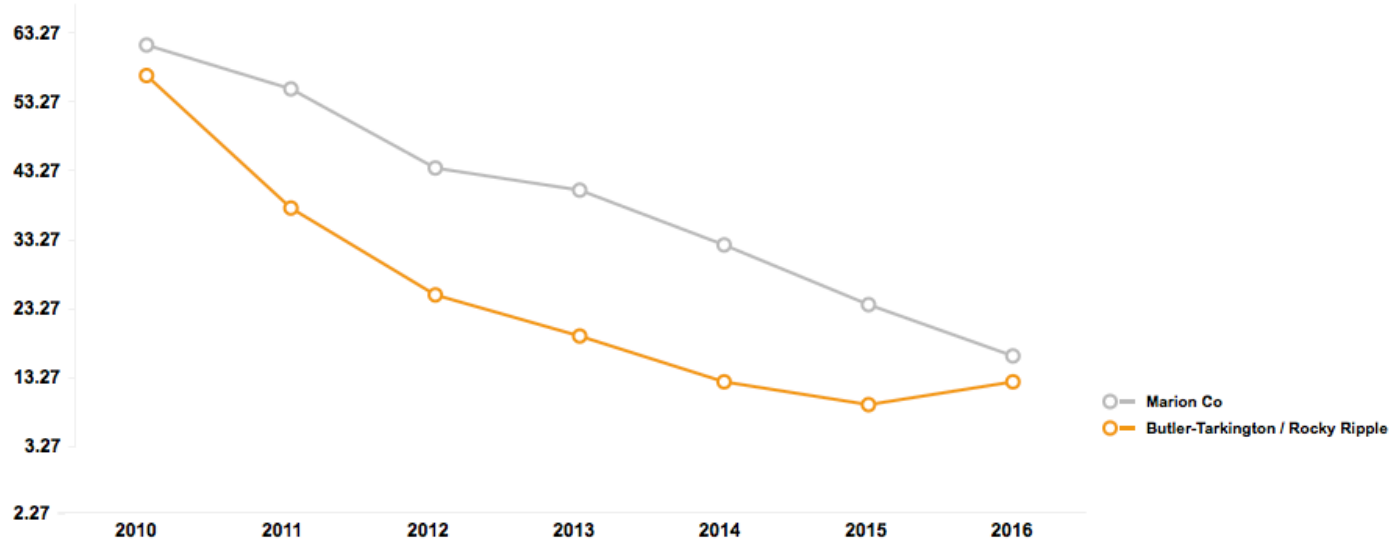
Pitfall #4

Changes in Juvenile Charges

Let’s go to IndyVitals to look at the trends in juvenile charges in Butler-Tarkington / Rocky Ripple.

Changes in Juvenile Charges

Juvenile Charges
2010-2016
For Butler-Tarkington / Rocky Ripple



Data source: Marion County Superior Court via SAVI Community Information System
Charges per 1000 juvenile population. Population data from the 2010 Decennial Census, via SAVI Community Information System.

Changes in Juvenile Charges

Charges come from:

Alleged Criminal Activity X Enforcement

Indiana Juvenile Detention Alternatives Initiative

Indiana has adopted JDAI in partnership with the Annie E. Casey Foundation.

