



**AFFORDABLE HOUSING
NEEDS ASSESSMENT:
TOOELE COUNTY**

**PREPARED FOR: TOOELE COUNTY
HOUSING AUTHORITY**

**PREPARED BY JAMES WOOD
March 2018**

Executive Summary

¶Utah’s affordable housing legislation (HB295) does not mandate that a community’s housing market meet the homeownership desires of all moderate, low and extremely low income households. Rather the legislation encourages a community to provide a “reasonable opportunity for a variety of affordable housing for moderate income households.” The results of this housing needs analysis show that the Tooele County housing market satisfies the language of HB295. The county’s housing market has a substantial number of *homeownership* opportunities for moderate income households while affordable housing opportunities for low and extremely low income households, as shown by household data on severe cost burdens, is limited for many households.

Housing Supply

¶The Tooele County housing market is dominated by owner occupied housing. Seventy-seven percent of all housing units are owner occupied and only 23 percent are renter occupied. The housing market is high concentrated in Tooele City, which accounts for 55 percent (10,506 units) of all housing units in the county. Grantsville ranks second with 15.8 percent (3,008 units), followed by Stansbury Park with 12.7 percent (2,413 units) and the remaining unincorporated area 11.2 percent (2,413 units).

¶Since the Great Recession, residential construction in Tooele Counties has been relatively sluggish compared to the housing boom in the Wasatch Front counties. The number of permits issued for new units has seldom been above 300 units. The high year in the eight year period of 2010-2017 was 2015 with 392 dwelling permits. In 2017 there were 310 permits for new dwelling units issued.

¶Eighty-eight percent of the 2,171 permits issued countywide for dwelling units since 2010 have been for detached single family homes, 1,900 homes. Only 11 percent (241 units) of the permits have been for new apartment units and less than one percent for condominiums/townhomes (18 units.) In stark contrast the building boom in Salt Lake and Utah Counties have been driven by multifamily housing (condominiums/townhomes and apartments.) In the past few years nearly half of all dwelling unit permits in these two counties has been for multifamily units.

¶Despite the difference in types of residential construction the housing market in Tooele County is doing very well. Sales of existing homes are at record levels, the median sales price of a home has increased by 63 percent to \$232,700 in 2017. Median home prices are highest in Stansbury Park (\$285,000) and Grantsville (\$267,000).

¶A survey of apartment communities (rent assisted and market rate) shows a very low vacancy rate, below four percent. Rent assisted are fully occupied with waiting list and the four large market rate projects in the county have very low vacancy rates. Rents have moved up as well. A one bedroom unit in the Cove at Overlake, the newest apartment community in the county rents for \$1,069, a two bedroom two bath unit for \$1,179, and a three bedroom two bath unit for \$1,299. The project (132 units) is 99 percent occupied.

¶Housing market indicators point to a housing shortage in Tooele County with increasing prices for both homeownership and renters and very low vacancy rates. Currently, most major housing market in Utah face similar conditions. Housing demand is outpacing the supply of new homes and apartments.

Demographic Conditions

¶ In 2016 Tooele County had a population of 65,285, ranking as the seventh largest county in Utah. Tooele City with a population of 33,762 is the largest city in the county followed by the unincorporated area (including Stansbury Park) of 18,327 individuals, and Grantsville at 10,549 individuals. One out of every four individuals in the county lives in the unincorporated area. About half, 8,948 of the unincorporated population lives in Stansbury Park.

¶ By 2022 the population of the county is expected to reach 78,400 and the number of households 27,400. Household growth is of critical importance to housing demand. Housing demand is driven by changes in households. In 2016 there were 20,057 households in the county; 10,577 in Tooele city, 5,281 in the unincorporated area including the 2,413 households in Stansbury Park, and 3,217 in Grantsville.

¶ The average annual growth rate in households since 2000 is 2.9 percent. The growth for households in Stansbury Park has been a remarkable 8.0 percent. The number of households in the county increased by 944 in 2017 but only 310 new housing units received permits; a sign of housing demand exceeding housing supply. According to demographic projections, over the next five years the annual increase in households will be very stable at just under 1,000 additional households. If the household growth projections are accurate the number of new housing units needed over the next five years will be 5,000 units, however if housing development remains well below 500 units annually population growth will necessarily be considerably lower.

¶ Special needs population include the disabled, Seniors, veterans, homeless, and victims of domestic violence. After review of the data I feel the highest priority populations for housing assistance and policies are Seniors, which includes many of the disabled. Over 400 senior households rent and more than 150 of these households suffer some form of disability.

¶ A second special needs population of high priority is victims of domestic violence. Victims of domestic violence receive shelter at Pathways Domestic Violence Shelter operated by Valley Behavioral Health. The facility has 16 beds and operates at high levels of occupancy. The program allows shelter for victims of domestic violence for 30 days then the individual(s) is released. In 2017 the facility served 536 individuals, 342 were residents of Tooele County. A high need, as expressed by director Elizabeth Albertson, is for transitional housing. Many of their clients do not have housing and are left to choose between homelessness or doubling up with friends/family. Pathways Domestic Violence Shelter has applied for a U.S. Department of Justice grant that would help fund and develop a 5-unit transitional housing facility. Under the terms of the grant the transitional housing would be for 6 months to 24 months. Transitional housing for this population is a high priority.

Economic Conditions

¶ Tooele County has an employment base of 15,800, which ranks as the tenth largest county employment base among Utah's 29 counties. But employment growth in Tooele County has been sluggish over the past ten years due to the recession as well as major closures of manufacturing facilities (Allegheny Technologies and Deseret Chemical Depot) and reduction in federal employment. Federal employment has dropped from 15 percent of the labor force only a few years ago to 8 percent in 2016.

¶ The decline in manufacturing and federal employment have been offset by increases in warehousing and transportation and local government employment. The Walmart Distribution center which

opened in 2006 employs over 1,000. The share of transportation and warehousing jobs has increased from one percent of labor market to 9 percent. Local government has increased its share from 13 percent to 16 percent of the labor force.

¶ Tooele County has a number of locational advantages that should support future job growth: (1) location on I-80, (2) proximity to large urban labor market, (3) vast tracts of land and (4) proximity to Great Salt Lake and mineral industries related to the lake and (5) location of Department of Defense facilities, (6) an affordable housing market and (7) the need for local services to meet demands of growing population. Employment projections from the Kem Gardner Policy Institute show that by 2022 employment in the county will reach nearly 18,000 jobs. Over the next six years employment is projected to increase at an average annual rate of 2.1 percent.

¶ Commuting patterns in Tooele County are unique. Each workday over 18,000 residents of Tooele County travel outside the county for work. Nearly 12,000 of these commuters travel to Salt Lake County for employment and the remainder of out-commuting is spread between Utah, Davis, and Weber counties and those traveling out of state for work. Tooele ranks fourth among all counties in out-commuting. Only Daggett, Piute, and Morgan counties have higher rates of out-commuting and all three of these counties are very small in terms of population. Of Utah's major counties Tooele leads by a substantial amount in out-commuting.

¶ Out-commuting is measured as the ratio of county residents that out-commute compared to county residents living and working in Tooele County. This ratio is 3.11 for Tooele County, which means there are a little more than 3 residents leaving the county for employment each day to one resident living and working in the county. The mean travel time of residents of Tooele County is 29.3 minutes.

¶ The ratio of out-commuting in Tooele will increase in the future. High rates of net in-migration are expected over the next several years leading to strong household growth. Demographic growth is expected to be at about 3 percent annually while employment growth is projected at 2 percent. The difference in these growth rates indicates increased levels of out-commuting.

Housing Affordability

¶ The home sales data show that Tooele County, Tooele City, Grantsville and Stansbury Park have a high degree of affordability. Affordability is measured by percent of homes affordable to various income groups. For a city or county to be at affordable equilibrium, 50 percent of the homes sold in a city or county should be affordable to the median income household. If more than 50 percent of homes sold in the city or county are above the 50 percent level the jurisdiction has an affordable housing market and the higher the distance from 50 percent the greater the affordability. The reverse is the case for percent of sales below 50 percent, the lower the share of homes sold below 50 the lower the housing affordability.

¶ For the median income household Tooele County, Tooele City, Grantsville and Stansbury Park have a high degree of affordability, with all four jurisdictions above the 50 percent level. Even for households at 80% AMI (area median income) over half of the sales in Tooele County and Tooele City were affordable to the moderate income household at 80% AMI. Grantsville is slightly below with a percent share of 45% affordable homes and Stansbury Park is not affordable to households at 80% AMI, only 19 percent of homes sold were affordable to moderate income households, see tables below.

Percent of All Homes Sold That Were Affordable to Income Groups, 2016
(single family, condominium, townhome, twin home)

	Tooele County	Tooele City	Grantsville	Stansbury Park
Median Income	80.3%	96.2%	72.4%	58.7%
80% of AMI	56.1%	72.7%	45.4%	19.5%
50% of AMI	3.7%	5.7%	3.8%	0.3%
30% of AMI	0.1%	0.1%	0.0%	0%

Source: UtahRealEstate.com.

Percent of Homes Sold That Were Affordable to Income Groups, 2016
(single family, condominium, townhome, twin home)

	Tooele County	Tooele City	Grantsville	Stansbury Park
Median Income	1,139	794	134	183
80% of AMI	795	600	84	57
50% of AMI	52	47	7	292
30% of AMI	2	1	0	0

Source: UtahRealEstate.com

¶ One of the best and most widely used indicators of the need for affordable housing is the number of households facing housing cost burdens. These data are provided by HUD's Comprehensive Housing Affordability Strategy (CHAS.) If a household is paying more than 30 percent of their income for housing and utilities that household has a "housing cost burden." If a household is paying more than 50 percent of their income for housing that household has a "severe housing cost burden." These severe cost burdened households are most vulnerable to eviction and homelessness.

¶ The severe cost burden data show that about 20 percent of homeowners (2,975 households) have a housing cost burden of at least 30 percent. The share of homeowners with severe housing cost burdens drops to about 5 percent of all households (190 households) for the county and Tooele City, Grantsville and the unincorporated area.

¶ Thirty-two percent of all renters (1,385 households) in Tooele County have housing cost burdens of at least 30 percent. Tooele City has the highest incidence of cost burden with 40 percent of renters facing housing cost burdens. Twenty percent of renters (515 households) in Tooele City have severe housing cost burdens. Keep in mind, any household that has a cost burden is not receiving any housing subsidy, (tax credit unit, voucher, etc.), see tables below.

Renters with Cost Burdens in Tooele County and Selected Cities, 2015

	Total Renters	Renters with Cost Burden ≥30% of Income	Renters with Cost Burden ≥50% of Income
Tooele County	4,325	1,385	635
Tooele City	2,585	1,050	515
Grantsville	450	113	80
Unincorporated	830	52	0

Source: HUD CHAS.

**Percent of Renters with Cost Burdens
in Tooele County and Selected Cities, 2015**

	% of Renters with Cost Burden ≥30% of Income	% of Renters with Cost Burden ≥50% of Income
Tooele County	32.0%	14.7%
Tooele City	40.6%	19.9%
Grantsville	25.1%	17.8%
Unincorporated	6.3%	0.0%

Source: HUD CHAS.

Fair Housing Status, Zoning, and Impact and Permits Fees

¶ HUD measures Fair Housing Status by the number of housing discrimination complaints in a jurisdiction. Fair Housing complaints are very low for Tooele County. Since 1994, 24 complaints have been filed. Five complaints were filed in 2012, the highest year, only 3 complaints were file in 2017. Considering the county has about 4,300 rental units, filed complaints are a miniscule share of the renter population.

¶ Surveys of the three major jurisdiction; Tooele County, Tooele City, and Grantsville were conducted regarding zoning ordinances, fees and permits. None have specific ordinances targeted to encourage affordable housing. There are no fee or permit waivers or density bonuses for affordable housing. Although there are no proactive policies among the cities and county ordinances promoting affordable housing there are no ordinances or policies that prohibit affordable housing. Manufactured housing is permitted, high density multifamily is permitted, and minimum lot sizes for single family homes are between 7,000 and 8,000 square feet, which facilitates affordable housing.

Priorities for Housing Need

¶ (1) Severe cost burdened renters: Over the next five years the number of severe cost burden renters will increase by 100 households. In 2015 there were 635 renter households in this group. The addition of tax credit rental units would be a significant benefit for this growing group of extremely vulnerable renters.

¶ (2) Special needs populations: As mentioned above, Senior disabled individuals and victims of domestic violence are high priorities for housing assistance.

¶ (3) Many of the communities in the county (Wendover, Stockton, Rush Valley, Vernon and Tooele City) have relatively old housing inventories. Programs to provide repair, maintenance, weatherization, etc. would improve living conditions and the quality of the housing stock.

¶ (4) With the understanding that market forces are the final arbiter, public officials should encourage the development of all types and prices of housing development. The low level of multifamily development (apartments and condominiums/townhomes) in the county is puzzling. More housing units are needed. Tooele County has a shortage of housing as does the Wasatch Front and the state. If Tooele County is to achieve the projected rate of demographic growth, higher levels of housing construction are required.

I. HOUSING SUPPLY CONDITIONS: CHARACTERISTICS OF THE HOUSING INVENTORY

This housing needs assessment begins with a discussion of the current housing inventory of Tooele County, six cities, and a Census Designated Place (CDP), Stansbury Park. The characteristics of the inventory are presented including the share of units by tenure, as well as other important characteristics of the housing inventory. The discussion of characteristics is followed by an analysis of residential construction trends for the county, Tooele and Grantsville cities, and unincorporated Tooele County. The last section reviews housing prices in the county and principal cities and Stansbury Park.

A. Characteristics of the Housing Inventory

In 2016, the U.S. Census Bureau reported a total housing inventory for the county of 20,148 units. Ninety-two percent of the residential units in the county are occupied; a total of 18,600 units. Seventy-seven percent of the occupied housing units countywide are owner occupied. This share of owner occupied is higher than the state average of 70 percent. As we shall see Tooele County is a bedroom community for Salt Lake County. Many of the residents of the county commute outside of the county for employment. The number of occupied rental in the county is estimated at nearly 4,300 units, accounting for only 23 percent of the occupied inventory.

Housing Highly Concentrated - Tooele City dominates the local housing market. Fifty-five percent of all occupied housing units are in Tooele City, *Tables 1-2, and Figure 1*. The city has 54 percent of owner occupied units and 58 percent of renter occupied units. Of the remaining cities in rank order Grantsville has the next highest share of occupied housing units with 15.8 percent (3,008 units), followed by Stansbury Park (2,413 units), and the remaining unincorporated area, exclusive of Stansbury Park, with 11.2 percent (2,137 units). These four municipalities; Tooele City, Grantsville, Stansbury Park, and unincorporated area account for 95 percent of the occupied housing units in the county.

Table 1
Inventory of Housing Units by Tenure, 2016

	Owner Occupied	Renter Occupied	Total
Tooele County	14,764	4,302	19,066
Grantsville	2,474	534	3,008
Rush Valley	146	21	167
Stansbury Park	2,072	341	2,413
Stockton	198	65	263
Tooele City	8,009	2,497	10,506
Vernon	79	14	93
Wendover	79	400	479
Unincorporated	1,707	430	2,137

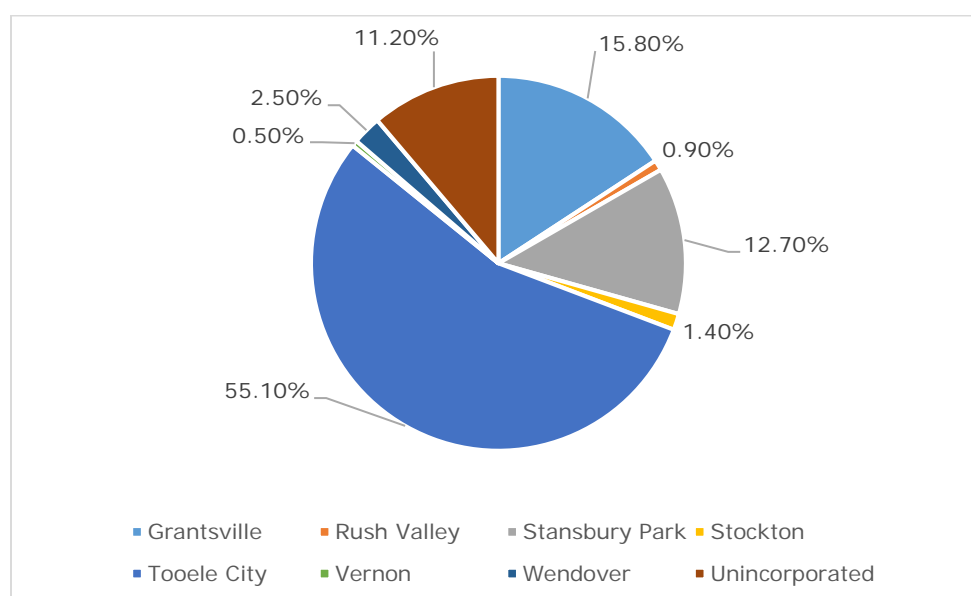
Source: U.S. Census, American Community Survey.

Table 2
Percent Share of Units by City, 2016

	Percent Share of Owner Occupied Units	Percent Share of Renter Units	Percent Share of Units
Tooele County	100.0%	100.0%	100.0%
Grantsville	16.8%	12.4%	15.8%
Rush Valley	1.0%	0.5%	0.9%
Stansbury Park	14.0%	7.9%	12.7%
Stockton	1.3%	1.5%	1.4%
Tooele City	54.2%	58.0%	55.1%
Vernon	0.5%	0.3%	0.5%
Wendover	0.5%	9.3%	2.5%
Unincorporated	11.6%	10.0%	11.2%

Source: U.S. Census, American Community Survey.

Figure 1
Share of Occupied Housing Units



Owner and Renter Occupied Housing – With the exceptions of Tooele City, Stockton, and Wendover, the remaining cities in Tooele County have 80 percent or more of their housing stock devoted to owner occupied housing. In Tooele City 75 percent of the inventory is owner occupied. Tooele City has 8,000 owner occupied units, and Grantsville has nearly 2,500 owner occupied units *Table 3*.

The rental inventory is not quite as concentrated as the owner occupied inventory due to Wendover's housing inventory. Wendover has the highest share of renter occupied units of all cities in the state. Nearly 84 percent of Wendover's housing inventory is rental units. The city has a total of 479 occupied housing units and 400 are rental units. The rental inventory in Wendover provides inexpensive housing for employees in the gaming industry. Tooele, Grantsville, Stansbury Park, Stockton and the unincorporated area make up the remaining cities where rental housing is located. Stockton is a surprise with 25 percent of the housing inventory devoted to rental units. Tooele City with 2,500

renter occupied units accounts for nearly 60 percent of the rental inventory. Grantsville has a 12 percent share with 534 units.

The rental inventory in Tooele County has a relatively large share of the rental occupied units in single family homes and basement apartments of single family homes. Countywide just over 50 percent of all rental units are in single family homes *Table 4-5*. Statewide the share is 38 percent. There are two anomalies among the cities; Wendover only has 17 percent of the rental inventory in single family homes and at the other extreme Stansbury Park has 77 percent of its rental inventory in single family homes.

Table 3
Percent Share by Tenure by City, 2016

	Owner Occupied Units	Renter Units	Total Occupied Units	Percent Share Owner Occupied	Percent Share Renter Occupied
Tooele County	14,764	4,302	19,066	77.4%	22.6%
Grantsville	2,474	534	3,008	82.2%	17.8%
Rush Valley	146	21	167	87.4%	12.6%
Stansbury Park	2,072	341	2,413	85.9%	14.1%
Stockton	198	65	263	75.3%	24.7%
Tooele City	8,009	2,497	10,506	76.2%	23.8%
Vernon	79	14	93	84.9%	15.1%
Wendover	79	400	479	16.5%	83.5%
Unincorporated	1,707	430	2,137	80.0%	20.0%

Source: U.S. Census, American Community Survey.

The rental inventory in Tooele County has a relatively large share of the rental occupied units in single family homes and basement apartments of single family homes. Countywide just over 50 percent of all rental units are in single family homes *Table 4-5*. Statewide the share is 38 percent. There are two anomalies among the cities; Wendover only has 17 percent of the rental inventory in single family homes and at the other extreme Stansbury Park has 77 percent of its rental inventory in single family homes.

