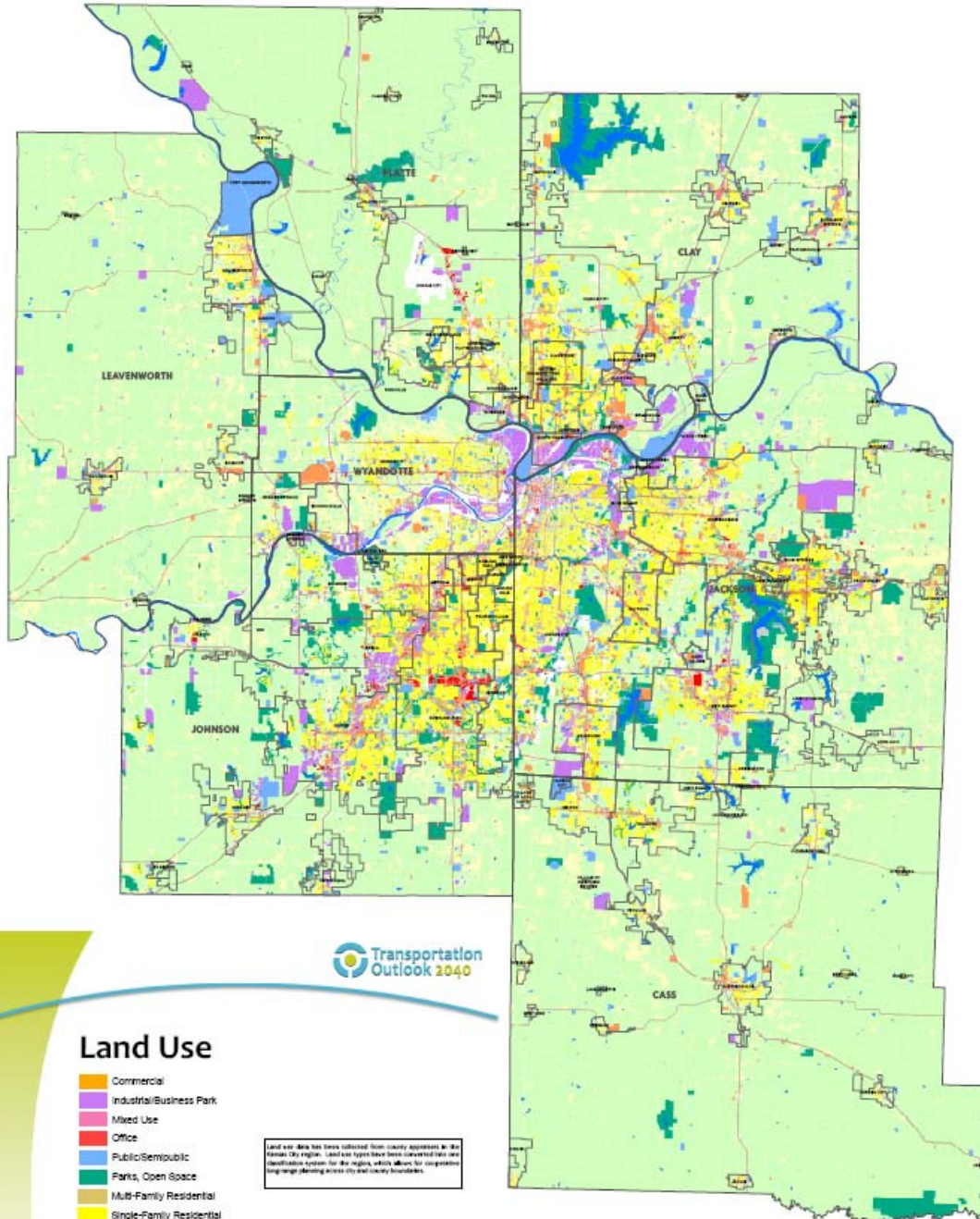


Paint the Town

Land Use Scenarios

For Transportation Outlook 2040

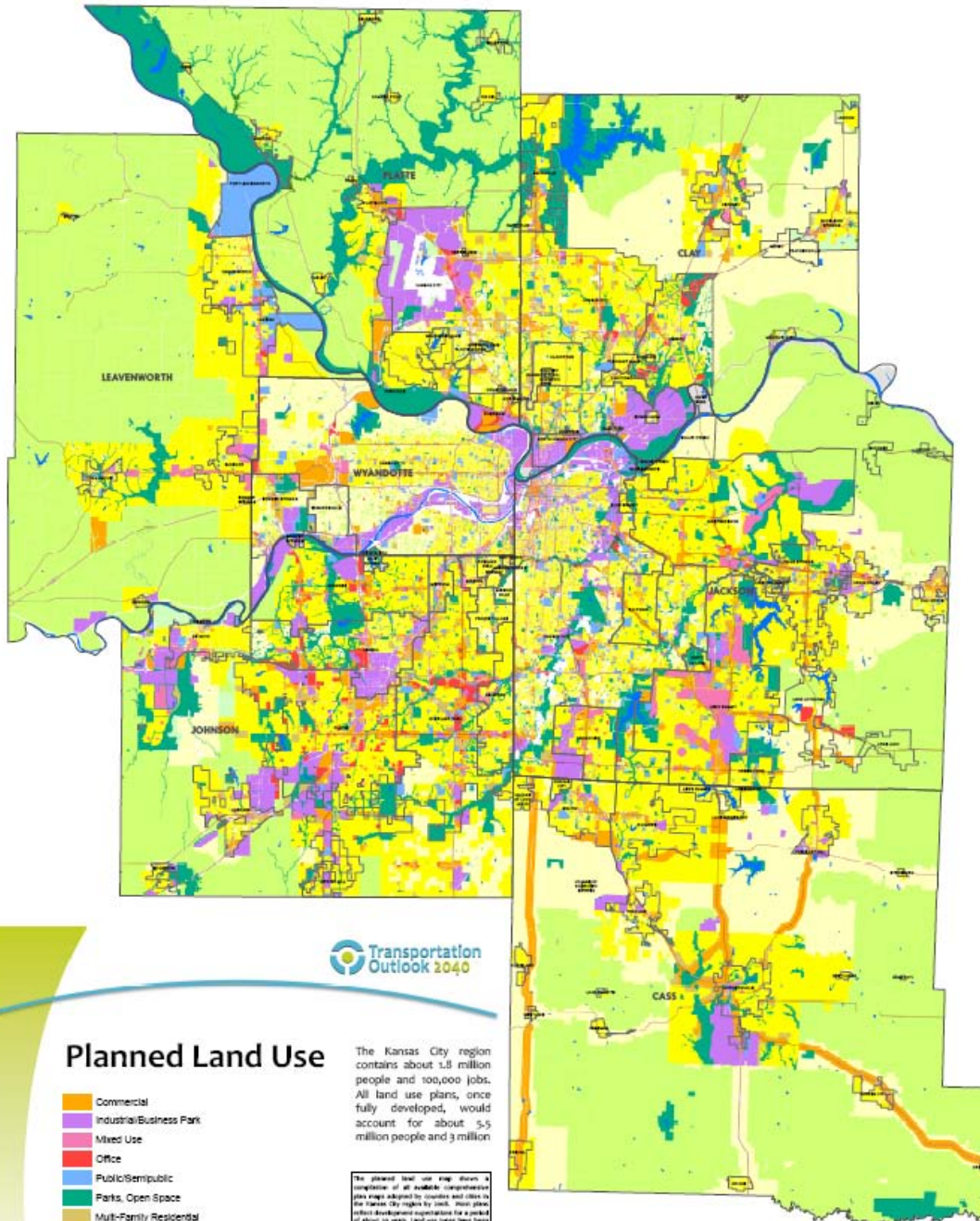


Land Use

- Commercial
- Industrial/Business Park
- Mixed Use
- Office
- Public/Semi-public
- Parks, Open Space
- Multi-Family Residential
- Single-Family Residential
- Low-Density Residential
- Rural Residential

Land use data has been collected from county appraisers in the Kansas City region. Land use types have been converted into one classification system for the region, which allows for comparison along length/distance across city and county boundaries.





Planned Land Use

- Commercial
- Industrial/Business Park
- Mixed Use
- Office
- Public/Semipublic
- Parks, Open Space
- Multi-Family Residential
- Single-Family Residential
- Low-Density Residential
- Rural Residential
- Vacant/Agriculture

The Kansas City region contains about 1.8 million people and 100,000 jobs. All land use plans, once fully developed, would account for about 5.5 million people and 3 million

The planned land use map shows a compilation of all available transportation plan maps adopted by counties and cities in the Kansas City region by 2040. These plans reflect development expectations for a period of about 20 years. Land use types have been categorized into nine classification systems for the region, which allows for cooperation long-range planning across city and county boundaries.



