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INSIGHTS



Shrinking Is Not Declining: A County Typology of Economic Decline and Talent Erosion

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ABSTRACT

Regional policymakers and scholars often equate population loss with decline, yet the two may diverge. This report introduces a county typology that separates economic decline from talent erosion—the loss of young, working-age, and educated residents—and combines them into a four-part classification. Using change between 2014 and 2024 across eight demographic, economic, and migration variables for 3,132 U.S. counties, and adapting the simple-versus-complex shrinkage distinction of Gescher et al. (2026), we find that a county's economic and demographic trajectories often disagree: nearly half of all counties are either economically stable while losing talent ("aging in place") or economically strained while holding their younger and more educated residents ("squeezed"). Economic decline clusters in rural and remote counties, but talent erosion is spatially scattered and reaches metro areas—including a notable share of the most-distressed "hollowing out" type. Shrinking, in short, is not the same as declining, and each county type warrants distinct policy responses.

Interactive map available here: <https://datawrapper.dwcdn.net/oIRuk/3/>

INTRODUCTION

Community economic development continues to grapple with why communities develop the way they do, and what the consequences of that development are. One way to understand these dynamics is through typologies. No typology is perfect: on the upside, multiple typologies offer different lenses of this process allowing practitioners and policymakers to respond accordingly; on the downside, they may oversimplify complex and severe problems.

Several typologies focus on demographics, rurality, or economics ranging from the United States Department of Agriculture (USDA) Rural-Urban Continuum Codes (RUCC) to the Urban Influence Codes to distressed-community indices such as the Economic Innovation Group's Distressed Communities Index¹. Although their methodologies and assumptions vary, each provides a different perspective. Yet one variable appears and is discussed consistently across all of them: population decline. And it raises the central question of this report: is shrinking the same as declining? These two are routinely conflated by regional policymakers and scholars.

In this report we introduce² a new county typology that integrates traditional demographic and economic variables (population change, unemployment, GDP per capita) with migration- and talent-related variables, where talent refers to the demographic base a community draws on: its young, working-age, and educated residents. The typology distinguishes two dimensions of change we call economic decline and talent erosion, and it distinguishes simple shrinkage (population loss alone) from complex shrinkage (population loss coupled with economic and demographic strain).

¹ [Distressed Communities Index \(DCI\) - Economic Innovation Group](#)

² This study replicates a portion of the methodology and rationale of Gescher, J., Royer, J., Svyndets, S., Leibert, T., & Lang, T. (2026). Downhill from here? Why shrinking regions are not necessarily 'left-behind'. *Journal of Rural Studies*, 126, 104244. <https://doi.org/10.1016/j.jrurstud.2026.104244>

Put plainly: are there communities that are shrinking yet economically stable, and others that are growing yet losing the young and educated residents that sustain them? Using change rather than a one-time or cross-sectional snapshot provides a different lens. We find that the two often diverge. Nearly half of all counties show a mismatch between their demographic and economic trajectories. This novel typology provides yet another lens when trying to understand a community's demographic and economic health.

This report makes three contributions. First, it operationalizes the simple-versus-complex shrinkage distinction of Gescher et al. (2026) at the scale of 3,132 U.S. counties, rather than a single national or regional case. Second, it separates talent erosion into its own dimension by directly observing a decrease in younger and more educated in-migration, working-age population, and educated residents as well as an aging community. Third, it combines the two dimensions into an intuitive four-part matrix that gives community leaders and policymakers a common vocabulary for distinguishing counties that are shrinking but stable from those that are quietly hollowing out.

DATA & METHODS

The concept of distinguishing between simple and complex shrinkage came from the Gescher et al. (2026) study, borrowing a portion of their methodology for this study. This in turn led to adding talent-related variables and assigning categories to counties based on the intersection of talent erosion and economic decline, which includes simple and complex shrinkage. The former focuses solely on population change while the latter includes GDP per capita and unemployment, in addition to population change.

Data for this report was obtained for the years 2014 and 2024, harmonized to 2014 FIPS codes, from the 5-Year American Community Survey, the Bureau of Economic Analysis, and the United States Department of Agriculture 2013 Rural Urban Continuum Codes. The dataset analyzed included 3,132 counties³. See Table A1 in the appendix for more information on the variables, formulas, and sources.

Percentage population change was calculated as well as the percentage change in the unemployment rate and real GDP per capita⁴ change was calculated between 2014 and 2024. If the percentage change in population was negative, counties were labeled as shrinking (1; adverse). For the percentage change in the unemployment rate and GDP per capita, a national median value was calculated. For the unemployment rate, each county was labeled as above (1; adverse) or below (0) the national median due to rising unemployment. For GDP per capita, each county was labeled as above (0) or below (1; adverse) the national median due to falling GDP per capita.

³ All Connecticut counties/regions were removed due to harmonization issues as well as Kalawao County (HI) and Loving (TX) due to lack of data.

⁴ 2024 dollars, adjusted for inflation using the CPI-U deflator.

The tweak to Gescher's study was to add talent-related variables. The percentage change of the share of the population age 25 or older with a bachelor's degree or higher was calculated as well as the percentage change of the share of the population ages 18 to 54, the median age difference, the percentage change of the share of the population age 18 to 54 that moved from a different county or different state, and the percentage change of the share of the population with a bachelor's degree and professional or graduate degree that moved from a different county or state. **Table 1** summarizes the variables, formulas, and sources.

Variables associated with economic decline and their relative position with the national median were added up resulting in a score from 0 to 3. Counties with a value of zero indicate that they did not experience either simple (negative population change) or complex shrinkage (negative population change, higher unemployment rate change, and lower GDP per capita change) and were labeled "Stable"; counties with one adverse variable were labeled "Slipping"; counties with two of the variables with adverse values were labeled "Declining"; and counties with adverse values across all three variables were labeled "Deep Decline."

Variables associated with talent erosion and their relative position with the national median were also added up resulting in a score of 0 to 5. Counties with no adverse values were labeled "Renewing"; counties with one adverse value were labeled "Steady"; counties with two adverse values were labeled "Softening"; counties with three adverse values were labeled "Eroding"; counties with four adverse values were labeled "Draining"; and counties with all five adverse values (population change of those with a bachelor's degree or higher, share of population age 18 to 54, younger in-migration, and educated in-migration was lower than the U.S. median and their median age was higher than the national median) were labeled "Emptying."

Once these two typologies—economic decline (ED) and talent erosion (TE)—were identified, a matrix or combined typology was calculated. This innovative combined typology grouped both the economic decline and talent erosion counties into low or high⁵.

In summary, three typologies were developed to help community leaders and policymakers better understand the overlapping dimensions of economic decline and talent erosion, while also understanding the individual dimensions. The period analyzed was 10 years, from 2014 and 2024. Table 1 summarizes the three typologies and provides a brief description. The next section presents the results of economic decline, talent erosion, and the combined matrix.

⁵ Low/high cutoff for economic decline was ≥ 2 adverse values = high; talent erosion ≥ 3 high

TABLE 1. Summary of typologies, categories, and descriptions

Typology	Category	Description
Economic Decline	Stable	No adverse economic trends. Population did not decline, and neither unemployment nor GDP per capita worsened relative to the national median.
	Slipping	One adverse economic trend of three (population decline, rising unemployment, or falling real GDP per capita).
	Declining	Two of the three adverse economic trends.
	Deep Decline	All three adverse economic trends: population decline, unemployment rising faster than the national median, and real GDP per capita falling relative to the national median.
Talent Erosion	Renewing	No adverse talent trends across the five measures.
	Steady	One adverse talent trend of five.
	Softening	Two adverse talent trends.
	Eroding	Three adverse talent trends.
	Draining	Four adverse talent trends.
	Emptying	All five adverse talent trends: below-median change in bachelor's share, prime-age (18–54) share, younger in-migration, and educated in-migration, plus faster-than-median aging[JW1.1].
Talent Erosion	Steady	Economy is holding and the county is largely retaining and renewing its younger and educated people.
	Aging in place	Economy is holding on, but the county is aging and losing younger and educated residents.
	Squeezed	Economy is declining, and the county is holding onto its younger and educated residents.
	Hollowing out	Economy is declining along with loss of younger and educated residents.

