DEMOGRAPHICS

Population is the driving force behind housing, local employment, economic, and the fiscal stability of the community. It is important for the community to understand where it has been, where it is, and where it appears to be going. Population statistics aid decision-makers by painting a picture of the community. Historic population conditions assist in developing demographic projections, which in turn assist in determining future housing, retail, medical, employment and educational needs within the community. Projections provide an estimate for the community, from which to base future land-use and development decisions. However, population projections are only an educated calculation for the future, and unforeseen factors can significantly affect those projections.

Population Trends and Analysis

Table 1 and Figure 1 show the historical population trend of Lexington from 1930 to the present. Lexington's largest growth periods took place in the decades of 1940, 1970, and 1990. Lexington has sustained this growth to remain the largest community in Dawson County.
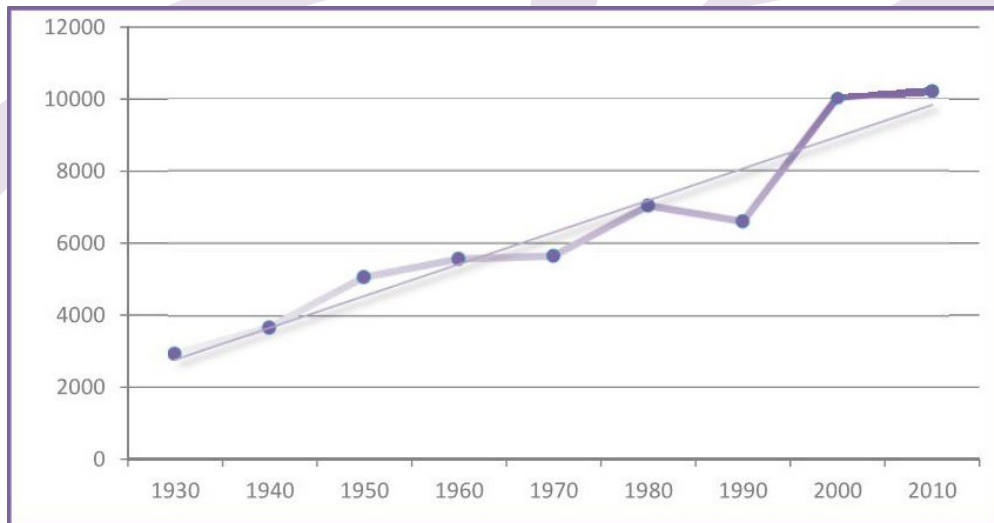
Historical Population Trends Lexington, Nebraska 1930-2010			
Year	Population	Change	Percentage
1930	2,962	na	na
1940	3,688	726	20%
1950	5,068	1,380	27%
1960	5,572	504	9%
1970	5,654	82	1%
1980	7,040	1,386	20%
1990	6,601	(439)	-7%
2000	10,011	3,410	34%
2010	10,230	219	2%

Source: US Census

Table 1: Population Trends, Lexington

Figure 1: Historical Population Trends, Lexington
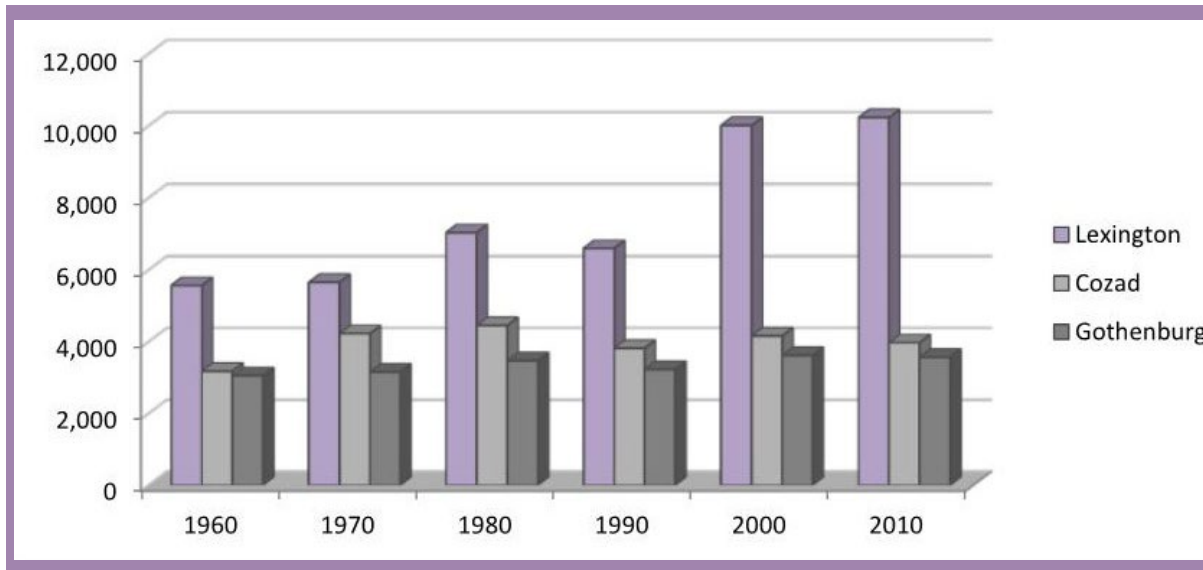
Population Trends and Analysis (con't)

