

Texas Land Trends

A publication of the Texas A&M Natural Resources Institute
September 2017



**Texas landowner
changes and trends**

PUBLISHED BY

Texas A&M Natural Resources Institute

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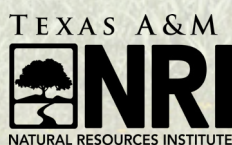
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*Citation: Lund, A.A., L.A. Smith, A.
Lopez, and R.R. Lopez. 2017. Texas
landowner changes and trends. Texas A&M
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txlandtrends.org



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Texas landowner changes and trends

About the Data

The goal of the *Texas Landowner Changes and Trends* report is to describe the state's growing population and changing rural landowners (also referred to as operators in this report). Through incorporation of several datasets, we developed a framework for evaluating landowner demographics among privately owned, rural working lands in Texas. This report considers racial and ethnic demographic datasets to better understand Texas' population and rural landowners, and follows the Census of Agriculture's racial classifications (i.e., African-American, Hispanic, White, and Other [including Asian, Multi-Race, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander]).

Data Disclaimer

Several datasets and sources were used in the drafting of this report. Due to differences in data collection and methodology among these data sources, there are some differences in reported numbers. Missing data and undisclosed data due to confidentiality concerns may also result in discrepancies between the various data sources used in this report. Note the U.S. Department of Agriculture (USDA) National Agricultural Statistics Service's (NASS) Census of Agriculture conducts nationwide surveys every five years, and most recently released data for the year 2012; the current survey for 2017 will not be publicly available until 2019. The data sources used in this report include:

- USDA NASS Census of Agriculture
- United States Census Bureau
- Texas Demographic Center
- Texas State Comptroller of Public Accounts

INTRODUCTION

Texas is changing. Rural working lands in Texas are selling, subdividing, and converting to alternative land uses at an unprecedented rate. Rapid population growth across the state continues to influence land fragmentation and land use changes, impacting rural working lands and the natural resources they provide. Landowner factors such as age, land residency, and land-use preferences influence management decisions on rural working lands. Public benefits derived from these lands, such as clean air and water, fish and wildlife habitat, ecosystem services, and recreation, are needed but are limited by a shrinking open space land mass. Understanding Texas' changing population and land management needs can help inform land development planning, education, and policies geared toward sustaining the states' rich open spaces and natural resources for generations to come.

POPULATION

They say everything is bigger in Texas, and the same can be said about the state's ever-growing human population. Since the early 1900's, Texas has outpaced the nation in population growth. Most recent increases averaged about 2% per year between 1997 to 2012, while the national average was approximately 2% for the entire 15-year period (Figure 1). The state's various attractions, including its central location, ample natural resources, vast landscapes, and business-friendly environment, have likely contributed to the state's net migration patterns and employment sector gains. State demographer projections indicate continued population growth should be expected over the next 40 years, and could potentially double by 2050 (Figure 2).

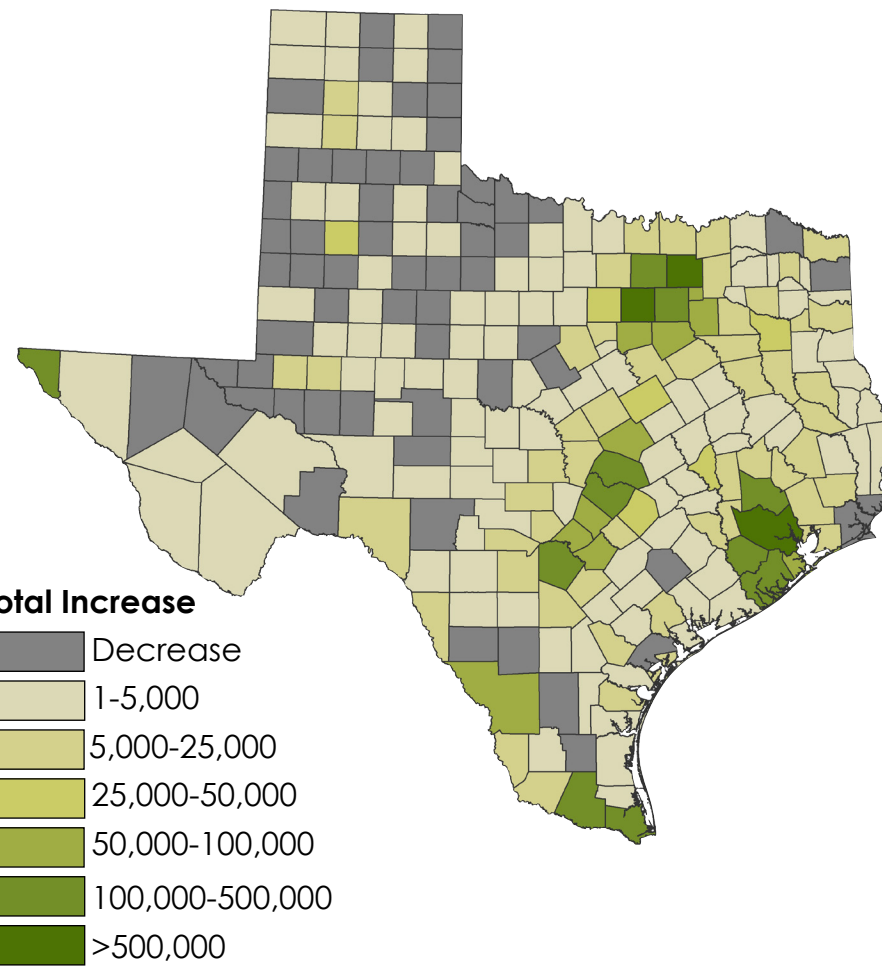


Figure 1. Total population increase by county (1997-2012)