Other Characteristics – For the entire housing inventory of over 20,000 units, 82 percent are in single family homes *Table 6*. Detached single family are the dominate building type and the fact that half of all rental units are in single family homes adds to their share of building types.

In terms of median age of dwelling unit (owner occupied and renter occupied) Wendover has by far the oldest housing inventory in the county. The median age of a dwelling unit in Wendover is about 1966, more than 50 years old *Table 7*. Tooele City also has a relatively old housing stock with the median age at about 1988, thirty years old. In contrast Grantsville's housing inventory is young with a median age of 2005, 12 years old. The age of the Wendover housing stock indicates a need for rehabilitation and stepped-up maintenance of the rental housing stock. Many of the older housing units are in older apartment complexes and manufactured or mobile homes.

Manufactured or mobile homes account for about 7 percent of the housing units in Tooele County. There are over 1,300 manufactured homes used as primary residences. In many housing markets outside urban areas manufactured homes are a popular housing type due to their affordability as well as zoning ordinances allowing manufactured homes.

Table 4
Renter Occupied Units by Units in Structure

	Tooele County	Tooele City	Grantsville	Stansbury Park	Wendover
Total Renter Occupied	4,302	2,497	534	341	400
1, detached	1,815	1,059	267	250	69
1, attached	385	212	28	14	0
2	168	107	0	0	15
3 or 4	544	280	105	0	60
5 to 9	368	252	70	0	46
10 to 19	280	155	0	0	114
20 to 49	365	211	11	77	43
50 or more	36	26	10	0	0
mobile home	341	195	43	0	53

Source: U.S. Census Bureau, American Community Survey.

Table 5
Percent of Renter Occupied Units by Units in Structure

	Tooele County	Tooele City	Grantsville	Stansbury Park	Wendover
Total Renter Occupied	100.0%	100.0%	100.0%	100.0%	100.0%
1, detached	42.2%	42.4%	50.0%	73.3%	17.3%
1, attached	8.9%	8.5%	5.2%	4.1%	0.0%
2	3.9%	4.3%	0.0%	0.0%	3.8%
3 or 4	12.6%	11.2%	19.7%	0.0%	15.0%
5 to 9	8.6%	10.1%	13.1%	0.0%	11.5%
10 to 19	6.5%	6.2%	0.0%	0.0%	28.5%
20 to 49	8.5%	8.5%	2.1%	22.6%	10.8%
50 or more	0.8%	1.0%	1.9%	0.0%	0.0%
mobile home	7.9%	7.8%	8.1%	0.0%	13.3%

Source: U.S. Census Bureau, American Community Survey.

Table 6
Units in Structure, 2016

	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Unincorporated County*	Tooele County
Units in Structure								
Total Units	3,021	243	274	11,001	103	584	4,922	20,148
1 unit detached	2,391	208	232	8,574	80	114	4,049	15,648
1 unit attached	69	0	1	526	0	0	404	1,000
2 units	0	0	2	201	6	13	139	361
3 or 4 units	123	0	3	257	0	47	164	594
5 to 9 units	73	0	0	238	0	63	0	374
10 to 19 units	0	0	0	211	0	141	27	379
20 or more units	0	0	0	290	0	106	51	447
Mobile home	352	35	36	704	17	100	88	1,332
Boat or RV	13	0	0	0	0	0	0	13

Source: U.S. Census Bureau.

Table 7
Year Dwelling Unit Built, 2016

Year Built	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Unincorporated County*	Tooele County
2010 and after	113	1	0	180	0	3	166	463
2000 to 2009	1,042	44	62	2,870	8	18	2,136	6,180
1980 to 1990	718	68	113	3,380	41	195	1,327	5,842
1960 to 1980	654	52	45	2,719	26	191	703	4,390
1940 to 1960	278	42	34	1,244	10	129	429	2,166
Pre 1940	216	36	20	608	18	48	161	1,107

Source: U.S. Census Bureau.

Table 8
Dwellings Units by Number of Bedrooms, 2016

	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Unincorporated County*	Tooele County
Total Housing Units	3,021	243	274	11,001	103	584	4,922	20,148
No bedroom	37	5	0	54	0	128	53	277
One bedroom	114	7	12	468	9	120	88	818
Two bedroom	489	55	48	1,985	13	213	582	3,385
Three bedroom	980	117	153	3,858	54	116	1,549	6,827
Four bedroom	739	25	37	3,103	17	7	1,344	5,272
Five or more bedroom	662	34	24	1,533	10	0	1,306	3,569

Source: U.S. Census Bureau.

Nearly 80 percent of the dwelling units in Tooele County have three or more bedrooms. One bedroom units, presumably all rental units, represent only 4 percent of the housing stock *Table 8*. The disproportionate share of units with a large number of bedrooms indicates a relatively high percentage of large families in the county. Many of these families have located in Tooele County because of the affordability of housing and the close proximity to the Salt Lake County labor market.

Table 9 shows that there are very few housing problems regarding quality of unit, plumbing, kitchen area, and number of bedrooms (overcrowding) for all cities with the exception of Wendover. Overcrowding is a problem in the Wendover housing market.

Table 9
Dwellings Units with Housing Problems, 2016

Housing Problems	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Unincorporated County*	County
Overcrowding	0	0	2	11	0	23	5	41
Lack kitchen and plumbing facilities	0	0	0	0	0	21	14	35

Source: U.S. Census Bureau.

B. Residential Construction Trends

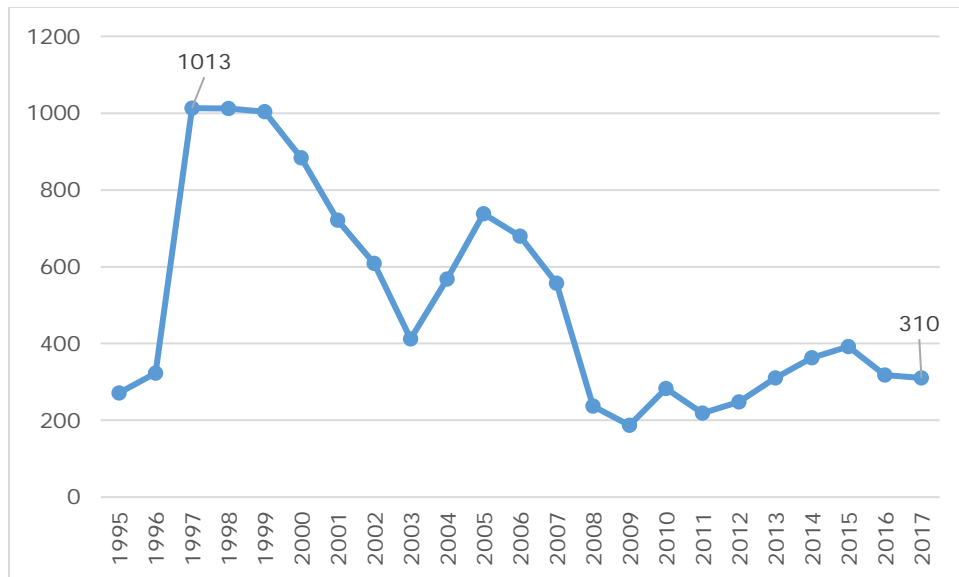
Since 1995 residential construction activity in Tooele County has experienced two burst of high levels of construction. The first was from 1997 through 1999 *Table 10 and Figure 2*. Over this three year period permits were issued for 1,000 units a year. Prior to this sudden acceleration building activity was below 400 units annually.

Table 10
Permits Issued for Residential Permits in Tooele County

Year	Dwelling Units	Year	Dwelling Units
1995	271	2007	557
1996	323	2008	237
1997	1013	2009	187
1998	1012	2010	283
1999	1004	2011	219
2000	884	2012	248
2001	721	2013	310
2002	609	2014	363
2003	412	2015	392
2004	568	2016	318
2005	738	2017	310
2006	680		

Source: Ivory-Boyer Construction Database,
Kem Gardner Policy Institute, University of
Utah.

Figure 2
Permits Issued for Residential Permits in Tooele County



Development of Owner Occupied Housing - By 2000 new construction activity began to decline, falling over the next four years to 412 units; a 60 percent decline. Abruptly again in 2005 new construction accelerating for two years before retreating with the onset of the Great Recession. By 2009 the number of permits issued had fallen to 187 units, the lowest level in over 20 years. In the aftermath of the recession followed by the recovery of the last five years the level of residential construction in Tooele County has bounced between 250 and 400 units. The year with the greatest number of starts was 2015 with 392 units. In 2017 permits were issued for 310 units. Clearly the boom years of the late 1990s was unsustainable. The unusually high numbers were due to the opening of large new subdivisions for development and the high housing prices in Salt Lake County. In the late 1990s Utah led the county in housing price increases and prices in Salt Lake County had reached record levels. Households looking for affordable housing were attracted to new developments in Tooele City that offered affordable single family housing.

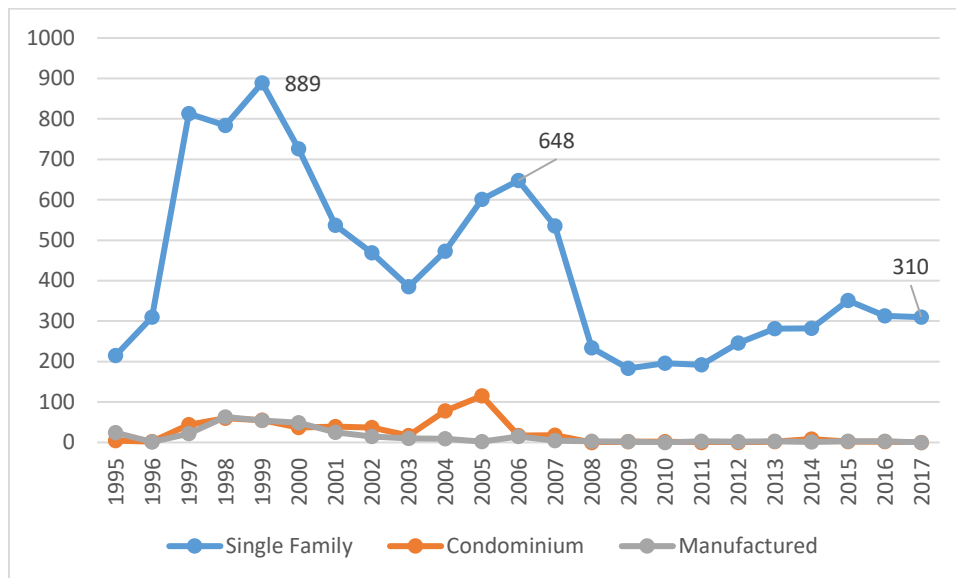
For the most part, residential construction activity in Tooele County has been dominated by single family construction activity *Table 11 and Figure 3*. There have been periods when condominium development was active but it was confined to the late 1990s and early 2000s. Over a period of several years condominium development was around 50 units annually with the highest year in 2005 with 115 units. But since 2008 there has been only 18 new condominium units developed. Condominiums/townhomes have very limited levels of activity in Tooele County.

Table 11
Permits Issued for Owner Occupied Residential Units in Tooele County

	Single Family	Condo, Townhome	Manufactured		Single Family	Condo, Townhome	Manufactured
1995	215	4	24	2007	535	18	4
1996	310	2	1	2008	234	0	3
1997	813	44	22	2009	183	2	2
1998	784	60	63	2010	196	2	0
1999	889	55	54	2011	192	0	3
2000	726	37	49	2012	246	0	2
2001	537	39	25	2013	281	2	3
2002	469	37	15	2014	282	8	1
2003	385	17	10	2015	351	2	3
2004	473	78	9	2016	313	2	3
2005	601	115	2	2017	310	0	0
2006	648	17	15				

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute.

Figure 3
Building Permits Issued for Owner Occupied Dwelling Units by Type in Tooele County



Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute.

Even manufactured homes have declined by a substantial amount from the level of the 1990s, when over seven years (1997 through 2003) the number of new manufactured homes averaged 34 units annually. Over the last ten years the number of new manufactured homes has averaged about two annually. Two of the most affordable types of owner occupied units, condominiums/townhomes and manufactured homes, are not being developed in Tooele County.

Development of Renter Occupied Housing – The trend in apartment construction follows a similar pattern to condominiums and manufactured homes; relatively high levels of activity during the 1990s but sparse development in the past ten years. Apartment development in Tooele County has been very volatile but generally at low levels. Development will occur for two to three years followed by a period of dormancy for a few years then another brief surge in activity (*Table 12 and Figure 4*). During the late 1990s and early 2000s there were three years when apartment development exceeded 100 units; 1997, 1998 and 2001. Since then development has been spotty and at low levels. There has not been any new development in the past three years however, in 2014 permits were issued for 72 new units for the Cove at Overlake

Tables 14-16 and Figure 6-8 present over twenty years of construction data for Tooele City, Grantsville and unincorporated Tooele County, which includes Stansbury Park. The data show that condominium and apartment development have been nearly the sole province of Tooele City. Single family construction are almost exclusively developed in Grantsville and unincorporated Tooele County. Grantsville shows relatively high levels of residential development in the past three years *Figure 6*. Neither Tooele City nor unincorporated county has experienced substantially higher levels of activity in the past three years. In 2017, Grantsville City issued building permits for 147 new single family homes.

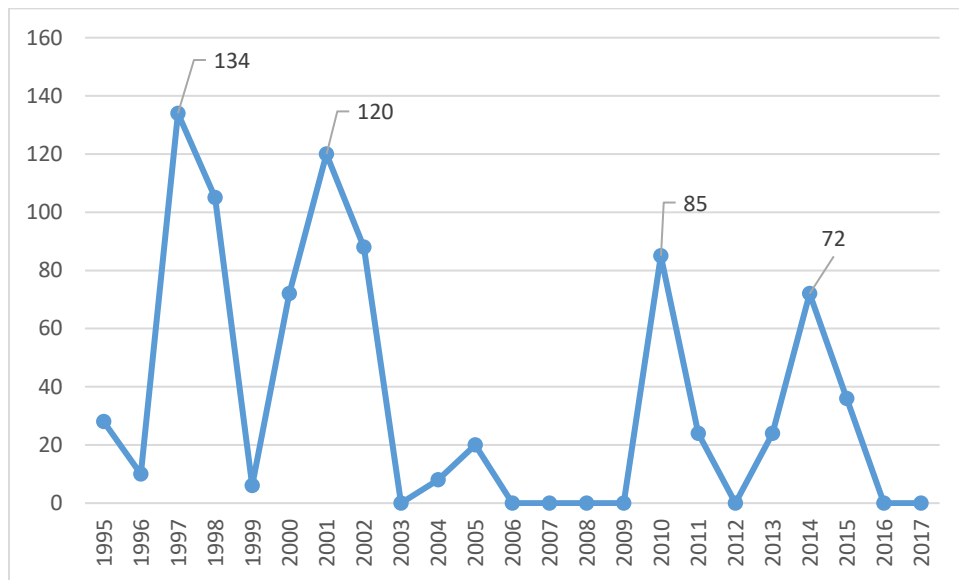
While the Wasatch Front counties are experiencing a boom in apartment and condominium/town home construction this is not the case for Tooele County. The contrast is best illustrated by a comparison of the share of apartment units to total residential units developed in nearby counties *Table 16*. Since 2012 apartments represent 43 percent of all new residential units in Salt Lake County and 25 percent in Utah County. In Tooele County the share of apartments to total development is only 7 percent. Tooele County is not participating in the apartment boom underway in the Wasatch Front counties.

Table 12
Permits Issued for Apartments in Tooele County

Year	Units	Year	Units
1995	28	2007	0
1996	10	2008	0
1997	134	2009	0
1998	105	2010	85
1999	6	2011	24
2000	72	2012	0
2001	120	2013	24
2002	88	2014	72
2003	0	2015	36
2004	8	2016	0
2005	20	2017	0
2006	0		

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Figure 4
Permits Issued for Apartment Units in Tooele County



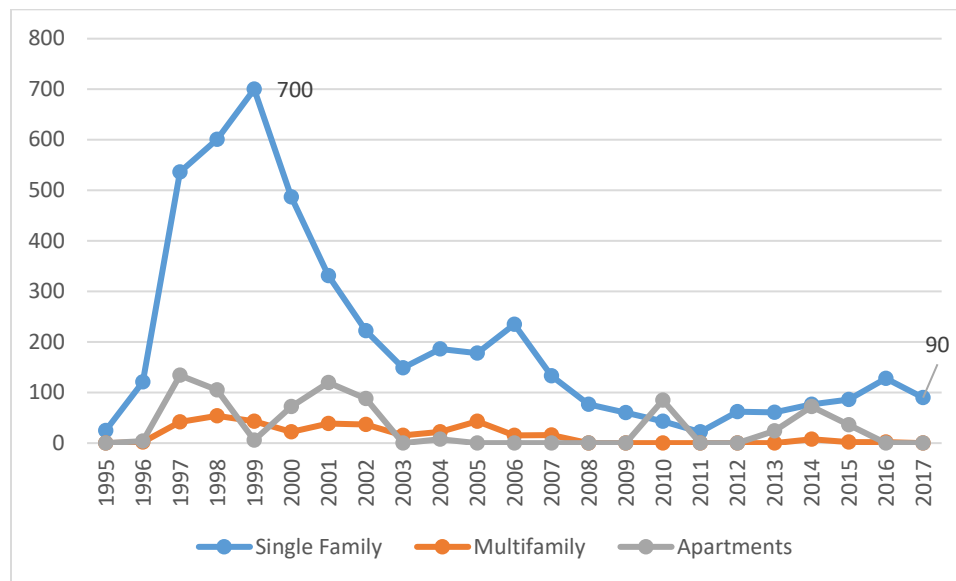
Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Table 13
Permit Issued for Residential Units in Tooele City

	Single Family	Multifamily	Apartments	Total
1995	25	0	0	25
1996	121	2	4	127
1997	536	42	134	712
1998	601	54	105	760
1999	700	43	6	749
2000	487	22	72	581
2001	331	39	120	490
2002	222	37	88	347
2003	149	15	0	164
2004	186	22	8	216
2005	178	43	0	221
2006	235	15	0	250
2007	133	16	0	149
2008	77	0	0	77
2009	60	0	0	60
2010	43	0	85	128
2011	22	0	0	22
2012	62	0	0	62
2013	61	0	24	85
2014	77	8	72	157
2015	86	2	36	124
2016	128	2	0	130
2017	90	0	0	90

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Figure 5
Residential Building Permits Issued in Tooele City by Type of Unit



Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Table 14
Permits Issued for Residential Units in Grantsville by Type of Unit

	Single Family	Multifamily	Apartments	Total
1995	46	0	28	74
1996	15	0	0	15
1997	47	2	0	49
1998	89	2	0	91
1999	99	6	0	105
2000	73	13	0	86
2001	59	0	0	59
2002	49	0	0	49
2003	53	2	0	55
2004	66	0	0	66
2005	135	0	20	155
2006	174	2	0	176
2007	165	2	0	167
2008	25	0	0	25
2009	30	2	0	32
2010	53	2	0	55
2011	74	0	24	98
2012	58	0	0	58
2013	76	0	0	76
2014	44	0	0	44
2015	106	0	0	106
2016	115	0	0	115
2017	147	0	0	147

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Figure 6
Building Permits Issued for Dwelling Units by Type in Grantsville City

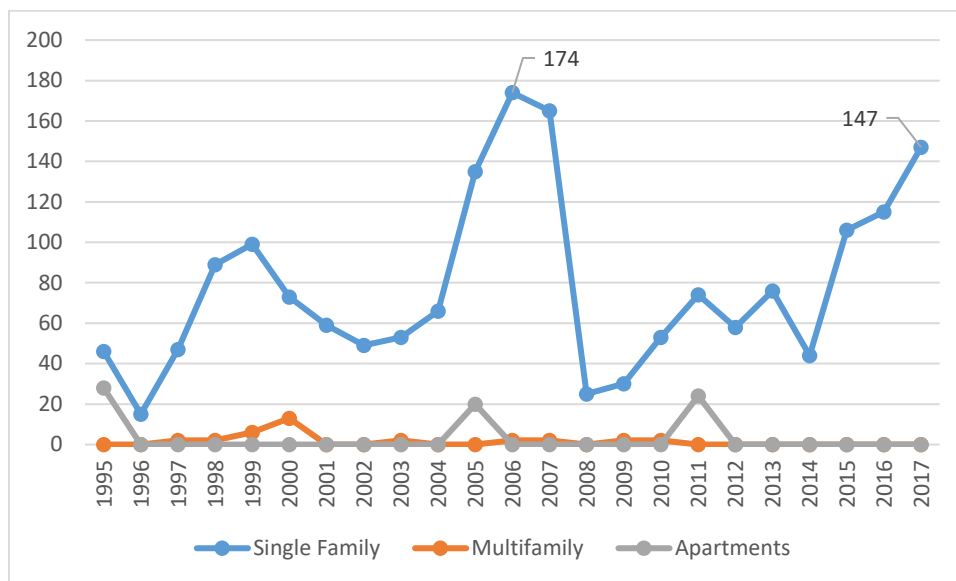


Table 15
Permits Issued for Residential Units by Type of Unit in Unincorporated Tooele County

	Single Family	Multifamily	Apartments	Manufactured	Total
1995	133	4	0	0	137
1996	168	0	6	0	174
1997	223	0	0	14	237
1998	94	4	0	16	114
1999	90	6	0	19	115
2000	166	2	0	6	174
2001	147	0	0	11	158
2002	198	0	0	7	205
2003	150	0	0	2	152
2004	221	56	0	3	280
2005	288	72	0	0	360
2006	238	0	0	3	241
2007	237	0	0	2	239
2008	132	0	0	1	133
2009	93	0	0	0	93
2010	100	0	0	0	100
2011	95	0	0	2	97
2012	126	0	0	0	126
2013	144	0	0	0	144
2014	162	0	0	1	163
2015	159	0	0	0	159
2016	84	0	0	0	84
2017	73	0	0	0	73

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute, University of Utah.

