What do Households Value in Quality of Life?

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Some underlying thoughts . . .

- We all have a vague sense that nicer places do better in attracting people and businesses.

- We call this *Quality of Life*, or *Quality of Place* or *Placemaking*, or *Primacy of Place* in describing the characteristics of nicer neighborhoods, towns or cities.

- Some folks argue that high quality job growth drives quality of place, by attracting a stronger tax base or more affluent residents.

- Decades of business attraction policies condition us all to consider familiar tools (incentives, tax rates) instead of more fundamental aspects of our communities.

- We are a wonderfully heterogenous people, so all of us like different things.   So, how can we decide what people like, and what draws them to a community?

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The Challenge

- We know what people generally like in their communities from surveys . . .

- We have data on 100's of amenities for each county, but cannot directly estimate what mix of these people prefer.

- We should be able to know what amenities people living in our community prefer (they've chosen to live in the community).

- But, if we want to attract more people, we really need to know how people who live elsewhere value what we have.

- That necessitates a 'price' measure of quality of life, much like a stock price measures all that is good or bad that can be known about a particular company.

What Housing Markets tell us about Quality of Life

- Suppose we had two identical homes, located in two very different communities.

- The market price of those homes would tell us something about each community.

- The higher the price, the better the community, the lower the price the less attractive it is.

- We can artificially construct 'identical' homes in each county by controlling for their size, age, density, type of construction using decades old statistical models.

- The variation in home prices that is NOT explained in this model yield a measure of how much more/less the housing market values that community due to some intangible, or unmeasured aspect.

- This is a good measure of relative cost of living.

What <u>Labor Markets</u> tell us about Quality of Life

- Suppose we had two 'identical workers', choosing jobs between two very different communities.

- The wages that worker would be willing to accept would have to be higher in the place they found unattractive, and lower in the place they found attractive.

- Keep in mind, the workers making these choices by moving, are the better educated, higher wage workers (low wage workers find it harder to make this choice).

- We can construct '<u>identical</u>' workers in each county by controlling for their education, industry, age, regional industry mix, and labor market conditions in a labor market model.

- The variation in wages NOT explained in this model yield a measure of how much more/less the labor market values that community, based on intangible or unmeasured characteristics.

- Higher '<u>unexplained</u>' wages mean the place is less attractive, lower wages more attractive. (Reminder, it is the top half of earners making these choices, so usually higher income earners are moving).

# Putting it together in a measure of Quality of Life

- Location choices optimize the cost of living, wages and amenities. This is the relationship that has motivated hundreds of studies (in metro areas) and is the foundation of the 'Quality of Life' movement in economic development policy. It says:

  - Workers willing to live in a more expensive community, but earn lower wages than they could obtain elsewhere are signaling that this is a high Quality of Life community.

  - Workers who demand higher wages, and are unwilling to pay more for an 'identical' home are signaling that this community has a low Quality of Life.

  - These two observations yield a relative (not absolute) measure of Quality of Life for each county.

