PROFILE

"The Lex-Plan 2013"

INTRODUCTION

In order to foster robust communities, cities must continually evaluate both its past trends and existing facilities. The *Profile* Section of the "*The Lex-Plan 2013*" focuses on characteristics that create Lexington. Current demographics, economic climate, housing stock, and public facilities play a vital role in the future of a community. The following data will help derive solutions to future issues that may hinder Lexington's growth and economic development. The City of Lexington and its two-mile jurisdiction will remain pivotal to the surrounding economies and job creation in Dawson County. Officials, private citizens, and businesses can use this comprehensive plan update as a reference to its future needs. These needs can be achieved through long term planning and budgeting. Lexington's commitment to community improvement can greatly improve the lives and well-being of the entire community. Promoting Lexington and its diverse community can be achieved with both private and public methods. For example, the estimated population may desire more diversity of housing options and job opportunities. Promotion of such diversity allows the city to become more stable while providing services and education.

The *Profile* Section gives findings in the following sections:

Demographics, Housing, Economic and Employment, Public Facilities and Utilities, Natural Environment, and Existing Land Use.

CITY OF Lexington NEBRASKA

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.

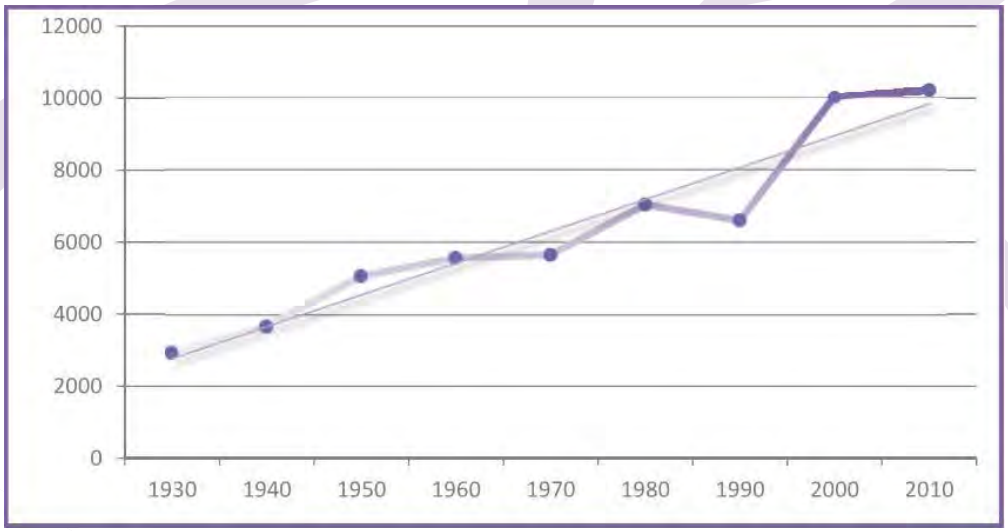


Figure 1: Historical Population Trends, Lexington

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

Population Trends and Analysis (con't)

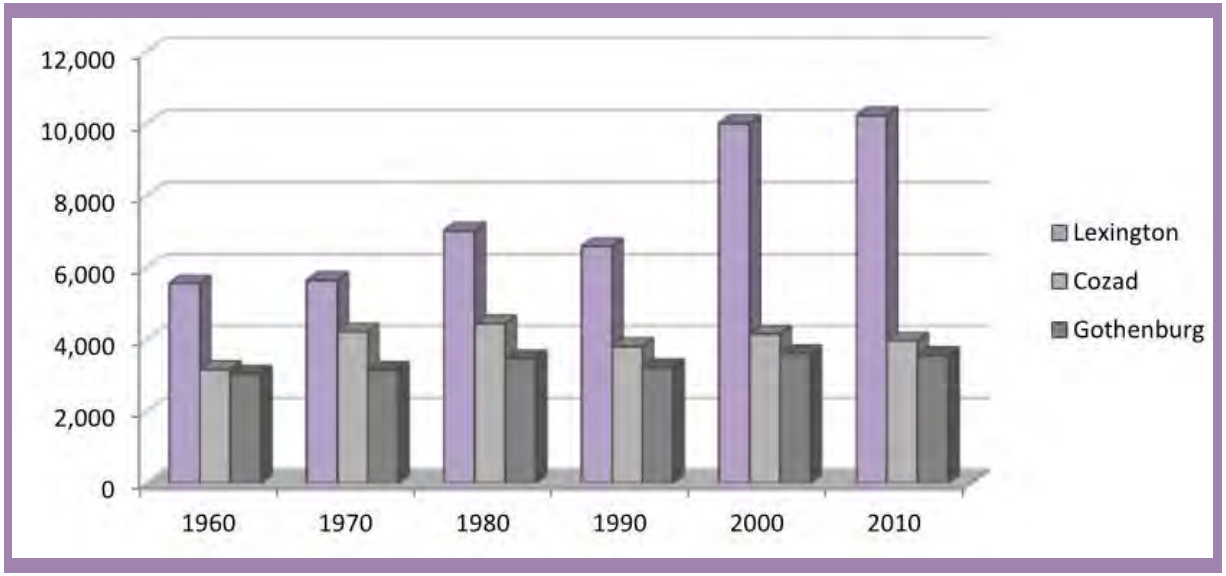


Figure 2: Population Comparison with Dawson County cities

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.

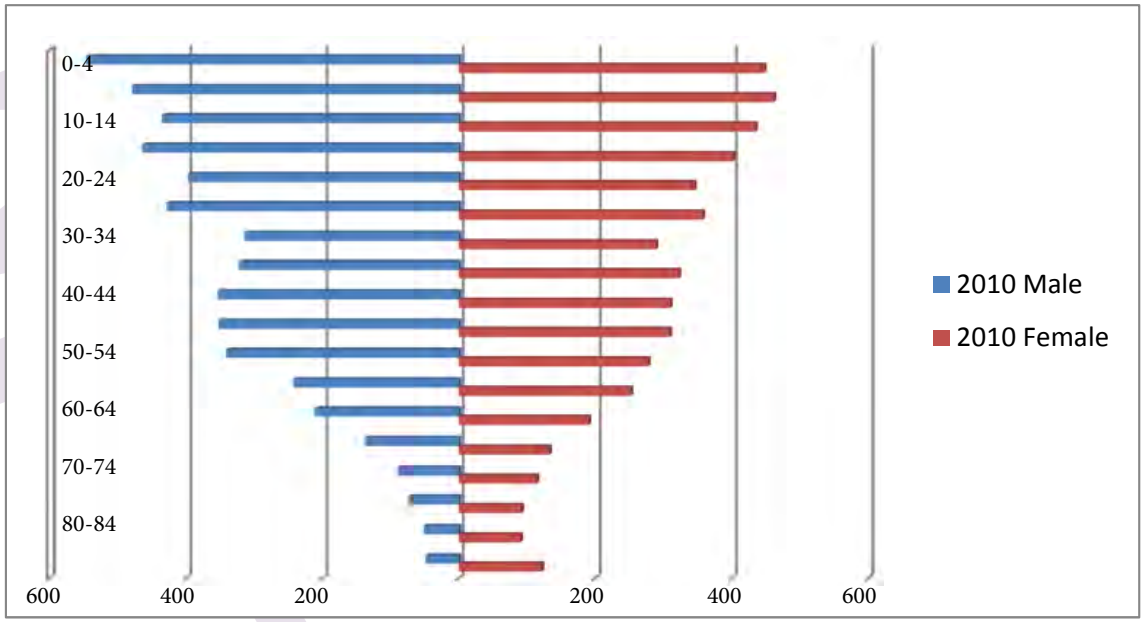


Figure 3: 2010 Age Cohort Chart, Lexington

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

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 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 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%	

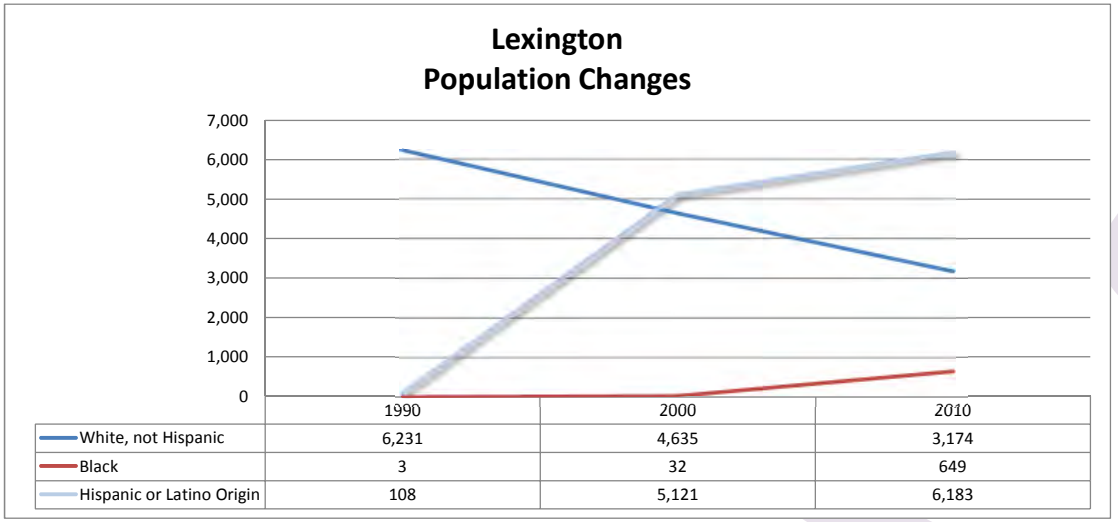
Source: U.S. Census

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.



	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

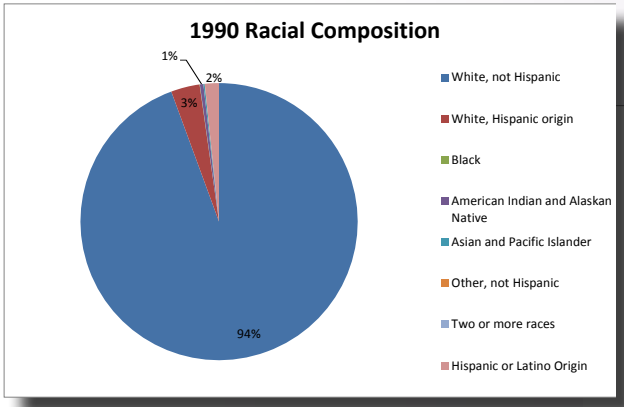


Figure 5: 1990 Racial Composition, Lexington, NE

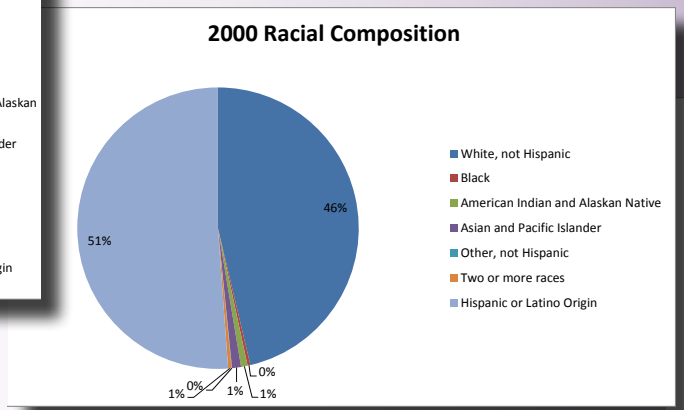


Figure 6: 2000 Racial Composition, Lexington, NE

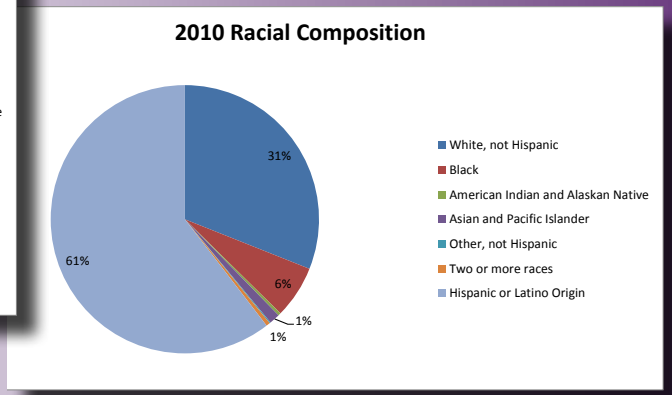


Figure 7: 2010 Racial Composition, Lexington, NE

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

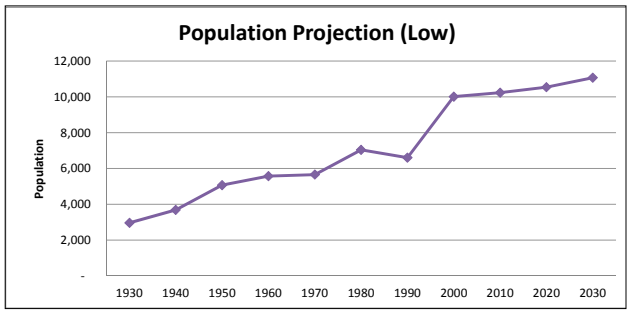


Figure 8: Low Population Projection

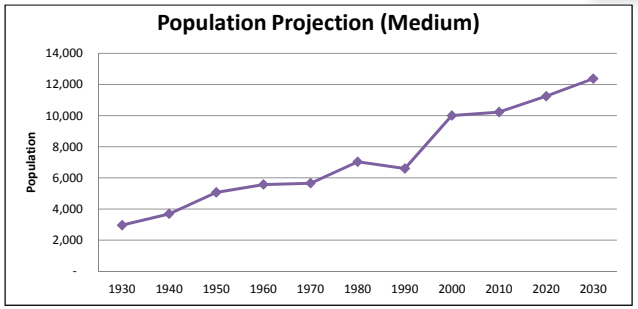


Figure 9: Medium Population Projection

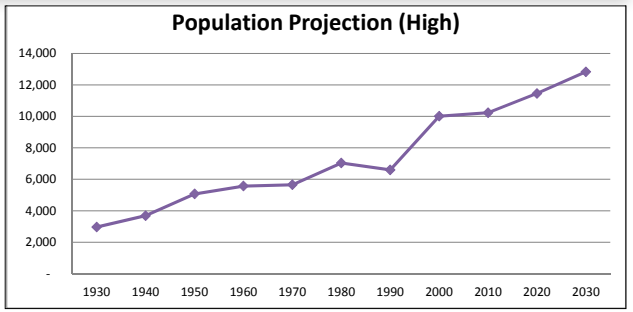


Figure 10: High Population Projection

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

HOUSING PROFILE

This section of the Lexington's statistics turns its attention to housing. The current housing stock and housing options available play an important role in the lives of its residents. Analyzing the following data will help evaluate the future needs of the community. When examining the current housing, it will clarify any deficiencies that exist for the safety and well being of its residents and helping to provide affordable housing options in the future. The composition of the current housing units will be helpful to determine the necessary supply of future housing types. The City of Lexington will continue to plan into the future and meet its residents' need.