Figure 7
Permit Issued for Residential Units by Type of Unit in Unincorporated Tooele County

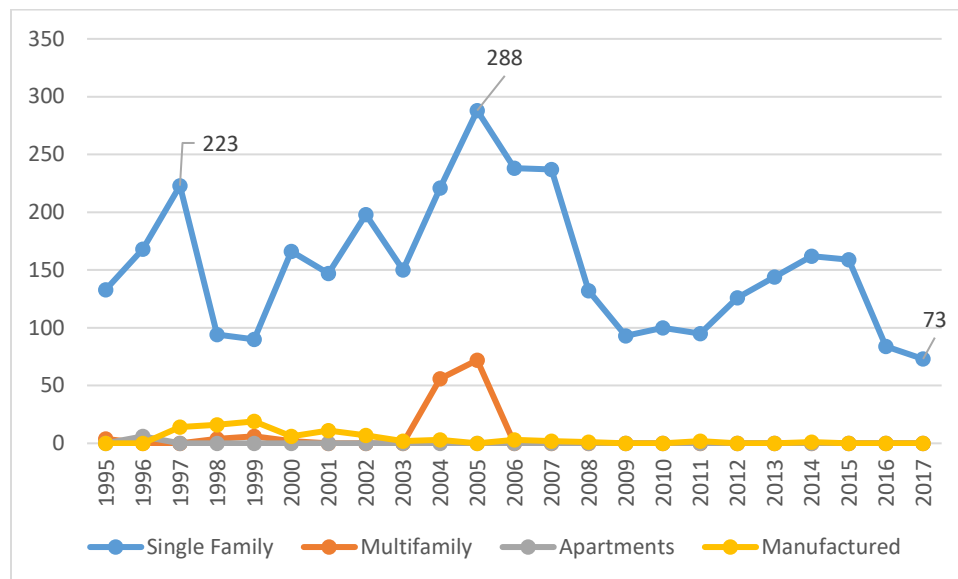


Table 16
Apartment Share of Residential Construction

	Apartment Units	Total Units	% Share Apartments
Davis	2,359	10,753	21.9%
Salt Lake	15,154	35,588	42.6%
Tooele	132	1,821	7.2%
Utah	6,568	26,220	25.0%
Weber	1,166	5,170	22.6%

Source: Ivory-Boyer Construction Database, Kem Gardner Policy Institute.

C. Prices of Owner Occupied Housing

Housing prices in Tooele County are very affordable compared to prices in neighboring Wasatch Front counties. The countywide median sales price in 2017 was \$232,700. In Salt Lake County the median sales price of a single family homes was \$325,000 in 2017, 40 percent higher than Tooele County's median sales price. Tooele City is even more affordable with the median sales price of \$210,000 in 2017. However prices in both Grantsville and Stansbury Park are considerably higher. The median sales price for Grantsville is \$267,000 and for Stansbury Park \$285,000.

Housing prices in Tooele County and the major cities have followed a similar trend to statewide and Wasatch Front housing prices. A rapid acceleration of prices from 2004 to 2007 then a precipitous decline from 2008 to 2011 followed by a strong recovery over the past six years. The decline in prices associated with the Great Recession was generally around 25 percent. In Tooele County prices fell from \$194,000 in 2007 to \$142,000 in 2011. Once prices hit bottom followed by the recovery prices typically gain 50 to 60 percent. In Tooele County prices increased from \$142,000 in 2011 to \$232,700 in 2017, a 63 percent increase in six years.

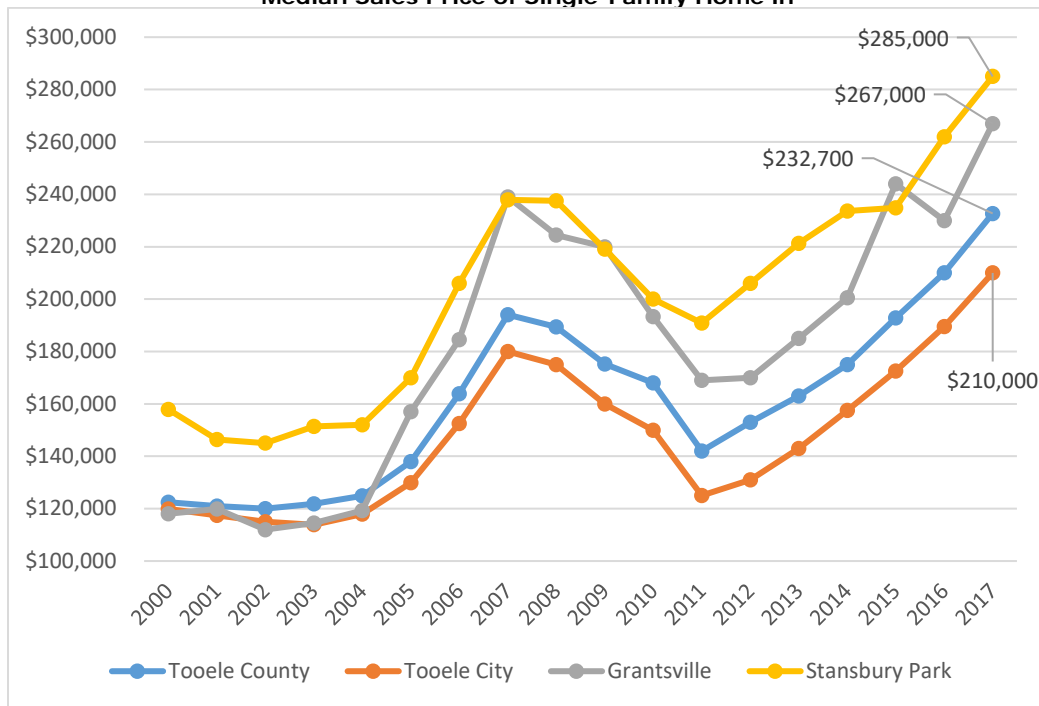
Since 2000 the average annual growth rates in the median sales price of a home in Tooele County has been 3.4 percent. Tooele City has had the slowest rate of increase at 2.9 percent while Grantsville has had the highest rate of increase at 4.3 percent *Table 17*.

Table 17
Median Sales Price of Single-Family Homes

	Tooele County	Tooele City	Grantsville	Stansbury Park
2000	\$122,500	\$119,900	\$118,000	\$157,900
2001	\$120,999	\$117,460	\$119,909	\$146,394
2002	\$120,000	\$115,000	\$112,000	\$145,000
2004	\$124,900	\$117,900	\$119,250	\$152,000
2005	\$138,000	\$129,900	\$157,000	\$170,000
2006	\$163,900	\$152,500	\$184,500	\$206,000
2007	\$194,000	\$180,000	\$239,015	\$237,900
2008	\$189,450	\$175,000	\$224,500	\$237,500
2009	\$175,289	\$159,900	\$220,000	\$219,110
2010	\$168,000	\$150,000	\$193,250	\$200,000
2011	\$142,000	\$125,000	\$169,000	\$190,900
2012	\$153,000	\$131,000	\$170,000	\$206,000
2013	\$163,000	\$143,000	\$185,000	\$221,310
2014	\$174,950	\$157,500	\$200,500	\$233,580
2015	\$192,850	\$172,500	\$244,000	\$234,900
2016	\$210,000	\$189,500	\$230,000	\$262,000
2017	\$232,700	\$210,000	\$267,000	\$285,000
AAGR	3.4%	2.9%	4.3%	3.5%

AAGR = average annual growth rate.
Source: UtahRealtor.Com.

Figure 8
Median Sales Price of Single-Family Home in



Condominiums and townhomes have had much slower rates of growth. Since 2000 the average annual growth rate in condominium prices countywide has been only 1.4 percent and even lower in Tooele City, less than one percent *Table 18*. Condominiums are a source of very affordable housing. Historically condominium prices have behaved similarly to single family home prices; rapid acceleration beginning in 2004 with prices peaking in 2008 then steep three year decline with prices hitting bottom in 2011 followed by a strong recovery over the past six years *Figure 9*.

In recent years real estate sales in Tooele County have been very strong. In 2017 1,272 homes were sold, the second highest year ever. The all-time record high was 2016 with 1,334 sales. In Tooele City 723 homes were sold last year. Stansbury Park has had a sharp increase in sales in the past three years with sales over 250 homes each year. Sales in Grantsville are between 150 and 200 homes, which is near a record high.

Table 18
Median Sales Price of Condominiums and Townhomes

	Tooele County	Tooele City
2000	\$114,400	\$115,463
2001	\$91,900	\$91,900
2002	\$92,000	\$91,995
2003	\$84,500	\$84,850
2004	\$89,500	\$85,950
2005	\$102,900	\$101,000
2006	\$119,000	\$119,900
2007	\$136,450	\$136,400
2008	\$138,950	\$136,300
2009	\$133,200	\$125,000
2010	\$115,000	\$112,200
2011	\$87,000	\$81,750
2012	\$106,500	\$90,950
2013	\$127,000	\$109,900
2014	\$111,000	\$109,000
2015	\$135,500	\$120,000
2016	\$143,750	\$132,000
2017	\$166,950	\$152,000
AARG	1.4%	0.8%

Source: UtahRealtor.Com.

Figure 9
Median Sales Price of Condominiums and Townhomes, Tooele County and Tooele City

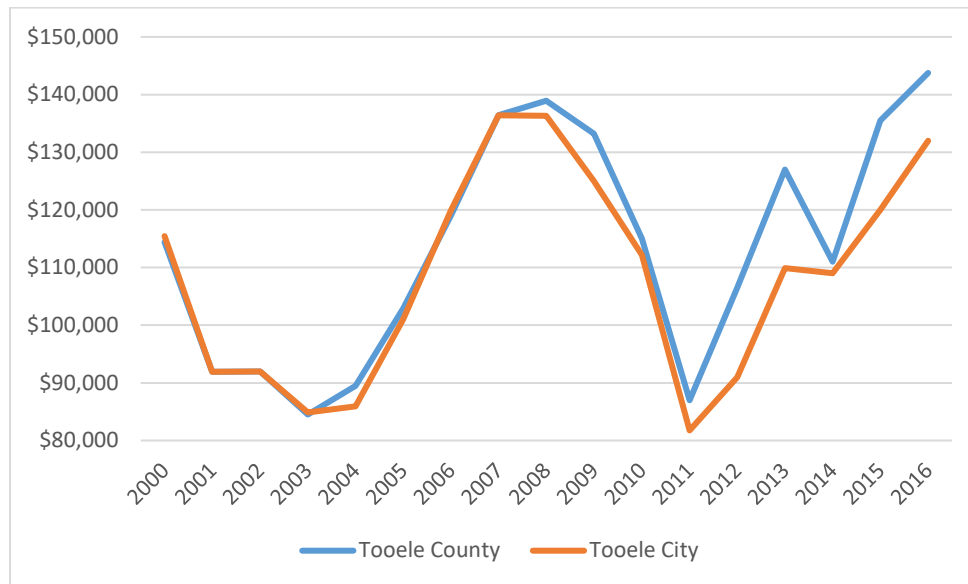


Table 19
Sales of Single Family Homes in Tooele County and Selected Cities

	Tooele	Tooele City	Grantsville	Stansbury Park
2000	427	334	40	41
2001	519	360	62	74
2002	609	396	69	117
2003	745	476	84	157
2004	836	543	112	127
2005	1,086	707	159	175
2006	1,218	831	171	163
2007	941	607	142	147
2008	628	386	102	110
2009	630	375	101	120
2010	610	339	124	115
2011	657	398	94	127
2012	725	424	105	157
2013	843	501	127	160
2014	938	549	142	181
2015	1,191	660	174	277
2016	1,334	771	199	264
2017	1,272	723	154	267

Source: UtahRealEstate.com.

II. HOUSING DEMAND: DEMOGRAPHICS AND ECONOMIC CONDITIONS

This section of the study presents the demographic trends in Tooele County that are most relevant to housing market conditions. Demographic trends since 2000, including population and households, are provided along with the components of demographic change (natural increase and net in-migration). Data on the demographic characteristics; including race and ethnicity, age, income, and housing affordability are included. And last data on the demographic characteristics of special needs populations, disabled, Seniors, veterans, and homeless, are provided.

A. Demographic Trends and Characteristics

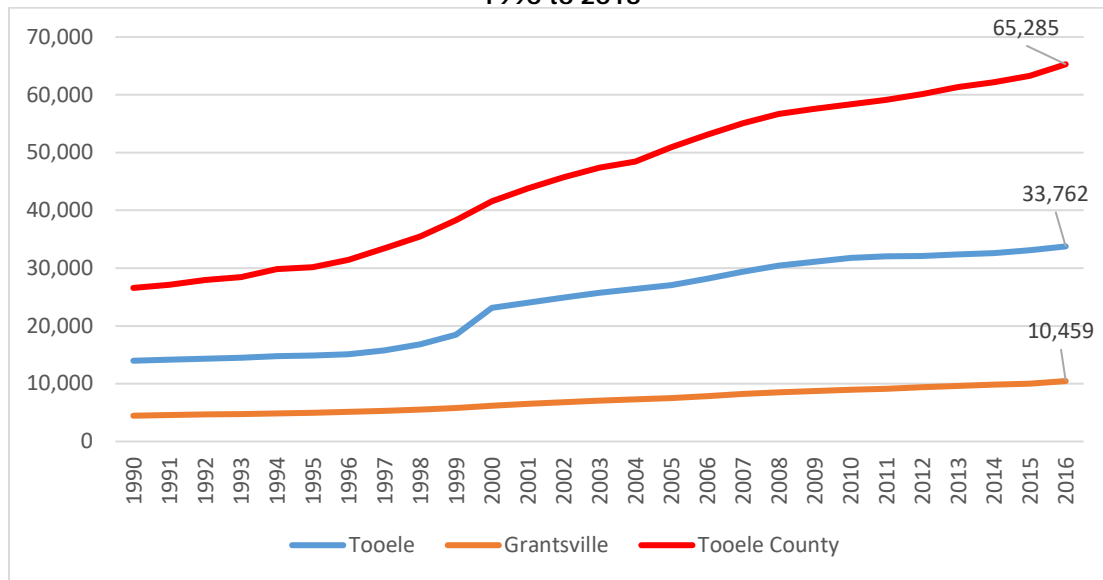
Population and Households -Tooele County, with a population of 65,285 in 2016, is the seventh largest county among Utah's 29 counties *Table 1 and Figure 1*. Only the four Wasatch Front counties plus Washington and Cache counties have larger populations. Since 2000 Tooele County ranks fifth in average annual growth rate with a rate of 2.86 percent. The rate of growth statewide from 2000 to 2017 has been 1.94 percent.

Table 1
Counties Ranked by Population Change

	2000	2016	AAGR	Numeric Change
Wasatch County	15,427	29,995	4.24%	14,568
Washington County	91,128	160,359	3.60%	69,231
Utah County	371,798	603,362	3.07%	231,564
Morgan County	7,171	11,522	3.01%	4,351
Tooele County	41,548	65,285	2.86%	23,737
Iron County	34,088	50,742	2.52%	16,654
Uintah County	25,323	36,580	2.33%	11,257
Duchesne County	14,401	20,608	2.27%	6,207
Davis County	240,162	342,645	2.25%	102,483
Juab County	8,311	11,541	2.07%	3,230
State of Utah	2,245,000	3,054,806	1.94%	809,806
Cache County	91,849	123,907	1.89%	32,058
Summit County	30,012	40,050	1.82%	10,038
Sanpete County	22,844	29,489	1.61%	6,645
Box Elder County	42,863	54,038	1.46%	11,175
Kane County	6,041	7,581	1.43%	1,540
Weber County	197,591	245,672	1.37%	48,081
Salt Lake County	902,843	1,108,872	1.29%	206,029
Rich County	1,953	2,355	1.18%	402
Daggett County	933	1,103	1.05%	170
Grand County	8,530	9,933	0.96%	1,403
San Juan County	14,337	16,302	0.81%	1,965
Sevier County	18,936	21,517	0.80%	2,581
Beaver County	6,022	6,782	0.75%	760
Piute County	1,438	1,604	0.68%	166
Garfield County	4,763	5,190	0.54%	427
Wayne County	2,514	2,718	0.49%	204
Millard County	12,447	13,291	0.41%	844
Carbon County	20,413	21,188	0.23%	775
Emery County	10,782	10,573	-0.12%	-209

Source: U.S. Census Bureau.

Figure 1
Population in Tooele County, Tooele City, and Grantsville
1990 to 2016



Tooele City is by far the largest city in the county with a population of 33,762 in 2016. Tooele City represent 52 percent of the county's population. The unincorporated area, which includes Stansbury Park, ranks second in population with 18,237 individuals. One out of every four individuals in the county lives in the unincorporated area. About half, 8,948 of the unincorporated population lives in Stansbury Park. The third ranked area is Grantsville with a population of 10,459; 16 percent of the countywide population *Table 2*.

By 2022 the population of the county is expected to reach 78,400 and the number of households 27,400 *Table 3*. Household growth is of critical importance to housing demand. Demand is driven by changes in households. In 2016 there were 20,057 households in the county; 10,577 in Tooele city, 5,281 in the unincorporated area including the 2,413 households in Stansbury Park, and 3,217 in Grantsville *Table 4*.

Table 2
Change in Population in Tooele County and Municipalities

	2000	2010	2016	AAGR 2000-2016	Percent Share of Population
Tooele City	23,123	31,789	33,762	2.4%	51.7%
Grantsville	6,181	8,945	10,459	3.3%	16.0%
Wendover	1,587	1,408	1,407	-0.7%	2.2%
Stockton	516	620	647	1.4%	1.0%
Rush Valley	461	450	479	0.2%	0.7%
Vernon	234	244	294	1.4%	0.5%
Unincorporated	9,446	14,899	18,237	4.2%	27.9%
Stansbury Park	2,385	5,145	8,948*	8.6%	13.7%
Tooele County	41,548	58,355	65,285	2.9%	100.0%

AAGR = average annual growth rate.

*average over 2012 to 2016.

Source: U.S. Census Bureau.

Table 3
Population and Household Projections for Tooele County

	Population	Households
2017	67,550	22,480
2018	69,862	23,462
2019	72,121	24,441
2020	74,293	25,428
2021	76,418	26,437
2022	78,429	27,388

Source: Kem Gardner Policy Institute,
University of Utah.