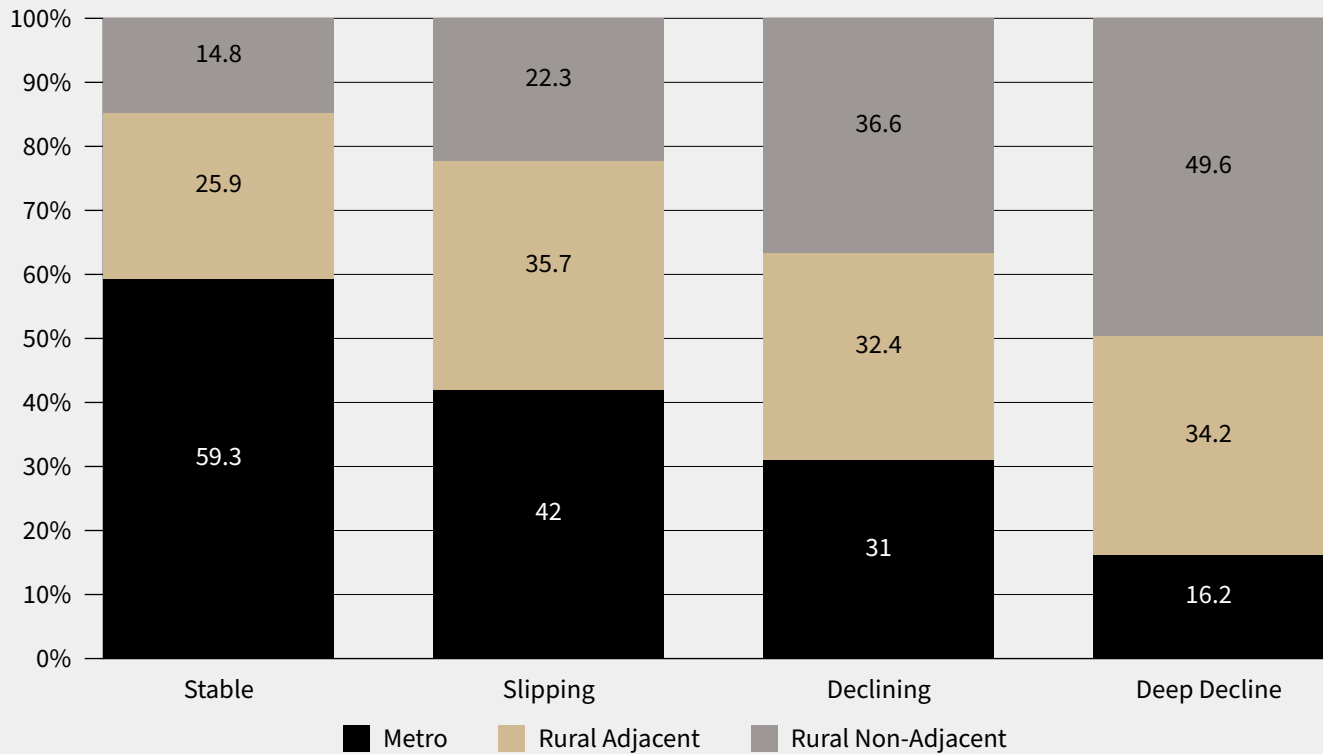
RESULTS

This section provides descriptive statistics for the economic decline, talent erosion, and combines matrix typologies. The breakdown of USDA RUCC county type for each typology is included for all typologies as well as a map. The variables used for each typology are included to provide the reader with a better understanding of the trends within each typology. The intent is for the reader to visualize the difference among these typologies based on specific socioeconomic characteristics.

Economic Decline

Figure 1 shows the breakdown of economic decline counties by rurality type. Almost 60% of the “Stable” counties were metro compared to less than 15% considered rural non-adjacent. On the other hand, close to half of counties in “Deep Decline,” whose population declined, change in their unemployment rate was higher than the national median, and the change in their GDP per capita was lower than the national median, were rural non-adjacent. “Declining” counties were almost evenly split between metro, rural adjacent, and rural non-adjacent. The share of rural non-adjacent counties increases as the economic decline categories go from “Stable” to “Deep Decline.”

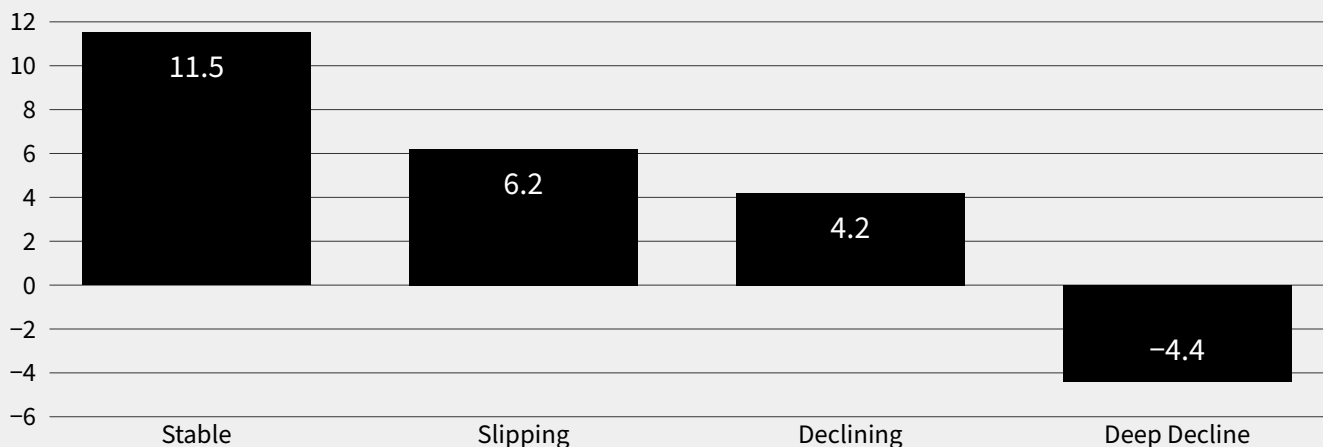
FIGURE 1. % Rurality by Economic Decline Type



Source: 2013 USDA RUCC; Author's Calculations

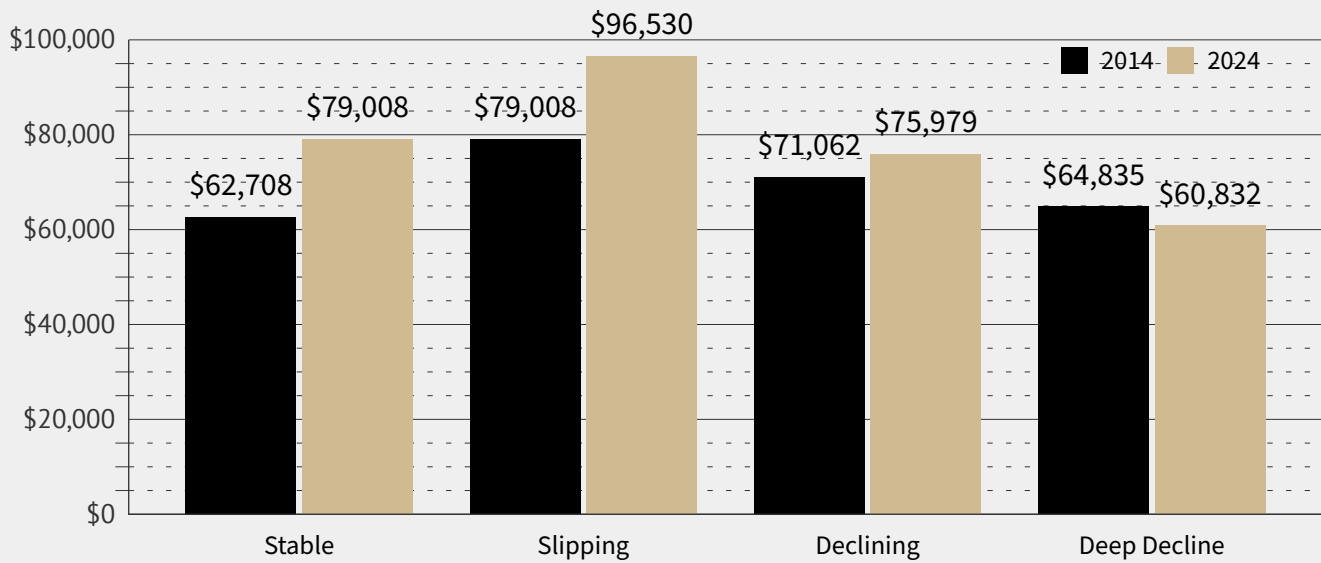
Figures 2, 3 and 4 show the variables used in this typology: percentage change in population, real GDP per capita, and change in unemployment (for formulas refer to Table A1). As expected, “Stable” counties gained population, their GDP per capita increased, and their unemployed decreased the most of all other county types. On the other hand, “Deep Decline” counties lost close to 4.5% (about 580,000 residents between 2014 and 2024), their GDP per capita declined, and their unemployment, although declining, did so at a slower pace compared to the other county types.

