City of Lawrence
Douglas County
PLANNING & DEVELOPMENT SERVICES

Horizon 2020 Steering Committee
City Commission Room
3:00 – 5:00pm
June 13, 2016

AGENDA

1) **Approve March 7, 2016 Meeting Notes**

2) **Receive communication from the Public**

3) **Receive Updates on Related Plans**

   a. **Lawrence Parks & Recreation Master Plan**
   b. **2015 Residential Lot Inventory Report**
   c. **July 2015 City Population Estimates and Projections**
   d. **Draft Natural Resources Chapter**

4) **Receive Staff Presentation and Discuss Growth Policies**

Horizon 2020 Steering Committee
March 7, 2016
Meeting Notes

Members Present: Comm. Thellman, Mayor Amyx, Bill Ackerly, John Gascon, Clay Britton, Lisa Harris, Kyra Martinez, Patrick Kelly, Charlie Bryan (ex officio)

Members Absent: Marcel Harmon, Scott Zaremba

Staff Present: Scott McCullough, Amy Miller, Jeff Crick

Others Present: Several members of the public were present.

Mayor Amyx welcomed everyone.

The meeting notes from the August 31, 2015 meeting were discussed. Motioned by Harris and seconded by Britton to approve the August 31, 2015 notes. Motion passed 7-0.

McCullough introduced the next item which was the proposed 2016 meeting calendar. The committee is proposed to meet in 2016 on June 13th, September 12th and December 12th.

McCullough also provided an update to the committee regarding work by other committees and boards related to updating various plans.

The committee discussed the draft document outline. The group discussed that technology should play more of a role as a theme in the plan. Harris suggested that "Growth and Development" be changed to "Quality of Life: Growth and Development" and changing "Utilities" to "Physical and Technical Infrastructure". Gascon suggested moving community facilities to community resources, moving historic resources under neighborhoods and housing and revising the orders of topics listed under natural resources to go from big to small. Ackerly asked how staff plans to develop a measure to track the performance of the plan and McCullough said that staff would bring something back to the committee for discussion. Thellman suggested that each chapter or section have its own vision statement. The group directed staff to work using the Goshen, Indiana comprehensive plan template as a base and to draft a chapter and bring it back to the group for discussion at their June meeting.

(Patrick Kelly joined the meeting during the above item)

Motioned by Harris and seconded by Britton to adjourn the meeting. Meeting adjourned (8-0) at 5:20 p.m.

Memorandum
City of Lawrence
City Manager's Office

TO: Thomas M. Markus, City Manager
CC: Diane Stoddard, Assistant City Manager
Casey Toomay, Assistant City Manager
Scott McCullough, Planning and Development Services Director
FROM: Britt Crum-Cano, Economic Development Coordinator
DATE: April 5, 2016
RE: 2015 Residential Lot Inventory

This report is an update on the status of available lots for new residential construction as of December 31, 2015 based on supply, market demand, and inventory. Data focuses on building permits issued in 2015 as well as lots platted for single-family, residential construction from 2005-2015 (i.e. newer subdivisions). A map of residential lots platted from 2005 through 2015 is included at the end of this report. A second map showing building permits issued from 2005-2015 is also provided.

Overview

Demand for all types of housing was strong in 2015 as evidenced by the sharp increase in building permits pulled. There were 161 permits pulled for single family homes (an increase of over 59% from 2014), 78 permits pulled for 156 duplex units (an increase of 420% from 2014), and seven permits pulled for 467 apartment units (an increase of approximately 17%).

2015 saw the highest demand for single family building permits since before the recession, when 166 permits were pulled in 2007. This had a substantial impact on the availability of residential lot supply at the end of the year. Overall, development ready lots (with infrastructure in place) dropped approximately 38%, falling from 1,347 lots in 2014 to 838 lots in 2015. Development ready lots in newer subdivisions dropped by approximately 30% from the previous year (329 lots in 2015, down from 469). Development ready lots in older subdivisions dropped 42% from the previous year (509 lots in 2015, down from 878).

Given 2015 market demand, single family lot inventory was reduced by 53% as compared to the previous year. 2015 single-family lot inventory in newer subdivisions stood at 2.8 years, down from 4.6 years in 2014. In older subdivisions, single family lot inventory decreased from 9.9 years in to 2014 to 4.0 years in 2015. Using historical permit data, the City is showing 8.7 years of residential lot inventory based on 5 year demand (121 permits/year) and 7.8 years of residential lot inventory based on 10 year demand (141 permits/year).

Supply of Residential Lots

At the end of 2015, 463 undeveloped lots (134 without infrastructure and 329 with infrastructure) were available for residential construction in newer subdivisions.

Table 1: Residential Lots as of December 31, 2015[1]

Newer Subdivisions *(Lots Platted After January 1, 2005)*			
	# Lots	**% of Total**	**Average Lot Size (ac)**
Undeveloped Lots: Without Infrastructure	134	29%	0.26
Undeveloped Lots: With Infrastructure	329	71%	0.26
Total	**463**	**100%**	**0.26**

Not restricting data based on date platted, there are a total of 1,093 platted, undeveloped residential lots available throughout the City (463 lots located in newer subdivisions and 630 lots located in older subdivisions). 2014 had 1,470 platted, undeveloped residential lots available, with 469 of those lots located in newer subdivisions and 1,001 lots located in older subdivisions.

Table 2: Total Residential Lot Supply[2]

Total Residential Lot Supply *(As of December 31, 2015)*			
	Newer Subdivisions *(platted after 1-1-2005)*	**Older Subdivisions**	**Total**
Undeveloped Lots: Without Infrastructure	134	121	255
Undeveloped Lots: With Infrastructure (Development Ready)	329	509	838
Total	**463**	**630**	**1,093**

[1] Source: City of Lawrence, Kansas, GIS Department
[2] Source: City of Lawrence, Kansas, GIS Department

Demand for New Residential Construction

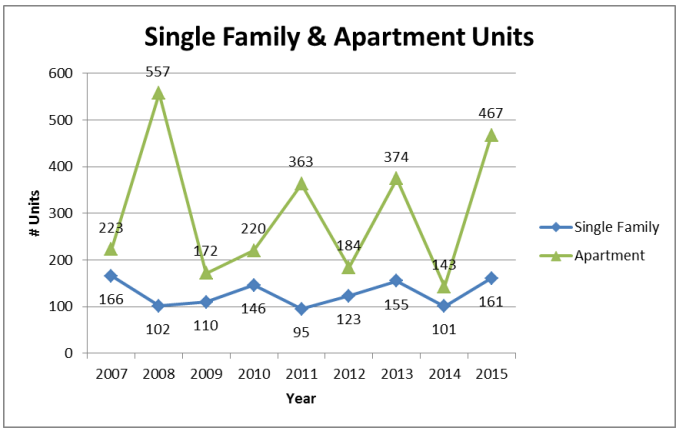
There were 246 residential building permits issued in 2015 for a total of 784 units of new residential housing. Of the permits issued, there were 161 issued for single family homes, 78 for duplex structures, and 7 for apartment buildings.

