

# Memorandum

## City of Lawrence

### Planning and Development Services

**TO: David L. Corliss, City Manager**

**FROM: Amy Miller, Long-Range Planner**  
**David Guntert, GIS Planner**

**CC: Scott McCullough, Planning & Development Services Director**

**Date: March 10, 2010**

**RE: Census 2010 – Redistricting Data Release**

#### **Overview:**

The U.S. Census Bureau is mandated by the Constitution to count every resident in the United States through the decennial census program that takes place every ten years. The count took place during Spring 2010 and some, but not all, of the data has recently been released. The recently released data includes general population and housing unit totals for Douglas County and the incorporated cities, including Lawrence. This memo serves as a status update to explain what data has recently been released, what data we are still waiting for, why the data is important, and the next steps in analyzing the data.

#### **2010 Census - Redistricting Data:**

The U.S. Census Bureau has released two sets of data to date: Apportionment Data and Redistricting Data. The Apportionment Data was released in December 2010 and certifies the state populations as of April 1, 2010 for the purposes of distributing the correct number of U.S. House of Representatives seats among the 50 states based on the population figures collected during the decennial census. The official population for the State of Kansas on April 1, 2010 is 2,853,118 people. The official population for the State of Kansas on April 1, 2000 was 2,688,418 people.

The Redistricting Data was released on March 3, 2011 and is traditionally used for the purpose of geographically defining state legislative districts, or “redistricting”. It contains basic population information, including total population, occupied housing units, vacant housing units, and population by race for Douglas County as a whole and the incorporated cities, including the City of Lawrence.

<b>Summary of 2010 Redistricting Data Release</b>						
	<b>Douglas County</b>	<b>Lawrence</b>	<b>Eudora</b>	<b>Baldwin</b>	<b>Lecompton</b>	<b>Unincorporated</b>
<b>Total Population</b>	110,826	87,643	6,136	4,515	625	11,907
<b>Total Housing Units</b>	46,731	37,502	2,306	1,665	254	5,004
<b>Occupied Housing Units</b>	43,576	34,970	2,210	1,501	240	4,655
<b>Vacant Housing Units</b>	3,155	2,532	96	164	14	349
<b>Vacancy Rate</b>	6.75%	6.75%	4.16%	9.85%	5.51%	6.97%

According to the 2010 Redistricting Data Release from the Census Bureau, the population of Lawrence on April, 2010 was 87,643. This represents a 9.4% increase from the 2000 Decennial Census figure of 80,508 people.

According to the 2010 Redistricting Data, Lawrence is the sixth largest City in the state. Wichita (382,368 people, 11.1% change 2000-2010) is the largest followed by Overland Park (173,372 people, 16.3% change 2000-2010), Kansas City (145,786 people, -0.7% change 2000-2010), Topeka (127,473 people, 4.2% change 2000-2010) and Olathe (125,872 people, 35.4% change 2000-2010).

Douglas County has a population of 110,826 people according to the redistricting data, and remains the fifth largest county in the state. The county grew by 10.9% from 2000 to 2010. Johnson County remains the most populous county in the state, with 544,179 people. In addition, Johnson, Sedgwick, Miami, Geary and Pottawatomie counties all had 2000-2010 growth rates over 25%.

### **Population Estimates Produced by City Staff:**

Planning Staff issues twice a year population estimates that are based on a prescribed formula dictated by the Census Bureau. It involves totaling the number of new residential dwelling units constructed each year; subtracting the number of dwellings that were demolished during the same time period to derive the total number of new dwelling units built; then, multiplying the number of new dwelling units by the vacancy rate for the city to establish the number of new occupied dwelling units. Then the total number of occupied dwelling units is multiplied by the average number of persons per household to derive a figure for the new population residing in the new dwelling units. Finally, this new population increase is added to the latest decennial Census population to establish a new estimate for the City's population. That formula reads as follows:

