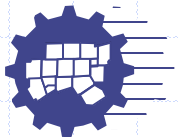


Forecast 2040 Update

Presented to

NCTCOG Executive Board

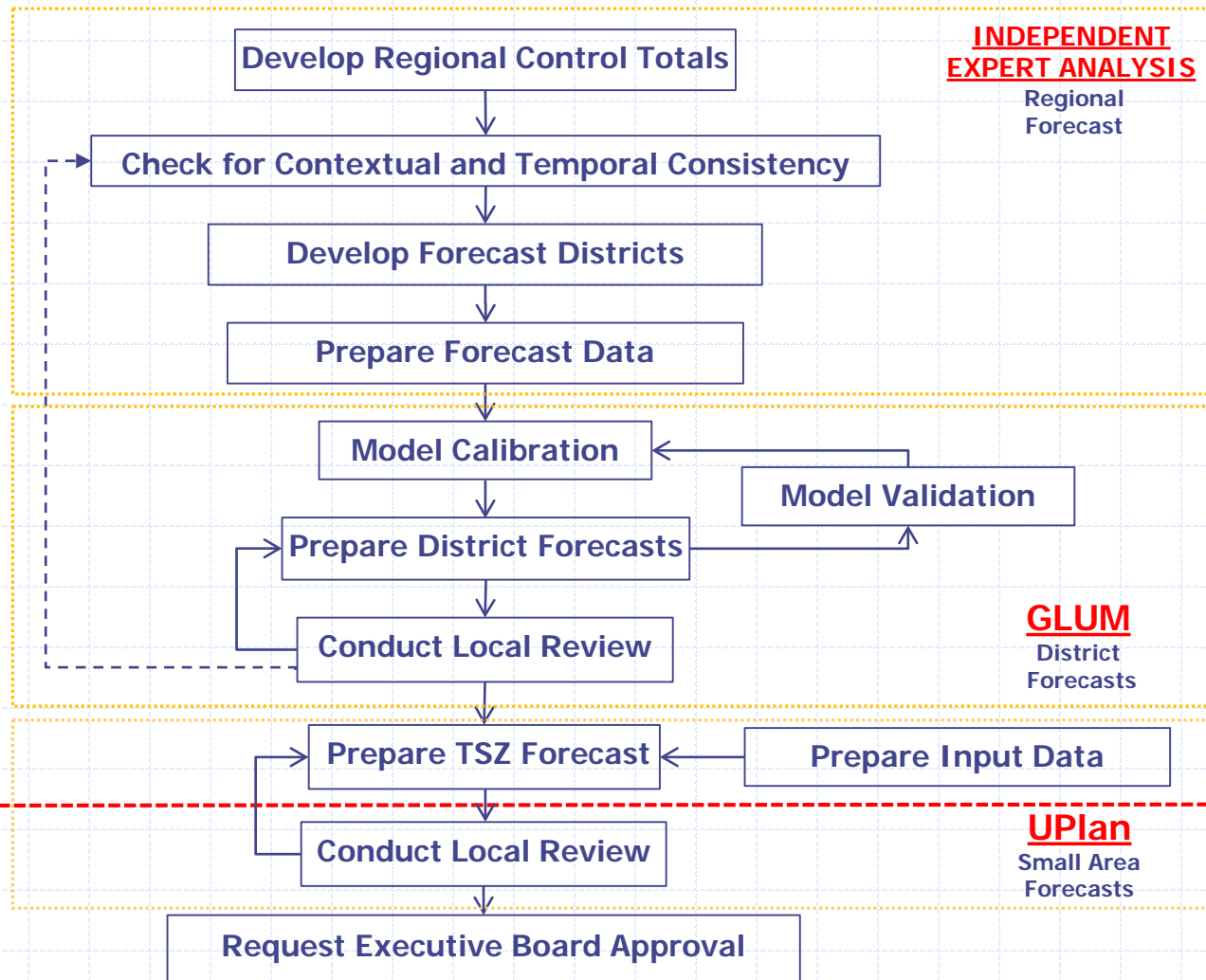
January 22, 2015





Demographic Forecasting Process

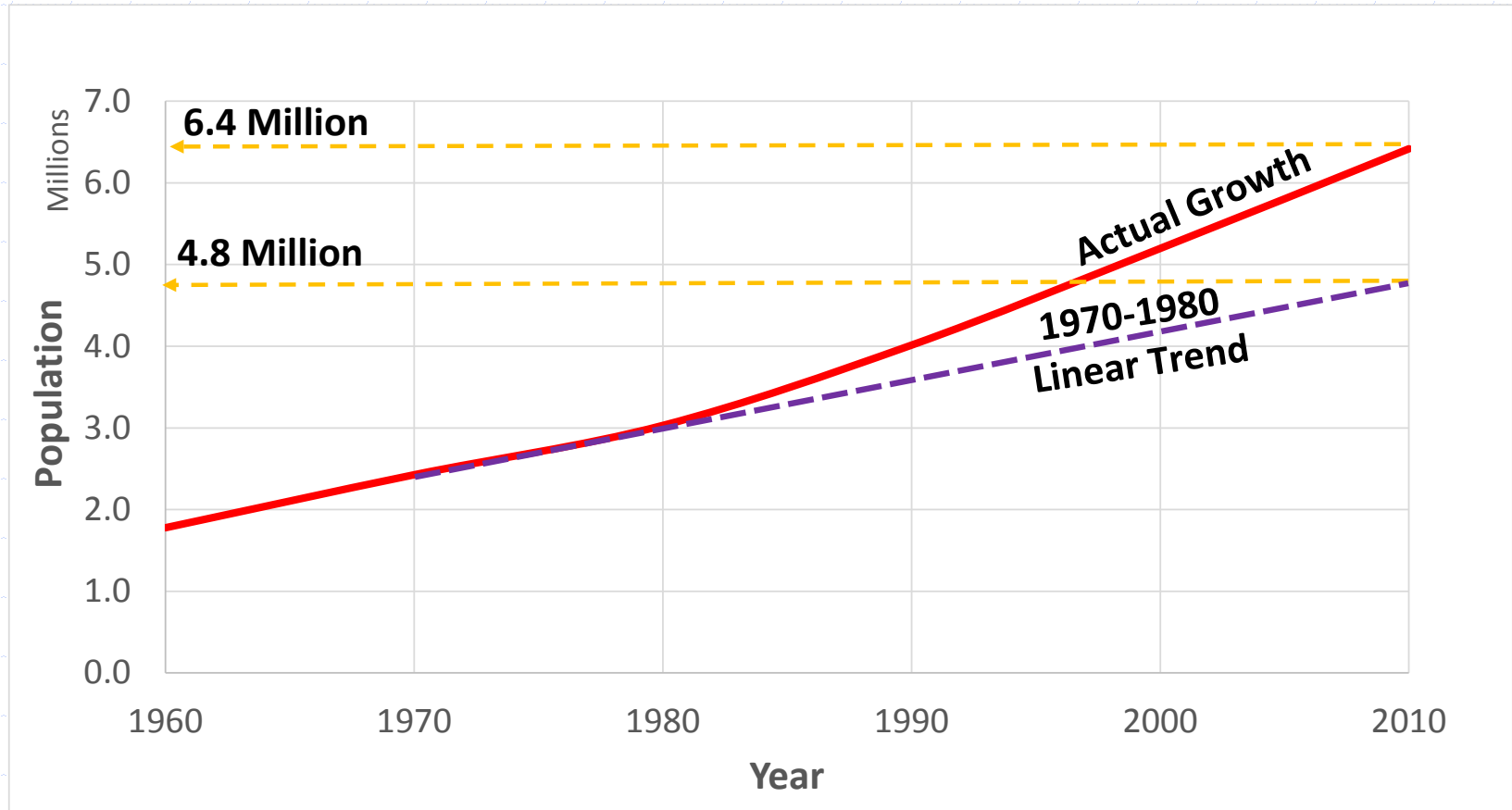
the demographic forecasting process at NCTCOG is a data-driven analytical approach with consideration of