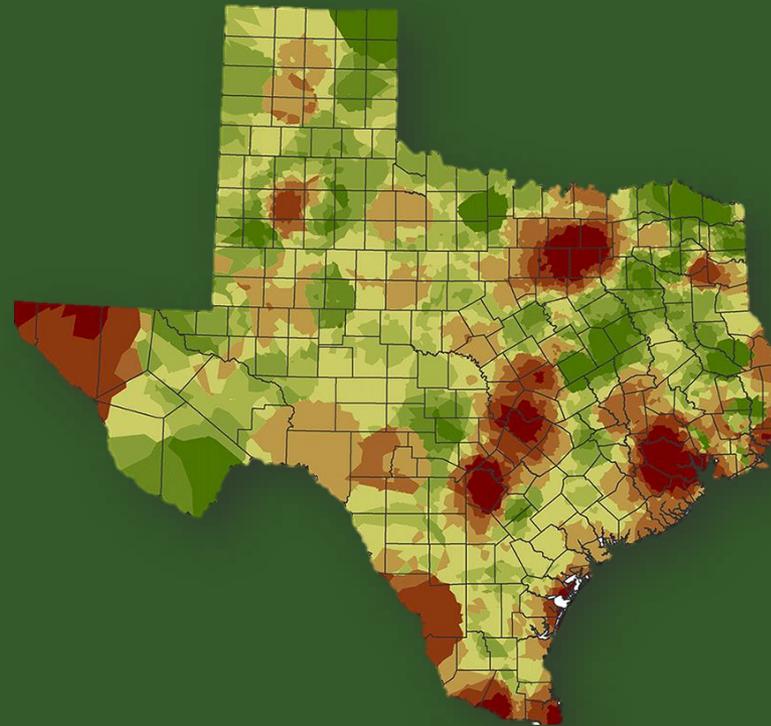


How and Why Texas is Changing



Roel R. Lopez

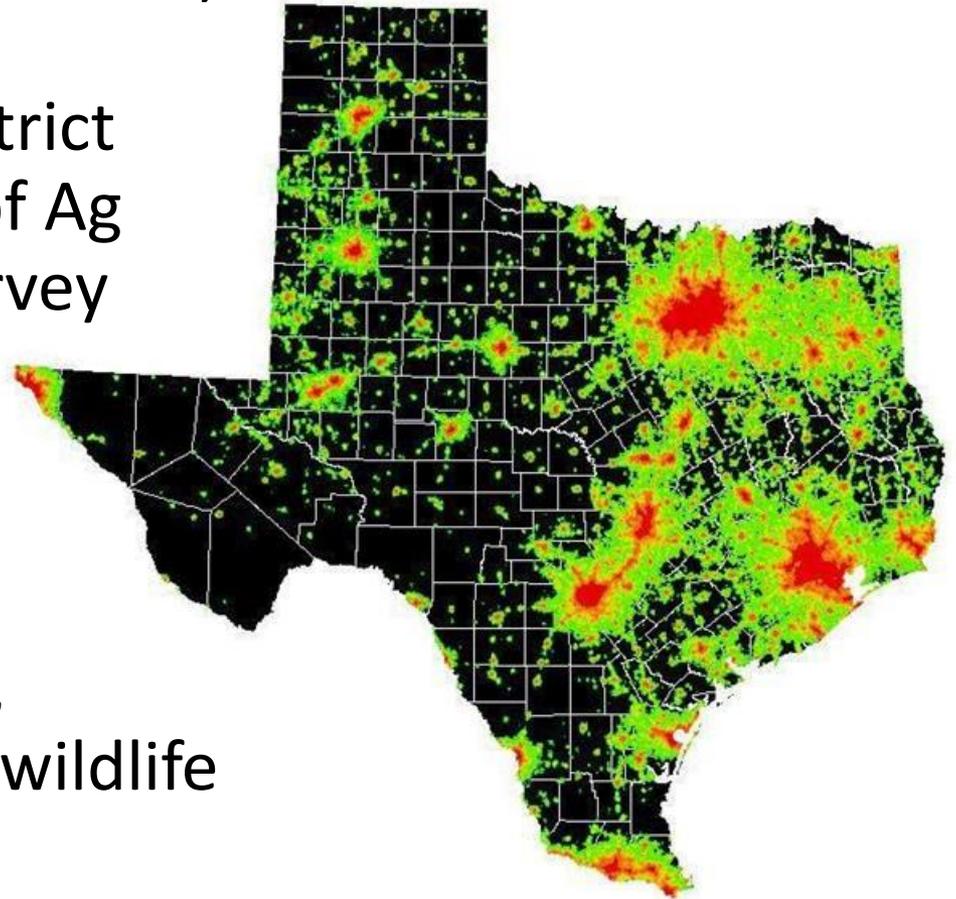
Value of Rural Lands

- Rural working lands –critical role in providing water, food, energy, and national security
- *Effective* conservation requires innovative solutions to sustaining private rural working lands.
- Review of data to give a perspective on challenges
 - More people...
 - Less farms and ranches...
 - Changing landowners....
- Opportunities and approaches



Texas Land Trends

- Trends in land use (1997-2012)
- Primary datasets used
 - County Appraisal District
 - USDA NASS Census of Ag
 - Texas Landowner Survey
- Relationships among
 - Land Value
 - Land Ownership
 - Land Use
- **Working Lands** – farms, ranches, family forests, wildlife (e.g., 1D, 1D1)

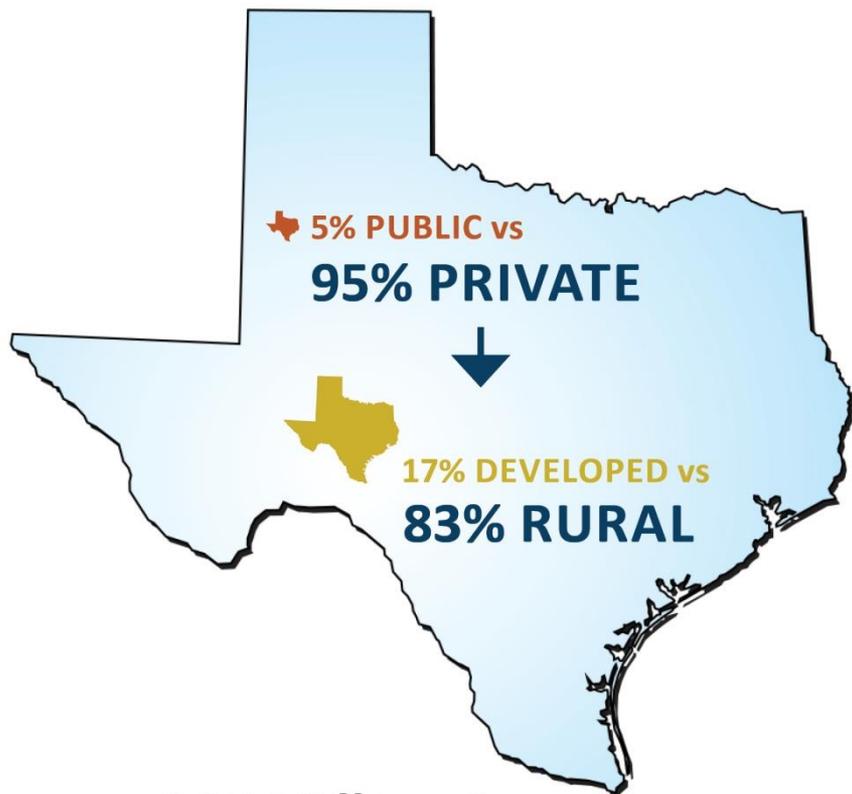


More People....



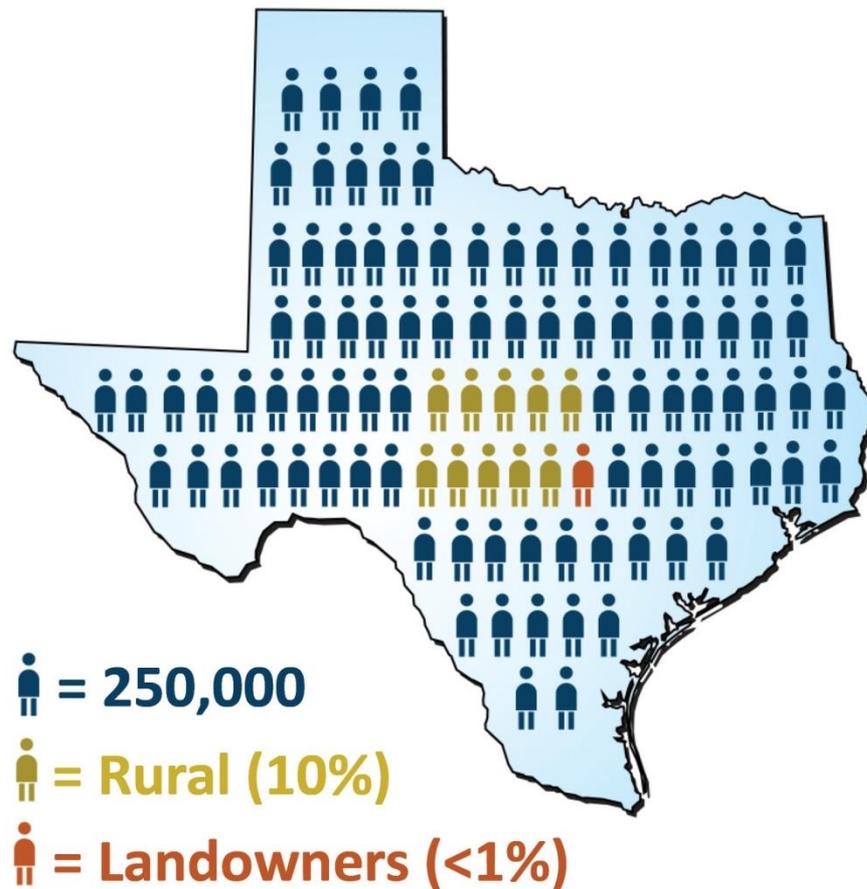
Changing Texas

171 Million Acres...



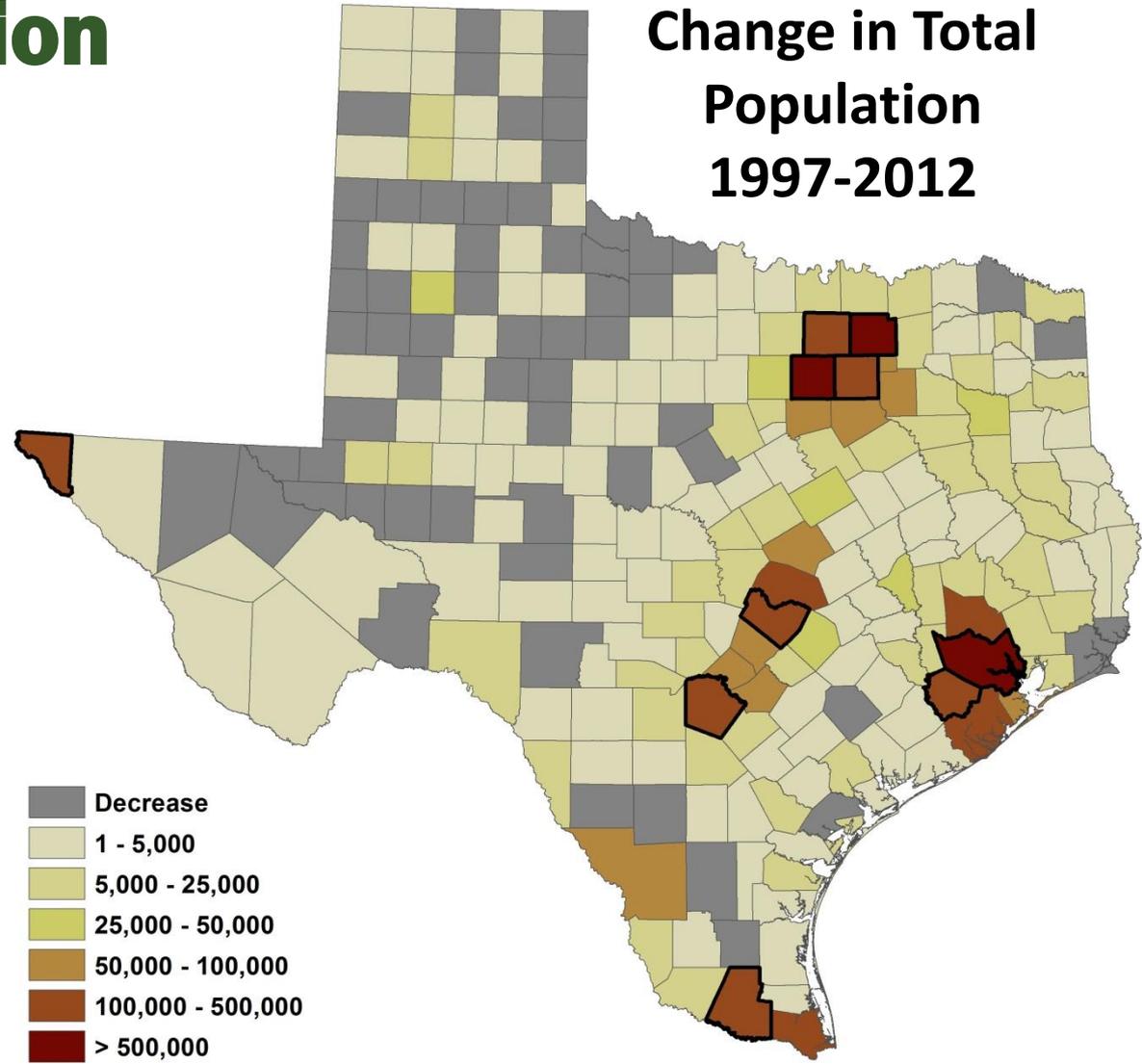
...142 Million Acres
Private Working Lands

Population: 26 Million...

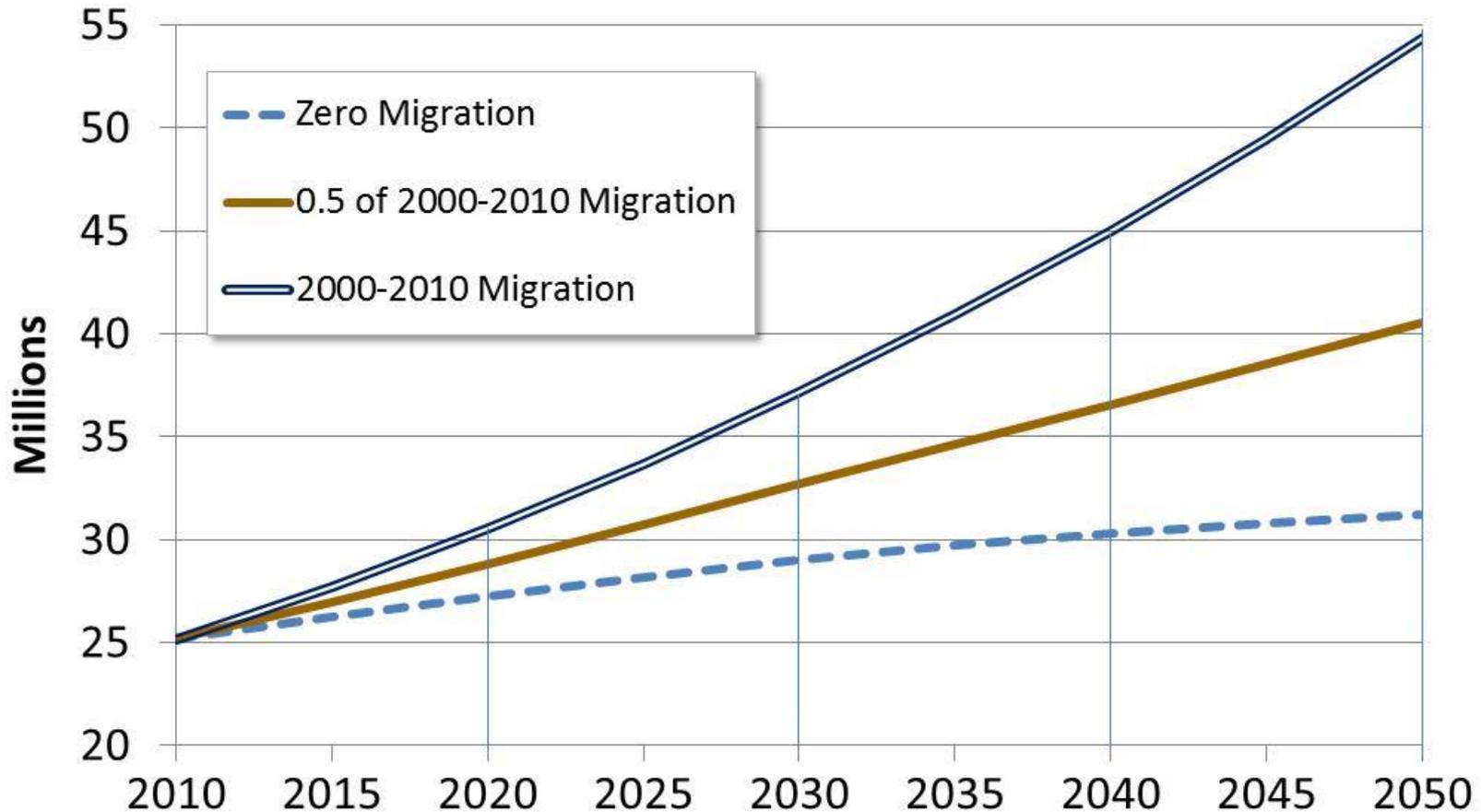


Texas Population

- 1997 – 19 Million
- 2012 – 26 Million
- 36% increase
- 500,000/year
- 65% of increase occurred within *Top Ten Populated Counties*