Many factors come to play in assessing housing stock. Growth within communities creates an imbalance of supply and demand in housing options. The population, employment, and housing needs of a city are consistently changing. However, patterns do exist. The following analyzed information will demonstrate Lexington's past trends and changes. The future projections will be drawn from this analysis and information. Employment does play an important factor in determining the amount and type of housing stock. Location of one's workplace and salary can drive the local real estate market. Finally, Lexington's housing options will ultimately be determined by the combination of land use policies and the residents' choices of housing types. The following tables and figures are intended to assist with determining future housing needs and develop policies designed to accomplish the housing goals of Lexington.

Age of Existing Housing Stock

An analysis of the age of Lexington's housing stock reveals a number of things about the population and economic conditions of the past. It can tell the history of a city and the pride of its residents for its culture and traditions. The age of the existing housing stock can show how much rehabilitation efforts are necessary while determining the need for new construction. Examining the housing stock is important in order to understand the overall quality of housing and the quality of life in Lexington.

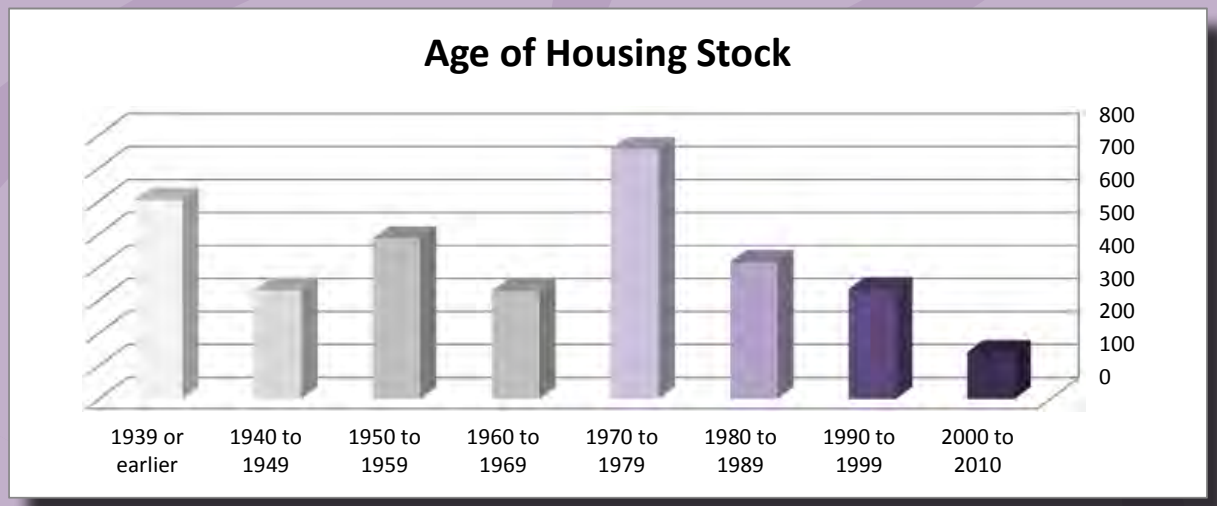


Figure 11: Age of Housing Stock, Lexington, 2010

The most recent information shows that 604 existing houses or 17.8% of the housing stock were built before 1939. The houses built in 1959 or earlier represent 41.9% of Lexington's existing housing stock. These properties may need to be reevaluated for safety purposes and remodeling needs. Through other agencies there may also be a possibility of energy efficiency programs.

The largest decade represented in Figure 11 shows that there are currently 757 buildings were built in the 1970s. Combined with the 1980 to 1989 housing stock, it represents 34.5% of the Lexington housing. This portion of the housing stock should continue to provide safe housing in the near future. After 1990, the building of new construction within Lexington's housing stock declined even while experiencing its most recent growth period. This time period will be examined in the following section of housing trends.

Selected Characteristics	1990	2000	2010
Population	6,601	10,111	10,230
Persons in Households	6,573	9,733	10,093
Persons in Group Quarters	28	278	137
Persons per Household - Owner		3.20	3.32
Persons per Household - Renter		3.04	2.93
Persons per Household	2.52	3.14	3.17
Total Housing Units	2,838	3,222	3,403
Occupied Housing Units	2,610	3,095	3,180
Owner-occupied units	1,726	1,978	1,991
Renter -occupied units	884	1,117	1,189
Vacant Housing units	228	227	223
Owner-occupied vacancy rate		1.40	1.60
Renter -occupied vacancy rate		10.80	8.50
Single Family units	1,830	2,237	2,320
Duplex/Multiple-family units	183	NA	NA
Mobile Homes, trailer, other	1,647	275	NA
Median Contract Rent			
Lexington	296	358	586
Dawson County	288	331	582
State of Nebraska	348	412	534
Median Value of Owner-Occupied Units			
Lexington		$61,900	$84,700
Dawson County		$64,100	$85,400
State of Nebraska		$88,000	$125,400

Source: U.S. Census, Census of Population and Housing , 1990, 2000, and 2010; 2011 American Community Survey 5 Year Estimates

Table 12: Housing Trends, Lexington, 1990 - 2010

Housing Trends

Housing trends can reveal a great deal of information about the different population groups within Lexington. Table 12 gives vital information on how Lexington has grown, is currently comprised, and direction(s) the community may anticipate in the future.

The Housing Trends table shows 223 vacant housing units. The 2010 vacancy rates is determined by the number of units not occupied at the time of the Census survey. The number of available housing units combined with a 8.5 renter-occcupied vacancy rate would suggest that the majority of housing available were rental units.

This helps understand Lexington's housing needs. A larger family may desire to buy or rent a 3 or 4 bedroom unit which Lexington's current housing may not have available.

Ownership and Rental Properties

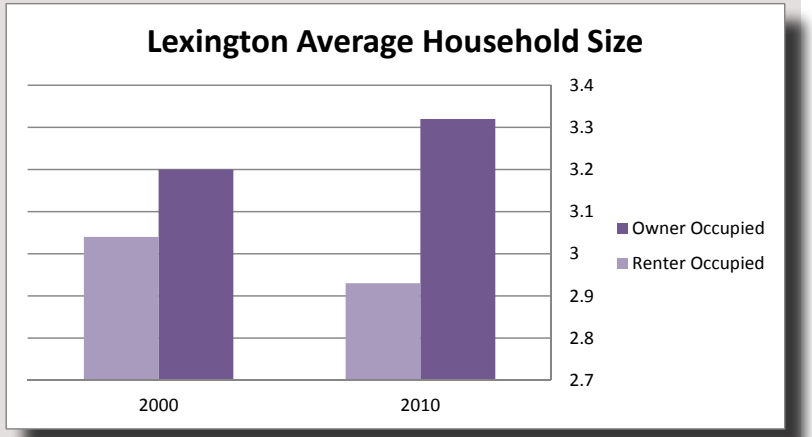


Figure 12: Tenure Trend, Lexington 2000 - 2010

As noted in Table 12, the average household size is enlarging for owner-occupied housing and decreasing slightly for rental properties. The following Figures 12 and 13 illustrate the Tenure difference in owner-occupied housing and renter-occupied housing within the previous decade.

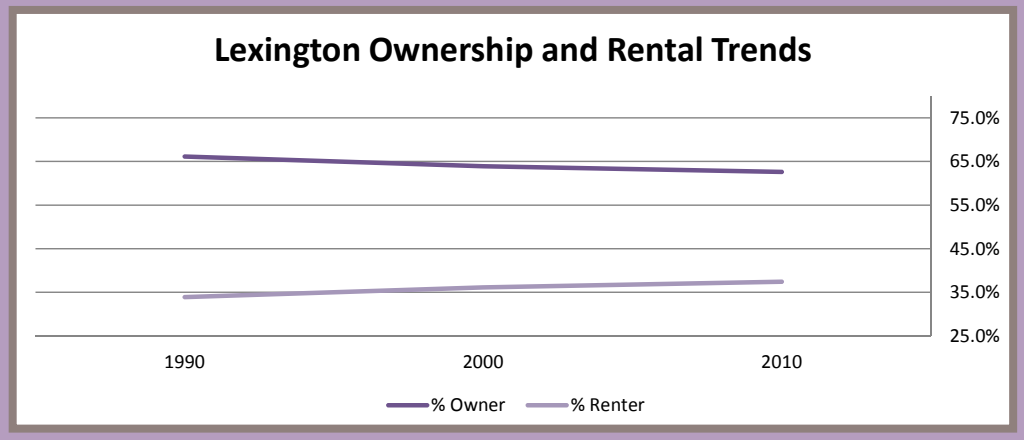


Figure 13: Percentage Tenure Trend of Owner and Renter, Lexington 1990 - 2010

The ownership has declined since 1990 from 66.1% to 62.6%. while the rental population has increased from 33.9% to 37.4%. If the rental population continues to rise, new housing stock may need to constructed. More detailed information may be needed if it becomes apparent that there is an issue with the costs of owning a house and wages within the community. This may also mean that the preferred housing stock is becoming rental as well.

Persons per Household, 2010 Lexington, Nebraska	
2010 Total:	3,180
1-person household	703
2-person household	829
3-person household	443
4-person household	460
5-person household	335
6-person household	203
7-or-more-person household	207

Source: U.S. Census, 2010

Table 13: Persons per Household, Lexington 2010

Table 13 indicates Lexington's current household sizes. This table looks at the composition of Lexington's household sizes that must utilize both larger homes and individual living units. Smaller households are shown with 22.1% in single person households and 26.1% in two-person housing stock.

The family oriented population is well represented in Table 13. Lexington's family households consist of 73% of total households in 2010. This percentage is consistent with slight increases from 70.1% in 1990 and 72.3% in 2000. With 745 households with 5 or more persons, 23.4% of these households will continue to require a larger sized housing stock. The residents will choose their preferred housing choices based on the size required.

Family Households have increased by three percent over the past twenty years from 1,830 to 2,320 households. In 2010, family households increased to 73% and the average family average size changed to 3.7 per household. Of the 860 non family households in 2010, 86% or 703 housing units were occupied by a single renter. Table 13 helps to show the wide variety of new construction that will continue to be important in the Lexington's housing market.

The Lexington Housing Authority provides housing assistance to low income residents. They charge rent based upon a tenant's income. For example, the Eastlawn Apartments allow for senior low income housing through the HUD federal program. The Lexington Housing Authority recently completed Legend Oaks, a 21-unit project that utilize tax credits to provide housing for low to moderate income ranges. It is a good example of public and private sectors working together to provide for its residents.

Future Housing Projections

Lexington Housing Projections for 2020		LOW	HIGH
Additional Population	2010 to 2020	716	1,228
Additional Households Needed	Renter	244	419
	Owner	216	370
	Total	450	789

Source: JEO Consulting Group, 2013

Table 14: Lexington Housing Need Projections for 2020

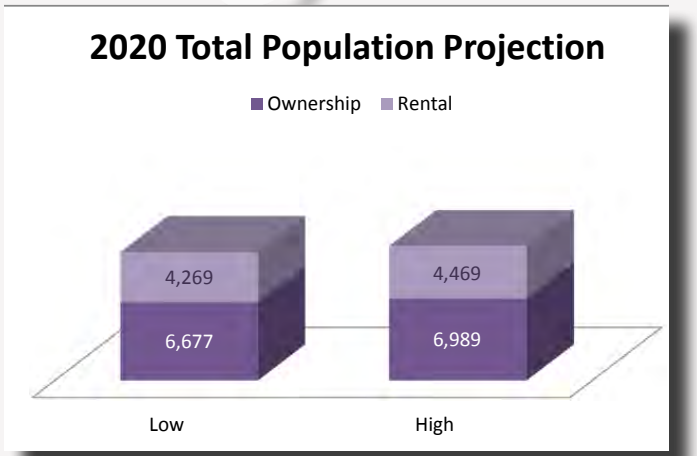


Figure 14: 2020 Projections, Populations of owners and renters

2020

As shown here, the current housing stock cannot meet demand, and additional units will be added. However, the demands of the preferred housing type may continue to change if demographics continue to shift toward more rental properties. In addition to the resident's preferred housing type, Lexington may begin to experience the loss of their older housing stock within the next twenty years. This would increase the amount of new construction needed. This projected housing data did not take into account the need to replace dilapidated or dangerous housing.

The expected housing needs were determined with recent housing trend changes. Along with prior population projections from the Demographic section, it is possible to estimate the amount of housing stock needed to match Lexington's growth for the next ten and twenty years.

By using the 2010 U.S. Census per household ratios for Lexington, it allowed projection of estimates for the possible number of households with the most current change in Lexington's market demand. To supply a growing community, Lexington would be expected to prepare for roughly an additional 600 housing units per decade. This argument can be made by looking at the low or modest projection of growth along with the possibility of replacing part of the 41.9% of housing that was constructed before 1960. To further the housing projections, the previous table broke into the estimated new owner-occupied and renter-occupied units needed. By looking back at the increasing average size of family households, it would make sense to build a portion of the new housing stock, whether to sell or rent, to accommodate 4-member families. Keep in mind, the rental population had increase slightly but with fewer renters per unit. Housing trends will have to be continually monitored for the demands of renters as well as buyers.

Future Housing Projections

Lexington Housing Projections for 2030		LOW	HIGH
Additional Population	2020 to 2030	766	1,375
Additional Households Needed	Renter	261	469
	Owner	231	414
	Total	492	883

Source: JEO Consulting Group, 2013

Table 15: lexington Housing Need Projections for 2030

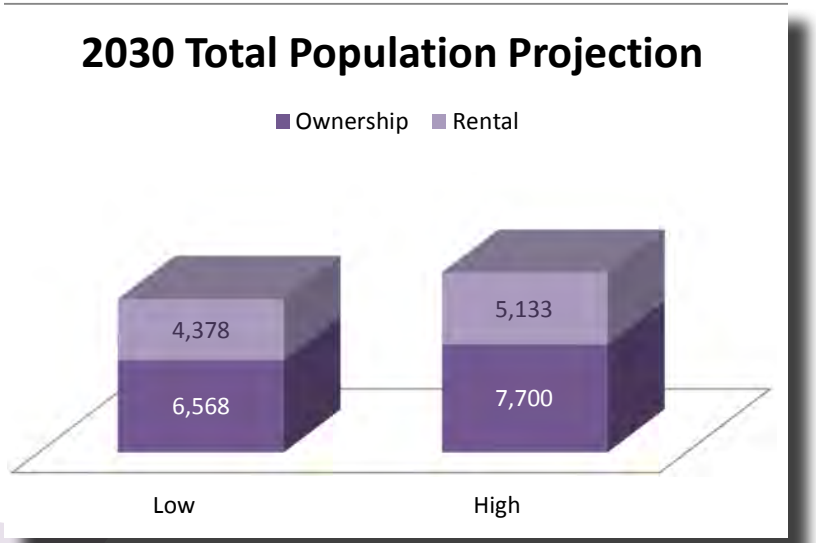


Figure 15: 2030 Projections, Populations of owner and renters

2030

Figures 14 and 15 show the Owner versus Renter composition of the projected populations of 2020 and 2030. These graphs show the proportion of renters to owners. The lower and modest projection does not seem to make a dramatic change. However, Lexington has experienced a large population growth in recent years. If that reoccurs, the high population and housing projection will be addressed through the future land use policies established within this comprehensive plan. The City of Lexington will be able to manage and enhance the quality of living for its residents as well as the extraterritorial jurisdiction.