FIGURE 2. Economic Decline Type – % Population Change 2014-2024



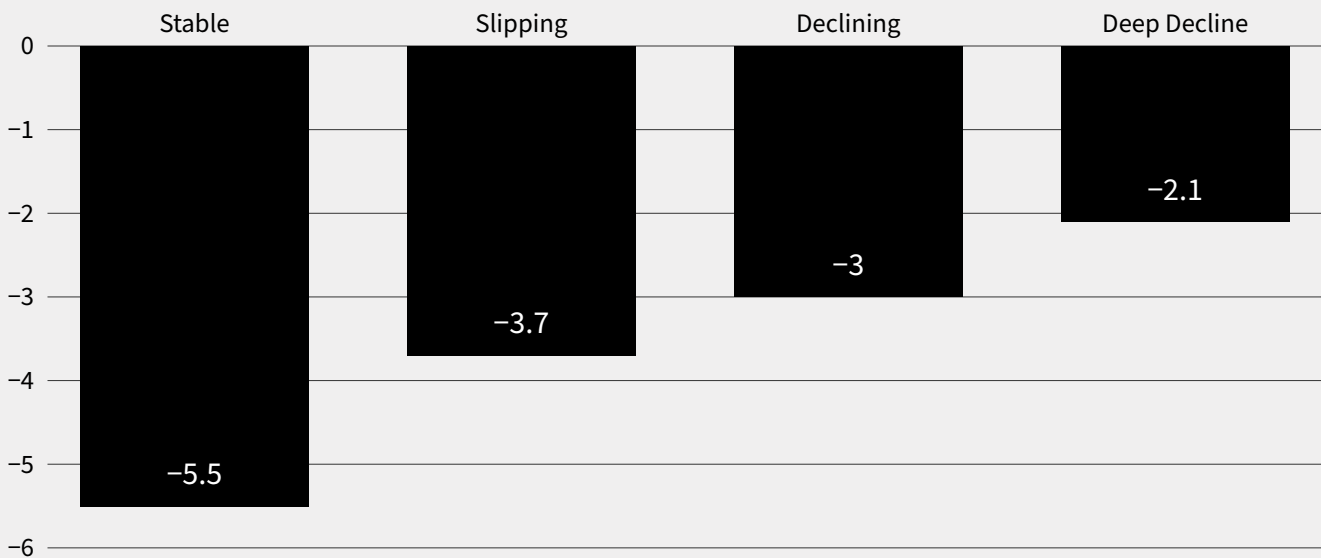
Source: 5-Year ACS; Author's Calculations

FIGURE 3. Economic Decline Type – Real (2024 \$) GDP Per Capita



Source: Bureau of Economic Analysis; Author's Calculations

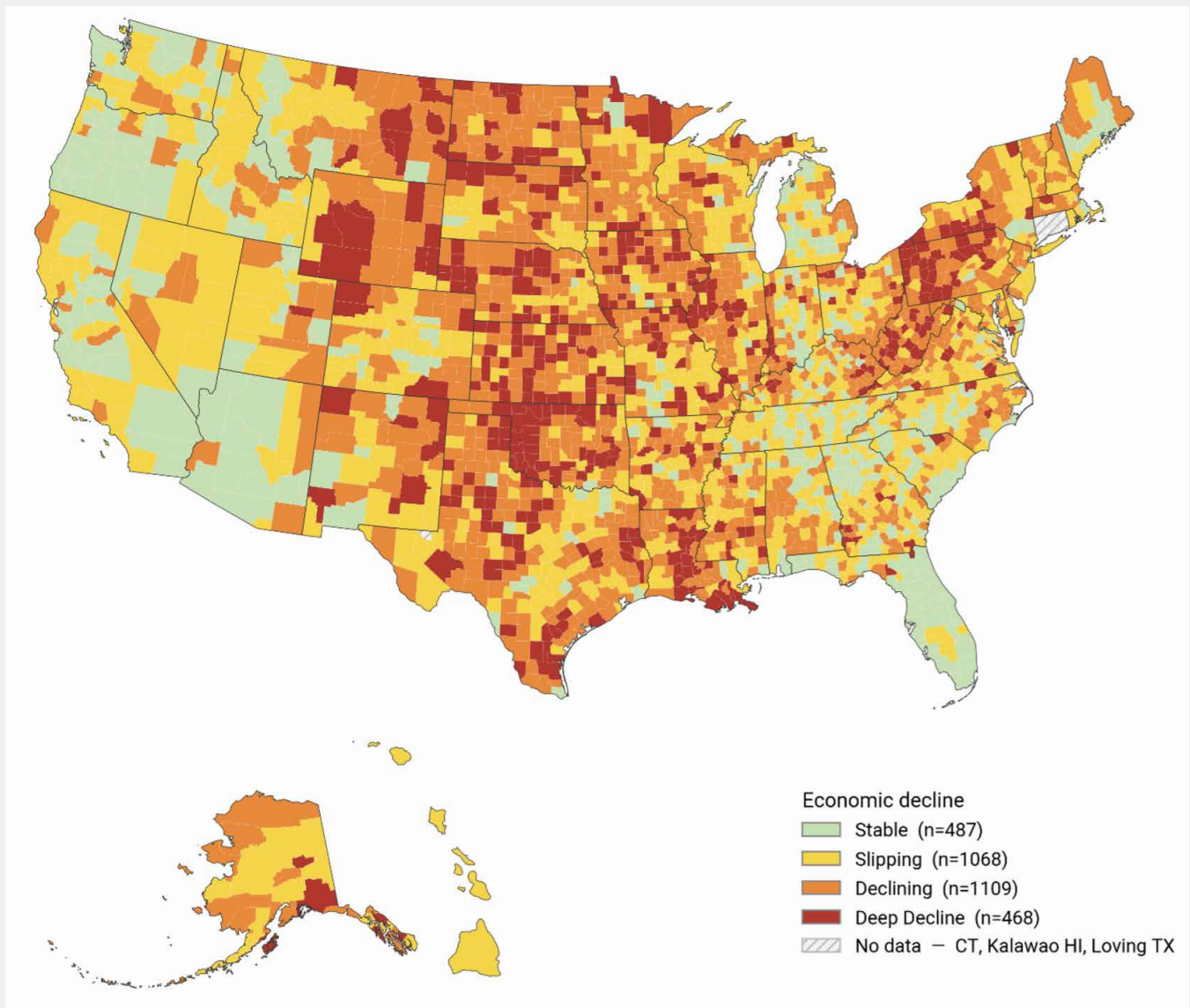
FIGURE 4. Economic Decline Type – % Change in Unemployed



Source: 5-Year ACS; Author's Calculations

Regarding geographic patterns, the map in **Figure 5** shows the economic decline counties. “Deep Decline” counties (red) were clustered in upstate New York, Pennsylvania, and West Virginia as well as the Great Plains ranging from North Dakota to Texas. Arizona, Florida, and Oregon had several “Stable” counties (light green) compared to other states. Note how some of the “Black belt” counties, usually identified in persistent poverty or population decline, were labeled “Slipping” or “Declining.” Oklahoma had the highest share of counties in “Deep Decline” with 45.5% followed by Wyoming with 39.1% and Kansas with 38.1%. On the “Stable” front, Florida had the largest share of counties in this category with 70.1% followed by Oregon with 69.4% and Arizona with 60%.