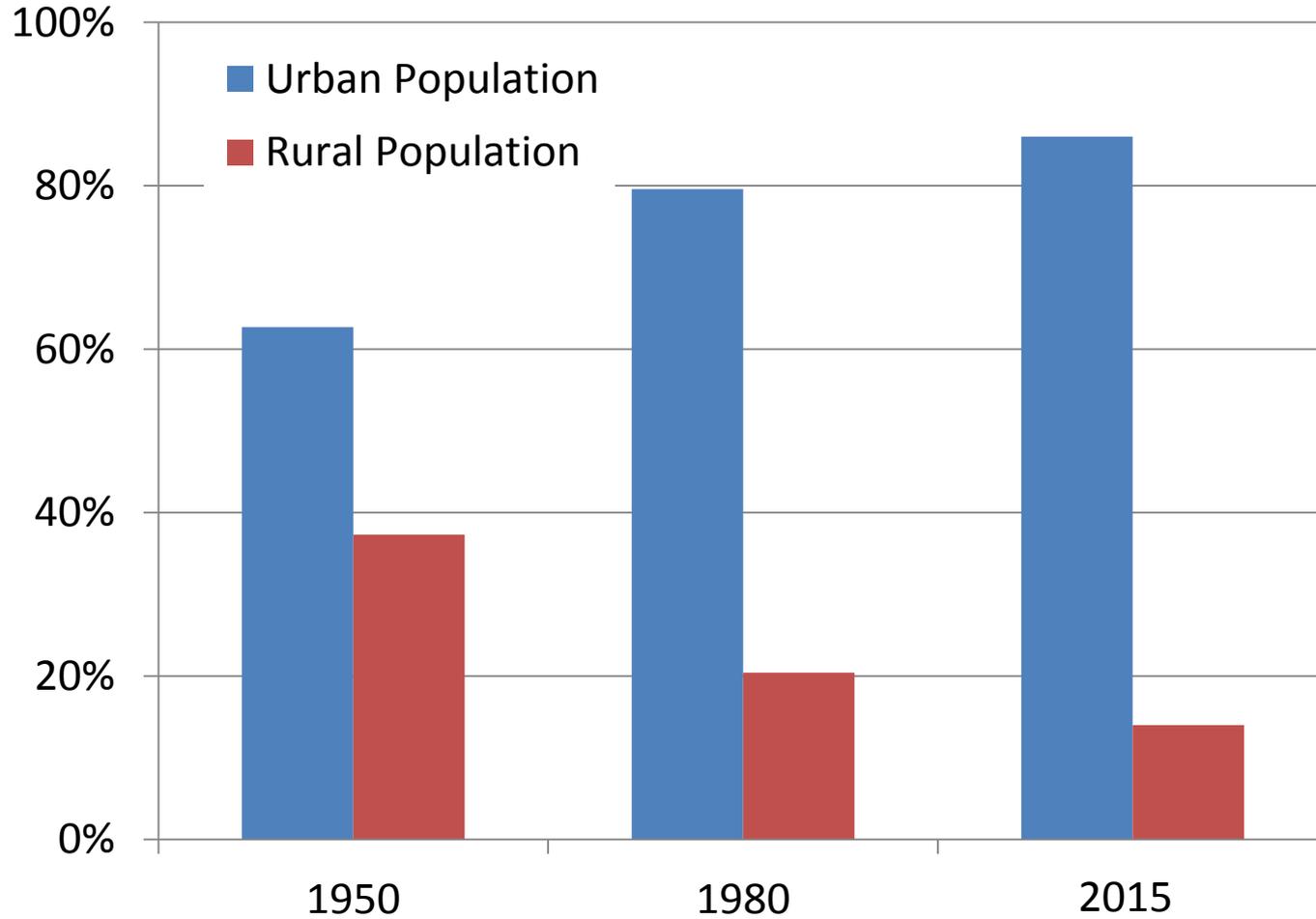


Texas Projections (2010-2050)

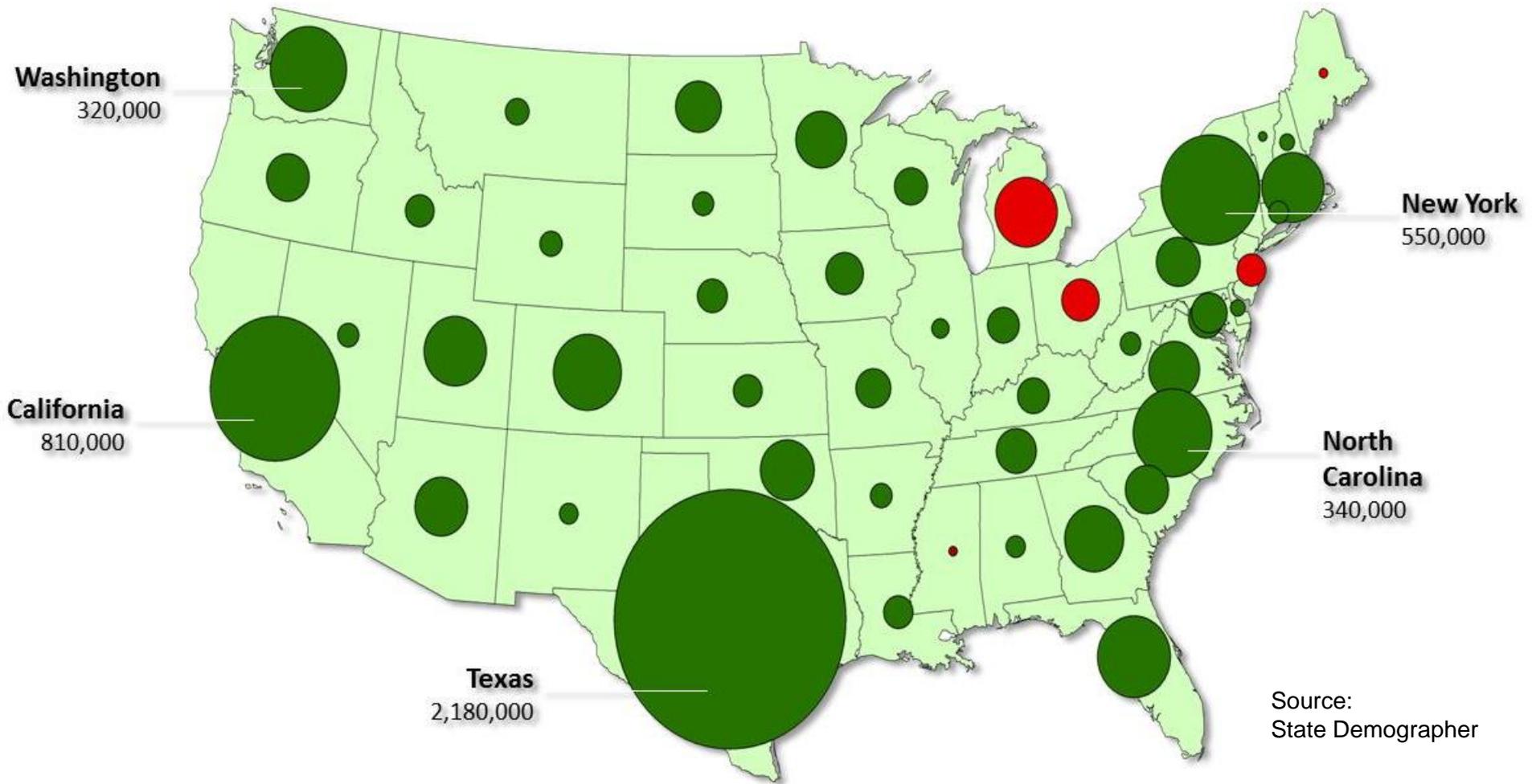


Source: State Demographer

Texas Rural and Urban Populations



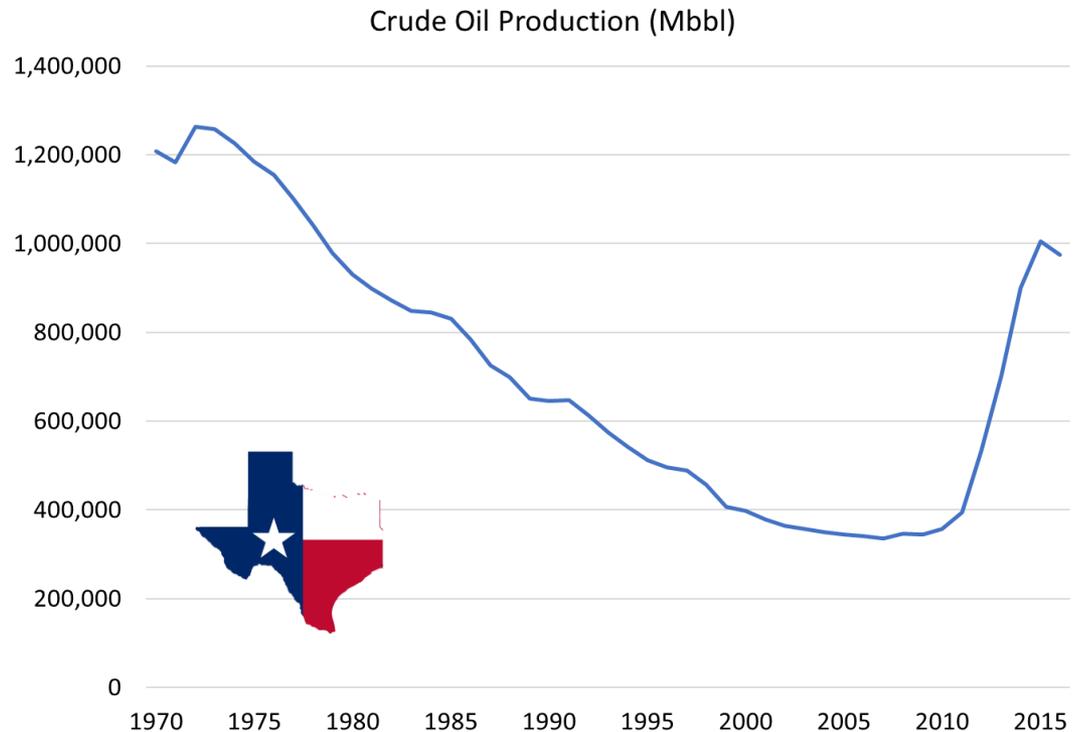
Texas Leads U.S. Job Growth (2004-2014)



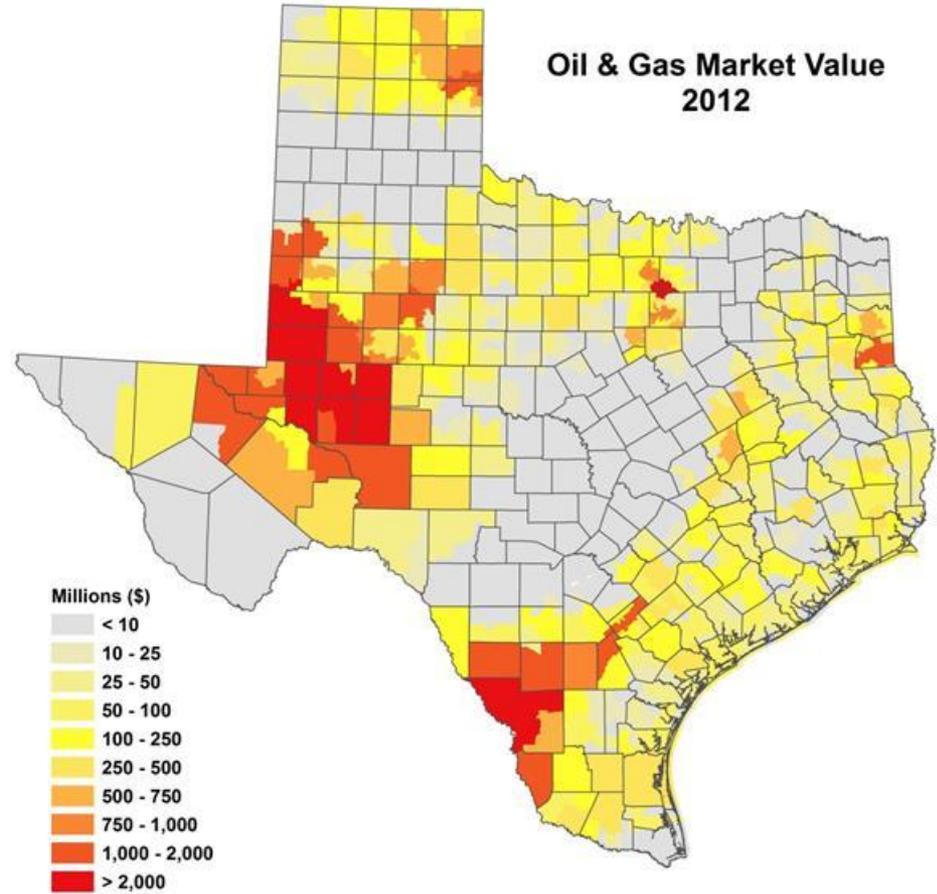
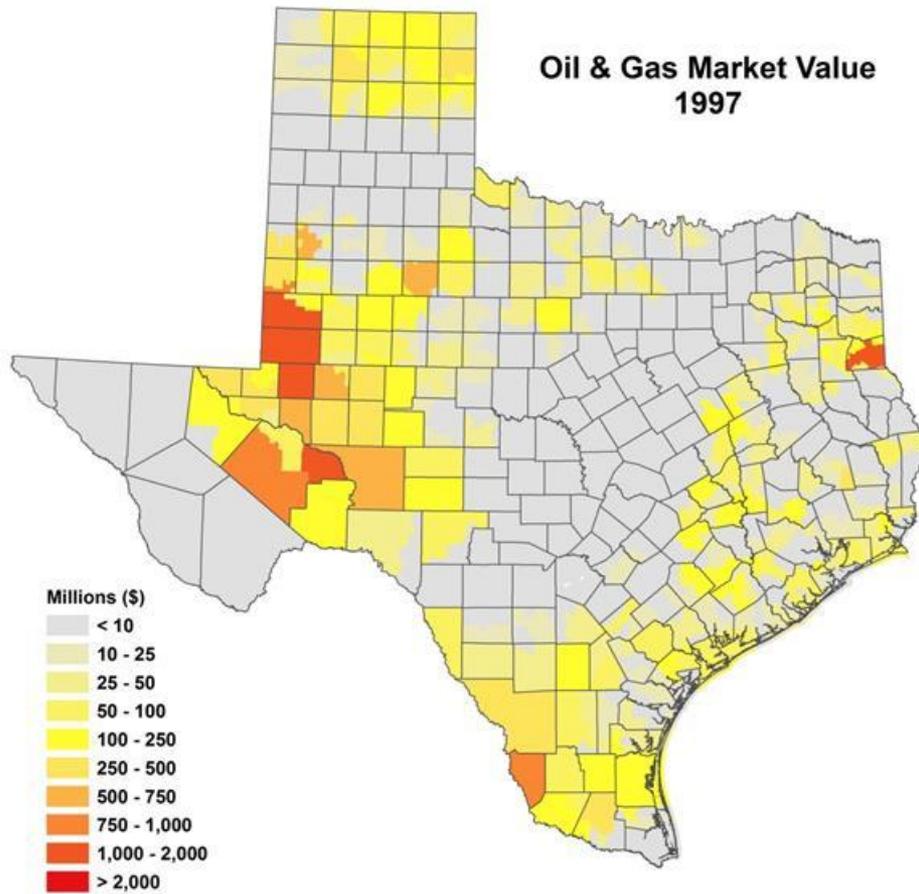
Source:
State Demographer

Oil and Gas

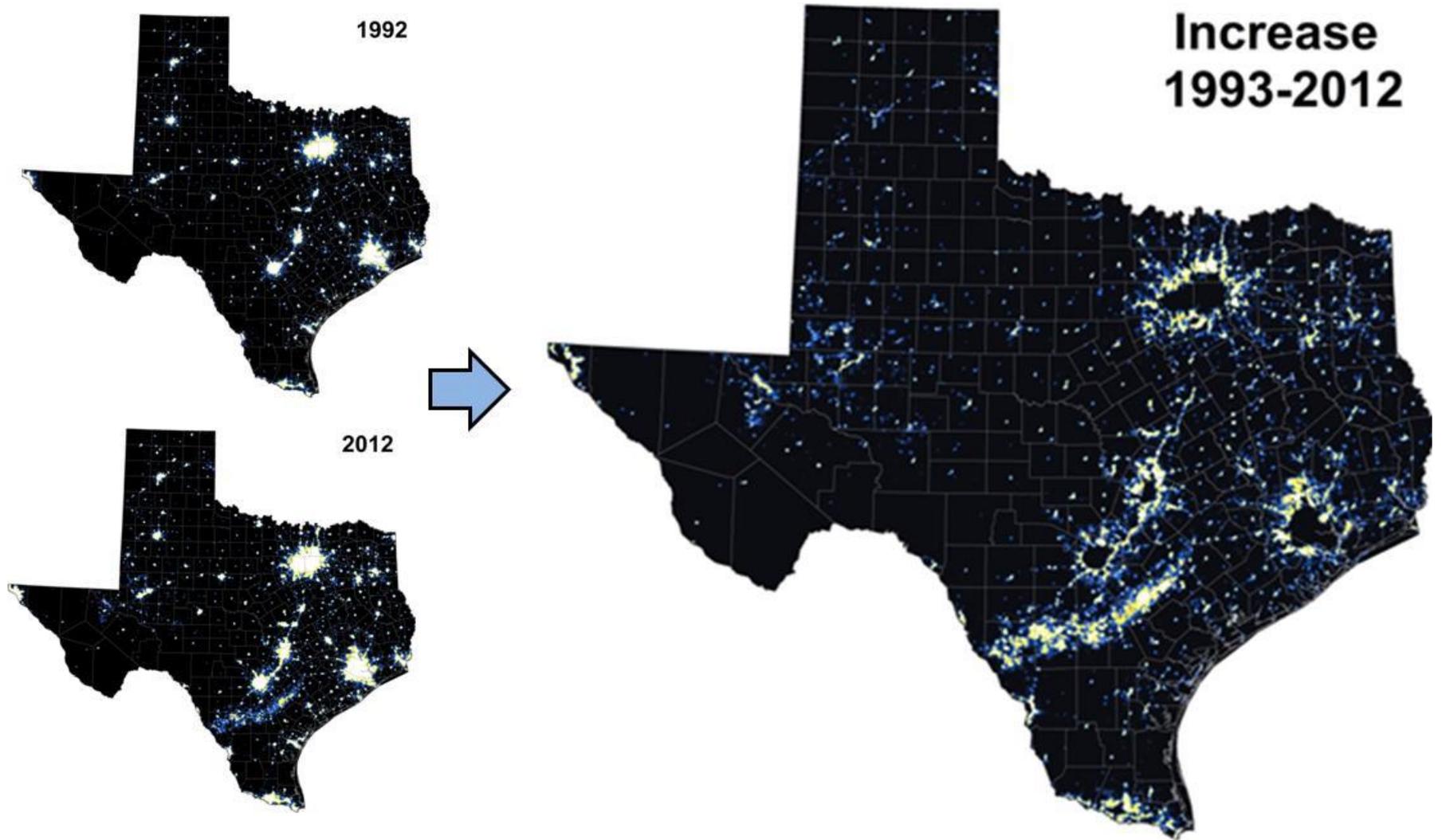
- *Economic Driver* — Texas is leading crude oil production state in part to 3 large shale gas plays
- Eagle Ford Shale
 - \$87B in revenue (2014)
 - Natural gas production has *doubled* and oil production has increased *6X*.