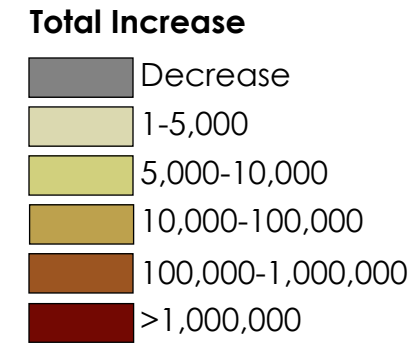
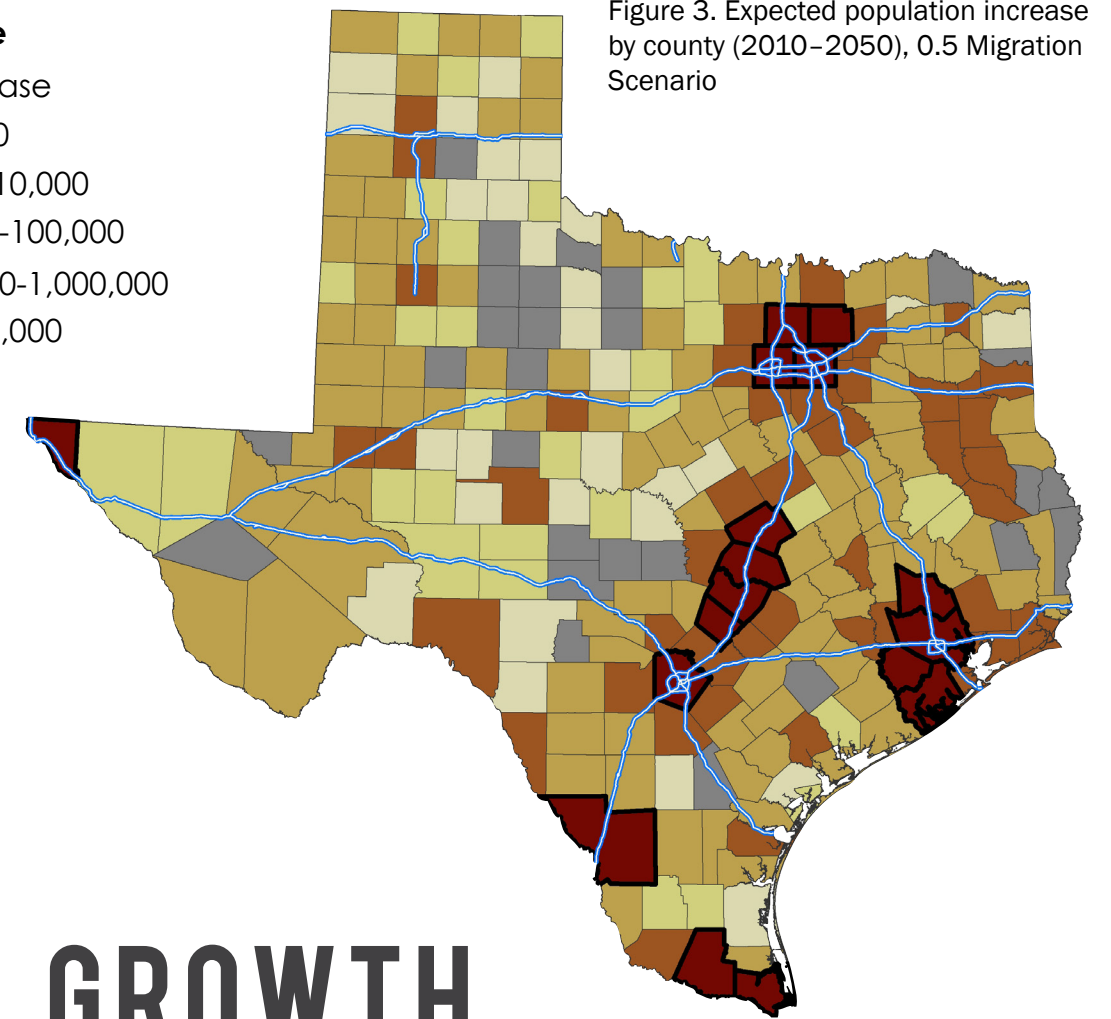


Figure 3. Expected population increase by county (2010-2050), 0.5 Migration Scenario



URBAN GROWTH

The movement and distribution of people on the landscape has impacted land use and ownership patterns across the state. *Texas Land Trends* data suggests increases in population density in urban centers may influence private, rural ownerships and subsequent changes to current land uses in Texas due to the increased needs for development, resulting in urban sprawl outside city limits. State migration scenarios predict the fastest growth from 2010 to 2050 will occur in the suburban ring surrounding large urban counties, including Harris, Dallas, Tarrant, Bexar, and Travis (Figure 3). This projection mirrors population growth trends from 1997 to 2012, where the greatest increases over the 15-year period occurred within an area known as the "Texas triangle." During this period, other counties with major urban centers, such as El Paso, Cameron, Hidalgo, and Webb counties, demonstrated similar trends with development around urban outskirts.

TEXAS TRIANGLE

The Texas triangle includes counties within and surrounding the metroplexes of Austin, San Antonio, Houston, and Dallas/Fort Worth.



1.0 Migration Scenario—population growth with a migration rate equal to growth patterns observed from 2000-2010

0.5 Migration Scenario—population growth at a migration rate that is half of the observed population growth from 2000-2010

Zero Migration Scenario—population growth with zero migration

25M

2010 2015 2020 2025 2030 2035 2040 2045 2050

54M

41M

31M

Figure 2. Projected population increase (2010-2050)

AGE AND INTERGENERATIONAL LAND TRANSFER



Texas Land Trends demographic data highlights a statewide increase in average operator age, a 4-year increase since 1997 (Figures 4 and 5). Over the next decade, Texas will experience the largest intergenerational land transfer and potential change in land use to date. Aging rural landowners in Texas will soon transfer working lands to younger generations and first-time landowners. These new landowners may have less experience or connection with the land, lack basic knowledge of agricultural operations and management, or lack the financial capital to maintain the land once inherited.