ECONOMIC AND EMPLOYMENT

Economic data is collected to understand area markets, activity, and the needs and opportunities of Lexington. The four major components represented in Lexington's economic analysis are: income statistics, industry employment, commuter trends, and sales and fiscal profile. In each analysis, Lexington will be compared to Gothenburg, Cozad, Dawson County or the State of Nebraska. The following data will help derive solutions to any future issues that may stunt Lexington's growth and economic development.

Income Statistics

Median Household Income 2011 American Community Survey	
Location	2011 Estimate
Dawson County	$45,038
Cozad	$44,457
Gothenburg	$46,250
Lexington	**$42,540**

Table 16: Median Household Income, Lexington 2011

Income statistics for households are important for determining the earning power of households in a community. The most recent statistics available is in the form of estimates generated by the American Community Survey. Table 16 is based on the 2007 - 2011 American Community Survey. This five year survey represents estimates taken from roughly three and a half million housing units per year. It is a critical element in the Census Bureau's decennial census program.

Later in this economics section, there is more detailed sales tax information that also compares these three cities and Dawson County. Table 16 shows Lexington in comparison to median household incomes of the surrounding urban clusters of Gothenburg and Cozad.

Household Income Lexington, NE 2010			Household Income State of Nebraska 2010	
Household Income Range	Households	Percentage	Households	Percentage
Total households	3,030		711,771	
Less than $10,000	173	6%	45,312	6%
$10,000 to $14,999	277	9%	41,617	6%
$15,000 to $24,999	511	17%	81,800	11%
$25,000 to $34,999	325	11%	83,307	12%
$35,000 to $49,999	566	19%	108,311	15%
$50,000 to $74,999	658	22%	146,702	21%
$75,000 to $99,999	317	10%	90,871	13%
$100,000 to $149,999	187	6%	76,556	11%
$150,000 to $199,999	16	1%	19,998	3%
$200,000 or more	0	0%	17,288	2%
Median household income (dollars)	**$40,216**		**$49,342**	
Mean household income (dollars)	**$46,724**		**$62,707**	

Table 17: Household Incomes, Lexington and State of Nebraska, 2010

Table 17 shows that 40% of the Lexington's incomes or 1,324 jobs received an income between $35,000 and $74,999 in spite of trailing Nebraska's 2010 ACS Estimates of $49,342 per household income, the percentage of $35,000 to $75,000 slightly favors Lexington. The State of Nebraska recaptured this deficiency with a higher percentage of top earners despite having a large number of households with incomes less than $10,000.

Table 18 will shows household income levels for Lexington with decennial census in comparison to the State of Nebraska. This data is reviewed to determine whether households experienced income increases at a rate comparable to that of the State of Nebraska. The following chart breaks down the household income in price ranges for further review.

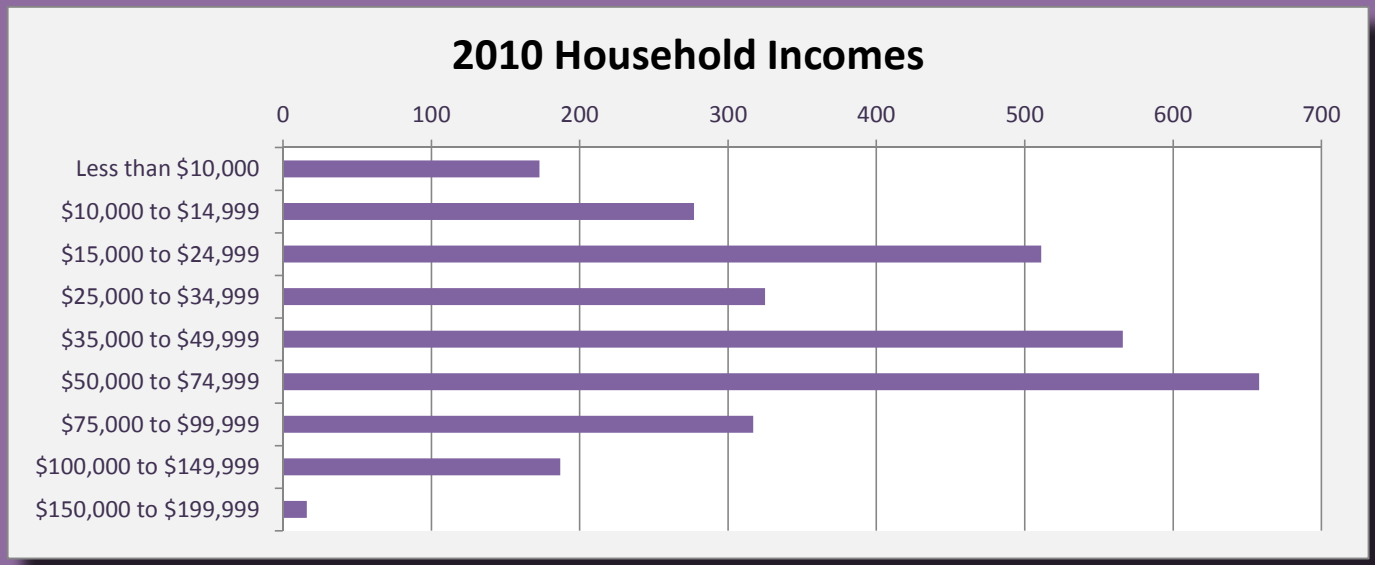


Figure 16: Household Incomes, Lexington, 2010

Income Statistics

Table 17 show Lexington had a median income of $40,216 in 2010. The earning brackets of Lexington's 2010 Household Incomes is found in Figure 16.

Table 18 shows a historical trend from 1990 to 2010 to show the relative increase that the state experienced. Due to inflation and the inevitable rise in cost, it is expected to have an increase in the household income. When using the inflation formula, the buying power of $22,988 salary in 1990 is equal to $38,352 in 2010.

Household Income Trend Lexington, NE 1990 to 2010			Household Income Trend State of Nebraska 1990 to 2010
Year	Households	Median Household Income	Nebraska
1990	2,610	$22,988	$26,016
2000	3,101	$38,098	$39,250
2010	3,030	$40,216	$49,342
2000 to 2010	**-2.34%**	**5.27%**	**20.45%**
1990 to 2010	**13.86%**	**42.84%**	**47.27%**

Table 18: Household Income Trends, Lexington and Nebraska, 1990 to 2010

Per Capita Personal Income

A more recent increase of economic activity for Dawson County as well as the State of Nebraska can be observed with an increase toward the national average for Per Capita Income. Since the national recession began in 2008, the years of 2009 to 2011 have seen an increase for Dawson County from 75% in 2009 to more than 80% in 2011. The state of Nebraska has fared better than national average in 2011 with over 100% of the nation's average. To look at the more recent statistics, Table 19 shows 2010 and 2011.

Per Capita Personal Income (PCPI) Comparison			
Location	2010 PCPI	2011 PCPI	2011 Increase
Dawson County	$30,554	$33,320	8.30%
Nebraska	$39,224	$42,450	7.60%
U.S.	$39,731	$41,560	4.40%
Source: Bureau of Economic Activity			

Table 19: Per Capita Income Comparison, Lexington

Table 19 reiterates the previous decade of economic growth for Dawson County and Nebraska. Between 2010 and 2011, they both surpassed the nation's compound annual growth rate. Dawson County had a compound annual growth rate of Per Capita Personal Income at 3.4 percent. Nebraska's compound annual growth rate of Per Capita Personal Income was 3.6 percent over the same time period which exceeded the national rate of 2.9%.

Employment by Industry Lexington, NE 2010	
INDUSTRY	People
Civilian employed population 16 years and over	4,835
Agriculture, forestry, fishing and hunting, and mining	211
Construction	287
Manufacturing	2,052
Wholesale trade	215
Retail trade	473
Transportation and warehousing, and utilities	99
Information	43
Finance and insurance, and real estate and rental and leasing	164
Professional, scientific, and management, and administrative and waste management services	161
Educational services, and health care and social assistance	400
Arts, entertainment, and recreation, and accommodation and food services	403
Other services, except public administration	279
Public administration	48

Table 20: Employment by Industry, Lexington, 2010

Industry Employment

Breaking down the employment by industry determines the key components of their labor force. This section indicates the type of industry comprising the local economy, as well as identifying particular occupations that employs Lexington's residents. Table 20 shows employment sectors and the size of each industry for Lexington.

Of the 4,835 people over the age of 16, the largest industry was manufacturing with 2,052 people, and the next largest work force is found in the Retail Trade industry with 473 people.

Top Employment Comparison

For comparison, the following lists by industry rank compares Lexington's 2010 employment per industry to that of Dawson County as well as the State in the 5-year American Community Survey taken between 2007 to 2011.

The top five employment sectors for Lexington in 2010 were:

Manufacturing	42.4%
Retail	9.8%
Education services, etc	8.3%
Arts, entertainment, etc.	8.3%
Construction	5.9%

LEXINGTON

The top five employment sectors for Dawson County in 2010 were:

Manufacturing	27.8%
Education services, etc	14.9%
Retail	10.2%
Agriculture, forestry, etc.	9.0%
Construction	7.4%

DAWSON COUNTY

The top five employment sectors for State of Nebraska in 2010 were:

Education services, etc	23.3%
Retail	11.6%
Manufacturing	10.7%
Professional, scientific, etc.	8.1%
Arts, entertainment, etc.	7.6%

STATE OF NEBRASKA

Lexington, NE				
TRAVEL TIME TO WORK	2000	Percent	*2011 ACS	Percent
Workers that did not work at home	3,968	100.0%	4,440	100%
Less than 10 minutes	1,929	48.6%	1,834	41.3%
10 to 14 minutes	1,094	27.6%	1,563	35.2%
15 to 19 minutes	324	8.2%	346	7.8%
20 to 24 minutes	290	7.3%	151	3.4%
25 to 29 minutes	37	0.9%	75	1.7%
30 to 34 minutes	107	2.7%	178	4.0%
35 to 44 minutes	45	1.1%	67	1.5%
45 to 59 minutes	80	2.0%	102	2.3%
60 to 89 minutes *(60 minutes or more 2011 ACS)	38	1.0%	124	2.8%
90 or more minutes	24	0.6%	0	0.0%
TIME LEAVING HOME TO GO TO WORK	2000	Percent	*2011 ACS	Percent
Workers who did not work at home	3,968		4,440	
12 AM to 4:59 AM *(2011 ACS)			186	4.2%
5:00 to 5:59 AM	642	16.2%	755	17.0%
6:00 to 6:29 AM	286	7.2%	422	9.5%
6:30 to 6:59 AM	227	5.7%	258	5.8%
7:00 to 7:29 AM	420	10.6%	453	10.2%
7:30 to 7:59 AM	406	10.2%	524	11.8%
8:00 to 8:29 AM	322	8.1%	404	9.1%
8:30 to 8:59 AM	131	3.3%	53	1.2%
9:00 to 11:59 AM *(9:00 AM-11:59 PM 2011 ACS)	215	5.4%	1,394	31.4%
12 PM to 3:59 PM	781	19.7%		
All other times	538	13.6%		

Source: U.S. Census 2000 and American Community Survey 2011

Table 21: Travel Time to Work, Lexington

Commuters Trends

The majority of Lexington's labor force has a travel time to work that is less than 14 minutes. With 3,397 people or 76.5% of the population with a short drive to work, congestion does not seem to be an issue.

Longer travel times would suggest people working in other cities. The time leaving for work is busiest between 7 and 8 AM with 977 people and 22% of workers. A close second is earlier in the day between 5:00 and 6:00 AM with 755 people or 17% of the population.

The 2011 American Community Survey puts a large timeline between 9 AM and midnight which estimates that 31.4% of laborers leave for work. This would suggest the retail industry workers but also afternoon or evening shifts for manufacturing.

Commuter Trends

The means of transportation and carpooling will continue to be an important factor as Lexington continues to grow and expand its two-mile jurisdiction. Large cities must pay attention to their population and needs. There were 961 people or 32% of the 2010 total population making less than $25,000 a year. The City of Lexington understands the importance of carpooling and alternative transportation options with the park system and bike lanes that will help the residents of Lexington save money, give the entire community an alternative transportation option, and also help the overall health of the community.

Lexington, NE				
MEANS OF TRANSPORTATION AND CARPOOLING	2000	Percent	*2011 ACS	Percent
Workers 16 and over	4,064	100.0%	4,652	100.0%
Car, Truck or Van	3,758	92.5%	4,038	86.8%
Drove Alone	2,723	67.0%	2,977	64.0%
Carpooled	1,035	25.5%	1,065	22.9%
in a 2 person carpool	718	17.7%	730	15.7%
in a 3 person carpool	230	5.7%	172	3.7%
in a 4 person carpool	87	1.4%	158	3.4%
Workers per vehicle	1.18		1.17	
Bicycle	29	0.7%	70	1.5%
Walked	68	1.7%	247	5.3%
Other means	113	2.8%	79	1.7%
Worked at home	96	2.4%	214	4.6%
Source: U.S Census and American Community Survey 2011				

Table 22: Means of Travel Trend, Lexington, 2000, 2011

Travel time to work is a factor to determine where the people of Lexington are employed. Travel time can be affected to congestion in traffic and families with school children. Depending on how residents answer the American Community Survey, that may or may not be added to the actual miles traveled in non-peak traffic hours.

Sales and Fiscal Profile

Retail trade is an important part of a local economy. Examining this allows Lexington to analyze the level of retail activity occurring within the city's corporate limits. Some of the most important economic activities for communities are transactions of goods and services, which take place between consumers and local businesses. Table 23 shows Lexington's amount of sales tax collected by the city as well as the city's pull factor. The pull factor represents its ability to attract outside sales within the city boundaries. A Pull Factor of "1.0" would represent the money spent outside of the jurisdiction is equal to the money brought into the city. If the pull factor is greater than "1.0," this means that Lexington is attracting additional outside money. Larger communities tend to create this pull factor due to offering different goods and services that may not be sustainable in smaller communities. A pull factor near "1.0" is a good sign of the community supporting the local businesses and community.

Gothenburg				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	Pull Factor
2012	$2,590,228.45	3,574	$724.74	0.94
2011	$2,379,740.12	3,574	$665.85	0.88

Cozad				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	Pull Factor
2012	$2,665,747.79	3,977	$670.29	0.87
2011	$2,672,741.37	3,977	$672.05	0.89
2010	$2,526,915.81	3,977	$635.38	0.89

DAWSON COUNTY
Sales Tax Collected
2012: $13,819,908.55
2011: $13,618,787.16

Lexington				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	Pull Factor
2012	**$8,038,541.05**	10,257	$783.71	1.02
2011	$8,158,018.75	10,257	$795.36	1.04
2010	$7,733,274.59	10,230	$755.94	1.12

Table 23: Sales Tax Collected and Pull Factor, Dawson County communities

Sales and Fiscal Profile

When Lexington is compared to Cozad and Gothenburg, it shows that Lexington has a greater pull for sales than its contemporaries. When Dawson County as a whole is compared to Nebraska, this pull rate lowers to roughly 0.74 compared to other counties.