- However: our empirical model is not perfect, for three reasons.
  - Very fast/slow growing urban places may not be at 'equilibrium' (we fix with multiple decades)
  - Urban counties may have much broader labor markets so the wage regression is poor measure (it might be better to aggregate these to the level MSA).
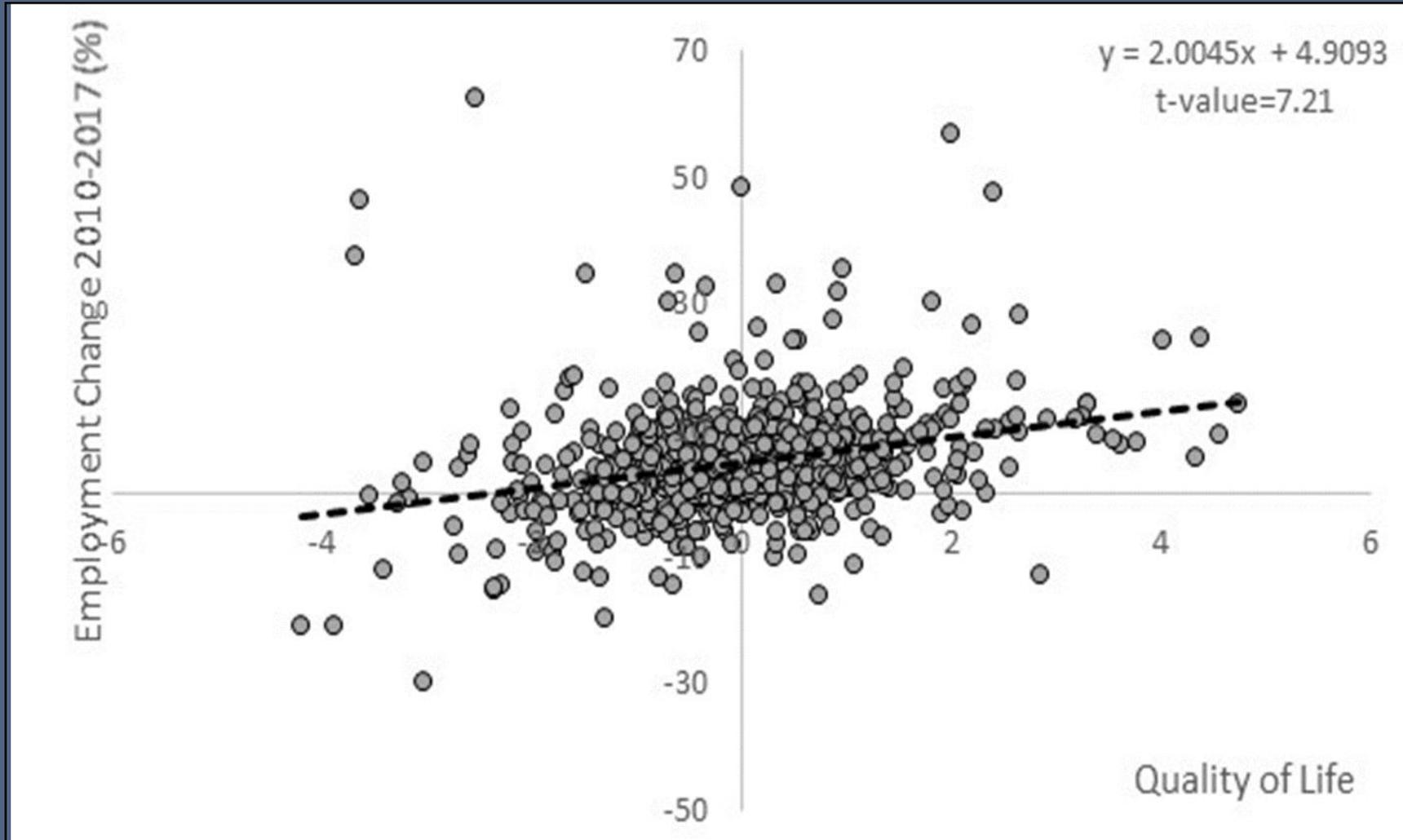 - Very rural places have missing data.