stakeholders' feedback both at the aggregate (district level) and disaggregate (traffic survey zone level) forecast stages

Demographic Forecast Steps



 Done
 In Progress

Dallas-Fort Worth Metropolitan Area Population Growth Trend

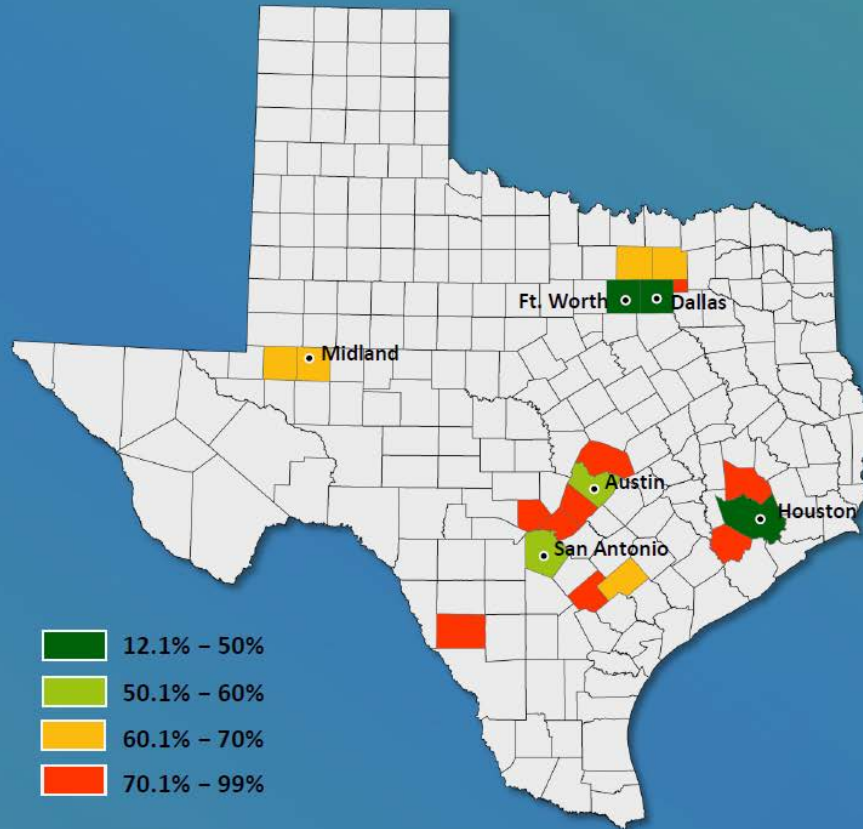


Source : Decennial Census, NCTCOG

Texas Net Migration (2010-2013)