$$[(SHU-SDU)*.98*SPPH*SOCR]+[(MHU-MDU)*.98*MPPH*MOCR]+GQ+DCF=Pop\ Estimate$$

**SHU** = Single Family Housing Units Added

**SDU** = Single Family Demolished Units

**MHU** = Multi Family Housing Units Added

**MDU** = Multi Family Demolished Units

**.98** = Assumes that 2% of all units building permits applied for are never built

**SPPH** = Single Family Persons per household

**SOCR** = Single Family Occupancy rate

**MPPH** = Multi Family Persons per household

**MOCR** = Multi Family Occupancy rate

**GQ** = Group Quarters Population

**DCF**=Decennial Census Population number

Using this method, there are an estimated 92,727 people living in the City of Lawrence as of July 1, 2010. The table below illustrates the staff issued population estimates, as well as the Census Bureau's annual estimates. The Census Bureau's sub-county estimates are based on a housing unit formula similar to the one that City staff use in determining population estimates.

<b>City of Lawrence Population Estimates 2000 -2010</b>					
<b>Estimate - July 1st</b>	<b>Population</b>	<b>Change/Year</b>	<b>% Change</b>	<b>Census Estimate</b>	<b>Diff.</b>
2000	80,508			80,508	0
2001	81,780	1,272	1.58%	81,780	0
2002	83,310	1,530	1.87%	83,310	0
2003	84,844	1,534	1.84%	84,844	0
2004	86,448	1,604	1.89%	86,448	0
2005	88,664	2,216	2.56%	88,664	0
2006	89,110	446	0.50%	89,110	0
2007	90,311	1,201	1.35%	89,847	464
2008	90,866	555	0.62%	90,504	362
2009	91,464	598	0.66%	92,048	-584
2010	92,727	1,263	1.38%		
Average Annual Change 2000-2010		1,222	1.43%		
Average Annual Change 2005-2010		813	0.90%		

That population estimate released by planning staff is based on their being 38,884 housing units in the city as of July 1, 2010. This is determined by taking the number of housing units reported with the 2000 Census and adding the number of new units built (determined through building permits) and subtracting the number of units demolished.

#### **Analysis of Redistricting Data:**

The Census Bureau releases their own population estimates every year based on a housing unit formula, but acknowledges that ultimately the community has the best available data, and therefore provides a way for the cities and counties to challenge annual population estimates using building permit data. The City successfully challenged the Census Bureau's population estimates in 2005 and 2006, as reflected in the table above. It is important to note that the 2009 estimate released by the Census Bureau was 92,048 people, which was higher than the city's own estimate and much higher than the recently released 2010 Decennial Census figure of 87,643 people. Also important, the 2010 Decennial Census figure of 87,643 people lies between both the Census Estimate and the City Estimate from between 2004 and 2005.

Two maps are attached to the end of this memo that list population and housing unit change between 2000 and 2010 for Census Tracts in Lawrence. A third map shows the boundaries of the different Census Tracts in the City. There are tracts that showed a decline in population while showing an increase in housing units. The reverse is also true, as there were some tracts that showed an increase in population, while there was a decrease in housing units. Of particular note is Tract 3, which includes a portion of the Oread Neighborhood. Tract 3 showed an increase in population from 2000 to 2010 of 621 people, while the number of housing units decreased 192. Another example is Tract 9.01, which is south of the University of Kansas campus. Tract 9.01 showed the addition of 172 housing units from 2000 to 2010, but a decrease in 345 people. These numbers will need to be compared over the next few months to our own building permit records in order to determine if true discrepancies exist that would warrant an appeal of the data. Also, important to note is that loss of 554 housing units and 1785 people from Tract 4, which includes the University of Kansas campus. Staff will coordinate efforts with the University in order to analyze these figures and determine the possible reasoning for these declines.

The Redistricting Data release does not include key components that are needed to adequately compare the City's population estimate for 2010 with the 2010 Decennial Census figure. Average Household Size, Group Quarters Population, and Housing Unit figures broken down by Single or Multi-Unit were not released with the Redistricting Data, but instead will be released, along with the complete 2010 Census information in Summary File 1, later this summer. At that time, more analysis on the discrepancy between the 2010 Redistricting Data, the population estimates released by the Census Bureau, and the City's population estimates will be performed.