Figure 2: Population Comparison with Dawson County cities

Figure 2 shows a visual representation of the historical population of the previous 50 years within Dawson County. It can be seen that Lexington's growth had increased the 1970s with a brief dip in the 1980s. However, Lexington responded to this loss of population by having its largest growth in the 1990s and continues to influence in Dawson County.

Table 2 compares its population growth of Lexington to Dawson County and the larger cities of Cozad and Gothenburg over the past forty years. This information provides an understanding of the county's long term population trends. The decade of 1970 showed an increase for Dawson County while the 1980s revealed an overall decrease for both the cities and the county. Lexington's population in 2010 was 10,230 persons, which was an increase of 3,629 persons, or 55%, since 1990. The large population growth in the 1990s has elevated Lexington to remain above its contemporaries in 2010. Within the same time period, Dawson County's population increased by 22.0%; with all communities and incorporated areas increasing their population by 4,386. The table also shows that Cozad lost 4.5% of its population between 2000 and 2010.

Community	1970	1980	% Change 1970 to 1980	1990	% Change 1980 to 1990	2000	% Change 1990 to 2000	2010	% Change 2000 to 2010
Lexington	5,654	7,040	24.5%	6,601	-6.2%	10,011	51.7%	10,230	2.2%
Cozad	4,225	4,453	5.4%	3,823	-14.1%	4,163	8.9%	3,977	-4.5%
Gothenburg	3,158	3,479	10.2%	3,232	-7.1%	3,619	12.0%	3,574	-1.2%
Dawson County	19,467	22,304	14.6%	19,940	-10.6%	24,365	22.2%	24,326	-0.2%
Source: U.S. Census and American Factfinder									

Table 2: Population Comparison, Dawson County cities

PROFILE

Age Structure Analysis

Age Structure analysis will interpret what a city is experiencing within its age groups. It is necessary to research this information to effectively plan. An age cohort breaks down the overall population into five year spans which a community can evaluate its development. The past or present growth of particular age cohorts must be taken into consideration. The child-bearing age cohorts are typically an important factor because they supply the natural growth of a community's population. When evaluating the age cohorts of 20 to 44, the growth of the community may be naturally higher. On the other hand, if the large, younger cohorts maintain their relative size, but do not increase the population as expected, they will, as a group, tend to strain the resources of an area as they age. Communities must also take into account the population that is growing in place. If a community has a large retired population, it may need to invest and supply adequate assistance and available care. Budgeting and future investment can be altered to correct for deficiencies and avoid overspending.

The 2010 Age Cohort Chart visualizes the population within Lexington. The two youngest cohorts are shown to be the largest. The 0-4 age range has 546 boys and 447 girls while the second largest cohort of 5-9 has 479 boys and 461 girls for a total of 940 children.