FIGURE 5. Economic Decline – Population, Unemployment Rate, and GDP Per Capita. 2014-2024

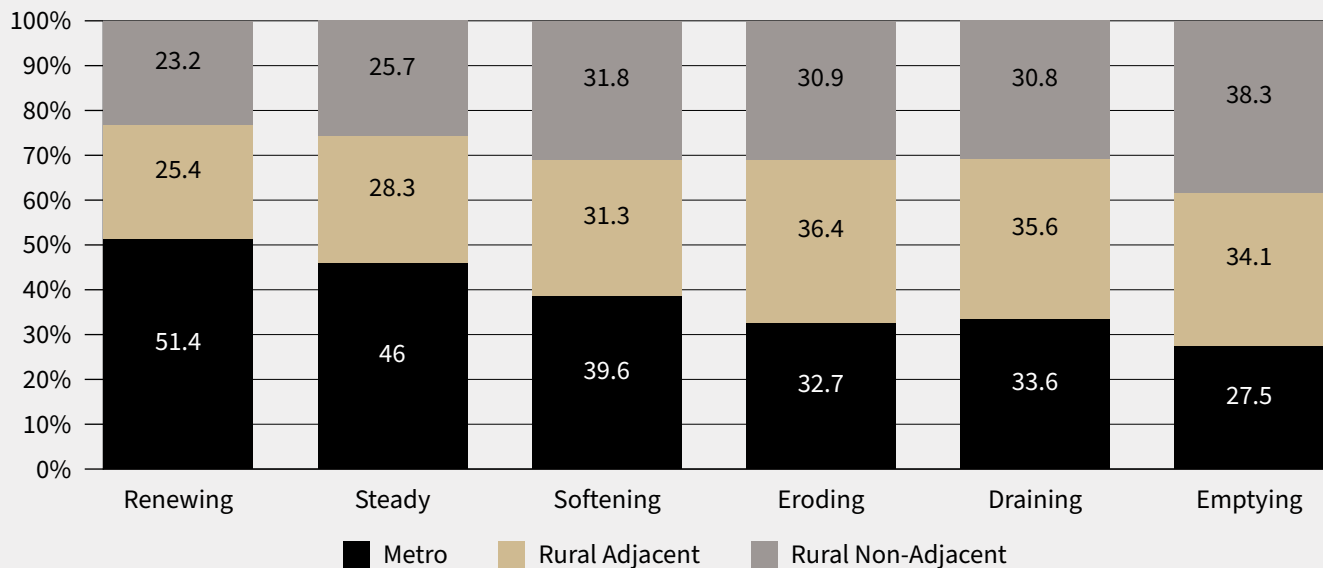


Source: ACS 5-yr, BEA GDP (2024 \$), CPI-U | 3,132 counties, 2014-2024

Talent Erosion

As shown in **Figure 6**, a little more than 38% of counties labeled “Emptying” were rural non-adjacent compared to less than 28% metro. Note how three of the five categories (“Softening,” “Eroding,” and “Draining”) had an almost even split between rural county types. As expected, the majority of counties labeled “Renewing” were metro counties compared to a little less than one-fourth labeled rural non-adjacent.

FIGURE 6. % Rurality by Talent Erosion Type

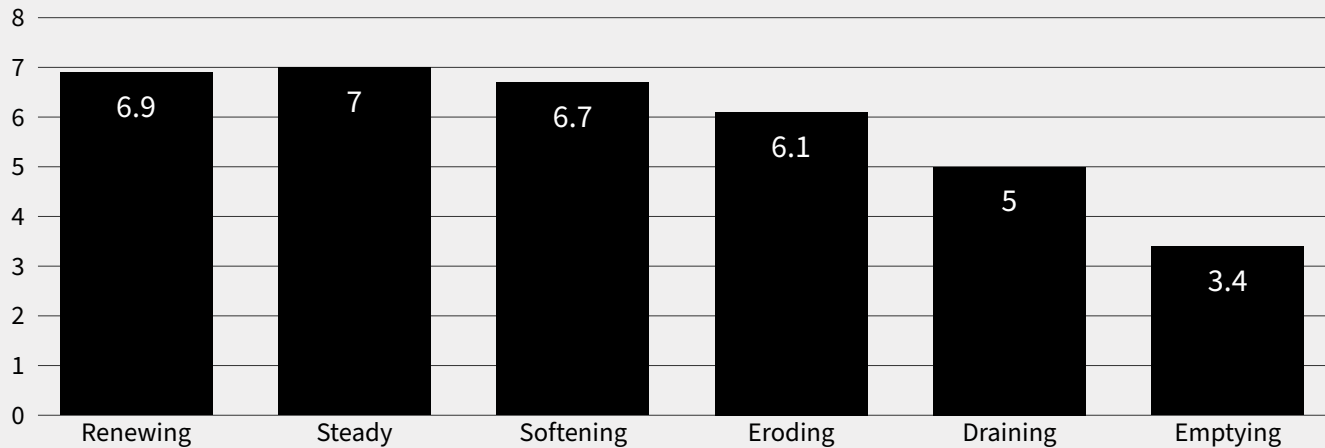


Source: 2013 USDA RUCC; Author's Calculations

Figure 7, 8, 9, 10, and 11 show the variables by talent erosion county type: change in those with a bachelor's degree or higher, change in the population ages 18 to 54, median age, change in the younger in-migration, and the change in the higher educated in-migration (for formulas refer to Table A1). Most variables behave as expected, whereas “Emptying” counties lost residents with a bachelor's degree or higher and those ages 18 to 54 while their in-migration of younger and more educated was lower compared to “Renewing” counties.

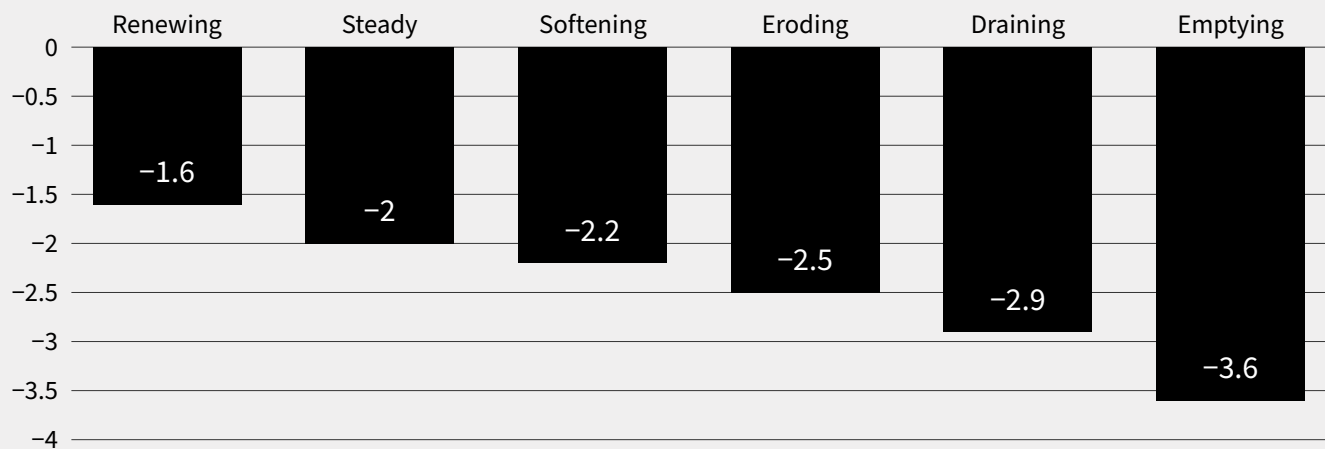
Regarding median age, an interesting trend is observed. “Emptying” counties were younger compared to “Renewing” back in 2014 though became older by 2024. Local community leaders and community developers may help answer why or provide more context for this trend. The median age in “Renewing” counties decreased slightly while barely increasing in “Steady” counties between 2014 and 2024.