### **Importance of Decennial Census Data:**

Census data is important for our community, not only to accurately reflect the demographic make-up of the town and determine potential congressional districts, but also because many programs are funded based on the data. Every year, the federal government allocates more than \$400 billion to states and communities based, in part, on census data. Census data is used by developers, real estate agents, cities, etc. to determine locations for retail stores, schools, hospitals, childcare centers, senior service centers, new housing developments and other community facilities. Census data helps determine allocations for funding highways, local transit, school lunch programs, grants for home rehabilitation, and education programs that keep our schools drug free.

In 2008 alone, Douglas County received funding for many programs based on allocations derived from Census data.<sup>1</sup>

- \$26.6 million in medical help for low-income seniors, children, and people with disabilities
- \$3.6 million for highway infrastructure
- \$1.1 million for the Women, Infants and Children (WIC) food program for low-income families
- \$5 million in funding for local families using food stamps
- \$1.7 million for the National School Lunch program to provide healthy meals to Douglas County kids
- \$626,133 in grant funding to rehabilitate homes in Douglas County or invest in energy saving solutions for local families
- \$798,320 in funding for community development programs and support to local non-profit agencies
- \$858,496 funding for the Safe and Drug Free Schools and Communities Program
- \$87,730 in funding to provide emergency shelter loans or grants for persons needing assistance with utilities and rent
- \$1.9 million in funding for local small business loans

In addition to funding, the Decennial Census data helps guide long range plans for the community, including adequately planning for infrastructure. Of particular importance at this point, correct population figures are a key input in determining the appropriate timing of the construction of the new wastewater treatment plant and the associated utility infrastructure.

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<sup>1</sup> U.S. Census Bureau, Consolidated federal Funds Report

**Next Steps:**

As the release of the Redistricting Data is only a week old, staff will continue to analyze the numbers in order to determine why there is, in staff's opinion, a significant difference in the number of housing units and people being reported between the 2010 Census Figures and the City's and Census Bureau's own estimates. In addition, staff will investigate the impact that this may have on the population projections for 2020 and 2030, especially as they relate to utility and long-range planning efforts. Ultimately, staff will have to wait on the release of the full 2010 Census information expected to happen with the release of Summary File 1 later this summer. At that time, staff will be able to look at the data broken down by Single- and Multi-Unit structures, and get a better idea about the average household size as well as other figures needed for the computation of figures based on our estimate methodology. This is an ongoing project that is important to our community.

The Census Bureau does have a process by which the Decennial Census population and housing unit figures may be appealed, called Count Question Resolution. The appeal process involves analyzing the data based on Census Tracts in order to ensure that if the correct number of housing units were reflected in the 2010 Decennial Census count. The Summary File 1, set to be released in Summer 2011, will provide additional data necessary for the City Commission to determine if an appeal is warranted. Challenges will be accepted starting June 1, 2011, with a final deadline in 2013.

