Reading Demographic Tea Leaves: Population Change and Urban Futures

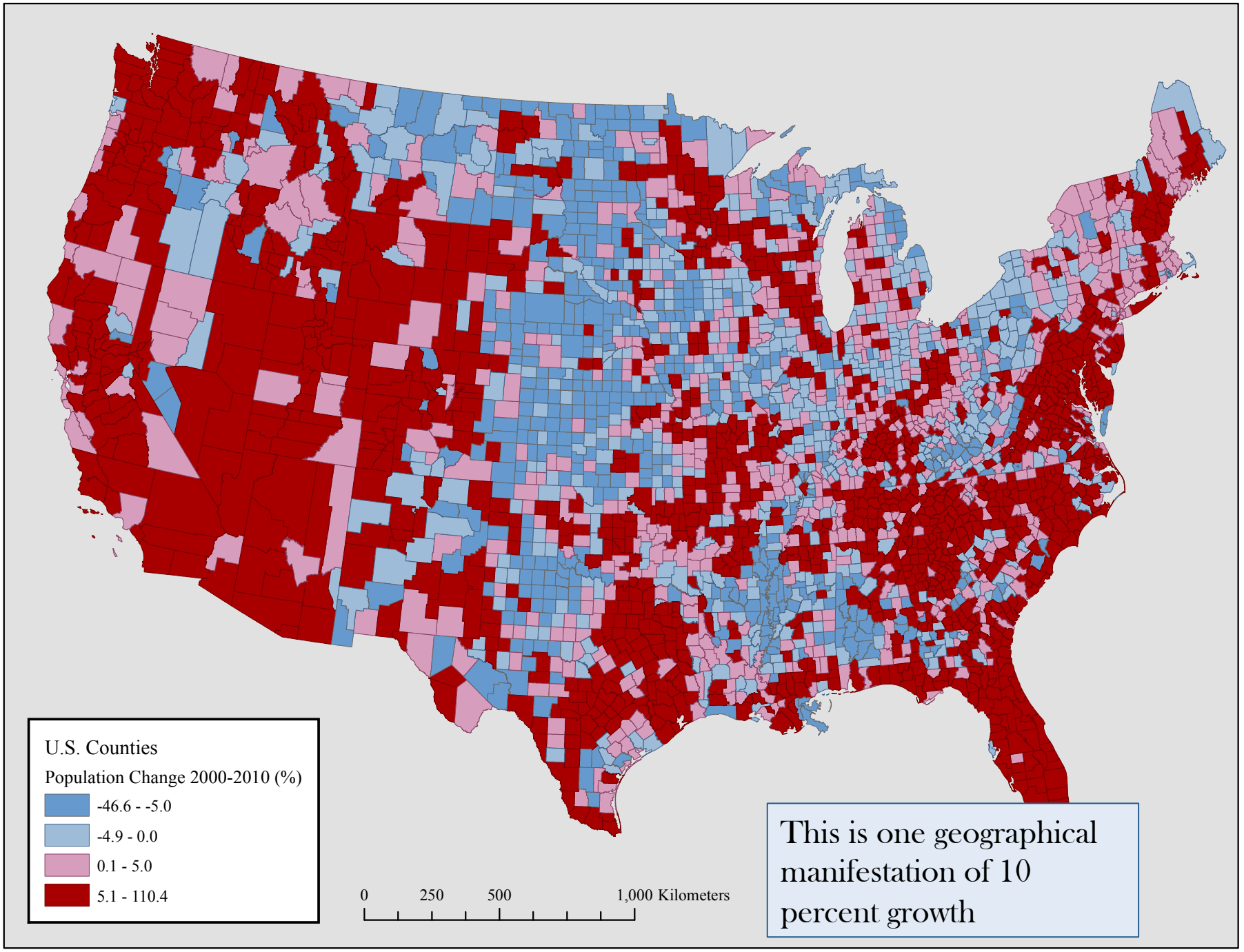
Rachel S. Franklin
Spatial Structures in the Social Sciences (S4)
Brown University
Providence, Rhode Island USA

Anyone who believes exponential growth can go on forever in a finite world is either a madman or an economist.