FIGURE 7. Talent Erosion Type – % Change Pop. 25+ with a Bachelor's or Higher



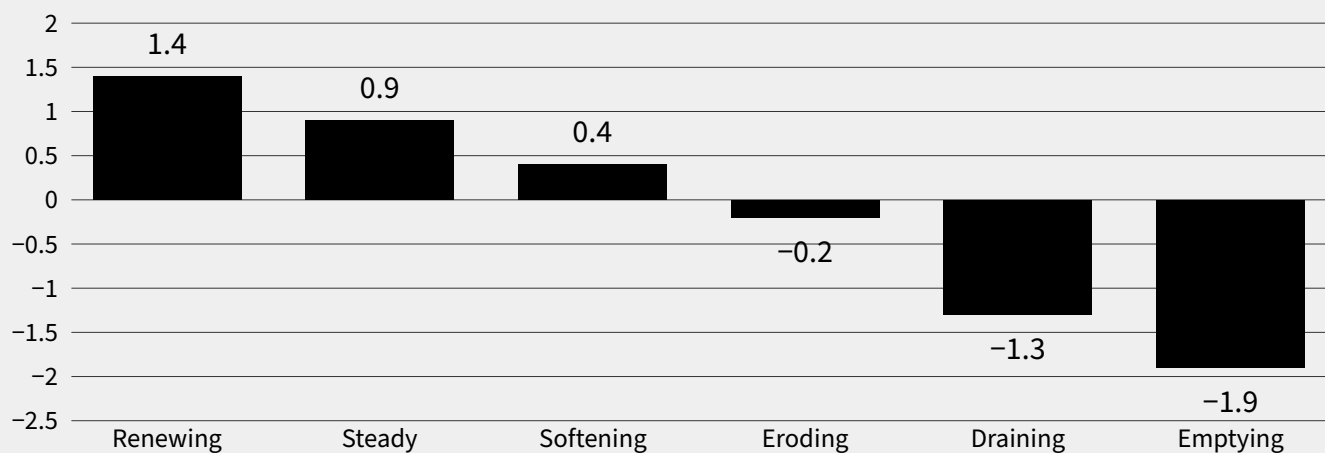
Source: 5-Year ACS; Author's Calculations

FIGURE 8. Talent Erosion Type – % Change Population Age 18 to 54



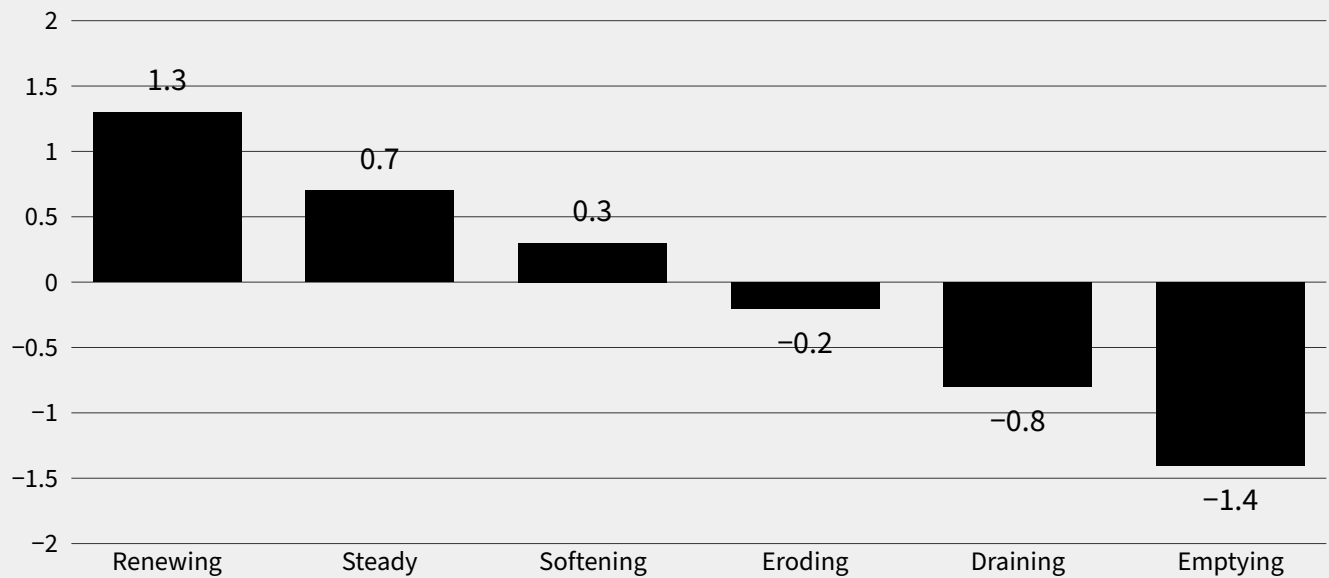
Source: 5-Year ACS; Author's Calculations

FIGURE 9. Talent Erosion Type – % Change in Younger In-Migration



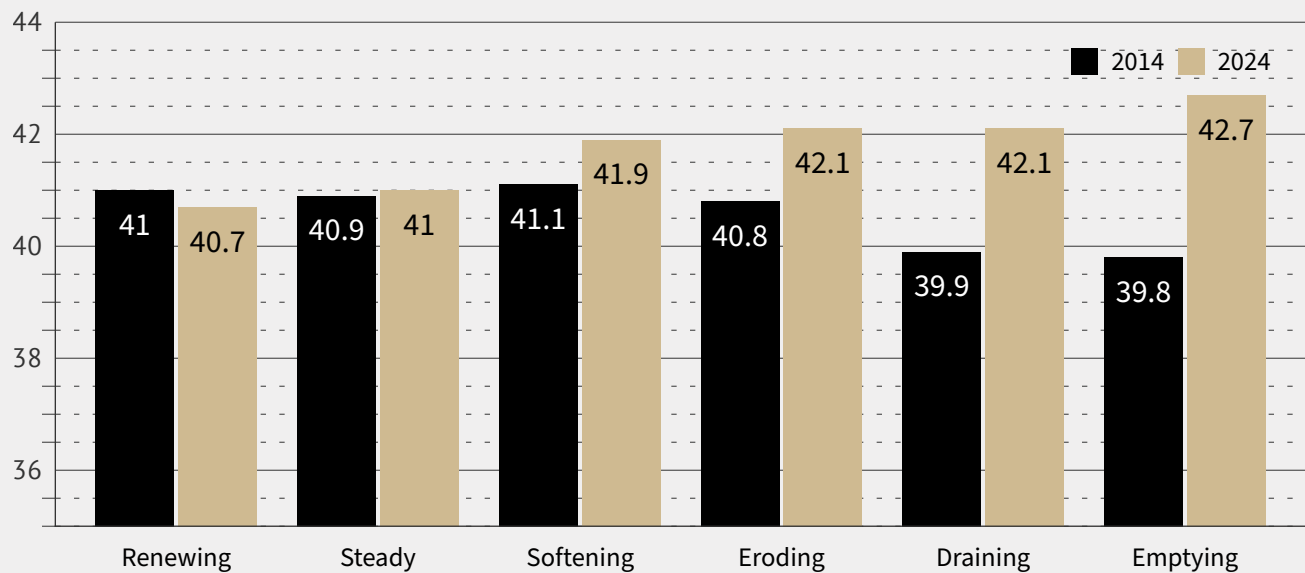
Source: 5-Year ACS; Author's Calculations