In early 2013, the Nebraska Department of Revenue's monthly report stated Nebraska had increased its net taxable sales from the previous year by 4.60% at the end of November 2012.

Dawson County improved its net taxable sales from the 2011 with a 7.03% increase. Lexington and Cozad were slightly behind their correlating 2011 figures with -0.63% and -0.12% respectively. Lexington's 5.5% Sales Tax Collection is slightly behind with $47,033.39 below the previous year's monthly reports. Gothenburg helped Dawson County's net taxable sales with a 28.00% increase. In 2011, Gothenburg generated $33,055,858 in net taxable sales and increased to $42,310,079 by November 2012 which at 5.5% Sales tax equals $2,327,057.

Lexington				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	Pull Factor
2012	8,038,541.05	10,257	$783.71	1.02
2011	8,158,018.75	10,257	$795.36	1.05
2010	7,733,274.59	10,230	$755.94	1.06
2009	7,471,545.25	10,164	$735.10	1.03
2008	7,256,381.67	10,164	$713.93	0.96
Dawson County				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	Pull Factor
2012	13,819,908.55	24,220	$570.60	0.74
2011	13,618,787.16	24,326	$559.84	0.74
2010	12,732,282.19	24,326	$523.40	0.74
2009	12,395,489.36	24,789	$500.04	0.70
2008	12,340,999.02	24,789	$497.84	0.67
State of Nebraska				
Year	Sales Tax Collected	Population estimates	Sales tax per capita	
2012	1,429,337,007.80	1,855,525	$770.31	
2011	1,377,466,873.71	1,826,341	$754.22	
2010	1,299,184,126.20	1,826,341	$711.36	
2009	1,261,908,510.78	1,772,124	$712.09	
2008	1,314,944,634.76	1,772,124	$742.02	

2010 Census and 2011 ACS 5 year estimates for population

Table 24: Comparison of Sales Tax Trend and Pull Factor, Lexington, Dawson County, State of Nebraska

PUBLIC FACILITIES AND UTILITIES

State and local governments provide a number of services for their citizens. The people, buildings, equipment and land utilized in the process of providing these services are referred to as public facilities.

Public facilities represent a wide range of buildings, utilities, and services that are provided and maintained by the different levels of government. These facilities are provided to ensure the safety, well-being and enjoyment of the residents of a jurisdiction. Facilities and services provide city residents with social, cultural, educational, and recreational opportunities, as well as law enforcement and fire protection services. It is important for all levels of government to anticipate the future demand for their goods and services if they are to remain strong and vital.

The first step is to evaluate the ability of the city to meet existing and future demand while determining the level of services that will need to be provided. The analyses of existing facilities as well as the future demand for services are contained in the Facilities Plan. Alternatively there are some services not provided by the local or state governments but are provided by non-governmental, private or non-profit organizations for the community. These organizations are equally important providers of services to the community and therefore should not be overlooked.

INTRODUCTION

The Community Facilities for Lexington are divided into the following categories:

Parks and Recreational Facilities

Educational Facilities

Police, Fire and Rescue

City Buildings

Communication Facilities

Health Facilities

Public Utilities

Community Facilities

The Community Facilities component of "*The Lex-Plan 2013*" reviews current capacities of all public and private facilities and services. This section evaluates current demands and accepted standards to determine whether capacity is adequate, as well as determine what level of service is required to meet future demands within the planning period. Finally, there are recommendations for improvements for community facilities and services that are not adequate for present or future needs.

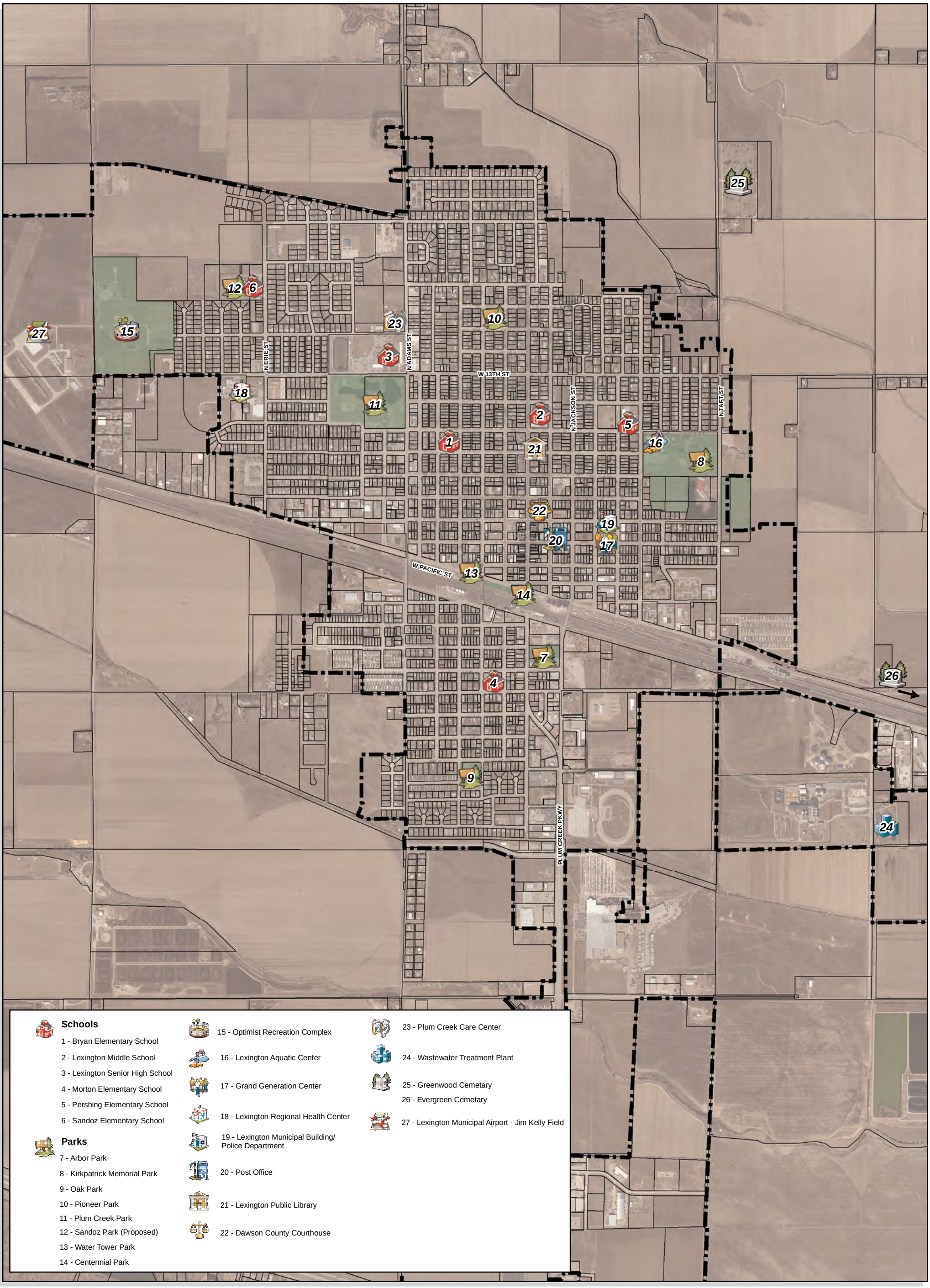


Figure 17: Public Facilities, Lexington

City of Lexington
Dawson County, Nebraska
Public Facilities Map

N

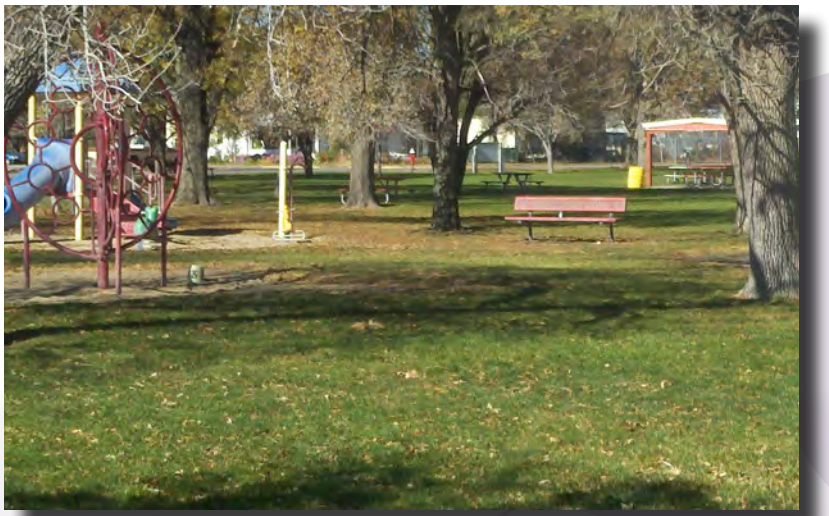
0 750 1,500 3,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC.

HDR

Parks and Recreational Facilities



The *Profile* Section of *"The Lex-Plan 2013"* lists a short inventory of existing park and recreation facilities within Lexington and its two-mile jurisdiction. The *Achieve* Section of this plan contains a Parks and Recreation component that will serve as Lexington's Park and Recreation Master Plan for further parks, recreation and open space. This portion of the plan will evaluate the existing facilities and make recommendations for all future facilities.

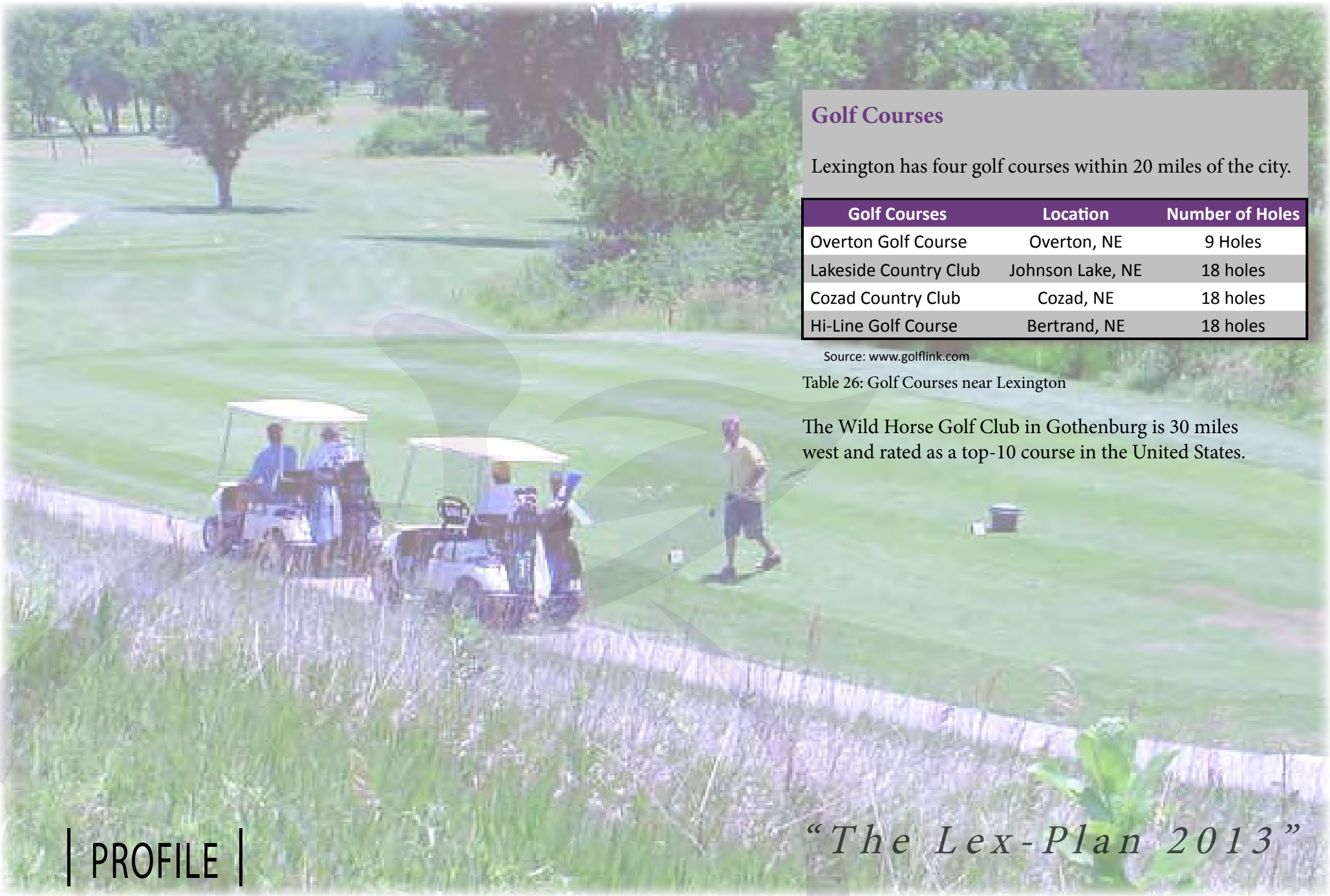
Parks within Lexington and Extraterritorial Jurisdiction

There are nine parks and outdoor recreational areas in or adjacent to the City of Lexington. These facilities are maintained by the City. The following table lists the parks and the amenities they contain:

Lexington Parks

Name	Location	Acres	Amenities
Arbor Park	Hwy 283 and Maple	4	Skate park, picnic tables, shade, playground.
Centennial Park	US 30 and Washington	1.5	Walking trail, benches, memorial wall.
Kirkpatrick Memorial Park	11th and Taft	29.1	Aquatic Center (water slide, zero-depth, Olympic pool, splash pad), park shelter building, one ball field, tennis, playground, sand volleyball, picnic areas
Oak Park	Oak and Madison	3.2	One ball field, paved basketball court, playground, picnic areas
Optimist Recreation Complex	13th and Airport Road	35.9	Soccer, softball, legion ball, indoor hitting complex, concessions.
Pioneer Park	15th and Lincoln	2.1	Playground, picnic shelter.
Plum Creek Park	13th and Adams	23	Picnic shelter, tennis, playground, sand volleyball, ball field, disc golf, fishing, bocce ball, horseshoes, walking trail.
Sandoz Park	TBD- 19th and Erie		TBD
Water Tower Park	US 30 and Madison	0.3	Shaded picnic area, scenic flower garden.

Table 25: Parks Information, City of Lexington



Golf Courses

Lexington has four golf courses within 20 miles of the city.