As Figure 3 shows, the school system may become the focus of the community. Difficulties may arise with a continued growth of the school aged population and possibly create a strain on public funds if not planned properly. This figure is for visual purposes and a more detailed table follows.
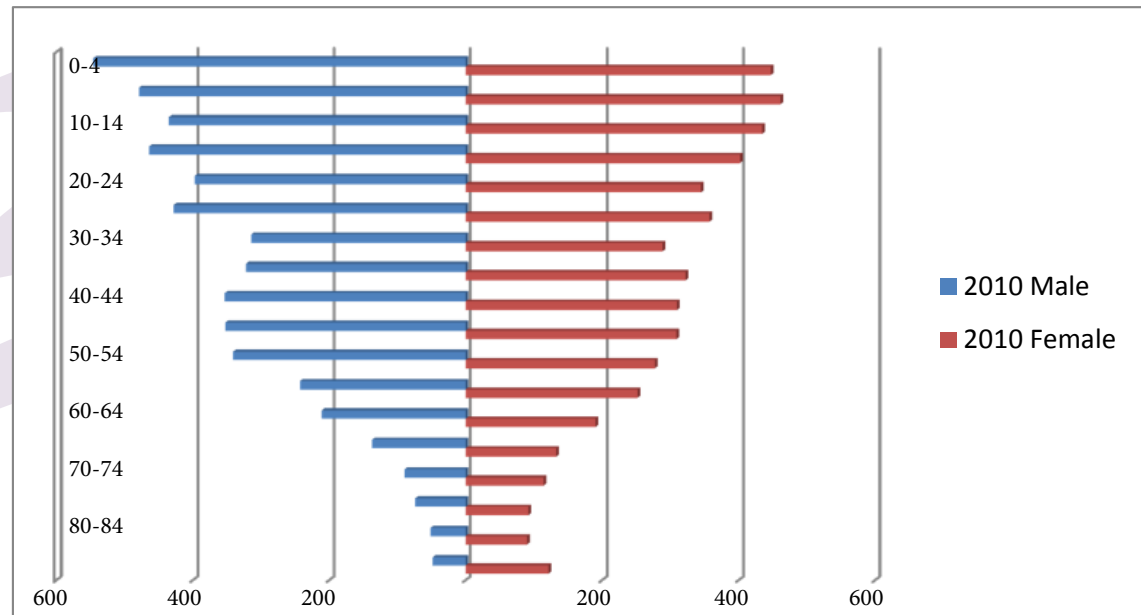

Figure 3: 2010 Age Cohort Chart, Lexington

Age Structure Analysis (con't)

Table 3 compares Lexington's Age Cohorts from 2000 and 2010. One method of analyzing cohort movement in a population involves comparing the same age cohort ten years later. For this example, the 0-4 Age Cohort in the year 2000 becomes the 2010s 10-14 Age Cohort. This helps reveal trends within a community as they age. The analysis of the Child Bearing Age Cohort shows this age cohort decreased slightly from 2000 to 2010 by 4%. A positive change in the age cohort would suggest that a particular cohort experienced an in-migration. If an age cohort has a decrease within an age cohort, it would suggest out-migration. In this analysis of Lexington's age cohort between 2000 and 2010, each age cohort had varying degrees of out-migration. The largest cohorts that lost the most population were the 35 to 39 and 40 to 44 with 146 and 148 respectfully.

2000 Age Cohort	2000 Male and Female	2000's % of Total	2010 Age Cohort	2010 Male and Female	2010's % of Total	2000-2010 Cohort Change	% Change
			0-4	993	9.7%		
			5-9	940	9.2%		
0-4	1,021	10.2%	10-14 (0-4 in 2000)	870	8.5%	-151	-14.8%
5-9	915	9.1%	15-19	866	8.5%	-49	-5.4%
10-14	859	8.6%	20-24	742	7.3%	-117	-13.6%
15-19	791	7.9%	25-29	785	7.7%	-6	-0.8%
20-24	694	6.9%	30-34	603	5.9%	-91	-13.1%
25-29	790	7.9%	35-39	644	6.3%	-146	-18.5%
30-34	811	8.1%	40-44	663	6.5%	-148	-18.2%
35-39	747	7.5%	45-49	661	6.5%	-86	-11.5%
40-44	722	7.2%	50-54	618	6.0%	-104	-14.4%
45-49	582	5.8%	55-59	495	4.8%	-87	-14.9%
50-54	473	4.7%	60-64	401	3.9%	-72	-15.2%
55-59	304	3.0%	65-69	270	2.6%	-34	-11.2%
60-64	256	2.6%	70-74	203	2.0%	-53	-20.7%
65-69	234	2.3%	75-79	166	1.6%	-68	-29.1%
70-74	233	2.3%	80-84	141	1.4%	-92	-39.5%
75-79	204	2.0%	85+	169	1.7%	-35	-17.2%
80-84	176	1.8%		10,230			
85+	199	2.0%					
	10,011						