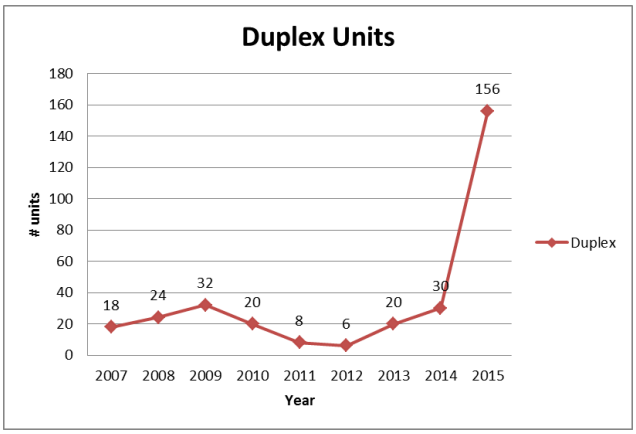
Table 3: New Residential Building Permits & Units[3]

	2010		2011		2012		2013		2014		2015	
New Residential	**Permits**	**Units**	**Permits**	**Units**	**Permits**	**Units**	**Permits**	**Units**	**Permits**	**Units**	**Permits**	**Units**
Single Family	146	146	95	95	123	123	155	155	101	101	161	161
Duplex	10	20	4	8	3	6	10	20	15	30	78	156
Apartment	6	220	19	363	22	184	23	374	6	143	7	467
Total	**162**	**386**	**118**	**466**	**148**	**313**	**188**	**549**	**122**	**274**	**246**	**784**

The number of single family residential units was up 59% from the previous year, increasing to 161 units in 2015 as compared to 101 units in 2014. Apartment units also increased, going from 143 units in 2014 to 467 unit in 2015 (227% increase from the previous year). The number of duplex units rose from 30 units in 2014 to 156 units in 2015, an increase of 420%.

Historical Comparison: Demand for New Residential Units





[3] Source: City of Lawrence, Development Services, Valuation of Building Permits

Estimated Inventory of Residential Building Lots

The inventory of available lots can be estimated by comparing both the supply of and demand for lots for new residential construction.

Demand: Annual demand can be estimated using the number of building permits issued for new residential construction throughout the year. Since the majority of new residential permits are issued for single family homes, this analysis utilizes the number of single family building permits issued to represent demand for residential lots.

Supply: The number of undeveloped, platted lots for new residential construction is utilized to represent the current supply of available lots.

Using 2015 data to represent current market conditions, the total residential lot inventory will last approximately 6.8 years. Lots in newer subdivisions are estimated to last approximately 2.8 years.

Table 4: Estimated Inventory Based on Current Market Demand
(161 permits/year)

Estimated Lot Inventory In Years *(Available Residential Lots as of December 31, 2015)*			
	Stock in Newer Subdivisions	**Stock in Older Subdivisions**	**Total Stock**
Undeveloped Lots: Without Infrastructure	0.8	0.8	1.6
Undeveloped Lots: With Infrastructure (Development Ready)	2.0	3.2	5.2
Total	**2.8**	**4.0**	**6.8**

Since residential real estate market demand can vary from year to year, the below shows inventory in light of historical trends in market demand. As shown below, when historical demand is examined, the total supply of residential lots is estimated to be from 7.8 to 8.7 years, with the supply of lots in newer subdivisions estimated to last approximately 3.3. to 3.7 years.

Table 5: Estimated Inventory based on 5-Year Market Average
(127 permits/year)

Estimated Lot Inventory In Years *(Available Residential Lots as of December 31, 2015)*			
	Stock in Newer Subdivisions	**Stock in Older Subdivisions**	**Total Stock**
Undeveloped Lots: Without Infrastructure	1.1	1.0	2.1
Undeveloped Lots: With Infrastructure (Development Ready)	2.6	4.0	6.6
Total	**3.7**	**5.0**	**8.7**

When examining historical demand data over the past five years, the average number of single family building permits issued per year was 127, representing approximately 8.7 years of residential building lot inventory given the current supply of undeveloped lots. Lots in newer subdivisions are estimated to last approximately 3.7 years.

Table 6: Estimated Inventory based on 10-Year Market Average
(141 permits/year)

Estimated Lot Inventory In Years *(Available Residential Lots as of December 31, 2015)*			
	Stock in Newer Subdivisions	**Stock in Older Subdivisions**	**Total Stock**
Undeveloped Lots: Without Infrastructure	1.0	0.9	1.9
Undeveloped Lots: With Infrastructure (Development Ready)	2.3	3.6	5.9
Total	**3.3**	**4.5**	**7.8**

When examining historical demand data over the past ten years, the average number of single family building permits issued per year was 141, representing 7.8 years of residential building lot inventory given the current supply of undeveloped lots. Lots in newer subdivisions are estimated to last approximately 3.3 years.

Conclusion

Analysis shows that 2015 demand for new, single family homes rose substantially over the previous year, increasing over 59%. Demand for duplex units took the sharpest rise, increasing 420% from 15 permits (2014) to 78 permits in 2015. Demand for apartment housing also increased, rising 16.7% over the previous year.

Building Permits: 2014-2015			
	2014	2015	% Change
Single Family	101	161	59.4%
Duplex	15	78	420.0%
Apartments	6	7	16.7%
Total	**122**	**246**	**101.6%**

As might be expected, the substantial increase in single family building permits pulled in 2015 resulted in an overall drop in residential lot supply. Lots in newer subdivisions were reduced by approximately 30%, while lots in older subdivision dropped by 42% as compared to the previous year.