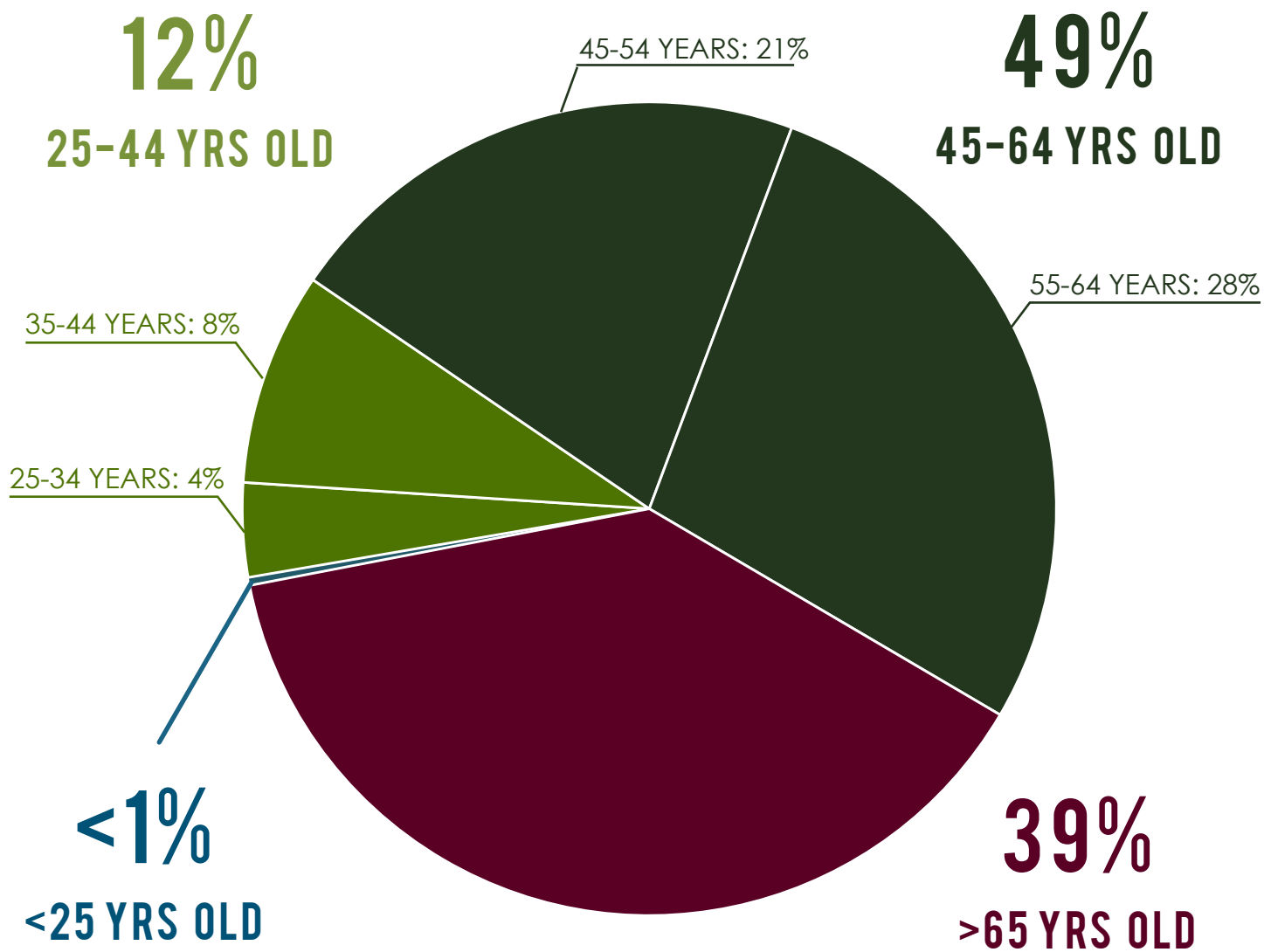
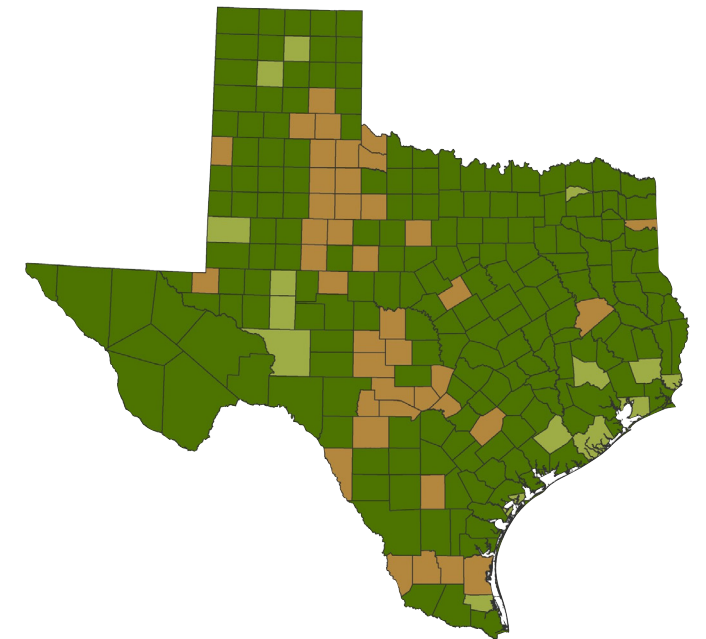
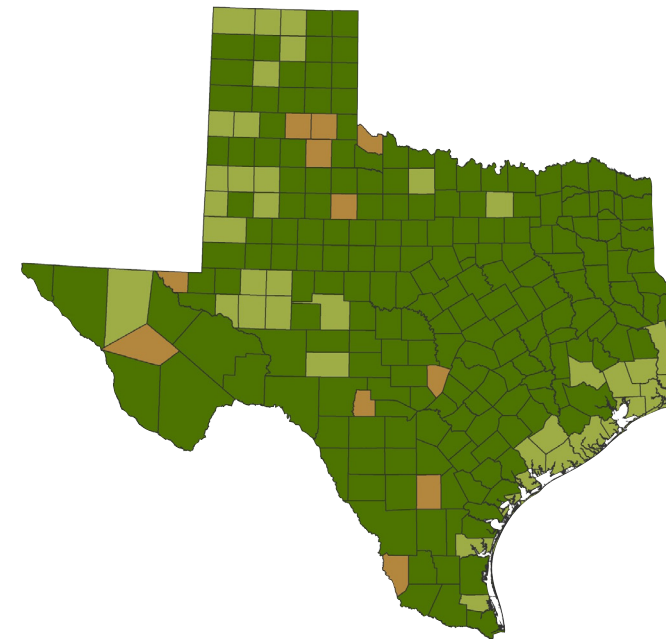


Figure 4. Percent of operators by age group (2012)

AVERAGE LANDOWNER AGE

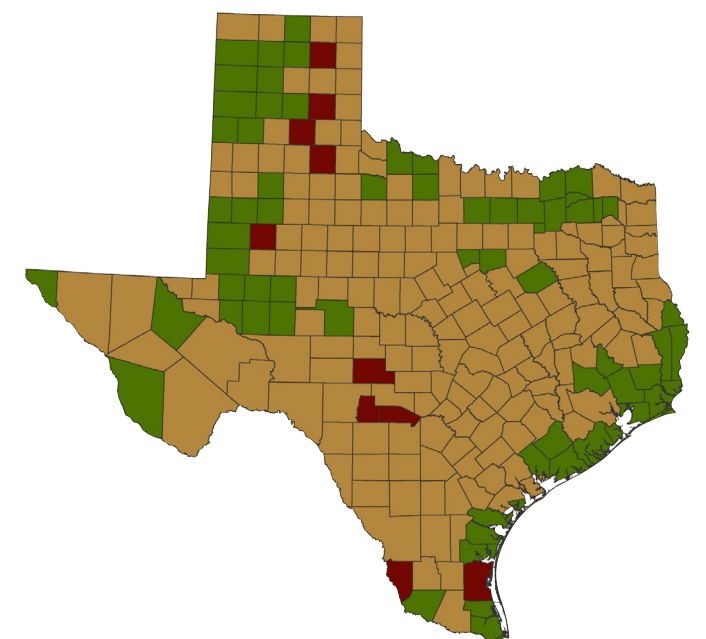
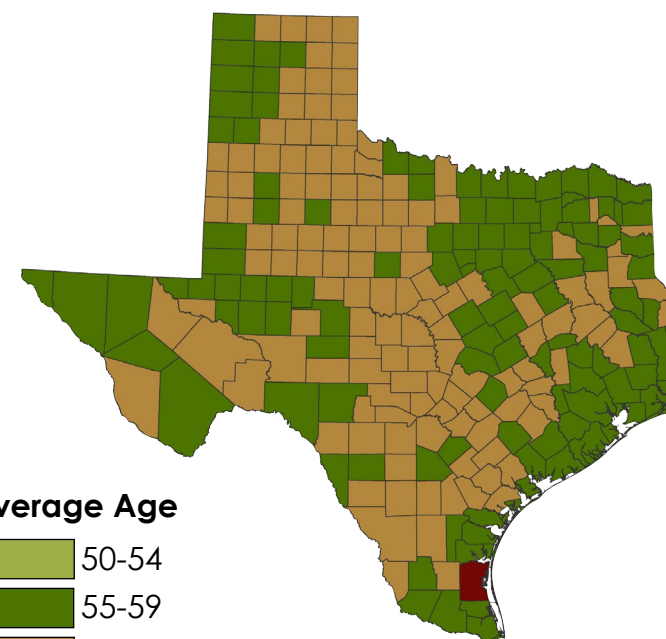
1997
56 YEARS