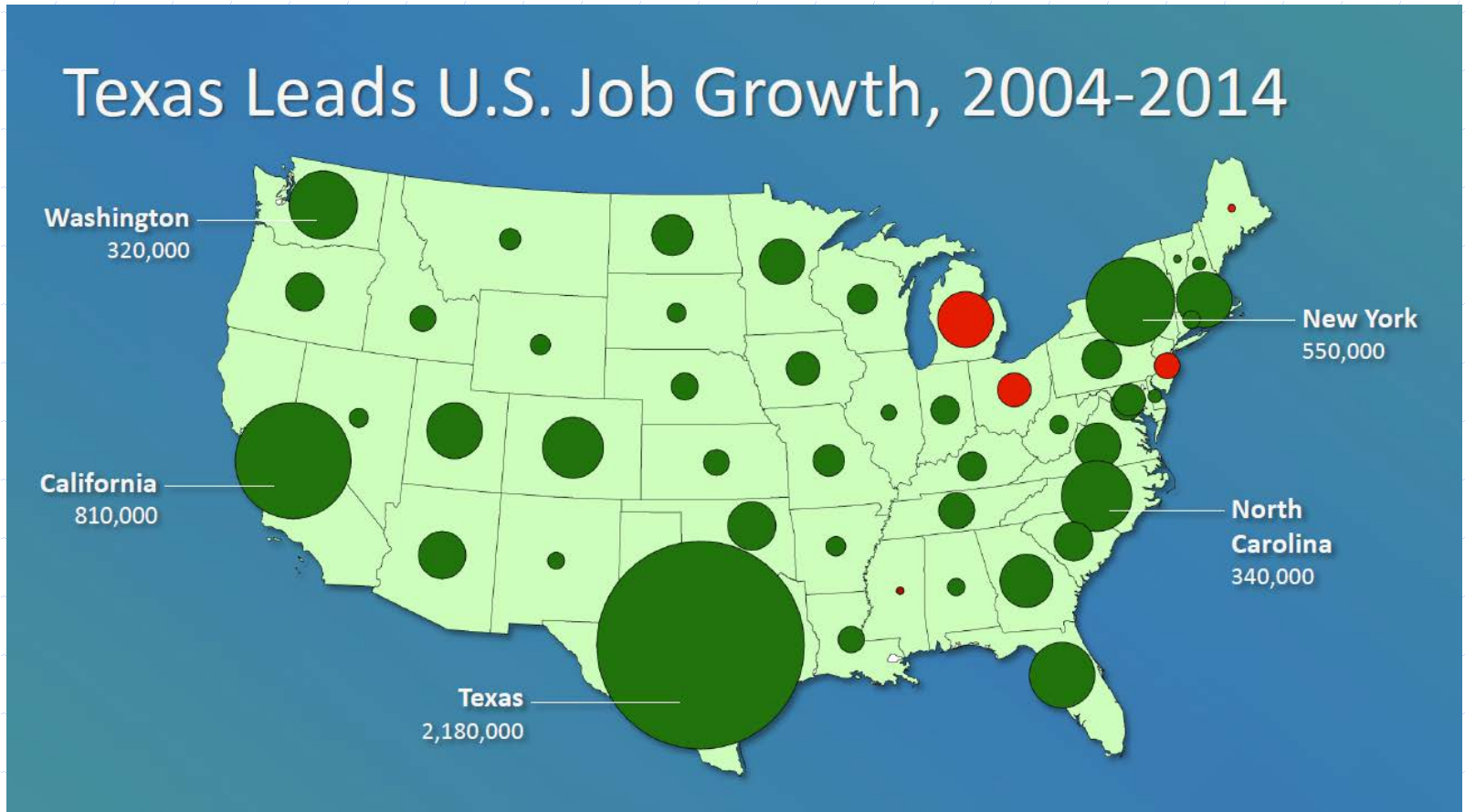
Net Migration

Percent of 2010-2013
Population Change
from Net Migration



Source : Dr. Lloyd Potter, Texas State Demographer

Texas Job Growth (2004-2014)

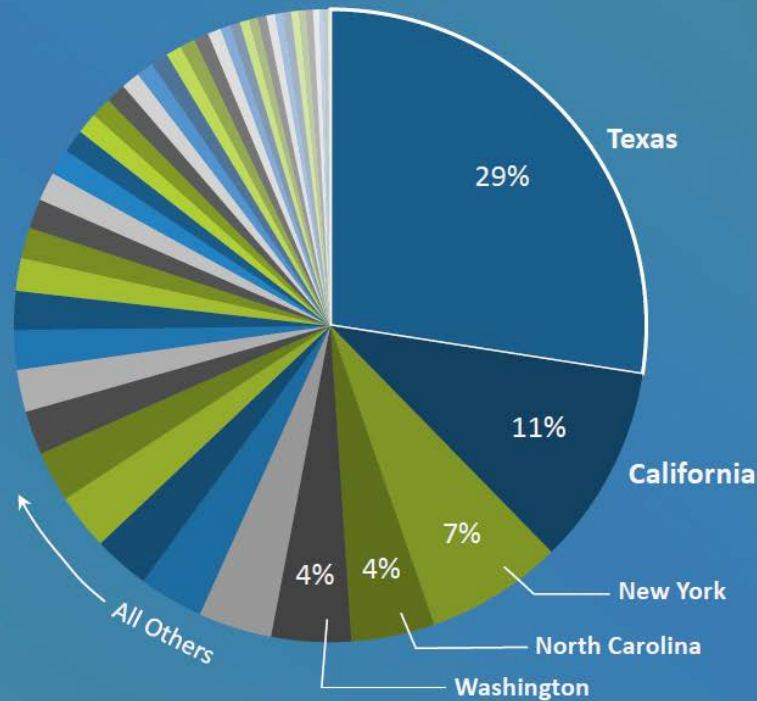


Source : Dr. Lloyd Potter, Texas State Demographer

Texas Job Growth (2004-2014)