Land Use Description	Range: FAR or Units per Acre (UPA)	Planned Acres	Planned Employment	Planned Population
Agriculture	0 UPA	8,341	0	0
Commercial (High)	.3 FAR	5,496	77,553	
Commercial (Low)	.2 FAR	68,200	427,751	
Industrial/Bus. Park (High)	.24 FAR	28,369	160,084	
Industrial/Bus. Park (Low)	.2 FAR	74,255	523,941	
Mixed Use (High)	.65 FAR	2,032	46,608	44,032
Mixed Use (Low)	.35 FAR	14,951	92,308	174,309
Office (Low)	.25 FAR	14,576	308,552	
Office (Med)	.275 FAR	208	5,132	
Parks, Open Space		174,713		0
Public/Semipublic (High)	.3 FAR	8,942	464,419	
Public/Semipublic (Low)	.22 FAR	26,148	895,902	
Residential MF High	17.5-24.99 UPA	1,791		54,802
Residential MF Low	6.5 -9.99 UPA	14,845		181,707
Residential MF Low-Med	10-13.49 UPA	13,720		251,892
Residential MF Medium	13.5-17.49 UPA	7,398		169,794
Residential MF Very High	25 or more UPA	408		18,727
Residential SF Large Lot	.75 to .1.24 UPA	36,414		103,779
Residential SF Low	2-3.24 UPA	411,904		2,445,683
Residential SF Medium	3.25-6.49 UPA	52,656		625,291
Residential SF Very Low	1.25 -1.99 UPA	216,695		926,371
Rural Policy Area	0 to .14 UPA	491,789		140,160
Rural Residential	.15 to .24 UPA	219,854		125,317
Urban Fringe	.25 to .74 UPA	137,217		195,534
None		8,537		
Developed		9,140		
Office (High)		215		
ROW		47,282		
RR ROW		218		
TOTAL			3,002,249	5,457,398

3,002,249

5,457,398

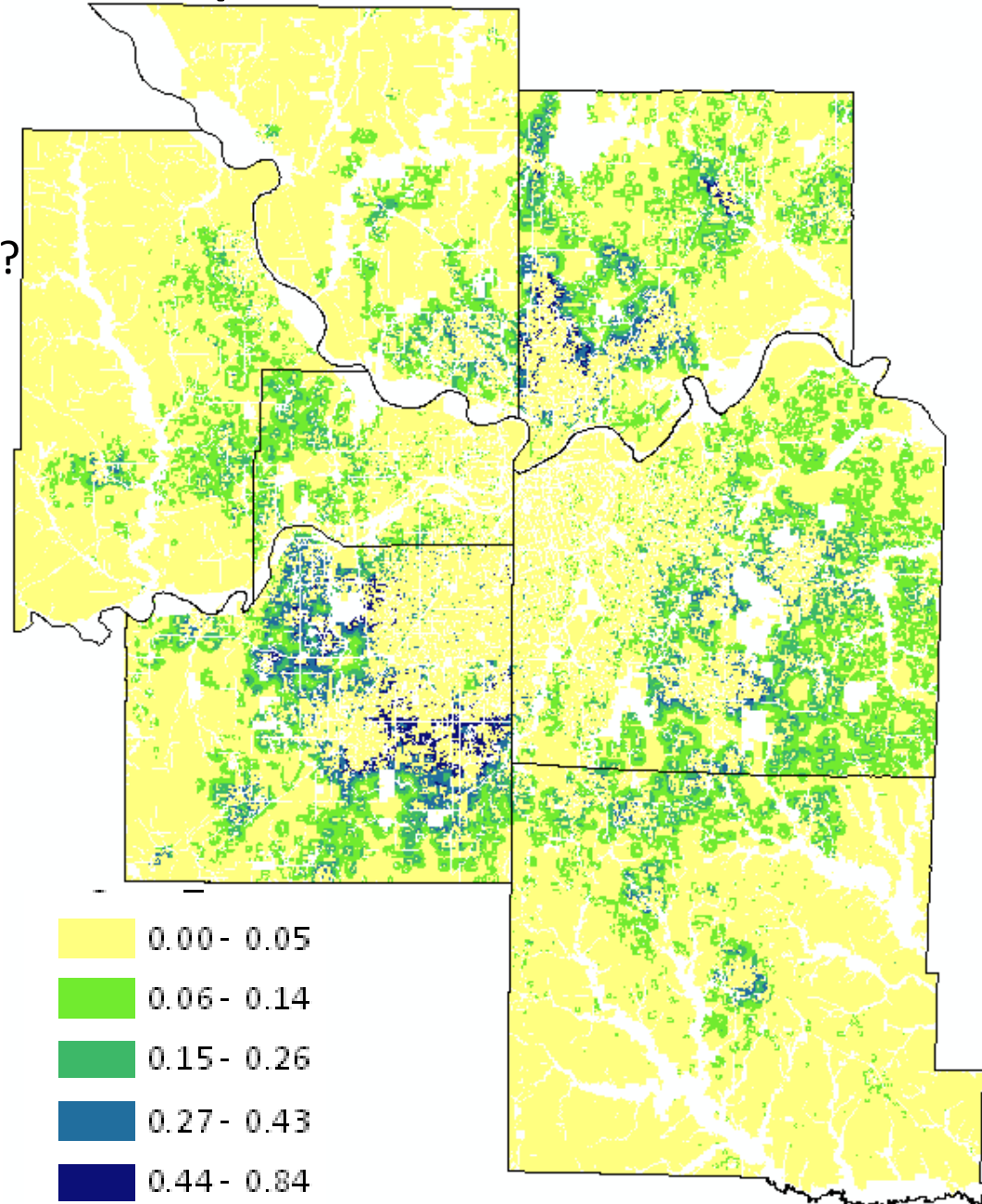
Probability of New Development

Trying to Explain:

- Which land vacant in 2000 is most likely to have developed since then?

Major Explanatory Variables:

- Median Income in 2000
- Vacant Land in 2000
- Employment Density in 2000
- Sewer availability
- Distance from land that developed during 1990s
- Distance from roads
- Road density
- Poverty rate in 2000
- County



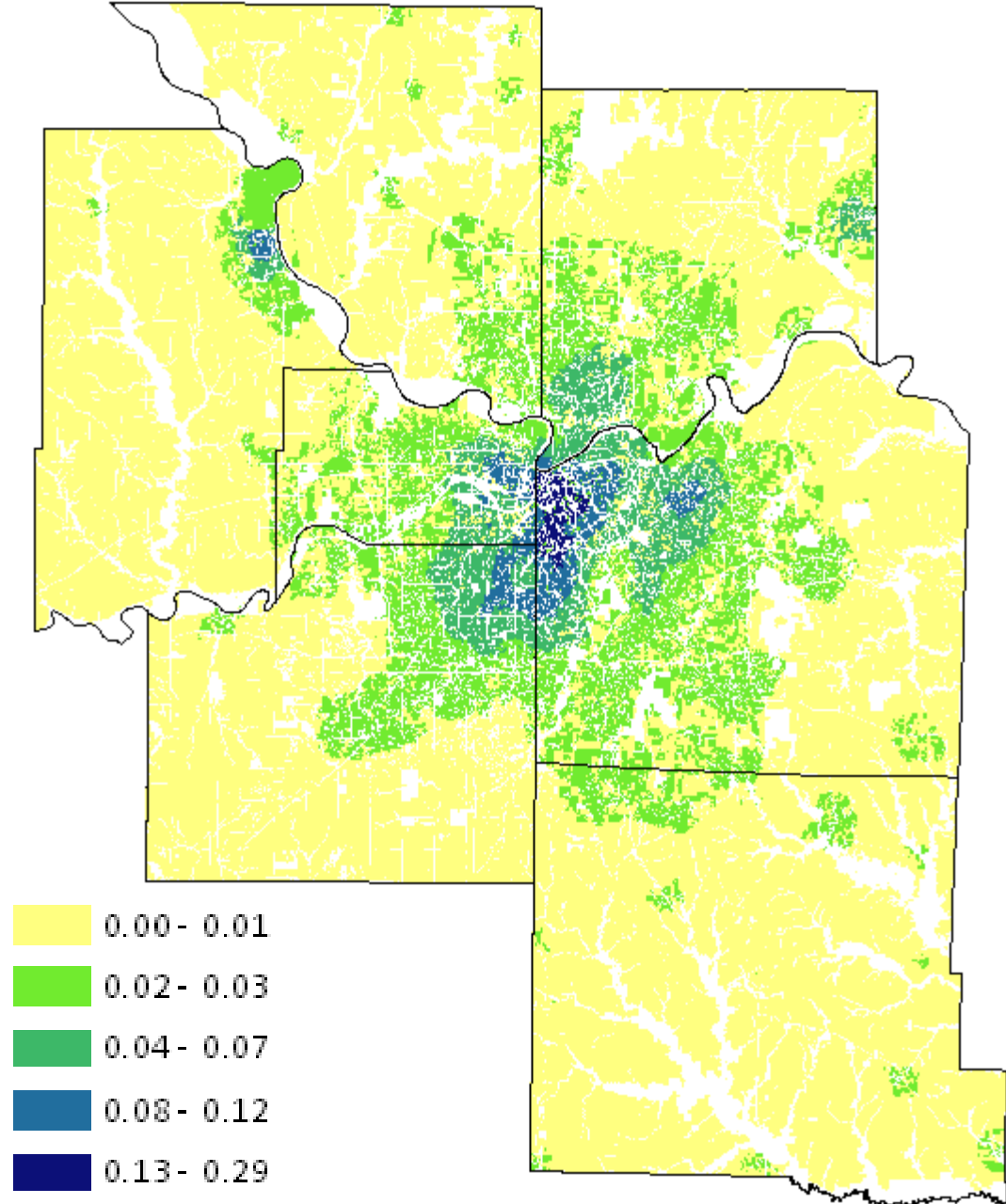
Probability of Re-Development

Trying to Explain:

- Which currently developed land is most likely to have a structure built since 1980 that is 20-40 years newer than its surrounding neighborhood

Major Explanatory Variables:

- Median age of housing unit 1990
- Percent in Poverty 1990
- Median income 1990
- Being inside an incorporated area 1990
- Density of roads
- Distance from major roads and freeways