Oil and Gas



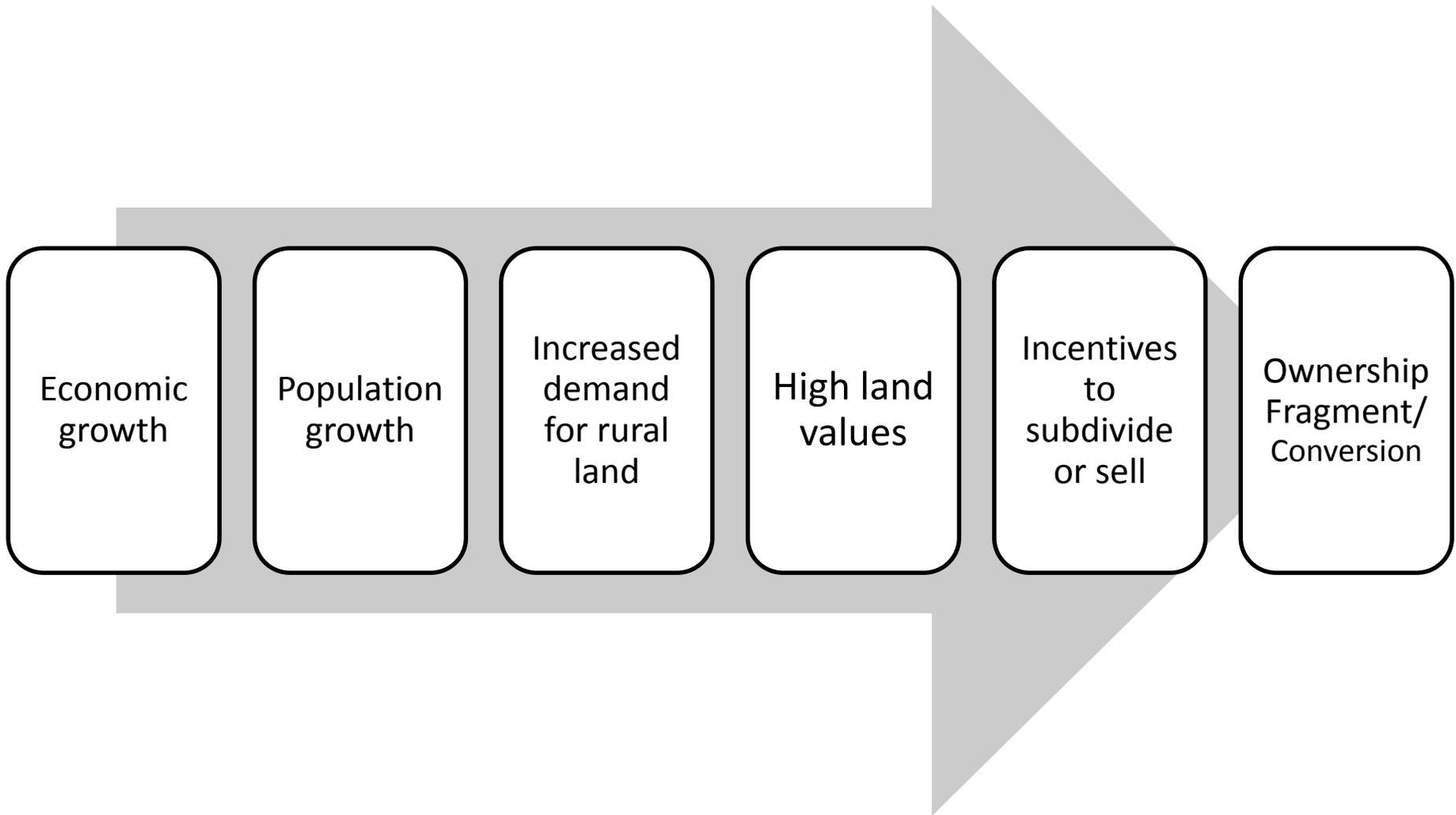
Night Time Illumination



Less Farms and Ranches....

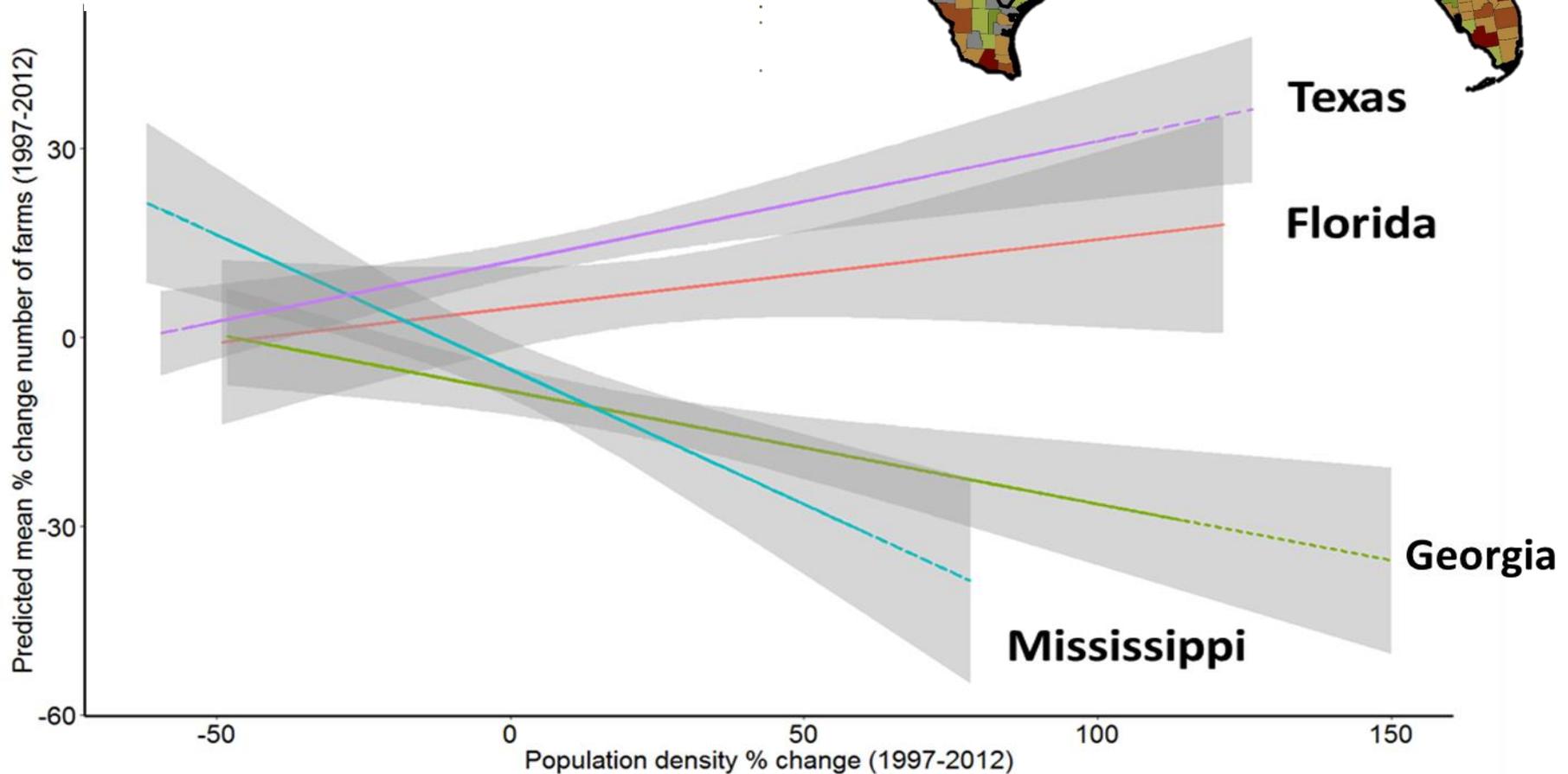
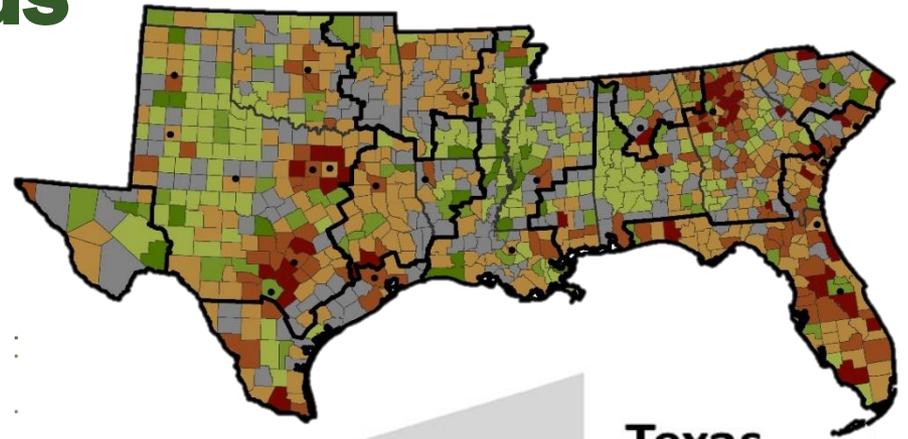
FOR SALE
166.5 +/- Acres
512 252-8900
RealLivingSelect.com
Farm & Ranch Division

Change in Working Lands – Process



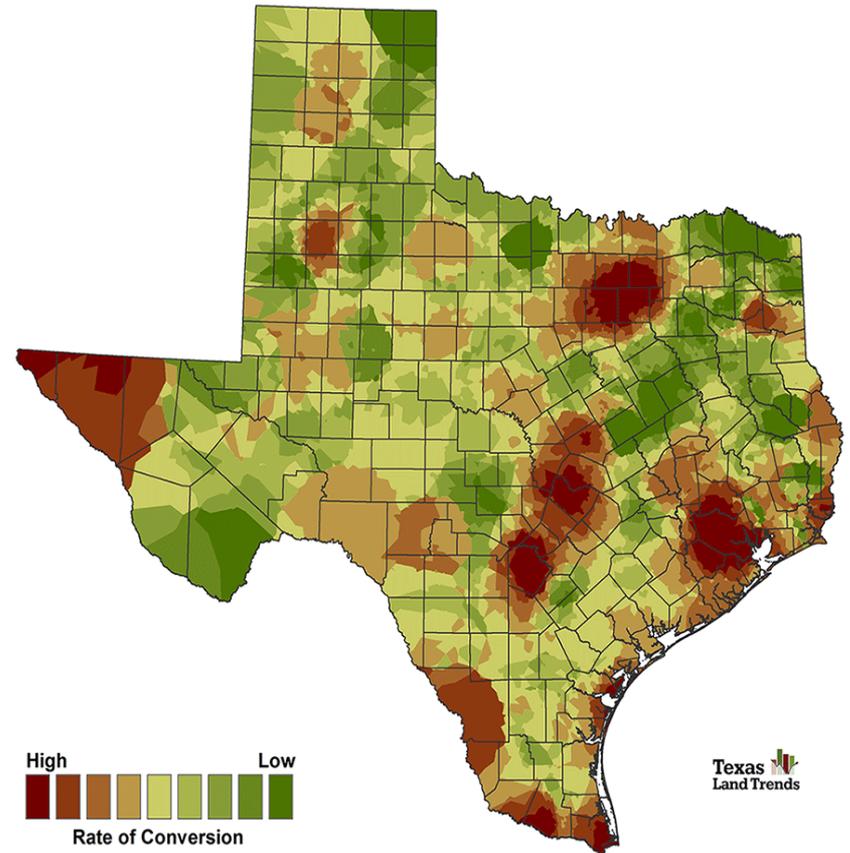
Regional Land Trends

Population Density % Change
Predicted Change # Farms
(1997-2012)



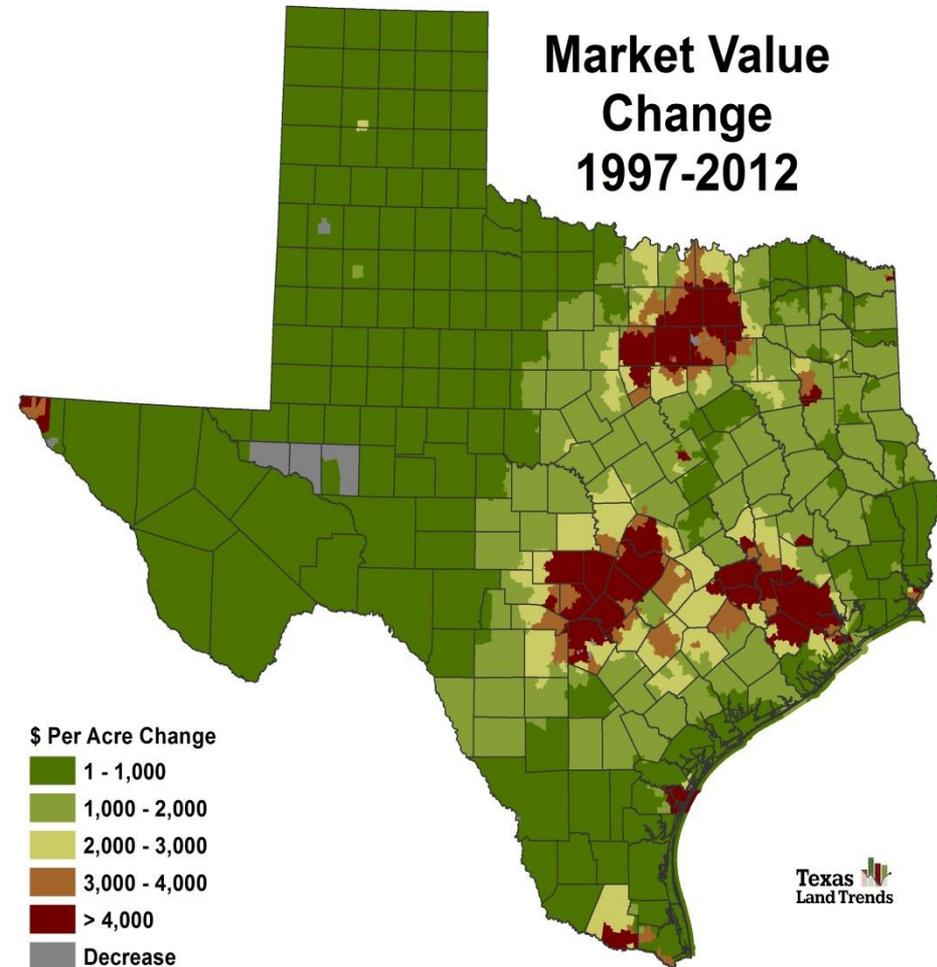
Working Land Loss – Conversion

- 1997 – 143 Million acres
- 2012 – 142 Million acres
- Loss ~1 Million acres



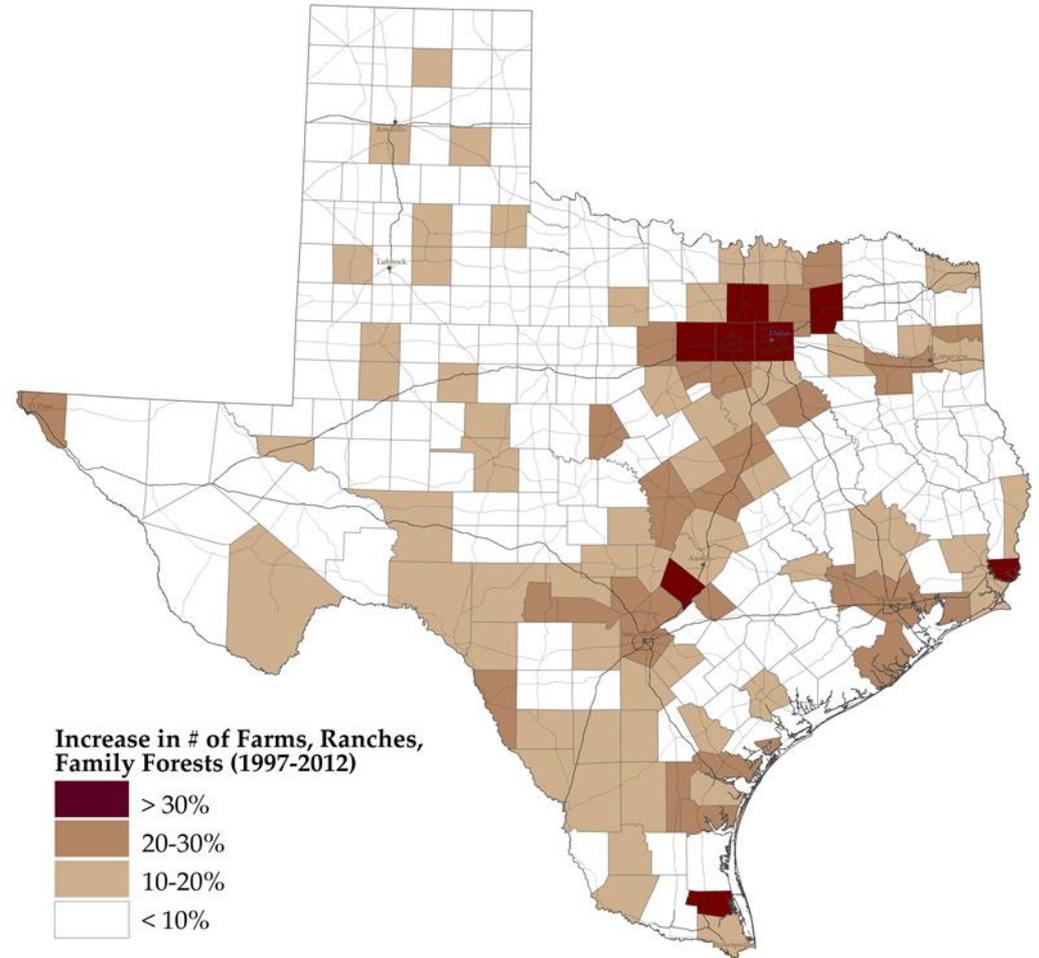
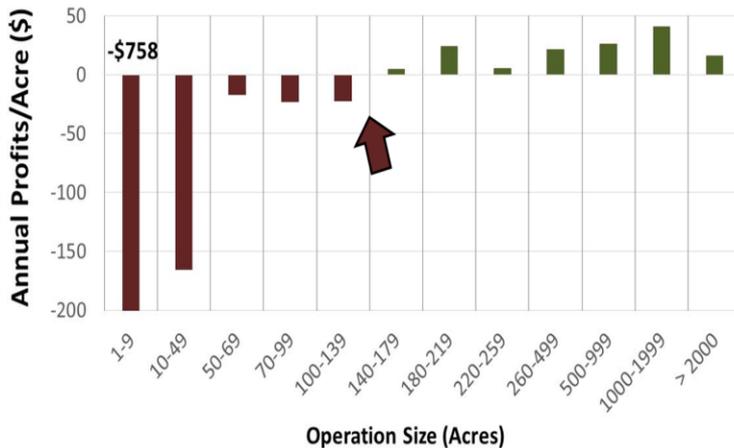
Market Value – Driver