Table 3: Cohort Analysis, Lexington, 2000 - 2010

PROFILE

Age Cohort	2000	2010	Cohort Change
0-4	1,021	993	-28
5-9	915	940	25
10-14	859	870	11
15-19	791	866	75
20-24	694	742	48
25-29	790	785	-5
30-34	811	603	-208
35-39	747	644	-103
40-44	722	663	-59
45-49	582	661	79
50-54	473	618	145
55-59	304	495	191
60-64	256	401	145
65-69	234	270	36
70-74	233	203	-30
75-79	204	166	-38
80-84	176	141	-35
85+	199	169	-30

Table 4: Age Cohort Comparison, Lexington

Age Cohort Comparison

Table 4 uses the same information as Table 3, however this comparison does not track the age cohorts as they age but evaluates each decade's age cohort to one another. The shift in Lexington's population percentages can found in this table. As collective groups, the older population and school-aged population experienced different migrations. In 2000, the 0-19 Age Cohorts had a total of 3,586 people and the same corresponding cohort decreased to 3,469 people. However, the numbers can be deceiving. With a large 0-9 cohort from 2000 and the continued births within that ten year period, the school aged children gained 35.8% to 38.9% of Lexington's 2010 population. The combined cohorts of over 70 years of age were 812 people and 8.1% of the 2000 population. In 2010, this age cohort decreased in size to 679 people as well as decreasing its percentage to 6.7%. A surprising in-migration of 481 people can be found between 50 to 64 age cohorts who each gained at least 145 people.

Age Distribution

Table 5 for Age Distribution simplifies the change in demographics and the composition of Lexington's population over the past decade. The age ranges combine different age cohorts together. The age cohort for 20 to 29 totaled 1,527 or 15% of the 2010 population. Combined with the 0-19 age cohort, Lexington had 50.8% of its population under the age of 30. This helps to create a vibrant community and a steady labor force. Focusing education costs and providing training can help Lexington grow in the future.

Age Groups	2000	2010	Change	% Change
Under 19	3,586	3,669	83	2.3%
20-29	1,484	1,527	43	2.9%
30-39	1,558	1,247	-311	-20.0%
40-54	1,777	1,942	165	9.3%
55-64	560	896	336	60.0%
65 +	1,046	949	-97	-9.3%
U.S. Census 2010				

Table 5: Age Distribution, Lexington

There are a number of reasons why people migrate in or out of a city. Communities sometimes experience loss to the age cohorts between 20 to 24 age cohort due to post-secondary education or in search of employment if jobs are unavailable. Other possibilities can be family related decisions to move in or out of a community. In this age distribution table, the 30 to 39 age groups lost the most relative population in 2010 at 20%. Similar to the 50 – 64 age cohort in the previous comparison, the distribution between 55 and 64 years of age experienced a 60% increase with 336 in-migration.

PROFILE

Race Characteristics

Another important factor in Lexington's population is the racial composition of the overall population.
The following table shows the changes in Lexington's racial composition from 1990 to 2010.

Race	1990		2000		2010		1990-2010
	Number	% of Total	Number	% of Total	Number	% of Total	% Change
White, not Hispanic	6,231	94.39%	4,635	46.30%	3,174	31.03%	-63.37%
Black	3	0.05%	32	0.32%	649	6.34%	6.30%
American Indian and Alaskan Native	27	0.41%	76	0.76%	34	0.33%	-0.08%
Asian and Pacific Islander	10	0.15%	103	1.03%	130	1.27%	1.12%
Other, not Hispanic	1	0.02%	5	0.05%	14	0.14%	0.12%
Two or more races			39	0.39%	46	0.45%	0.45%
Hispanic or Latino Origin	*329	1.64%	5,121	51.15%	6,183	60.44%	55.46%
Total Population	6,601	100%	10,011	100%	10,230	100%	

Source: U.S. Census

Table 6: Racial Composition Trends, 1990 to 2010

* 1990 Census Category White, Hispanic origin is included into the Hispanic or Latino population

Table 6 illustrates Lexington's changing demographics within the community.
As Lexington continues to grow and change, its population and the needs of
its citizens will be met.