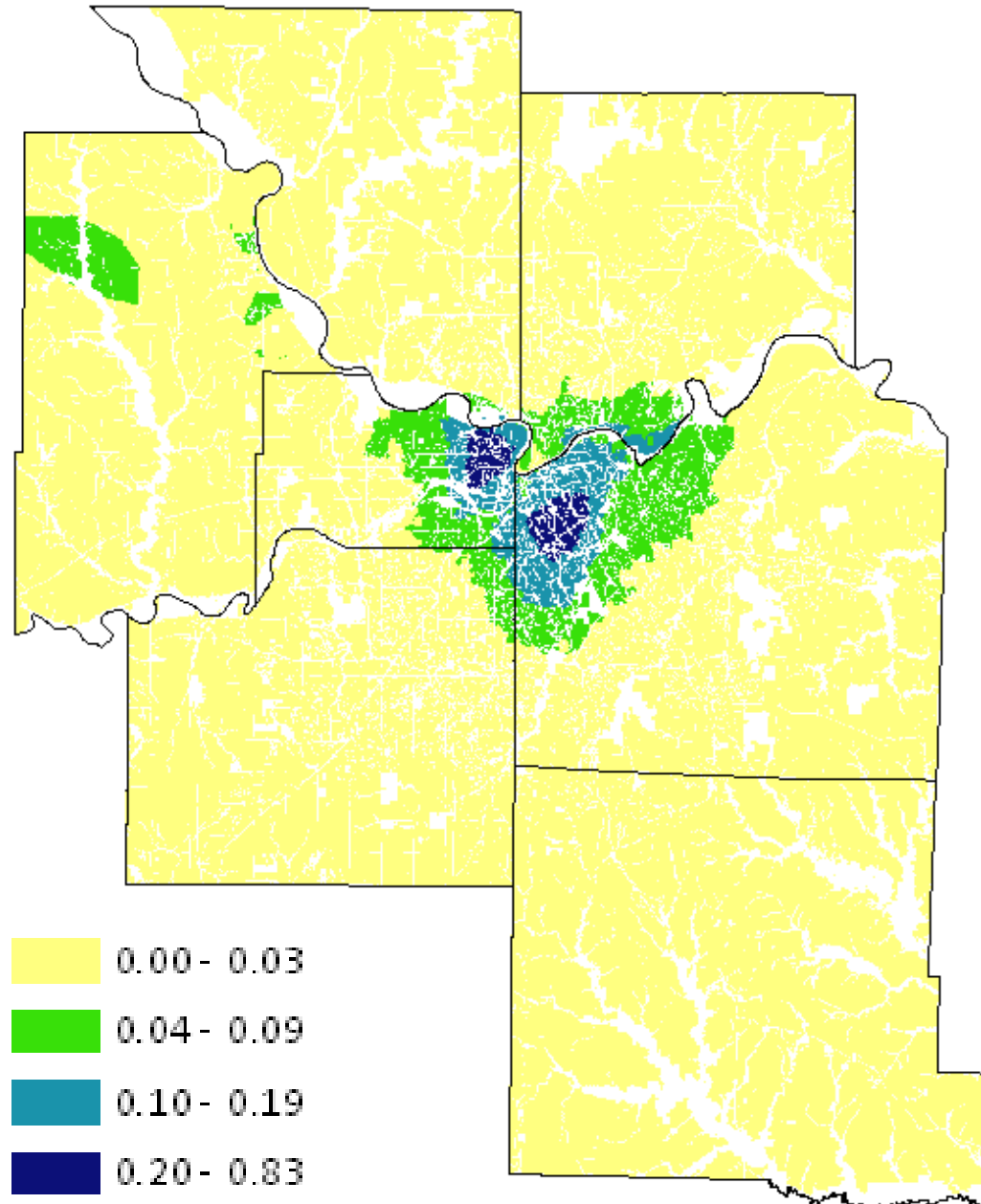
Probability of Decline

Trying to Explain:

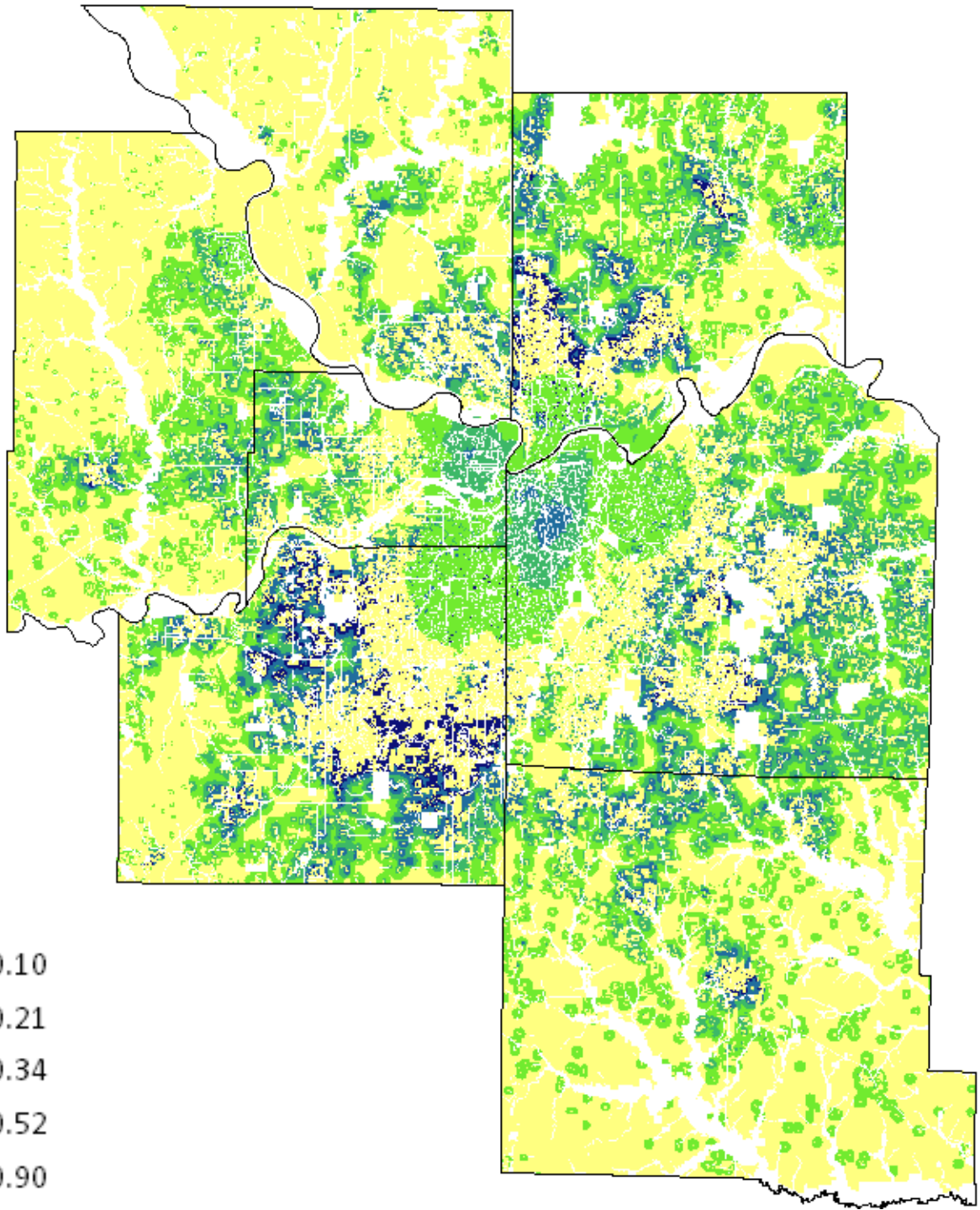
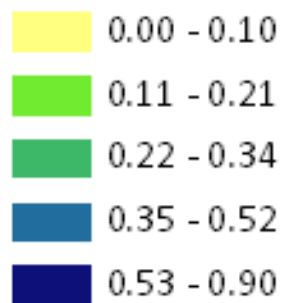
- Which land is most likely to be currently vacant that historically had an urban structure built upon it?

Major Explanatory Variables:

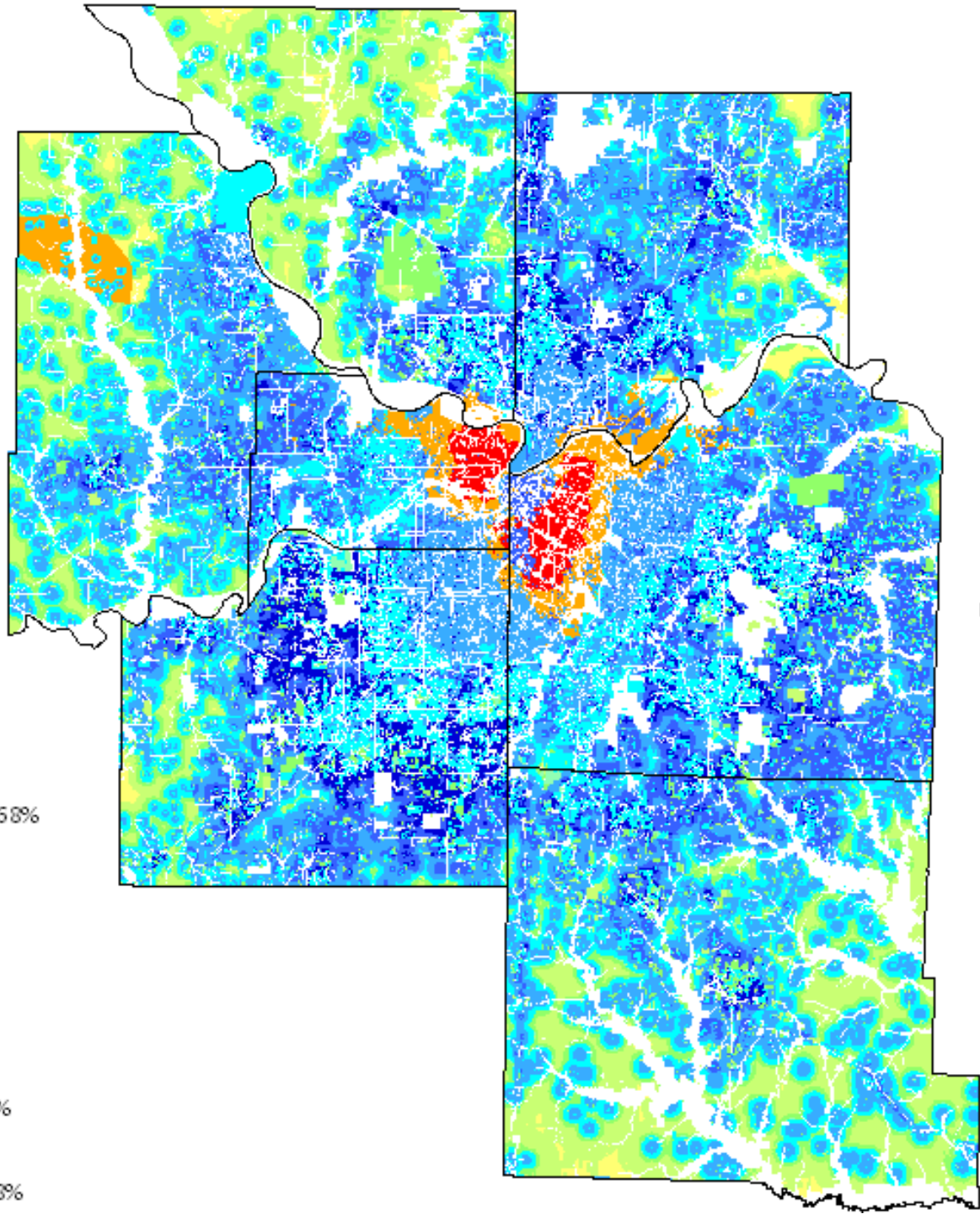
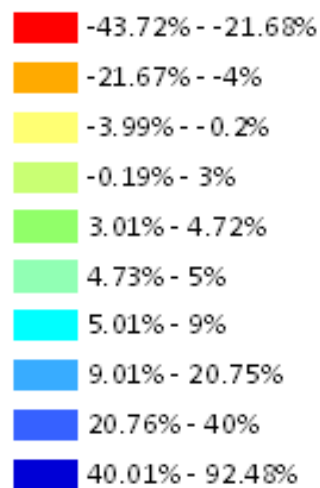
- Median age of housing unit in 1990
- Percent in Poverty in 1990
- Percent of population that is white in 1990
- County