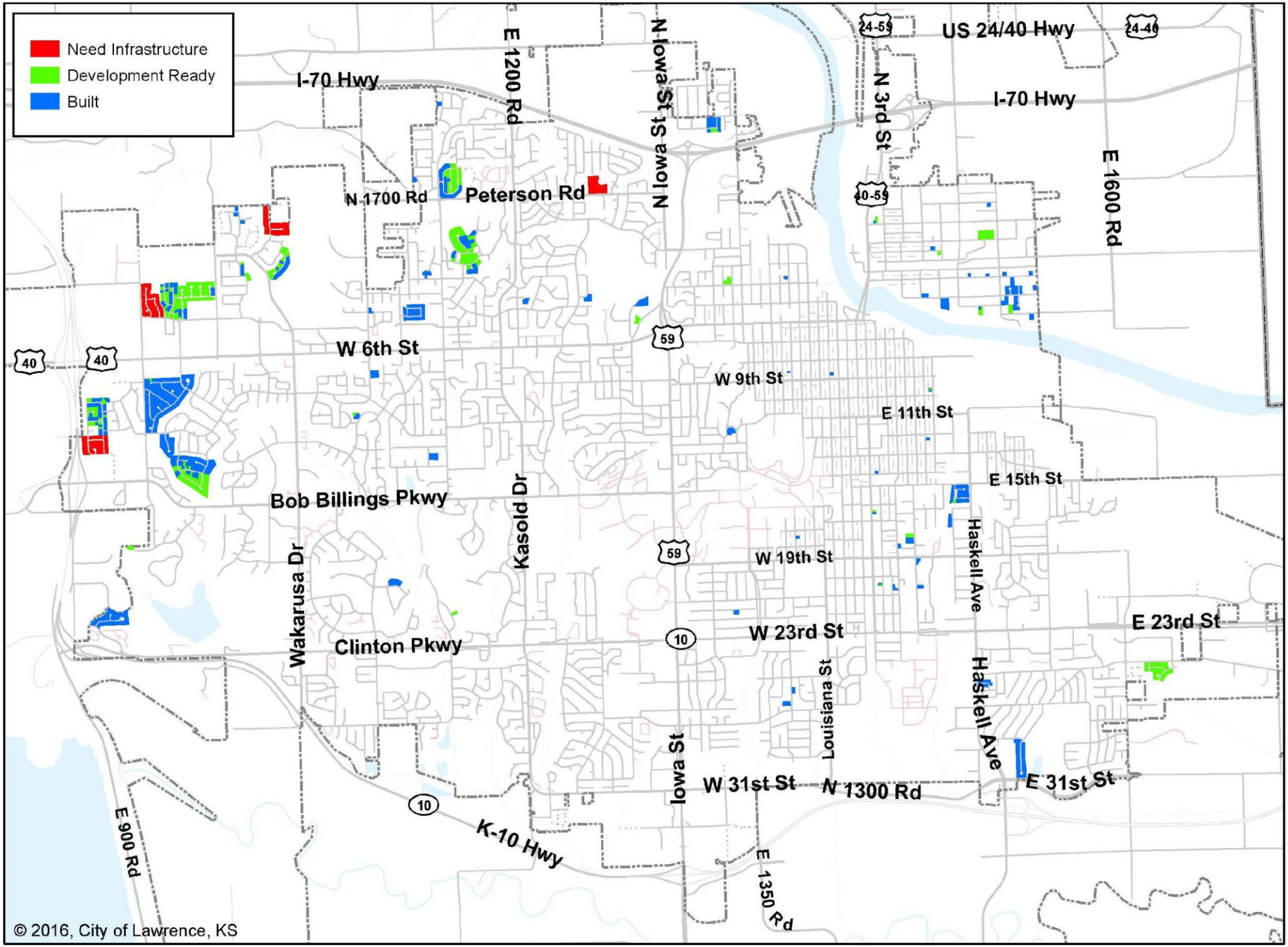
Available Lots: 2014-2015			
	2014	2015	% Change
Newer Subdivisions	469	329	-29.9%
Older Subdivisions	878	509	-42.0%
Total	**1347**	**838**	-37.8%

When adjusting for 2015 demand (161 permits average per year), the supply of residential, single-family lots also decreased. Inventory stood at about 6.8 years given the 2015 demand as compared to 14.5 years in 2014. However, when averaging demand over the past five years (127 permits average per year), total lot inventory was at 8.7 years. When averaging demand over the past 10 years (141 permits average per year), total lot inventory was at 7.8 years.

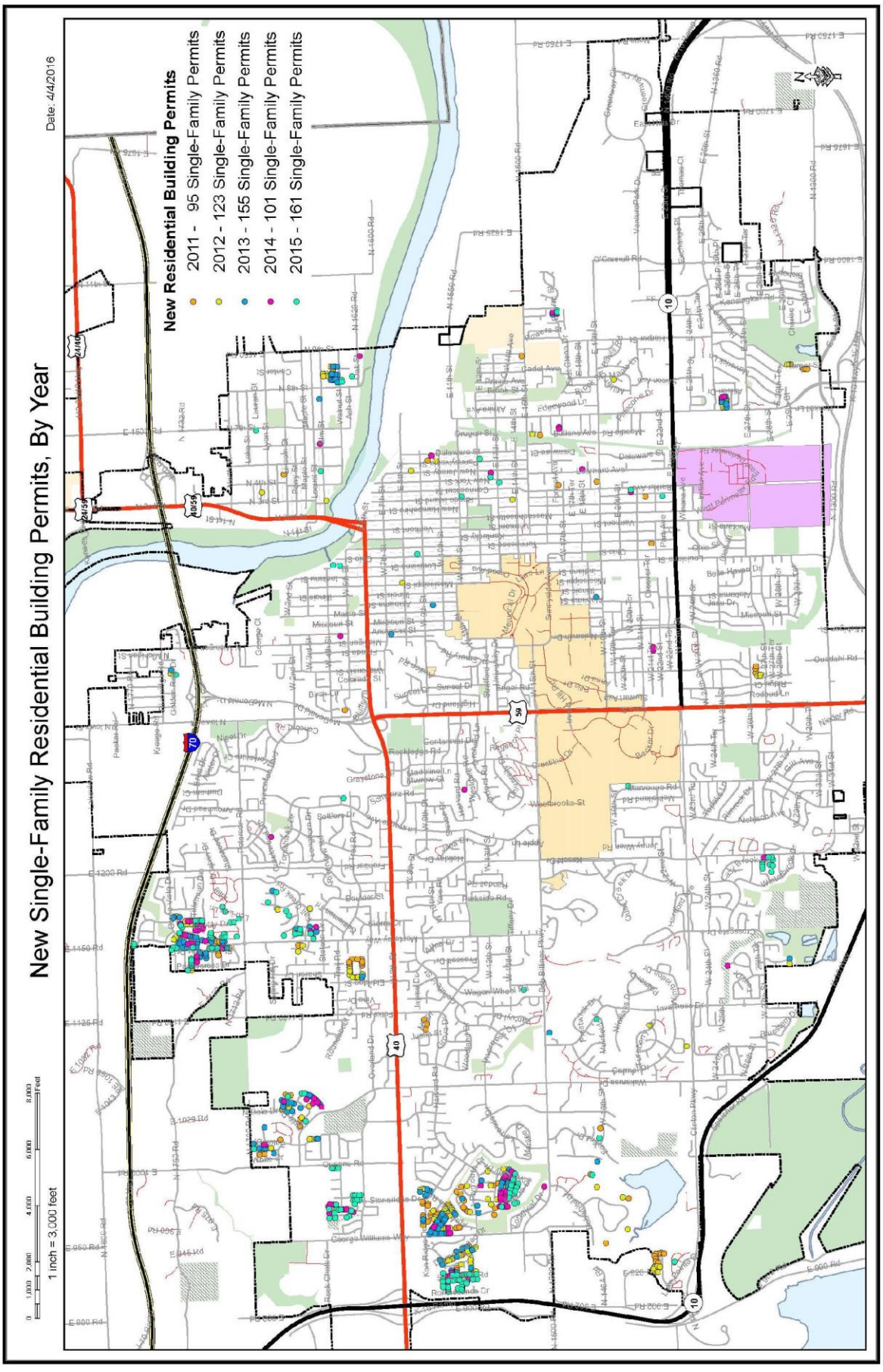
Estimated Inventory (2015 market conditions)			
	2014	2015	% Change
Newer Subdivisions	4.6	2.8	-39.1%
Older Subdivisions	9.9	4	-59.6%
Total	**14.5**	**6.8**	**-53.1%**