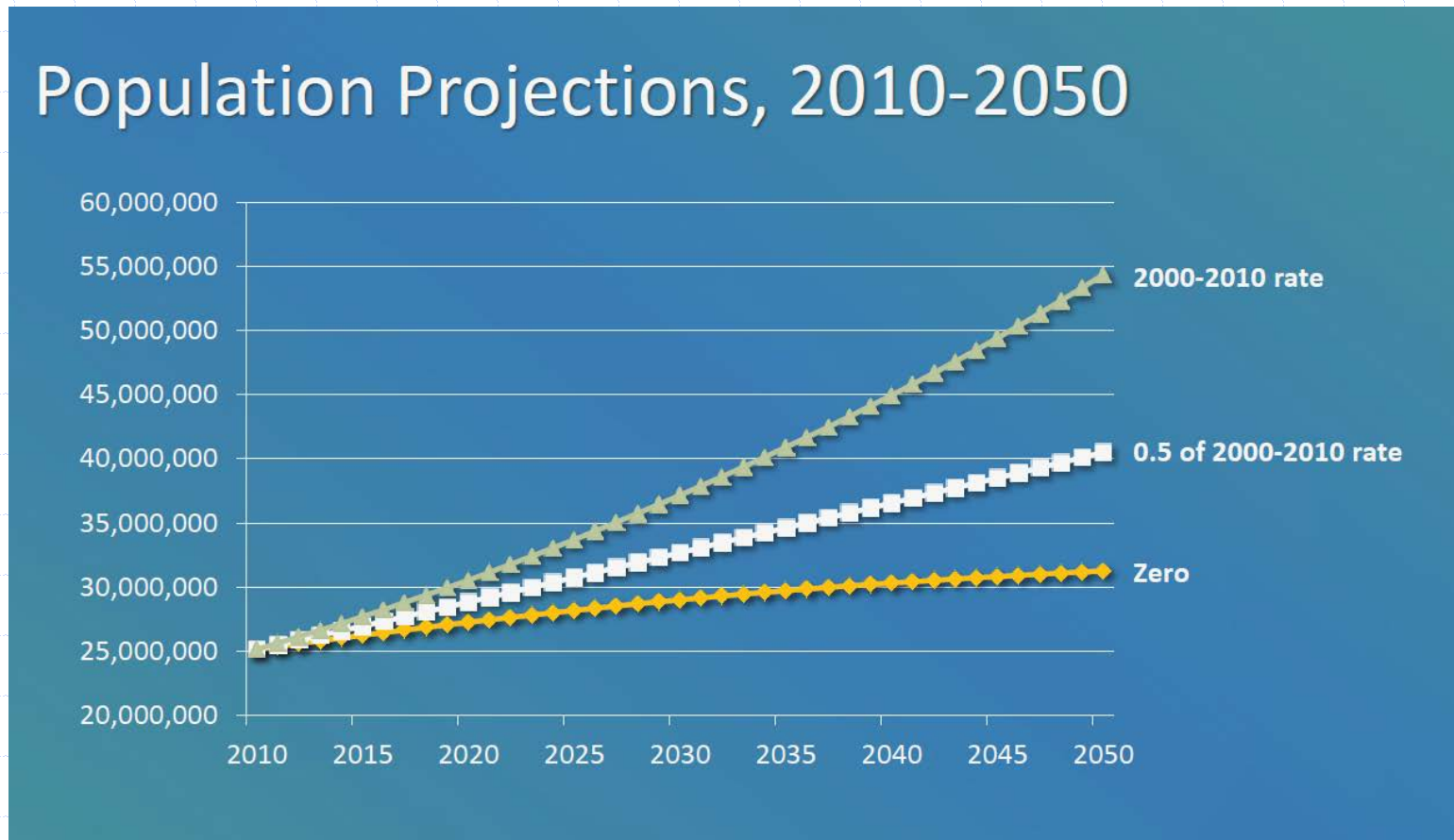
Texas Leads U.S. Job Growth, 2004-2014

Percentage of Total
U.S. Job Gains
Attributable to each
State



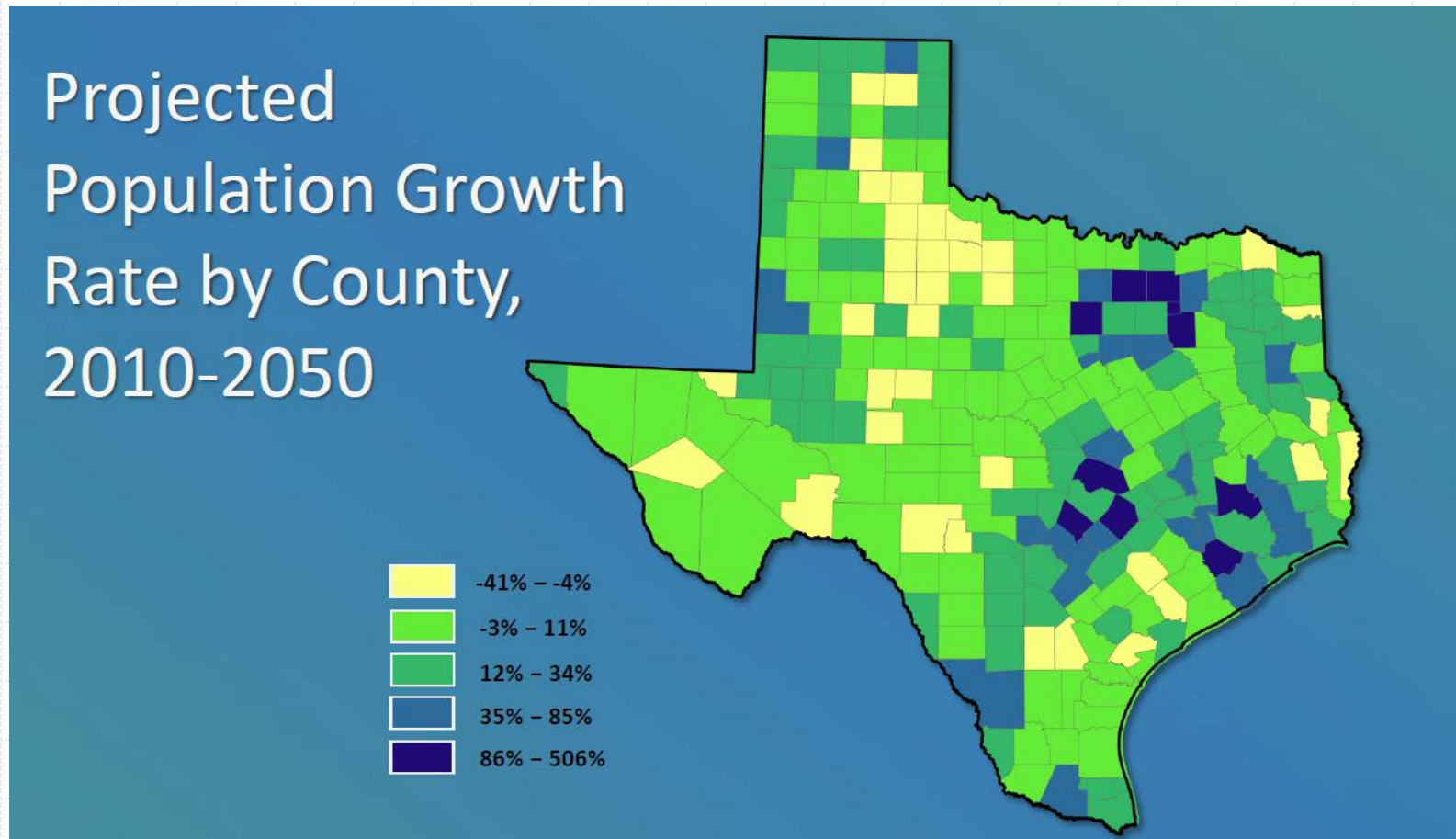
Source : Dr. Lloyd Potter, Texas State Demographer