FIGURE 10. Talent Erosion Type – % Change in High Educational Attainment In-Migration



Source: 5-Year ACS; Author's Calculations

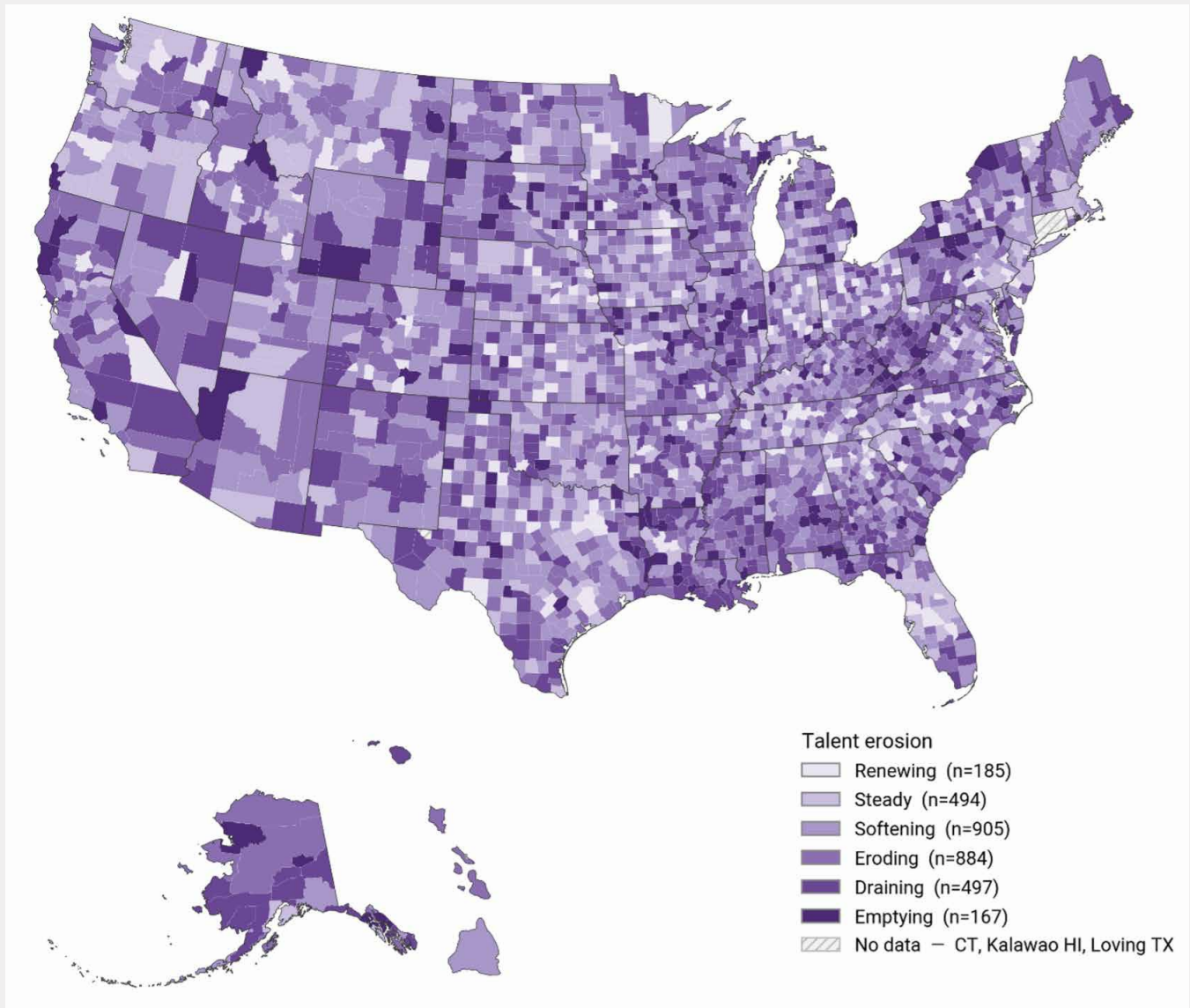
FIGURE 11. Talent Erosion Type – Median Age



Source: 5-Year ACS; Author's Calculations

Lastly, the talent erosion counties were mapped in **Figure 12**. Note how there is no distinctive geographic pattern. Talent erosion county types are scattered across the country, including some “Renewing” in the Great Plains. Excluding states with less than 10 counties, the state with the highest share of “Renewing” counties was Washington with 15.4% followed by a two-way tie between New Jersey and Vermont, each with 14.3%. Alaska, Arizona, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Mexico, Wisconsin, and Wyoming had zero “Renewing” counties. On the opposite side, the share of “Emptying” counties was highest in Alaska with 13.8% followed by Wyoming with 13% and Louisiana with 12.5%.

FIGURE 12. Talent Erosion – Bachelor's or Higher, Age 18 to 54 Share, Aging, Younger In-Migration, 2014-2024



Source: ACS 5-yr, BEA GDP (2024 \$), CPI-U | 3,132 counties, 2014-2024

Economic Decline and Talent Erosion Matrix

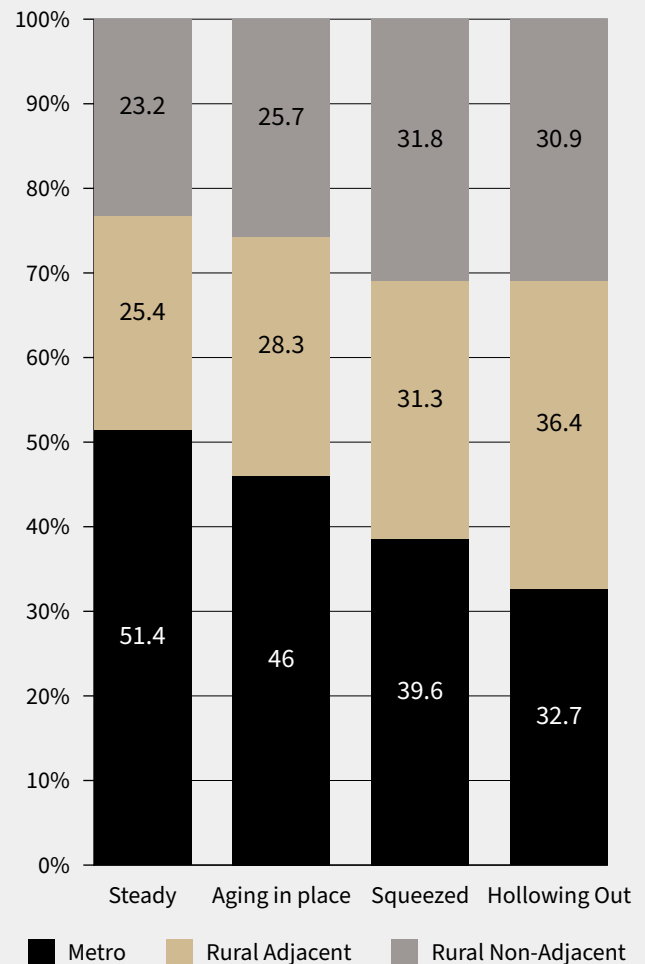
The most important contribution to this report is the combination of economic decline and talent erosion into a 2x2 matrix resulting in four county types: "Steady," "Aging in Place," "Squeezed," and "Hollowing Out." For more information on how these were labeled refer to the Data & Methods section.

Figure 13 shows the economic decline and talent erosion combined types by rurality. More than half of "Steady" counties were metro counties while close to 40% of "Hollowing out" counties were rural non-adjacent. However, close to one-quarter of these counties were metro, the highest share of all typologies analyzed. Also, a higher share of "Aging in place" counties were metro compared to rural non-adjacent.

Figures 14 and 15 plot the percentage population change and the real GDP per capita across the matrix types. Regarding population change, all types gained population even though the "Hollowing out" barely grew. This tells a different story than the economic decline and talent erosion (not shown) typologies. Similarly, the real GDP per capita between 2014 and 2024 increased across all matrix county types, as did in the talent erosion typology (not shown), unlike the economic decline, where is declined among "Deep Decline" counties.