0 1,700 3,400 6,800 10,200 13,600 Feet

1 inch = 7,000 feet

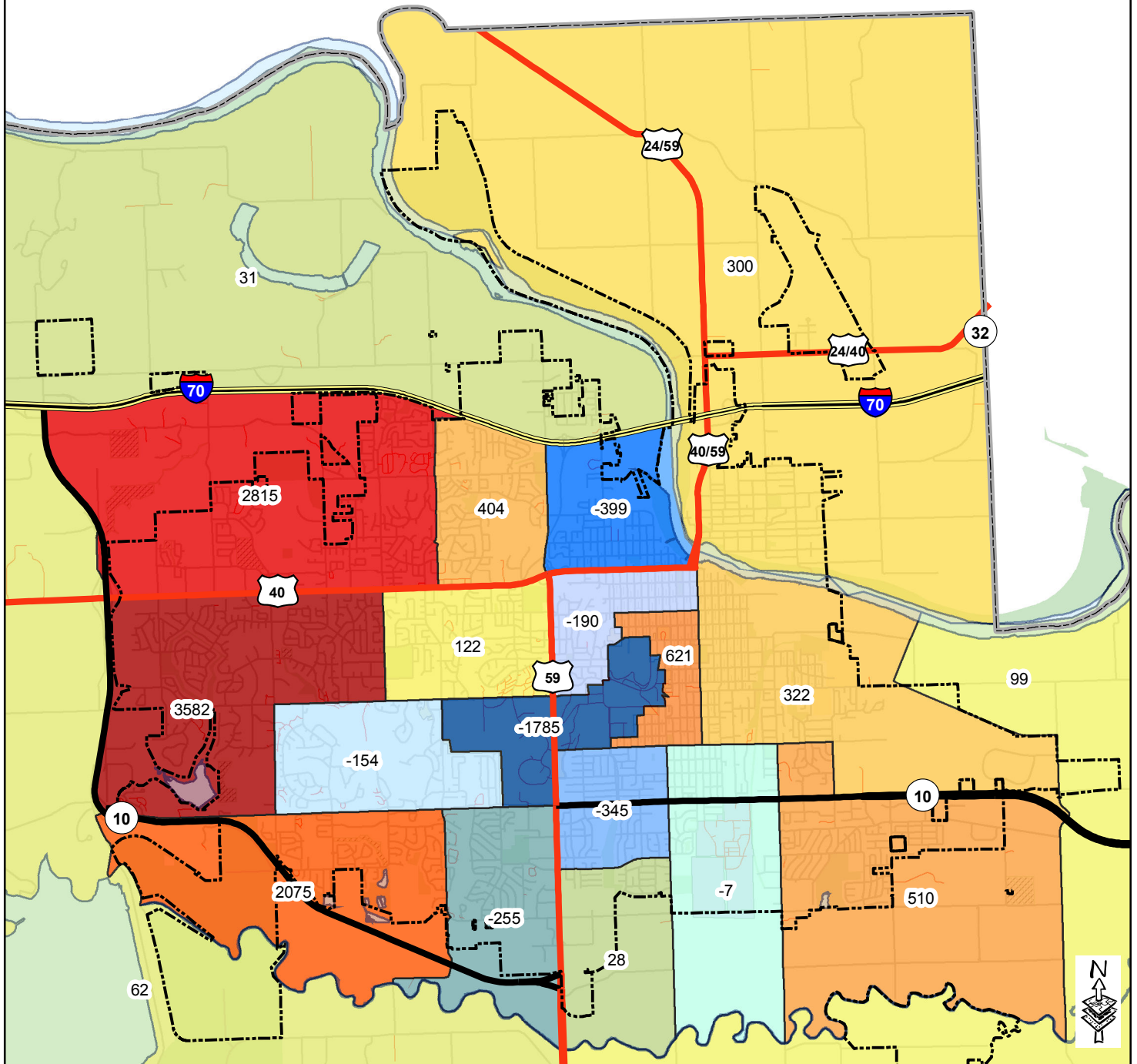
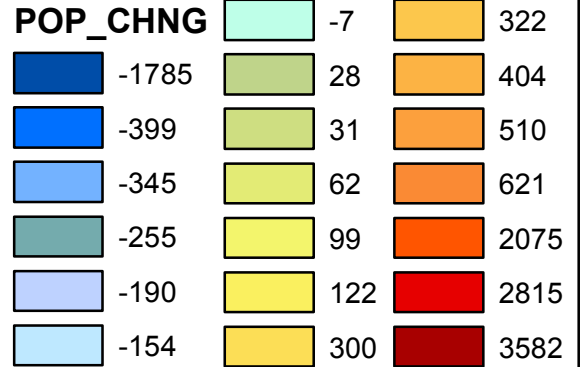
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Date: 3/10/2011

