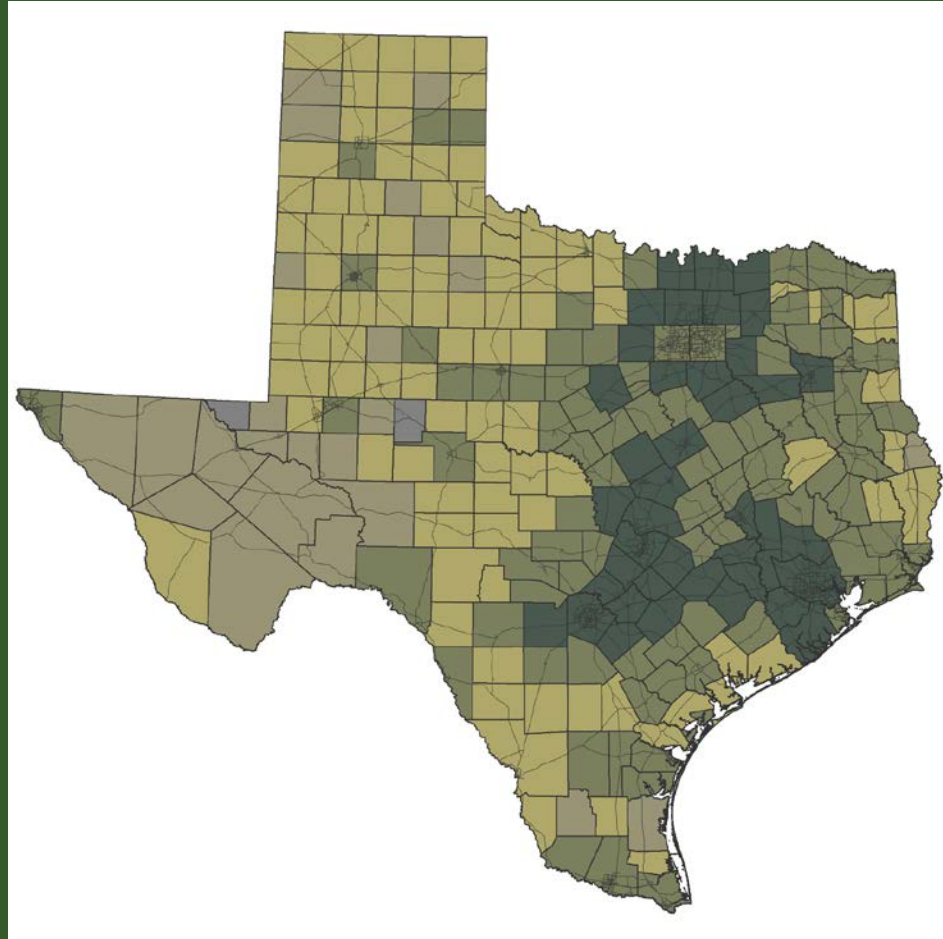


# *Trends in Texas Rural Lands*



Jim Cathey

# Texas A&M Natural Resources Institute

- A group of ***problem-solvers*** for natural resource challenges and we foster stewardship of private lands and their public benefits.
- ~80 staff members
- Four offices:
  - College Station
  - San Antonio
  - Dallas
  - Washington, D.C.



# Texas Land Trends

- Trends in land use (1997-2017)
- Primary datasets used
  - County Appraisal District
  - USDA NASS Census of Ag
  - Texas Landowner Survey
- Relationships among
  - Land Value
  - Land Ownership
  - Land Use





# Texas Land Trends



A publication of the Texas A&M Natural Resources Institute | December 2019

## Status Update and Trends of Texas Working Lands

1997 - 2017

## Land Trends Publication Series

- Trends in Ownership Along the Texas Borderlands
- Conservation Easements in Texas
- Texas Landowner Changes and Trend



# Report Topics

- Population Growth 
- Land Values 
- Working Lands 
- Ownership Size 

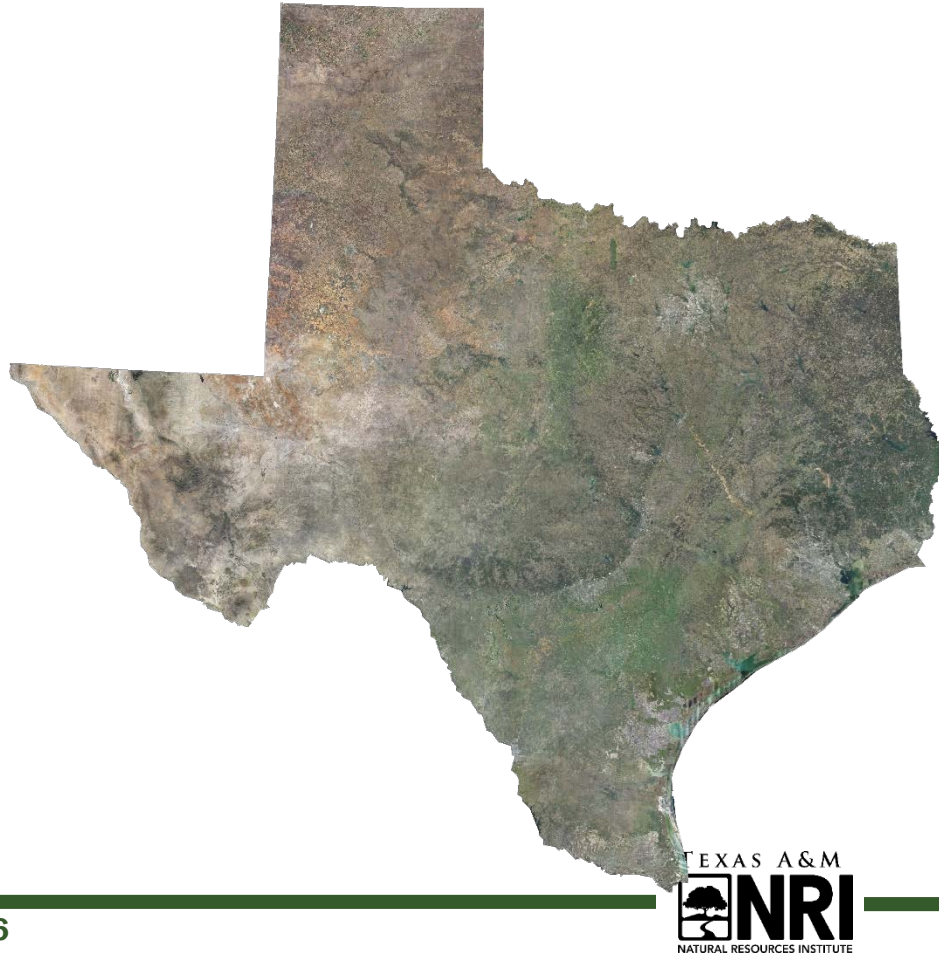


**{in•flu•ence}** v.

1. to affect the nature, development,  
or condition of;