If Lexington experiences another large population growth, that growing demographic will drive the housing markets with its own particular needs. In the following the projections, the current population will continue to increase and the racial composition will change. The job and housing markets must be available to keep this growing population in Lexington.
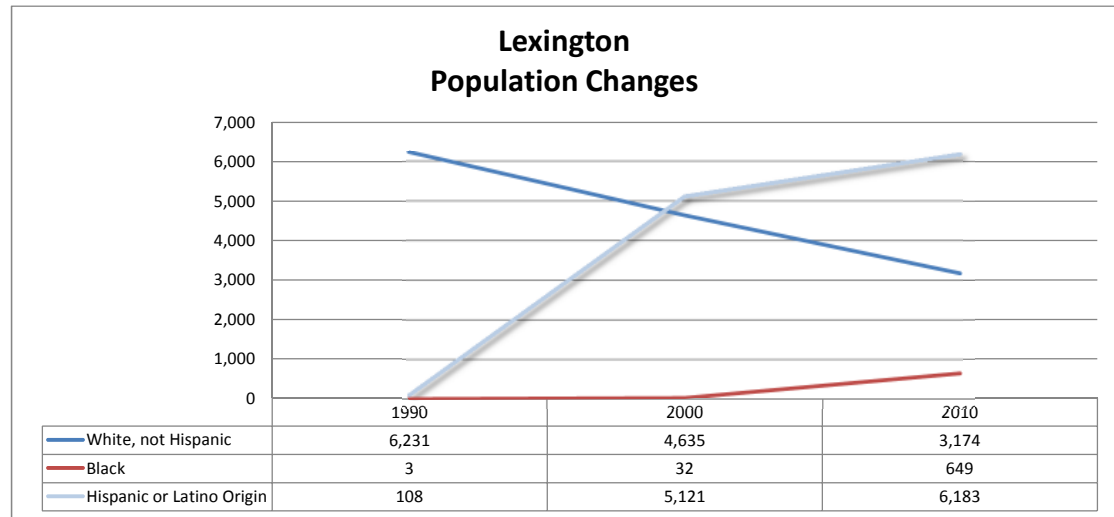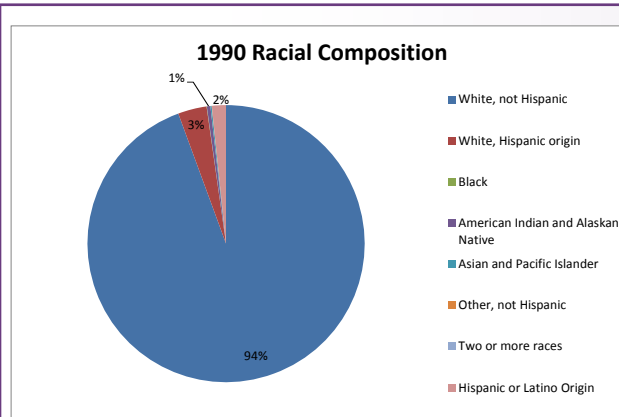
Lexington Population Changes

	1990	2000	2010
White, not Hispanic	6,231	4,635	3,174
Black	3	32	649
Hispanic or Latino Origin	108	5,121	6,183