APPENDIX

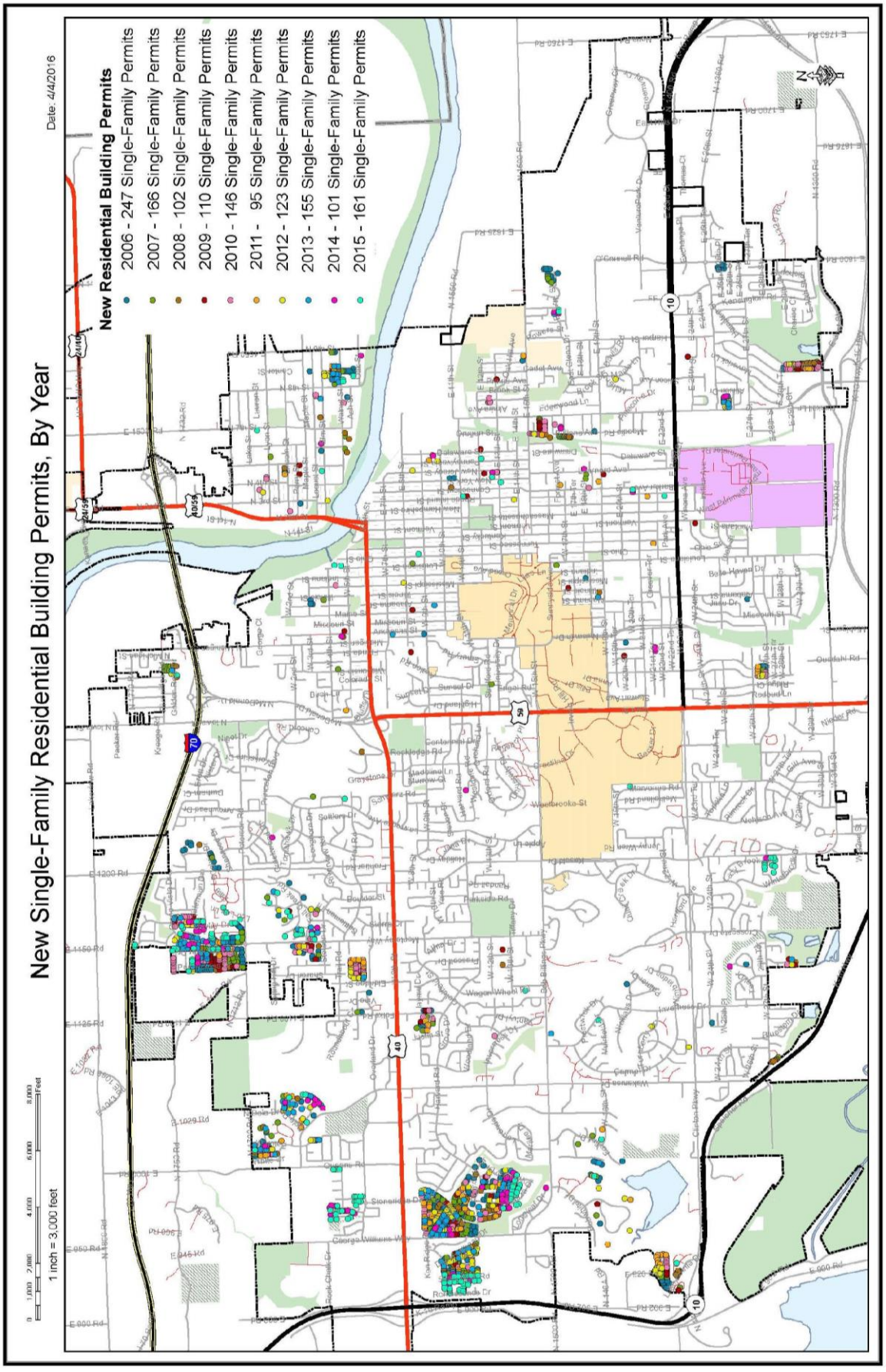
Lawrence Single Family Residential Lot Inventory 2005-2015



5-Year Map: Building Permits by Year



10-Year Map: Building Permits by Year



Memorandum
City of Lawrence
Planning and Development Services

TO: Diane Stoddard, Interim City Manager
CC: Scott McCullough, Planning & Development Services Director
FROM: Jeff Crick, AICP, Planner II
DATE: October 6, 2015
RE: July 2015 City Population Estimates and Projections

Background

As of July 1, 2015, the estimated population of Lawrence is 97,193. Trend data also shows that a 1.2% annual growth rate is reasonable given the City's historical growth trend from 2000 to 2015. Using the current population growth trend, Lawrence's population in 2030 would be approximately 115,000.