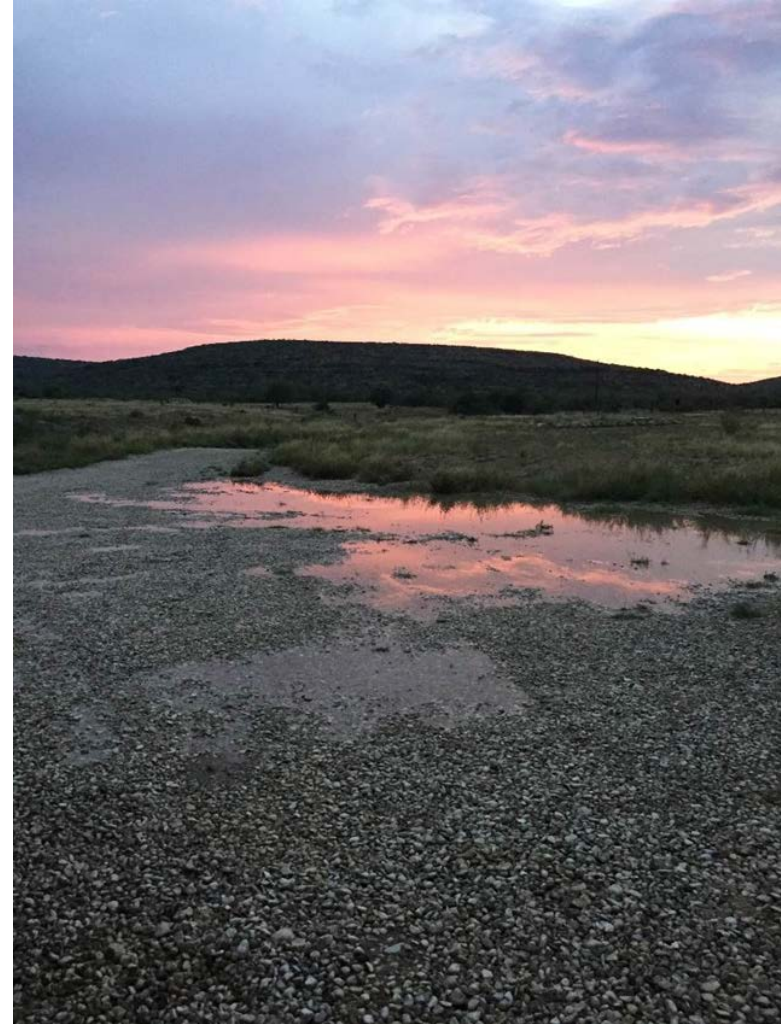
# Benefits of Rural Lands

- ***Working Lands*** – farms, ranches, family forests, wildlife (1-D & 1-D-1 agricultural valuation)
  - These lands play a critical role in sustaining life by providing water, food, energy, and national security
  - *Effective* conservation requires innovative solutions to sustaining private rural working lands



# Public Benefits – *“Ecosystem Services”*

- Private lands provide “ecosystem services” or public benefits to communities
  - Clean water,
  - Clean air
  - Carbon sequestration
  - Recreation
- Disturbances or alterations to functioning landscapes can lead to degradation or loss of “ecosystem services”







Texas Population  
3.9 Million

Some Sp

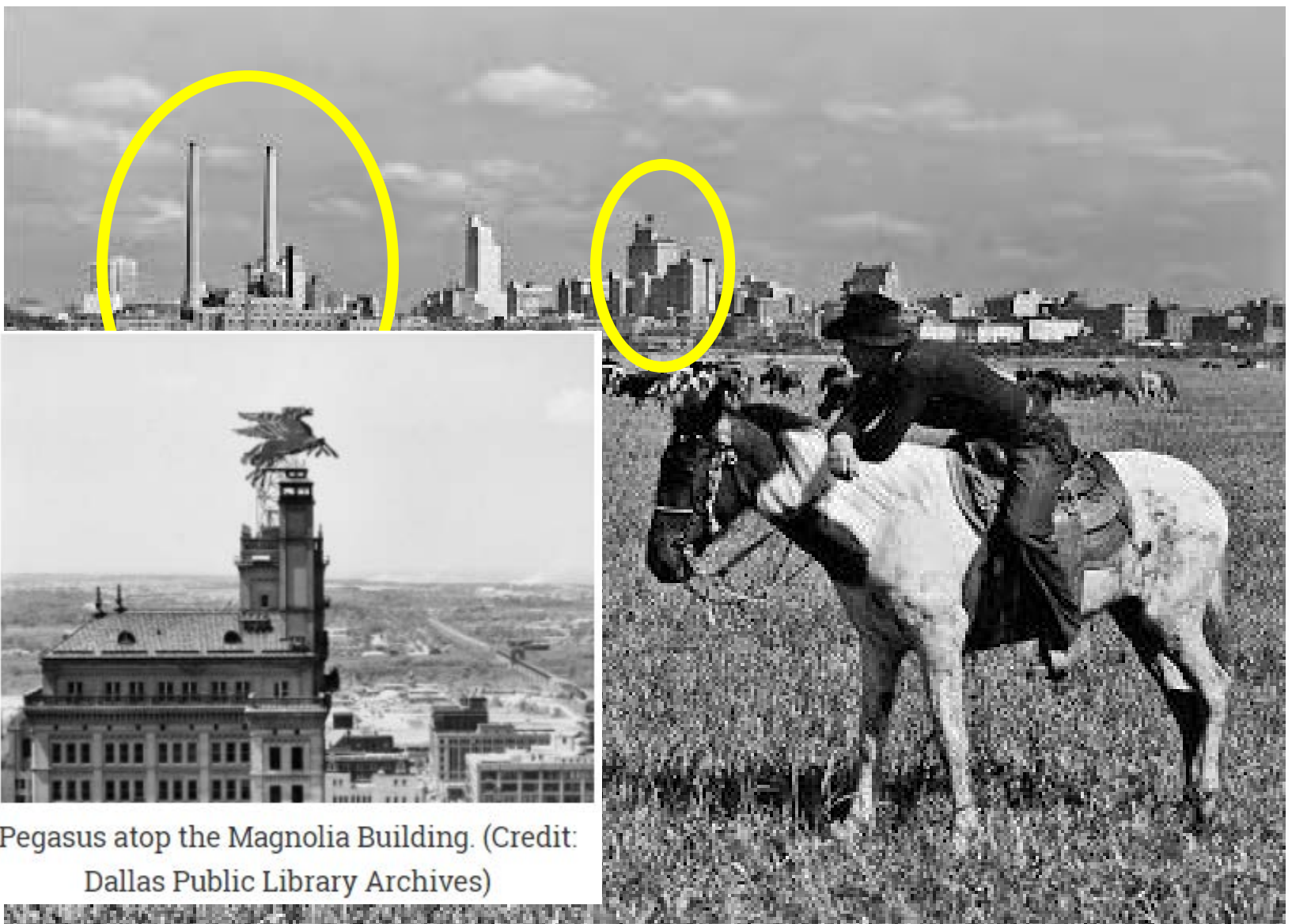
sitions

Vol. XXV

|              | Per Acre | Per Year. |
|--------------|----------|-----------|
| 43,719       | \$ 7.00  |           |
| 66312 a      | 6.00     |           |
| 10,000 ac    | 20.00    |           |
| 14,000 ac    | 4.50     |           |
| 27,000 acres | 10.00    |           |

Much of above property is on road, in best belt of Southwest Texas. Also in farms.

**Leona Land Company,**  
UVALDE, TEXAS.



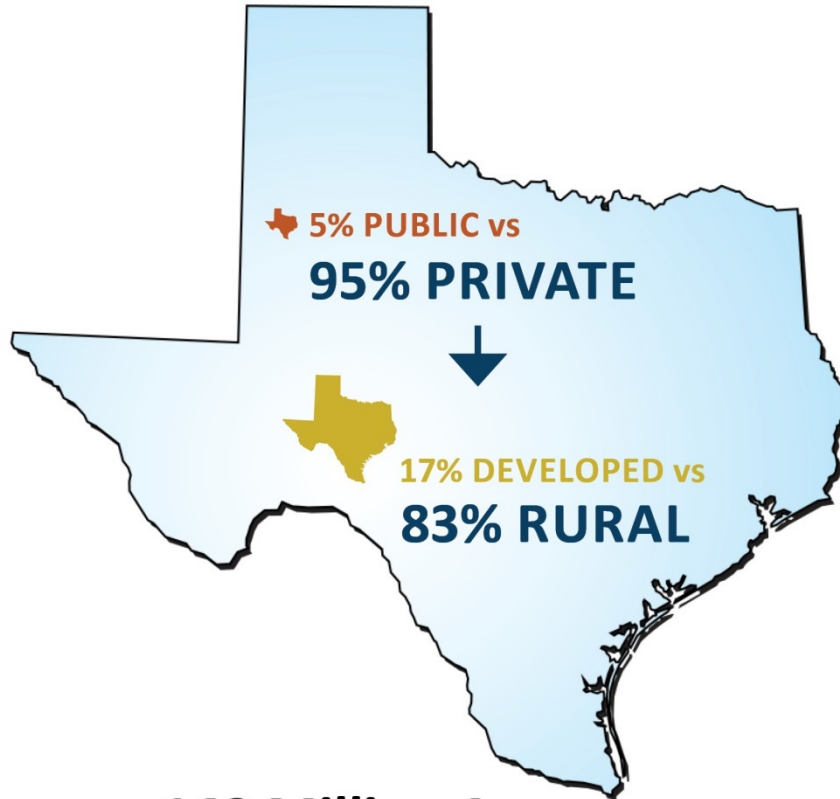
Pegasus atop the Magnolia Building. (Credit: Dallas Public Library Archives)

A cowboy overlooks the Dallas skyline in 1945. This photo was taken by William Langley