Figure 4: Lexington Population change

1990 Racial Composition

Figure 5: 1990 Racial Composition, Lexington, NE

2000 Racial Composition
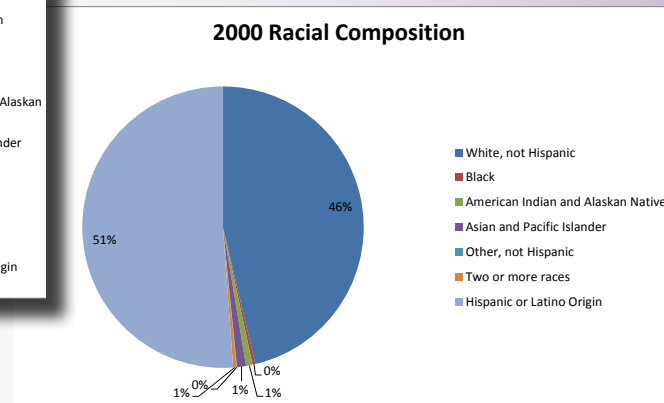
Figure 6: 2000 Racial Composition, Lexington, NE

2010 Racial Composition
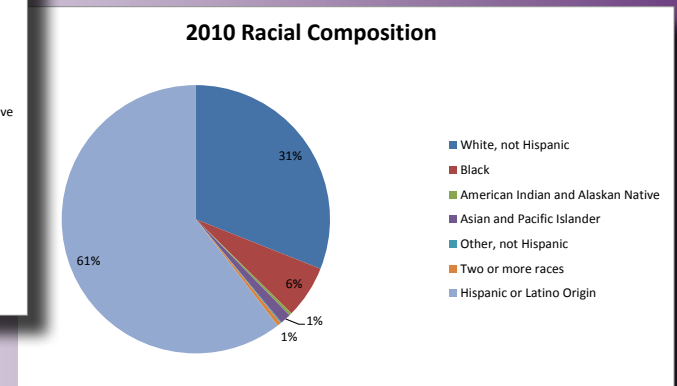
Figure 7: 2010 Racial Composition, Lexington, NE

[DEMOGRAPHICS] Comprehensive Plan - Lexington, Nebraska

PROFILE

Population Projections

Projecting populations is the important factor in future decision. The complex process includes many variables and trends within a community. Future populations are projected with the assumption that a stable local economy as well as social structure trends. Due to the nature of projections, it will be very important to update with continual adjustments and reevaluation to ensure the population's immediate needs are being met.

Age Cohort Survival Projection

The Age Cohort Survival projection uses a mixture of mortality rate and birth rate of each population. This graph shows the five changes of how the city of Lexington may look in the future, beginning with the 2010 Age Cohorts. The child-bearing age cohorts are used to tabulate the estimated number of birth through five year periods as well. When these statistics are factored, a trend appears from the age cohorts of 2010s 0 to 19 cohorts. As this group ages, it can be shown that an additional population for each cohort is found in the following 5 year period.

It can become very important for the city of Lexington as this cohort ages through the school system, into the workforce, and of child bearing age. As shown in the 2035 cohort survival projection, each cohort from 0-34 has over one thousand residents in it. As stated above, Lexington can experience unforeseen economic and social changes that can affect the varying amounts of migration over the next twenty years. Housing preferences as well as demand can also change with any changing population. If Lexington is successful in keeping its population, the following cohort survival graph shows Lexington's growth into 2035. It will be unlikely to reach this population.

Age Cohort Survival Projection

Age Cohort	2010	*2015	Population Change	*2020	Population Change	*2025	Population Change	*2030	Population Change	*2035	Population Change
0-4	993	936	-57	978	42	1,112	134	1,315	203	1,546	231
5-9	940	1,099	159	1,043	-56	1,090	47	1,239	149	1,465	226
10-14	870	1,146	276	1,341	195	1,266	-75	1,322	57	1,504	181
15-19	866	1,020	154	1,343	324	1,572	229	1,483	-89	1,550	66
20-24	742	1,042	300	1,221	180	1,615	394	1,894	279	1,773	-121
25-29	785	542	-243	762	220	892	130	1,181	289	1,386	205
30-34	603	681	78	470	-211	661	191	774	113	1,025	251
35-39	644	834	190	937	103	647	-290	904	256	1,066	162
40-44	663	820	157	1,056	236	1,192	136	823	-369	1,155	333
45-49	661	722	61	892	170	1,152	260	1,297	145	896	-401
50-54	618	682	64	745	63	920	175	1,188	268	1,338	150
55-59	495	636	141	698	62	757	59	939	182	1,202	263
60-64	401	438	37	556	118	611	55	665	53	823	158
65-69	270	421	151	459	38	584	125	642	58	698	56
70-74	203	303	100	472	169	515	43	655	140	720	65
75-79	166	193	27	287	94	446	159	489	43	615	126
80-84	141	178	37	207	29	310	102	483	173	526	44
85+	169	110	-59	140	30	163	23	243	81	379	136
Totals	10,230	11,803	1,573	13,609	1,805	15,506	1,898	17,538	2,031	19,667	2,129