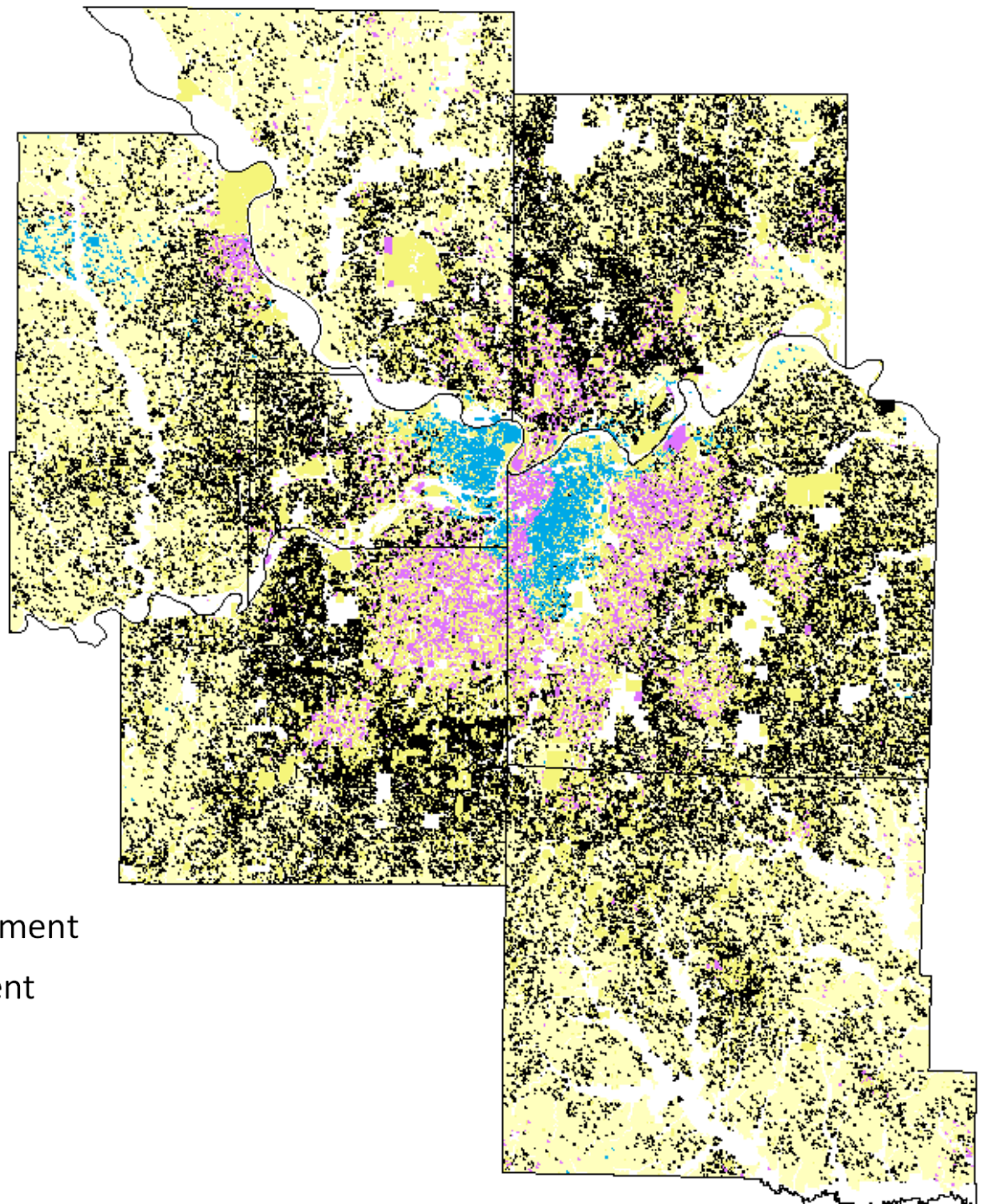
Baseline Scenario Combined Probability of Land Use Change