Texas Population Projections (2010-2050)



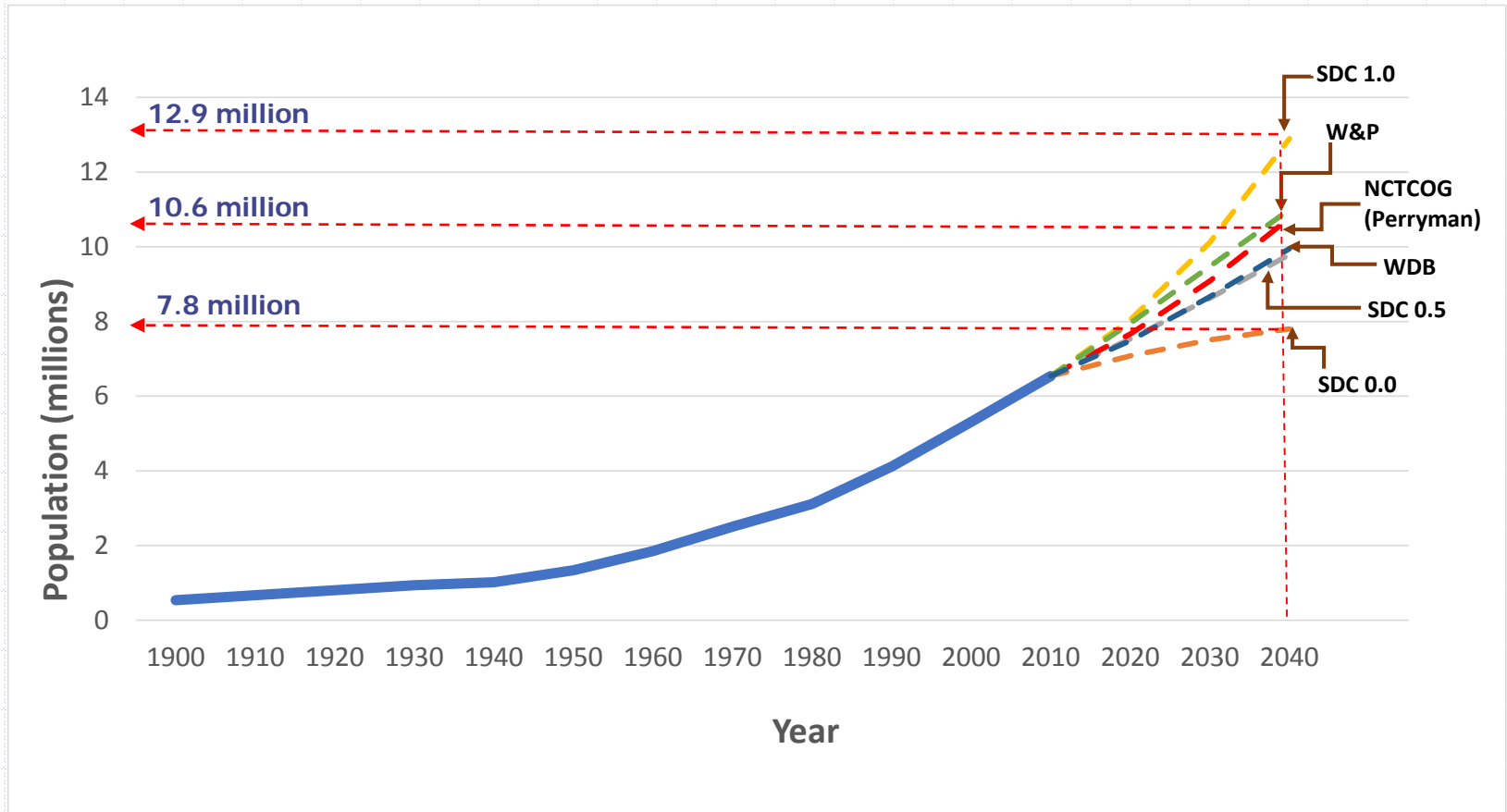
Source : Dr. Lloyd Potter, Texas State Demographer

Texas Population Projections by County (2010-2050)