Table 4
Change in Households in Tooele County and Municipalities

	2000	2010	2016*	AAGR 2000-2016
Tooele City	7,459	9,959	10,577	2.2%
Grantsville	1,856	2,751	3,217	3.5%
Wendover	432	486	486	0.7%
Stockton	155	216	225	2.4%
Rush Valley	149	166	177	1.1%
Vernon	77	79	95	1.3%
Unincorporated	2,549	4,314	5,281	4.7%
Stansbury Park	701	1,457	2,413	8.0%
Tooele County	12,677	17,971	20,057	2.9%

*estimated by James Wood.

Source: U.S. Census Bureau.

The average annual growth rate in households since 2000 is 2.9 percent. The growth for households in Stansbury Park has been a remarkable 8.0 percent. The number of households in the county increased by 944 in 2017. Over the next five years the annual increase in households will be very stable at just under 1,000 additional households *Table 5 and Figure 2*. If the household growth projections are accurate the number of new housing units needed over the next five years will be 5,000, however if housing development remains well below 500 units annually population growth will be much lower.

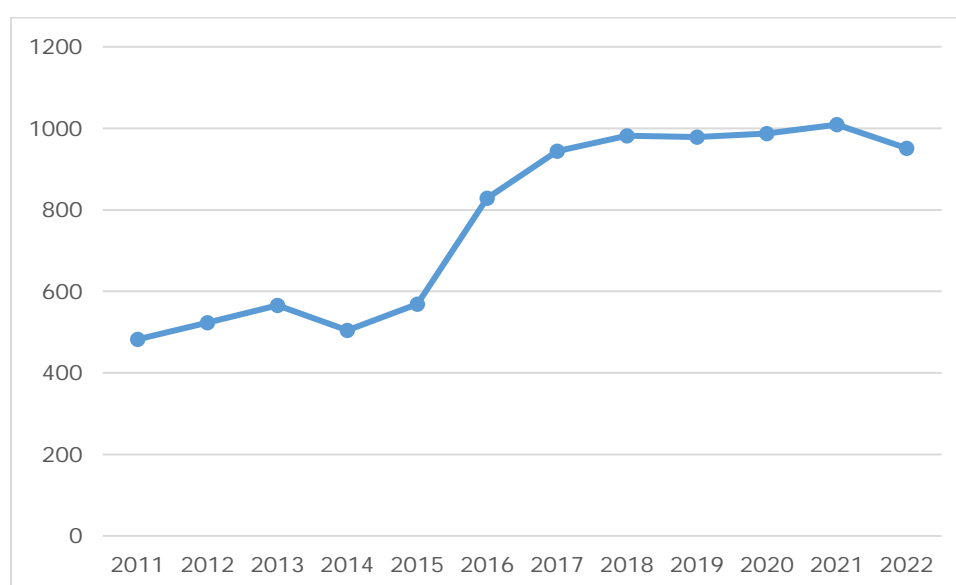
Components of Demographic Change – Underlying the changes in the population and households are the component of demographic change; births, deaths, natural increase, and net migration *Table 6 and Figure 3*. The demographic projections for Tooele County show that natural increase (births – deaths) will be quite stable over the next several years at around 750 to 800 individuals. Tooele County’s accelerating growth will come from net in-migration. Over the next five years net in-migration is projected to be 1,400 individuals annually. That rate of increase will add about 450 households each year to the county from net in-migration. About half the growth of the county will come from households moving into the county.

Table 5
Change in Households in Tooele County

	Households	Change
2010	18,062	
2011	18,544	482
2012	19,068	524
2013	19,634	566
2014	20,138	505
2015	20,707	569
2016	21,536	829
2017	22,480	944
2018	23,462	982
2019	24,441	978
2020	25,428	988
2021	26,437	1,009
2022	27,388	951

Source: Kem Gardner Policy Institute, University of Utah.

Figure 2
Annual Change in Households for Tooele County



Source: Kem Gardner Policy Institute, University of Utah.

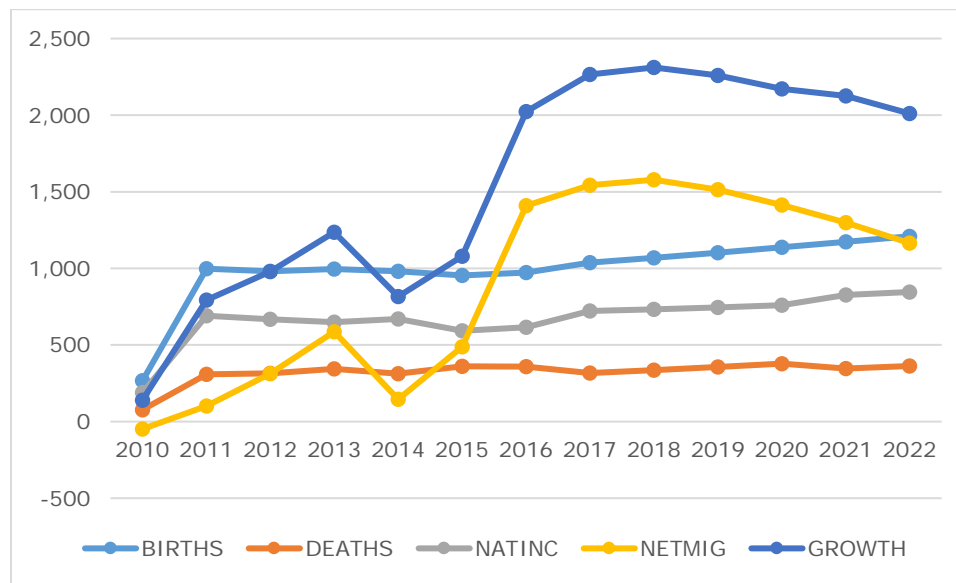
Components of Demographic Change – Underlying the changes in the population and households are the component of demographic change; births, deaths, natural increase, and net migration *Table 6 and Figure 3*. The demographic projections for Tooele County show that natural increase (births – deaths) will be quite stable over the next several years at around 750 to 800 individuals. Tooele County’s accelerating growth will come from net in-migration. Over the next five years net in-migration is projected to be 1,400 individuals annually. That rate of increase will add about 450 households each year to the county from net in-migration. About half the growth of the county will come from households moving into the county.

Table 6
Trends in Components of Demographic Change for Tooele County

	Births	Deaths	Natural Increase	Net Migration	Total Growth
2010	266	77	189	-49	140
2011	998	308	690	103	793
2012	982	314	668	312	980
2013	995	345	650	586	1,236
2014	982	313	669	146	815
2015	953	361	592	488	1,080
2016	973	358	615	1,408	2,023
2017	1,039	317	722	1,543	2,265
2018	1,069	336	733	1,579	2,311
2019	1,103	357	745	1,513	2,259
2020	1,137	378	759	1,413	2,172
2021	1,173	347	826	1,299	2,125
2022	1,210	364	846	1,166	2,012

Source: Kem Gardner Policy Institute.

Figure 3
Trends in Components of Demographic Change for Tooele County



Source: Kem Gardner Policy Institute.

B. Demographic Characteristics

Race, Ethnicity, Age, and Income – Tooele County's population is 81 percent white (not Hispanic). Minorities, which includes Hispanics, comprise 18.6 percent of the population, a total of 12,261 individuals. More than half of all minority individuals are Hispanic. The Hispanic population of the county in 2015 was 7,207 individuals. The Hispanic population has increased from 2,960 in 1990 to 7,207 in 2015. The average annual growth of the Hispanic population has been 3.6 percent annually.

The age distribution of Tooele County is quite similar to the state. The median age of Tooele County's population is 30.7 years, statewide it is 30.3 years. Wendover has the youngest population of any city

in the county with a median age of 26.1 years. Rush Valley has the oldest population with a median age of 49.3 years. Stockton also has an older population with a median age of 40.5 years.

Table 7
Race and Ethnicity in Tooele County

	1990	% Share	2000	% Share	2010	% Share	2015	% Share
Total Population	26,601		40,735		58,128		65,947	
White (not Hispanic)	22,865	86.0%	34,497	84.7%	49,174	84.6%	53,686	81.4%
Minority	3,736	14.0%	6,238	15.3%	9,044	15.6%	12,261	18.6%
Hispanic	2,960	11.1%	4,214	10.3%	6,661	11.5%	7,207	10.9%
Non-Hispanic Minority	776	2.9%	2,024	5.0%	2,383	4.1%	5,024	7.6%
American Indian	354	1.3%	600	1.5%	464	0.8%	662	1.0%
Asian	171	0.6%	234	0.6%	357	0.6%	528	0.8%
Pacific Islander	34	0.1%	64	0.2%	212	0.4%	313	0.5%
Black	224	0.8%	480	1.2%	372	0.6%	369	0.6%
Other Race	14	0.1%	21	0.1%	39	0.1%	2,003	3.0%
Two or More Races	0	0.0%	625	1.5%	939	1.6%	1,149	1.7%

Source: U.S. Census Bureau.

Table 8
Race and Ethnicity by City in Tooele County, 2011-2015

	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Uninc	Total
Total Population	9,609	564	721	32,454	266	1,283	15,996	60,893
White (not Hispanic)	9,124	564	683	29,212	242	733	13,128	53,686
Minority	898	2	138	7,715	48	na	1,915	12,261
Hispanic	413	2	100	4,473	24	1,005	1,190	7,207
Non-Hispanic Minority	485	0	38	3,242	24	na	695	5,024
American Indian	38	0	0	572	0	8	44	662
Asian	127	0	0	133	0	0	268	528
Pacific Islander	156	0	0	102	0	0	55	313
Black	0	0	0	319	0	0	50	369
Other Race	101	0	35	1,186	24	na	134	2,003
Two or More Races	63	0	3	930	0	9	144	1,149
Percent Minority	9.3%	0.4%	19.1%	23.8%	18.0%	at least 78.3%	12.0%	18.6%
Percent Hispanic	4.3%	0.4%	13.9%	13.8%	9.0%	78.3%	7.4%	10.9%

Source: U.S. Census Bureau, American Community Survey.

Table 9
Population by Age for Tooele County and Cities, 2011-2015

	Tooele County	Grantsville	Rush Valley	Stockton	Tooele City	Vernon	Wendover	Unincorporated
Under 5 Years	5,287	952	20	37	2,770	32	151	1,325
5 to 9	6,262	998	13	53	3,184	22	89	1,903
10 to 14	6,305	1,106	30	44	2,942	25	125	2,033
15 to 17	3,384	620	32	34	1,668	20	96	914
18 and 19	1,618	247	8	16	1,002	5	37	303
20	887	139	13	16	383	0	11	325
21	681	70	15	15	445	0	30	106
22 to 24	1,735	220	15	10	991	16	87	396
25 to 29	3,613	489	13	30	2,232	13	77	759
30 to 34	4,784	785	21	64	2,737	9	92	1,076
35 to 39	4,923	785	22	32	2,507	26	76	1,475
40 to 44	4,149	612	14	70	2,165	11	50	1,227
45 to 49	3,507	723	97	47	1,903	5	122	610
50 to 54	3,315	366	72	57	1,729	14	23	1,054
55 to 59	2,648	556	35	34	1,276	14	67	666
60 and 61	1,161	128	22	20	670	3	16	302
62 to 64	1,714	131	25	33	1,061	7	57	400
65 to 66	861	136	13	26	361	2	13	310
67 to 69	1,074	138	10	38	674	2	9	203
70 to 74	1,135	183	27	29	592	3	23	278
75 to 79	770	111	11	7	457	8	18	158
80 to 84	633	89	20	3	395	7	4	115
85 and over	447	25	16	6	310	22	0	68
Median Age	30.7	29.5	49.3	40.5	31.1	30.0	26.1	29.2

Source: U.S. Census Bureau.

The median household income of household in Tooele County was \$64,000 in 2016. Tooele City households had a lower median of \$56,602 while Grantsville household's had a slightly higher income of \$64,652. The highest income household live in Stansbury Park which has a median income of \$85,297. Wendover has by far the lowest median income at \$27,596.

Table 10
Median Household Income

Tooele	\$64,000
Grantsville	\$64,652
Rush Valley	\$54,750
Stansbury Park	\$85,297
Stockton	\$61,875
Tooele	\$56,602
Vernon	
Wendover	\$27,596

Source: U.S. Census Bureau.

Tables 11-18 show the income available for median income household, households at 50% to 80% AMI, households at 30% to 50% AMI, and less than 30% AMI. The tables show what a household in each income group can afford to spend on housing. For example, households in Tooele County with incomes between 50% AMI and 80% AMI could afford to spend, without incurring a cost burden, \$800 to \$1,280 for housing *Table 11*. These tables follow the recommended template for the needs assessment from the Utah State Division of Community and Housing.

Table 11
Affordable Housing Costs by Income, Tenure, Race, and Age
Tooele County

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$5,333	\$1,600
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$5,921	\$1,776
Median Renter Household Income	\$3,331	\$999
White Household Median Income	\$5,444	\$1,633
Hispanic Household Median Income	\$4,282	\$1,285
Elderly Household Median Income (65+)	\$3,472	\$1,042

Source: U.S. Census Bureau, American Community Survey. 2012-2016.

Table 12
Affordable Housing Costs by Income, Tenure, Race, and Age
Tooele City

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$4,747	\$1,424
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$5,352	\$1,606
Median Renter Household Income	\$2,899	\$870
White Household Median Income	\$4,904	\$1,471
Hispanic Household Median Income	\$4,561	\$1,368
Elderly Household Median Income (65+)	\$3,245	\$974

Source: U.S. Census Bureau, American Community Survey. 2012-2016.

Table 13
Affordable Housing Costs by Income, Tenure, Race, and Age
Tooele Grantsville

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$5,388	\$1,616
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$5,803	\$1,741
Median Renter Household Income	\$2,590	\$777
White Household Median Income	\$5,466	\$1,640
Hispanic Household Median Income	*	*
Elderly Household Median Income (65+)	\$2,604	\$781

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Table 14
Affordable Housing Costs by Income, Tenure, Race, and Age
Rush Valley

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$4,563	\$1,369
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$4,688	\$1,406
Median Renter Household Income	\$0	\$0
White Household Median Income	\$4,563	\$1,369
Hispanic Household Median Income	*	*
Elderly Household Median Income (65+)	\$2,995	\$898

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Table 15
Affordable Housing Costs by Income, Tenure, Race, and Age
Stansbury Park

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$7,108	\$2,132
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$7,489	\$2,247
Median Renter Household Income	\$5,343	\$1,602
White Household Median Income	\$7,086	\$2,126
Hispanic Household Median Income	\$6,979	\$2,094
Elderly Household Median Income (65+)	\$6,191	\$1,857

Source: U.S. Census Bureau, American Community Survey. 2012-2016.

Table 16
Affordable Housing Costs by Income, Tenure, Race, and Age
Stockton

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$5,156	\$1,547
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$5,677	\$1,703
Median Renter Household Income	\$3,924	\$1,177
White Household Median Income	\$5,521	\$1,656
Hispanic Household Median Income	\$3,083	\$925
Elderly Household Median Income (65+)	\$3,594	\$1,078

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Table 17
Affordable Housing Costs by Income, Tenure, Race, and Age
Vernon

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$3,906	\$1,171
>50%-80% AMI	\$1,953 to \$3,125	\$586 to \$938
>30-50% AMI	\$1,172 to \$1,953	\$352 to \$586
0-30% AMI	\$0 to \$1,172	\$0 to \$352
Median Homeowner Household Income	\$4,729	\$1,419
Median Renter Household Income	*	*
White Household Median Income	\$4,750	\$1,425
Hispanic Household Median Income	*	*
Elderly Household Median Income (65+)	\$3,245	\$974

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Table 18
Affordable Housing Costs by Income, Tenure, Race, and Age
Wendover

Category	Gross Monthly Income	Affordable Housing Costs
Area Median Household Income	\$2,300	\$690
>50%-80% AMI	\$2,667 to \$4,266	\$800 to \$1,280
>30-50% AMI	\$1,653 to \$2,666	\$496 to \$799
0-30% AMI	\$0 To \$1,652	\$0 to \$495
Median Homeowner Household Income	\$4,328	\$1,298
Median Renter Household Income	\$2,108	\$633
White Household Median Income	\$2,826	\$848
Hispanic Household Median Income	\$2,254	\$676
Elderly Household Median Income (65+)	\$3,245	\$974

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Special Needs Population: Disabled, Seniors, Veterans, Homeless, and Domestic Violence - The most recent estimate of the disabled population is 6,500 individuals. Eighty percent of all disabled persons are Senior 65 years and older. Only 4 percent of individuals under 18 years are disabled, and 10 percent of the individuals between 18 and 64 years are disabled *Table 19*.

Seniors over 75 years old have a high rate of disability. About one quarter of all Seniors over 75 years of age have a hearing disability, one quarter have difficulty living independently, and one-third have ambulatory difficulty. Seniors and the disability population account for a high degree of the incidence of disabilities, *Table 20*.

There are 123 Senior renters over 75 years of age *Table 21*. It's likely that as many as 50 of these renters has a disability. There are nearly 1,100 Senior homeowners 75 years or older. It's likely that nearly 500 have a disability.

There are 2,534 veterans in Tooele County between the ages of 18-64 years. The median income of the male veterans was \$46,863, just \$75 dollars more than the male median income for the general population. There were 131 veterans living in poverty, 5.2 percent of all veterans in the county.

According to the 2016 annualized Point in Time count, about 0.1% of Utah's population is homeless, a total of 2,852 individuals. Although regional differences may impact the rate of homelessness, this percentage can be used to estimate the number of homeless individuals in Tooele County. With a population of 65,000 the homeless population in Tooele County would be 65 individuals. Given this estimate, Tooele County should consider developing and promoting programs to help these individuals find a stable housing situation. (Quoted from recommended template for needs assessment from Utah Division of Community and Housing.)

Victims of domestic violence receive shelter at Pathways Domestic Violence Shelter. The facility has 16 beds and operates at high levels of occupancy. The program allows shelter for victims of domestic violence for 30 days then the individual(s) is released. In 2017 the facility served 536 individuals, 342 were residents of Tooele County. A high need, as expressed by director Elizabeth Albertson, is for transitional housing. Many of their clients do not have housing and are left to choose between homelessness or doubling up with friends/family. Pathways Domestic Violence Shelter, operated by Valley Behavioral Health, has applied for a U.S. Department of Justice grant that would help fund and develop a 5-unit transitional housing facility. Under the terms of the grant the transitional housing would be for 6 months to 24 months. Transitional housing for this population is a high priority.

Table 19
Disability Status by Age in Tooele County, 2016

Total Population	61,538	100.0%
Under 18 years	21,247	100.0%
With One Type of Disability	718	3.4%
With Two Types of Disability	270	1.3%
No Disability	20,259	95.3%
18 to 64 years	35,122	100.0%
With One Type of Disability	1,954	5.6%
With Two Types of Disability	1,547	4.4%
No Disability	31,621	90.0%
65 years and over	5,169	100.0%
With One Type of Disability	973	18.8%
With Two Types of Disability	1,037	20.1%
No Disability	3,159	61.1%
Total with Disability	6,499	10.6%
Median Income of Those with Disability	\$24,755	

Source: U.S. Census Bureau, American Community Survey.

Table 20
Disability by Type for Senior Population for Tooele County

	Total	With Disability	Percent
With Hearing Difficulty			
Population 65 years to 74 years	3,244	398	12.3%
Population 75 years and older	1,925	522	27.1%
With Vision Difficulty			
Population 65 years to 74 years	3,244	74	2.3%
Population 75 years and older	1,925	195	10.1%
With Cognitive Difficulty			
Population 65 years to 74 years	3,244	99	3.1%
Population 75 years and older	1,925	173	9.0%
With Ambulatory Difficulty			
Population 65 years to 74 years	3,244	646	19.9%
Population 75 years and older	1,925	654	34.0%
With a Self-Care Difficulty			
Population 65 years to 74 years	3,244	211	6.5%
Population 75 years and older	1,925	226	11.7%
With Independent Living Difficulty			
Population 65 years to 74 years	3,244	332	10.2%
Population 75 years and older	1,925	523	27.2%

Source: U.S. Census Bureau, American Community Survey, 2012 - 2016.