Baseline Scenario Combined Probability of Land Use Change

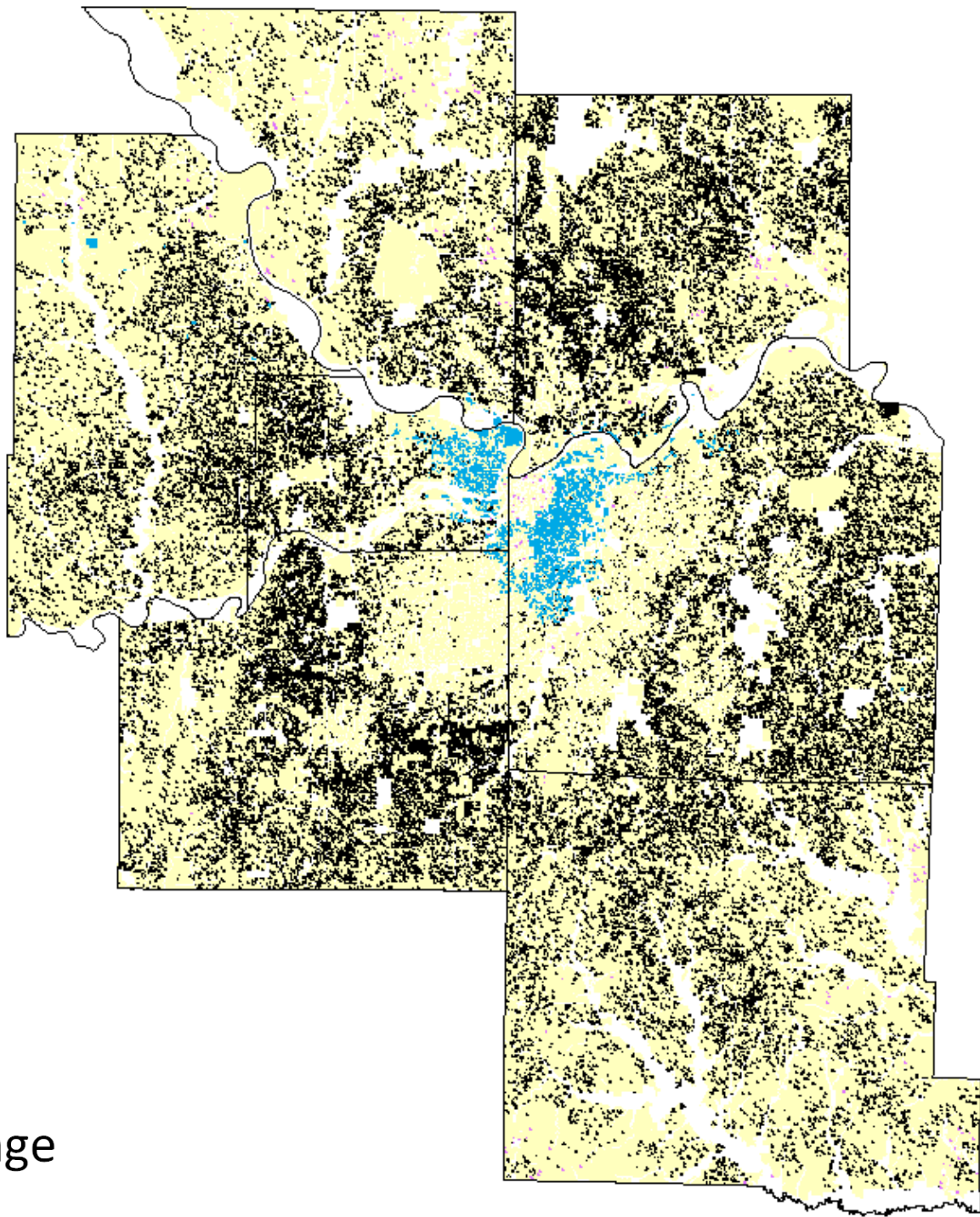


Baseline Scenario Type Of Land Use Change



Baseline Scenario Type
Of Land Use Change

- Gain
- Refill
- Loss
- No Change



Vision: America's Green Region

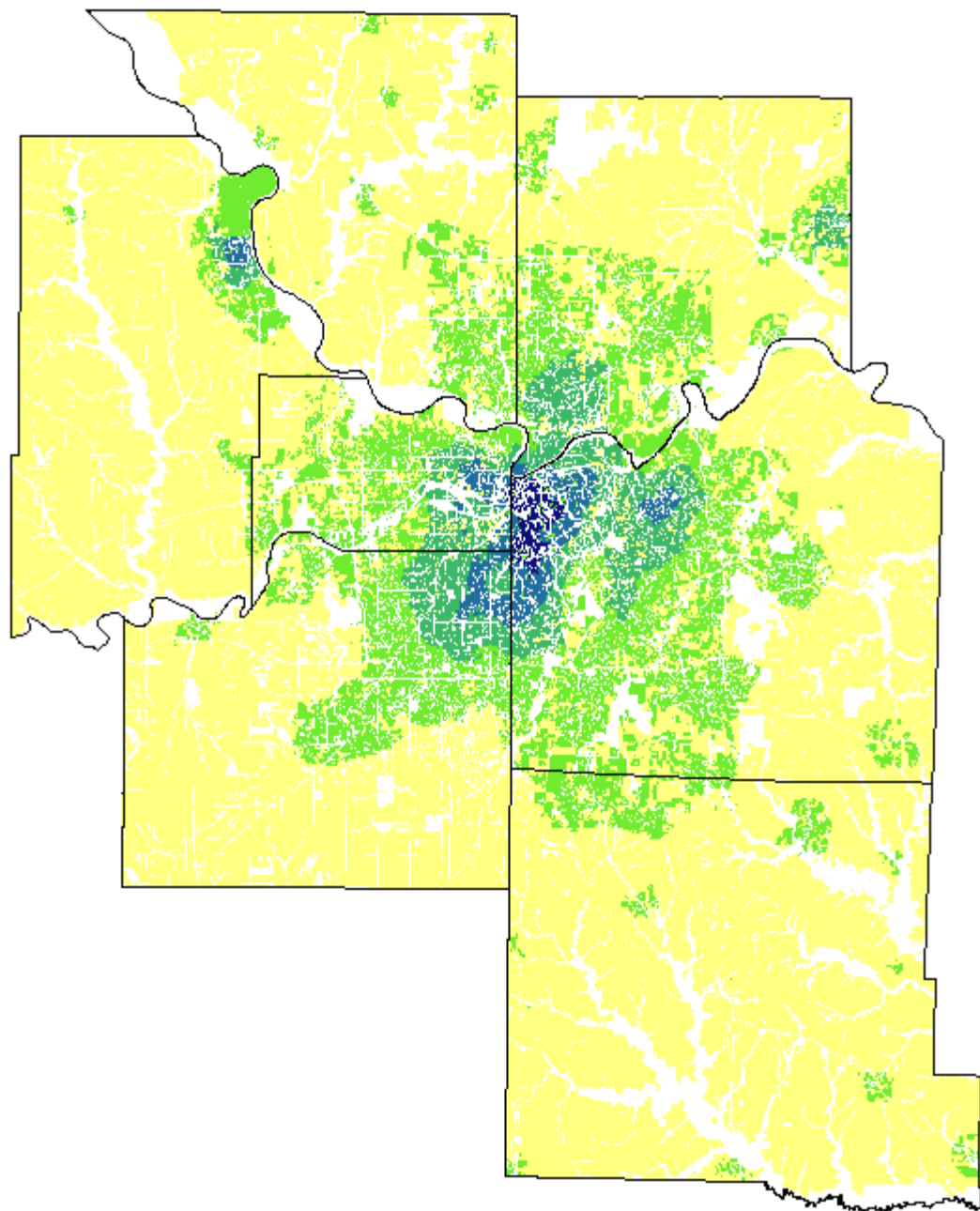
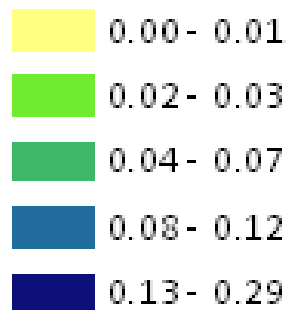
- Is the baseline development pattern consistent with this vision?
- Well, it consumes a lot of *greenfields* and takes a lot of *greenbacks*...
- But this probably isn't what most people mean by a "green" region.

What if . . . ?

- Carbon dioxide is regulated as a pollutant?
- The cost of energy doubles?
- The housing bust is like the dot-com bust, with years of overhang?
- Housing becomes something we buy simply for shelter, rather than an investment?
- Changing demographics, costs, and return change housing preferences?
- Consumption rises slower than incomes, and incomes continue to stagnate?
- We simply can't afford to build much new infrastructure AND maintain what we've already got in the ground?
- Local governments need to maximize tax revenue net of costs?
- Diversity is the key to vibrant places and innovative economies?
- What kind of land use pattern would best help us adapt to these kinds of changes?

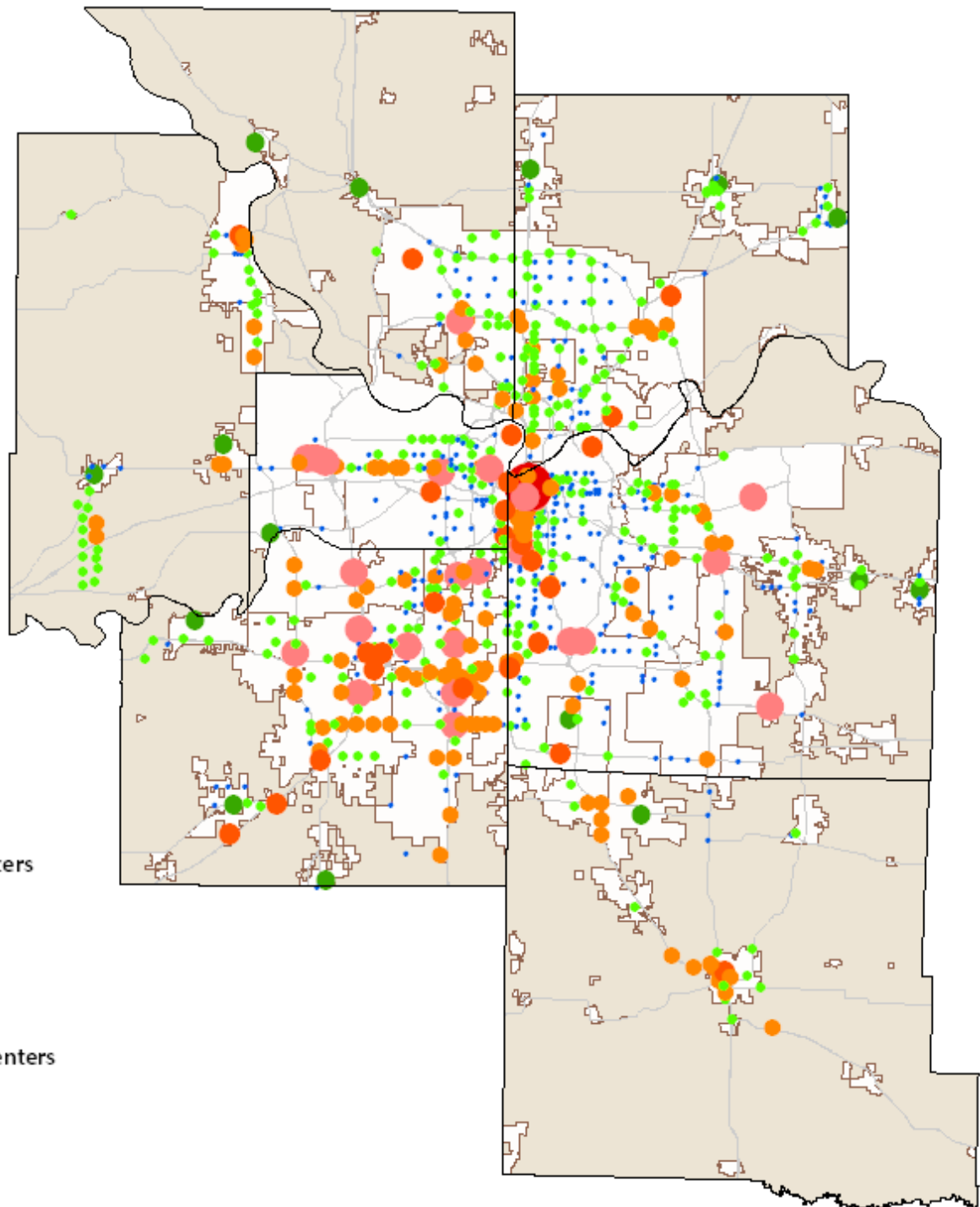
Adopt Policies
That . . .

Increase the
Probability of
Redevelopment



Adopt Policies That . . .

Focus Development
in Neighborhood
and
Employment Centers

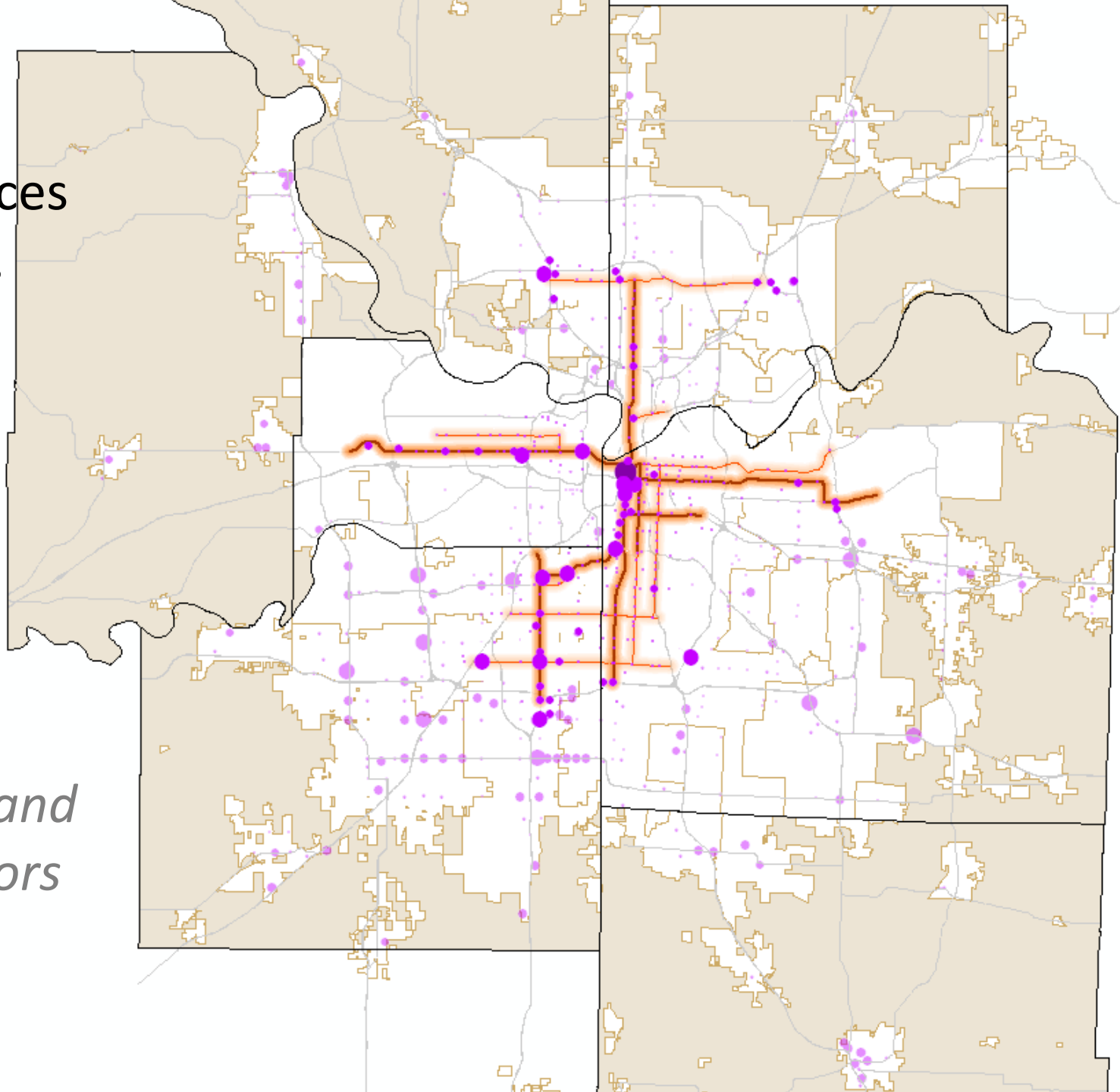


- A - Urban Regional Centers
- B - Regional Mixed-Use Centers
- C - Community Centers
- D - Neighborhood Centers
- E - Convenience Centers
- F - Rural/Fringe Centers
- G - Regional Employment Centers

Adopt Policies
That . . .