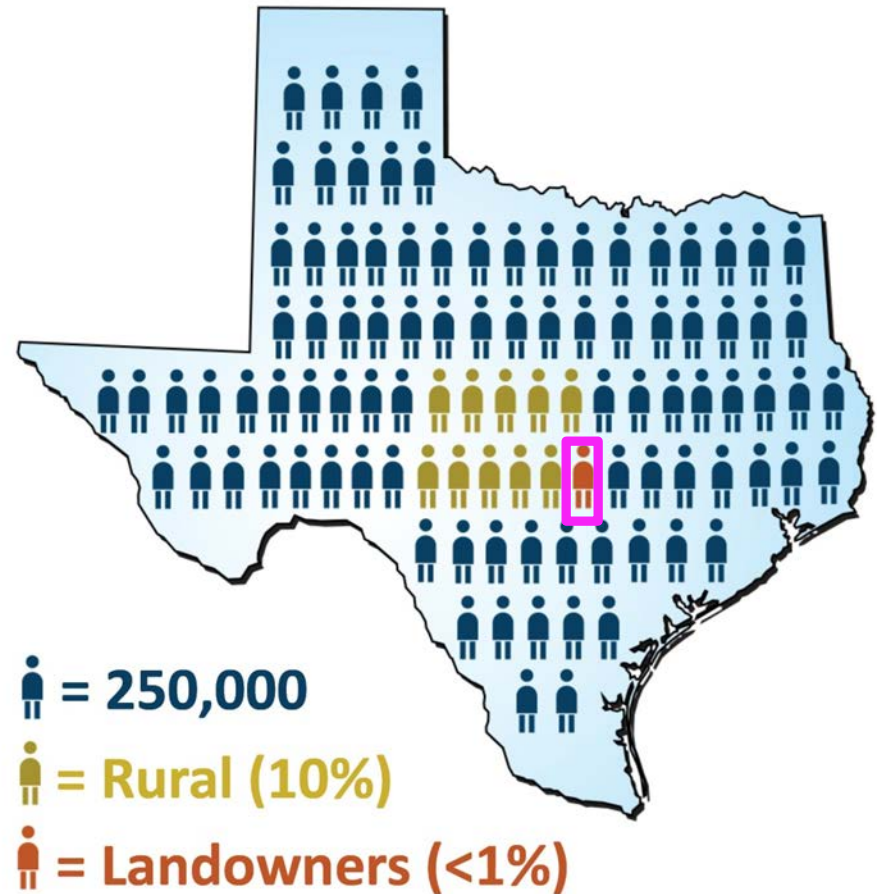
# Changing Texas

171 Million Acres...



...142 Million Acres  
*Private Working Lands*

29 Million People...







# Population Growth...Get Ready for More People!

People in Texas

- 1945 = 7M
- 1997 = 19M
- 2017 = 29M

48%



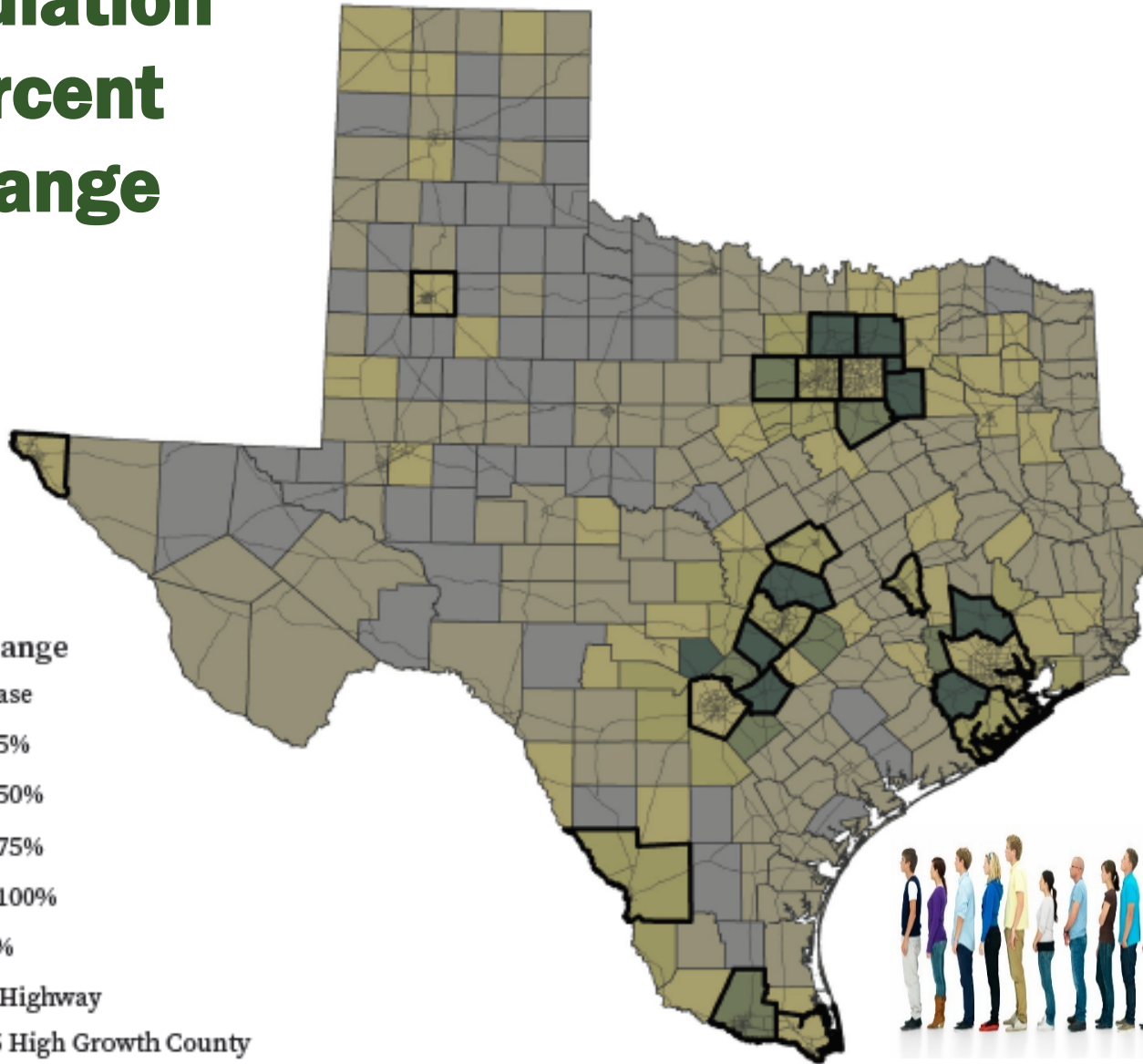
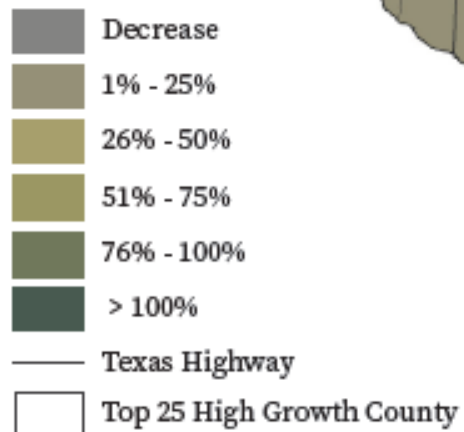
470,000 annually  
or  
1,287 people/day