Golf Courses	Location	Number of Holes
Overton Golf Course	Overton, NE	9 Holes
Lakeside Country Club	Johnson Lake, NE	18 holes
Cozad Country Club	Cozad, NE	18 holes
Hi-Line Golf Course	Bertrand, NE	18 holes

Source: www.golflink.com

Table 26: Golf Courses near Lexington

The Wild Horse Golf Club in Gothenburg is 30 miles west and rated as a top-10 course in the United States.

Educational Facilities

Public Schools

The Lexington School District currently has one pre-school, four elementary schools, one middle school and one high school.

School Name	Location	Enrollment	Capacity
Lexington High School	705 West 13th	820	950
Lexington Middle School	1100 North Washington St.	595	750
Sandoz Elementary School	1711 Erie St.	315	300
Pershing Elementary School	1104 North Tyler St.	273	350
Morton Elementary School	505 South Lincoln St.	358	500
Bryan Elementary School	1003 North Harrison St.	320	450
Early Learning Academy (pre-school)	1501 Plum Creek Parkway	230	275
Total		2,911	3,575

Table 27: 2012 -2013 School Year Enorollment, Lexington

Post Secondary Education

There are numerous educational opportunities in Nebraska for post-secondary education in just about any field of study. Table 28 lists a few of the larger enrollment institutions in close proximity of Lexington offering a wide variety of disciplines for their students.

Facility	Location	Enrollment	Miles from Lexington
Central Community College (Learning Center)	Lexington, NE	82	0
University of Nebraska - Kearney	Kearney, NE	7,100	35
Mid-Plains Community College	North Platte, NE	1,911	60
Central Community College (Branch Campus)	Grand Island, NE	302	82
Doane College (Branch Campus)	Grand Island, NE	192	83
Hastings College	Hastings, NE	1,112	94
Central Community College (Branch Campus)	Hastings, NE	934	98
University of Nebraska - Lincoln	Lincoln, NE	24,207	166

Table 28: Colleges and Universities in the Lexington Area

Fire and Police Protection

Fire and Rescue

The Lexington Fire Hall is located at 606 North Tyler Street. This facility is the home for the Lexington Volunteer Fire Department, and is shared with the Lexington Rural Fire District.

The LVFD currently has 40 volunteers, and operates 11 fire and rescue vehicles. The services offered include fire suppression and medical rescue operations to both city and rural calls for service. Along with the LRFD, the service area currently is 455 square miles.

Law Enforcement

The Lexington Police Department is located at City Hall at 406 East 7th Street. Office hours are Monday through Friday, 8:00 a.m. to 5:00 p.m., and officers are on call 24 hours a day, seven days a week. The Lexington Police Department is currently budgeted to fund 18 sworn officers.

Officers are actively deployed among the city to ensure citizens are aware of their presence. Officers often drop by area schools throughout the day and attend after school functions such as sporting events in the evening to ensure the safety of all participants.

Officers leverage their numbers along with technology to better serve the citizens of Lexington. The department recently purchased iPads to better serve the public as these devices allow officers the opportunity to communicate with citizens whose primary language is not English. Aside from this, the iPads allow officers better flexibility while interacting with the public and conducting training.

Sumner-Eddyville-Miller Schs

Cozad City Schools

Dawson County

Lexington Public Schools

Overton Public Schools

Eustis-Farnam Public Schools

Gosper County

Elwood Public Schools

Phelps County

Bertrand Public Schools

Loomis Public Schools

Legend

- Lexington Corporate Limits
- County Boundaries
- 2-Mile
- Townships
- Sections
- School District Boundaries*

Figure 18: School Districts, Lexington area

City of Lexington
Dawson County, Nebraska
Area School Districts Map

N

0 7,000 14,000 28,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC

HDR

Custer County
Oconto
Eddyville
Sumner
Cozad
Dawson County
Lexington
Overton
Eustis
Gosper County
Elwood
Bertrand
Phelps County
Loomis

Legend

- Lexington Corporate Limits
- 2-Mile
- County Boundaries
- Fire and Rescue District Boundaries
- Townships
- Sections

Figure 19: Fire and Rescue Districts, Lexington area

City of Lexington
Dawson County, Nebraska
Fire and Rescue Districts Map

N

0 7,500 15,000 30,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC
HDR

City Buildings

PROFILE

Public Library

The library is located at 907 N. Washington Street. This 18,500 sq. ft. facility was built in 2005 and comprises stacks, study rooms, and two large conference rooms. The library is open daily for a total of 68 hours each week. The library provides service to the residents of Lexington and by contract to nonresident borrowers from rural Dawson County for a $5 membership fee. The library staff includes five full-time employees and four part-time employees.

In the 2010-2011 statistical report, the Library's collections included 36,647 books, 107 periodical subscriptions, and many media items. The library has twenty-four public access computers for public use. These computers were provided in part through a grant provided by the Nebraska Library Commission. Digital services include on-line catalog access, internet access, general application software such as word processing, and a number of on-line databases/resources.

The Lexington Public Library provides a number of services directed toward special populations and interests. Children's services include two story time groups; one designed specifically for home-schooled students. Teens are offered a distinctive collection of reading materials targeted to their interests. One very unique offering is its collection of cake pans. These variously shaped cake pans are made available for patrons to check out and return when finished. Their collection is both extensive and varied. Several other programs offered by the library include a monthly book club, tax forms and help through the Volunteer Income Tax Assistance (VITA) program, book delivery for the home-bound, and the use of the national Interlibrary Loan program. The library is also the meeting place for the Lexington Genealogical Society.

The Lexington Public Library is operated and supported by tax funds as well as private contributions with the mission to "extend quality service to area residents." There is a five member Library Board of Directors that provides oversight for the operations of the Library. The library works with the "Friends of the Library" group, which provides volunteer time and fundraising assistance. Donations are managed by the Lexington Community Foundation and are used to enhance the collection and other specialized programs.

City Hall

Lexington City Hall is located at 406 E 7th Street and was originally constructed in 1969. There was recently an addition to the building completed in 2010. In addition to the Police Department, offices located at City Hall include the City Manager's Office, City Clerk, Building and Zoning Department, and the Utilities Department.

City Maintenance Facilities

The Lexington Community Services Building is located at 801 West Vine Street. This facility houses the Public Works department for the city which manages the installation, repair and maintenance of the City's 170 lane miles of streets, water and sewer systems, eight parks and two cemeteries. This site is also where citizens of Lexington can obtain wood chips and compost.

Communication Facilities

Service Providers

Service Providers	Cable/Satellite Television	Telephone	Internet
Charter	X	X	X
Direct TV	X		
Dish Network	X		
CenturyLink		X	X

Table 29: Private Service Providers, Lexington Nebraska

Newspaper

Listed below are the various newspapers serving the residents of Lexington:

Lexington Clipper-Herald (bi-weekly)
Kearney Hub
North Platte Telegraph
Tri-City Tribune (weekly)
Que Pasa (monthly)

Television

KNOP – NBC Station (Channel 2)	KGIN – CBS Station (Channel 11)
KLNE – PBS Station (Channel 3)	KHGI – ABC Station (Channel 13)
KHAS – NBC Station (Channel 5)	KTVG – FOX Station (Channel 17)
KWNB – ABC Station (Channel 6)	
Source: www.dtv.gov	

Table 30: Lexington Television Stations

Radio

KLNE 88.7 FM	KSYZ 107.7 FM	KCNI 1280 AM
KRVN 93.1 FM	KFRM 550 AM	KBRL 1300 AM
KLIQ 94.5 FM	KXSP 590 AM	KGFW 1340 AM
KBBN 95.3 FM	KMMJ 750 AM	KNGN 1360 AM
KMTY 97.7 FM	KXXX 790 AM	KUVR 1380 AM
KKPR 98.9 FM	KRVN 880 AM	KOOQ 1410 AM
KHZY 99.3 FM	KOGA 930 AM	KRGI 1430 AM
KROR 101.5 FM	KJLT 970 AM	KXPN 1460 AM
KRNY 102.3 FM	KMMQ 1020 AM	KKAN 1490 AM
KKJK 103.1 FM	KNLV 1060 AM	KQNK 1530 AM
KCVN 104.5 FM	KHAS 1230 AM	KAMI 1580 AM
KQKY 105.9 FM	KODY 1240 AM	

Source: www.radio-locator.com

Table 31: Lexington Radio Stations

Health Facilities

Hospital

Lexington Regional Health Center

This facility, serving the community since 1976, has continued to expand and grow since its beginnings. It now holds the state trauma designation and is considered a Critical Access Hospital by the state of Nebraska. This hospital serves the city of Lexington and the region around it through its many specialty departments and services. The varied types of services include; obstetrics, radiology, physical rehabilitation services, occupational and speech therapy, and emergency services. Another specialty service offered by the hospital is its visiting physicians program. Physicians from area cities visit the hospital on a weekly, bi-weekly, or monthly schedule. The specialties represented include; cardiology, endocrinology, general surgery, neurology, oncology, and orthopedics.

Clinics

Urgent Care

This urgent care clinic is owned and operated by the Lexington Regional Health Center. It was built adjacent to the hospital and provides a lower cost alternative to emergency room visits. This facility treats common conditions including; cuts, burns, common colds and infections, and physicals.

Plum Creek Medical Group

This family clinic is located near the Lexington Regional Health Center at 1103 Buffalo Bend. Within this facility, they also provide outpatient behavioral health services to children and adolescents with a variety of behavioral health concerns.

Independent and Assisted Living Centers

Park Avenue Estates

This Assisted and Independent living facility offers 53 assisted and 23 independent living apartments. One and two bedroom apartments are available along with restaurant style dining. This facility has been in operation for 20 years and has become a part of the local community by providing avenues where residents interact with members of the community. This facility accepts Medicaid and private pay.

Plum Creek Care Center

This Skilled Nursing and Assisted Living facility has been in operation for more than 35 years. It consists of 66 skilled nursing rooms and 29 assisted living rooms. It accepts Medicaid, Medicare and private pay. Some of the additional assets of this facility are; adult daycare, in-house therapy, respite care, and an Alzheimer's support group.

Shackley Retirement Village

Among other benefits, this Independent Living facility boasts close proximity to the Lexington Regional Health Center. It offers 18 one and two bedroom apartments. Along with housing, residents of the Shackley community receive memberships to the community health and fitness center. Other services offered includes laundry services, garage rental and full housekeeping services.

PROFILE

Public Utilities

The City of Lexington currently provides the following public utilities services to its residents:

Water System

The City of Lexington's water system consists of more than 48 miles of 2" to 12" diameter water mains, one 400,000 gallon and one 1,000,000 gallon elevated water storage tanks, and twelve municipal wells. The combined production from the 15 wells is 9,000 gpm. The water distribution system is comprised primarily of cast iron and ductile iron mains with a small quantity of PVC mains. There are approximately 12.6 miles of 10", 12", and 16" diameter ductile iron mains that provide the distribution network for the smaller 4", 6", and 8" diameter interior mains. The system presently serves approximately 3,700 customers both inside and outside the corporate limits.

Wastewater Collection and Treatment

The City of Lexington's sanitary sewer collection consists of 6" diameter pipe all the way up to 42" diameter sewer pipes. There are presently five sewage pumping stations within the collection system that lead to a trickling filter sewage treatment system. Planned improvements are to upgrade the current system to an activated sludge system.

Solid Waste Collection

Trash service is coordinated by the city and is billed to customers along with electric services. The city then outsources this service to Dan's Sanitation, a private sector contractor.

Electric Power

The City of Lexington operates its distribution system, sells electricity at retail, and purchases wholesale from Nebraska Public Power District.

PROFILE

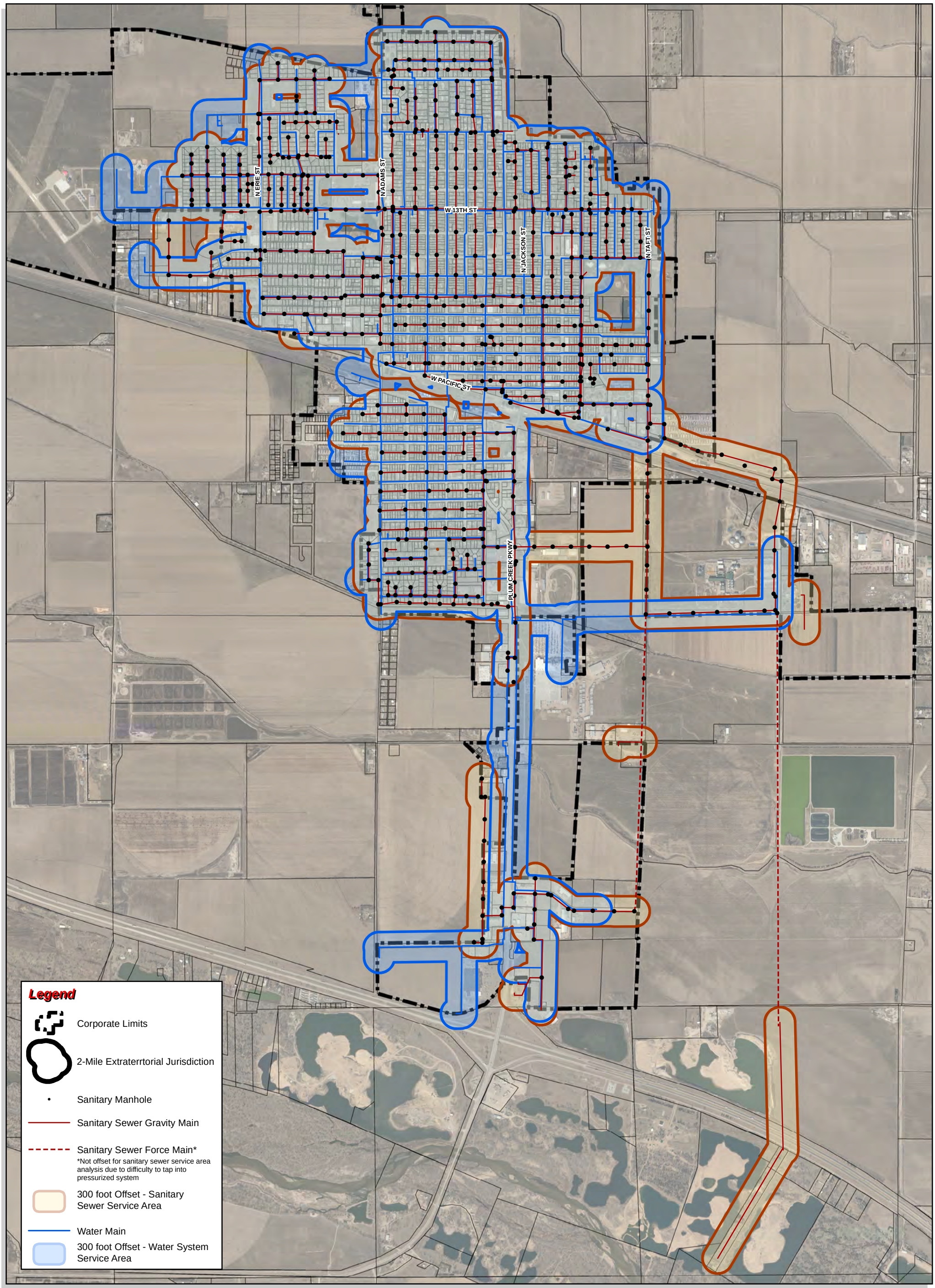


Figure 20: Utility Service, Lexington

City of Lexington

Dawson County, Nebraska

Utility Service Area Map

N

0 875 1,750 3,500 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

JEO CONSULTING GROUP INC

HDR

Energy Element

The purpose of an energy component within comprehensive plans allows the opportunity to prepare Lexington for future energy needs. Nebraska Legislation LB997 states that public jurisdictions are required to include an energy component into their comprehensive plans by January 2015. It allows residents to be informed of its energy use, costs, and consequences. This document will be added as the Energy Element for Lexington's obligation for its completed Comprehensive Plan.