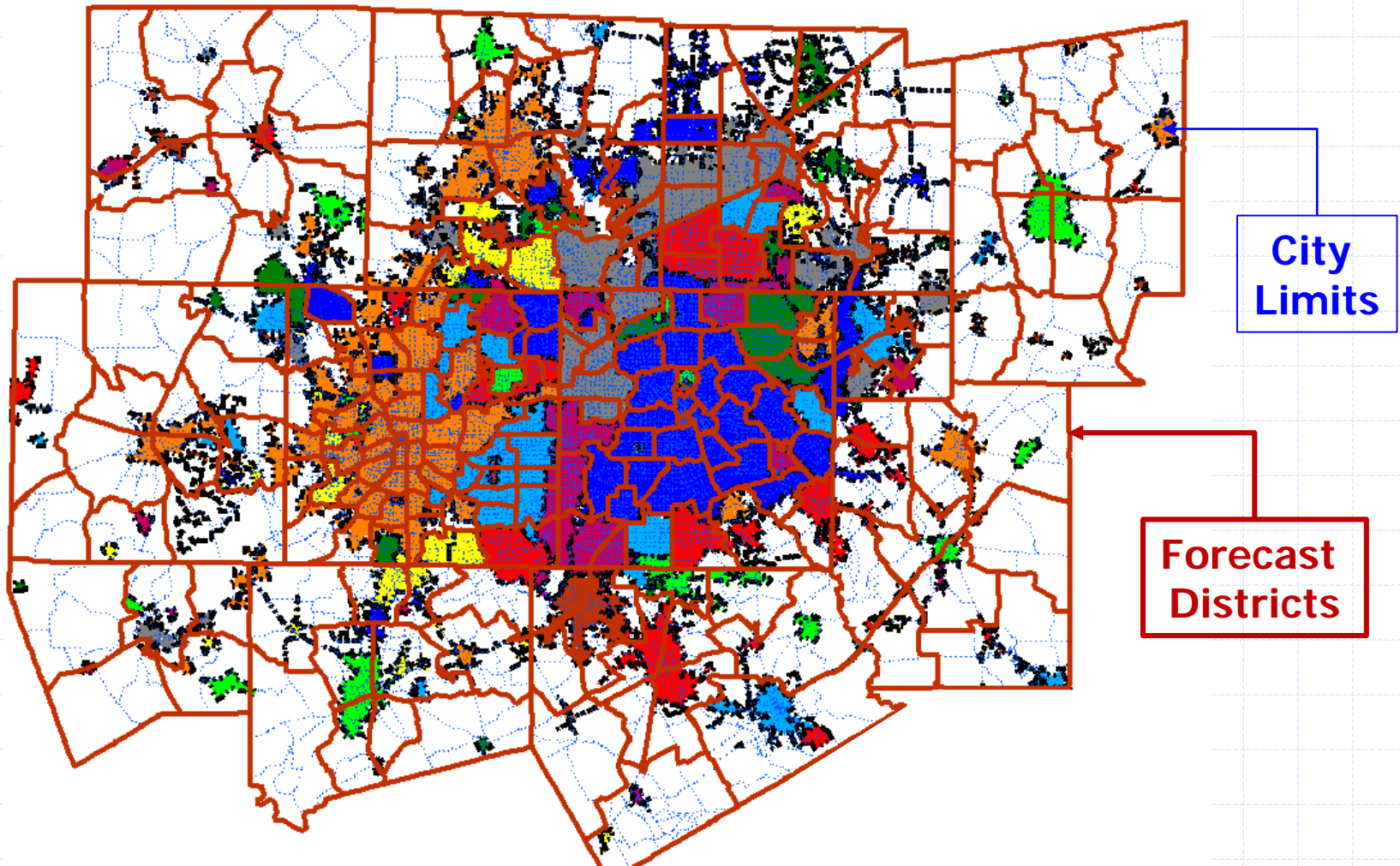
Source : Dr. Lloyd Potter, Texas State Demographer

2040 Population Forecasts (Control Total)



Sources : Decennial Census, Woods & Poole, Texas Water Development Board, State Data Center, The Perryman Group

GLUM Forecast Districts (232)



GLUM Calibration and Validation

Calibration is the process of building a mathematical formulation and optimizing the parameters to ensure that the model is accurately representing how population and employment growth occurred (From 2000 To 2005)

Validation is the process of using the calibrated model to verify the forecasted growth to a known future point in time (2010)

GLUM Population Forecast Validation

COUNTY	2010 (CENSUS)	2010 (GLUM Model)	% DIFF
COLLIN	778,427	791,423	1.67%
DALLAS	2,337,741	2,355,498	0.76%
DENTON	652,270	635,907	-2.51%
ELLIS	148,000	150,331	1.57%
HOOD	50,481	48,139	-4.64%
HUNT	84,260	86,079	2.16%
JOHNSON	148,290	151,331	2.05%
KAUFMAN	102,014	105,714	3.63%
PARKER	113,806	109,784	-3.53%
ROCKWALL	77,678	78,509	1.07%
TARRANT	1,788,400	1,771,758	-0.93%
WISE	58,147	59,472	2.28%
Total	6,339,514	6,343,945	0.07%

GLUM 2040 Population Forecast*

County	Census 2010	2040 Forecast	% Difference
Collin	778,427	1,523,114	95.7%
Dallas	2,337,741	3,357,524	43.6%
Denton	652,270	1,241,664	90.4%
Ellis	148,000	283,900	91.8%
Hood	50,481	81,578	61.6%
Hunt	84,260	131,024	55.5%
Johnson	148,290	245,782	65.7%
Kaufman	102,014	210,098	106.0%
Parker	113,806	195,286	71.6%
Rockwall	77,678	166,356	114.2%
Tarrant	1,788,400	3,094,651	73.0%
Wise	58,147	101,864	75.2%
Total	6,339,514	10,632,841	67.7%

* Forecasts reviewed by local governments at the district level.

GLUM 2040 Employment Forecast*

County	BEA 2010	2040 Forecast	% Difference
Collin	452,982	751,908	66.0%
Dallas	1,884,799	3,232,330	71.5%
Denton	251,394	432,175	71.9%
Ellis	58,519	96,877	65.5%
Hood	18,045	29,450	63.2%
Hunt	40,702	70,103	72.2%
Johnson	64,198	105,194	63.9%
Kaufman	40,558	64,036	57.9%
Parker	52,532	80,411	53.1%
Rockwall	33,163	48,681	46.8%
Tarrant	1,036,558	1,739,340	67.8%
Wise	31,516	40,941	29.9%
Total	3,964,966	6,691,447	68.8%

* Forecasts reviewed by local governments at the district level.

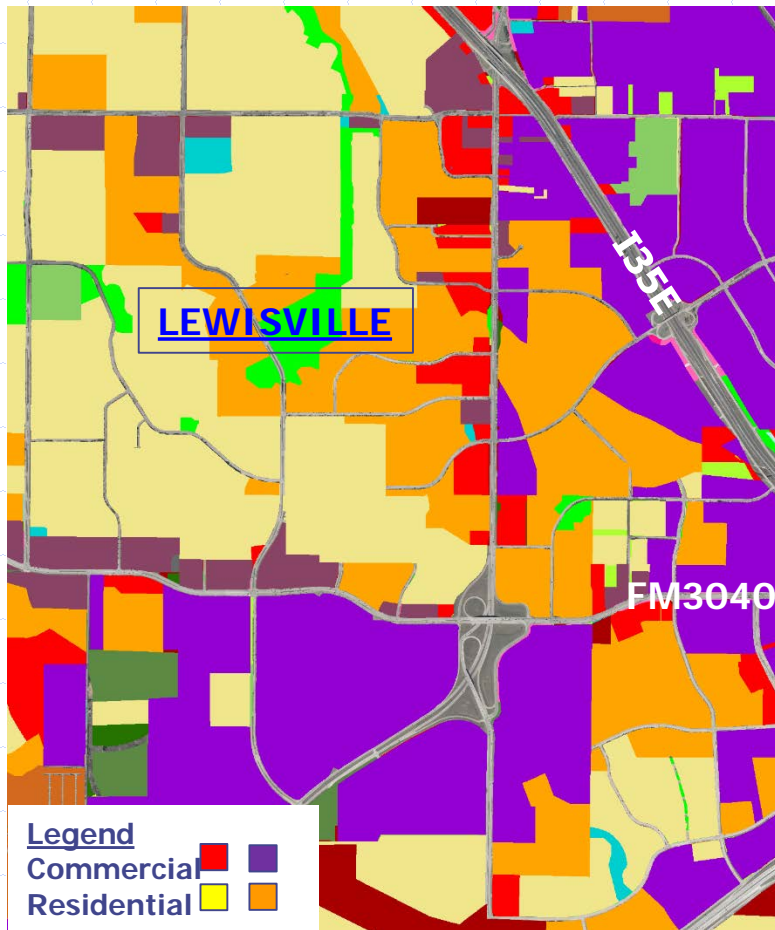
UPlan Input Data For TSZ Activity Allocation (5,252)