– Kenneth Boulding

And probably not a demographer…

- For many reasons, population decline or stasis, even within a broader context of growth, is possible and, in fact, already occurring in many places
- Looking towards the (demographic) future of cities, at least two points are important:
  1. The demography of growth/decline may matter
  2. The geographical context of the demography matters too


U.S. Counties
Population Change 2000-2010 (%)
-46.6 - -5.0
-4.9 - 0.0
0.1 - 5.0
5.1 - 110.4
0
250
500
1,000 Kilometers
This is one geographical manifestation of 10 percent growth

Urban population change in the U.S. context (2000-2009)

	United States (3,143 Counties)	Metropolitan (366 Areas)	Micropolitan (574 Areas)	Non-Metro/Micro (1,357 Counties)
Percent Change	9.1	10.4	4.4	0.05
Share of Population in 2009	100	83.8	9.9	6.3
Mean Change Across All Areas	3.3 (12.9 St. Dev.)	10.0 (10.5 St. Dev.)	3.6 (8.7 St. Dev.)	-2.8 (9.3 St. Dev.)
Proportion of Areas Experiencing Growth	0.57	0.86	0.63	0.34

Demographically, how do places change?

- Components of change:
  - Natural increase
  - Domestic migration
  - International migration

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- Components of change:
  - Natural increase → **Births and Deaths**
  - Domestic migration → **Ins versus Outs**
  - International migration → **Ins versus Outs**

The question is: Is it predominantly one of these factors that shifts the scale from growth to decline?