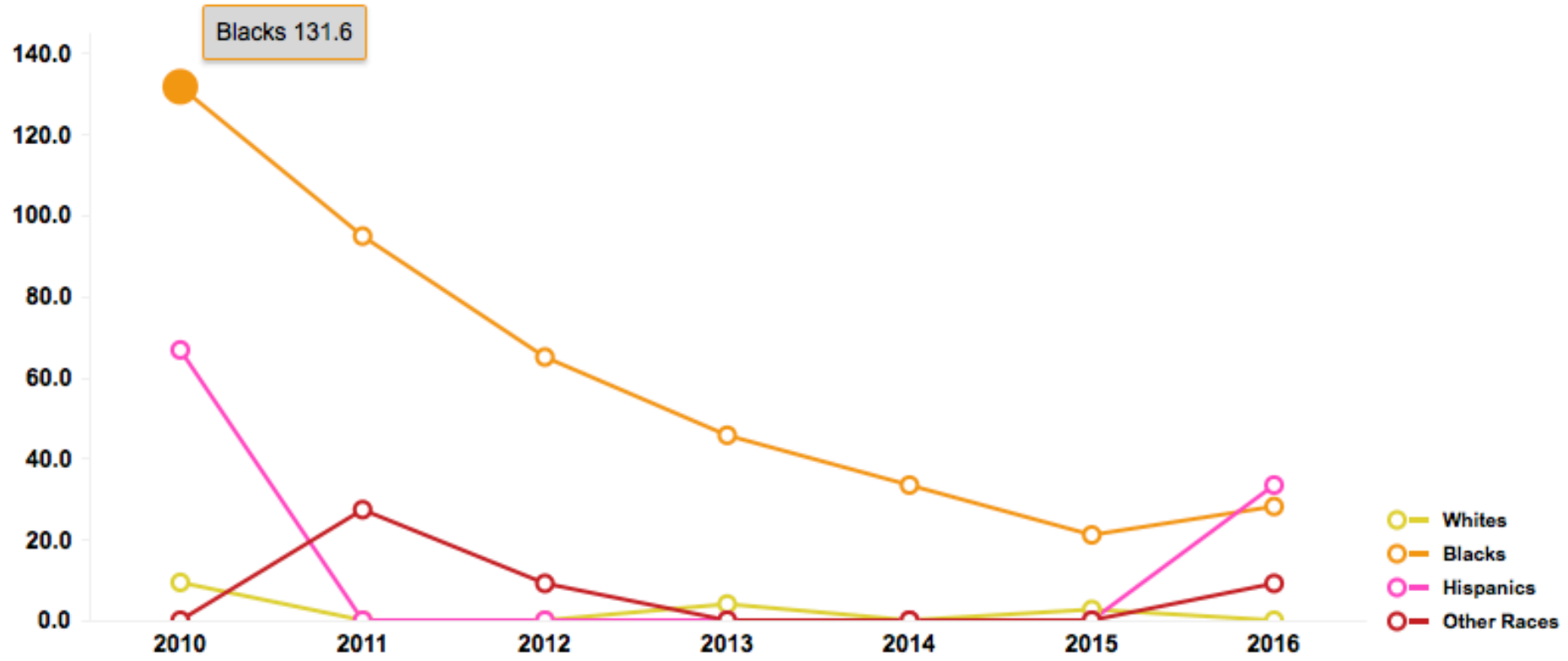
Mission: The juvenile justice system will improve public safety in Indiana through the use of evidence-based interventions for youth and families that eliminate the unnecessary detention of youth, reduce disproportionate minority contact, improve outcomes and welfare of youth, save tax payer money and stimulate overall juvenile justice system improvement.

In light of these policy changes, how do we interpret the falling juvenile crime rate?

Juvenile Charges By Race

2010-2016

For Butler-Tarkington / Rocky Ripple

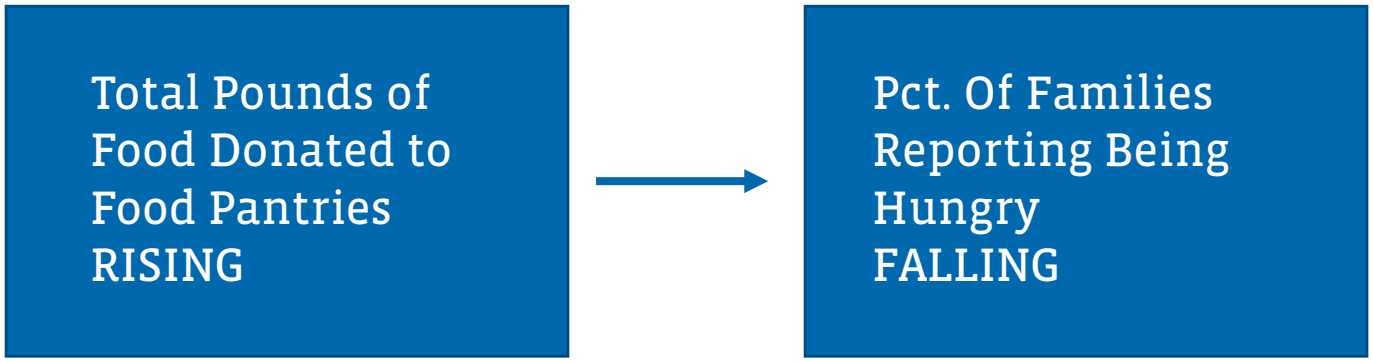


Data source: Marion County Superior Court via SAVI Community Information System

Charges per 1000 juvenile population of each race; Population data from the 2010 Decennial Census, via SAVI Community Information System.

What is the true crime rate?