Identify Priority
Areas for
Development/
Redevelopment

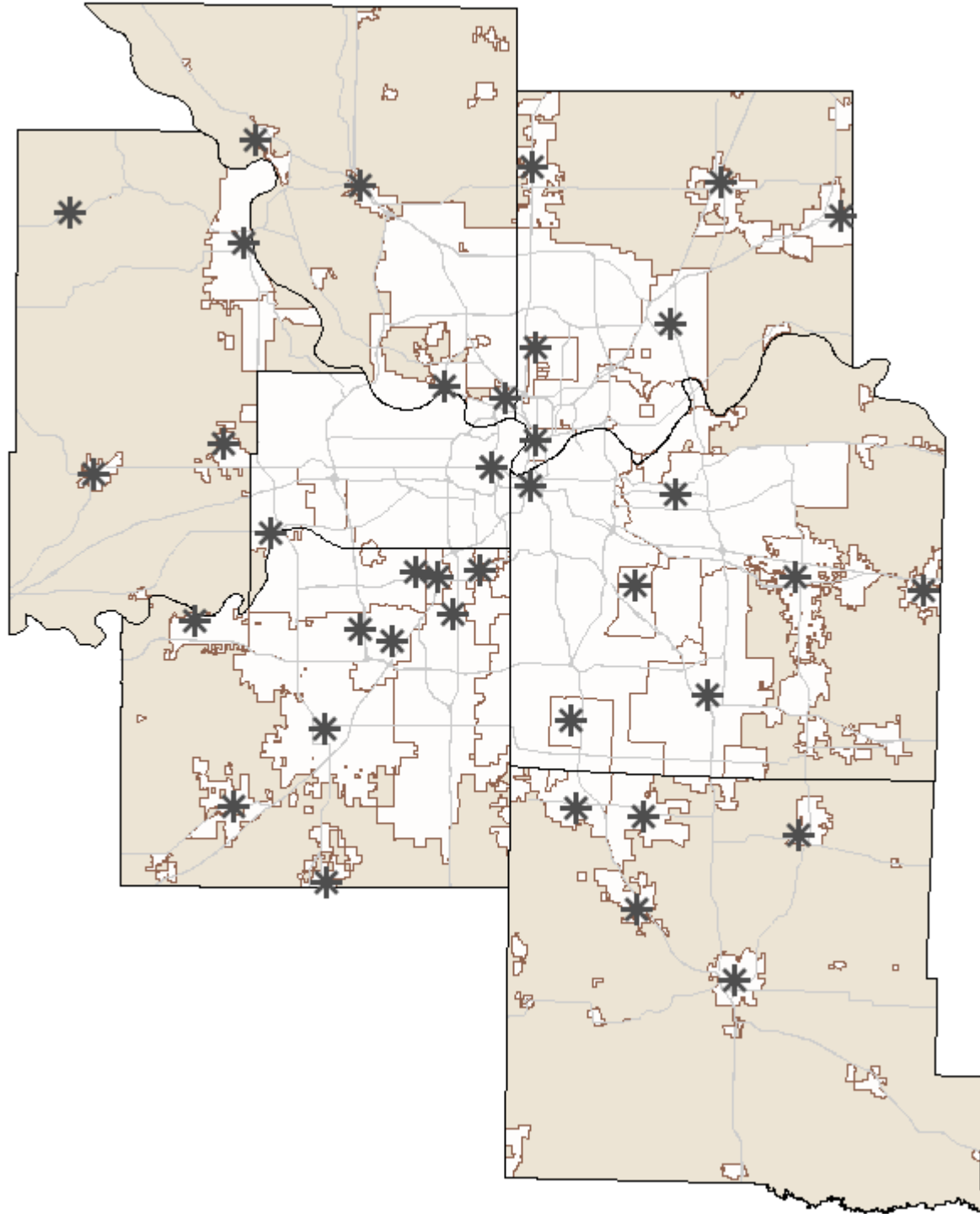
*Centers along
urban transit and
activity corridors*



Adopt Policies
That . . .

Identify Priority
Areas for
Development/
Redevelopment

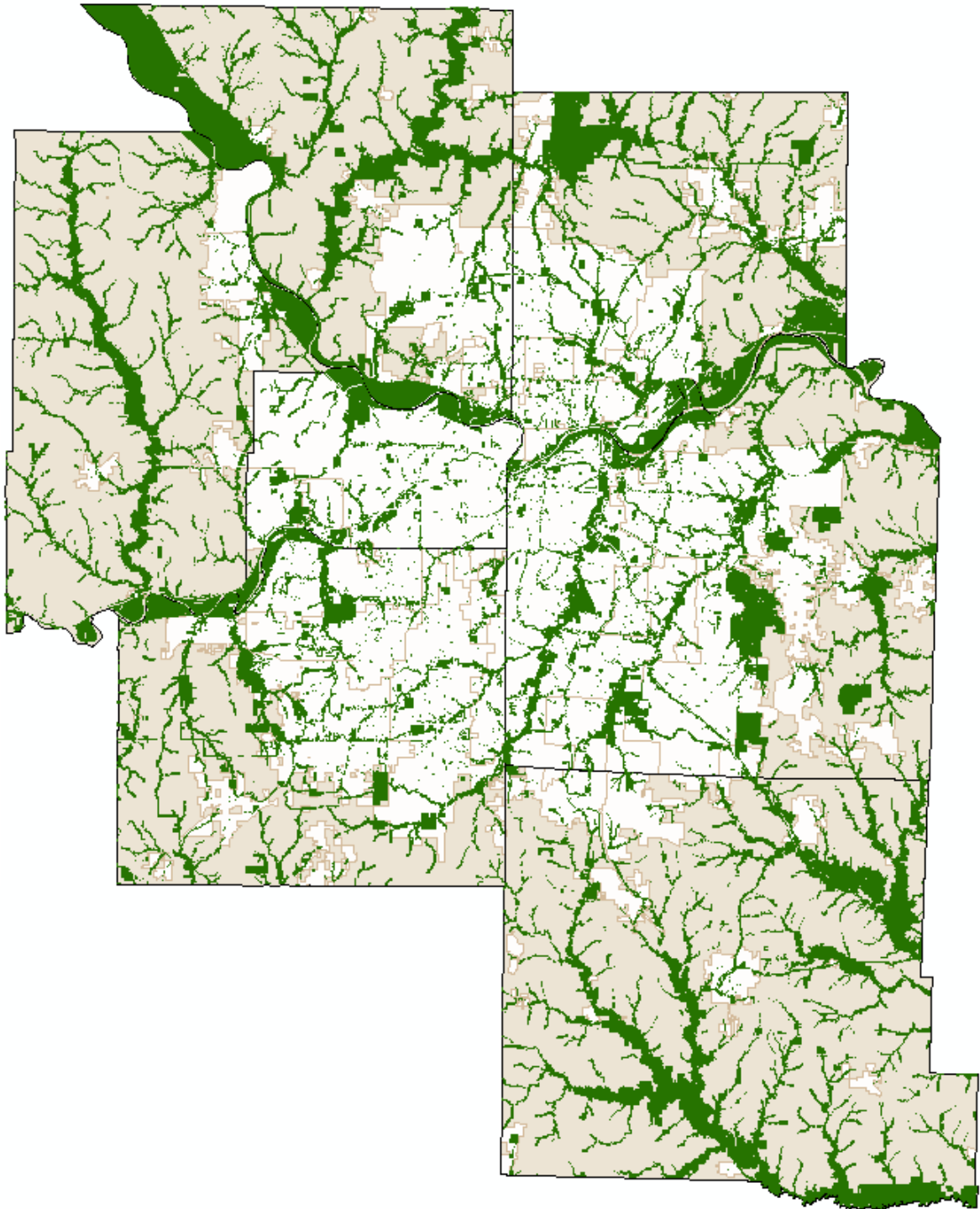
Historic City Centers



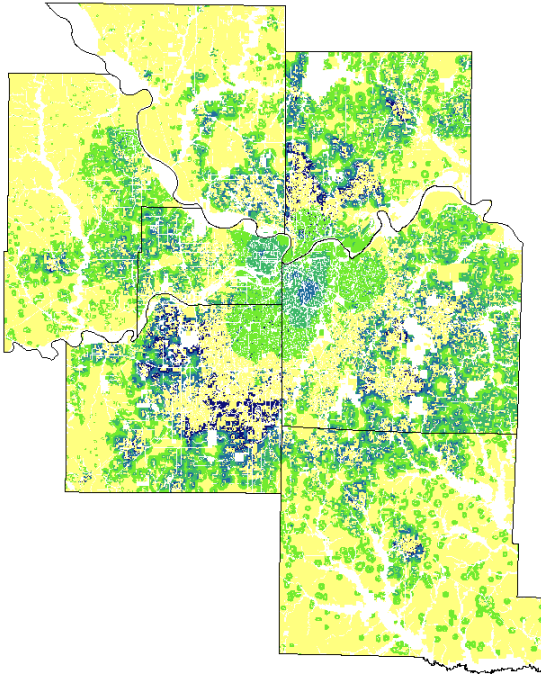
Adopt Policies That . . .