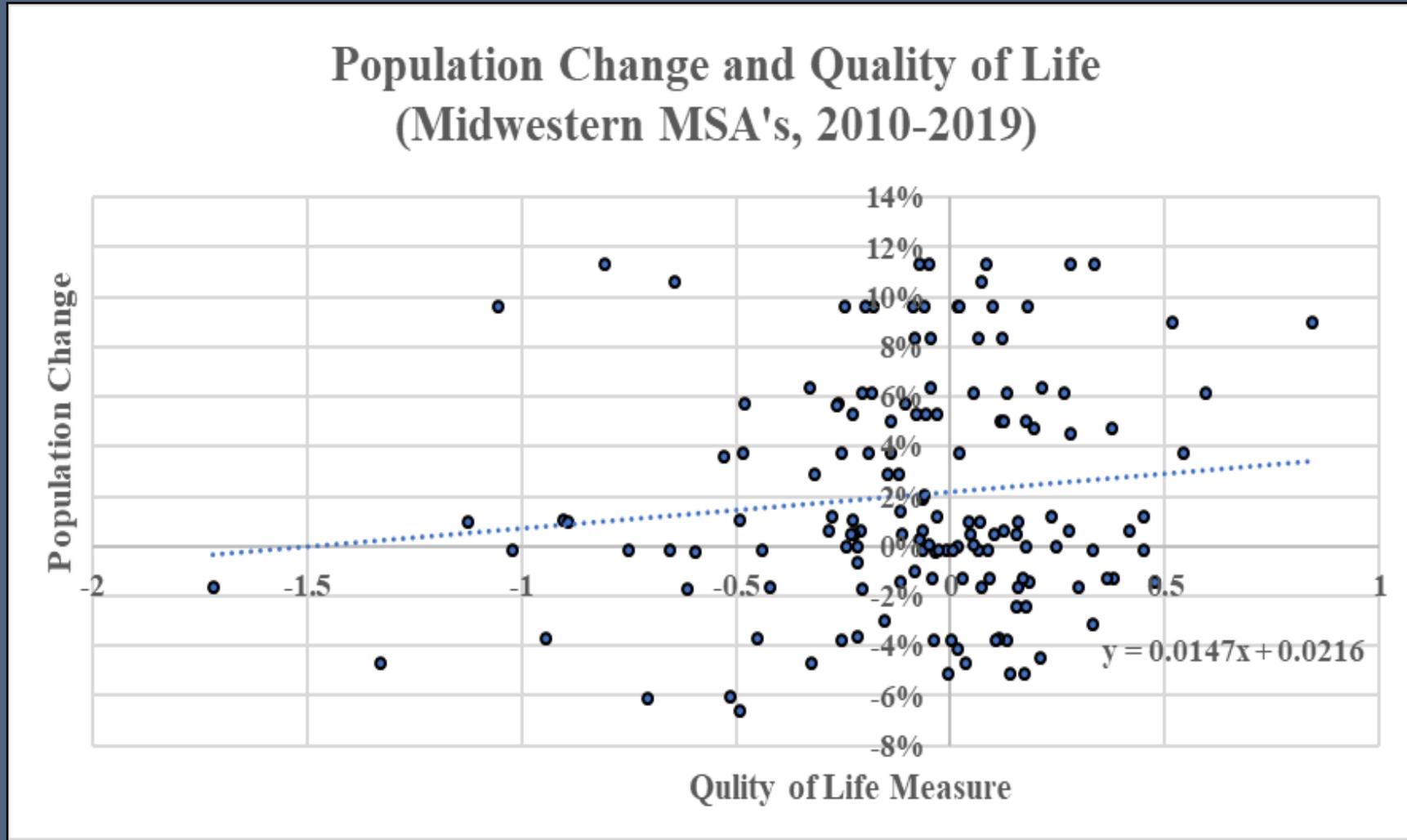Figure 4: Quality of Life across Counties in the U.S. (2010)