# Population Percent Change



## Population Percent Change





# Texas Contains 7 of the 15 Most Rapidly Growing Cities in the Nation

Frisco

McKinney

Round Rock

Sugarland

Midland

Austin

College Station





# Conversion Path for Working Lands



Texas Land Trends

## Land Ownership or Conversion

Incentives to  
Subdivide or Sell

High Land Values

Increased Demand  
for Rural Land

Population  
Growth

Economic  
Growth





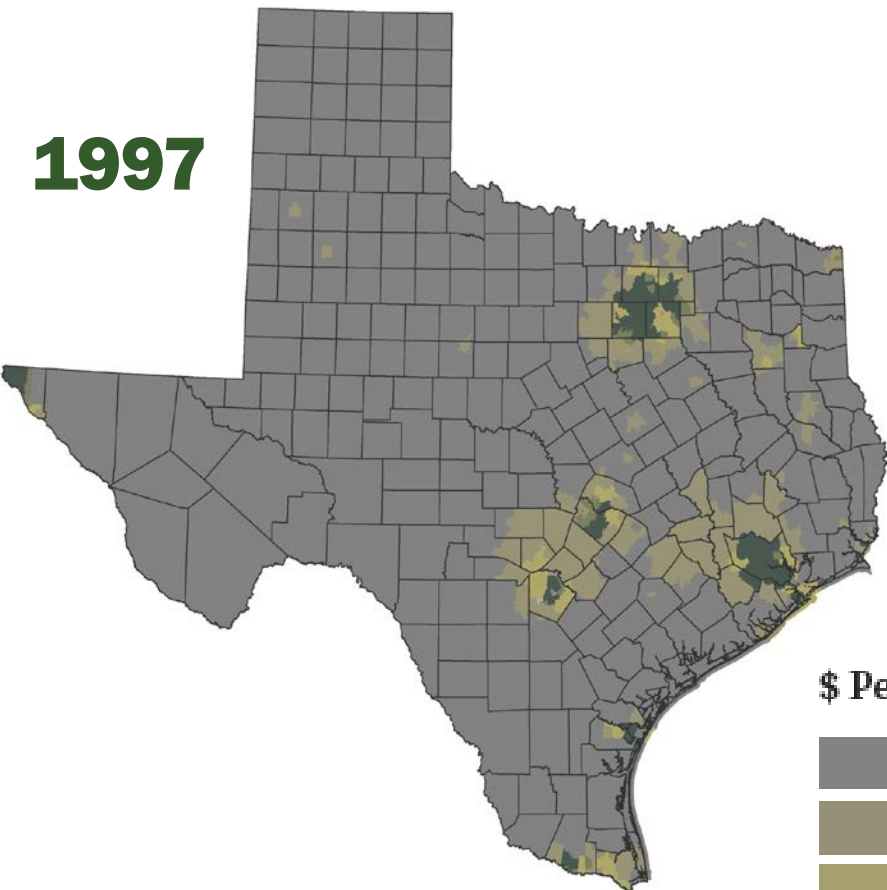
Leander ISD

Where it all started: Spindletop in 1908.