Source: www.nppd.com; Canaday Station

Legislation

Nebraska Legislation LB997

According to LB997, there are three main components. These three components include the following:

1. Energy infrastructure and energy use by sector, including residential, commercial, and industrial sectors.

Energy infrastructure and energy use by sector for Lexington is found in the statistics section of the Energy Element document.

2. Utilization of renewable energy sources.

Energy source statistics are not available for Lexington, however there is a list found in the Renewable Energy Sources section of this document that shows what is possible in Nebraska.

3. Energy conservation measures that benefit the community.

Energy Codes – Under §§81-1608 to 81-1616, the State of Nebraska has adopted the International Energy Conservation Code as the Nebraska Energy Code. Any community or county may adopt and enforce the Nebraska Energy Code or an equivalent energy code. If a community or county does not adopt an energy code, the Nebraska Energy Office will enforce the Nebraska Energy Code in the jurisdiction.

The purpose of the Code, under §81-1608, is to ensure that newly built houses or buildings meet uniform energy efficiency standards. The statute finds:

> *that there is a need to adopt the . . . International Energy Conservation Code in order (1) to ensure that a minimum energy efficiency standard is maintained throughout the state, (2) to harmonize and clarify energy building code statutory references, (3) to ensure compliance with the National Energy Policy Act of 1992, (4) to increase energy savings for all Nebraska consumers, especially low-income Nebraskans, (5) to reduce the cost of state programs that provide assistance to low-income Nebraskans, (6) to reduce the amount of money expended to import energy, (7) to reduce the growth of energy consumption, (8) to lessen the need for new power plants, and (9) to provide training for local code officials and residential and commercial builders who implement the . . . International Energy Conservation Code.*

The Code applies to all new buildings, or renovations of or additions to any existing buildings. Only those renovations that will cost more than 50 percent of the replacement cost of the building must comply with the Code. As of early 2013, Lexington has not adopted an energy code.

Nebraska Legislation LB436 - Net Metering

The Nebraska Legislature passed LB436 which allows for net metering and gives citizens the opportunity to generate their own energy. It is found to be in the public interest because it encourages customer-owned renewable energy resources. It also can simulate economic growth, encourage diversification of energy resources, and maintain low-cost, reliable electric service for the State of Nebraska. By supplementing electric bills through "credits" for energy purchased back from the utility company, the citizens of Lexington can save money and reduce pressure on the utility grid.

According to their website, NPPD has offered net metering since 2008. As of December 31, 2011, NPPD had 16 net metering qualified facilities with total generating capacity of 66.9 kilowatts. The total estimated amount of energy produced by these customer generators in 2011 was 82,151 kilowatt-hours, and the net kWh received from them was 2,015 kilowatt-hours. As of October 12, 2012, NPPD has 27 net meter installations for a total installed capacity of 117.7 kWh.

The City of Lexington is willing to work with residents who are looking to take advantage of this opportunity.

Energy Usage Statistics

Consumption by Source

In the Electric Power Sector, Nebraska's Energy Consumption in 2009 consisted of mainly two sources. 68.61% (242.326 trillion Btu) of consumption came from coal while the second highest use was 27.94% (3.326 TBtu) generated by Nuclear Electric Power.

According to the 2009 EIA State-Level Energy Consumption statistics, Nebraska was ranked 34th in total consumption with 759.1 trillion Btu. This consumption per person in Nebraska is 9th highest with 422.9 Million Btu. The upper Midwest Region is represented poorly for consumption per person with Wyoming, North Dakota, Iowa, South Dakota, Nebraska, and Montana in the top ten. This is due to the rural and agricultural nature of these states. Most of these states are found in the top ten of lowest prices for Dollars spent per Million Btu.

The agricultural economies and cheap prices lead to high energy consumption per person as well as less urgency to conserve these resources. It becomes a way of life and hard to change course with both isolated farmers as well as urban citizens who have low and affordable public prices. For example, the average monthly bill in Nebraska in 2007 was roughly $78. In 2010 it rose to $94. Nebraska's energy consumption by source as it compares to the United States in 2010 is shown in Table 30.

ENERGY CONSUMPTION BY SOURCE

	NEBRASKA	United States
COAL	254.6 TBtu (31st)	20,869 TBtu
NATURAL GAS	169.6 TBtu (38th)	24,314 TBtu
PETROLEUM	222.1 TBtu (36th)	37,081 TBtu
RETAIL ELECTRICITY SALES	101.8 TBtu (36th)	12,810 TBtu

CONSUMPTION PER CAPITA

NEBRASKA	United States
461.1 MBtu (8th)	315.9 MBtu

Table 32: Energy Consumption By Source and Per Capita

The consumption by source for Lexington is difficult to determine. Typically, this information is not at the city scale but on system-wide scales. Purchasing outside energy from third parties also compounds this task for verifying information and therefore left at the state level.

Consumption by End User

In 2007, the Nebraska Energy Office compiled statewide statistics on energy consumption in the sectors of Residential, Commercial and Industrial.

2007 Residential Sector

1) Natural Gas: 47.5%
2) Electricity: 40.2%
3) Petroleum: 7.7%
4) Renewable Energy: 4.64%

(wood 4.38; geothermal 0.22; solar 0.04)

5) Coal: less than 1%

2007 Commercial Sector

1) Electricity: 48.06%
2) Natural Gas: 45.88%
3) Petroleum: 4.1%

(diesel fuel 1.65; propane 1.58;motor gasoline 0.88; kerosene 0.01)

4) Renewable Energy: 1.79%
5) *geothermal 0.92; wood 0.85; ethanol 0.02*
6) Coal: Less than 1%

2007 Industrial Sector (including the transportation sector)

1) Natural Gas: 38.13%
2) (*Petroleum*) Diesel Fuel: 22.66%
3) Electricity: 19.77%
4) Petroleum: 10.88%

(*asphalt and road oil 3.82; propane 3.51; motor gasoline 2.33; residual fuel 0.19; lubricants 0.14; kerosene 0.01; other petroleum 0.88*)

5) Coal: 5.13%
6) Renewable Energy: 3.44% (*wood/wood waste 3.38; ethanol 0.06*)

Nebraska's energy consumption by end-user sector as it compares to the United States in 2010 is shown in Table 33. This information was compiled by the United States Energy Information Administration (EIA).

Energy Consumption by End-Use Sector

Nebraska 2010

SECTOR	Nebraska TRILLION BTU	U.S. TRILLION BTU
Residential	165.4 (#36)	21,836.2
Commercial	143.8 (#35)	18,040.1
Industrial	352.4 (#27)	30,390.6
Transportation	182.2 (#38)	27,443.8
Total Consumption	843.8 (#33)	97,710.6

Table 33: **Energy Consumption by End-Use Sector, 2010**

Local Utility Provider

The City of Lexington serves its citizens affordable utilities by purchasing wholesale energy from Nebraska Public Power District (NPPD). The Electric Rebate Incentive program is available for Lexington residents and commercial customers for high efficiency heat pump purchases. It relates to new, conversion, or upgrade installations with electric back-up heating only.

The first step of the Electric Rebate Incentive is for the citizen or the hired contractor to fill out two applications. One is the City of Lexington Electric Rebate Program Application with basic information. The High Efficiency Heat Pump Program application is the second form that has more detailed questions. The second step of the rebate program is for the contractor to provide a Certificate of Product Rating Form from AHRI. The final step is to bring these required forms to the City Inspection Department to schedule an inspection for verification of properly installed equipment.

Both Lexington and NPPD contribute to the rebate incentives. It is a good investment to improve the efficiency of heat pumps but research must be done to verify that the upfront cost with the benefit of rebates will pay off in the long term. There are also incentives for improving efficiency in lighting, insulation, cooling systems, irrigation and industrial motors. For more information and the various incentives, visit the City of Lexington's or NPPD's websites or contact the city inspection or utilities department.

The City of Lexington's utilities department works on a fiscal year from October to September. The following table represents the electricity used per year and is measured in kilowatt hours. Also note, Commercial-Large includes downtown, churches, parks, and schools.

City of Lexington Utilities	2006 - 2007	2007 - 2008	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012
Units in kWh						
Basic Residential	25,014,318	24,381,972	24,156,847	26,101,893	26,221,017	24,021,853
Commercial - Small	12,628,440	12,891,876	12,117,482	12,847,381	12,351,211	11,895,223
Commercial - Large	17,041,780	17,089,608	17,517,144	17,642,229	17,003,078	18,555,386
Industrial	118,049,933	112,902,831	116,836,278	124,924,181	124,869,734	119,737,332

Table 34: Energy Usage Trend, City of Lexington, 2006 - 2012

Renewable Energy Sources

According to the U.S. Energy Information Administration, The nation as a whole used a higher percentage of renewable energy than Nebraska. In 2008, 7% of the energy consumption in the United States was from renewable sources. That year the sources of energy for the nation were petroleum (37%), natural gas (24%), coal (23%), nuclear electric power (8%), and renewable energy (7%). The sources of renewable energy were solar (0.07%), geothermal (0.35%), wind (0.49%), hydropower (2.38%), and biomass (3.71%).

According to the Nebraska Energy Office, it is reported that in 2007, three percent of Nebraska's energy consumption was from renewable energy sources. The sources of energy for Nebraska in 2007 were petroleum (33%), coal (31%), natural gas (21%), nuclear power (17%) and renewable energy (3%). The renewable sources were biomass (1.48%), conventional hydroelectric power (0.496%), ethanol (0.379%), wind (0.309%), geothermal energy (0.115%), and solar (0.005%).

Most renewable energy systems are used as a supplemental energy source. Even on a small scale, it can help alleviate pressure on the local energy grid during the peak hours of demand. Technology continues to advance in creating more available options to the typical household consumer. Not all renewable energy sources will be a perfect match for Lexington, but some energy options will make sense to investigate in a cost analysis for the homes, businesses, or public investment. Renewable energy systems in Nebraska include wind power, hydro power, biofuels, and solar power.

Wind Power

In the Environmental Information Administration's (EIA) 2011 Profile for the State of Nebraska, the National Renewable Energy Laboratory estimates that 92 percent of Nebraska has suitable conditions for wind-powered electricity. Community-scale wind projects of 50 meters high are a popular height and size.

The Nebraska Power Association reported that 195 MW of wind projects are committed resources and projected to be on line by the end of 2012 as well as available for the 2013 summer peak. The only downside to wind power is the effectiveness of systems during daytime peak hours since higher winds are recorded at nighttime when there is less demand.

Biofuels

Biomass is from plants or animals, and can be converted in biofuels for energy production. Examples of this fuel include algae, fly ash (a byproduct of coal and concrete products), manure, crop residue on the surface of fields, and the burning of woody mass in pellet form.

Waste-to-energy, also known as energy from garbage municipal solid waste (MSW) include items such as paper, cardboard, food scraps, grass clippings, leaves, wood, leather products, and other non-biomass combustible material
plastics made from petroleum.

Biogas includes methane gas collection and natural gas production from landfills. This seems to be the more practical approach to renewable energy as a collective *county*-wide decision. The Nebraska Power Association concluded their Statewide Coordinated Long Range Power Supply Study in July 2012.

Solar Power

Solar Power (photovoltaic and other options) can benefit individual households as well as businesses. There should a concerted effort to increase interest in what solar systems can do for a business's bottom line. The front-up cost may seem daunting but the rate of return may surprise people. There are ways to help finance the initial amount of investment, and incentives may be available. Nebraska Energy Office is a great resource to look for funding options such as low interest loans. Communities and their business leaders should consider their options when it purchasing new units.

From a commercial standpoint, the top five businesses that would benefit from solar energy would be laundromats (heating the water), breweries (nonstop operation, heating and cooling ingredients), data storage facilities (non-stop running of computers in the "server farm"), restaurants (air-conditioning and lighting), and manufacturing facilities (typically large machines that need high amount of energy). Solar Power would usually be available during peak hours.

On a much larger scale, the CSP or Concentrated Solar Power could be helpful to support or supplement the local utility grid for isolated communities and farmers. They could use the energy source for supplementing energy consumption of a community, irrigation purposes, and other farming needs.

Biogas Example: Lincoln Electric System (LES) has a committed landfill gas generator project for the 2013 summer peak period. This generator will add 4 MW of capacity and will bring the total amount to roughly 10 MW of landfill gas. The advantage is that Biogas is usually part of the system that is already in place.

Hydro Power

There are a number of hydro plants throughout Nebraska, including water and waste water treatment for treatment for various communities and subdivisions. The proposed national renewable portfolio standards do not allow for existing hydro units to count toward renewable energy goals.

Nebraska is divided into various watersheds and corresponding Natural Resource Districts (NRDs) that deal with ground and surface water. Through the assistance of the NRDs and other state agencies, and because of Nebraska's many rivers and streams, it makes sense to plan for and invest in new hydro plants.

Awareness of the area's watershed(s) can help a community make appropriate water-related environmental decisions. There are a number of practices residents can employ to help prevent runoff. A great beginning– to-intermediate source for citizens interested in preventing or reusing stormwater runoff is the City of Lincoln's Alternative Stormwater "Best Management Practices Guidelines" for watershed management. As for public treatment of water and wastewater, cost-saving efforts include co-locating anaerobic digesters. Algae-wheel systems can be harvested and used as a renewable feedstock for biofuels.

Additional Energy Information and Documentation

Recycling

Recycling in Lexington is promoted through local service organizations, youth organizations, and Keep Lexington Beautiful. Citizens are encouraged to support these efforts and recycle whatever consumables they can.

Nebraska's Energy Plan

In 2011, the Nebraska Energy Office released the Nebraska Energy Plan which provides strategies for the state to consider in meeting their three objectives:

- Ensure access to affordable and reliable energy for Nebraskans to use responsibly
- Advance implementation and innovation of renewable energy in the state
- Reduce petroleum consumption in Nebraska's transportation sector

This short and information-packed document is full of examples and future plans of how the State of Nebraska is advancing our diversity of energy sources while maintaining low-cost and reliable energy to its citizens. http://www.neo.ne.gov/Energyplan2011.pdf

Energy Saving Tips

The Nebraska Energy Office has listed ways to save money on energy bills for the home, farm, business, and vehicles. Options for energy savings can be found on the Office's web site at http://www.neo.ne.gov/tips/tips.htm. Lexington residents and businesses are encouraged to learn more and take advantage of these conservation measures.