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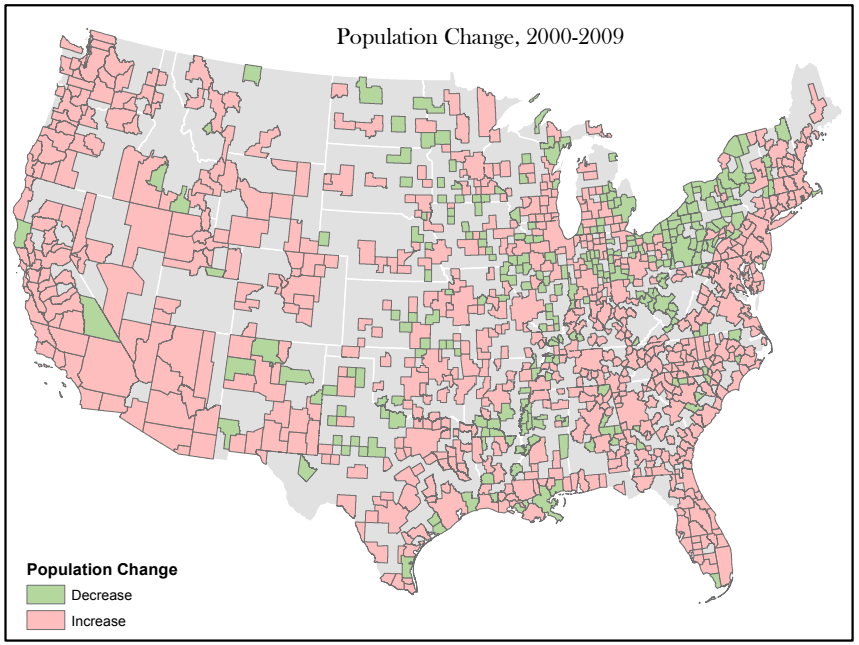
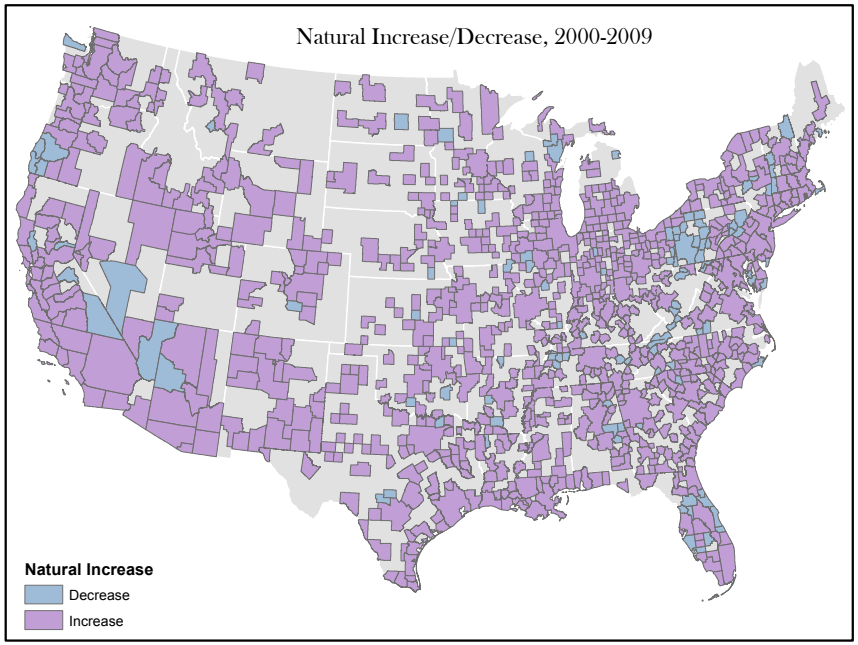
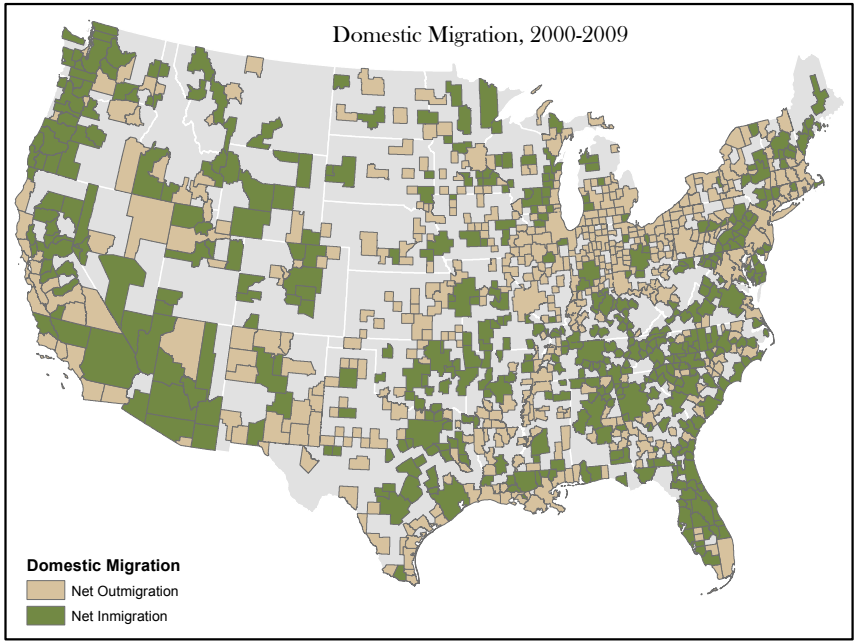
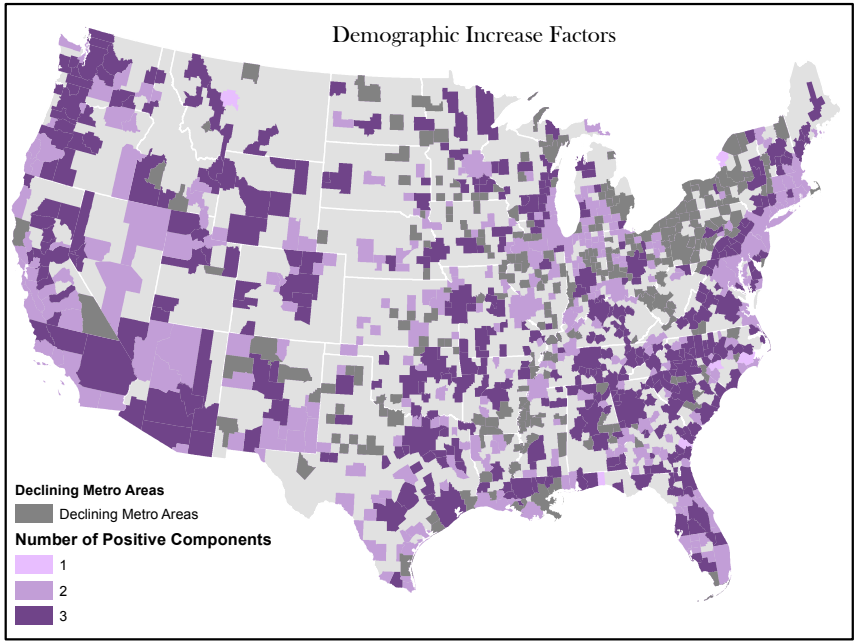
Proportion of Areas Experiencing Growth	0.57	0.86	0.63	0.34
Births	38,358,804	32,580,213	3,598,809	2,179,782
Deaths	22,483,225	17,771,469	2,742,056	1,969,700
Natural Increase/Decrease	15,875,579	14,808,744	856,753	210,082
Net Domestic Migration	-	50,872	196,743	-247,615
Net Immigration	8,944,170	8,456,601	348,559	139,010