Protect Natural Areas:

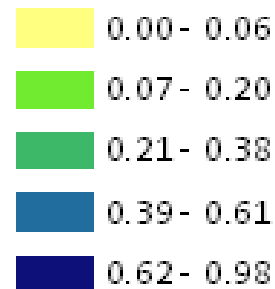
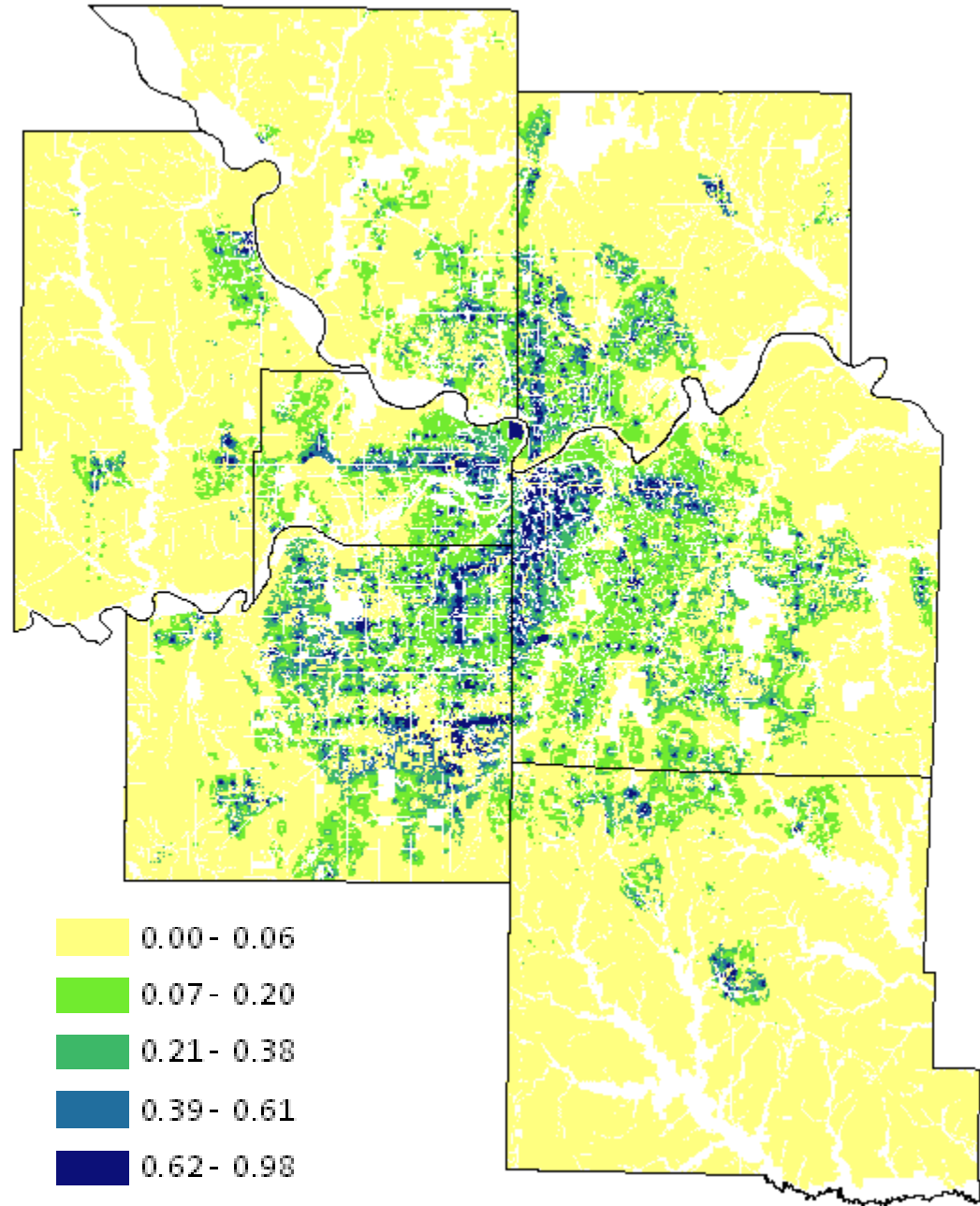
- Floodplain
- Parks
- High-quality agricultural land
- MetroGreen greenways
- Stream Buffers