2002
57 YEARS



2007
59 YEARS

2012
60 YEARS



Average Age

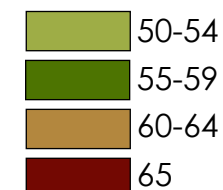
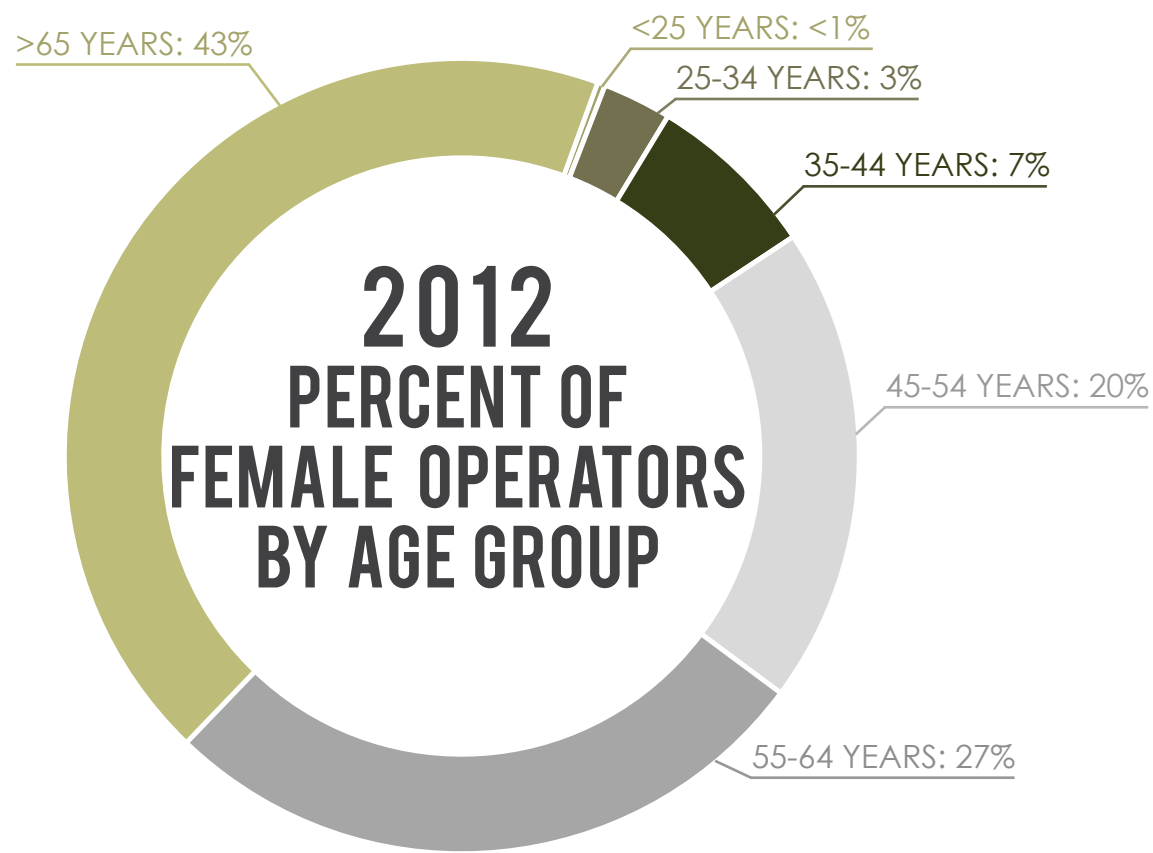


Figure 5. Average age of operators by county (1997-2012)

WOMEN & MEN

While men still make up the majority of landowners in Texas (85% of operations in 2012), the presence of women as primary operators and the number of acres they manage have increased since 1997 (Figure 6). This gain could be attributed to unexpected changes in ownership, such as the death of a spouse. In 2012, the average age of female operators in Texas was 63 years old, slightly higher than the overall average landowner age (60 years old). As landowners across Texas age, continued changes in land ownership and operators are likely to continue to shift.



	Operations	Average Operation Size (acres)	Acres Operated	Ratio of Female to Male Operators
1997				
MALE	202,463	593	120,057,426	10 Male Icons
FEMALE	25,710	398	10,244,051	1 Female Icon, 5 Male Icons
2012				
MALE	210,357	544	114,343,873	10 Male Icons
FEMALE	38,452	307	11,809,537	1 Female Icon, 5 Male Icons

FEMALE OPERATIONS

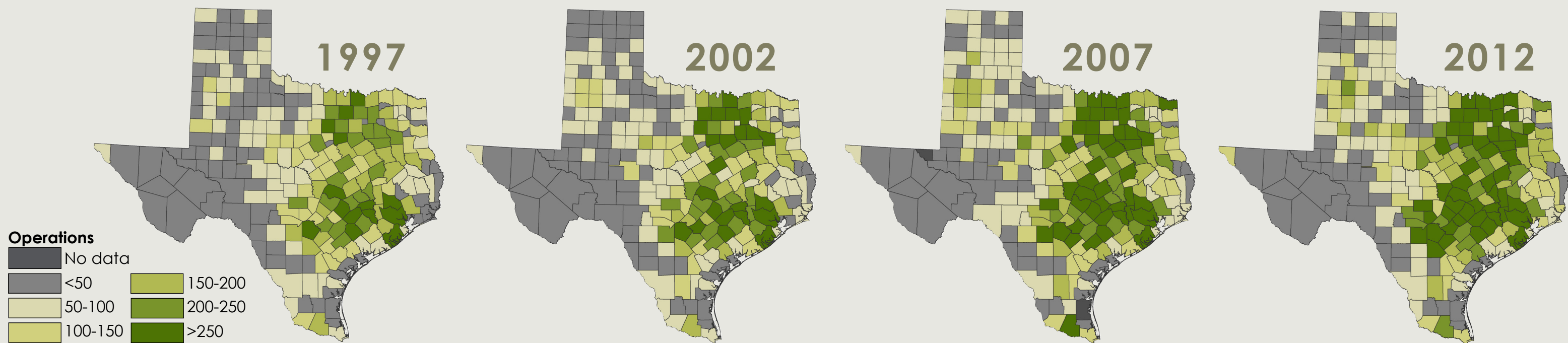


Figure 6. Number of female operations by county (1997–2012)

RACE & ETHNICITY

The number of operations reported by the USDA's NASS Census of Agriculture demographic dataset reveals minor changes in Texas' landowner base since 2007, the first reporting year of this data. Statewide data indicates increasing trends in both African-American and Hispanic-owned operations and acres over the 5-year period from 2007 to 2012. Future population increases may contribute to continued upward trends in minority landowner groups in future years. According to state population projections, the Hispanic population, for example, made up 38% of the state's population in 2010 and will likely surpass all other ethnicities and make up 53% of the entire population by 2050 (Figure 7).