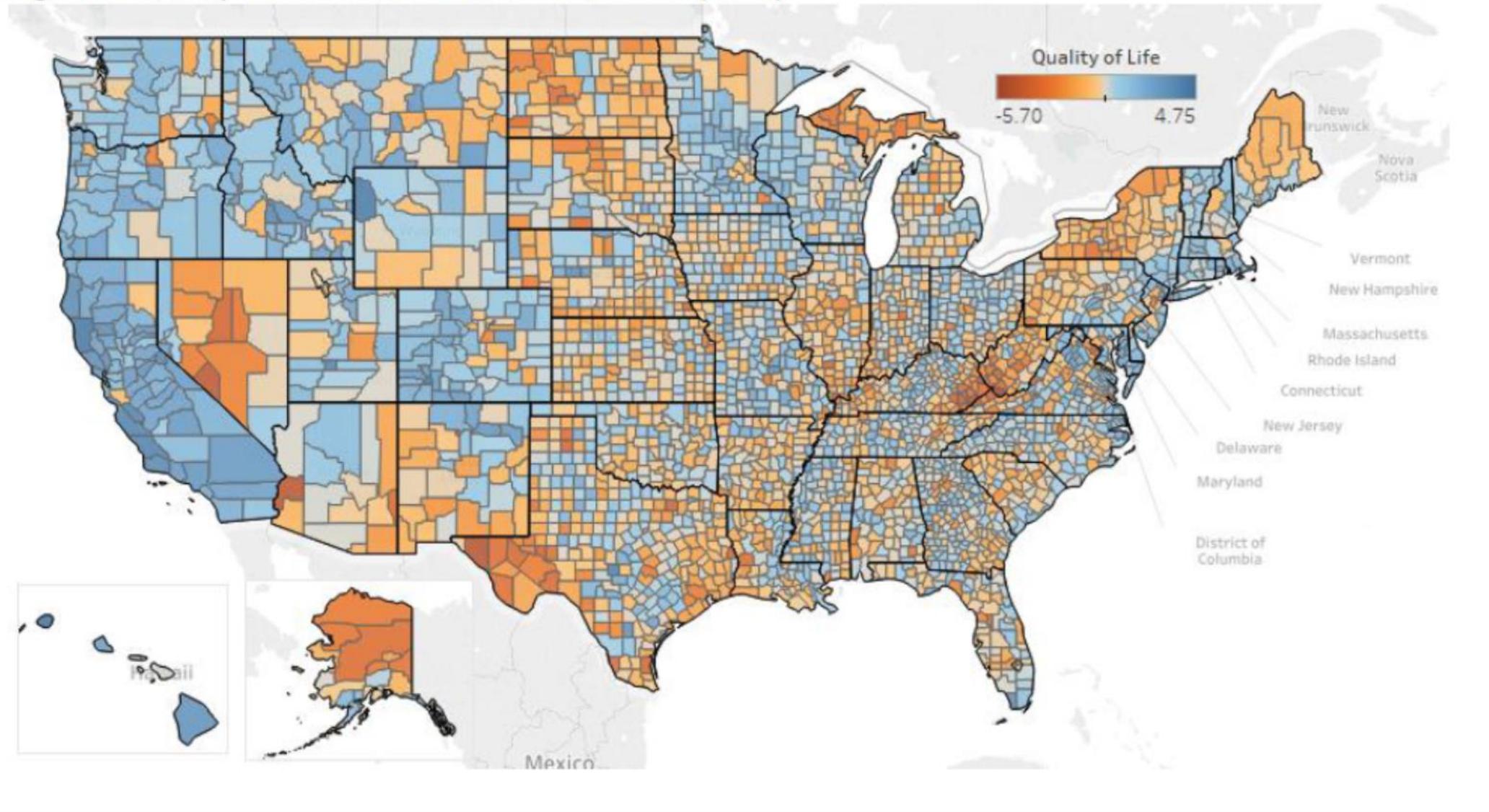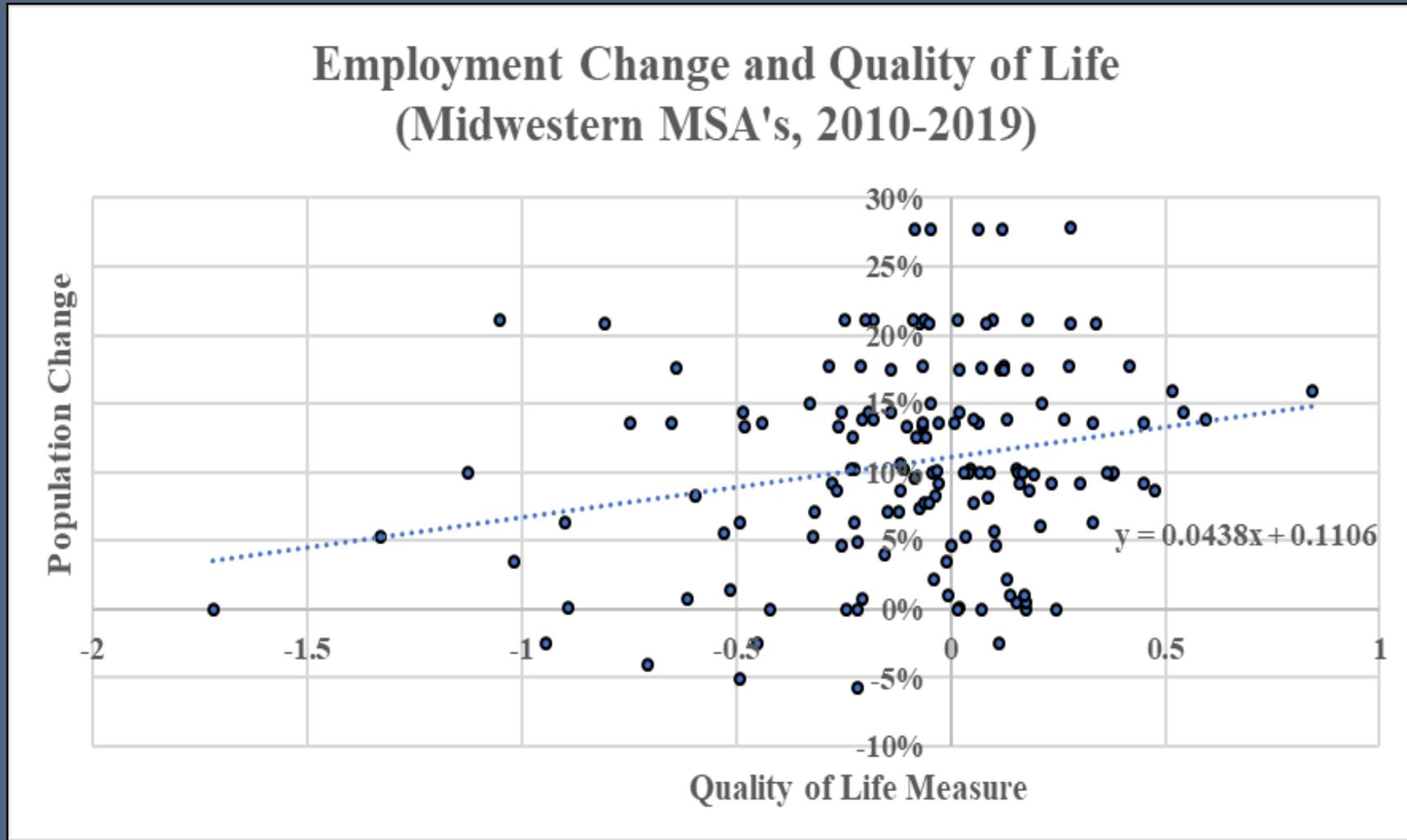