- 1997 – \$501/Acre
- 2012 – \$1,573/Acre
- Gain of \$1,072/Acre



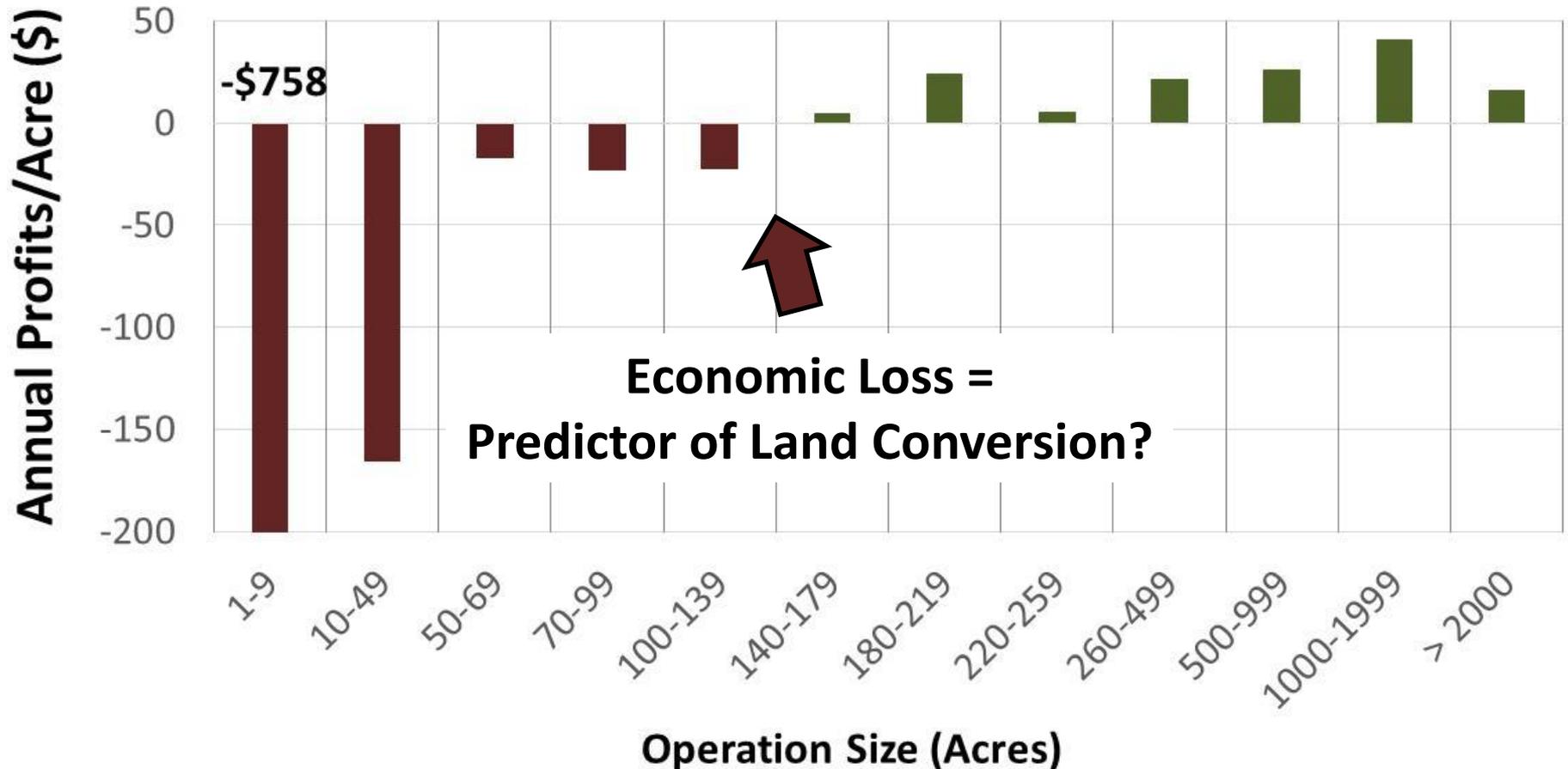
Working Land Loss – Fragmentation

- 25,000+ new farms and ranches (1997-2012)
- 4.5M acres impacted

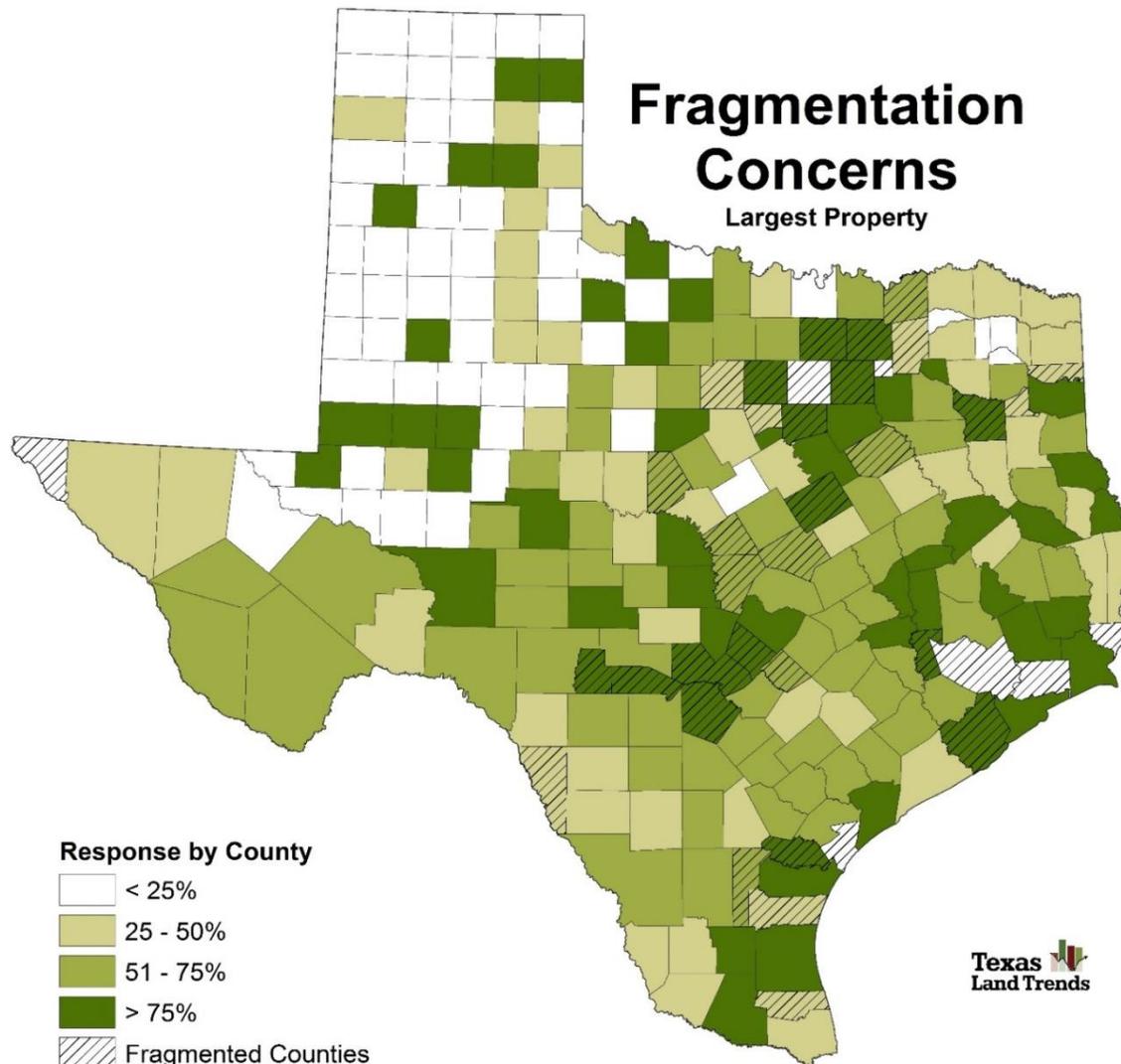


Farm and Ranch Proceeds – *Driver*

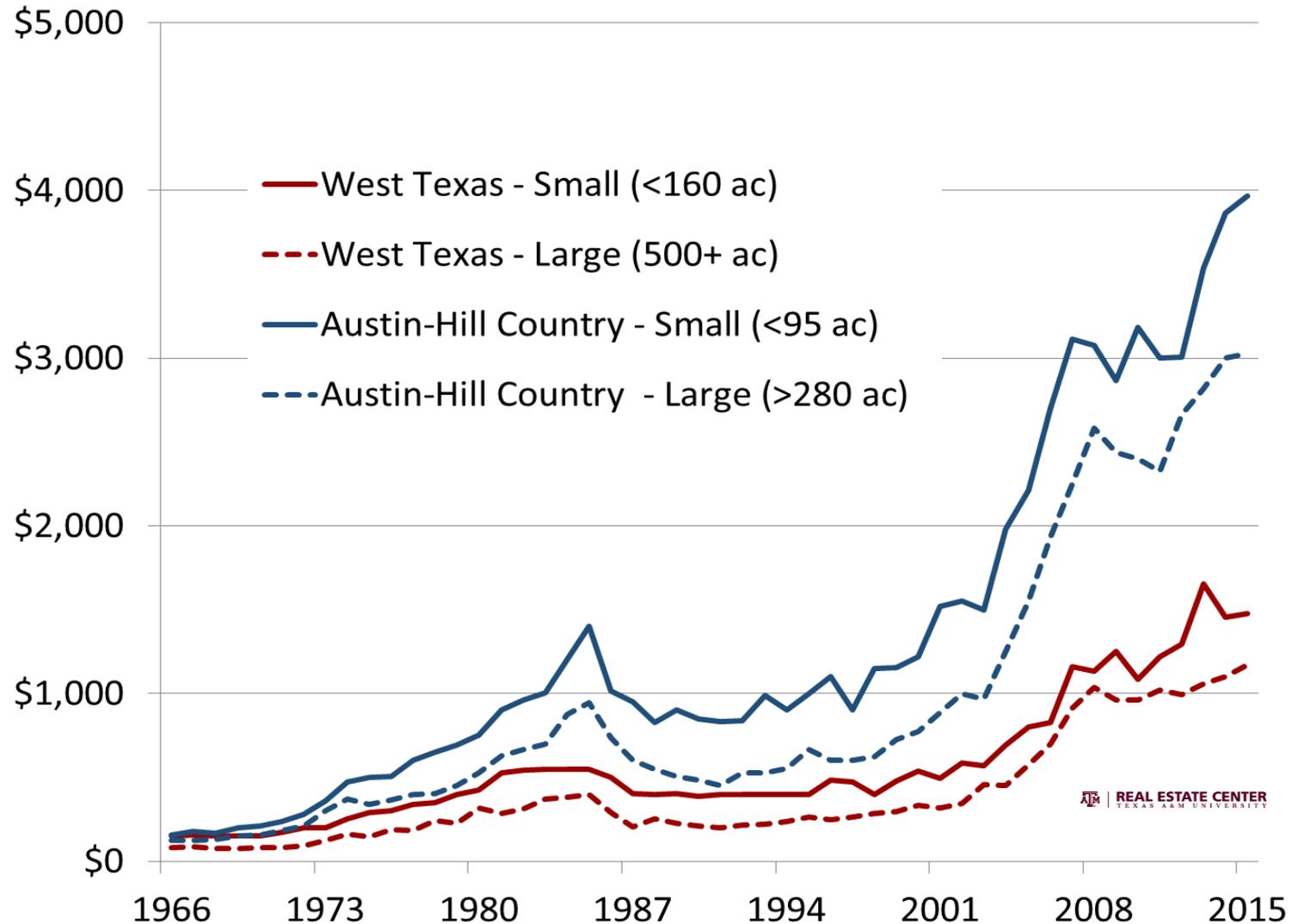
Net Farm and Ranch Proceeds by Ownership Size, 2012



Landowners – *Fragmentation Concerns*



Rural Land Trend Prices (Small vs. Large)