Table 21
Tenure by Age in Tooele County

Category	Households	Percent Change
Occupied Units	19,066	
Owner Occupied	14,764	100.0%
15 to 24 years	269	1.8%
25 to 34 years	2,418	16.4%
35 to 44 years	3,541	24.0%
45 to 54 years	3,152	21.3%
55 to 59 years	1,277	8.6%
60 to 64 years	1,387	9.4%
65 to 74 years	1,633	11.1%
75 to 84 years	859	5.8%
85 years and over	228	1.5%
Renter Occupied	4,302	100.0%
15 to 24 years	487	11.3%
25 to 34 years	1,032	24.0%
35 to 44 years	1,076	25.0%
45 to 54 years	748	17.4%
55 to 59 years	361	8.4%
60 to 64 years	187	4.3%
65 to 74 years	288	6.7%
75 to 84 years	98	2.3%
85 years and over	25	0.6%

Source: U.S. Census Bureau, American Community Survey, 2012-2016.

Table 22
Socioeconomic Characteristics of Veterans

Category	Amount
Veterans 18-64 years	2,534
Percent of 18-64 population	7.40%
Veteran median income	\$46,925
Male veteran median income	\$46,863
Female	NA
Nonveteran	
Male median income	\$42,254
Female median income	\$21,191
Veteran poverty status	131
Percent of Veterans	5.2%
Labor force participation rate	83.80%
Unemployment rate	3.30%

Source: U.S. Census Bureau, American Community Survey.

C. Economic Characteristics

Employment conditions are vital to the health of a local housing market. Without employment growth housing prices stagnant, the housing stock deteriorates, and housing opportunities for the population become more limited and less desirable. This section discusses the employment growth trends, employment by sector, changes in wages, and commuting patterns of Tooele County residents.

Employment Base – In 2016 Tooele County’s job market had 15,800 jobs *Table 23*. The Tooele County employment base ranks as the tenth largest county employment base among Utah’s 29 counties. Employment has increased by 42 percent since 2000, an increase of 4,688 jobs. In absolute growth of employment over the 16 year period Tooele County ranks 8th. These rankings appear to show a solid job market but in fact the local labor market has seen very little employment growth over the past 10 years. In 2007 the number of jobs in the county was 15,500, just 300 fewer jobs than in 2017. The flat job market for both Tooele County and Tooele City is illustrated in *Figure 4*. The number of jobs in Tooele City has been steady since 2000 at approximately 7,000 jobs *Table 24*.

Table 23
Counties Ranked by Increase in Employment

Rank	County	2000	2016	Numeric Change	% Change
1	Salt Lake	545,153	684,639	139,486	25.6%
2	Utah	152,699	234,648	81,949	53.7%
3	Davis	84,846	121,232	36,386	42.9%
4	Washington	33,579	60,992	27,413	81.6%
5	Weber	88,346	103,903	15,557	17.6%
6	Cache	41,840	56,682	14,842	35.5%
7	Summit	15,228	26,500	11,272	74.0%
8	Tooele	11,130	15,818	4,688	42.1%
9	Wasatch	4,695	8,178	3,483	74.2%
10	Iron	14,070	17,478	3,408	24.2%
11	Uintah	9,261	12,349	3,088	33.3%
12	Duchesne	4,764	7,629	2,865	60.1%
13	Box Elder	17,747	19,750	2,003	11.3%
14	Grand	4,165	5,407	1,242	29.8%
15	Sevier	7,187	8,391	1,204	16.8%
16	Sanpete	6,846	7,820	974	14.2%
17	Juab	2,508	3,456	948	37.8%
18	Millard	3,515	4,159	644	18.3%
19	Kane	2,808	3,408	600	21.4%
20	Morgan	1,565	2,128	563	36.0%
21	Beaver	1,886	2,273	387	20.5%
22	Rich	559	760	201	36.0%
23	San Juan	4,029	4,142	113	2.8%
24	Garfield	2,175	2,276	101	4.6%
25	Piute	242	229	-13	-5.4%
26	Daggett	468	423	-45	-9.6%
27	Wayne	1,091	1,002	-89	-8.2%
28	Carbon	8,871	8,415	-456	-5.1%
29	Emery	3,606	3,082	-524	-14.5%

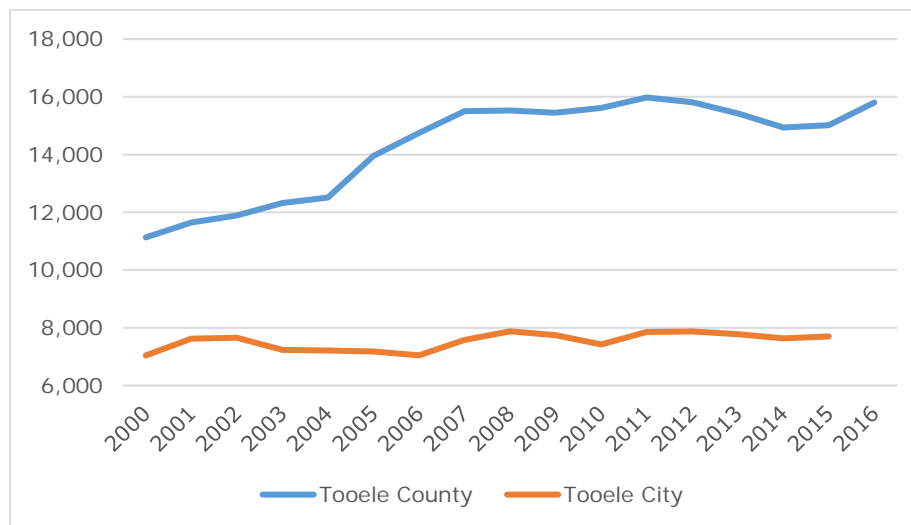
Source: Utah Department of Workforce Services.

Table 24
Employment in Tooele County and Tooele City

	Tooele County	Tooele City
2000	11,130	7,039
2001	11,646	7,622
2002	11,887	7,655
2003	12,324	7,228
2004	12,515	7,211
2005	13,957	7,178
2006	14,755	7,040
2007	15,502	7,574
2008	15,526	7,870
2009	15,446	7,739
2010	15,612	7,422
2011	15,979	7,853
2012	15,812	7,871
2013	15,432	7,781
2014	14,944	7,634
2015	15,016	7,701
2016	15,809	

Source: Utah Department of
Workforce Services.

Figure 4
Employment in Tooele County and Tooele City



The job growth that has occurred since 2001 has been concentrated in three sectors; transportation and warehousing, local government, and health care. Transportation and warehousing has grown significantly due to the 1.2 million square foot Wal-Mart Distribution Center completed in Grantsville in 2006. The distribution center employs over 1,000 workers. Federal government employment accounts for 8 percent of all nonfarm employment in the county. Statewide, federal employment is only 3.2 percent of the workforce. Recent declines in federal government employment is one of the principal reasons job growth has been very sluggish. There are nearly 500 fewer federal government employees in 2016 than in 2001 *Table 25*. As a share of Tooele County's workforce, federal employment has declined from 15 percent of the workforce to 8 percent *Table 26*. Declining federal employment has been a drag on the local employment base. Transportation and warehousing has increased its share of the workforce from one percent in 2001 to 9.2 percent in 2016. Local government has also increase its share to nearly 16 percent from 13.5 percent. Growth over the past several years in local government employment and warehousing and transportation have help to offset losses in federal government employment and manufacturing.

Table 25
Employment Change in Tooele County by Industry Sector, 2001 to 2016

	2001	2016	Numeric Change
Transportation & Warehousing	122	1,434	1,312
Local Government	1,566	2,476	910
Health Care and Social Assistance	696	1,386	690
Retail Trade	1,454	1,854	400
Accommodation and Food Services	948	1,310	362
Education Services	14	189	175
Manufacturing	1,486	1,632	146
Construction	630	769	139
Other	264	394	130
Wholesale Trade	56	171	115
Mining	41	91	50
Real Estate and Rental	67	103	36
Finance and Insurance	175	209	34
State Government	178	193	15
Agriculture, Forestry	92	106	14
Information	183	193	10
Administrative Support	1,411	1,420	9
Professional, Scientific & Technical Services	533	459	-74
Federal Government	1,721	1,255	-466
Total	11,637	15,644	4,007

Source: Utah Department of Workforce Services.

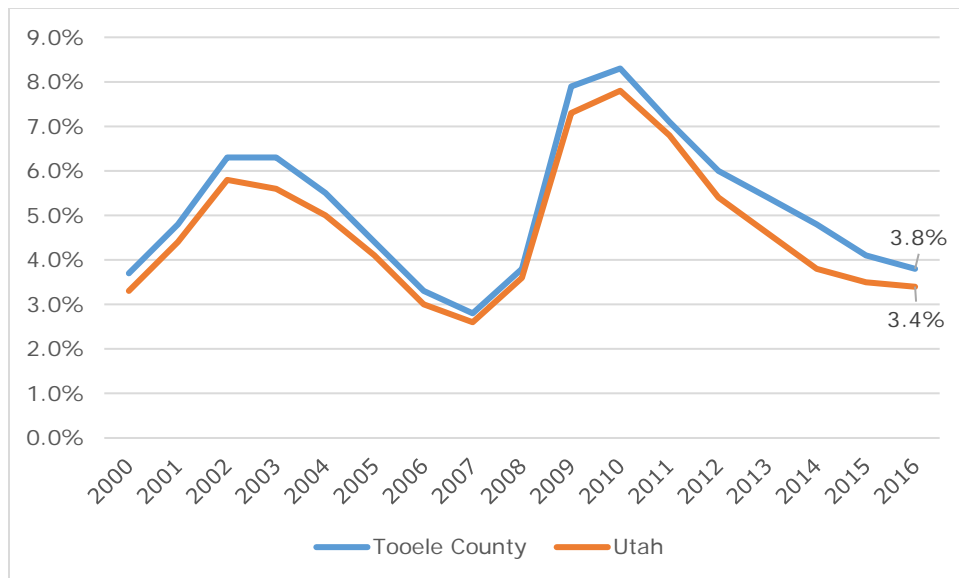
Table 26
Change of Employment by Sector

	% Share	% Share
Agriculture, Forestry	0.8%	0.7%
Mining	0.4%	0.6%
Construction	5.4%	4.9%
Manufacturing	12.8%	10.4%
Wholesale Trade	0.5%	1.1%
Retail Trade	12.5%	11.9%
Transportation & Warehousing	1.0%	9.2%
Information	1.6%	1.2%
Finance and Insurance	1.5%	1.3%
Real Estate and Rental	0.6%	0.7%
Professional, Scientific & Technical Services	4.6%	2.9%
Administrative Support	12.1%	9.1%
Education Services	0.1%	1.2%
Health Care and Social Assistance	6.0%	8.9%
Accommodation and Food Services	8.1%	8.4%
Other	2.3%	2.5%
Federal Government	14.8%	8.0%
State Government	1.5%	1.2%
Local Government	13.5%	15.8%

Source: Utah Department of Workforce Services.

The most recent annual unemployment rate in Tooele County was 3.8 percent in 2016 *Figure 5*. The most recent monthly unemployment rate is for September 2017; a 3.4 percent unemployment rate.

Figure 5
Unemployment Rate in Tooele County and Utah



Employment Projections - Tooele County has a number of locational advantages that should support future job growth: (1) location on I-80, (2) proximity to large urban labor market, (3) vast tracts of land and (4) proximity to Great Salt Lake and mineral industries related to the lake and (5) location of Department of Defense facilities, (6) an affordable housing market and (7) the need for local services to meet demands of growing population. Employment projections from the Kem Gardner Policy Institute show that by 2022 employment in the county will reach nearly 18,000 jobs *Table 27*. Over the next six years employment is projected to increase at an average annual rate of 2.1 percent.

Table 27
Employment Projections

	Employment
2016	15,809
2017	16,110
2018	16,541
2019	16,939
2020	17,295
2021	17,616
2022	17,917

Source: Kem Gardner Policy Institute, University of Utah.

Wages – The average wage rate in Tooele County has decline due to the reduction in high paying federal government jobs. In 2016 the average wage was \$39,384 compared to \$43,656 just three years ago *Table 28*. The decline reflects the shift from some manufacturing (Allegheny Technologies) and federal employment to more health care and local government jobs. Federal government jobs have the highest wage in the county *Table 29*. The decline in the average wage is quite unusual at a time when statewide economic growth is very strong. In fact over the 2010-2016 period Utah has led the county in rate of job growth.

Major Employers – The three largest employers in Tooele County are Tooele School District, Walmart, and the Department of Defense. All three have employment levels between 1,000 and 2,000 jobs. After the top three employers, the employment level of major employers drops to 250-499 jobs, which includes U.S. Magnesium, Cabela's distribution center, Tooele City, Tooele County, and Mountain West Medical. Missing from the list is Deseret Chemical Depot, which stored chemical weapons and closed in 2015 with the loss of about 1,000 high paying jobs *Table 30*.

Table 28
Average Annual Wage

	Tooele County	Tooele City
2000	\$30,096	\$32,796
2001	\$31,008	\$33,192
2002	\$32,796	\$34,224
2003	\$33,192	\$35,304
2004	\$34,224	\$35,976
2005	\$35,304	\$0
2006	\$35,976	\$27,564
2007	\$37,056	\$28,116
2008	\$37,704	\$29,256
2009	\$39,528	\$29,736
2010	\$40,956	\$33,288
2011	\$42,192	\$29,736
2012	\$42,516	\$32,628
2013	\$43,656	\$35,292
2014	\$43,032	\$33,156
2015	\$38,652	\$34,368
2016	\$39,384	

Source: Utah Department of
Workforce Services.

Table 29
Average Wage by Sector

	Average Wage
Federal Government	\$70,560
Professional, Scientific & Technical Services	\$62,736
Wholesale Trade	\$57,876
Mining	\$57,000
Manufacturing	\$54,804
State Government	\$51,468
Administrative Support	\$45,360
Transportation & Warehousing	\$44,292
Finance and Insurance	\$42,756
Construction	\$42,192
Agriculture, Forestry	\$36,084
Health Care and Social Assistance	\$34,656
Local Government	\$32,580
Real Estate and Rental	\$31,128
Other	\$30,204
Information	\$28,056
Retail Trade	\$23,832
Education Services	\$23,724
Accommodation and Food Services	\$13,296
Overall Average	\$39,384

Source: Utah Department of Workforce Services.

Table 30
Major Employers in Tooele County

Company	Employment
Tooele School District	1000-1999
Wal-Mart	1000-1999
Department of Defense	1000-1999
U.S. Magnesium	250-499
Cabela's	250-499
Dealersocket	250-499
Tooele County	250-499
Detroit Diesel Remanufacturing	250-499
Mountain West Medical	250-499
Tooele City	250-499

Source: Utah Department of Workforce Services.

Commuting Patterns - Commuting patterns in Tooele County are unique. Each workday over 18,000 residents of Tooele County travel outside the county for work *Table 31 and Map 1*. Nearly 12,000 of these commuters travel to Salt Lake County for employment and the remainder out-commuting is spread between Utah, Davis, and Weber counties and those traveling out of state for work. Tooele ranks fourth among all counties in out-commuting. Only Daggett, Piute, and Morgan counties have higher rates of out-commuting and all three of these counties are very small in terms of population. Of Utah's major counties Tooele leads by a fair margin in out-commuting.

Out-commuting is measured as the ratio of county residents that out-commute compared to county residents living and working in Tooele County. This ratio is 3.11 for Tooele County, which means there are a little more than 3 residents leaving the county for employment each day to one resident living and working in the county *Table 32*. The mean travel time of residents of Tooele County is 29.3 minutes.

The ratio of out-commuting in Tooele will increase in the future. High rates of net in-migration are expected over the next several years leading to strong household growth. Demographic growth is expected to be at about 3 percent annually while employment growth is projected at 2 percent. The difference in these growth rates indicates increased levels of out-commuting.

New residents will be attracted to Tooele County, in part, due to its close proximity to Salt Lake City's growing northwest quadrant. The northwest quadrant currently has a job base of about 85,000 workers. The number of employees has increased by almost 10,000 jobs in the past four years. And employment will grow to close to 95,000 over the next five years. The completion of the new Utah State Prison west of the airport will add a few thousand jobs, as will the completion of the \$3.6 billion redevelopment (2021) of the Salt Lake International Airport, and Amazon's 850,000 square foot fulfillment center, currently under construction, will also add several hundred employees.

Much of the future demand for housing in Tooele County will come from households attracted to the county by the close proximity to the Salt Lake City employment base of 265,000 jobs and the affordable housing in the county. Salt Lake City is within a 25 minute commute from Stansbury Park, and 30-35 minute commute from Grantsville and Tooele City. The median sales price of a home sold in Tooele City in 2017 was \$210,000, in Grantsville \$267,000, and in Stansbury Park \$285,000 compared to a median sales price in Salt Lake County of \$325,000. Housing prices, commute times,

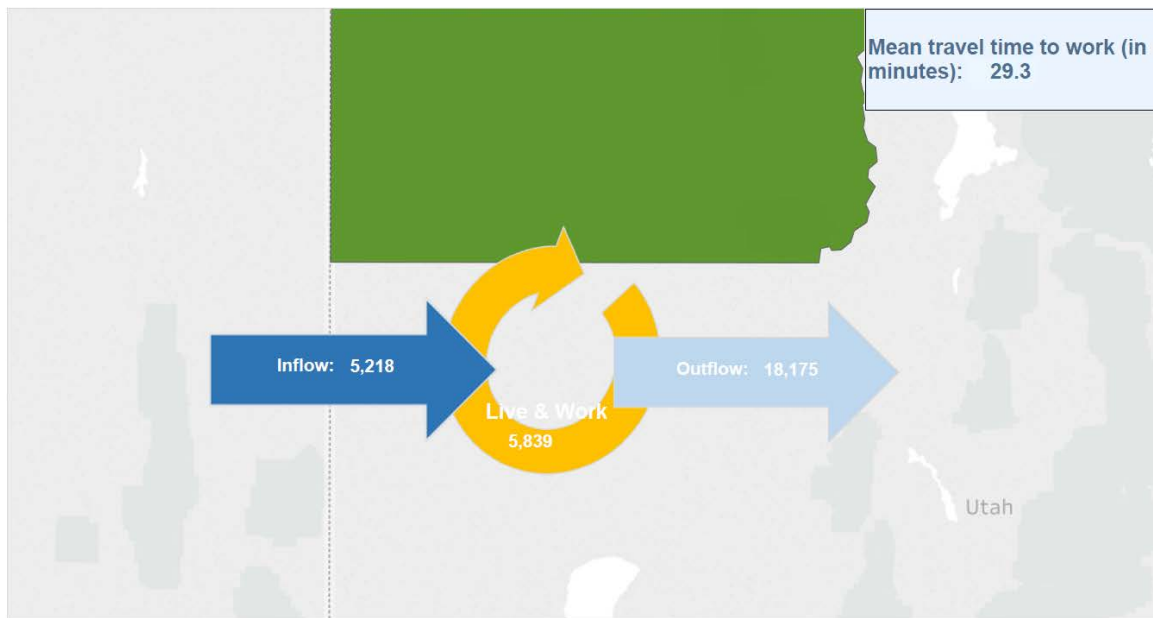
and proximity to employment combine for high rates of net in-migration for Tooele County over the next several years.

Table 31
Inflow and Outflow of Commuters

Locations	Commuters
Inflow	5,218
Salt Lake	2,238
Utah	902
Davis	442
Out of State	323
Weber	287
Other	1,026
Outflow	18,175
Salt Lake	11,813
Utah	1,524
Out of State	1,459
Davis	1,189
Weber	872
Other	1,318

Source: U.S. Census Bureau.