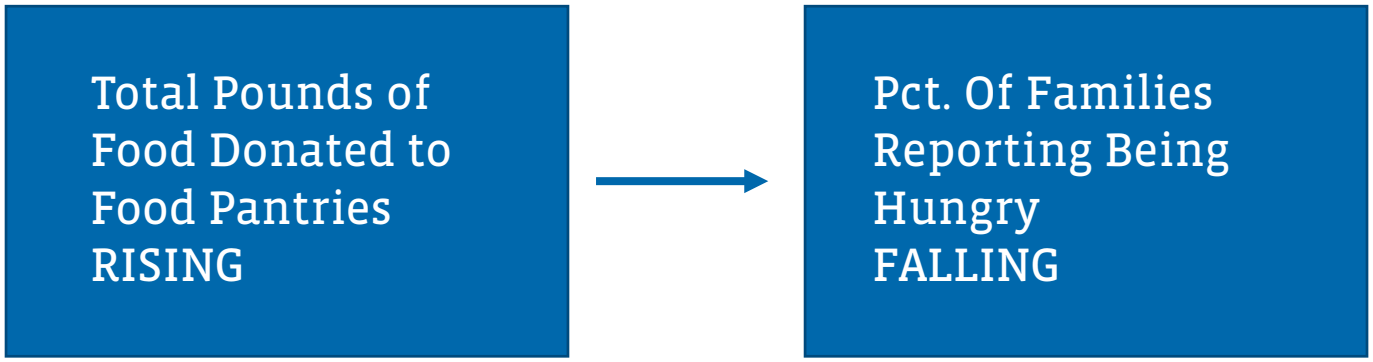
Confounding Variables



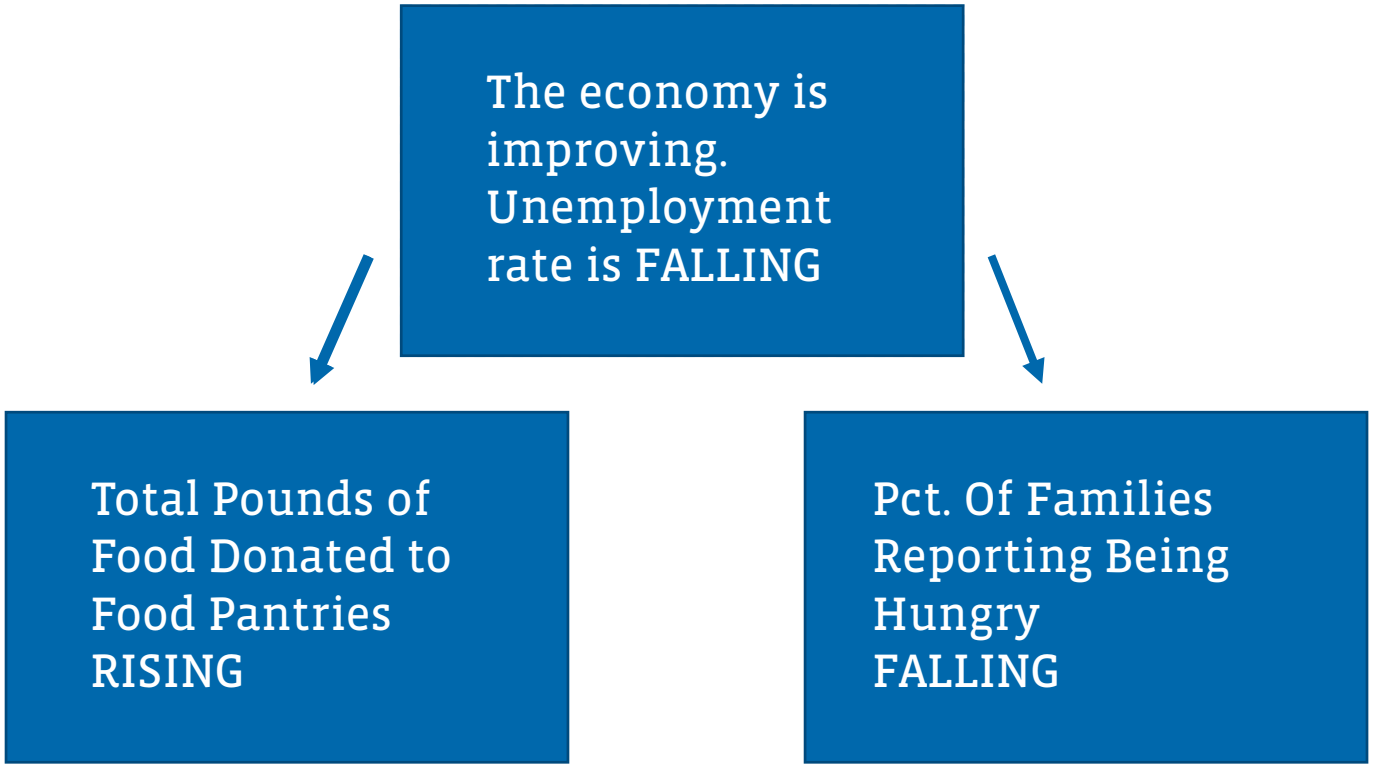
This looks good. Let's keep the donations coming!

Confounding Variables

But wait, something lurks unseen.



Confounding Variables



Aha! The economy is improving generally, leading to more philanthropic donations and more food stability in families.