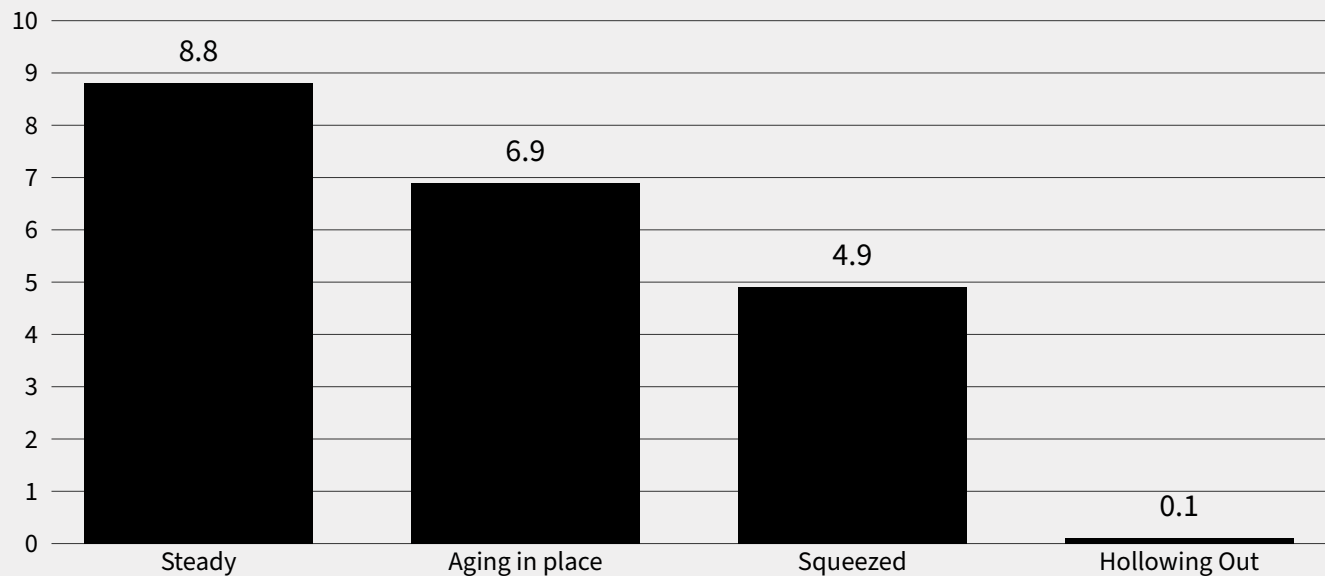
All other variables show similar trends (not shown). For example, the share of those with a bachelor's degree increased across all four matrix counties as well as the economic decline counties unlike the talent erosion typology.

FIGURE 13. % Rurality by Economic Decline and Talent Erosion



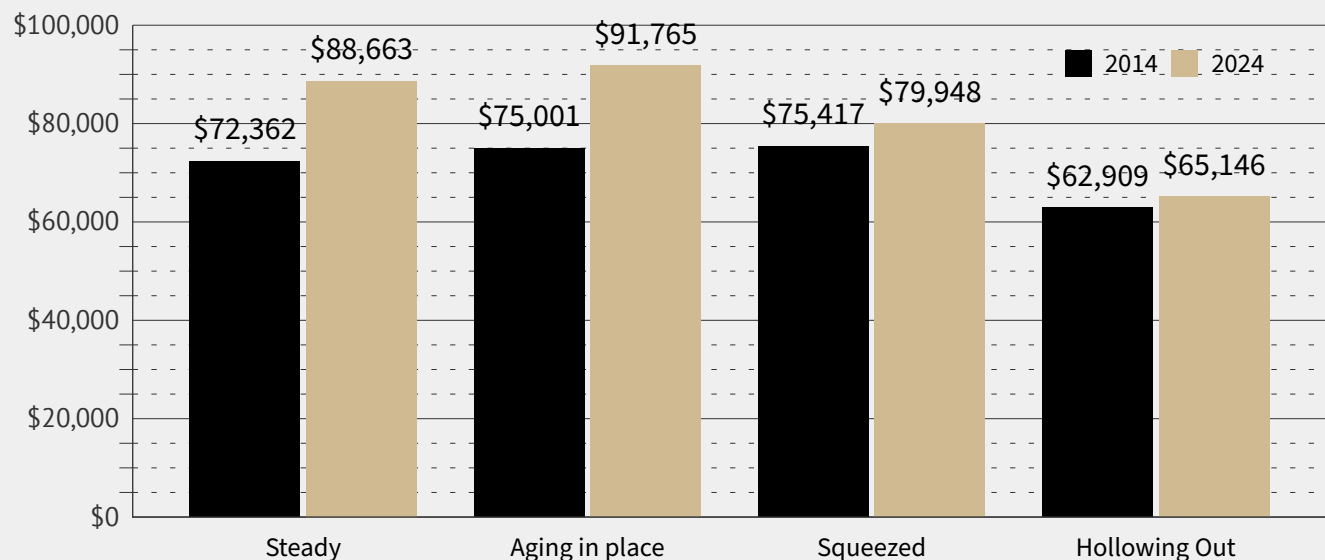
Source: 2013 USDA RUCC; Author's Calculations