- **Land Use** (locally adopted land use and zoning plans)
- **Attractors** (proximity to transportation, parks, other amenities, etc.)
- **Discouragers** (proximity to airports, landfills, incompatible uses, etc.)
- **Exclusions** (floodplains, cemeteries, airports, roadways, parks, etc.)

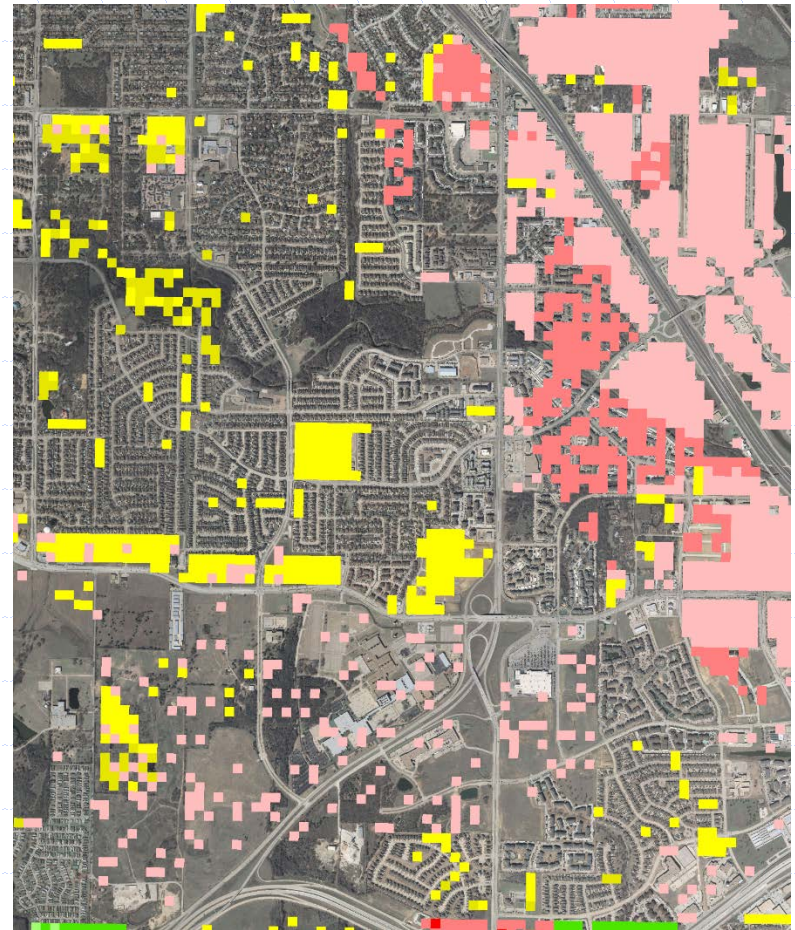
TSZ Allocation Example

(Activity Assignment is Done at 50mx50m tiles)