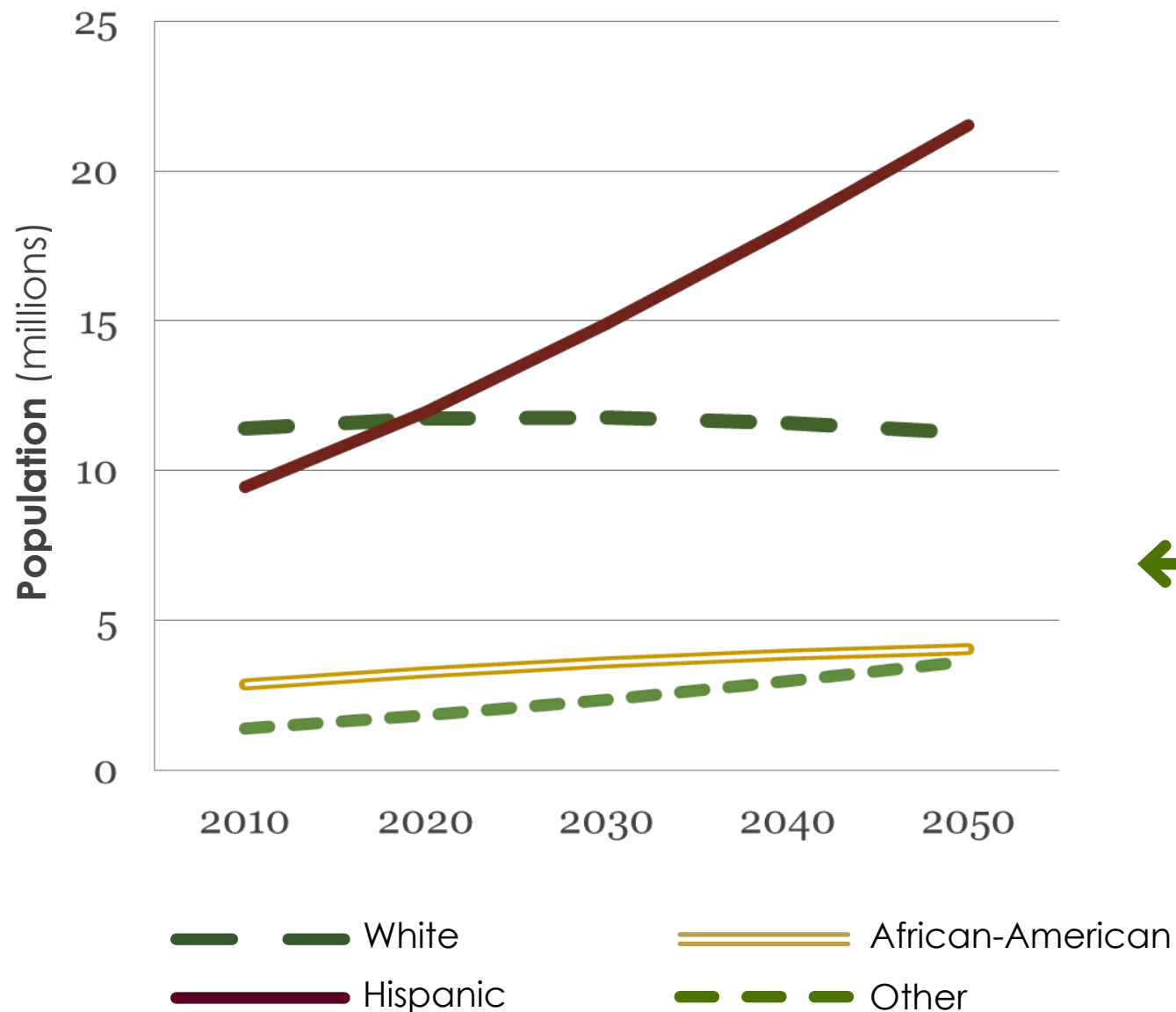
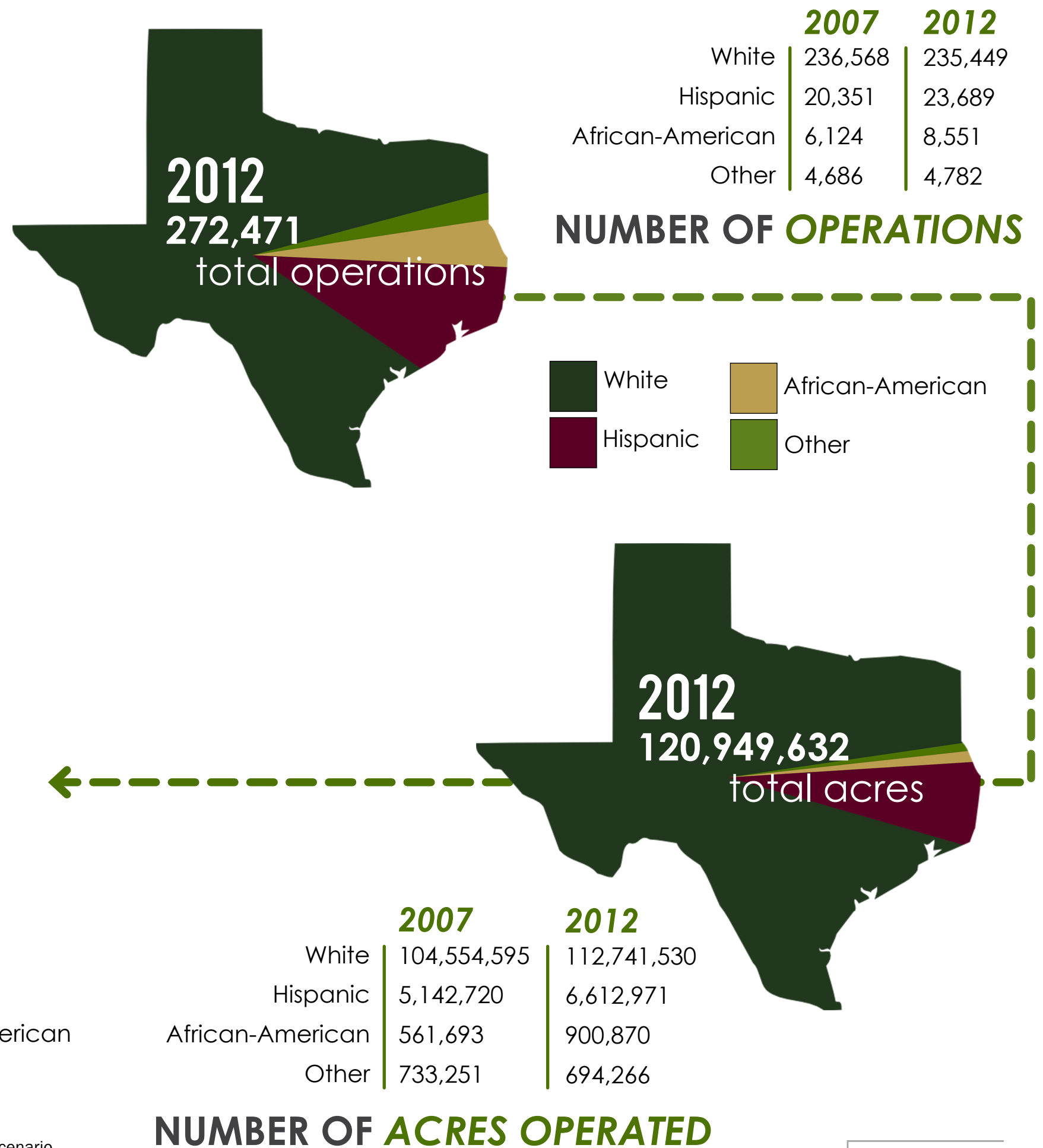