On their homepage, www.nppd.com , Nebraska Public Power District has a "Save Energy Section" which has more informational energy tips and incentives for your home and business. There is also information on renewable energy and net metering. NPPD operates in almost every county in Nebraska and is a great resource to use.

NATURAL AND ENVIRONMENTAL CONDITIONS

Introduction

This chapter of the *Profile* Lexington section is intended to provide the City of Lexington with underlying environmental data and any potential concerns for future planning and decision-making. The information contained in this section is important because it develops key concepts and policies with "*The Lex-Plan 2013*" and especially the *Achieve* Lexington section.

This chapter will review the different natural and environmental issues that provide opportunities and constraints upon future development for Lexington. The following constraints are reviewed in this section:

Soil Associations
Floodplain
Wellhead Protection Program

Each of these issues has some impact on potential future development for Lexington. Most of the issues are related directly to soils found within the extraterritorial jurisdiction. These issues, as well as others, are reviewed and analyzed to determine the best possible types and locations for future development.

Soil Associations

The soils in and around Lexington are classified into five soil groups, or associations, each with a broad range of characteristics. The Generalized Soils Association Map (see Figure 21) displays this simplified version of what soils exist within Lexington's extraterritorial jurisdiction. The U.S. Department of Agriculture, Natural Resources Conservation Service conducted the field soils survey and developed the boundaries of the soil types found on Figure 21. The five soil associations found in the Lexington area are the Cozad-Hord, Wood River-Rusco-Cozad, Gosper-Cozad-Silver Creek, Lex-Lawet-Gibbon, and Gothenburg-Platte. The report that describes and explains soil limitations was published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the University of Nebraska Conservation Survey Division.

SILTY SOILS ON STREAM TERRACES AND FOOT SLOPES

COZAD-HORD ASSOCIATION
(Lime Green in Figure 21)

Along the northern most portion of Lexington's Corporate Limits, as well as the northern third of the extraterritorial jurisdiction are comprised of the Cozad-Hord Association. Individual soils are generally described as, "deep, nearly level to gently sloping, well drained, silty soils on stream terraces and foot slopes." Farms in this association are some of the most intensively farmed throughout Dawson County.

Development limitations for Cozad soils are primarily related to slopes when greater than seven percent. Bearing capacity for foundations has moderate limitations when slopes are less than 15 percent. Hord Soils contain slight limitations for septic tanks, moderate permeability rates for sewage lagoons and moderate bearing capacity for foundations due to frost actions.

WOOD RIVER-RUSCO-COZAD ASSOCIATION
(Combined into Lime Green area in Figure 21)

The soils of Wood River-Rusco-Cozad intermingle with Cozad-Hord Association on the northern third of the extraterritorial jurisdiction of Lexington. Therefore, Figure 21 shows one solid lime green section that represents both associations. Wood River-Rusco-Cozad Association are described as "deep, nearly level, moderately well drained, silty soils on stream terraces."

LOAMY AND SILTY SOILS ON STREAM TERRACES

GOSPER-COZAD-SILVER CREEK ASSOCIATION
(Teal area in Figure 21)

Nearly the entire area within Lexington's corporate limits, as well as the central third of the two-mile planning jurisdiction, is included in the Gosper-Cozad-Silver Creek Association. Soils of this Association are described as "deep, nearly level, somewhat poorly drained to well drained, silty and loamy soils on the stream terraces."

Limitations for dwellings with or without basements are stated as moderate due to shrink-swell potential and seasonal high water table at a depth of four to five feet for Gosper soils. The soil composition comprises the majority of Lexington's developed residential neighborhoods. Dwelling limitations for Cozad Soils are moderate for slightly sloping lands and severe where slopes are greater than 15 percent. Silver Creek Soils are concentrated south of the Highway 30 corridor and have severe limitations for dwellings due to high shrink-swell potential, frost action and seasonal high water table at a depth of two to five feet.

Sewage lagoons are impacted by severe limitations for seasonal high water table at two to five feet depths in Silver Creek soil. Gosper soil also has severe limitations for sewage lagoons due to seepage below four feet depths and water table depths of four to five feet. Cozad soil is rated severe due to moderate permeability and water table depths of three to four feet on seasonal basis.

LOAMY, SILTY, AND SANDY SOILS ON BOTTOM LAND

LEX-LAWET-GIBBON ASSOCIATION
(Darker Blue surrounding Platte River in Figure 21)

Lands within the extraterritorial jurisdiction, along either side of the Platte River, are comprised the Lex-Lawet-Gibbon Association. This Association is generally described as "deep and moderately deep over sand and gravel, nearly level, somewhat poorly drained and poorly drained, loamy and silty soils on bottom land."

All of these Associations of Lex, Lawet, and Gibbon are severely limited for development of dwellings, septic tanks, and absorption fields and sewage lagoons.

GOTHENBURG-PLATTE ASSOCIATION
(Light Blue within Platte River in Figure 21)

The bottom lands of the Platte River, along the southern portion of Lexington's planning jurisdiction, are associated with the Gothenburg-Platte Association. Ground water is from six inches to five feet below the surface. River bottom soils, such as these, understandably have severe limitations for development.

Sewer lagoons, septic tanks and absorption fields and foundations of buildings are severely impacted by soils conditions in this Association.

Figure 21: Generalized Soils Association, Lexington

City of Lexington

Dawson County, Nebraska

Generalized Soils Association

Legend

- Corporate Limits
- 2 Mile Extraterritorial Jurisdiction
- Cozad-Hord and Wood River-Rusco-Cozad
- Gosper-Cozad-Silver Creek
- Gothenburng-Platte
- Lex-Lawet-Gibbon

N

0 2,125 4,250 8,500 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC

HDR

“The Lex-Plan 2013”

For more detailed information can be found on individual parcels of land. The previous map, Figure 21, is meant to give a broad understanding of the general soil capabilities. Contacting an expert to test the soil is highly recommended. As shown in Figure 23, it displays that the extraterritorial jurisdiction may have very different soil types near one another. Again, it is recommended to contact United States Department of Agriculture's (USDA's) National Resources Conservation Service (NRCS) for more details and limitations on acquiring land and land uses for. The decisions made on behalf of Lexington should be made with the most current and accurate information available. Figure 22 details the large legend of Lexington soils.

Figure 22: Detailed Legend for for Individual Soil Unit Map

Figure 23: Individual Soil Unit, Lexington

City of Lexington

Dawson County, Nebraska

Soils Unit Map Name

N

0 2,500 5,000 10,000

Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC.

HDR

Floodplain

The topography and terrain of Lexington and the two mile extraterritorial jurisdiction are varied. The natural landscape has been formed by wind and water erosion and deposits creating areas of nearly level lands on stream terraces. The slope within Lexington's corporate limits is generally nearly level and rests just above the Platte River bottom lands. Lands slope from developed areas of Lexington south easterly carrying stormwater runoff to Spring Creek and other drainage ways prior to converging with the Platte River.

In May of 1984, the U.S. Department of Housing and Urban Development, Federal Insurance Administration commissioned the "Flood Insurance Study" for the City of Lexington "to investigate the existence and severity of flood hazards." The study consists of detailed engineering graphics, tables and text. The City of Lexington should refer to this study for official hydraulic analysis.

The study outlined the floodplain management applications to guide future land uses and floodplain ordinance, which regulates building in areas declared as the 100-Year Flood Hazard Zone. Floodway, 100 year flood event, and 500 year flood event are shown in Environmental Constraints (Figure 24).

No flood protection structures exist or are planned. As Lexington continues to grow, future development within the floodway and floodplain should be discouraged and only allowed through strict adherence to the local flood plain regulations.

The citizen's protection against natural hazards is the responsibility of the local government and its officials. The effect of high water or flooding can be lessened by planning open space within the designated flood plain, continued maintenance of the floodway, and through the application of design standards to reduce water runoff.

Surface drainage and streams account for a small percentage of the water resources in the Lexington extraterritorial jurisdiction. The City of Lexington relies upon the Platte River to recharge the underground aquifer which supplies water to 14 municipal wells located throughout the community.

The underground water supply for Lexington is part of an abundant aquifer which flows across the majority of Nebraska. Since World War II, a large increase in irrigation practices throughout the Nebraska has drastically lowered the water table. However, the depth to the water table in Dawson County and the Lexington has not significantly changed. The average depth of Lexington's municipal wells vary from 60 to 350 feet. Private agricultural and domestic wells average from 140 to 160 feet in depth in the uplands and from 15 to 30 feet deep in the Platte River Valley. The surface water in drainage ways and depression seeps into the aquifer to recharge it. Thus, the surface and ground water are part of one interactive system which cannot be separated.

Securing the quality of drinking water from private wells in the rural areas of Lexington's extraterritorial jurisdiction is very important. A minimum lot size of three acres is recommended for residences in agriculturally zoned areas. This standard generally ensures that adjacent households do not contaminate each other's drinking water.

Lot sizes less than three acres would locate rural residences close to one another. Rural dwellings typically have septic tanks and possibly leach fields. If located too close to each other, contamination might occur.

Wellhead Protection Program

The Nebraska Department of Environmental Quality (NDEQ) regulates groundwater quality and quantity. To assist local municipalities with protecting their drinking water supply, the NDEQ developed the Nebraska Wellhead Protection (WHP) Program. The Nebraska Wellhead Protection Areas are shown on Figure 24.

The Wellhead Protection (WHP) Program provides the following in accordance with federal laws:

1. Duties of the governmental entities and utility districts
2. Determines protection area
3. Identifies contamination sources
4. Develop a contaminant source management program
5. Develop an alternative drinking water plan
6. Review contaminated sources in future wellhead areas
7. Involve the public

The approaches of Nebraska's Wellhead Protection (WHP) Program are to:

Prevent the location of new contamination sources in wellhead protection areas through planning.

Minimize the hazard of existing sources through management.

Provide early warning of existing contamination through ground water monitoring.

The Wellhead Protection Area is a region with restrictive land use regulations to prevent potential contaminants from locating in the sensitive area. The boundaries are delineated by a time of travel cylindrical displacement calculation. The boundary is mapped by the Nebraska Department of Environmental Quality (NEDQ) so communities can apply zoning regulations to the district. The City of Lexington plans to regulate the wellhead districts with a specific wellhead protection zone.

Legend

- Corporate Limits
- 2-Mile Extraterritorial Jurisdiction
- *Floodway
- *100-Year Floodplain
- *0.2% Annual Chance Floodplain (500-Year)
- Wellhead Protection Areas

FIRM Panel Number
31047C0475C
31047C0450C
31047C0435C
31047C0650C
31047C0625C
31047C0442C
31047C0444C
31047C0464C

*The100-Year Floodplain areas shown on this map are a generalized representation of the Floodplain boundaries shown on the following FIRM panels in the 31047C series:

The FIRM Panels listed to the left are specific to the City of Lexington / D awson County, Nebraska and were officially adopted as of 5/3/2011, and must be referred to for interpretation of Floodplain areas.

Figure 24: Environmental Constraints, Lexington

City of Lexington

Dawson County, Nebraska

Environmental Constraints Map

N

0 2,300 4,600 9,200 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC.

HDR

EXISTING LAND USE

In order for a community to plan for future land uses and land use changes, knowledge of existing land uses must be established. The purpose of this section of the Plan is to establish an inventory and evaluation of the existing land uses found within the Lexington planning area. This does not take into account future land use or land ownership.

Land use categories that will be used to plan for future development areas are general statements about how the underlying property is being used. These are generally described with broad labels such as residential, commercial, and industrial, as well as an identification of vacant or open spaces being used for cropland, recreational areas, and any under- or non-developed land. In order to fully explain the variety of uses currently found, the description used in this section will include more detailed statements.

Land uses and properties do not have to be arranged in a 1:1 ratio with one land use per parcel. Uses are often mingled within a development, and can be stacked on each other, such as in a Downtown building that is used for residential uses on upper floors and commercial uses on the ground floor. The number and type of land uses found in a vibrant community is constantly changing to meet the needs and desires of residents, which can produce a number of impacts that either benefit or detract from the overall sense of community and quality of life. Because of this, the success and sustainability of a community is directly influenced by the manner in which available resources are utilized given the constraints the city faces during the course of the planning period.

Typically, older Midwest communities exhibit a fixed pattern of land use that is fairly consistent with a rural setting's relaxed pace. Lexington, however, is experiencing increasing levels of growth and development pressures, and has seen its surroundings transform from the more common rural setting found throughout Nebraska to an urbanizing extension. The proximity to I-80 and Highway 30, as well as its location along Highway 21, provide Lexington with many more opportunities than would be found in a typical town of the same size. The opportunities that result from such external forces create impacts upon the community and its residents, which can drastically affect the land use in and around the Lexington area and will significantly impact how and where Lexington grows in the future.

Existing Land Use Categories

Land uses are generally best described in terms of specific categories that provide broad descriptions into which numerous businesses, institutions, and structures are grouped.

Lexington's existing land use categories are more specific to allow for a more detailed evaluation of each use. For the purposes of "*The Lex-Plan 2013*," the following land use classifications are used:

Agriculture / Open Space – A parcel of land that is not intended for development and is currently used for low intensity agriculture uses, such as pasturing, or contains open spaces such as woodlands or flood plain.

Developing Residential – A parcel of land that is currently undeveloped and not proposed for development. This may be subdivided and undergo preparations for residential development. This land is generally found to be open and minimally maintained.

Single-Family Residential – A parcel of land where each residential structure is occupied by one family, such as a traditional home on its own lot, surrounded by yards on all sides.

Multi-Family Residential – A parcel of land containing a structure being utilized by two or more families within a same structure.

Residential Mobile Home – A parcel of land containing a factory-built, single-family structure. These uses are Single-Family Residential in nature, but identified separately.

Commercial – A parcel of land containing a commercial use which may sell a good, but mostly provides a service, such as automotive repair, hair salon, and includes the Downtown.

Industrial – A parcel of land containing a commercial use involved in manufacturing or packing, storage, or assembly of products, which does not have a major external effect on surrounding properties or uses.

Parks and Recreation – A parcel of land containing public or private land available for recreational, educational, cultural, or aesthetic use.

Public/Quasi-Public – A parcel of land owned or maintained by a federal, state, or a local governmental entity and open for enjoyment by public, or a parcel of land containing a use that is generally under the control of a private, religious, or non-profit entity, that provides social benefit to the community as a whole.

Existing Land Use Analysis

Lexington's existing land uses were evaluated and tabulated, showing the quantity of uses found within the corporate limits as well as within the entire planning jurisdiction. The data was arranged using total acres of each type of Land Use displayed in Table 35.