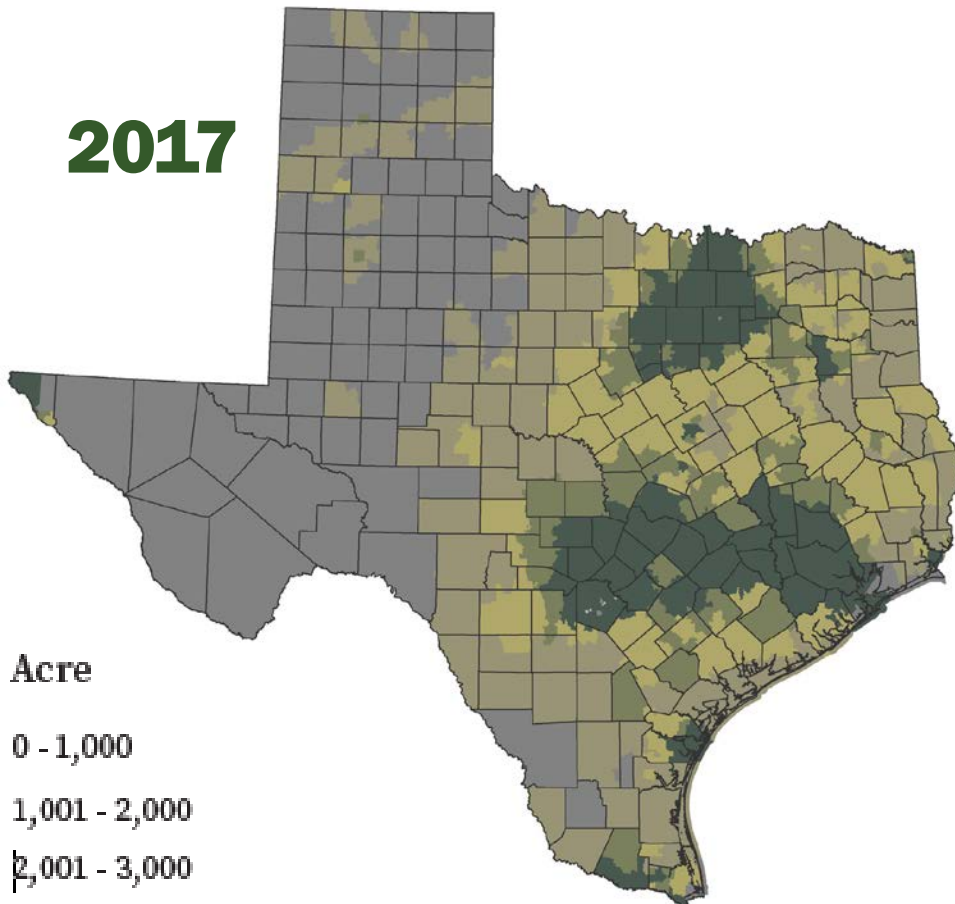


# Land Values – Market value \$/ac by ISD

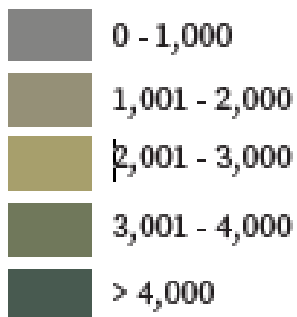
**1997**



**2017**



**\$ Per Acre**



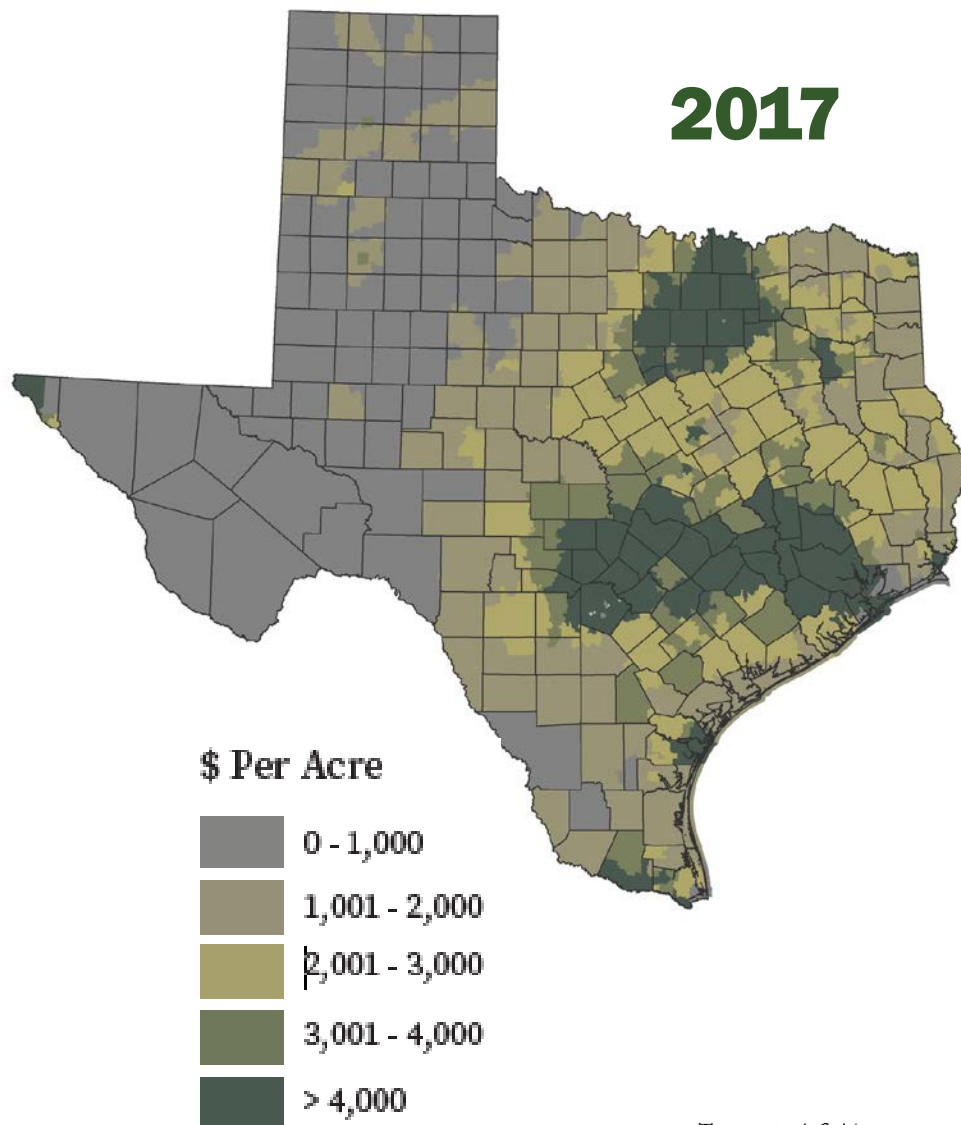




# Land Value – Market *Driver*

- 1997 – \$499/Acre
- 2017 – \$1,951/Acre
- Gain of \$1,452/Acre

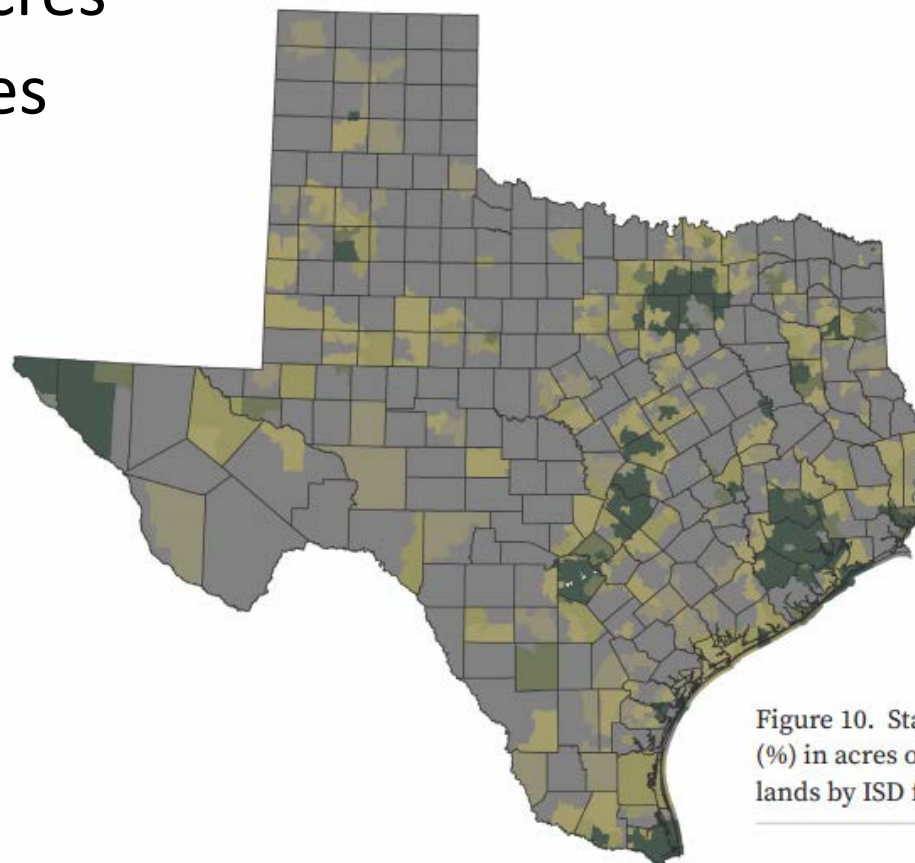
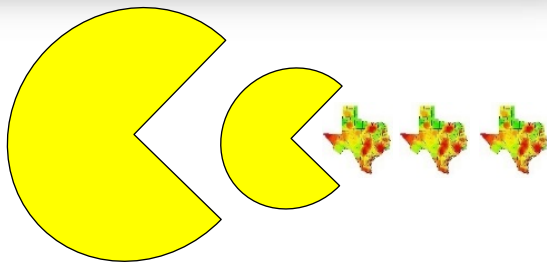
Market Value





# Working Lands – Loss and *Conversion*

- 1997 – 143 Million acres
- 2017 – 141 Million acres
- Loss ~2.2 Million acres



Rate of  
Conversion

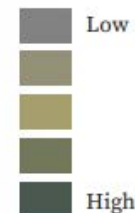


Figure 10. Statewide change (%) in acres of total working lands by ISD from 1997 to 2017.

# Texas Land Trends

- From 1997 to 2017, Texas lost approximately 2.2M acres of working lands (i.e., converted to non-agricultural uses)
  - a decline of nearly 1.2M acres converted in the last 5-year period





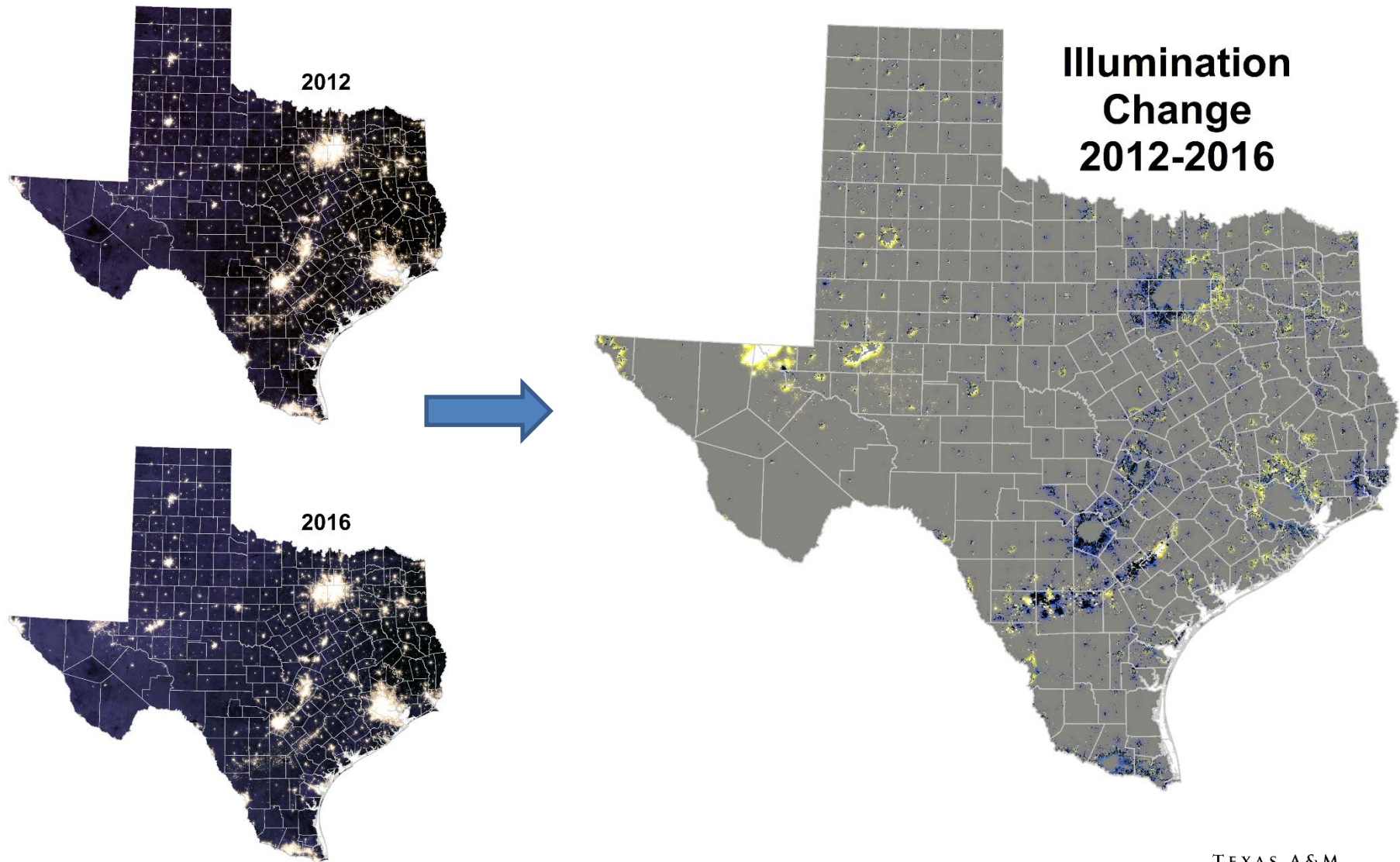
A detailed black and white aerial photograph of McKinney, Texas. The image shows a dense network of residential streets, commercial areas, and green spaces. A major highway, likely I-75, runs diagonally across the lower right portion of the map. The overall layout is a mix of urban development and natural terrain.