FIGURE 14. Economic Decline and Talent Erosion – % Population Change 2014-2024



Source: 5-Year ACS; Author's Calculations

FIGURE 15. Economic Decline and Talent Erosion – Real (2024 \$) GDP Per Capita

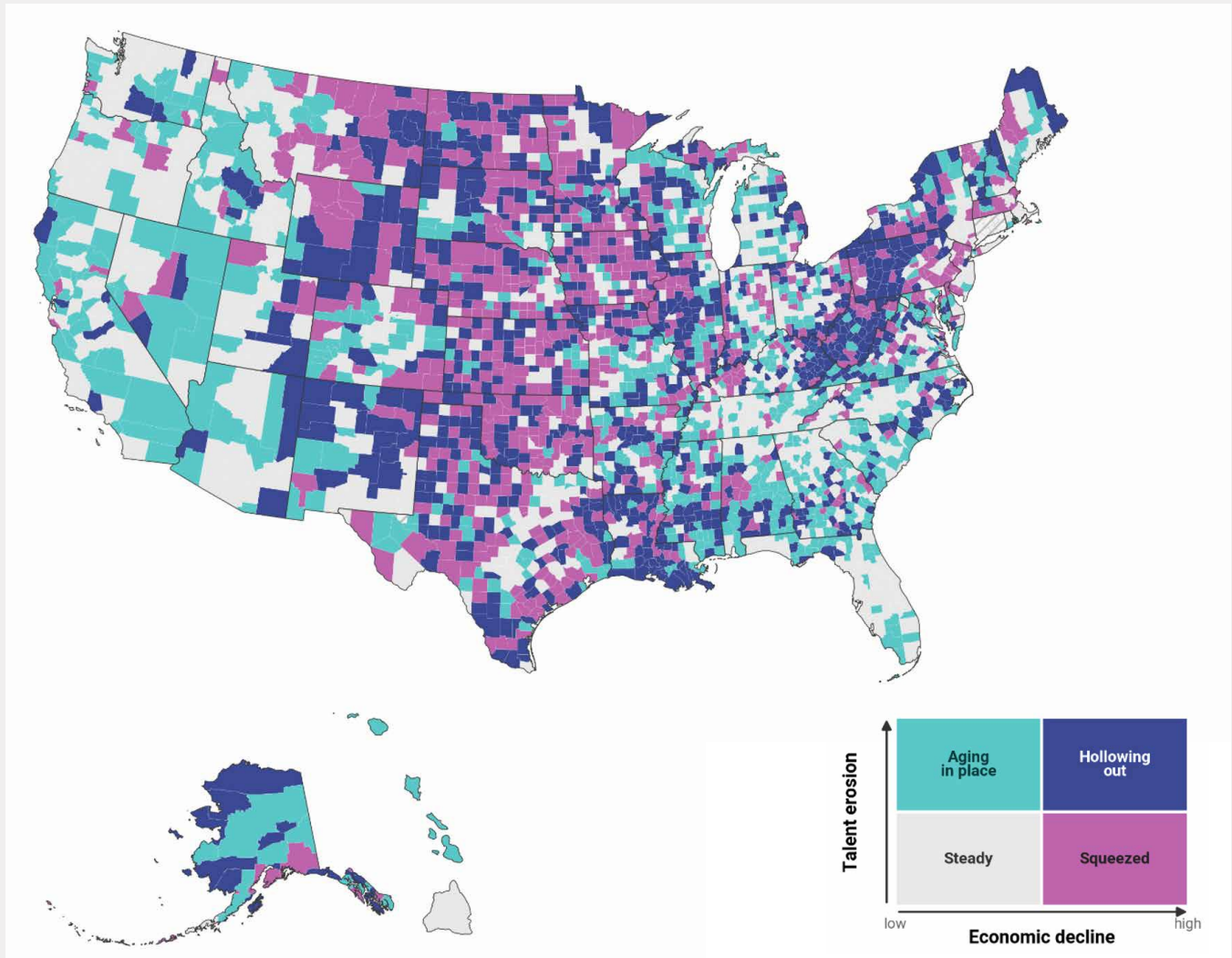


Source: Bureau of Economic Analysis; Author's Calculations

Lastly for this section, we mapped the matrix county typology in the **Figure 16**. The states with the highest share of “Steady” counties were Florida (61.2%), Oregon (61.1%), Washington (56.4%) and Utah (55.2%). Unlike the talent erosion typology where 10 states had zero “Renewing” counties, all states had at least one “Steady” county when looking at the matrix types.

Although the geographic pattern seems similar to the economic decline county types, there are a few differences worth discussing. For example, Florida had the highest share of “Stable” and “Steady” counties but did not among “Renewing.” Tennessee had zero “Deep Decline” counties while more than half were labeled “Steady” counties. Close to 40% of Mississippi’s counties were “Aging in place” while close to 44% were “Slipping” and “Eroding.”

FIGURE 16. Economic Decline and Talent Erosion – A bivariate county typology map. 2014-2024



Source: ACS 5-yr, BEA GDP (2024 \$), CPI-U | 3,132 counties

CONCLUSIONS

County typologies help scholars and practitioners alike make sense of trends and/or differences in development between counties. They are used to describe and group counties providing a deeper understanding of community and regional development. This paper introduced a new typology based on eight variables, some which are included in other typologies. The difference is how these variables were packaged into economic decline or stability, talent erosion or steadiness, and a combination of both. The key question to answer was whether shrinking is equivalent to decline. This research suggests it is not: nearly half of all counties showed a mismatch between their demographic and economic trajectories.

Results indicate that rural non-adjacent counties face more challenges than their metro counterparts, particularly when looking at economic decline or stability. In fact, there is a clear correlation between economic decline and rural status. However, when adding talent erosion or steadiness, a more nuanced, evolving picture emerges. For example, “Emptying” counties, included in the talent erosion typology, were younger than “Renewing” counties in 2014 had lost this competitive advantage by 2024.

Consider that the share of metro counties in the most struggling group—“Hollowing out (n=824)” —was the highest of any most-distressed category across all three typologies. In other words, when economic decline or stability and talent erosion or steadiness are overlapped, challenges do not accrue only to rural counties. This finding echoes the central lesson of the shrinking-regions literature: the most-distressed places are not necessarily the ones a rural-focused lens would flag. Furthermore, population of this group barely grew and increased their real GDP per capita, telling a different story than the one told when focusing solely on economic variables.

While economic decline or stability presents clear spatial clusters, talent erosion or steadiness does not. Counties in the latter typology are scattered across the country, complicating regional development efforts. This scattering carries a practical warning: because talent erosion does not map onto the familiar geographies of economic distress, it is largely invisible to place-based programs that target rural or economically distressed regions. A county can pass every conventional distress screen and still be steadily losing the young and educated residents its future depends on—precisely the dynamic existing typologies are not built to detect, and the gap this typology is designed to fill.

Even so, three of the four county types do have tailwinds in place that need to be capitalized on. For example, counties that are aging in place (n=724) still have stable economies, though they may be aging or not attracting as many younger and more educated residents. Similarly, counties that are being “squeezed” (n=753) are not aging as fast and still attract younger and highly educated residents, even as their economy declines faster than the national median. Because these dynamics differ, so should the policy responses. Aging-in-place counties may focus on housing, amenities, quality of life, and support for remote workers, which in turn may help attract younger, educated residents their economies can already support, while squeezing counties may focus on job quality and economic development to shore up their economic base supported by a population that remains.

Future studies can focus on digging deeper at the dynamics that are taking place across these four county types. Qualitative research and policy experiments can provide this deeper understanding. At the end of the day, these counties require different policy solutions. Hopefully this research provides enough nuance to increase awareness among policymakers and community leaders that both tailwinds and headwinds exist, and more importantly, that one can often be leveraged to address or sustain the other.

APPENDIX

TABLE A1. Variables, formulas, and sources

Variable	Simplified	Full formula	Dimension / Source
Population change	Population % change, 2014–24	$((\text{Pop}_{24} - \text{Pop}_{14}) / \text{Pop}_{14}) \times 100$	Economic decline 5-Year ACS
Unemployment rate change	Change in unemployment rate (pp)	$((\text{Pop1664Unemp} / \text{Pop1664ILF})_{24} - (\text{Pop1664Unemp} / \text{Pop1664ILF})_{14}) \times 100$	Economic decline 5-Year ACS
GDP per capita change	Real GDP-per-capita % change	$((\text{GDP} / \text{BEAPop})_{24} - (\text{GDP} / \text{BEAPop})_{14}) / (\text{GDP} / \text{BEAPop})_{14} \times 100$	Economic decline BEA; CPI-U
Bachelor's+ share change	Change in bachelor's-or-higher share (pp)	$((\text{Bach} / \text{Pop25})_{24} - (\text{Bach} / \text{Pop25})_{14}) \times 100$	Talent erosion 5-Year ACS
Age 18–54 share change	Change in prime-age (18–54) share (pp)	$((\text{Pop1854} / \text{Pop})_{24} - (\text{Pop1854} / \text{Pop})_{14}) \times 100$	Talent erosion 5-Year ACS
Median age change	Change in median age (years)	$\text{MedAge}_{24} - \text{MedAge}_{14}$	Talent erosion 5-Year ACS
Younger in-migration change	Change in in-migration rate of ages 18–54 (pp)	Let $Y = (\text{Pop1824DiffCnty} + \text{Pop1824DiffSt} + \text{Pop2554DiffCnty} + \text{Pop2554DiffSt}) / (\text{Pop1824GeoMob} + \text{Pop2554GeoMob})$. $(Y_{24} - Y_{14}) \times 100$	Talent erosion 5-Year ACS
Educated in-migration change	Change in in-migration rate of degree-holders (pp)	Let $E = (\text{EdAttBachDiffCnty} + \text{EdAttBachDiffSt} + \text{EdAttProfDiffCnty} + \text{EdAttProfDiffSt}) / (\text{EdAttBachGeoMob} + \text{EdAttProfGeoMob})$. $(E_{24} - E_{14}) \times 100$	Talent erosion 5-Year ACS

Notes: Subscripts 24 and 14 denote 2024 and 2014. GeoMob = population base for whom geographic mobility is determined (the mobility universe); DiffCnty = moved from a different county, same state; DiffSt = moved from a different state; ILF = in labor force; Bach = bachelor's degree; Prof = professional or graduate degree; Pop25 = population age 25 or older. Migration measures are in-migration (residence one year earlier), pooled across cohorts and population-weighted. GDP per capita is CPI-U adjusted to 2024 dollars. “Adverse” is defined relative to the national median, except population, which is adverse when it declines (< 0).

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