Population estimates and projections provide insight into future demands on utilities and infrastructure such as water & wastewater planning, transportation & road planning, and traffic modeling. They can serve as a signal to policymakers and staff when there are major changes in population trends that may affect economic development, school planning, and the potential impacts to Federal fund allocations.

When discussing future populations there are two separate but necessary components to ascertaining what the future population number for Lawrence would be. Calculating a population change is assessed through two population change measures:

- **Population Estimates**: Population estimates are approximations of current population. It is also important to note that population estimates never extend beyond the present and are used to determine what the current population is for Lawrence.

- **Population Projections**: Population projections are means of providing a picture of the population as it may develop in future years, under varying sets of real-world growth conditions. Population Projections are used to help plan for the future growth of Lawrence.

Having accurate population estimates helps ensure a stronger, more accurate population projection for Lawrence.

Population Estimates

Planning Staff issues biannual population estimates based on a prescribed Census Bureau formula. It includes totaling the number of new residential dwelling units constructed annually; subtracting the number of dwellings that were demolished during the same time period to derive the total number of new dwelling units built; then, multiplying the number of new dwelling units by the vacancy rate for the city to establish

the number of new occupied dwelling units. Then the total number of occupied dwelling units is multiplied by the average number of persons per household to derive a figure for the new population residing in the new dwelling units.

Finally, this new population increase is added to the latest decennial Census population to establish a new estimate for the City's population. The persons per household and vacancy rate figures are supplied by the Census Bureau, updated annually, and the updated figure is applied to the new dwelling units built since the latest decennial Census population figure was released. That formula reads as follows:

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

.98	Assumes 2% of all building permits units applied for are never built
DCF	Decennial Census Population
GQ	Group Quarters Population
MDU	Multi Family Demolished Units
MHU	Multi Family Housing Units Added
MOCR	Multi Family Occupancy rate
MPPH	Multi Family Persons per household
SDU	Single Family Demolished Units
SHU	Single Family Housing Units Added
SOCR	Single Family Occupancy rate
SPPH	Single Family Persons per household

It is important to note that typically the 2010 decennial Census population figure would be used as the base; however, because the city challenged the 2010 decennial Census based on the determination that the housing units were undercounted within the 2010 decennial Census population figure, staff is using the 2000 decennial Census figure instead for the 2015 estimate.

Using this equation, there are an estimated 97,193 people living in the City of Lawrence as of July 1, 2015.

The table below illustrates the staff issued population estimates, as well as the Census Bureau's annual estimates. The population estimate released by Planning Staff is based on there being 40,675 housing units in the city as of July 1, 2015. This is determined by taking the number of housing units reported with the 2000 Census and adding the number of new units built (determined through building permits) and subtracting the number of demolished units.

An important note in the table above is that the City challenged the Census estimates in 2005 and 2006, which resulted in the Census Bureau changing their population estimates for those years to reflect the staff estimates.

City of Lawrence: Population Estimates: 2000-2015

Estimate: July 1	City Estimate	Change/Year	% Change	Census Estimate	Diff.
2000	80,508			80,558	-50
2001	81,780	1,272	1.58%	81,973	-193
2002	83,310	1,530	1.87%	83,654	-344
2003	84,844	1,534	1.84%	85,335	-491
2004	86,448	1,604	1.89%	87,100	-652
2005	88,664	2,216	2.56%	88,664	0

2006	89,110	446	0.50%	89,110	0
2007	90,311	1,201	1.35%	89,847	+464
2008	90,866	555	0.61%	90,504	+362
2009	91,464	598	0.66%	92,048	-584
2010	92,727	1,263	1.38%	88,037	+4,690
2011	93,116	389	0.42%	89,050	+4,066
2012	93,944	828	0.89%	89,888	+4,056
2013	95,065	1,121	1.19%	91,176	+3,889
2014	96,292	1,227	1.29%	92,763	+3,529
2015	97,193	901	0.94%		