**2016**

# McKinney, Texas



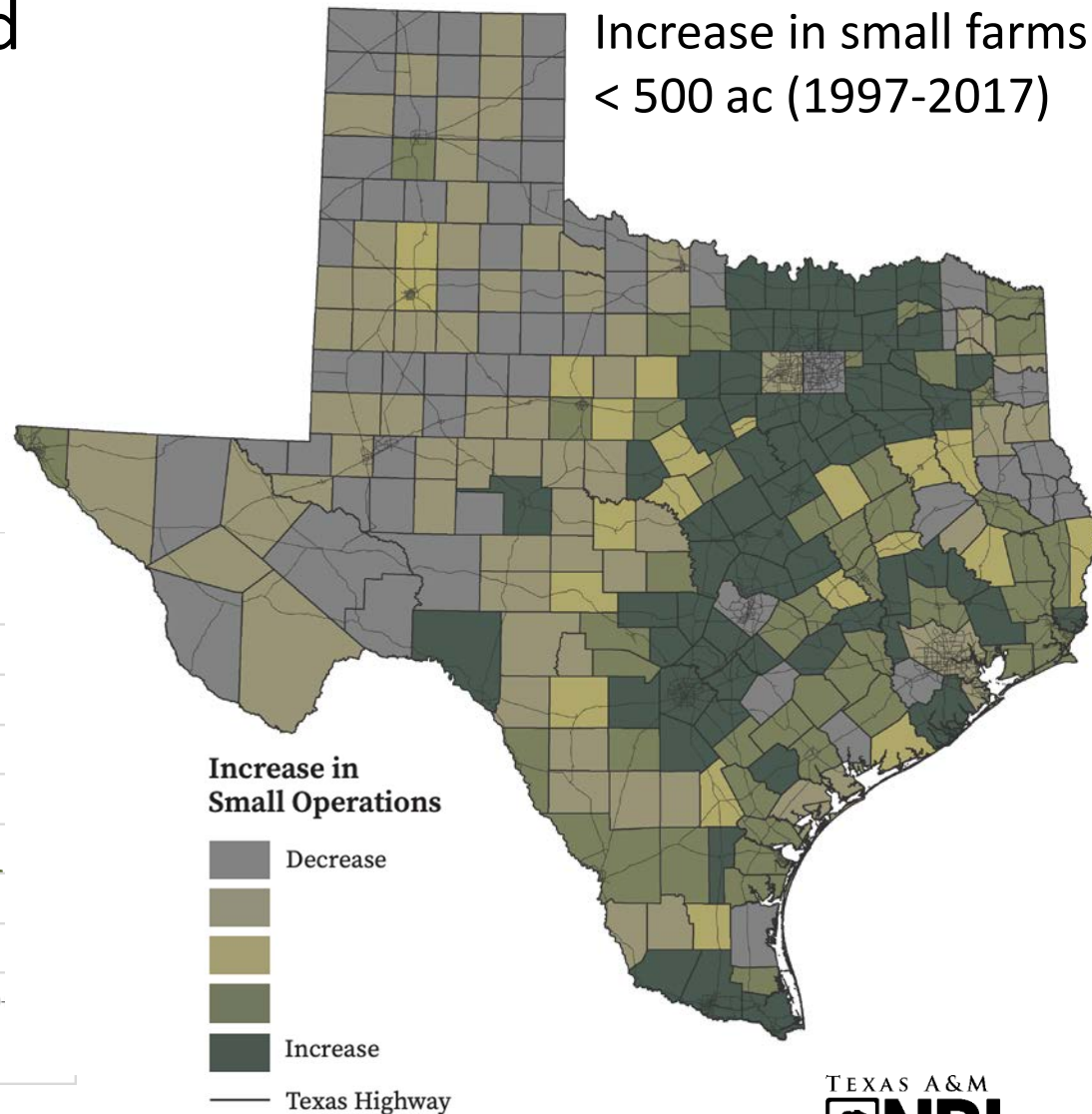
# Night Time Illumination



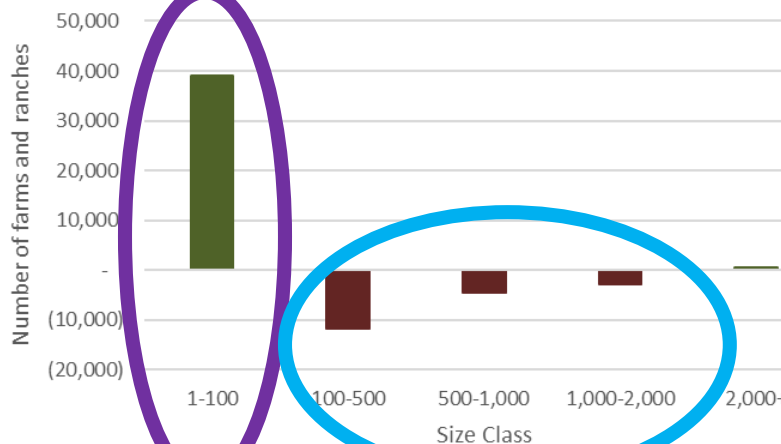
# Ownership Size Less Than 500 ac

- 39,000+ new farms and ranches (1997-2017)
- ~149,000 operations
  - Accounting for only 4% of all working lands

Increase in small farms  
< 500 ac (1997-2017)



Change in farms by size class (1997-2017)

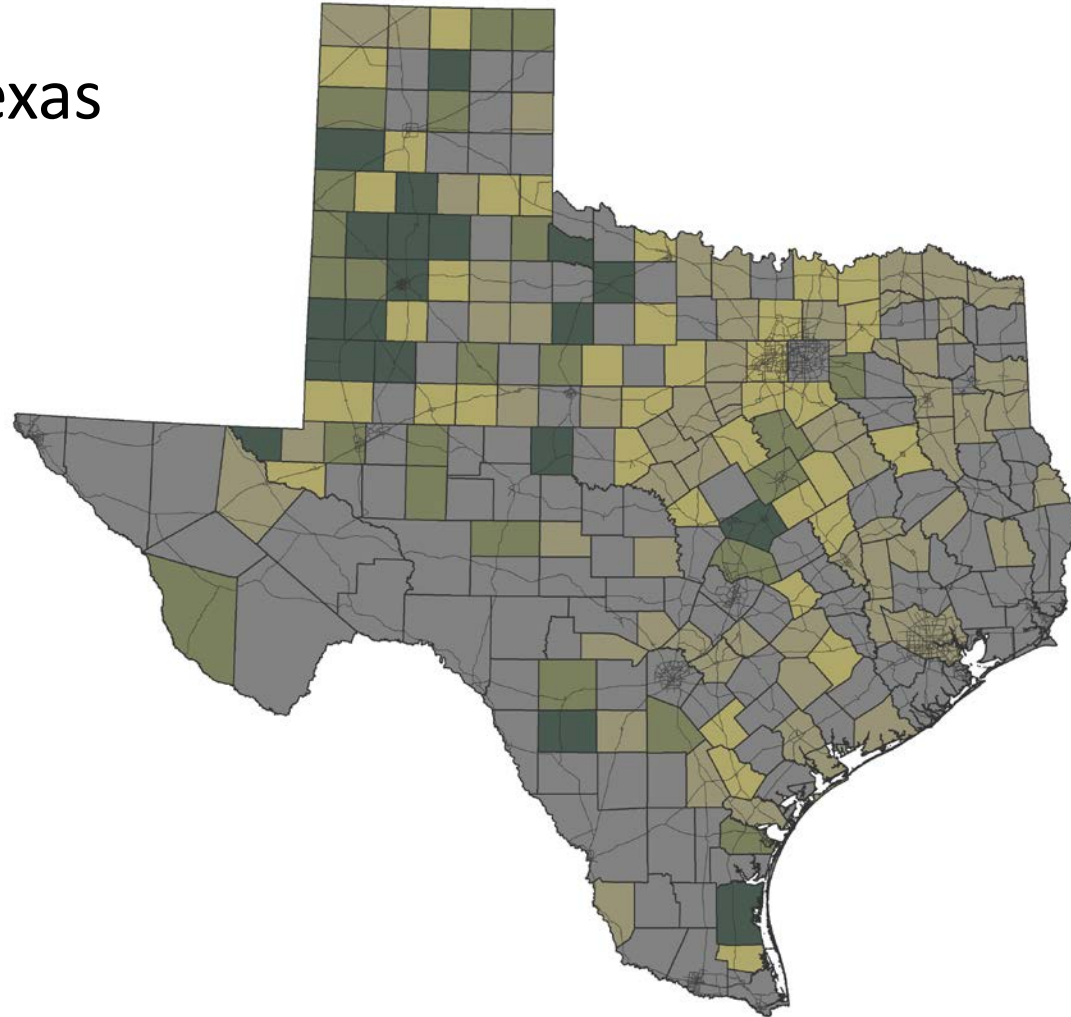






# Working Land Consolidation

- Increase in acres of Texas farms and ranches
- Greater than 2,000 ac
- 1997 - 2017