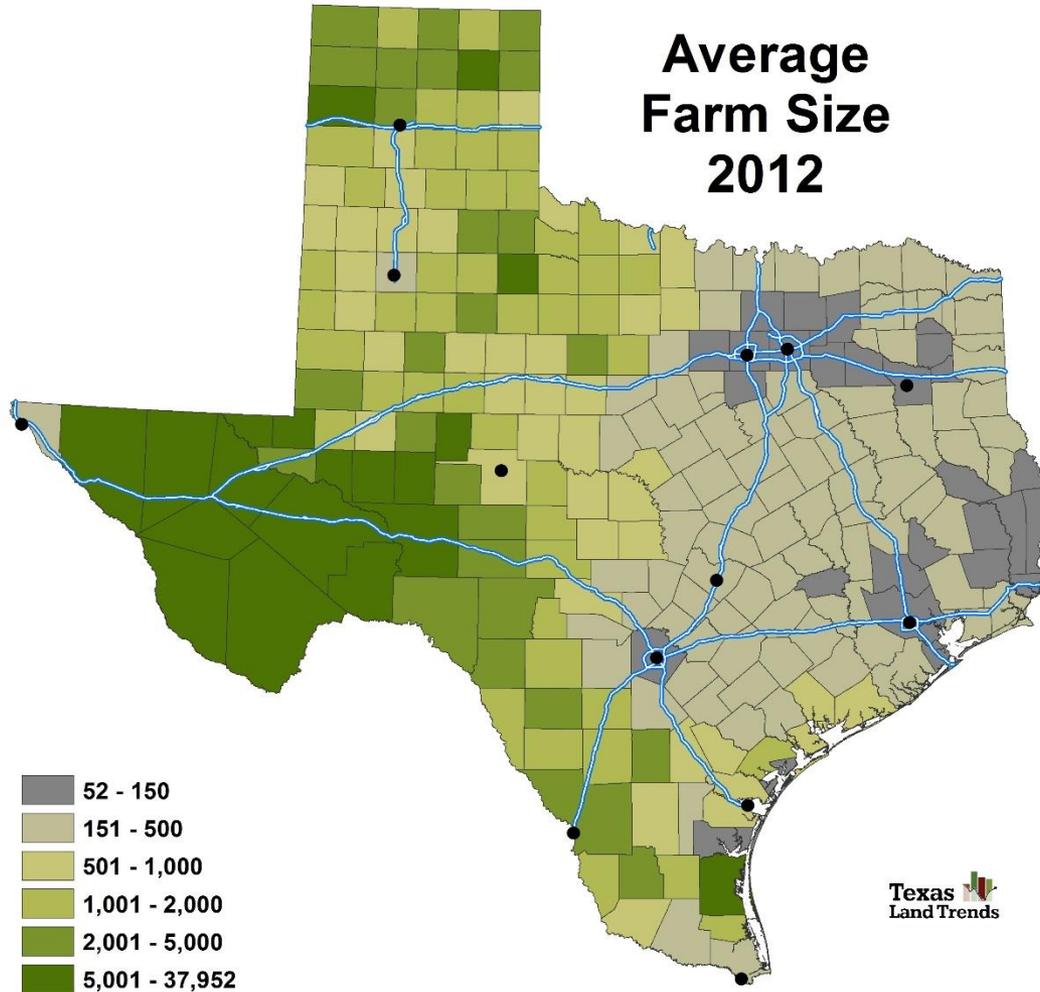


REAL ESTATE CENTER
TEXAS A&M UNIVERSITY

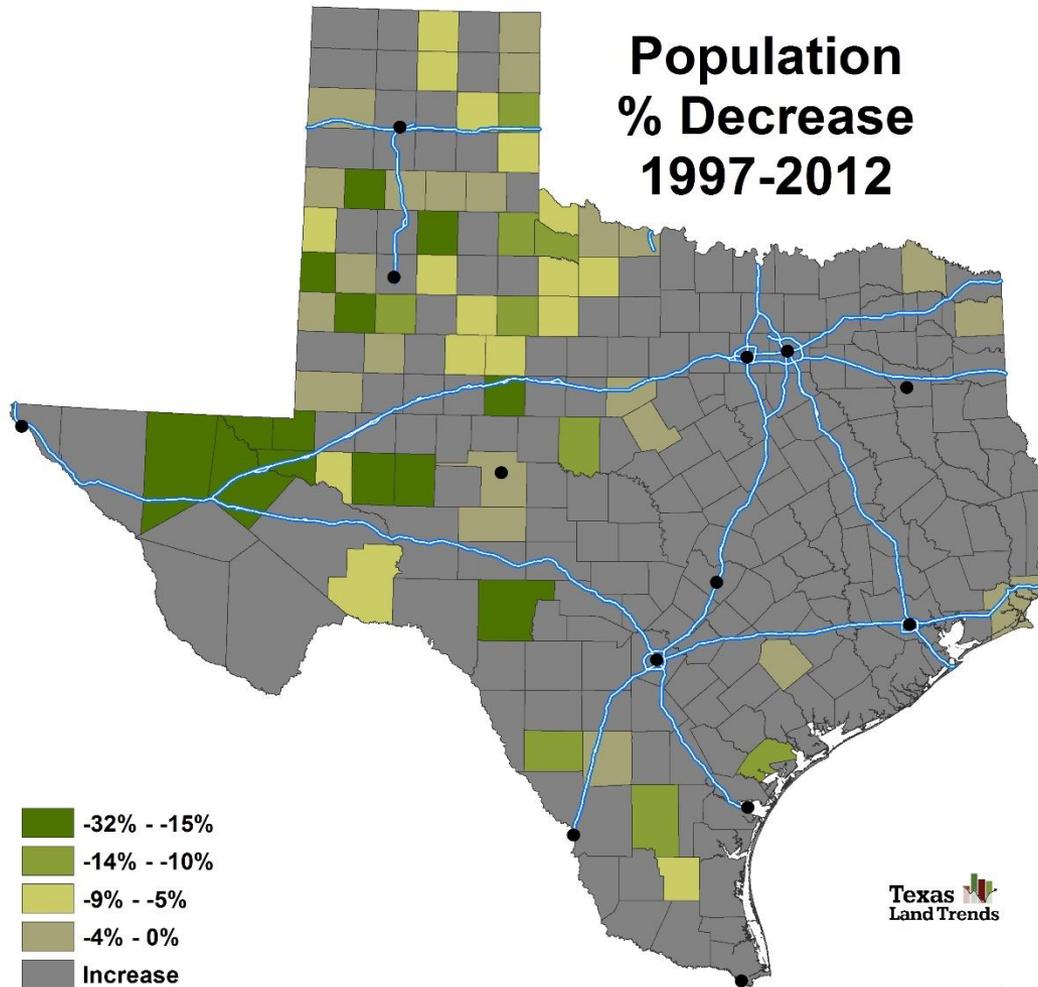


BUT...Texas still has wide open spaces....

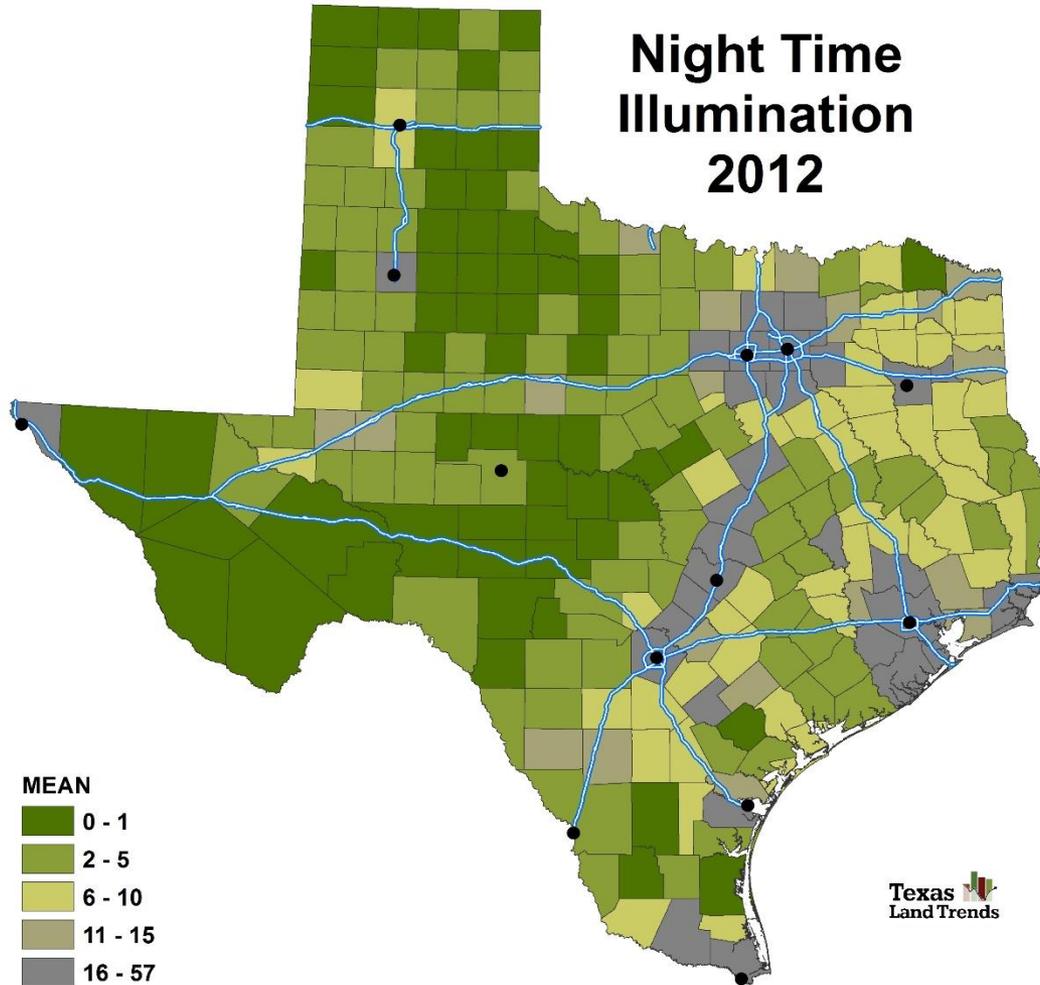
Average Farm Size – Top 25 Counties



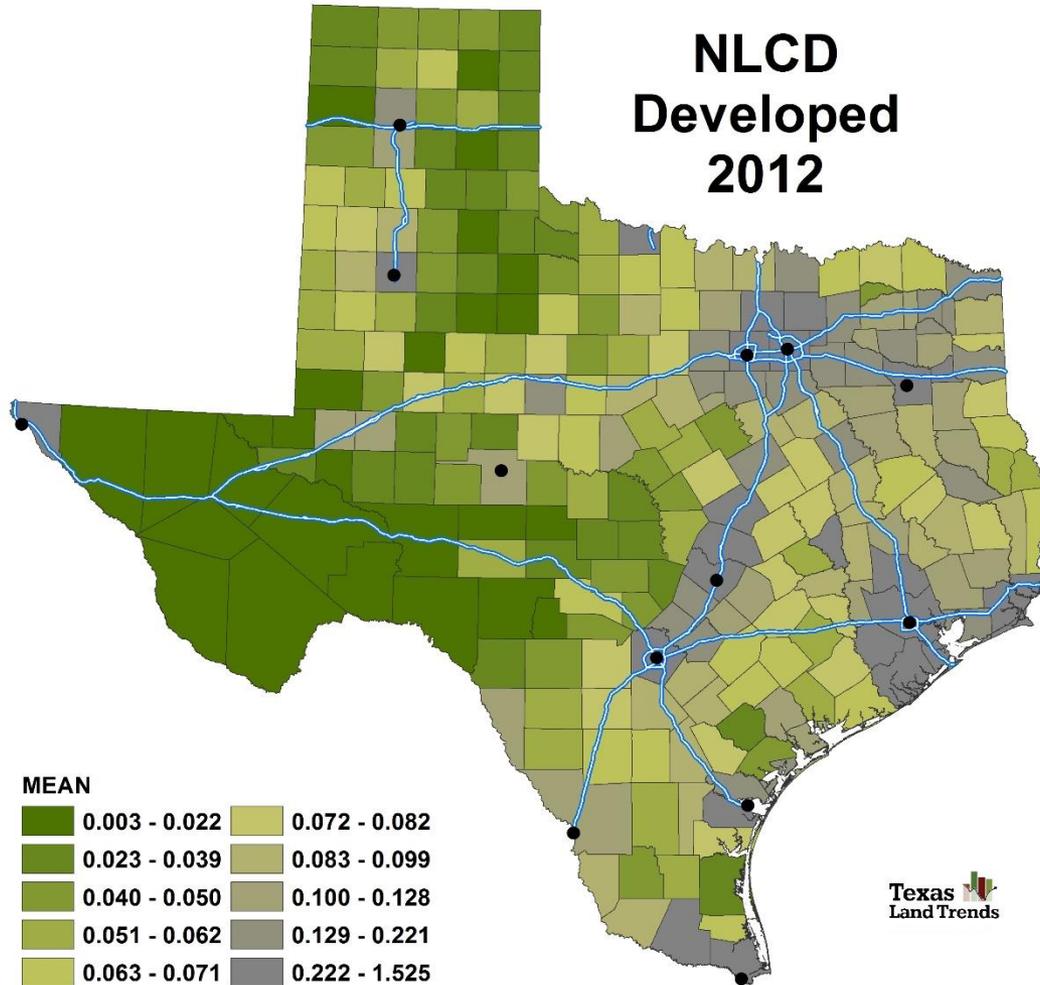
Population Percent Change – Top 25 Counties



Night Time Illumination – Top 25 Counties

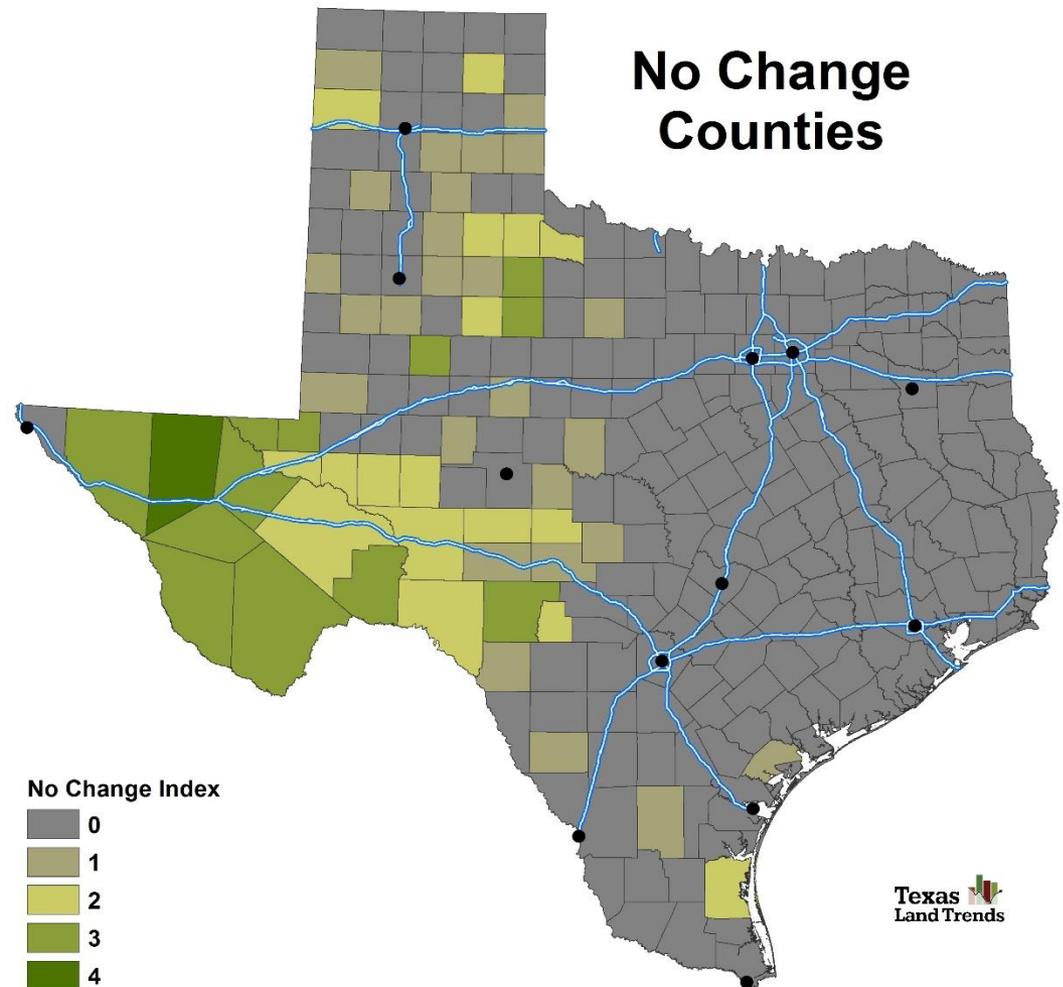


NLCD Developed Lands – Top 25 Counties



No Change Index – Top 25 Counties

1. Largest average farm/ranches...
2. Largest decrease in population...
3. Lowest night time illumination...
4. Lowest development...

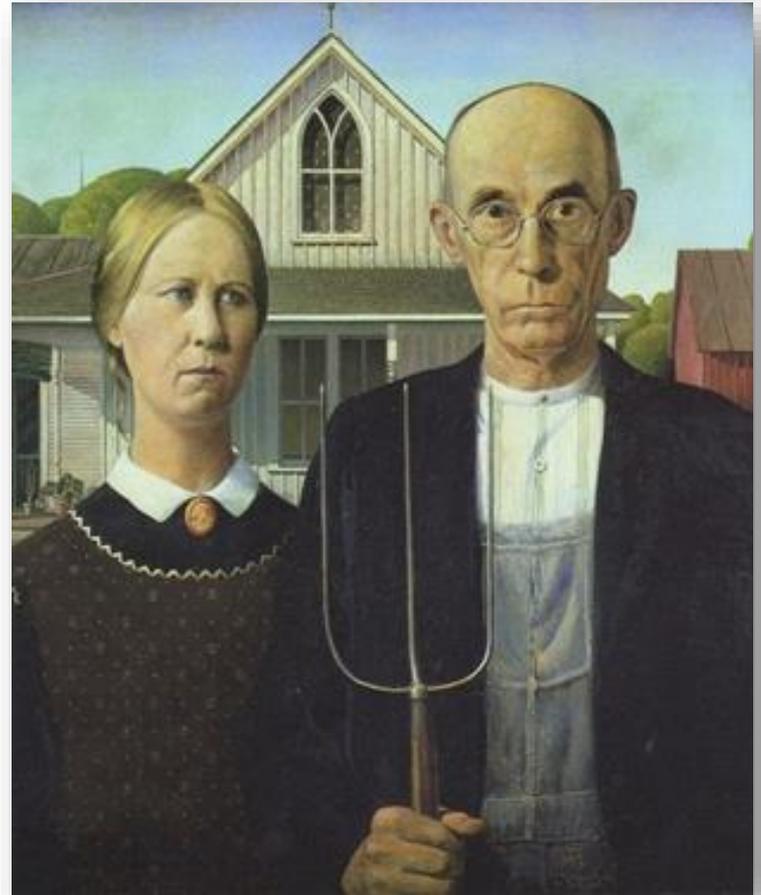


Changing Landowners....



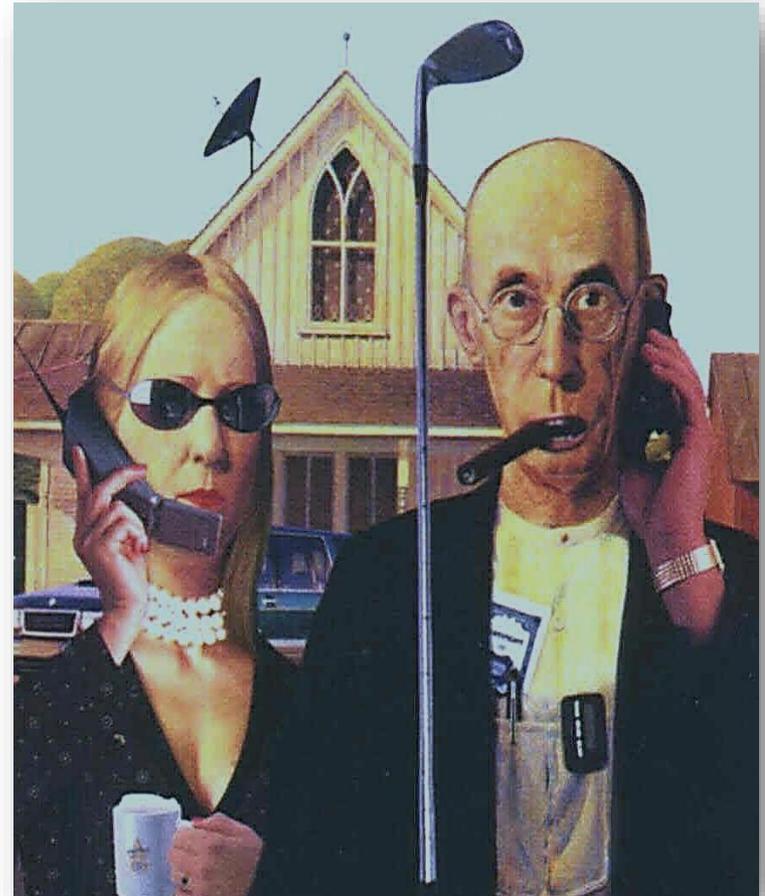
Landowner Demographics

- Average farmer – 57 years old
- Average forest landowner – 65 years old.
- In the next 20 years, U.S. will see the largest intergenerational transfer of rural lands in its history.