Figure 7. Texas projected population increase by race/ethnicity (2010–2050), 0.5 Migration Scenario



ABSENTEE OR RESIDENT

As Texas' working lands undergo shifts in ownership and management, an important variable comes to light—landowner residence. Absentee landowners, or those who own the land but do not live on it, are often perceived to live primarily in urban areas and use their rural lands solely for recreational or financial purposes. During the 1997 to 2012 period, absentee ownership remained relatively consistent, fluctuating within a range of about 5,000 operators across the state, suggesting a minimal turnover of ownership in this category (Figure 8). Conversely, statewide data highlights a substantial gain of about 40,000 new resident landowners, or those who own and reside on the land, during this same period (Figure 8). Intergenerational land transfers, paired with rising land market values and expanding urban centers, all lend themselves to an overall increase in the number of new operators, particularly in areas in close proximity to urban centers.

248,809 OWNERSHIPS in 2012

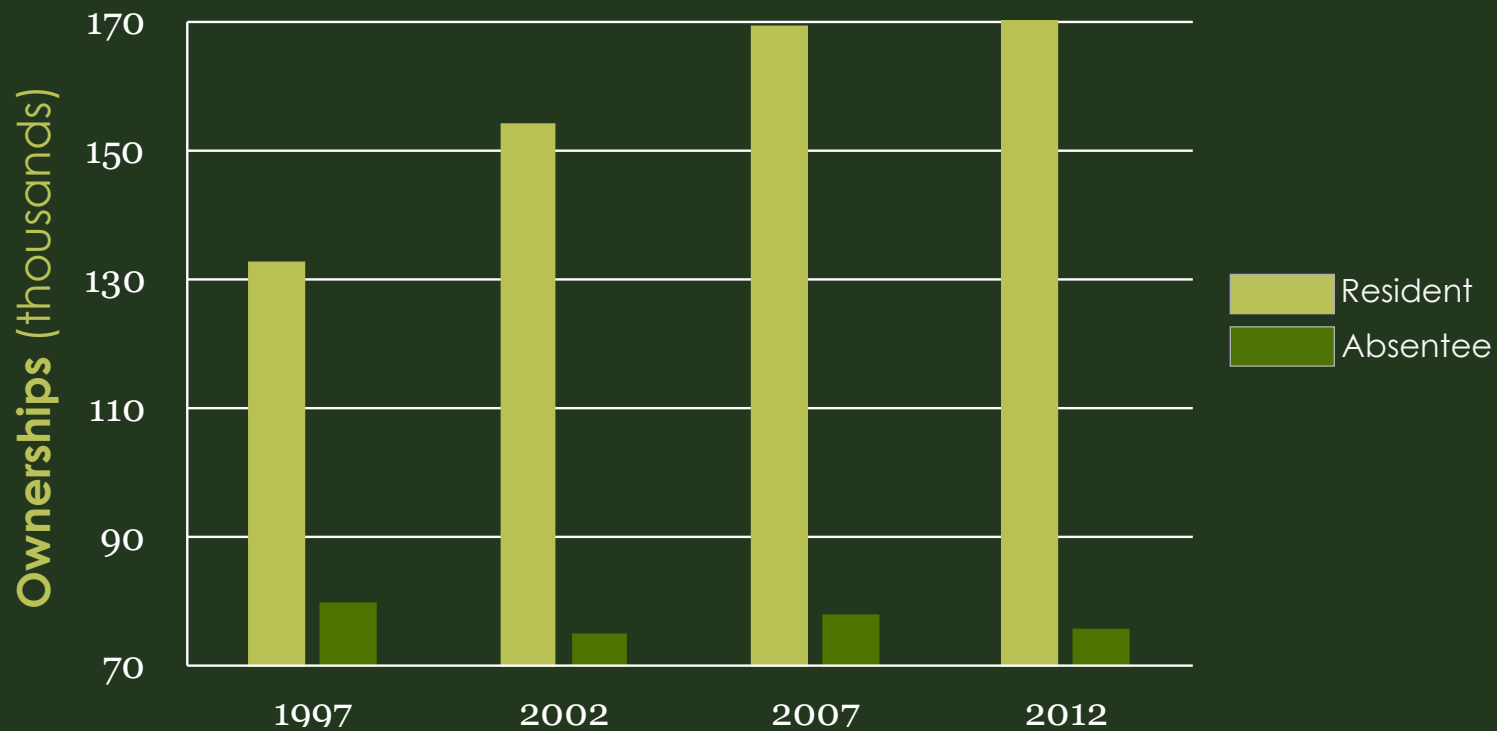
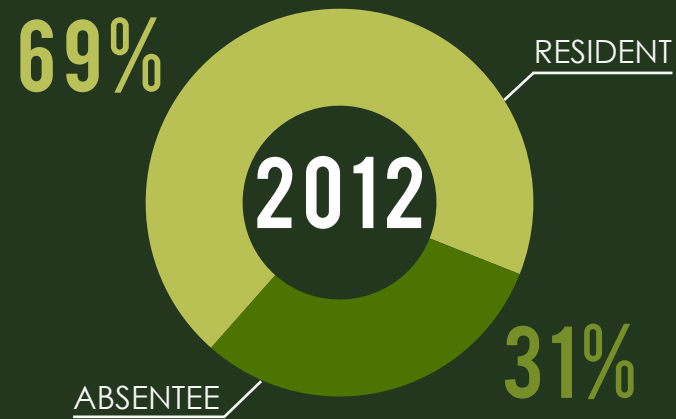
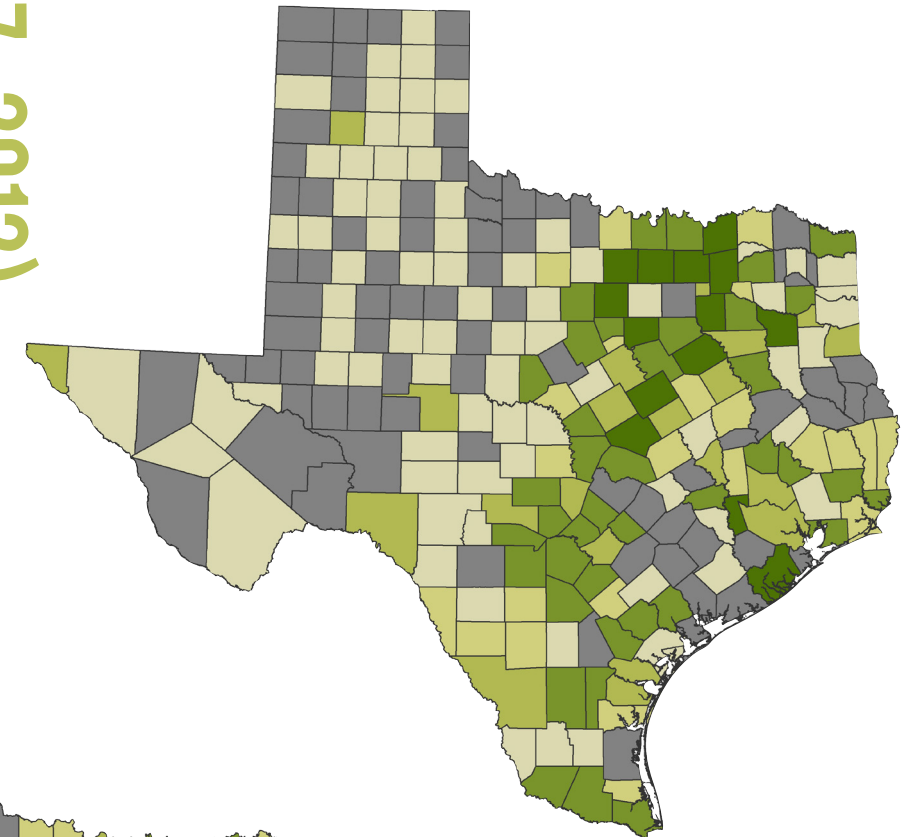