# Population Change Between 2000 and 2010, Shown by Census Tracts for Douglas County, Kansas

## POP\_CHNG



0 1,700 3,400 6,800 10,200 13,600  
Feet

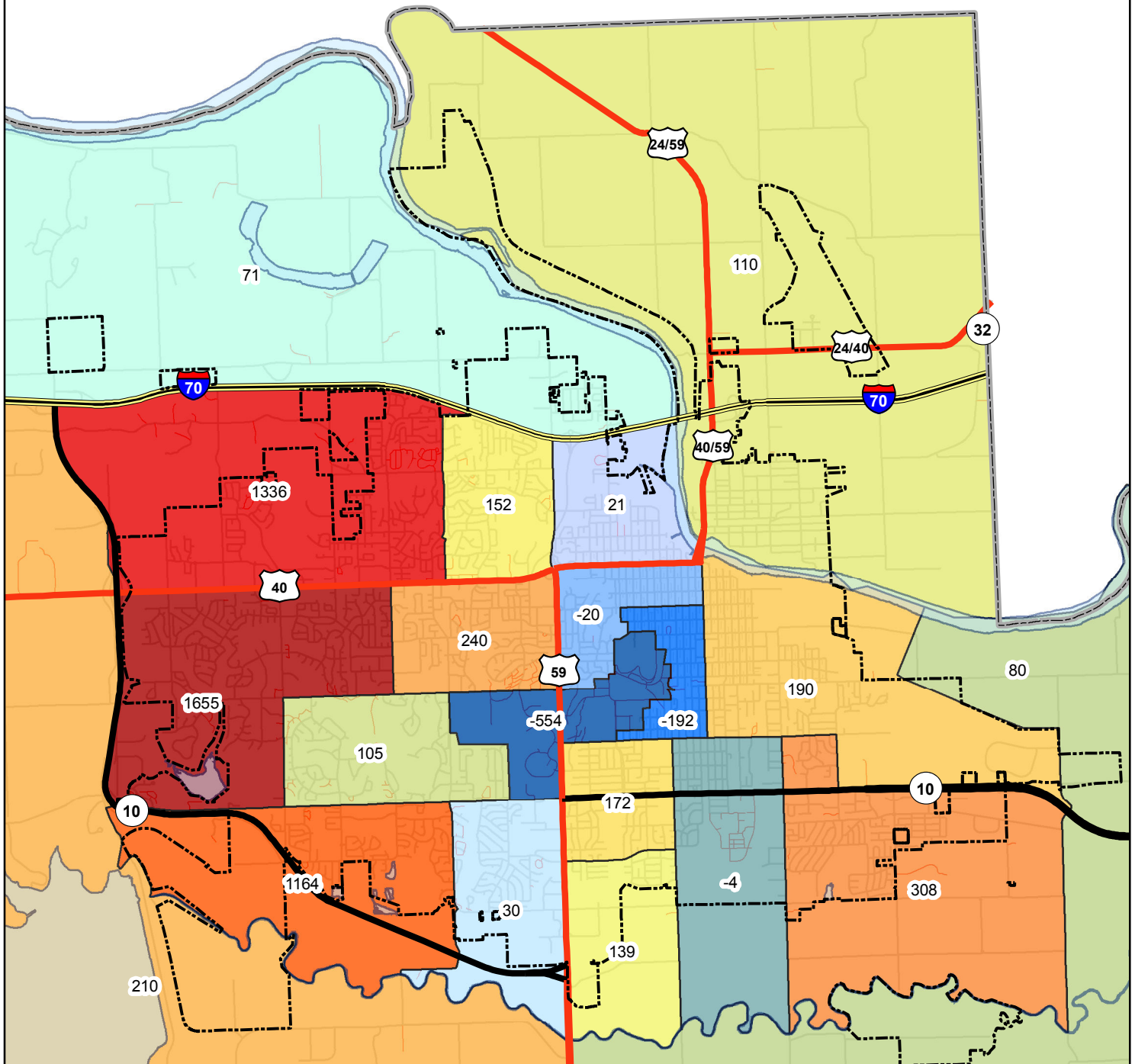
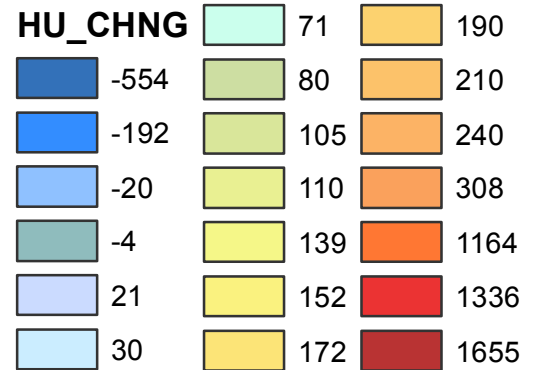
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Date: 3/10/2011

# Housing Unit Change Between 2000 and 2010, Shown by Census Tracts for Douglas County, Kansas





0 1,700 3,400 6,800 10,200 13,600 Feet

1 inch = 7,000 feet

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## Census 2010 Census Tracts