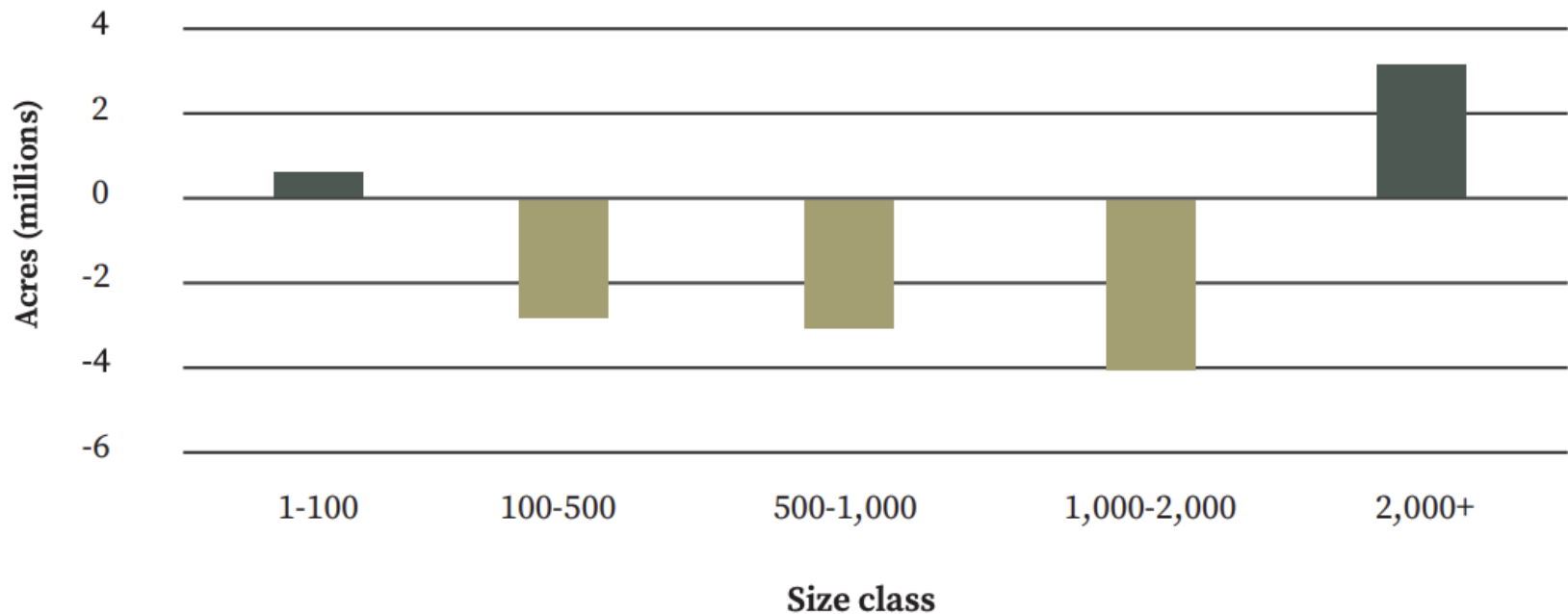
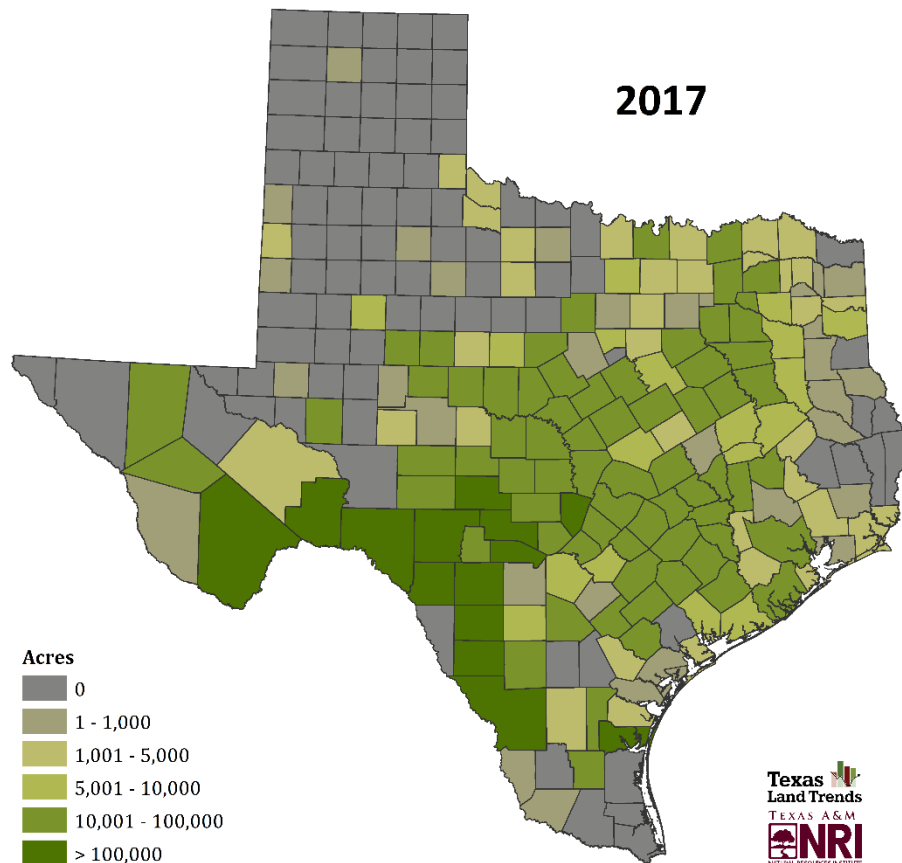


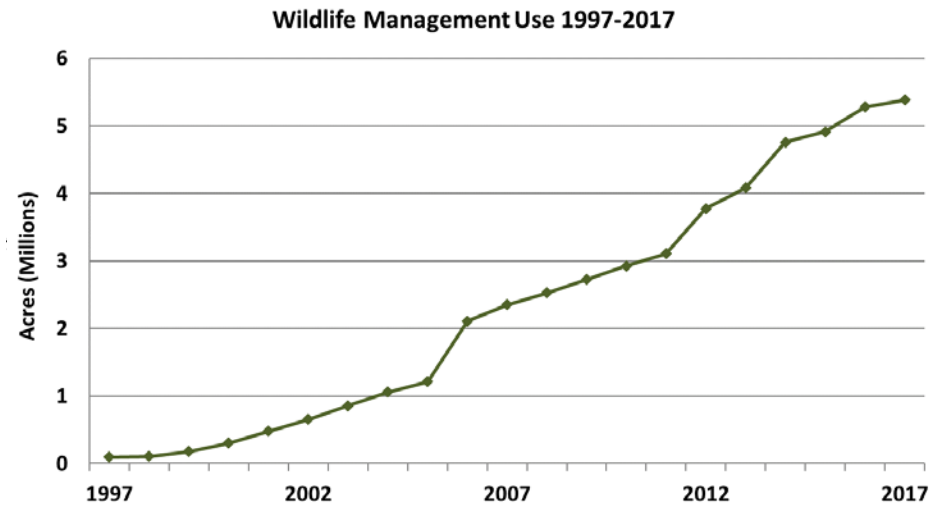
Figure 5. Change in acreage of Texas farms and ranches by ownership size class from 1997 to 2017.