Adaptive Scenario Combined Probability of Land Use Change

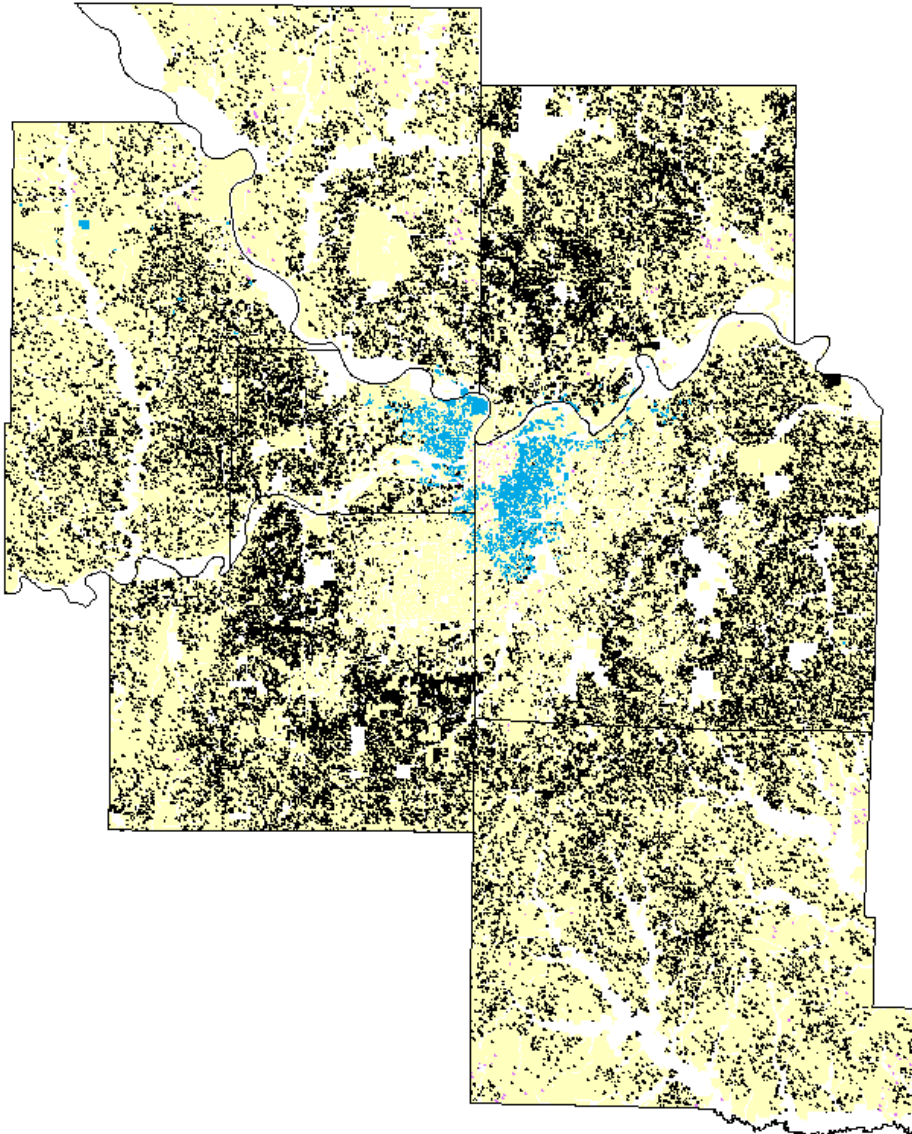


Baseline Scenario

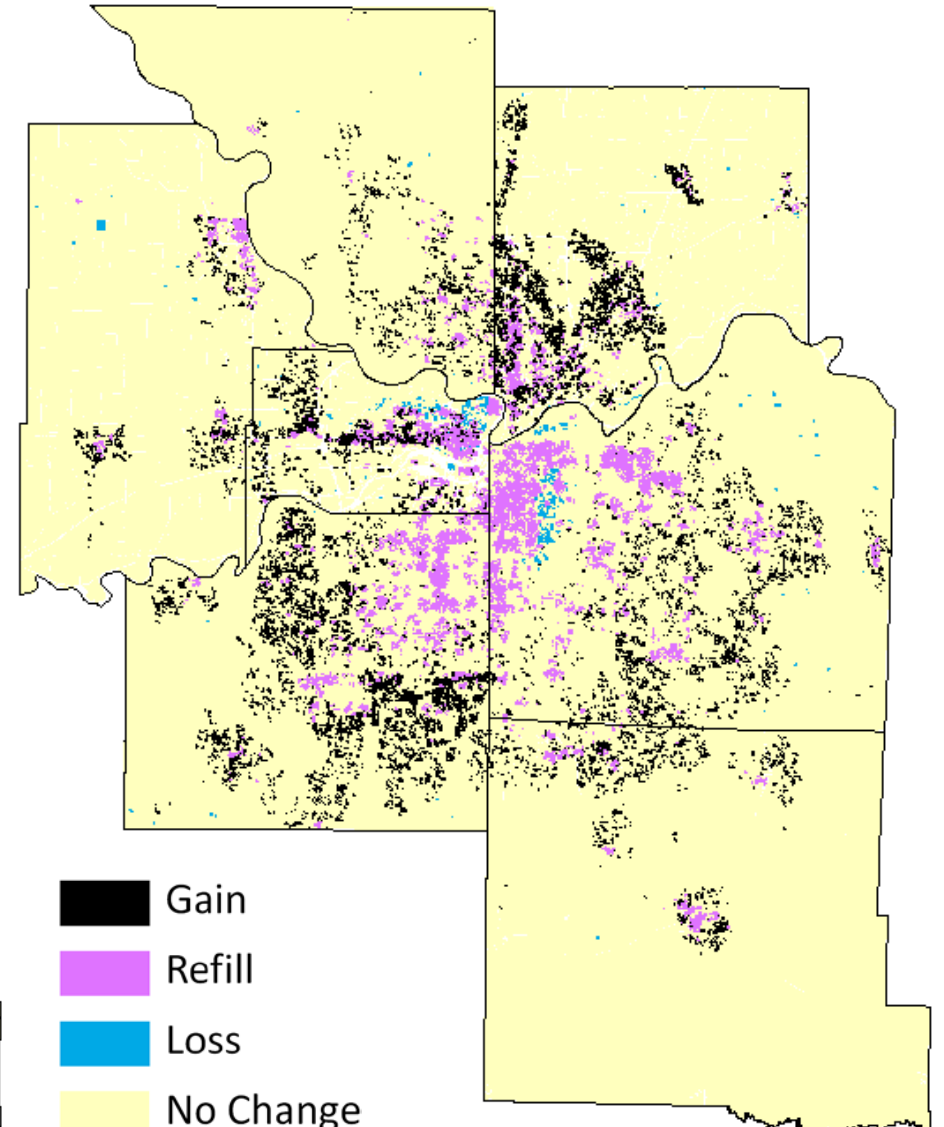


Type of Land Use Change

Baseline

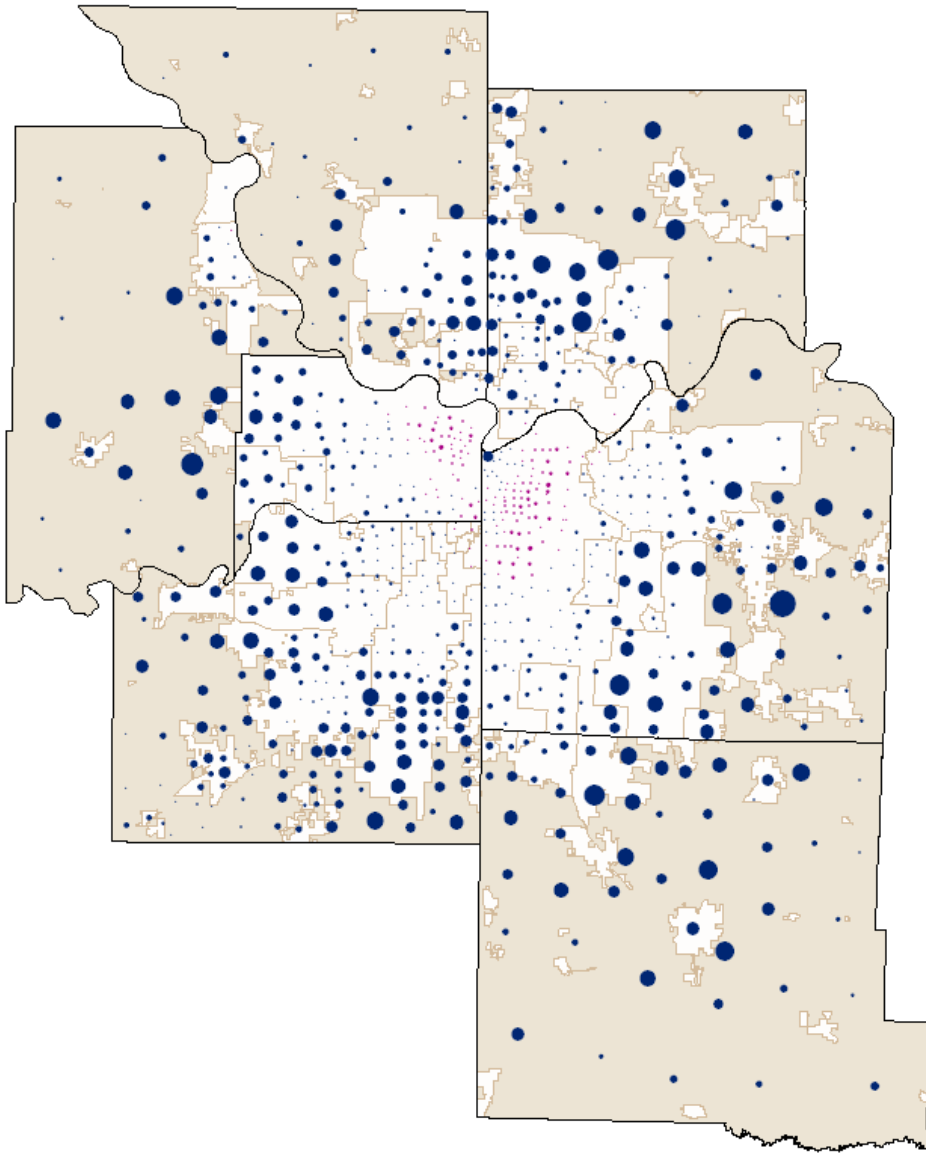


Adaptive

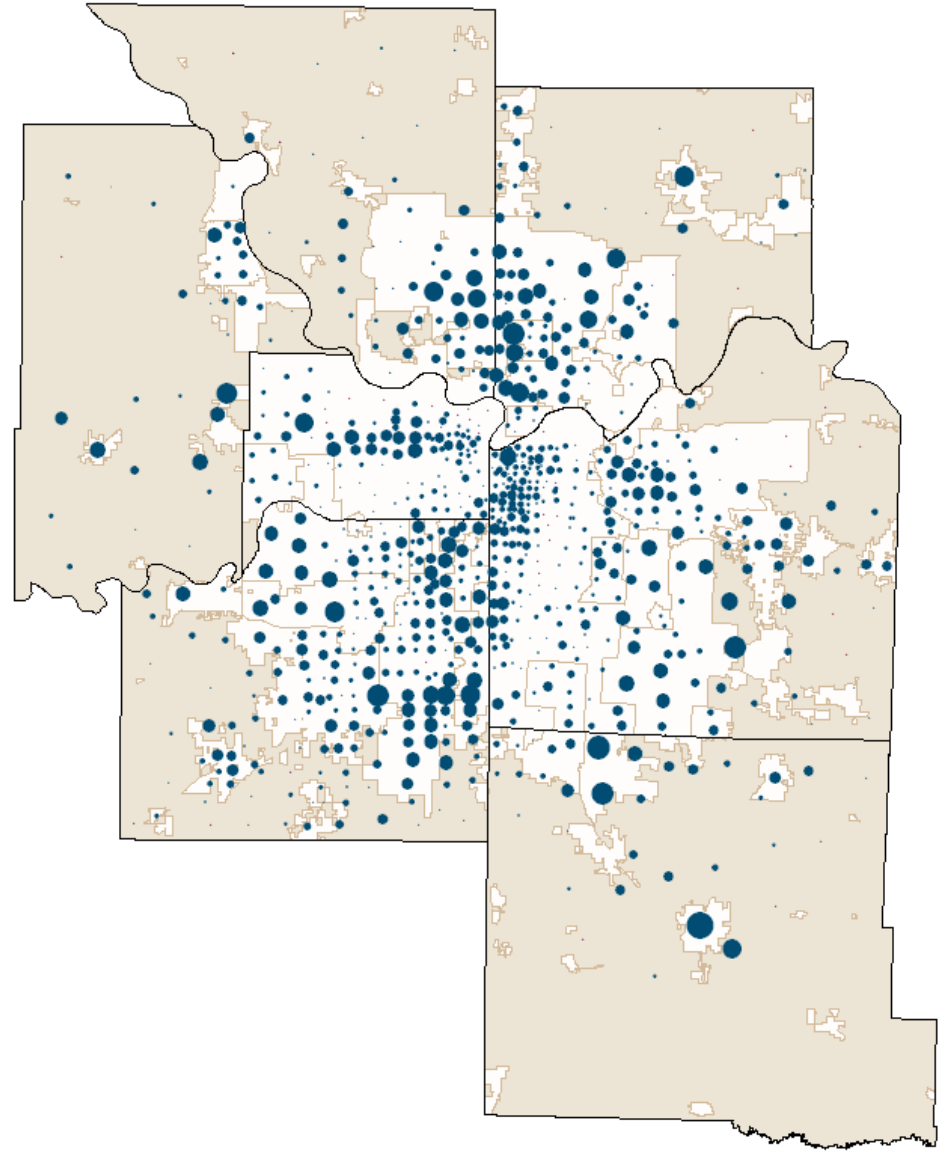


Distribution of New Population

Baseline



Adaptive



Gain, Loss, Refill

Baseline

	Population Change	Household Change	Employment Change
Gain	722,878	308,161	476,345
Loss	(47,387)	(20,658)	(26,886)
Refill	1,894	796	663
All	677,386	288,299	450,122

Adaptive

	Population Change	Household Change	Employment Change
Gain	391,799	166,449	263,312
Loss	(5,692)	(2,538)	(2,986)
Refill_G	284,527	122,398	176,320
Refill_L	6,861	2,118	(7,617)
All	677,495	288,427	429,030

Population, Households and Employment Change by County

Baseline

	Population	Household	Employment
CA	106,121	41,172	31,369
CL	122,362	54,078	68,906
JA	126,258	52,695	70,304
JO	194,023	86,495	219,528
LV	59,666	24,710	13,994
PL	49,712	22,607	37,937
WY	19,245	6,541	8,083
All	677,386	288,299	450,122

Adaptive

	Population	Household	Employment
CA	40,839	17,304	11,224
CL	111,213	47,917	44,484
JA	192,412	81,159	104,215
JO	216,632	92,119	209,249
LV	28,757	12,349	7,924
PL	40,188	17,360	29,200
WY	47,453	20,218	22,733
All	677,495	288,427	429,030

More Sustainable Development

- Baseline – 276 square miles
- Adaptive – 69 square miles
 - Land developed in nodes = 12% of all developed land
 - Nodes contain $\frac{3}{4}$ of population growth, covering both new and existing areas.
- Still to do – convert to infrastructure costs.

Neither Scenario is a Forecast

- They each depend upon their own set of assumptions, and neither set is entirely likely to occur as stated
- Toward which future will the KC Region generally move?
 - The question is not whether we grow, or even how much we grow, but *how* we grow.
 - This is largely a matter of the policies we adopt today.
- Public input on June 3 will be helpful
 - What's desired, What tradeoffs are we willing to make
- Huge role for transportation policy
- Seeking alignment between local and regional plans that moves us toward the vision of becoming America's Green Region.