Map 1
Inflow and Outflow of Commuters for Tooele County



Individuals who reside and work in Tooele County:

5,839

Table 32
Counties Ranked by Out-Commuting
 (Ratio of County Residents Out-Commuting to
 County Residents Living and Working in Their Home County)

County	Ratio	County	Ratio
Daggett	10.27	Beaver	1.02
Piute	7.52	Carbon	1.01
Morgan	3.64	Weber	1.00
Tooele	3.11	Sevier	0.89
Wasatch	2.43	San Juan	0.80
Rich	2.38	Millard	0.71
Wayne	1.87	Kane	0.70
Summit	1.81	Uintah	0.67
Davis	1.76	Iron	0.66
Juab	1.62	Utah	0.64
Emery	1.52	Cache	0.57
Box Elder	1.49	Grand	0.39
Sanpete	1.32	Washington	0.32
Garfield	1.19	Salt Lake	0.17
Duchesne	1.03		

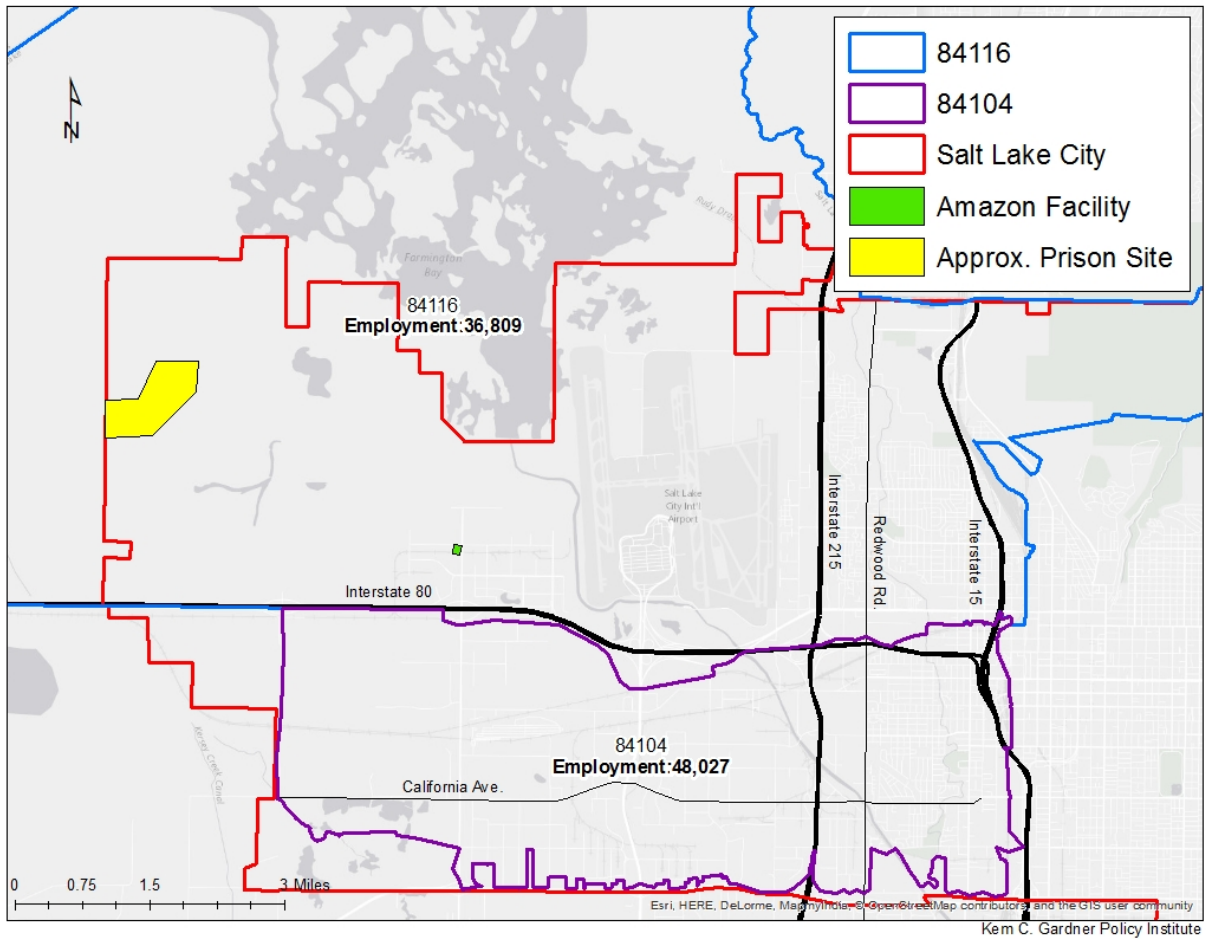
Source: U.S. Census Bureau.

Table 33
Employment in Salt Lake City Northwest Quadrant

	84116	84104	Total
2007	35,615	39,504	75,119
2008	36,465	40,586	77,052
2009	34,998	38,559	73,557
2010	35,226	38,202	73,428
2011	36,612	39,061	75,674
2012	35,308	39,968	75,276
2013	34,792	41,217	76,010
2014	34,114	42,456	76,569
2015	35,789	46,289	82,077
2016	36,809	48,027	84,836

Source: Utah Department of Workforce
 Services.

Map 2
Zip Codes 84116 and 84104



III. HOUSING AFFORDABILITY

This section begins with data on household incomes at the median income, then 80%, 50%, and 30% AMIs and the top housing price thresholds affordable to households in each of the AMI groups. The affordability calculations that determined affordable housing prices for each group are included. Next detailed data on the number and percent of homes (single family and condominiums) sold in 2016 that were affordable to each AMI group including median income households is provided, followed by the number and percent of owners and renters with severe housing cost burden for seven cities and the county. Finally a tally of the number of subsidized rental units in the county is included.

A. Estimates of Moderate, Low, and Very Household Income and Affordable Housing Prices

Household income estimates for median income households, 80% AMI households, 50% AMI, and 30% AMI households are given in *Table 1*. Estimates are provided for a five year period 2012-2016. Estimates for 2017 were not prepared because household income data for 2017 has not yet been published. Publication date is December 2018.

The income estimates were used to determine the housing price, in this case the maximum or top housing price affordable to each AMI income group. The income is county level income, which is traditionally used by HUD and Utah's Division of Community and Housing to determine housing affordability at the county level and city level. In 2016 the median income in Tooele County was \$64,000. This median income household could afford a home, given average mortgage rates in 2016, assumptions about taxes, homeowners insurance, mortgage insurance and utilities, priced at \$276,681 *Table 2*.

Table 1
Household Income for Selected Income Groups in Tooele County
(Top Income Threshold)

	Median Income	80% AMI	50% AMI	30% AMI
2012	\$61,933	\$49,546	\$30,967	\$18,580
2013	\$61,412	\$49,130	\$30,706	\$18,424
2014	\$63,077	\$50,462	\$31,539	\$18,923
2015	\$63,552	\$50,842	\$31,776	\$19,066
2016	\$64,000	\$51,200	\$32,000	\$19,200

Source: U.S. Census Bureau, American Community Survey.

Table 2
Affordable Housing Prices by Income Group in Tooele County
(Top Housing Price Threshold)

	Median Income	80% AMI	50% AMI	30% AMI
2012	\$265,955	\$203,642	\$110,400	\$48,089
2013	\$265,955	\$203,642	\$110,400	\$48,089
2014	\$255,225	\$195,821	\$106,502	\$46,887
2015	\$267,755	\$205,337	\$111,822	\$49,404
2016	\$276,681	\$212,258	\$115,735	\$51,312

Source: U.S. Census Bureau, American Community Survey.

Table 3
Affordability Calculations for Tooele County

2012	Median	80% AMI	50% AMI	30% AMI
Household Income	\$61,933	\$49,546	\$30,967	\$18,580
Income available for housing @30% of income	\$18,580	\$14,864	\$9,290	\$5,574
Income available for housing monthly	\$1,548	\$1,239	\$774	\$464
Income available after taxes, insurance, mortgage ins.	\$1,378	\$1,102	\$689	\$413
Less Utilities	\$200	\$200	\$200	\$200
Remaining income to finance mortgage	\$1,178	\$902	\$489	\$213
Mortgage balance	\$257,976	\$197,533	\$107,088	\$46,646
Down payment 3%	\$7,979	\$6,109	\$3,312	\$1,443
Top home price threshold	\$265,955	\$203,642	\$110,400	\$48,089
2013	Median	80% AMI	50% AMI	30% AMI
Household Income	\$61,412	\$49,130	\$30,706	\$18,424
Income available for housing @30% of income	\$18,424	\$14,739	\$9,212	\$5,527
Income available for housing monthly	\$1,535	\$1,228	\$768	\$461
Income available after taxes, insurance, mortgage ins.	\$1,366	\$1,093	\$683	\$410
Less Utilities	\$200	\$200	\$200	\$200
Remaining income to finance mortgage	\$1,166	\$893	\$483	\$210
Mortgage balance	\$257,976	\$197,533	\$107,088	\$46,646
Down payment 3%	\$7,979	\$6,109	\$3,312	\$1,443
Top home price threshold	\$265,955	\$203,642	\$110,400	\$48,089
2014	Median	80% AMI	50% AMI	30% AMI
Household Income	\$63,077	\$50,462	\$31,539	\$18,923
Income available for housing @30% of income	\$18,923	\$15,138	\$9,462	\$5,677
Income available for housing monthly	\$1,577	\$1,262	\$788	\$473
Income available after taxes, insurance, mortgage ins.	\$1,403	\$1,123	\$702	\$421
Less Utilities	\$200	\$200	\$200	\$200
Remaining income to finance mortgage	\$1,203	\$923	\$502	\$221
Mortgage balance	\$247,568	\$189,946	\$103,307	\$45,480
Down payment 3%	\$7,657	\$5,875	\$3,195	\$1,407
Top home price threshold	\$255,225	\$195,821	\$106,502	\$46,887
2015	Median	80% AMI	50% AMI	30% AMI
Household Income	\$63,552	\$50,842	\$31,776	\$19,066
Income available for housing @30% of income	\$19,066	\$15,252	\$9,533	\$5,720
Income available for housing monthly	\$1,589	\$1,271	\$794	\$477
Income available after taxes, insurance, mortgage ins.	\$1,414	\$1,131	\$707	\$424
Less Utilities	\$200	\$200	\$200	\$200
Remaining income to finance mortgage	\$1,214	\$931	\$507	\$224
Mortgage balance	\$259,722	\$199,177	\$108,467	\$47,922
Down payment 3%	\$8,033	\$6,160	\$3,355	\$1,482
Top home price threshold	\$267,755	\$205,337	\$111,822	\$49,404
2016	Median	80% AMI	50% AMI	30% AMI
Household Income	\$64,000	\$51,200	\$32,000	\$19,200
Income available for housing @30% of income	\$19,200	\$15,360	\$9,600	\$5,760
Income available for housing monthly	\$1,600	\$1,280	\$800	\$480
Income available after taxes, insurance, mortgage ins.	\$1,424	\$1,139	\$712	\$427
Less Utilities	\$200	\$200	\$200	\$200
Remaining income to finance mortgage	\$1,224	\$939	\$512	\$227
Mortgage balance	\$268,381	\$205,890	\$112,263	\$49,773
Down payment 3%	\$8,300	\$6,368	\$3,472	\$1,539
Top home price threshold	\$276,681	\$212,258	\$115,735	\$51,312

Taxes, homeowners insurance, mortgage insurance at 11 percent of income available for housing.

Source: James Wood and U.S. Census Bureau, American Community Survey.

B. Percent of Affordable Homes and Condominiums Sold

Data on all home sales by price were provided by UtahRealEstate.com through their sales data website. Price data for 2012 through 2016 was downloaded for Tooele County, Tooele City, Grantsville, and Stansbury Park. A distribution of all homes sales from the lowest priced home to the most expensive home and all sales in between was prepared. The distribution of sales by price was then compared to the affordable home price for each income group. From this comparison the number of homes sold below the affordable housing price threshold was tallied to given the number of actual sales that were affordable in a specific year, which provides a measure of affordability *Tables 4-5*.

Table's 6-53 present sales data, number of affordable homes sold, and percent share of homes sold that were affordable. For a city or county to be in affordable equilibrium, 50 percent of the homes sold in a city or county should be affordable to the median income household. If more than 50 percent of homes sold in the city or county are above the 50 percent level the jurisdiction has an affordable housing market and higher the distance from 50 percent the greater the affordability. The reverse is the case for percent of sales below 50 percent, the lower the share of homes sold below 50 the lower the housing affordability. These tables present a fair amount of detail over a five year period and can be used as reference.

To provide a more accessible sense of affordability, instead of wading through 47 tables, I have summarized the data for a single year 2016, for Tooele County, Tooele City, Grantsville, and Stansbury Park, for combined dwelling units (homes and condos) and for the four income groups; median, 80% AMI, 50% AMI, 30% AMI. The percent of affordable homes sold appear in *Table 4*. For example in 2016, 96 percent of all homes sold in Tooele City (796 homes) were affordable to the median income household; an exceptionally high degree of affordability *Table 5*. For the median income household all four jurisdictions had a high degree of affordability. Even for households at 80% AMI over half of the sales in Tooele County and Tooele City were affordable to the moderate income household at 80% AMI. Grantsville is slightly below with a percent share of 45% affordable homes and Stansbury Park is not affordable to households at 80% AMI, only 19 percent of homes sold were affordable to moderate income households.

The home sales data show that Tooele County and the four major population jurisdictions have a high degree of affordability.

Table 4
Percent of All Homes Sold That Were Affordable to Income Groups, 2016
(single family, condominium, townhome, twin home)

	Tooele County	Tooele City	Grantsville	Stansbury Park
Median Income	80.3%	96.2%	72.4%	58.7%
80% of AMI	56.1%	72.7%	45.4%	19.5%
50% of AMI	3.7%	5.7%	3.8%	0.3%
30% of AMI	0.1%	0.1%	0.0%	0%

Source: UtahRealEstate.com.

Table 5
Percent of Homes Sold That Were Affordable to Income Groups, 2016
(single family, condominium, townhome, twin home)

	Tooele County	Tooele City	Grantsville	Stansbury Park
Median Income	1,139	794	134	183
80% of AMI	795	600	84	57
50% of AMI	52	47	7	292
30% of AMI	2	1	0	0

Source: UtahRealEstate.com

**Affordability of Homes, Condominiums, and All Dwelling Units
for Median Income Households
(Tables 6–17)**

Table 6
**Percent of Homes Sold in Tooele County Affordable
to Median Income Household**

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	725	656	90.5%
2013	843	745	88.4%
2014	938	774	82.5%
2015	1,191	966	81.1%
2016	1,334	1,030	77.2%

Source: Utah Real Estate.com

Table 7
**Percent of Homes Sold in Tooele City Affordable to
Households at Median AMI**

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	424	414	97.6%
2013	501	491	98.0%
2014	549	519	94.5%
2015	660	632	95.8%
2016	771	740	96.0%

Source: Utah Real Estate.com

Table 8
Percent of Homes Sold in Grantsville Affordable to Households at Median AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	105	90	85.7%
2013	127	98	77.2%
2014	141	104	73.8%
2015	164	108	64.7%
2016	185	134	72.4%

Source: Utah Real Estate.com

Table 9
Percent of Homes Sold in Stansbury Park Affordable to Households at Median AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	157	134	85.4%
2013	160	128	80.0%
2014	181	124	68.5%
2015	271	200	73.6%
2016	264	155	58.7%

Source: Utah Real Estate.com

Table 10
Percent of Condominiums Sold in Tooele County Affordable to Median Income Household

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	42	42	100.0%
2013	49	48	98.0%
2014	55	52	94.5%
2015	74	73	98.6%
2016	84	80	95.2%

Source: Utah Real Estate.com

Table 11
Percent of Condominiums Sold in Tooele City Affordable to Households at Median AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	24	24	100.0%
2013	29	29	100.0%
2014	38	38	100.0%
2015	41	41	100.0%
2016	54	54	100.0%

Source: Utah Real Estate.com

Table 12
Percent of Condominiums Sold in Grantsville Affordable to Households at Median AMI

	Total Condos Sold	Affordable Homes	Share of Homes Sold Affordable
2012			
2013		Insufficient Data	
2014			
2015			
2016			

Source: Utah Real Estate.com

Table 13
Percent of Condominiums Sold in Stansbury Park Affordable to Households at Median AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	17	17	100.0%
2013	17	17	100.0%
2014	13	13	100.0%
2015	30	30	100.0%
2016	28	28	100.0%

Source: Utah Real Estate.com

Table 14
Percent of Single Family and Condominiums Sold in Tooele County Affordable to Median Income Household

	Total Units Sold	Affordable Homes	Share of Homes Sold Affordable
2012	767	701	91.4%
2013	884	797	90.2%
2014	993	826	83.2%
2015	1,265	1043	82.5%
2016	1,418	1139	80.3%

Source: Utah Real Estate.com

Table 15
Percent of Single Family and Condominiums Sold in Tooele City Affordable to Households at Median AMI

	Total Units Sold	Affordable Homes	Share of Homes Sold Affordable
2012	448	438	97.6%
2013	530	520	98.1%
2014	587	557	94.9%
2015	701	673	96.0%
2016	825	794	96.2%

Source: Utah Real Estate.com

Table 16
Percent of Single Family and Condominiums Sold in Grantsville Affordable to Households at Median AMI

	Total Units Sold	Affordable Homes	Share of Homes Sold Affordable
2012			
2013		Insufficient Condo Data	
2014			
2015			
2016			

Source: Utah Real Estate.com

Table 17
Percent of Single Family and Condominiums Sold in Stansbury Park Affordable to Households at Median AMI

	Total Units Sold	Affordable Homes	Share of Homes Sold Affordable
2012	174	151	86.8%
2013	177	145	81.9%
2014	194	137	70.6%
2015	307	230	74.9%
2016	292	183	62.7%

Source: Utah Real Estate.com

Affordability of Homes, Condominiums, and All Dwelling Units for Household at 80% AMI (Tables 18-29)

Table 18
Percent of Homes Sold in Tooele County Affordable to 80% AMI Household

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	725	556	76.7%
2013	835	604	72.3%
2014	938	574	61.2%
2015	1191	673	56.5%
2016	1334	715	53.6%

Source: Utah Real Estate.com

Table 19
Percent of Homes Sold in Tooele City Affordable to Households at 80% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	424	397	93.6%
2013	501	450	89.8%
2014	549	444	80.9%
2015	660	518	78.5%
2016	771	546	70.8%

Source: Utah Real Estate.com

Table 20
Percent of Homes Sold in Grantsville Affordable to Households at 80% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	105	69	65.7%
2013	127	75	59.1%
2014	141	67	47.5%
2015	167	65	38.9%
2016	185	84	45.4%

Source: Utah Real Estate.com

Table 21
Percent of Homes Sold in Stansbury Affordable to Households at 80% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	157	73	46.5%
2013	160	67	41.9%
2014	181	48	26.5%
2015	271	66	24.4%
2016	264	31	11.7%

Source: Utah Real Estate.com

Table 22
Percent of Condominiums Sold in Tooele County Affordable to Households at 80% AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	42	42	100.0
2013	49	48	98.0
2014	55	52	94.5
2015	74	73	98.6
2016	84	80	95.2

Source: Utah Real Estate.com

Table 23
Percent of Condominiums Sold in Tooele City Affordable to Households at 80% AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	24	24	100.0
2013	29	29	100.0
2014	38	35	92.1
2015	41	40	97.6
2016	54	54	100.0

Source: Utah Real Estate.com

Table 24
Percent of Condominiums Sold in Grantsville Affordable to Households at 80% AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012			
2013		Insufficient Condo Data	
2014			
2015			
2016			

Source: Utah Real Estate.com

Table 25
Percent of Condominiums Sold in Stansbury Park Affordable to Households at 80% AMI

	Total Condos Sold	Affordable Condos	Share of Homes Sold Affordable
2012	17	17	100.0%
2013	17	16	94.1%
2014	13	12	92.3%
2015	30	29	96.7%
2016	28	26	92.9%

Source: Utah Real Estate.com

Table 26
Percent of Single Family and Condominiums Sold in Tooele County Affordable to Household at 80% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	767	598	78.0%
2013	884	652	73.8%
2014	993	626	63.0%
2015	1265	746	59.0%
2016	1418	795	56.1%

Source: Utah Real Estate.com

Table 27
Percent of Single Family and Condominiums Sold in Tooele City Affordable to Households at 80% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	448	421	94.0%
2013	530	479	90.4%
2014	587	479	81.6%
2015	701	558	79.6%
2016	825	600	72.7%