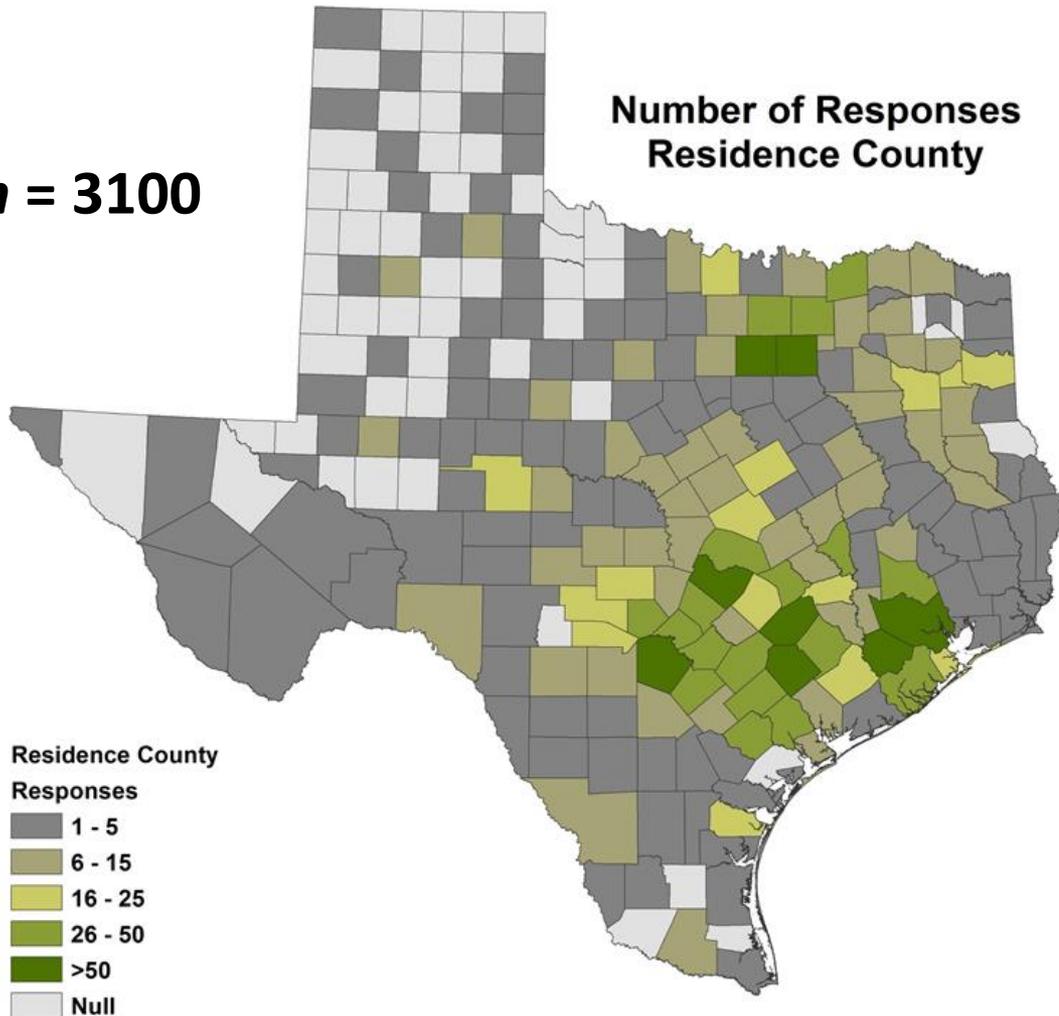
Future Texas Landowner?

- Younger generation less tied to the land.
- Goals and objectives the same? Concerns?
 - New Ownership (25%)
Owned <10 years
 - Absentee Ownership (40%)
- Texas Landowner Survey attempts to understand some of these trends.
 - Age, Tie-to-Land, Purpose



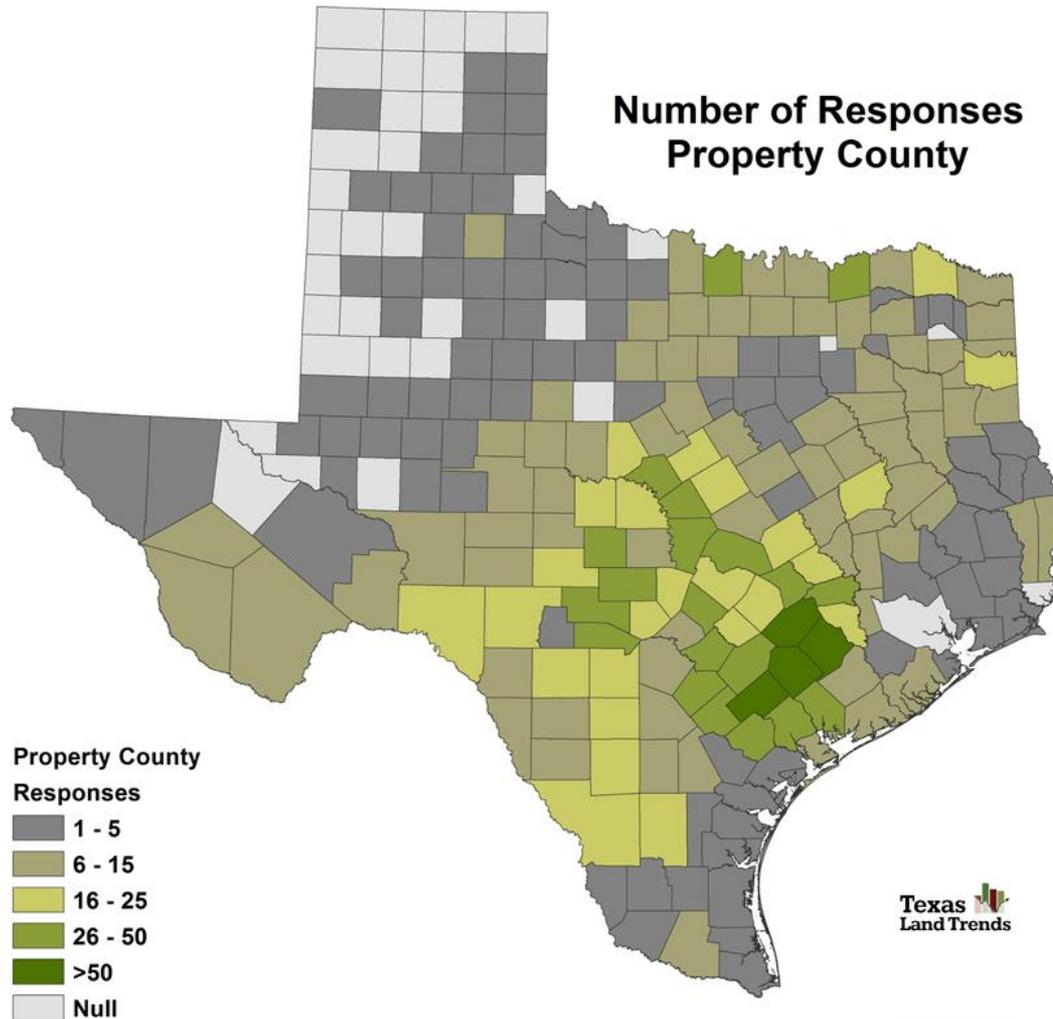
Questionnaire Overview

$n = 3100$

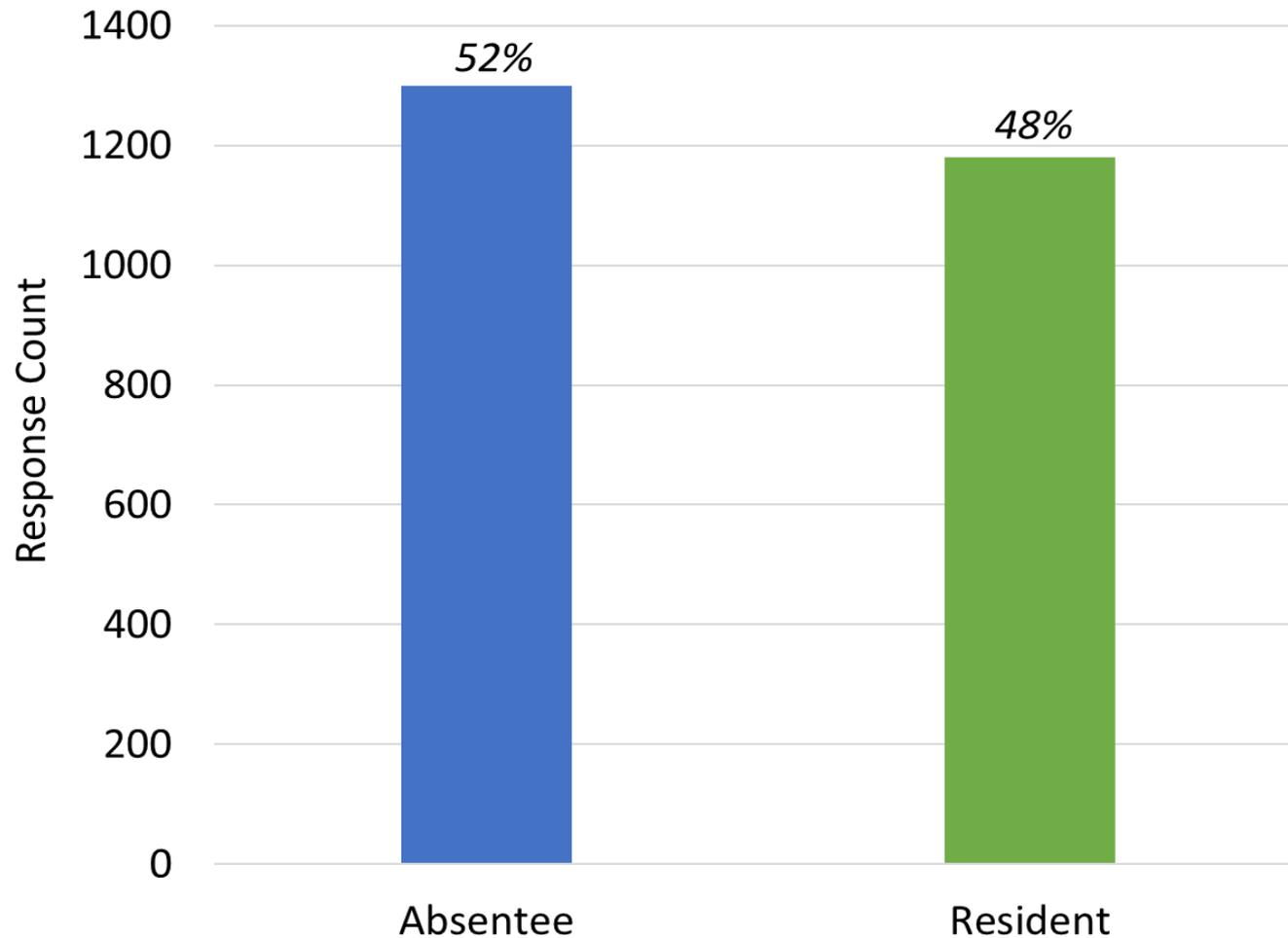


- Web-based questionnaire
 - Goal: Better serve landowners/meet needs
- Divided into 4 topic areas:
 - Landowner demographics
 - Land management
 - Landowner concerns
 - Land Loss/Fragmentation
- Almost all Texas counties (84%) represented