People Move to higher QoL Micropolitan Places
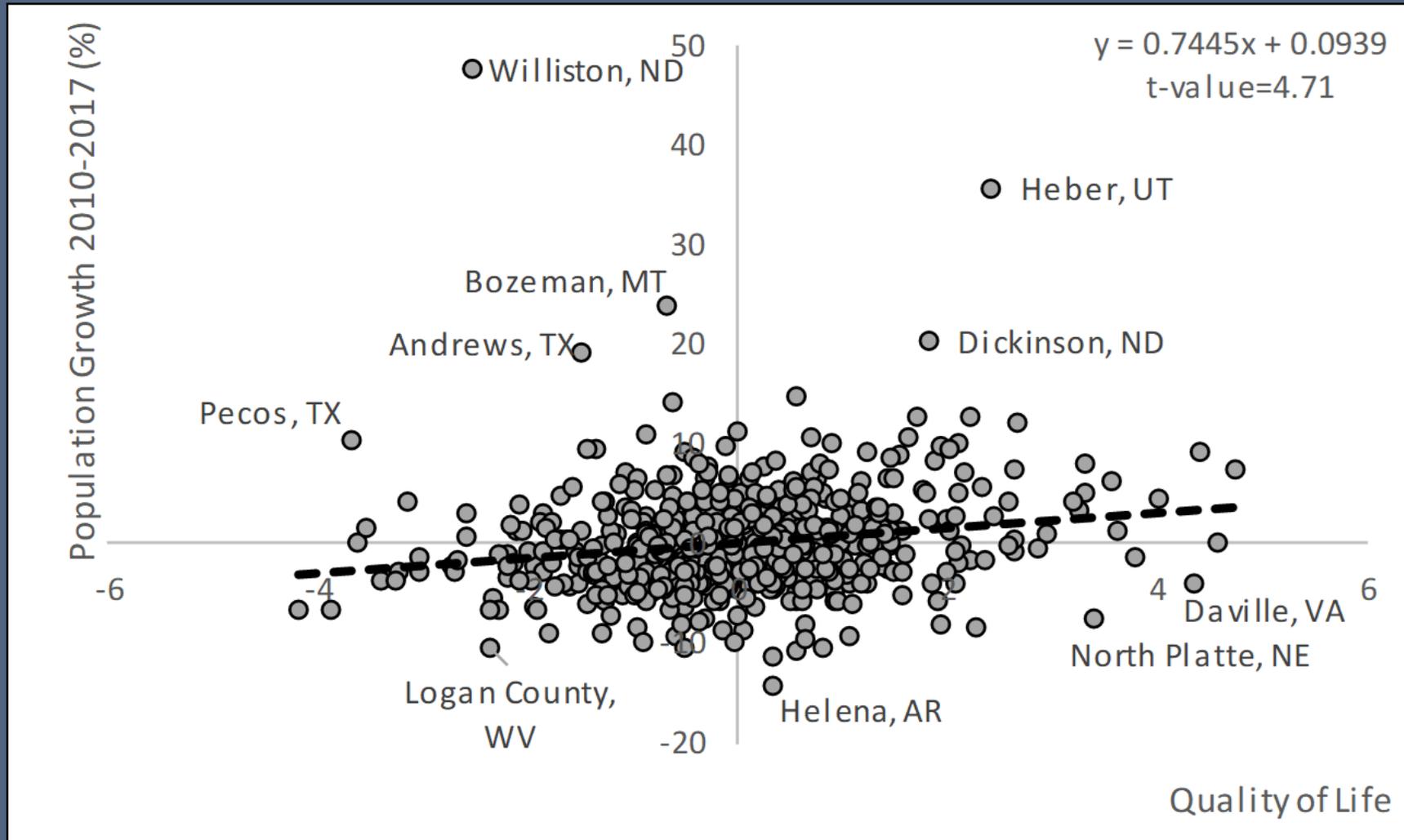