Source: Utah Real Estate.com

Table 28
Percent of Single Family and Condominiums Sold in Grantsville Affordable to
Households at 80% AMI
(only single family, condos insufficient data)

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	105	69	65.7%
2013	127	75	59.1%
2014	141	67	47.5%
2015	167	65	38.9%
2016	185	84	45.4%

Source: Utah Real Estate.com

Table 29
Percent of Single Family and Condominiums Sold in Stansbury Park Affordable to
Households at 80% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	174	90	51.7%
2013	177	83	46.9%
2014	194	137	70.6%
2015	307	95	30.9%
2016	292	57	19.5%

Source: Utah Real Estate.com

Affordability of Homes, Condominiums, and All Dwelling Units
for Households at 50% AMI
(Tables 30-41)

Table 30
Percent of Homes Sold in Tooele County Affordable
to 50% AMI Income Household

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	725	163	22.5%
2013	835	114	13.7%
2014	938	86	9.2%
2015	1191	70	5.9%
2016	1334	40	3.0%

Source: Utah Real Estate.com

Table 31
Percent of Homes Sold in Tooele City Affordable to Households at 50% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	424	134	31.6%
2013	501	96	19.2%
2014	549	79	14.4%
2015	660	52	7.9%
2016	771	37	4.8%

Source: Utah Real Estate.com

Table 32
Percent of Homes Sold in Grantsville Affordable to Households at 50% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	105	26	24.8%
2013	127	15	11.8%
2014	141	14	9.9%
2015	167	10	6.0%
2016	185	7	3.8%

Source: Utah Real Estate.com

Table 33
Percent of Homes Sold in Stansbury Affordable to Households at 50% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	157	1	0.6%
2013	160	0	0.0%
2014	181	1	0.6%
2015	271	0	0.0%
2016	264	0	0.0%

Source: Utah Real Estate.com

Table 34
Percent of Condominiums Sold in Tooele County Affordable to Households at 50% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	42	22	52.4
2013	49	18	36.7
2014	55	19	34.5
2015	74	20	27.0
2016	84	12	14.3

Source: Utah Real Estate.com

Table 35
Percent of Condominiums Sold in Tooele City Affordable to Households at 50% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	24	17	70.8%
2013	29	14	48.3%
2014	38	5	13.2%
2015	41	16	39.0%
2016	54	10	18.5%

Source: Utah Real Estate.com

Table 36
Percent of Condominiums Sold in Grantsville Affordable to Households at 50% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012			
2013			
2014		Insufficient Data	
2015			
2016			

Source: Utah Real Estate.com

Table 37
Percent of Condominiums Sold in Stansbury Park Affordable to Households at 50% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	17	4	23.5%
2013	17	1	5.9%
2014	13	1	7.7%
2015	30	2	6.7%
2016	28	1	3.6%

Source: Utah Real Estate.com

Table 38
Percent of Single Family and Condominiums Sold in Tooele County Affordable to Household at 50% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	767	185	24.1%
2013	884	132	14.9%
2014	993	107	10.8%
2015	1265	90	7.1%
2016	1418	52	3.7%

Source: Utah Real Estate.com

Table 39
Percent of Single Family and Condominiums Sold in Tooele City Affordable to Households at 50% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	448	151	33.7%
2013	530	112	21.1%
2014	587	84	14.3%
2015	701	68	9.7%
2016	825	47	5.7%

Table 40
Percent of Single Family and Condominiums Sold in Grantsville Affordable to Households at 50% AMI
(only single family, condos insufficient data)

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	105	26	24.8%
2013	127	15	11.8%
2014	141	14	9.9%
2015	167	10	6.0%
2016	185	7	3.8%

Source: Utah Real Estate.com

Table 41
Percent of Single Family and Condominiums Sold in Stansbury Park Affordable to Households at 50% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	174	5	2.9%
2013	177	1	0.6%
2014	194	2	1.0%
2015	307	2	0.7%
2016	292	1	0.3%

Source: Utah Real Estate.com

Affordability of Homes, Condominiums, and All Dwelling Units for Median Income Households
(Tables 42-53)

Table 42
Percent of Homes Sold in Tooele County Affordable to 30% AMI Income Household

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	725	31	4.3%
2013	835	3	0.4%
2014	938	5	0.5%
2015	1191	3	0.3%
2016	1334	2	0.1%

Source: Utah Real Estate.com

Table 43
Percent of Homes Sold in Tooele City Affordable to
Households at 30% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	424	17	4.0%
2013	501	5	1.0%
2014	549	3	0.5%
2015	660	6	0.9%
2016	771	1	0.1%

Source: Utah Real Estate.com

Table 44
Percent of Homes Sold in Grantsville Affordable to
Households at 30% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	105	2	1.9%
2013	127	0	0.0%
2014	141	0	0.0%
2015	167	0	0.0%
2016	185	0	0.0%

Source: Utah Real Estate.com

Table 45
Percent of Homes Sold in Stansbury Affordable to
Households at 30% AMI

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	157	0	0.0%
2013	160	0	0.0%
2014	181	0	0.0%
2015	271	0	0.0%
2016	264	0	0.0%

Source: Utah Real Estate.com

Table 46
Percent of Condominiums Sold in Tooele County Affordable
to Households at 30% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	42	2	4.8%
2013	49	7	14.3%
2014	55	0	0.0%
2015	74	0	0.0%
2016	84	0	0.0%

Source: Utah Real Estate.com

Table 47
Percent of Condominiums Sold in Tooele City Affordable to Households at 30% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	24	2	8.3%
2013	29	0	0.0%
2014	38	0	0.0%
2015	41	0	0.0%
2016	54	0	0.0%

Source: Utah Real Estate.com

Table 48
Percent of Condominiums Sold in Grantsville Affordable to Households at 30% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012		Insufficient Data	
2013			
2014			
2015			
2016			

Source: Utah Real Estate.com

Table 49
Percent of Condominiums Sold in Stansbury Park Affordable to Households at 30% AMI

	Total Condos Sold	Affordable Condos	Share of Condos Sold Affordable
2012	17	0	0.0%
2013	17	0	0.0%
2014	13	0	0.0%
2015	30	0	0.0%
2016	28	0	0.0%

Source: Utah Real Estate.com

Table 50
Percent of Single Family and Condominiums Sold in Tooele County Affordable to Household at 30% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	767	33	4.3%
2013	884	10	1.1%
2014	993	5	0.5%
2015	1265	3	0.2%
2016	1418	2	0.1%

Source: Utah Real Estate.com

Table 51
Percent of Single Family and Condominiums Sold in Tooele City Affordable to Households at 30% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	448	19	4.2%
2013	530	5	0.9%
2014	587	6	1.0%
2015	701	6	0.9%
2016	825	1	0.1%

Source: Utah Real Estate.com

Table 52
Percent of Single Family and Condominiums Sold in Grantsville Affordable to Households at 30% AMI
(only single family, insufficient data for condos)

	Total Homes Sold	Affordable Homes	Share of Homes Sold Affordable
2012	105	2	1.9%
2013	127	0	0.0%
2014	141	0	0.0%
2015	167	0	0.0%
2016	185	0	0.0%

Source: Utah Real Estate.com

Table 53
Percent of Single Family and Condominiums Sold in Stansbury Park Affordable to Households at 30% AMI

	Total Units Sold	Affordable Units	Share of Units Sold Affordable
2012	174	0	0.0%
2013	177	0	0.0%
2014	194	2	1.0%
2015	307	0	0.0%
2016	292	0	0.0%

C. Housing Cost Burden for Homeowners and Renters

One of the best and most widely used indicators of the need for affordable housing is the number of households facing housing cost burdens. These data are provided by HUD's Comprehensive Housing Affordability Strategy (CHAS.) If a household is paying more than 30 percent of their income for housing and utilities that household has a "housing cost burden." A fair share of household will accept a housing cost burden above 30 percent because of the essential nature of housing for the economic well-being of a household. Nevertheless, this is a problem for the household, which now has less to spend on food, clothing, education, health care, and other essentials. I have chosen to emphasize in the executive summary the number and percent of household facing a severe housing cost burden. The tables below do include data on those with These households are paying at least 50 percent of their income for housing, many are paying 60 or 70 percent. These households are extremely vulnerable to eviction and homelessness.

Cost Burden for Homeowners - I have summarized the result of the housing cost burden in four tables; *Table 54-Table 57*. The summary results show that about 20 percent of homeowners (2,975 households) have a housing cost burden of at least 30 percent. The share of homeowners with severe housing cost burdens drops to about 5 percent of all households (190 households) for the county and Tooele City, Grantsville and the unincorporated area.

Cost Burden for Renters - Thirty-two percent of all renters (1,385 households) in Tooele County have housing cost burdens of at least 30 percent *Tables 56-57*. Tooele City has the highest incidence of cost burden with 40 percent of renters facing housing cost burdens. Twenty percent of renters (515 households) in Tooele City have severe housing cost burdens. Keep in mind, any household that has a cost burden is not receiving any housing subsidy, (tax credit unit, voucher, etc.)

Tables 58-63 provided more detailed data, for reference, including housing cost burdens for owners and renters for all cities and the unincorporated area. Stansbury Park is not included in the HUD CHAS data. The housing cost burden in Tooele County for both owners and renters is below the cost burdens in the other major Utah counties *Table 64*.

Tooele County has 732 tax credit or RD units in 16 apartment communities. These units represent about 17 percent of the rental inventory. In addition to the tax credit units the Tooele County Housing Authority manages 215 Section 8 Housing Choice Vouchers (2 year wait list.) Twenty-two percent of renter occupied units in Tooele County receive a housing subsidy, a relatively high share of the inventory. *Map 1* shows the geographical location of rent assisted projects in the county, with the exception of Briarwood located in Wendover.

Table 54
Homeowners with Cost Burdens in Tooele County and Selected Cities, 2015

	Total Owners	Owners with Cost Burden ≥30% of Income	Owners with Cost Burden ≥50% of Income
Tooele County	14,075	2,975	735
Tooele City	7,705	1,530	380
Grantsville	2,350	504	139
Unincorporated	3,510	822	190

Source: HUD CHAS.

Table 55
Percent of Homeowners with Cost Burdens
in Tooele County and Selected Cities, 2015

	% of Owners with Cost Burden $\geq 30\%$ of Income	% of Owners with Cost Burden $\geq 50\%$ of Income
Tooele County	21.1%	5.2%
Tooele City	19.9%	4.9%
Grantsville	21.4%	5.9%
Unincorporated	23.4%	5.4%

Source: HUD CHAS.

Table 56
Renters with Cost Burdens in Tooele County and Selected Cities, 2015

	Total Renters	Renters with Cost Burden $\geq 30\%$ of Income	Renters with Cost Burden $\geq 50\%$ of Income
Tooele County	4,325	1,385	635
Tooele City	2,585	1,050	515
Grantsville	450	113	80
Unincorporated	830	52	0

Source: HUD CHAS.

Table 57
Percent of Renters with Cost Burdens
in Tooele County and Selected Cities, 2015

	% of Renters with Cost Burden $\geq 30\%$ of Income	% of Renters with Cost Burden $\geq 50\%$ of Income
Tooele County	32.0%	14.7%
Tooele City	40.6%	19.9%
Grantsville	25.1%	17.8%
Unincorporated	6.3%	0.0%

Source: HUD CHAS.

Table 58
Owners by Income by City in Tooele County and Cities

	$\leq 30\%$ AMI	$> 30\%$ AMI to $\leq 50\%$ AMI	$> 50\%$ AMI to $\leq 80\%$ AMI	$> 80\%$ AMI to $\leq 100\%$ AMI	$> 100\%$ AMI	Total
Grantsville	130	155	320	360	1,385	2,350
Rush Valley	15	4	35	40	105	200
Stockton	15	20	20	10	100	165
Tooele City	245	620	1,670	1,145	4,030	7,705
Vernon	4	15	10	10	20	60
Wendover	0	25	20	35	10	85
Unincorporated	131	131	515	385	2,335	3,510
Tooele County	540	970	2,590	1,985	7,985	14,075

Source: HUD CHAS

Table 59
30% Cost Burden of Owners by City in Tooele County and Cities

	≤30% AMI	>30% AMI to ≤50% AMI	>50%AMI to ≤80% AMI	>80% AMI to ≤100% AMI	>100% AMI	Total
Grantsville	120	50	109	145	80	504
Rush Valley	8	4	10	8	25	55
Stockton	10	4	4	4	4	26
Tooele City	195	325	690	190	130	1,530
Vernon	4	8	8	4	4	28
Wendover	0	0	0	10	0	10
Unincorporated	108	44	304	89	277	822
Tooele County	445	435	1,125	450	520	2,975

Source: HUD CHAS

Table 60
50% Cost Burden of Owners by City in Tooele County and Cities

	≤30% AMI	>30% AMI to ≤50% AMI	>50%AMI to ≤80% AMI	>80% AMI to ≤100% AMI	>100% AMI	Total
Grantsville	120	15	4	0	0	139
Rush Valley	4	0	0	4	0	8
Stockton	10	0	0	0	0	10
Tooele City	130	155	95	0	0	380
Vernon	0	4	4	0	0	8
Wendover	0	0	0	0	0	0
Unincorporated	96	21	17	11	45	190
Tooele County	360	195	120	15	45	735

Source: HUD CHAS

Table 61
Renters by City in Tooele County and Cities

	≤30% AMI	>30% AMI to ≤50% AMI	>50%AMI to ≤80% AMI	>80% AMI to ≤100% AMI	>100% AMI	Total
Grantsville	185	80	30	35	115	450
Rush Valley	4	0	4	4	10	25
Stockton	4	15	2	15	30	80
Tooele City	640	475	550	240	680	2,585
Vernon	4	4	4	4	0	15
Wendover	90	115	55	20	55	340
Unincorporated	63	36	170	92	500	830
Tooele County	990	725	815	410	1,390	4,325

Source: HUD CHAS

Table 62
30% Cost Burden of Renters by City in Tooele County

	≤30% AMI	>30% AMI to ≤50% AMI	>50%AMI to ≤80% AMI	>80% AMI to ≤100% AMI	>100% AMI	Total
Grantsville	44	65	4	0	0	113
Rush Valley	0	0	0	0	0	0
Stockton	4	4	4	0	0	12
Tooele City	505	305	240	0	0	1,050
Vernon	4	4	0	0	0	8
Wendover	75	75	0	0	0	150
Unincorporated	8	22	22	0	0	52
Tooele County	640	475	270	0	0	1,385

Source: HUD CHAS

Table 63
50% Cost Burden of Renters by City in Tooele County

	≤30% AMI	>30% AMI to ≤50% AMI	>50%AMI to ≤80% AMI	>80% AMI to ≤100% AMI	>100% AMI	Total
Grantsville	40	40	0	0	0	80
Rush Valley	0	0	0	0	0	0
Stockton	4	0	0	0	0	4
Tooele City	460	55	0	0	0	515
Vernon	4	0	0	0	0	4
Wendover	25	10	0	0	0	35
Unincorporated	0	0	0	0	0	0
Tooele County	530	105	0	0	0	635

Source: HUD CHAS

Table 64
**Percent of Home Owners and Renters
With Severe Housing Cost Burden**

	Owners	Renters
Box Elder	5.6%	13.2%
Davis	6.3%	18.8%
Salt Lake	9.0%	22.1%
Tooele	5.2%	14.7%
Utah	7.9%	23.6%
Washington	11.5%	23.1%
Weber	7.2%	19.4%
State	8.2%	21.1%

Source: HUD CHAS.

Table 65
Low Income Tax Credit and Subsidized Rental Communities in Tooele County

Apartment Community	Address	City	Subsidy	Units
Willow Creek (Senior)	236 West Plum Street	Grantsville	RD Senior	83
Grantsville Apartment	278 West Main	Grantsville	RD 515	20
Clark Street Apartments	334 East Clark Street	Grantsville	Tax Credit	24
Old Mill Stansbury	160 East Hilary Lane	Unincorporated	Tax Credit	128
Somerset Gardens (Senior)	143 North 400West	Tooele	RD Senior	28
Oquirrh View Apartment (Senior)	552 North 270 East	Tooele	RD Senior	16
Canyon Cove Senior Housing (Senior)	178 East Vine Street	Tooele	HUD Senior	21
Remington Park Retirement (Senior)	495 Utah Avenue	Tooele	RD Senior	72
Lake View Apartments	742 North 100 East	Tooele	Tax Credit	76
Valley Meadows	582 North Shay Land	Tooele	Tax Credit	40
Tooele CROWN	Scattered Sites	Tooele	Tax Credit	11
Tooele Gateway Apartments	232 W. Fenwick Lane	Tooele	Tax Credit	130
Westwood Mesa	780 West 770 South	Tooele	Tax Credit	22
Landmark Apartments	350 West 400 North	Tooele	HUD	24
Briarwood Apartments	145 Gardenia Way	Wendover	RD Family	32
Five-Plex		Tooele	Public Housing	5
Total				732*

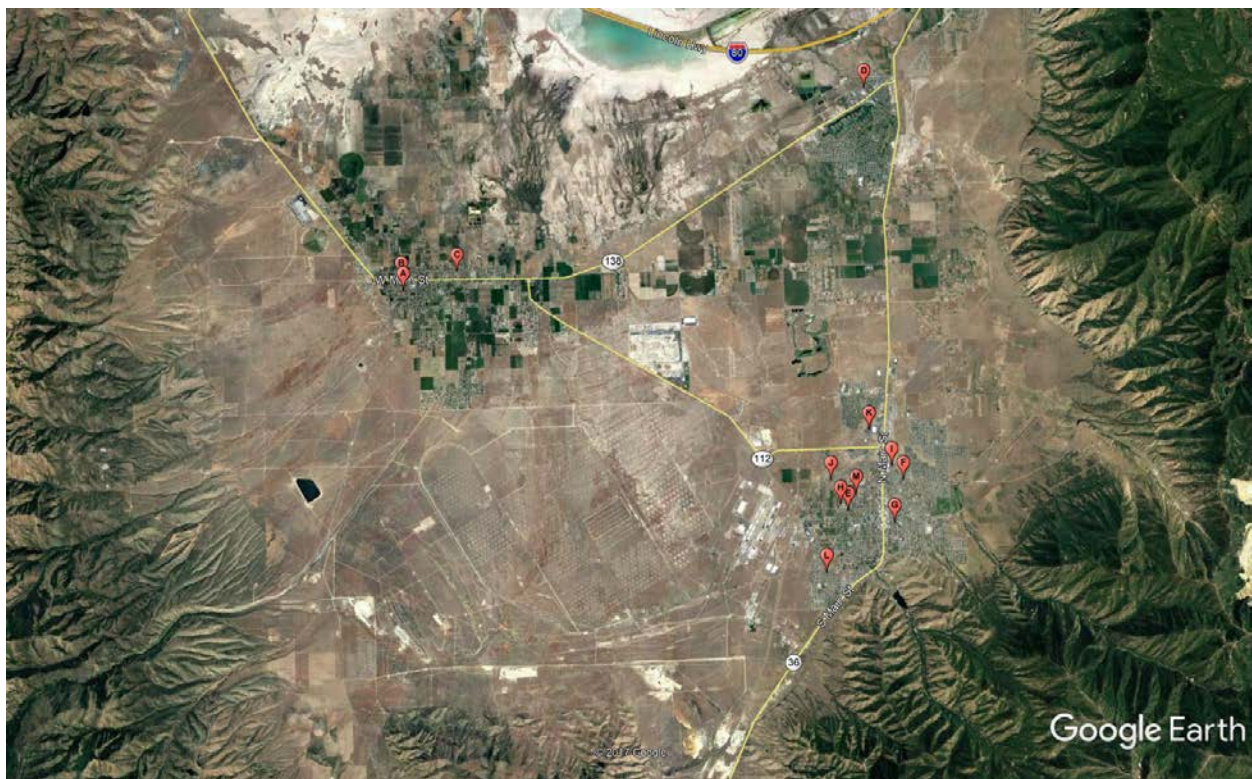
Source: Utah Housing Corporation and Tooele County Housing Authority.