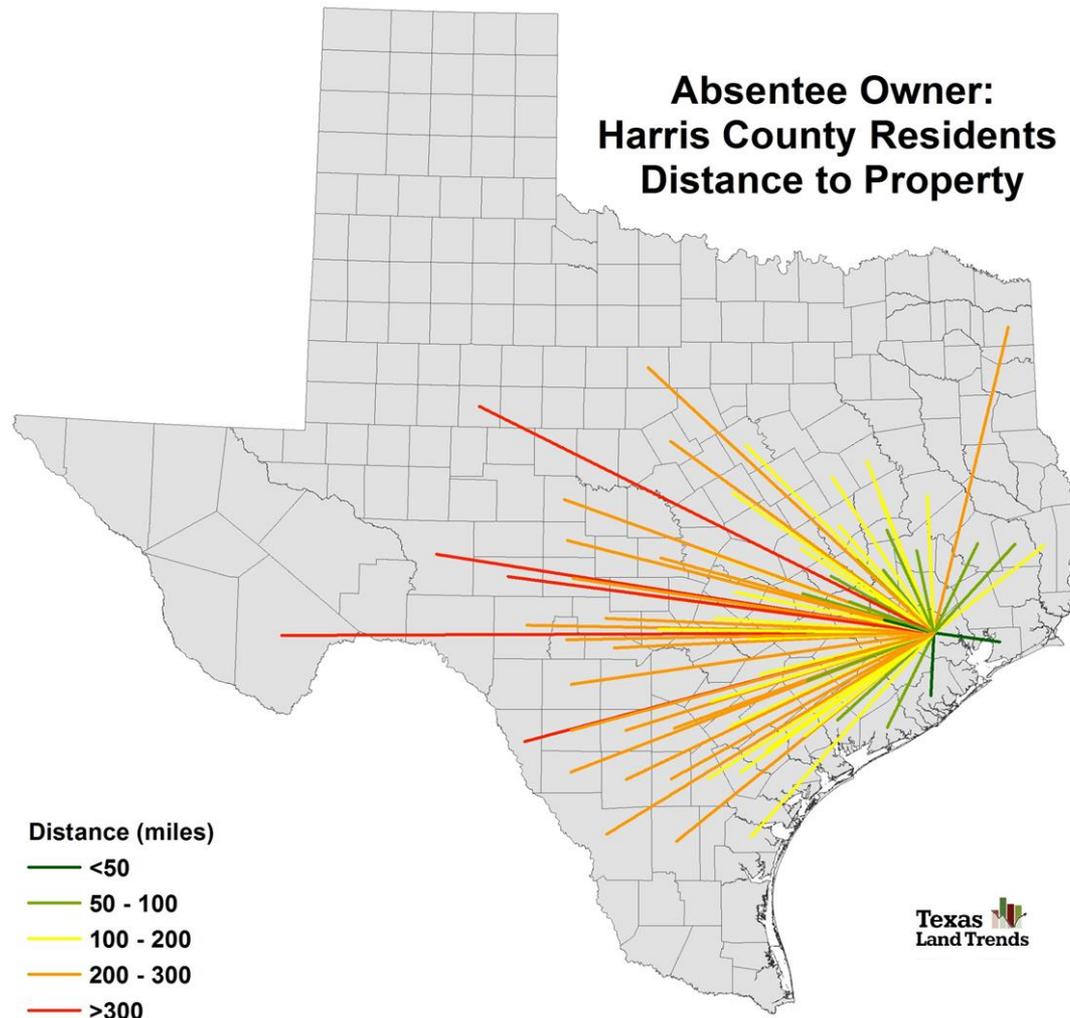
County of Largest Property



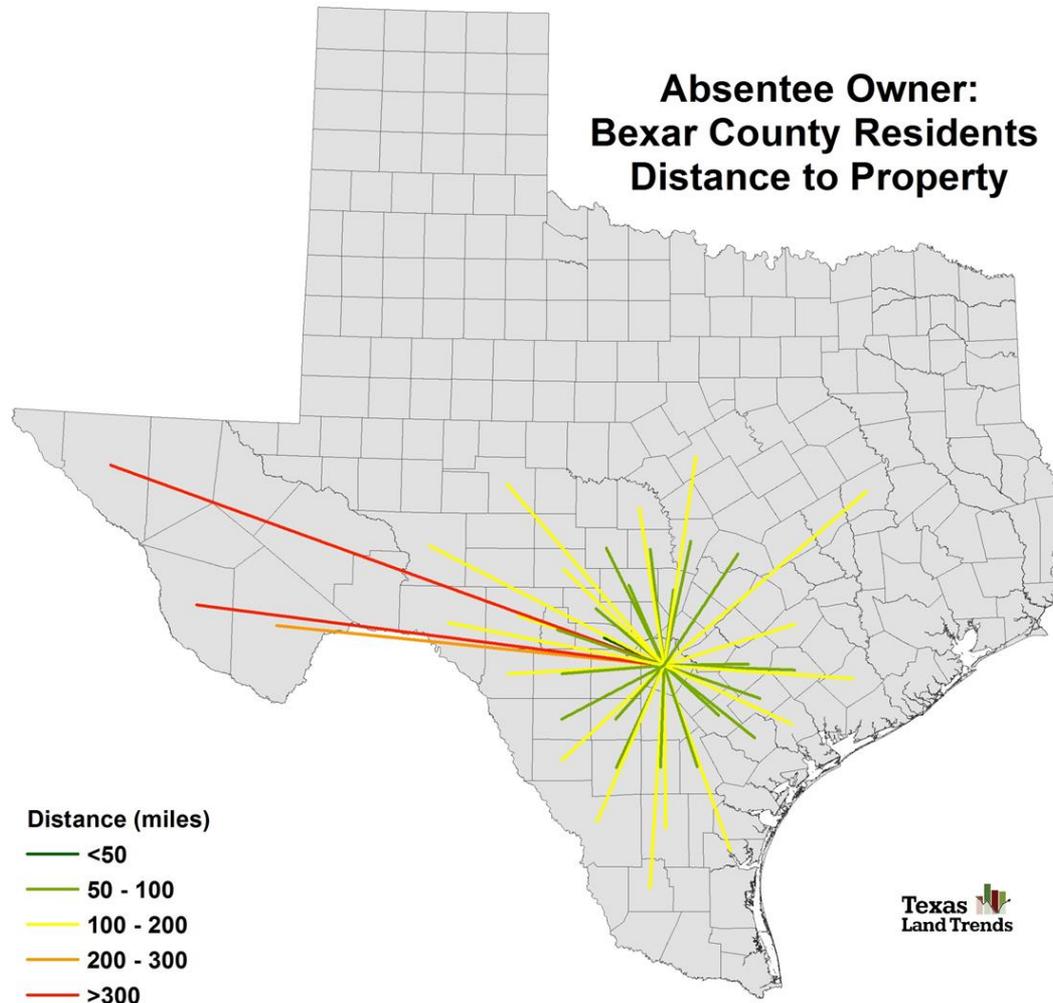
Questionnaire Responses by Type



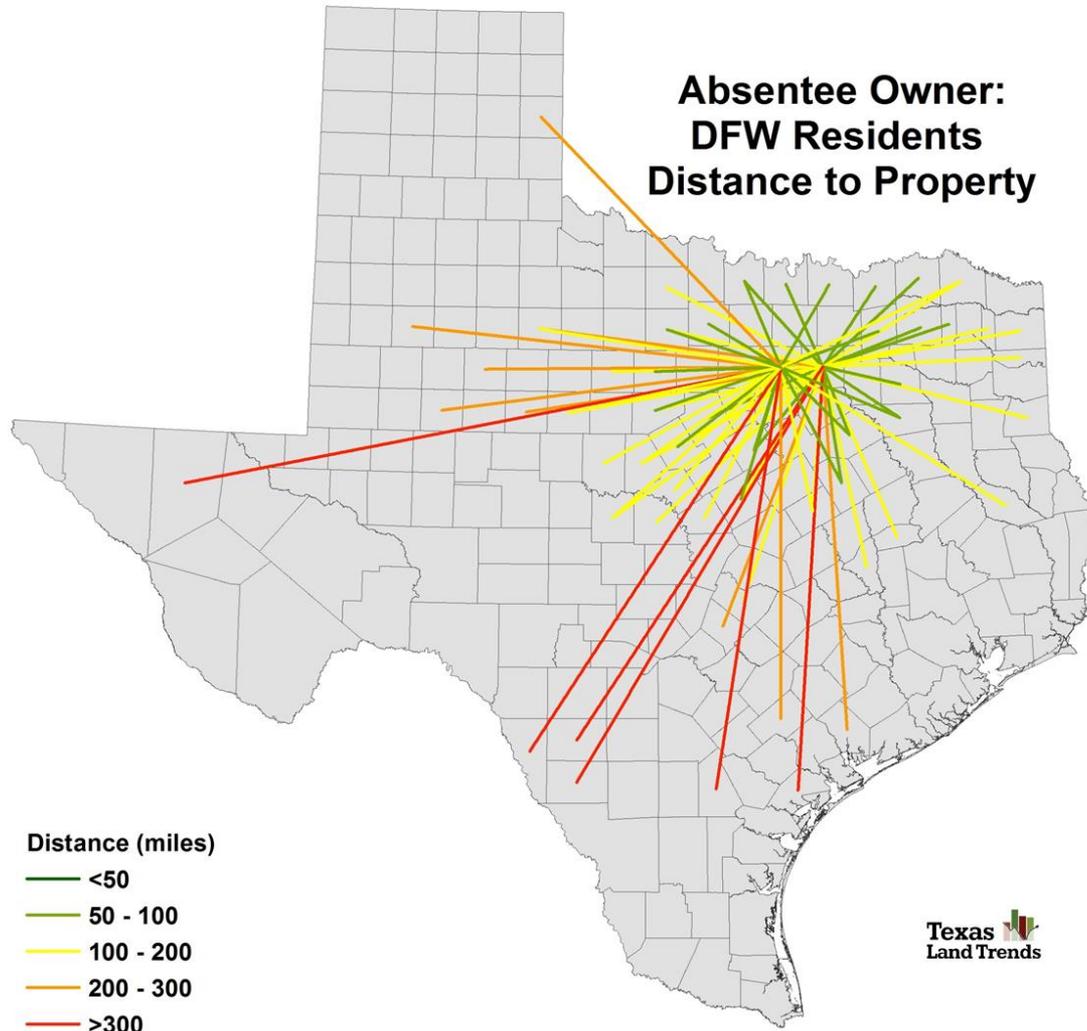
Average Distance from Houston



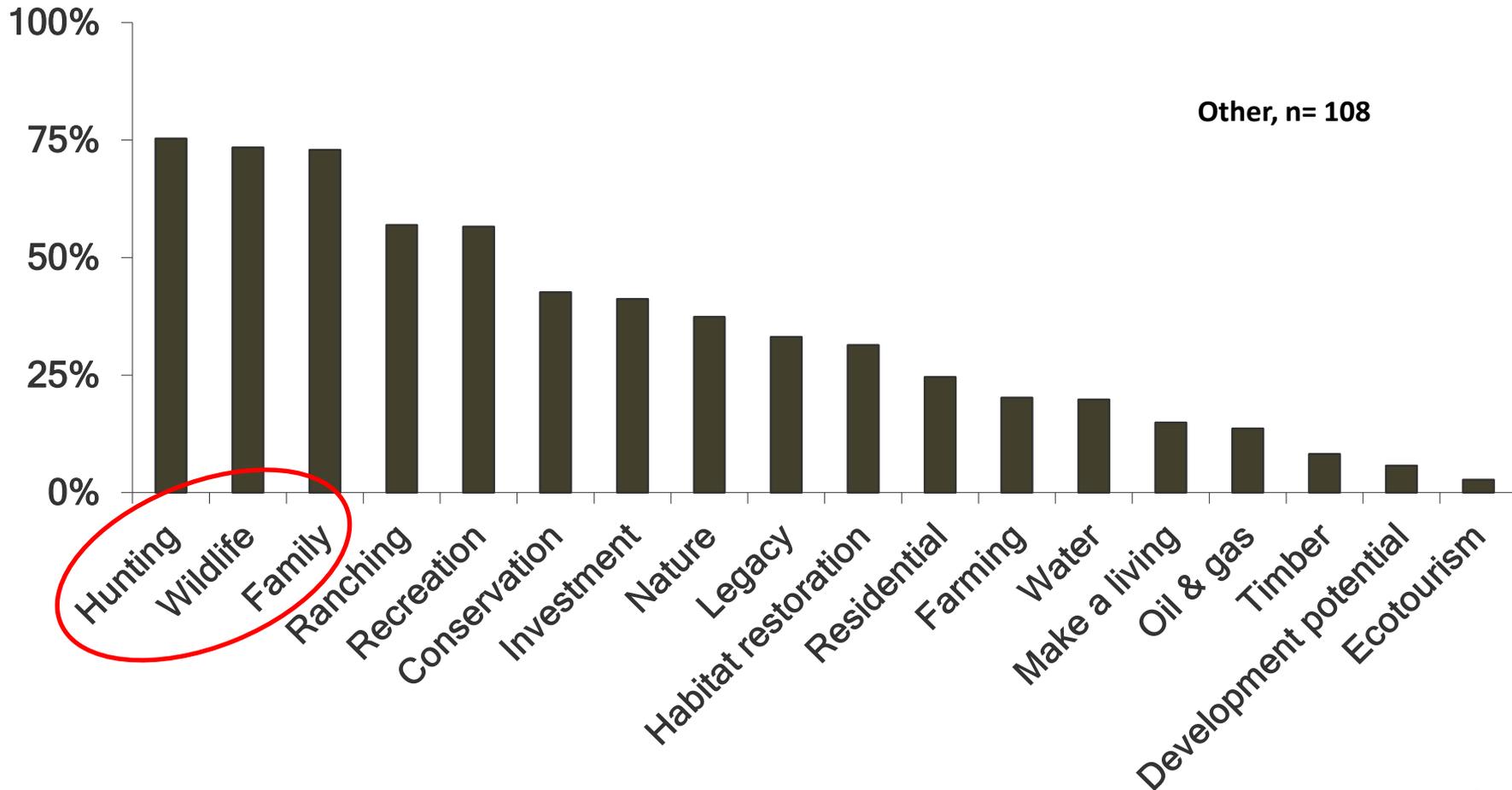
Average Distance from San Antonio



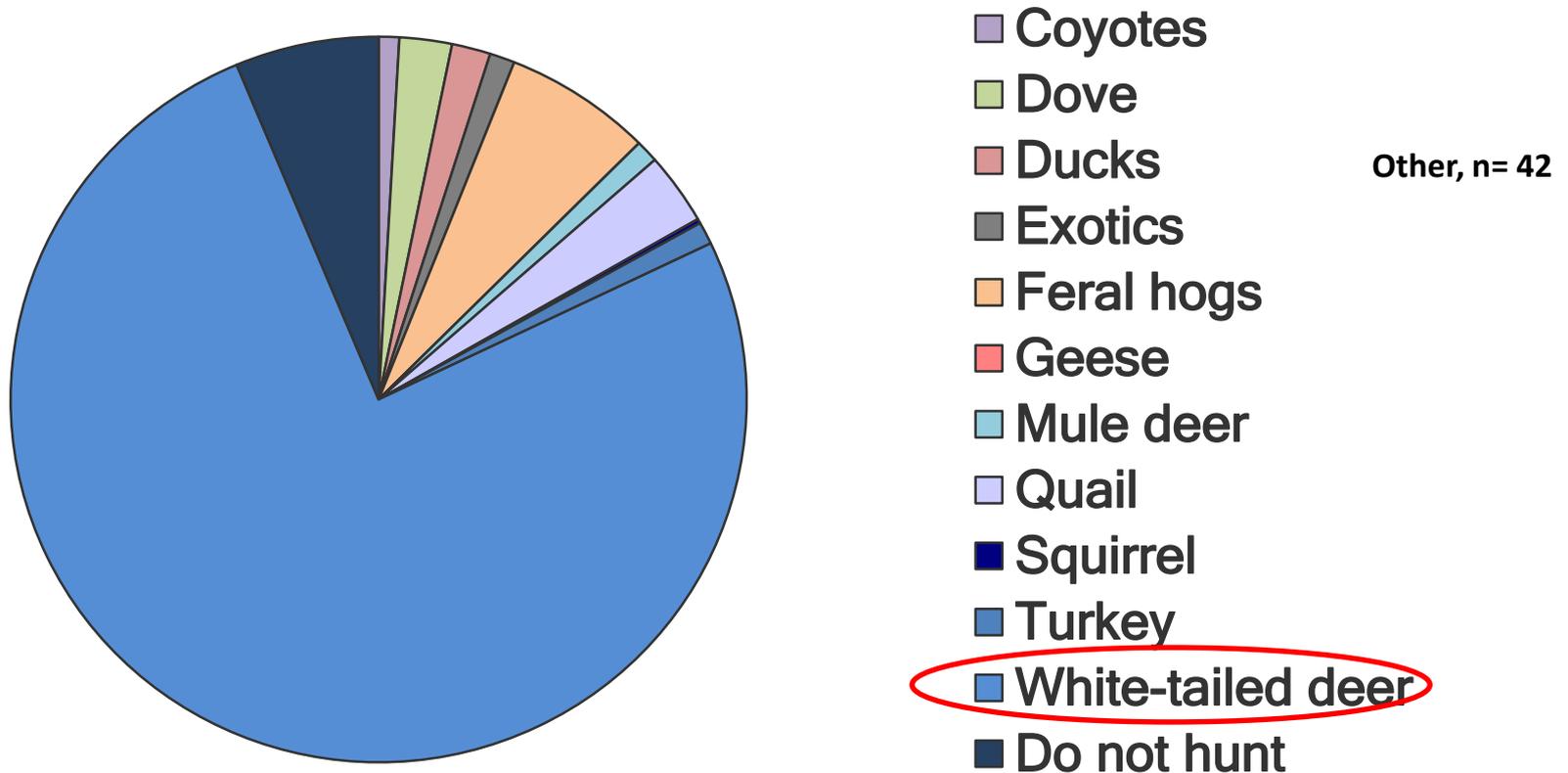
Average Distance from Dallas-Ft Worth



Which of the following reasons for owning land apply to you?



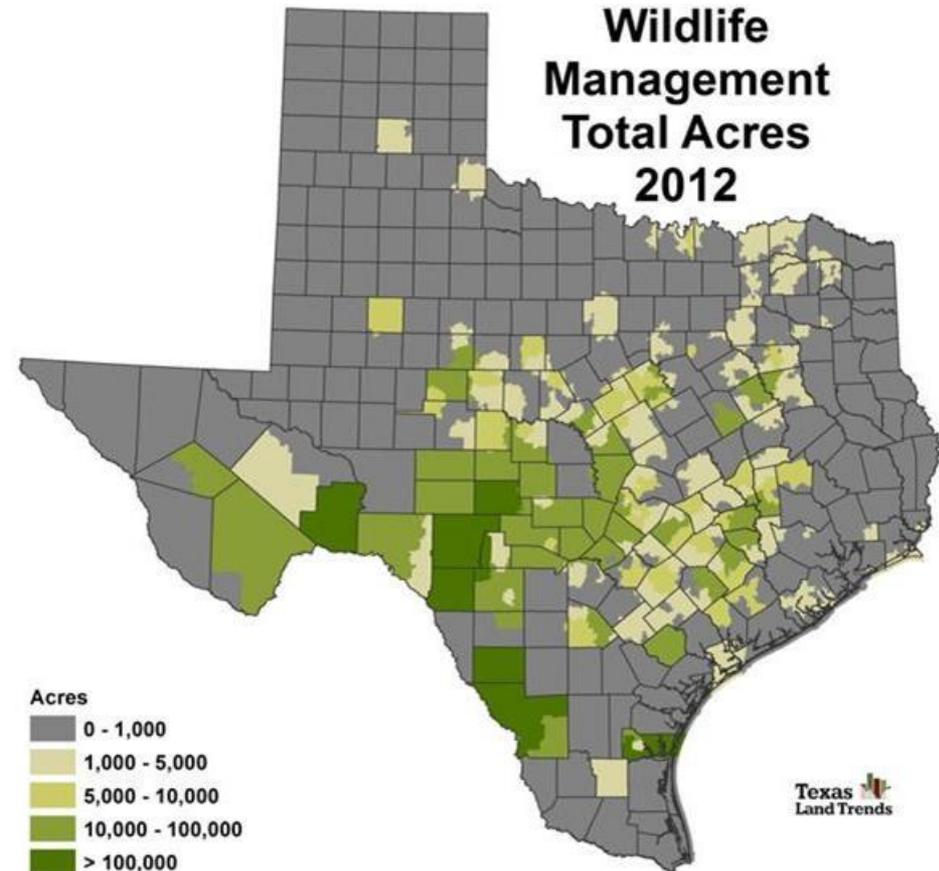
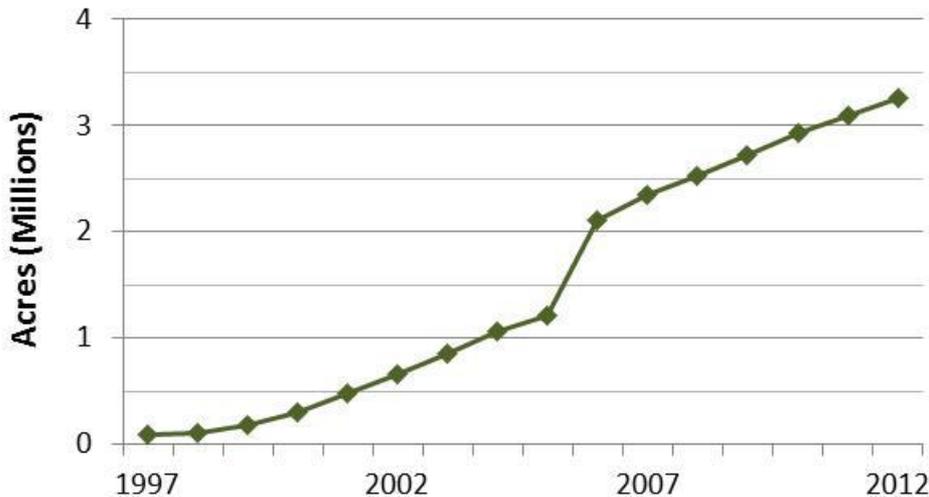
Primary wildlife species of interest?