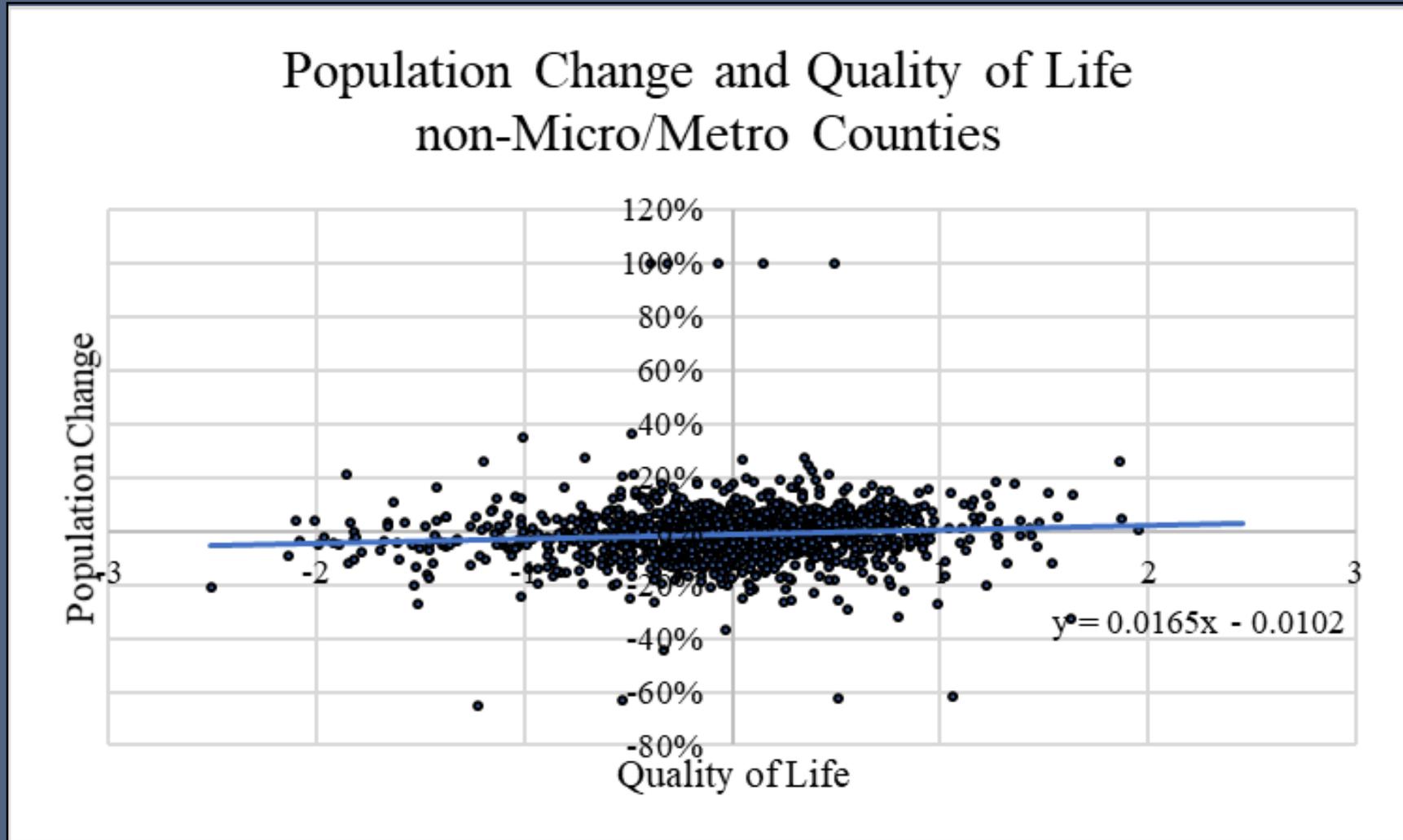# Job growth are even MORE sensitive to QoL in Micropolitans