Figure 8. Total change in resident and absentee land ownership (1997–2012)

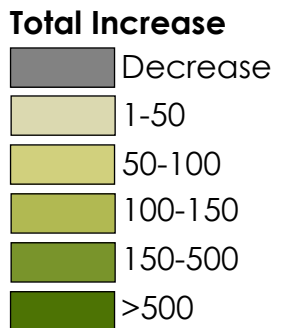
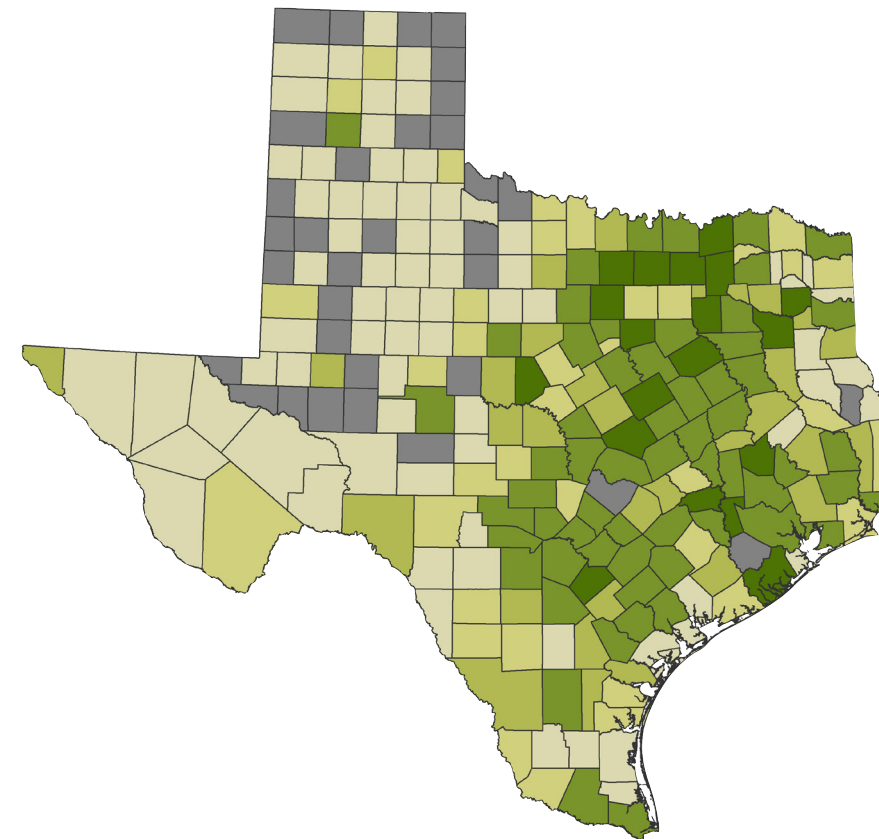
Texas Land Trends data reveals an important trend in the concentration and rise of resident landowners and small-acreage operations (<100 acres in size). The number of resident landowners and small-acreage farms both appear to increase together, indicating a possible connection between fragmentation of working lands and residency of Texas rural landowners (Figures 9 and 10).

TRENDS(1997-2012)

SMALL-ACREAGE OPERATIONS



RESIDENT LANDOWNERS



(Top) Figure 9. Total change in small acreage operations (<100 acres) by county (1997–2012)

(Bottom) Figure 10. Total change in resident landowners by county (1997–2012)

LAND OWNERSHIP

Statewide ownership data indicates the majority of landowners (approximately 84%) hold small operations (<500 acres in size). Small ownerships in Texas experienced the greatest rise in individual ownerships with a net increase of about 24,000 farms and ranches from 1997 to 2012. According to *Texas Land Trends* data, there appears to be an important connection between land ownership size and the profitability of a farm or ranch operation. As property size decreases, the ability to operate the land as a primary source of income for traditional farming, ranching, and forestry uses also decreases (Figure 11). As a result, landowners with smaller tracts may be less able to use their land to its fullest potential as a means of primary income, solely because of its small size. This does not diminish the value of rural lands as an income source for landowners but instead suggests the need for multiple streams of income. Operational challenges associated with smaller property sizes often facilitate the transition of land from one use to another (e.g., farm to residential development, etc.), thus creating potential loss of working lands and natural resource services.