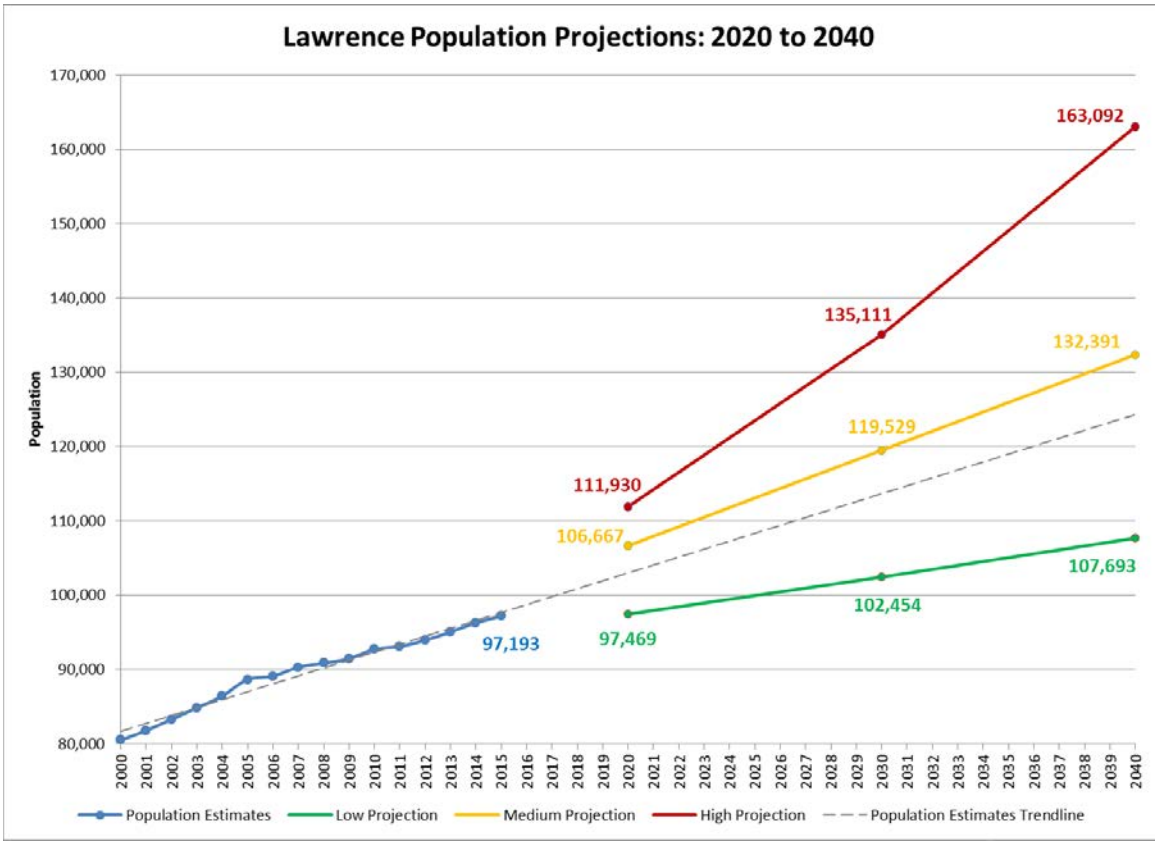
Population Projections

Population projection methods are primarily based on trend data, and the most accurate projections can only be completed every 10 years after sufficient trend data has been established.

Planning Staff has analyzed the effects that short and long-term growth trends would have on the population projections. Staff analyzed those growth trends in 2011 and issued new population projections (2011 Population Projections). Given recent population trends, staff is of the opinion that Lawrence is between the low and medium population projections from *Horizon 2020* (completed in 2001), and the department currently projects Lawrence to reach between 102,000 and 135,000 people in 2030, which would be consistent with a medium projected growth rate. A 2030 estimated Lawrence population between 120,000 and 125,000 was used to forecast the growth scenarios for the Integrated Water Utilities Plan and the Wastewater Facilities Master Plan.

2011 Population Projections - City of Lawrence			
Projections	**2020**	**2030**	**2040**
Low (Average Growth Rate 2005 - 0.5%)	97,469	102,454	107,693
Medium (Linear Regression 2000-2009)	106,667	119,529	132,391
High (Average Growth Rate 2000-2005 - 1.9%)	111,930	135,111	163,092

A medium population projection for the City of Lawrence would assume a 1.2% population growth annually over the coming years based on population historic trends.



Analysis of Census 2010 Figures

While the U.S. Census Bureau provides a great deal of valuable data products, Planning Staff has found through research and replication that the Census products have under represented the true population of Lawrence since 2005. Staff challenged the Census estimates in 2005 and 2006, successfully changing those figures based on the best available data: local permit records. Staff also attempted to challenge the 2010 Decennial Census figure, and while the Census Bureau acknowledged that our housing unit count may be more accurate, they were unable to change the decennial census figure for 2010. There are many factors, such as student and other transient populations that may account for this difference. Through studying Development Services building permit and Utility data, Planning Staff believes that the 2010 Decennial Census does not fully reflect the existing population of Lawrence today.

Staff has based the current population estimates on the 2000 Census figure instead of the 2010 Census figure because based on the best local data available, the more recent figure undercounted the living units within the City, and therefore undercounted the true population of Lawrence.

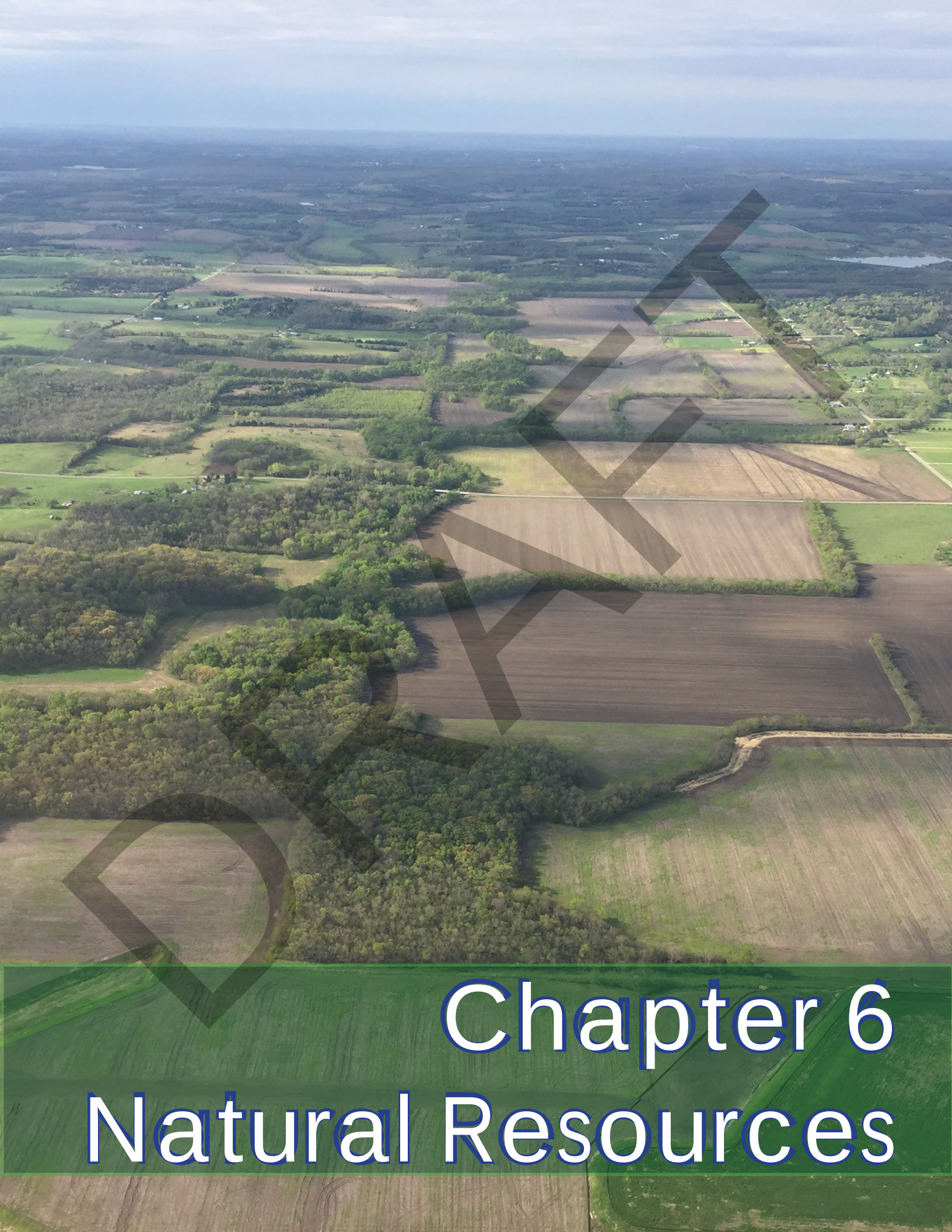
The Census Bureau releases their own population estimates every year based on a housing unit formula, but acknowledges that ultimately the community has the best available data. Therefore, they provide a way for the cities and counties to challenge annual population estimates using building permit data, and the City successfully challenged the Census Bureau's population estimates in 2005 and 2006.