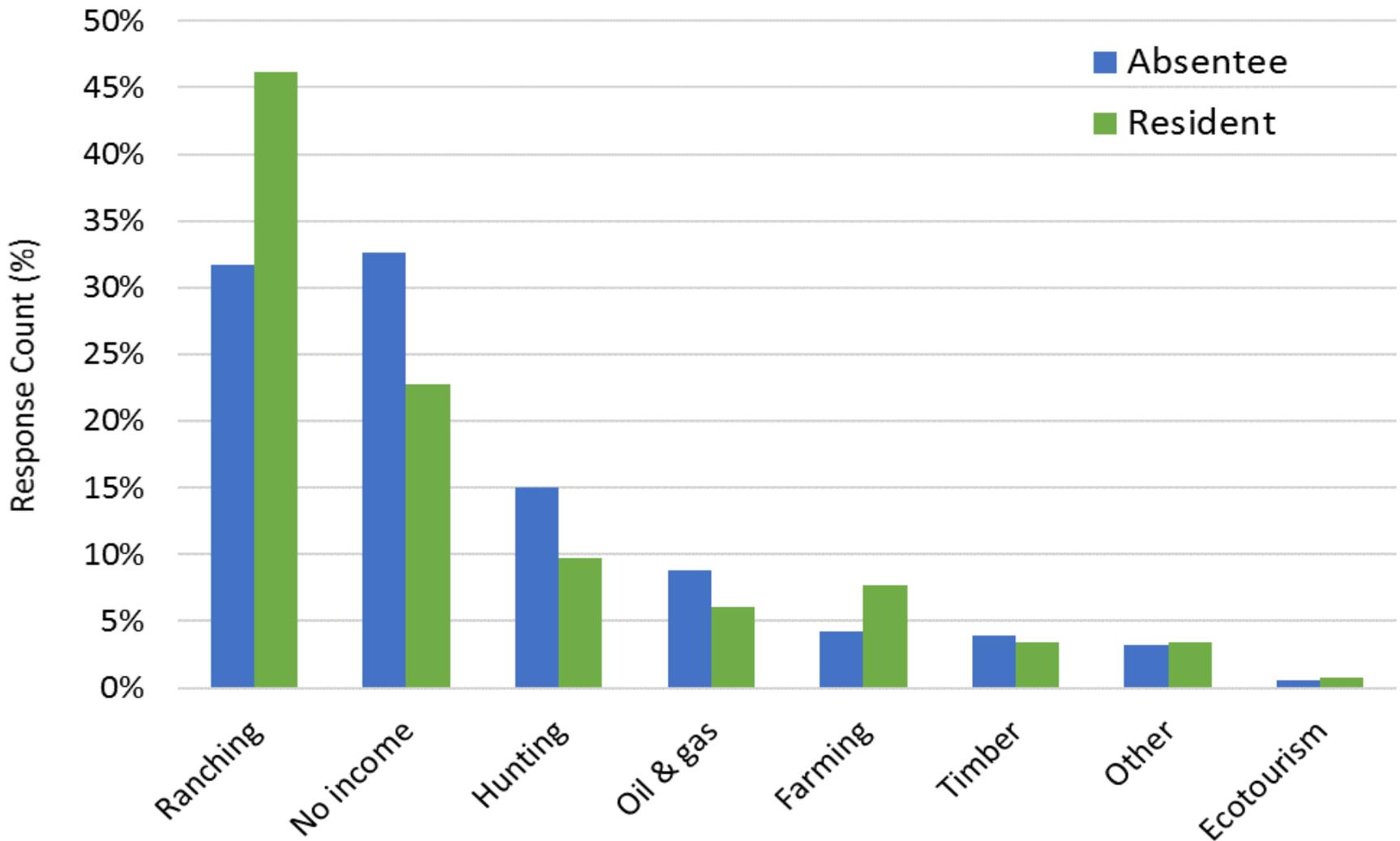
Wildlife Valuation Trends

- 1997 – 92K acres
- 2012 – 3.3 Million acres
- Gain of 3.2 Million acres

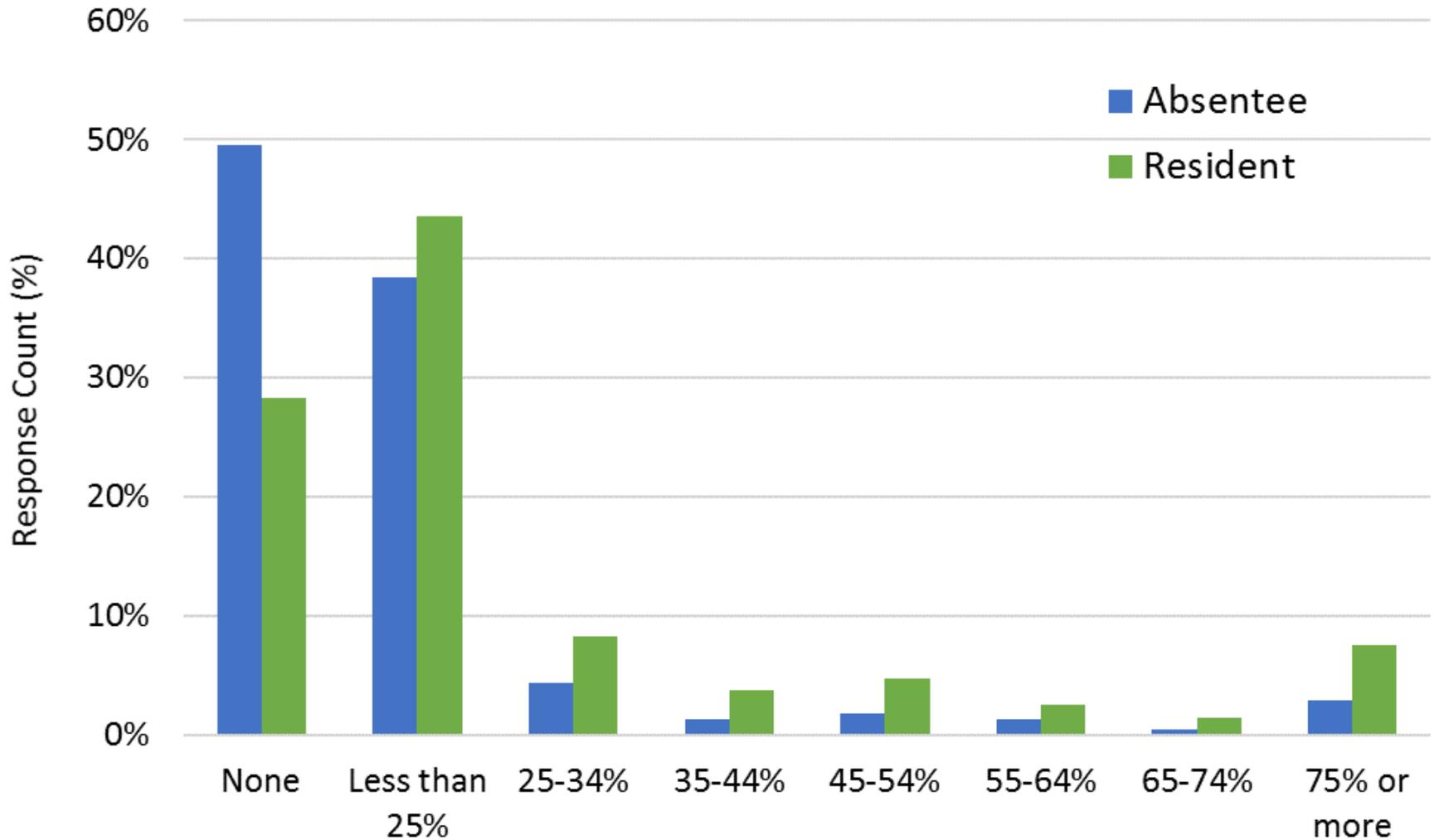
Total Wildlife Management



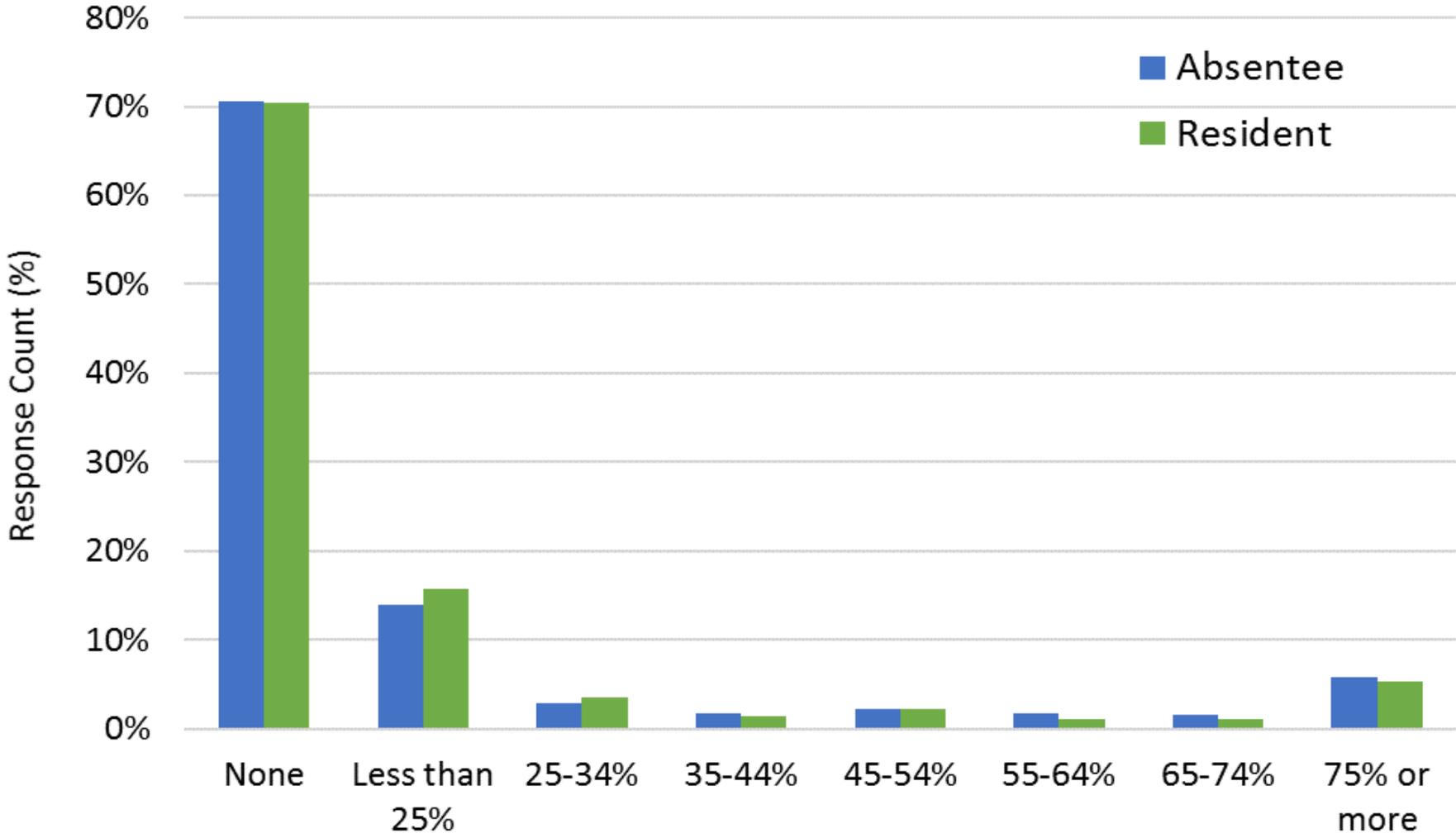
Sources of income from property?



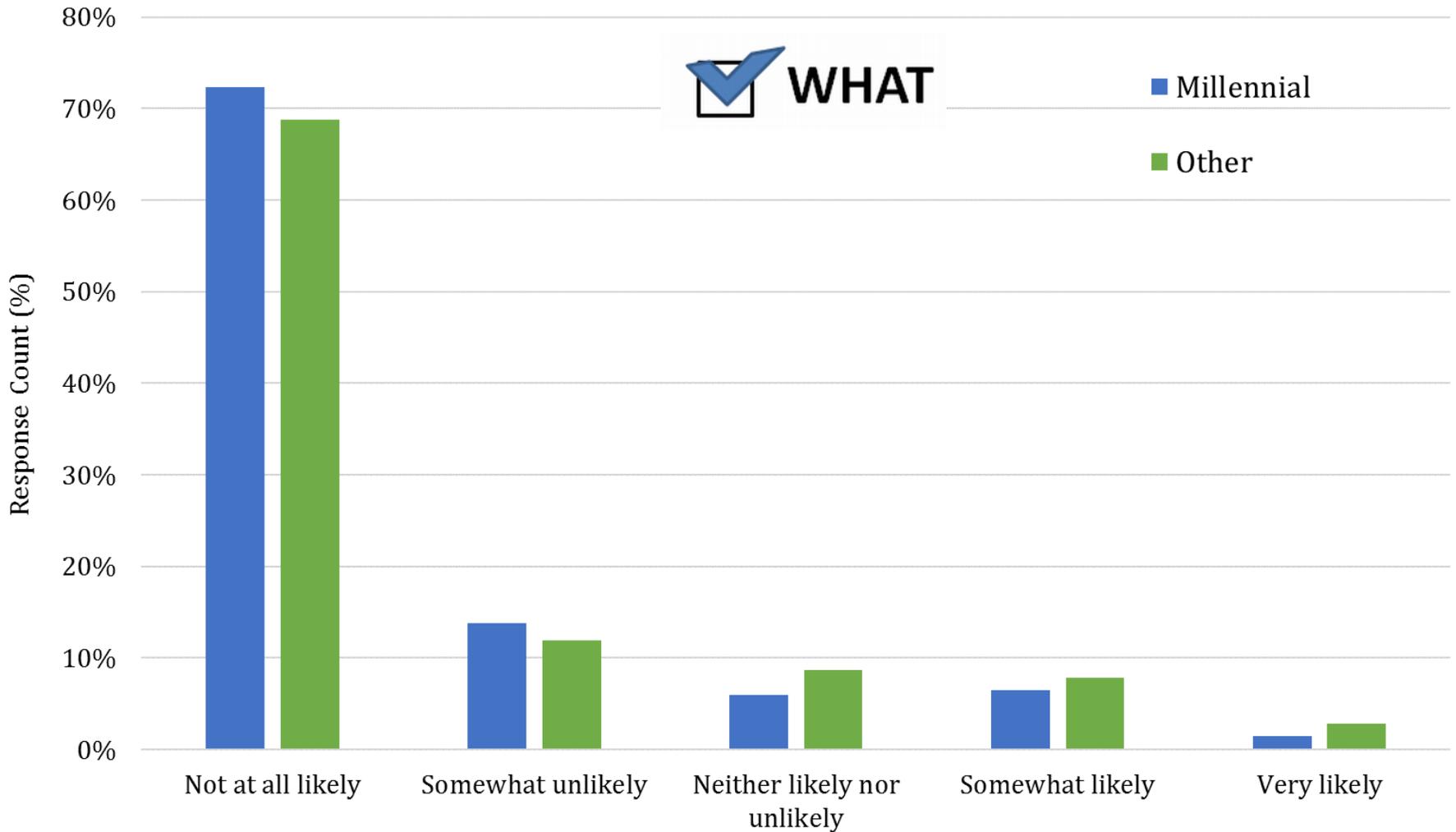
How much of annual income (%) from property?



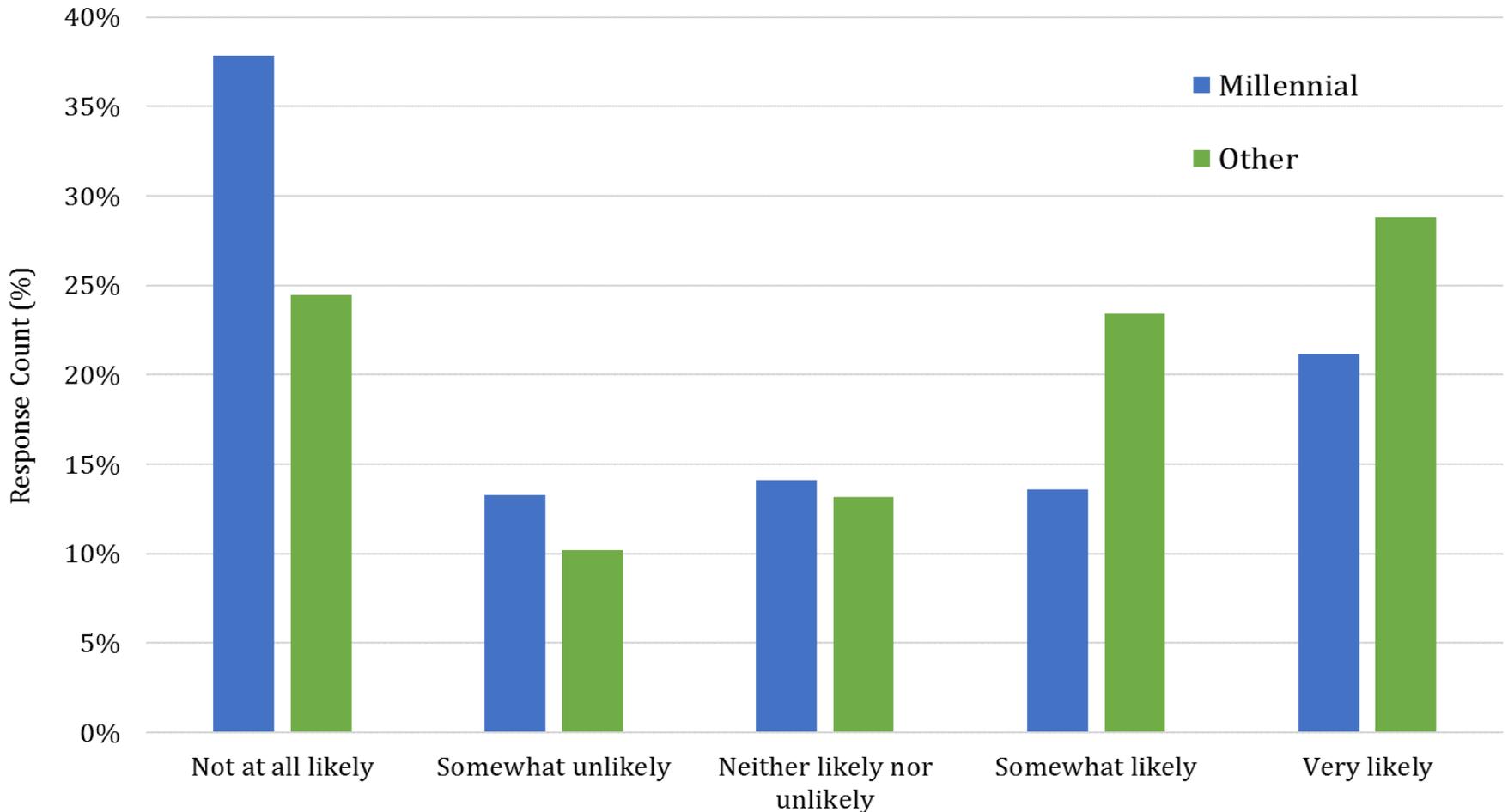
How much of property income (%) from wildlife?



In the next 10 years, how likely are you to... ...sell your land?

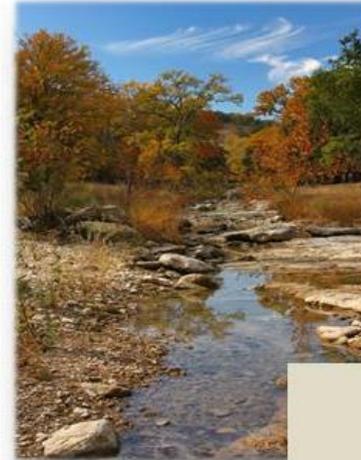


In the next 10 years, how likely are you to... ...transfer your land to family/loved one?



Final Thoughts...

- **More People** – Increasing human population, shifts in ethnicity and urban residents.
- **Impacts to Farms and Ranches** – Loss of working lands, fragmentation and conversion BUT not in all places...
- **Changing Landowner Perspectives** – Aging landowners, different objectives, largest intergenerational transfer.
- Communicate the *public* benefits of *private lands*...



Promoting Private Lands Stewardship through Research, Education, and Policy.



<http://nri.tamu.edu/>
<http://txlandtrends.org/>

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