Not surprisingly, the majority of developed land within Lexington is used for single family residential purposes. In 2013, nearly one-half of all developed property in Lexington was used for single-family dwellings. In terms of total acres, single-family uses in 2013 accounted for 598.87 acres. The remaining components of residential uses represented much smaller portions of the land use picture. Residential uses with two or more units accounted for 2.6 percent of all developed land within Lexington in 2013. There are a number of contiguous residential developments surrounding Lexington which give the community the potential to alter the residential land use figures if these areas were to be annexed in the future.

Type of Land Use	Land Use Counts	Acres
Agriculture / Open Space	48	537.82
Commercial	318	195.86
Developing Residential	147	143.88
Industrial	101	171.04
Multi-Family Residential	42	46.41
Parks and Recreation	18	99.08
Public / Quasi Public	73	532.65
Residential Mobile Home	52	50.65
Single Family Residential	2563	598.87
Total		2376.25
Streets/Railroads		*540.75*
Corp Limits Acres		**2917.00**

Source: 2013 Comprehensive Development Plan, JEO Consulting Group, Inc

Table 35: Land Use within Corporate Limits, Lexington, 2013

Overall, commercial uses in 2013 covered just over 195.86 acres, or nearly 12 percent of all developed land. Total acres put to industrial uses nearly equaled those put to commercial use, and accounted for approximately 10 percent of all developed land in 2012.

Public and quasi-public land uses accounted for nearly 30 percent of all developed land in 2013, second only to single-family residential. Parks and recreation acres accounted for the third smallest acreage, covering just over 99 acres in 2013.

Transportation uses, which include rights-of-way, railroads, and roadway systems, accounted for 18.6 acres of undeveloped land and 0.8 percent of total acreage in 2013. Undeveloped land, including transportation, agricultural uses, open space, and developing residential property accounted for 30 percent of all land within Lexington, compared to 70 percent for developed land.

Land Use Type	Land Use Count	Acres Of Extraterritorial Jurisdiction
Agricultural/Industrial	**5**	**344.55**
Commercial	**11**	**78.11**
Developing Residential	**5**	**91.24**
Industrial	**16**	**838.31**
Parks and Recreation	**5**	**100.04**
Public/Quasi Public	**9**	**147.7**
Residential	**127**	**500.26**
Single Family	*112*	*438.04*
Multifamily	*1*	*3.25*
Mobile Home	*14*	*58.97*
Agriculture/Open Space		**24,180.72**

Source: 2013 Comprehensive Development Plan, JEO Consulting Group, Inc.

Table 36: Extraterritorial Jurisdiction Land Use, Lexington, 2013

Lexington currently exercises its statutory authority to enforce planning jurisdiction within two miles of the corporate boundary. An evaluation of land uses within this extraterritorial jurisdiction (ETJ) is important for future development and planning activities. The land uses found outside of the corporate limits are mostly agriculture, agricultural residential, and single-family residential, especially to the east of the community. Due to external and internal development pressures, as well as the proximity of major transportation routes, the percentage of residential uses found within the Lexington ETJ is higher than would be typical for a Midwestern community of this size.

In addition, all land uses that are found within Lexington are also found within the ETJ. This pattern is also influenced by the urban nature of the area, as well as the land use policies Lexington has held over time. The presence of all the same land use types in the ETJ will encourage greater development activity, which in turn can influence Lexington's ability to annex and grow at an increased rate over communities located in more rural settings.

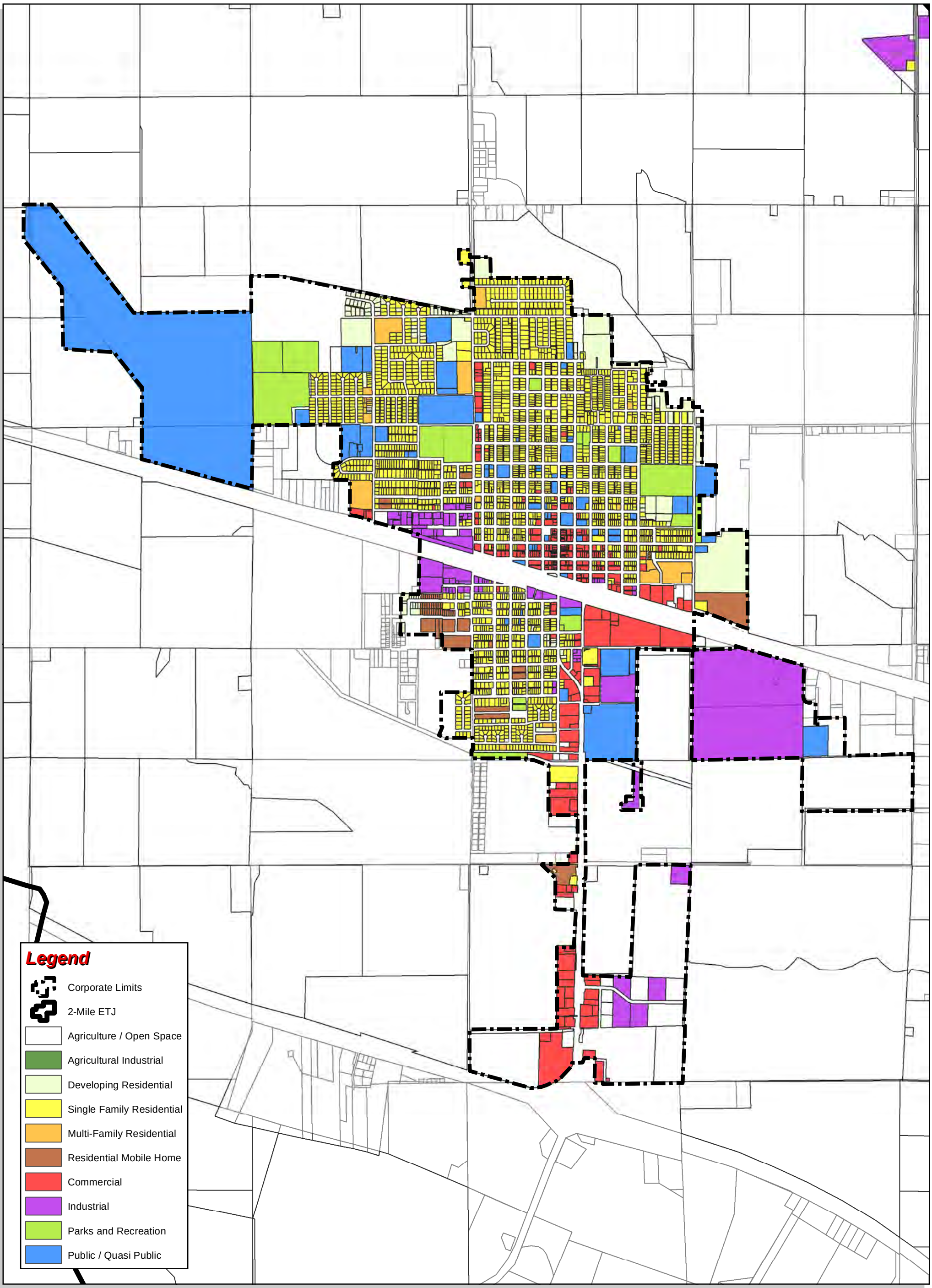


Figure 25: Existing Land Use within Corporate Limits

City of Lexington
Dawson County, Nebraska

Existing Land Use Map
Corporate Limits

N

0 1,250 2,500 5,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC

Legend

- Corporate Limits
- 2-Mile Extraterritorial Jurisdiction
- Agriculture / Open Space
- Agricultural Industrial
- Developing Residential
- Single Family Residential
- Multi-Family Residential
- Residential Mobile Home
- Commercial
- Industrial
- Parks and Recreation
- Public / Quasi-Public

Figure 25b: Existing Land Use, Extraterritorial Jurisdiction

City of Lexington
Dawson County, Nebraska

Existing Land Use Map
Extraterritorial Jurisdiction

N

0 2,500 5,000 10,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

AIRPORT OVERLAY

Lexington's Jim Kelly Field Airport (KLXN) is a regional airport that began in 1946 and currently covers 275 acres two miles northwest of Lexington. The facility is open to the public and services the Lexington residents and surrounding community. It is owned by the Lexington Airport Authority. As for its yearly functions, statistics show that between June 2008 and June 2009, Jim Kelly Field Airport had 4,000 Air Taxi Operations, 2,100 Itinerant Operations, 8,100 Local Operations and 40 Military Operations. That averages to more than 38 operations per day.

According to the Federal Aviation Administration glossary, Local Operations are those operations performed by aircraft that remain in the local traffic pattern, execute simulated instrument approaches or low passes at the airport, and the operations to or from the airport and a designated practice area within a 20-mile radius of the tower. Itinerant Operations are performed by an aircraft that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area. This is important because the historical traffic at the Jim Kelly Field Airport has reverted back to operations similar to operations prior to 1996. From 1996 to 2007, the Jim Kelly Airport increased its yearly Itinerant Operations from 2,400 in 1995 to remain steady at about 3,800 yearly. These Itinerant Operations then declined to a yearly average of 2,100 in 2008 and 2009. The Local Operations have shared the opposite effect. After experiencing high yearly Local Operations of 8,100 from 1990 to 1995, it decreased to around 2,300 in 1996. This continued until 2008 when the Local Operations increased to its prior yearly average of 8,100 in 2008 and 2009.

The safety of the Lexington residents and passengers on aircraft are of the utmost importance to the City. Construction height limits would be most restrictive in the Inner Area. This affects the southwestern edge of Lexington.

Nebraska Airport Act

The Nebraska Airport Act is a combination of three Acts. These Acts are:

State Aeronautics Department Act: 3-101 to 3-154

Revised Airports Act: 3-201 to 3-238 and 18-1502

Extraterritorial Airports Act: 3-240 to 3-244

The Nebraska Airport Act is in Nebraska Revised Statute 3-301 to 3-333. For example, if Lexington would like to expand its airport, Nebraska Revised Statute 3-203 states property needed for an airport or restricted landing area may be purchased if all parties involved agree on the terms of the acquisition. The Act further states that municipalities have eminent domain options to ensure the safety and well-being of local residents.

For further aeronautics information, Nebraska Revised Statutes 3-401 to 3-806 contain a wider range of topics such as Airport authority, property and structures, bonds, and legal matters. Lexington's decision makers should continue to refer to the above statutes and search for updated data when approving building permits in the future.

The following map, Figure 27, illustrates Lexington and the surrounding region. The largest area on the Airport Zoning Map is the Approach Zone and Turning Zone. These zones illustrate a critical distance to the airport and the angle of approach. The Lexington Airport has increased its Local Operations which include low passes at the airport. An aircraft will depart and turn for its flight path which is outlined and labeled Turning Zone. The checked paths represent the aircraft approaching the ground for a landing at the airport northwest of Lexington. It is critical and a safety requirement to restrict construction heights within these boundaries of Lexington, its extraterritorial jurisdiction, and the outlying property outside of Lexington's jurisdiction. Depending upon the location, Lexington and surrounding Dawson County landowners may be affected. The Approach Zone may restrict the height for construction of communication towers or wind turbines.

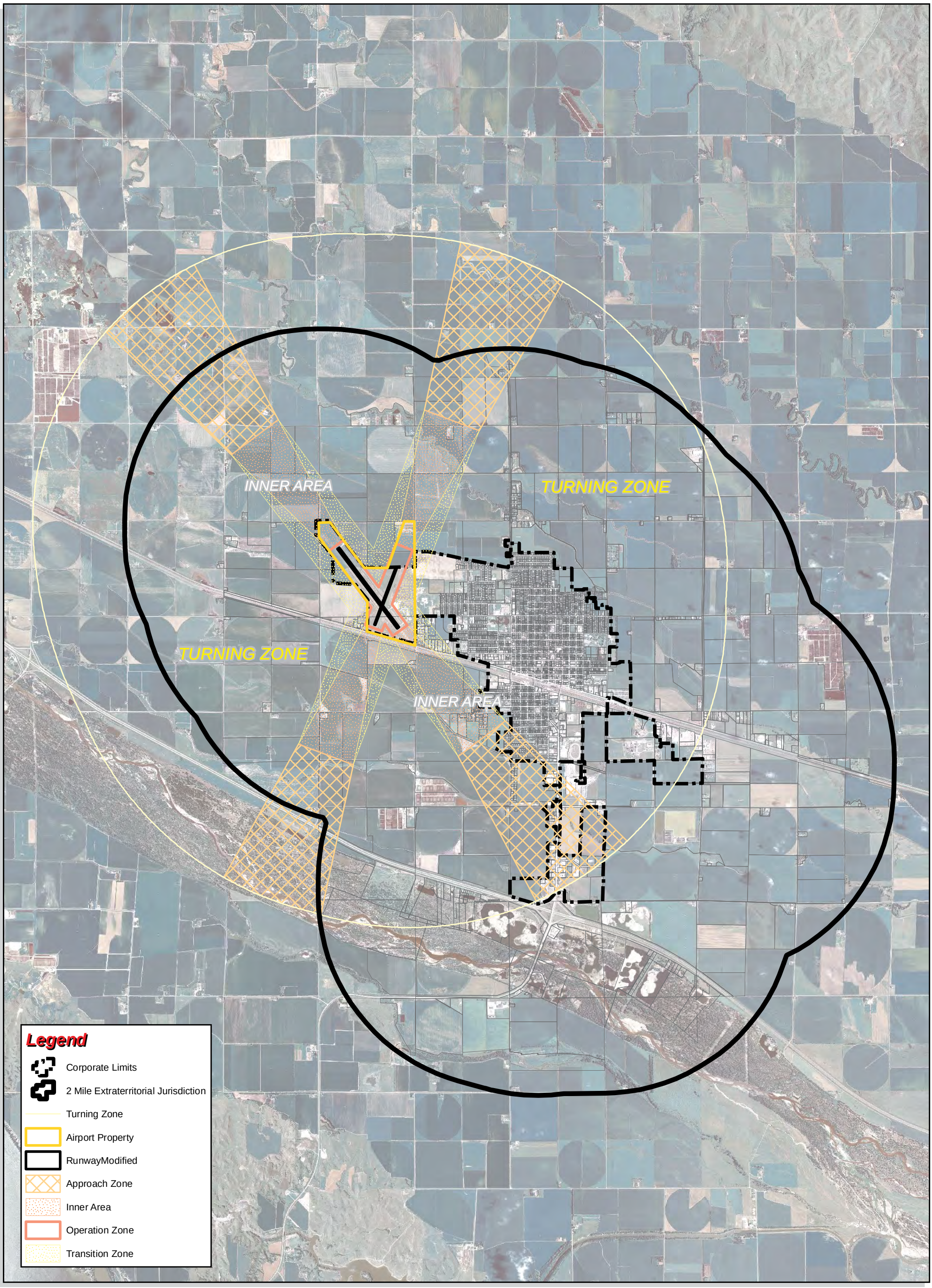


Figure 26: Jim Kelly Field Airport Overlay

City of Lexington
Dawson County, Nebraska
Airport Zoning

N

0 2,500 5,000 10,000 Feet

Created By: SMS
Date: April 2013
Software: ArcGIS 10
File: 100999

JEO CONSULTING GROUP INC

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.