Staff studied the 2010 census tract-level data to determine where the discrepancy between the in-house building permit data and the 2010 Decennial Census figures exists. Staff found that there were tracts showing a decline in population while showing an increase in housing units. The reverse was also true; some tracts showed an increase in population, while there was a decrease in housing units.

As an example, Tract 3, which includes a portion of the Oread Neighborhood, showed an increase in population from 2000 to 2010 of 621 people, while the number of housing units decreased 192. Following the formula used by the Census Bureau, this tract should have shown a decrease of approximately 442 residents. Another example is Tract 9.01, which is south of the University of Kansas campus. This tract showed the addition of 172 housing units from 2000 to 2010, but a decrease of 345 people. Also, important to note is the loss of 554 housing units and 1,785 people from Tract 4, which includes the University of Kansas campus. At this point, staff identified that significant discrepancies exist between what we estimate our housing unit and corresponding population numbers should have been for 2010 and what the Census Bureau determined through the 2010 Decennial Census. Staff plans to work with the Census Bureau in advance of the 2020 Decennial Census in order to resolve this discrepancy.

Conclusion

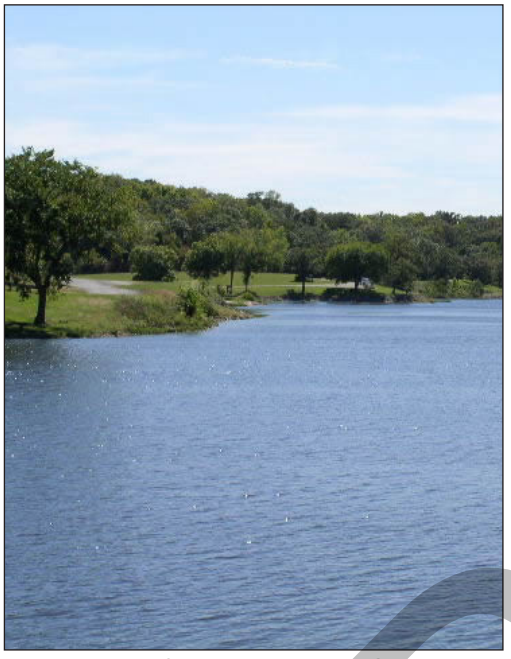
Staff produces population estimates and population projections based on the best available data as outlined in this memo. The July 1, 2015 population estimate is 97,193. Based on this estimate and the growth trend from 2000 to 2015, staff anticipates that there will be approximately 115,000 residents in Lawrence in 2030.



Chapter 6
Natural Resources

ADVISORY BOARDS

- Climate Protection Task Force
- Local Food Policy Council
- Peak Oil Task Force
- Sustainability Advisory Board



Lone Star Lake, Douglas Co.

What are Watersheds?

A watershed is a area of land above a point on a river or stream that contributes water to its flow. The entire watershed is drained by a river or stream to another river or lake.

Watersheds are important because the stream/river, and stormwater runoff, within a watershed will ultimately drain to other bodies of water. It is essential to consider these downstream impacts when developing and implementing water quality protection and restoration actions.

VISION

To protect, enhance, and contribute to the sustainability and livability of our community's natural environment. Lawrence and Douglas County shall strive to greatly enhance and contribute to a growing economy, preserve our rich and valuable natural heritage, and strive for sustainability or our natural environments.

GOALS

From recreation to drinking sources, **water** plays a vital role in both our natural and built environments. Managing water resources ensures that water quality is maintained for both drinking sources, as well as recreational purposes. It is also vital to help limit and mitigate flooding in areas through our community.

1. **Manage all water resources to protect natural habitats, mitigate hazards, and ensure water quality.**

   1.1 Watershed planning should be implemented to mitigate large scale development impacts.

   1.2 Preserve and protect natural surface streams and rivers.

   1.3 Develop stream corridor buffers to preserve and enhance natural water features.

   1.4 Encourage low-impact uses of riparian areas for parks and trail connections.

   1.5 Improve and maintain water quality through watershed protection measures.

   1.6 Identify, preserve, and protect wetlands.

   1.7 Inventory and protect groundwater resources and their recharge lands.

   1.8 Develop stormwater management policies to limit runoff and protect water quality.

Land resources, such as woodlands, prairies, and agricultural soils, providing wildlife habitats and open space. Preserving and maintaining these resources provides both economic and quality of life advantages.