Population Change, 2000-2009
Population Change
Decrease
Increase

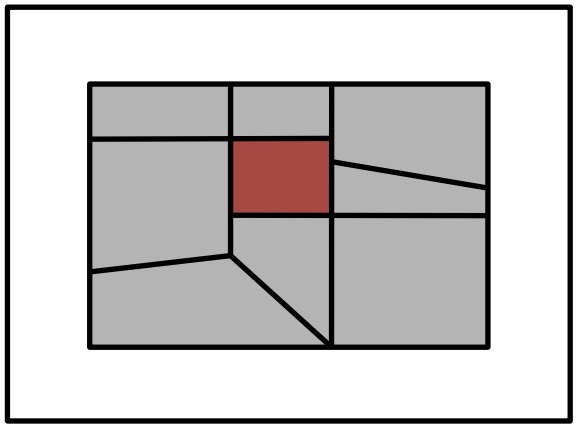

Natural Increase/Decrease, 2000-2009
Natural Increase
Decrease
Increase


Domestic Migration, 2000-2009
Domestic Migration
Net Outmigration
Net Inmigration

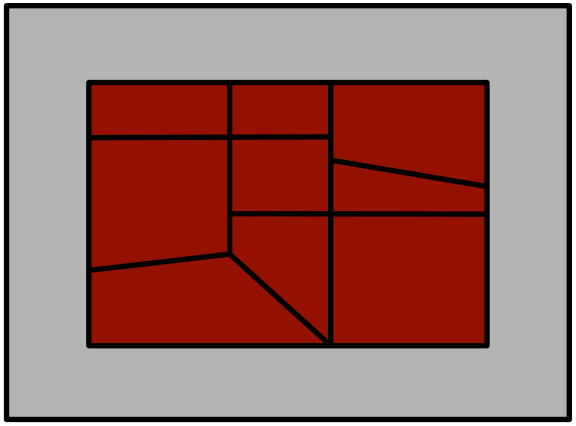

Demographic Increase Factors
Declining Metro Areas
Declining Metro Areas
Number of Positive Components
1
2
3

- Natural increase is the rule, not the exception, even in declining metropolitan areas
- Highest growth rates come from areas firing on all three demographic cylinders, and definitely positive migration
  - Growth can occur within a context of *natural decrease*, but these are retirement destinations
- Domestic migration is usually the key
- Positive net immigration is almost a given