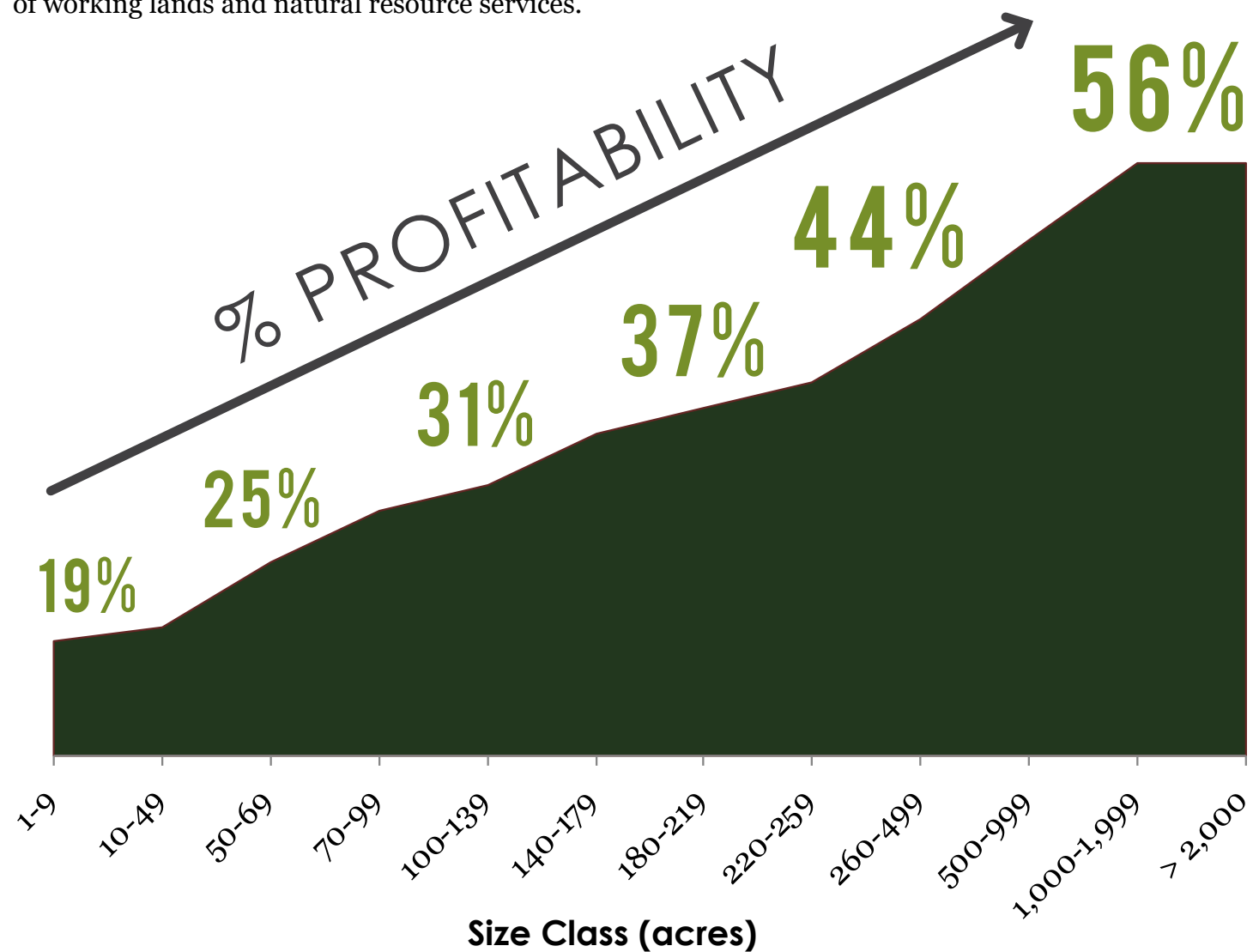


Figure 11. Percent of farm and ranch operations reporting positive net proceeds by ownership size (2012)

LANDOWNER PERSPECTIVE

Population and demographic changes greatly influence Texas' working lands, as private landowners, who own the majority of land in the state, are ultimately responsible for the stewardship of working lands. The states' people, places, and perspectives change over time, innovative educational and financial options for landowners are needed to support and promote working land conservation and management.

TX LANDOWNER SNAPSHOT

2012 USDA Census of Agriculture Data



65,547

are new to ag operations
(<10 years on current operation)

42%

depend on the operation as their primary occupation

Primary operator

85%

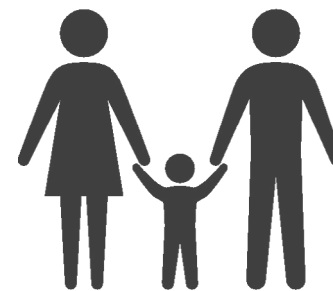


15%



TOP 3 REASONS FOR OWNING LAND?

2016 Texas Parks & Wildlife Department/Texas A&M Natural Resources Institute Landowner Survey



Family Recreation



Hunting



Wildlife Enjoyment

Absentee landowner—landowners who do not reside permanently on their land.

Ethnicity—the concept of social grouping with common national or cultural traditions or heritage. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

Farm/Operation/Ownership—farms, ranches, or forests from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the Census of Agriculture census year. See also *working lands*.

Land fragmentation—the spatial discontinuity of habitat patches or land cover.

Net migration—includes both domestic in-migration and international immigration.

Open space—land that is valued for natural processes and wildlife, agricultural and forest production, aesthetic beauty, active and passive recreation, and other public benefits. Open space may be protected or unprotected, public or private lands.

Operator/Landowner—a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, and marketing. The operator may be the owner, a member of the owner's household, a hired manager, a tenant, a renter, or a sharecropper. If a person rents land to others or has land worked on shares by others, he/she is considered the operator only of the land that is retained for his/her own operation. The census collected information on the total number of operators, the total number of women operators, and demographic information for up to three operators per farm.

Ownership fragmentation—the break-up of large farms, ranches, and forests into smaller ownership sizes.

Principal operator—the person primarily responsible for the on-site, day-to-day operation of the farm or ranch business. This person may be a hired manager or business manager. See Operators for further explanation.

Race—according to the Census of Agriculture (2012), race (of operator) is defined as African-American, Hispanic, White, and Other (including Asian, Multi-Race, American Indian or Alaska native, and native Hawaiian or other Pacific Islander).

Resident landowner—landowners who live and reside on their land.

Rural—characterized by low density development and low population density.

Urban—characterized by high density development and high population density.

Working lands—privately owned farms, ranches, and forests that produce food and fiber, support rural economies, and provide wildlife habitat, clean air and water, and recreational opportunities.


- Donnelly, S., and T. P. Evans. 2008. Characterizing spatial patterns of land ownership at the parcel level in south-central Indiana, 1928–1997. *Landscape and Urban Planning* 84:230-240.
- Kjelland, M. E., U. P. Kreuter, G. A. Clendenin, R. N. Wilkins, X. B. Wu, E. G. Afanador, and W. E. Grant. 2007. Factors related to spatial patterns of rural land fragmentation in Texas. *Environmental Management* 40:231-244.
- Maler, G., and H. D. Hunt. 2010. *The changing face of Texas*. Texas A&M University Real Estate Center, College Station, Texas, USA.
- Petersen, D., and L. Assanie. 2005. *The face of Texas : jobs, people, business, change*. Dallas, TX : Federal Reserve Bank of Dallas, [2005].
- Petrzelka, P., Z. Ma, and S. Malin. 2013. The elephant in the room: Absentee landowner issues in conservation and land management. *Land Use Policy* 30:157-166.
- Pope III, C. A. 1985. Agricultural productive and consumptive use components of rural land values in Texas. *American Journal of Agricultural Economics* 67:81-86.
- Potter, L. B., and N. Hoque. 2014. *Texas population projections, 2010 to 2050*. Texas Demographic Center, Austin, Texas, USA.
- Texas A&M Institute of Renewable Natural Resources. 2014. *Texas Land Trends: Status update and trends of Texas rural working lands*. Texas A&M AgriLife Extension Service.
- Valencia, L., L. Potter, S. Robinson, B. Pecotte, S. White, and H. You. 2016. *Aging in Texas: Introduction*. Texas Demographic Center, Austin, Texas, USA.
- Wilkins, R. N., D. G. Brown, R. J. Conner, J. Engl, C. Gilliland, A. Hays, R. D. Slack, and D. W. Steinbach. 2000. *Fragmented lands: Changing land ownership in Texas*. The Texas A&M University System, Agriculture Program, College Station, Texas, USA.





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