Source: JEO Consulting, 2013

Table 7: Projection Age Cohort Survival

Population: Linear Projections

With the exception of the 1980s, Lexington has continued to see growth within the past 80 years. Lexington's population projections of a low, medium, and high determine how the community allocates its funds. This also gives the community a population range to prepare for the next twenty years. The following Tables with visual graphs were created by JEO Consulting Group.

LEXINGTON, NEBRASKA

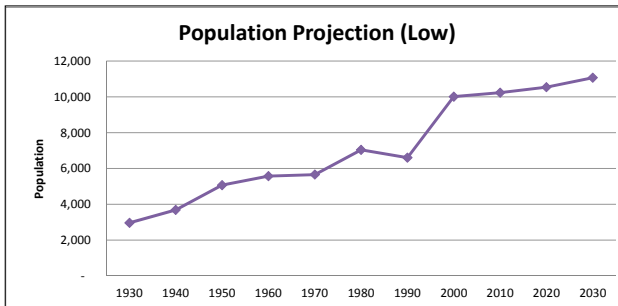| Lexington, Nebraska			
1930-2030			
Year	Population	Change	Percentage
1930	2,962	na	na
1940	3,688	726	20%
1950	5,068	1,380	27%
1960	5,572	504	9%
1970	5,654	82	1%
1980	7,040	1,386	20%
1990	6,601	(439)	-7%
2000	10,011	3,410	34%

Table 8: Lexington Historical Growth

Figure 8: Low Population Projection
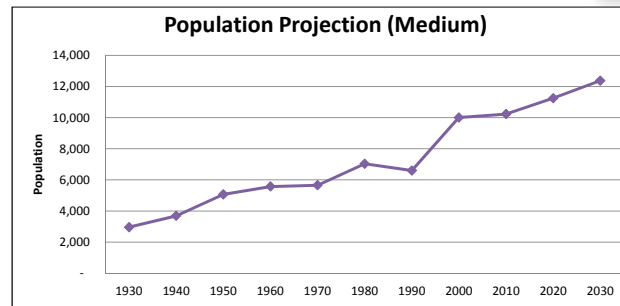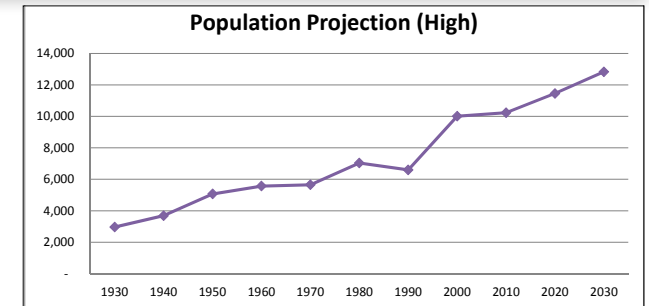

Figure 9: Medium Population Projection

Figure 10: High Population Projection

Lexington, Nebraska			
2010-2030			
Year	Population	Change	Percentage
2010	10,230	219	2%
2020	10,537	307	3.0%
2030	11,064	527	5.0%
Source: US Census, JEO Consulting Group, Inc.			

Table 9: Low Population Projection

Lexington, Nebraska			
2010-2030			
Year	Population	Change	Percentage
2010	10,230	219	2%
2020	11,253	1,023	10.0%
2030	12,378	1,125	10.0%
Source: US Census, JEO Consulting Group, Inc.			

Table 10: Medium Population Projection

Lexington, Nebraska			
2010-2030			
Year	Population	Change	Percentage
2010	10,230	219	2%
2020	11,458	1,228	12.0%
2030	12,833	1,375	12.0%
Source: US Census, JEO Consulting Group			

Table 11: High Population Projection