Same in Midwestern Metropolitan Counties

Population Change and Quality of Life
(Midwestern MSA's, 2010-2019)

y = 0.0147x + 0.0216

Job growth 4X more sensitive to QoL in Metropolitans

Employment Change and Quality of Life (Midwestern MSA's, 2010-2019). Scatter plot of Population Change versus Quality of Life Measure with trend line $y = 0.0438x + 0.1106$.

Same pattern on population in rural (non metro/micro) areas

What Amenities are Correlated with Quality of Life
(Hint: This is strong confirmation of our measure)

Natural Amenities		Public Amenities		Private Amenities	
January Temp	0.0254*** (0.0062)	School Spending	6.6583*** (1.5855)	Food Stores	0.0131** (0.0058)
July Temp	-0.0711*** (0.0138)	Violent Crime Rate	-0.0007*** (0.0002)	Worship Places	-0.0258*** (0.0099)
Hilliness	0.0001** (0.0000)	Physically Unhealthy Days	-0.0724* (0.0399)	Eat/Drink Places	-0.0039* (0.0021)
Forest Coverage	-1.2494*** (0.2225)	Distance to Metro	-0.0033** (0.0014)	Arts/Culture	0.0431* (0.0254)
Federal Land	-0.0001** (0.0001)	Work from Home	0.1185*** (0.0173)	Recreation	0.0551*** (0.0152)

What's All this mean for Communities?

- Quality of Life is not some passing fad in economic development, but a half century long behavioral shift in household location decisions.

- Jobs follow people to higher QoL locations, using judgement about where those places are, as well as population growth as a proxy for QoL.

- The market based measure of QoL is great for researchers and trying to explain the need for QoL investments to taxpayers, but that isn't its big benefit.

- QoL correlates with amenities, and some of which you affect in your cities and towns.

- We feel the public amenity measures are a proxy for more than just school and public safety spending or physically unhealthy days. They are quality of services, absence of blight and healthy natural surroundings (environmental attributes).

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