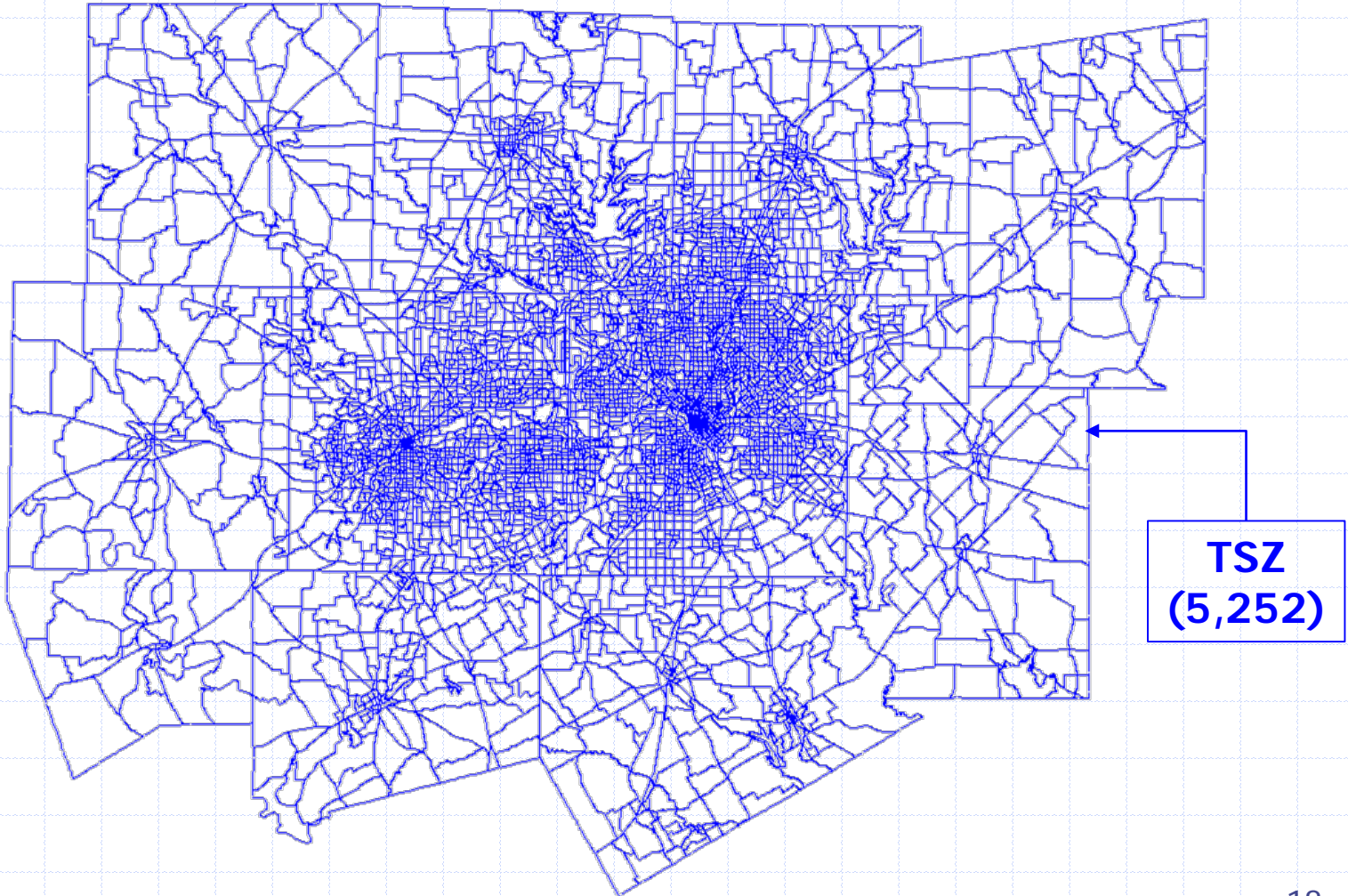
2040 Land Use Plan



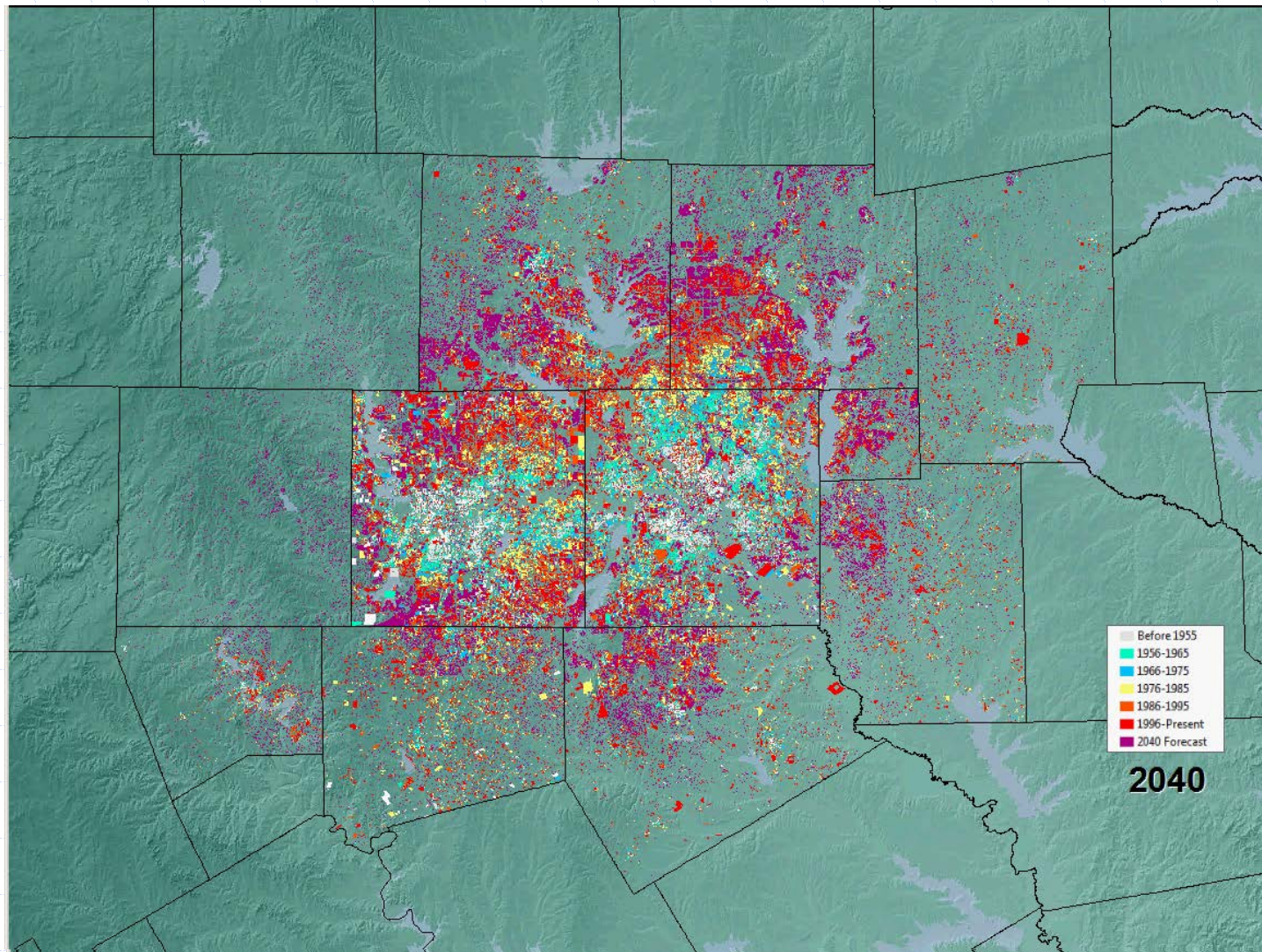
2040 Allocated HH and EMP



Traffic Survey Zones (TSZ)



1950-2040 Growth Animation



2040 Forecast Completion Schedule

- October-December, 2014
 - Local government/agency review of TSZ forecasts
- January-March, 2015
 - Review comments received
 - Finalize TSZ forecasts
- March-May, 2015
 - Approval by the NCTCOG Executive Board

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Questions ?