# Change to Wildlife Management



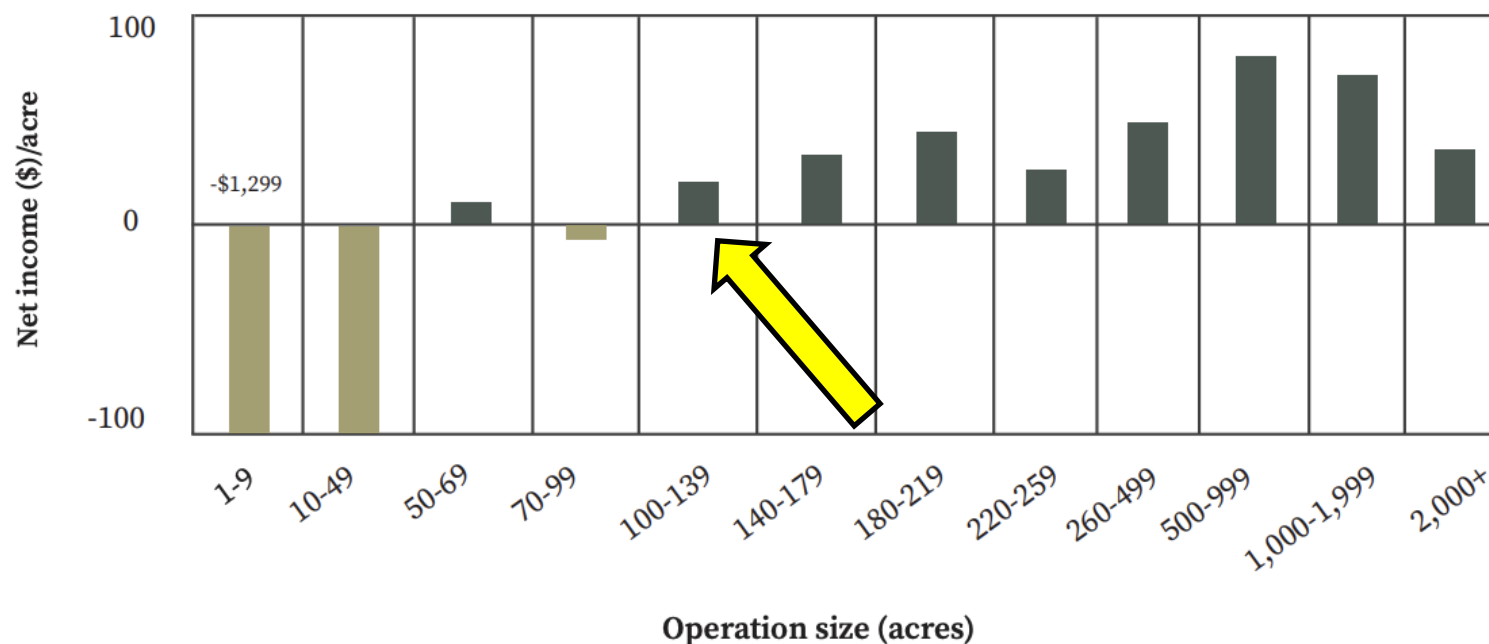
Increase to ~5.3M acres





# Farm and Ranch Proceeds – *Driver*

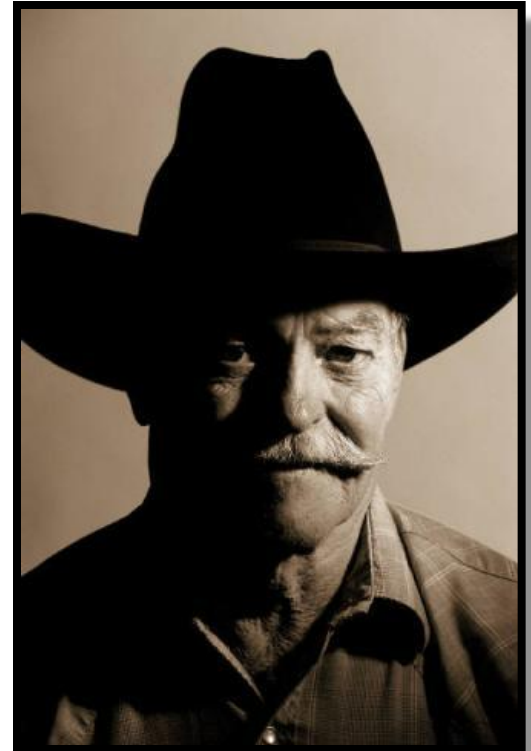
Annual net income



Is Economic Loss a Predictor of Land Conversion?

# Landowner Demographics

- 2007
  - average farmer was 57 years old
  - forest owners was 65 years old
- During the next 20 years,
  - we will witness the largest intergenerational transfer of rural lands in its history



# Landowner Demographics

- Future private landowner?
- Younger generation less tied to the land
- Concerns - estate taxes on holdings
- Buyers/developers who want to make a better return on their investments than farming or ranching can provide



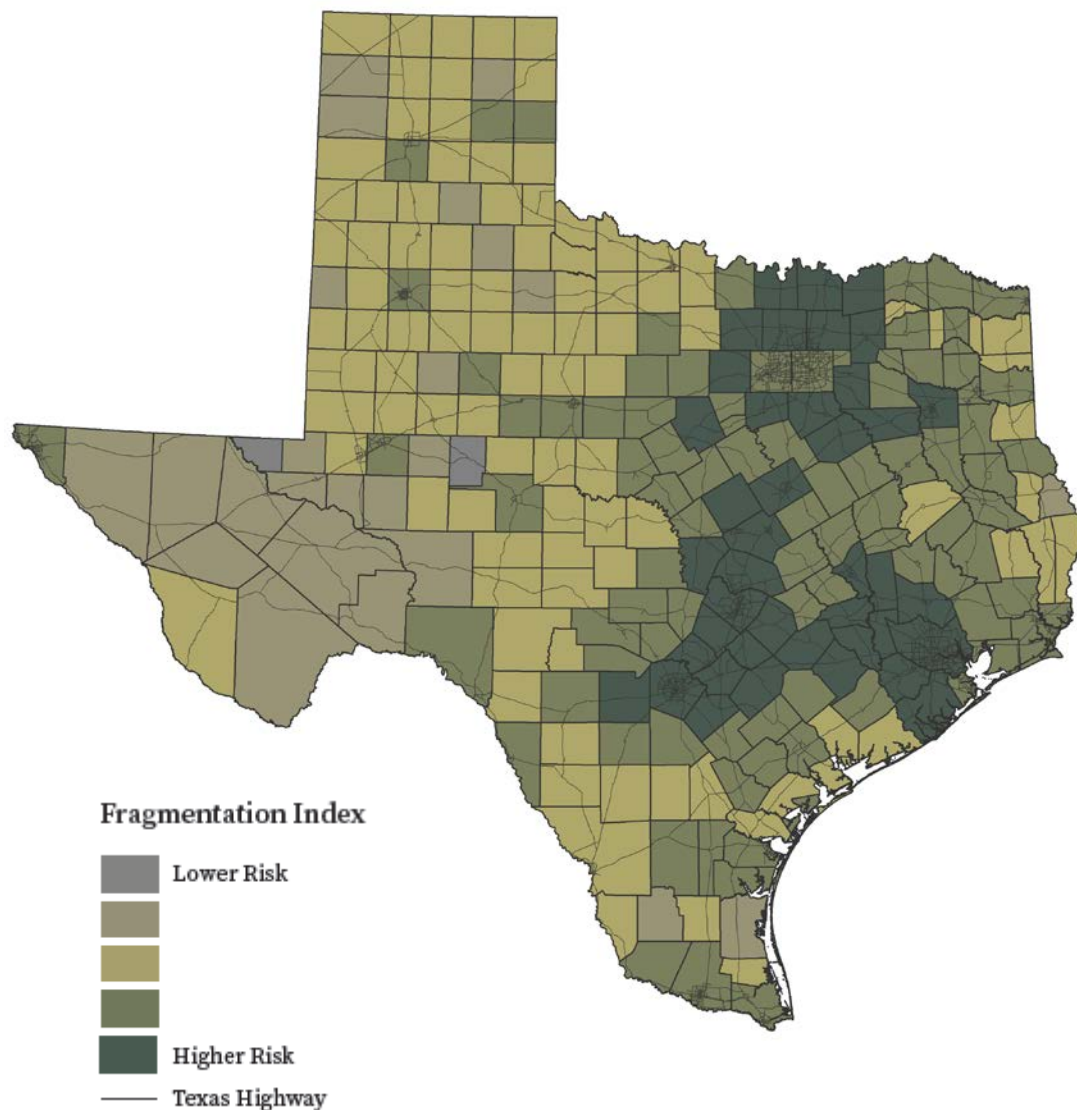




# Working Land Fragmentation Risk



- Profitability
- Ecosystem integrity
- Rural Communities



# 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/>