Table 66
Low Income Senior Rental Projects in Tooele County

	Units	Type
Willow Creek	83	RD Senior
Somerset Gardens	28	RD Senior
Oquirrh View Apartment	16	RD Senior
Canyon Cove	21	HUD 202
Remington Park	72	Tax Credit
Total	220	

Source: HUD, Tooele County HA and Utah Housing Corporation.

Map 1
Tax Credit, RD, and HUD Assisted Rental Units in Tooele County



VITA

JAMES A. WOOD

P.O. Box 58107
Salt Lake City, Utah 84158

Phone: (801) 581-7165 (office), fax (801) 581-3354
(801) 583-0392 (residence)

EDUCATION

University of Utah, Salt Lake City, Utah; B.S. Finance, June 1967.
University of Utah, Salt Lake City, Utah; Graduate Student in Economics, 1970-1974.

MILITARY EXPERIENCE

United States Army, Military Intelligence 1968-1970; Vietnam 1969-1970.

EMPLOYMENT EXPERIENCE

July 2015 to present Ivory Boyer Senior Fellow, Kem C. Gardner Policy Institute, University of Utah.

2002 to present, Director, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah.

1975 to 2002, Senior Research Analyst, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah, Salt Lake City, Utah.

1975 to present, private consultant, James A Wood & Associates, Salt Lake City, Utah.

1974-1975 - Legislative Aide on economic issues for Senator Frank E. Moss,
Washington, D.C.

1972-1974 - Research Analyst, Bureau of Economic and Business Research.

1970 (summer) - Accountant, Jacobsen Construction Company, Salt Lake City, Utah.

1966-1967 - Accountant, Utah Idaho Sugar Company, Salt Lake City, Utah.

ADVISORY COMMITTEES AND BOARDS

Ex-Officio Member of the Board of Trustees Downtown Alliance Salt Lake City.

Committee Member of Revenue Assumption Working Group, State of Utah.

Board Member of NeighborWorks Salt Lake City

President of Wasatch Economic Forum 2008-2009

Advisory Board Member of the Salt Lake County Housing Trust Fund 2009-2014

Board Member Salt Lake Home Builders Association

Member Salt Lake County Consortium Housing (HOME) Committee

UNIVERSITY RESEARCH STUDIES AND PUBLICATIONS

“Housing Prices and the Threat to Affordability”, Research Report, Kem C. Gardner Policy Institute, University of Utah, March 2018.

“The Impact of Globalization on Utah: The Flow of Goods and People”, Research Report, Kem C. Gardner Policy Institute, University of Utah, March 2017.

“Salt Lake County Real Estate Conditions and Forecast 2016-2017, Kem C. Gardner Policy Institute, University of Utah, February 2017.

“Salt Lake County Real Estate Market Conditions and Forecast 2015-2016”, Kem C. Gardner Public Policy Institute, Policy Brief, February 2016.

“The Great Recession: Utah’s Home Building and Real Estate Sectors”, Utah Economic and Business Review, Volume 74, Number 2, Summer 2014.

Housing and Urban Development Sustainable Communities Grant 2011-2014. Grant awarded to Salt Lake County and a research team composed of six participants including the Bureau of Economic and Business Research, University of Utah. The Regional Analysis of Impediments and Fair Housing Equity Assessment for 65 municipalities and four counties was completed by a four-person team at the Bureau of Economic and Business Research under the direction of James Wood. Purpose of the grant was to improve the regional integration of housing, transportation and economic development to enhance access to opportunities.

"Salt Lake County Real Estate Market: Current Conditions and Forecast for 2012" Volume 71 Number 4, Winter 2011.

“Nonresidential Construction: Past, Present and Future”, Utah Economic and Business Review, Volume 70 Number 2, Summer 2010.

“Utah’s Home Building Industry: Recovery and Challenges”, Utah Economic and Business Review, Volume 70 Number 1, Spring 2010.

Residential and Nonresidential Construction Trends and Forecast for Utah and Wasatch Front Counties. David Eccles School of Business, University of Utah. Prepared for Summit Materials, May 2010.

Utah’s Sports Sector: Economic Activity and Impact. David Eccles School of Business, University of Utah. Prepared for Utah’s Sports Commission. February 2010.

“Utah’s Housing Market: Present Perspective, Future Prospects”, Utah Economic and Business Review, Volume 69 Number 1, Spring 2009.

A Review of the Proposed Home Run Grant Program, David Eccles School of Business, University of Utah. Prepared for Utah’s Housing Action Coalition. February 2009.

Economic Impact of Bonding for Capital Facilities in Utah, David Eccles School of Business, University of Utah. Prepared for Commissioner’s Office of Higher Education. January 2009.

The Economic Impact of Thanksgiving Point on the Utah County Economy. David Eccles School of Business, University of Utah. Prepared for Thanksgiving Point Foundation. November 2008.

Foreclosures in Utah Likely to Hit Record. David Eccles School of Business, University of Utah. Prepared for Foreclosure Prevention Taskforce, October 2008.

Economic Baseline Study for Vernal and Ashley Valley, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Tightline Community Resources, September 2008.

Pathways Project: A Study of the Cost of Services for Chronically Homeless Individuals in Salt Lake County. Funded by Utah State Department of Community and Culture, August 2008

The Changing Structure and Current Baseline of the Davis County Economy, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Davis County Community and Economic Development, June 2007.

Competitive Role of Commercial Development at West Bench, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Kennecott Land. January 2007.

An Analysis of the Land Use and Value of Weber State University's Mountainside Parcel, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Weber State University. Co-authored with Frank Lilly. December 2006.

The Changing Structure and Current Baseline of Draper City, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Draper City Office of Economic Development. Co-authored with Frank Lilly. September 2006.

West Bench Economic Impact: Economic, Demographic and Fiscal Analysis, Bureau of Economic and Business Research, David Eccles School Business, University of Utah. Prepared for Kennecott Land. Co-authored with Pam Perlich. October 2005.

Economic Impact of Affordable Housing: Construction, Rehabilitation and Assistance Programs, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Utah Housing Coalition, September 2004.

"The Utah Economy: Outlook and Review", Utah Economic and Business Review, Volume 64, Numbers 1 and 2, January/December 2004.

Affordable Housing in Utah Cities: New Construction, Building Fees and Zoning. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Fannie Mae Utah Partnership Office, Utah Housing Corporation, Envision Utah and The Olene Walker Housing Trust Fund, June 2003.

Changing Economic Structure of Salt Lake City's Central Business District, 1990 to 2002. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for The Downtown Alliance of Salt Lake City, 2002.

The Impact of Changing Economics and Demographics on the Characteristics of New Homes and Housing Densities (Part II)@, Utah Economic and Business Review, Volume 61 Numbers 9 & 10, September/October 2001.

Utah Residential Construction: A Look at Past and Present Construction Cycles (Part I), Utah Economic and Business Review, Volume 61, Numbers 1 &2, January/February 2001.

A Demand and Use Analysis of Research Park Land and Buildings 2000 to 2015. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for University of Utah Administration. Co-authored with Jan Crispin-Little, May 2000.

Single-Family Construction Bucks Trend@, Utah Construction Report, Volume 42 No 2. April, May, June 1999, published by Bureau of Economic and Business Research, University of Utah.

A Closer Look: Nonresidential Construction in Utah 1985 to 1998, Utah Economic and Business Review, Volume 59, Numbers 5 and 6, May/June 1999.

Residential Construction Remains Surprisingly Strong, Utah Construction Report, Volume 42 No 1. January, February, March 1999, published by the Bureau of Economic and Business Research, University of Utah.

Construction Value Reaches New High, Utah Construction Report, Volume 41 No 4. October, November, December 1998, published by the Bureau of Economic and Business Research, University of Utah.

Retail Trends and the Need for Downtown Revitalization, Utah Economic and Business Review, Volume 58, Numbers 11 and 12, November/December 1998.

Gateway Retail Development and Downtown Revitalization. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Boyer Company and Salt Lake City Council, October 1998.

"Overview of Construction and Housing in the Utah Economy", Economic Report to the Governor, 1998.

Utah Technology Finance Corporation: Economic Development Policy and Economic Impacts. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Utah Technology Finance Corporation, June 1998.

"Housing Prices and Affordability in Utah", Utah Economic and Business Review, Volume 5 / Numbers 5 and 6, May/June 1997.

Demographic and Economic Trends for Utah, U.S., the Rocky Mountain Region and Hermes' Market Areas. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Hermes Associates. Coauthored with Jan Crispin-Little. March 1997.

"Housing Price Trends in Utah 1980-1996", Economic Report to the Governor, 1997.
Impediments to Low and Moderate Income Housing in Unincorporated Salt Lake County and Selected Municipalities. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report for Salt Lake County Office of Economic Development and Job Training. December 1996.

The University of Utah Research Park: A Review of Policy and History. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared University of Utah Research Park Administration, December 1996.

Demographic and Economic Trends and Forecasts for Utah and Idaho. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Oldcastle Materials. Coauthored with Jan Crispin-Little. February 1996.

"Construction Cycles in Utah" Utah Economic and Business Review, Volume 55 Numbers 11 and 12, November/December 1995.

"Losing Ground: Housing Affordability and Low-Income Renters in Utah", Utah Economic and Business Review, Volume 55 Numbers 9 and 10, September/October 1995.

"The Performance of Wage Rates in Utah 1982-1993" Utah Economic and Business Review, Volume 55 Numbers 3 and 4, March/April 1995. Coauthored with Kenneth E. Jensen, Utah Department of Employment Security.

Demographic, Economic and Export Statistics for the Salt Lake City Airport Authority. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Reported prepared for Salt Lake Airport Authority. May 1995.

A Study of the Custom Fit Training Program. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Utah State Office of Education. Coauthored with Jan Crispin-Little. March 1995.

"Utah Wage Levels" Economic Report to the Governor, 1995. Coauthored with Kenneth Jensen.

"Management of State Trust Lands in Washington County" Utah Economic and Business Review, Volume 54, Numbers 7 and 8, July/August 1994. Bureau of Economic and Business Research, University of Utah, 1994.

"The Changing Demographic and Economic Structure of Washington County, 1970-1993." Utah Economic and Business Review, Volume 54, Numbers 1 and 2, January/February 1994. Bureau of Economic and Business Research, University of Utah, 1994.

An Economic Analysis for the Management of State Lands in Washington County. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of State Lands and Forestry, Department of Natural Resources, State of Utah, March 1994.

"Economic Impact of Utah Housing Finance Agency's New Residential Mortgage Programs" Utah Economic and Business Review, Volume 53, Numbers 11 and 12, November/December 1993. Bureau of Economic and Business Research, University of Utah December, 1993.

Economic Analysis for the Salt Lake Courts Complex. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Facilities and Construction Management, Department of Administrative Services, State of Utah, October 1992.

"Economic Well-Being of Utah Households: 1979-1989" Utah Business and Economic Review, Volume 52, Numbers 4 and 5, April/May, 1992. Coauthored with R. Thayne Robson. Bureau of Economic and Business Review, Bureau of Economic and Business Research, University of Utah, May 1992.

Economic Impact of the Utah Technology Finance Corporation on the Utah Economy. Bureau of Economic and Business Research, University of Utah. Coauthored with Jan Elise Crispin. Report prepared for the Utah Technology Finance Corporation, State of Utah, 1992.

"Manufacturing in the West Since World War II." Utah Business and Economic Review, Volume 51, Number 3, March 1991. Bureau of Economic and Business Research, University of Utah, 1991.
 "Utah's Adjustment to Declining Defense Budgets." Utah Economic and Business Review, Volume 50, Numbers 11 and 12, November/December 1990. Coauthored with Jan Elise Crispin. Bureau of Economic and Business Research, University of Utah, 1990.

"Utah's Electronics Industry." Utah Economic and Business Review, Volume 50, Number 9, September 1990. Bureau of Economic and Business Research, University of Utah, 1990.

Electronics Target Industry Study. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1990.

"Report on Women-Owned Business in Utah." Utah Economic and Business Review, Volume 50, Number 3, March 1990. Coauthored with Rose Ann Watson. Bureau of Economic and Business Research, University of Utah, 1990.

Report on Women-Owned Business in Utah. Bureau of Economic and Business Research, University of Utah. Report prepared for the Women's Business Development Office, Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1990.

"Utah Housing Finance Agency: The Economic Impact of Mortgage Programs for New Residential Units." Utah Economic and Business Review, Volume 49, Number 9, September 1989. Bureau of Economic and Business Review, University of Utah, 1989.

Economic Impact of Utah Housing Finance Agency Programs on the Utah Economy. Bureau of Economic and Business Research, University of Utah. Report prepared for the Utah Housing Finance Agency, 1989; annual report 1989 to present.

"Utah's Aerospace Industry." Utah Economic and Business Review, Volume 49, Number 8, August 1989. Bureau of Economic and Business Research, University of Utah, 1989.

Utah's Aerospace Industry. Bureau of Economic and Business Research, University of Utah. Coauthored with John Brereton. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1989.

The Economic Impact of a Catastrophic Earthquake on Utah's Financial Institutions. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Comprehensive Emergency Management, Financial Institution Emergency Preparedness Committee, June 1989.

Public Education and Economic Development. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1989.

The Characteristics and Potential of the Health Care and Weight Control/Fitness Industries of St. George. Bureau of Economic and Business Research, University of Utah. Prepared for St. George City, October 1988.

Economic Profile Summit County/Park City. Bureau of Economic and Business Research, University of Utah. Report Prepared for Summit County/Park City Chamber of Commerce and Visitors Bureau, September 1988.

The Economic Impact on Utah of the U.S. Petroleum Corporation's Wax Processing Plant. Report for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, October 1987.

Projected Employment Growth Rates for State Government. Bureau of Economic and Business Research, University of Utah. Report prepared for Wallace Associates, Salt Lake City, Utah, October 1987.

A Proposal for US West Advanced Technologies. Bureau of Economic and Business Research, University of Utah. Coauthored with Jan Elise Crispin and Shipley Associates. Prepared for Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1987.

"The Utah Housing Market: Demographic and Economic Trends." Utah Economic and Business Review, Volume 47, Number 3, March 1987. Bureau of Economic and Business Research, University of Utah, March 1987.

Utah as a Location for Frozen Prepared Food Manufacturing. Bureau of Economic and Business Research University of Utah. Prepared for the Division of Business and Economic Development, State of Utah, 1986.

Capital Flow in Utah. Bureau of Economic and Business Research, University of Utah, 1986. Report prepared for Governor's Economic Development Conference, February 1986.

The Strategy and Economic Impact for the Development of a Western Town in Moab Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, June 1985.

"The Changing Conditions of The Salt Lake County Apartment Market." Utah Economic and Business Research, Volume 45, Number 3, March 1985. Bureau of Economic and Business Research University of Utah, 1985.

"Utah's Expanding Service Sector," Utah Economic and Business Review, Volume 44, Number 9, September 1984. Coauthored with Constance C. Steffan. Bureau of Economic and Business Research, September 1984.

Electronics Target Industry. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, September 1984.

"Salt Lake County Apartment Construction Activity," Utah Economic and Business Review, Volume 44, Number 6, June 1984. Bureau of Economic and Business Research, University of Utah, 1984.

Service Sector Target Industry Study. Bureau of Economic and Business Research, University of Utah, May 1984. Coauthored with Constance C. Steffan. Report prepared for Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, May 1984.

Survey of Utah's Exporting Firms. Bureau of Economic and Business Research, University of Utah, 1983. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1983.

Market Feasibility Study for Apartment Development. Bureau of Economic and Business Research, University of Utah. Report prepared for Triad Utah, December 1983.

Market Feasibility Study for Luxury Condominiums. Bureau of Economic and Business Research, University of Utah. Report prepared for Triad Utah, October 1983.

"Natural Resource Development and Small Business Opportunities in the Uintah Basin." Utah Economic and Business Review, Volume 43, Numbers 4 and 5, April/May 1983. Bureau of Economic and Business Research, University of Utah, 1983.

Natural Resource Development and Small Business Opportunities in the Uintah Basin. Bureau of Economic and Business Research, University of Utah. Report prepared for the Small Business Development Center, Salt Lake City, Utah, June 1983.

"The Electronics/Information Processing Industry in Utah," Utah Economic and Business Review, Volume 42, Number 10, October 1982. Bureau of Economic and Business Research, University of Utah, 1982.

The Electronic Components and Information Processing Industry and State Industrial Development Programs. Bureau of Economic and Business Research, University of Utah, 1982. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1982.

"Utah Homebuilding: Decline, Structural Changes, and Demand Factors." Utah Economic and Business Review, Volume 42, Number 9, September 1982. Bureau of Economic and Business Research, University of Utah, 1982.

"Utah's Thrust Belt: Exploration, Development and Economic Impacts." Utah Economic and Business Review, Volume 41, Number 1, January 1981. Bureau of Economic and Business Research, University of Utah, 1981.

Demand for Cold and Frozen Storage in Utah and the Mountain States. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1980.

Proposed Industrial Park Development in Grand County. Bureau of Economic and Business Research, University of Utah. Report prepared for Division of Economic and Industrial Development, Department of Community and Economic Development, State of Utah, October 1979.

Utah Labor Market Conditions for Manufacturing Assemblers and Electronic Technicians 1979. Coauthored with Randy Rogers and Ronda Brinkerhoff. Bureau of Economic and Business Research, University of Utah, 1979.

Utah: A Profitable Location for Headquarters and Administrative Office Facilities, Bureau of Economic and Business Research, University of Utah, September 1979. Report prepared for Division of Economic and Industrial Development, Department of Community and Economic Development, State of Utah, 1979.

Utah Demand for Bricks 1978, 1985, 1990. Bureau of Economic and Business Research, University of Utah. Coauthored with Mark Linford. Report prepared for Interstate Brick, Entrada Industries, July 1979.

Market Feasibility Study for Kaolin Clay Production in Utah. Bureau of Economic and Business Research, University of Utah, May 1979. Coauthored with Mark Linford. Report prepared for Office of Small Business Development, Department of Community and Economic Development, State of Utah, 1979.

Utah: A Profitable Location for the Machinery Industry. Bureau of Economic and Business Research, University of Utah, 1978. Report prepared for Division of Industrial Development, Department of Development Services, State of Utah, 1978.

"Demand for Housing in Salt Lake County." Real Estate Activities in Salt Lake Davis, Weber, Utah and Cache Counties, Fall 1978. Utah Real Estate Research Committee and Bureau of Economic and Business Research, University of Utah, 1978.

An Analysis of the Clay Roofing Tile Market in Utah. Bureau of Economic and Business Research, University of Utah, 1978. Report prepared for Interstate Brick, Entrada Industries, March 1978.

Sandy: An Economic Profile and Land Use Requirements. Bureau of Economic and Business Research, University of Utah. Coauthored with John Brereton and Randall Rogers. Report prepared for Sandy City Planning Office, January, 1977.

Demand for Selected Steel Products. Bureau of Economic and Business Research, University of Utah, October 1976. Coauthored with Dwight Israelsen, Robert Wood and Randall Rogers. Report prepared for Steelco Corporation, Salt Lake City, Utah, 1976.

A Study of the Economic Potential of the Great Salt Lake State Park. Bureau of Economic and Business Research, University of Utah, September 1976. Coauthored with John Brereton and Janet Kiholm. Report prepared for Division of Parks and Recreation, Department of Natural Resources, State of Utah, 1976.

Married Student Housing Survey. Bureau of Economic and Business Research, University of Utah, August 1976. Report prepared for Housing Management, University of Utah, 1976.

"The Changing Composition of the State Budget," Utah Economic and Business Review, Volume 36, Numbers 4 and 5, April/May 1976. Bureau of Economic and Business Research, University of Utah, 1976.

"Utah Building Activity 1970-1975." Real Estate Activities in Salt Lake, Davis, Weber, Utah and Cache Counties, Fall 1975. Coauthored with Kathy Watanabe. Utah Real Estate Research Committee and the Bureau of Economic and Business Research, University of Utah, 1975.

"Condominium Developments in Utah," Utah Economic and Business Review, Volume 34, Number 9, September 1974. Bureau of Economic and Business Research, University of Utah, 1974.

Electronics Industry: Location Potential in Utah. Bureau of Economic and Business Research, University of Utah, June 1973. Coauthored with Jean H. Hanssen. Report prepared for the Division of Industrial Development, Department of Development Services, State of Utah, 1973.