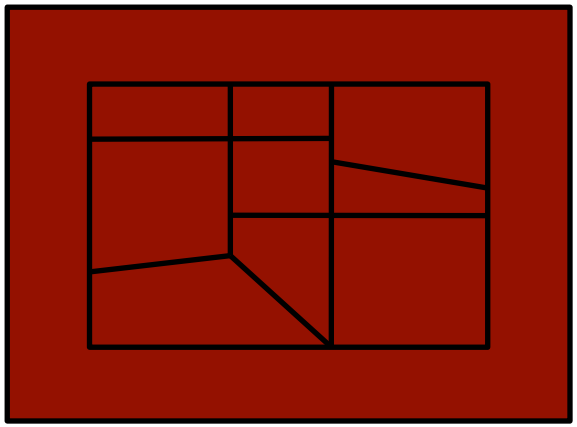
Geographical context matters



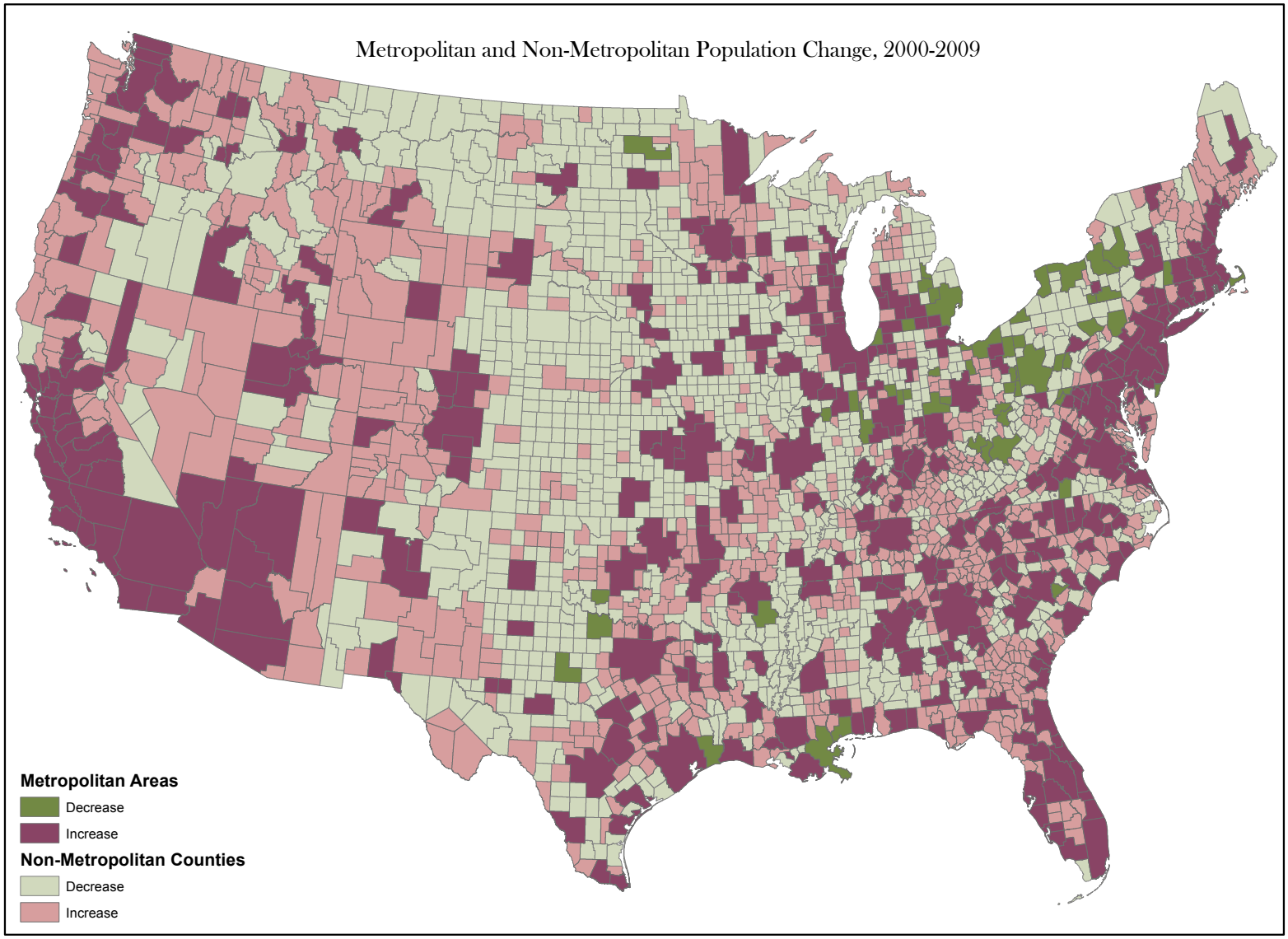
Localized decline, characterized by spillover growth in neighboring areas



Clustered decline that defies characterization as only local



Decline embedded within larger region of decline



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Why does this matter?

- Decline/growth from net migration might be different from decline/growth from natural change
  - Retirement destinations for example will rely forever on favorable migration conditions
  - It's the demographic "surprises" or turnarounds that are the most difficult
    - e.g. Young white families deciding to stay in the District of Columbia
- Understanding combination of geography and demographic change is invaluable for planning and policy-making

Some final thoughts

- Let's not forget compositional change
- International migration as the canary in the coal mine
- Natural increase for sustainability
- Decline ≠ Unhealthy
- Importance of demographic turnarounds