2. Manage land resources to maintain their natural functions and ensure their sustainability for the future.

2.1 Minimize grading and steep slope development when possible.

2.2 Preserve and sustain woodlands through the development of regulations and incentives providing protection.

2.3 Protect urban forests throughout Lawrence by enhancing and preserving these portions of the community.

2.4 Develop guidelines and incentives to preserving native prairies, including utilizing conservation easements.

2.5 Identify important wildlife habitats and prioritize them for protection and conservation.

2.6 Link these areas together to create a natural infrastructure and recreation area, when appropriate.

2.7 Protect high quality agricultural land for today and for future use.

Sensitive Lands

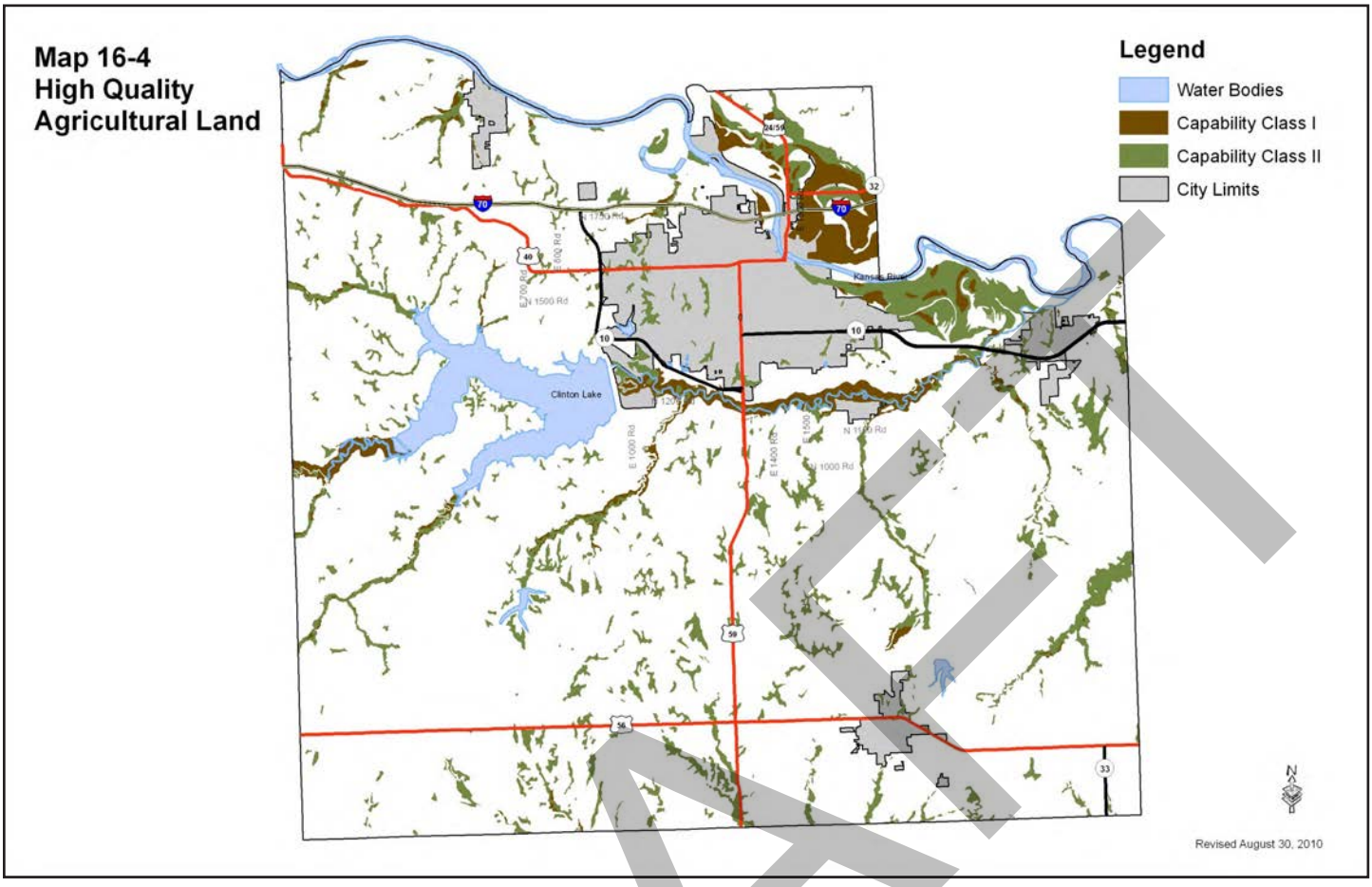
Sensitive lands parts of the natural environment that provide habitat for wildlife, endangered ecosystems, or presently unique settings that are rare in Douglas County. By protecting these designated spaces we can protect natural habitats, provide recreation areas, and help minimize development in dangerous areas.

These include:

- Rural Woodlands & Urban Forests
- Native Prairies
- Endangered Species Habitats
- High Quality Agricultural Soils
- Slopes exceeding 15% incline

"Through the reduction of local GHG (greenhouse gas) emissions, the City of Lawrence can recognize cost savings, attract environmentally friendly businesses to the area, and help Lawrence establish a leadership role in climate risk mitigation in Kansas."

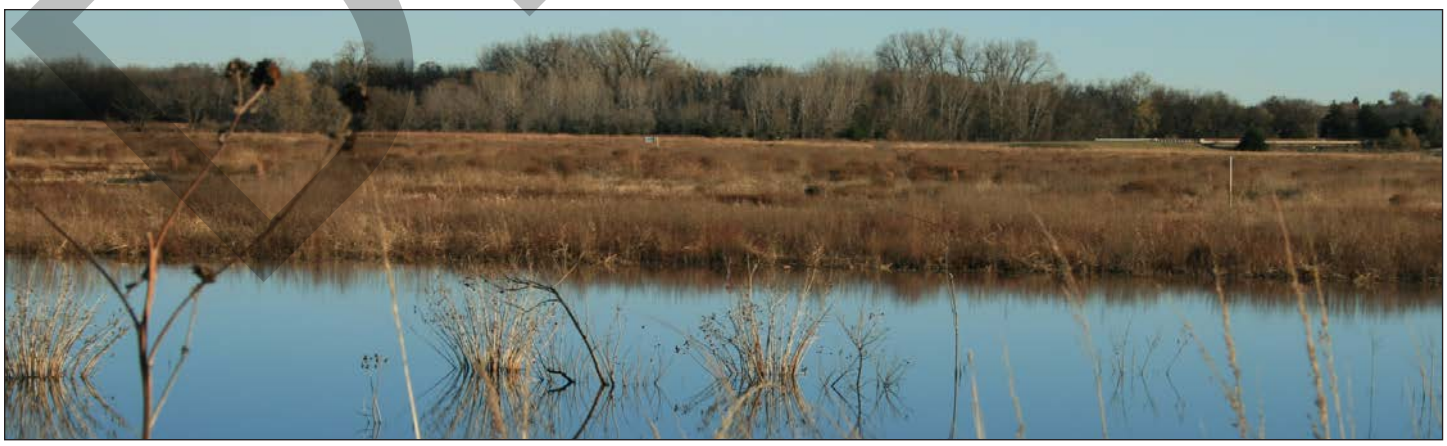
Climate Protection Task Force: Climate Protection Plan, p. 4



What are High Quality Soils?
High Quality Soils are locations that have been graded as being the best land for agricultural production. This includes 2 classes:

Class I: Soils in this class are best suited for cultivated crops, pasture, range, woodland, and wildlife. They are deep, generally well drained, easily worked, and less prone to erosion.

Class II: They require careful management to prevent deterioration or to improve air and water relations when cultivated. The limitations are few and the necessary management is easy to apply. The soils may be used for cultivated crops, pasture, range, woodland, or wildlife food and cover. Class 2 provide farmers less latitude in crop selection or more management practices.



Baker Wetlands

Air quality has a profound impact on the environment and leads to water and soil contamination, community health impacts, and contributes to adding greenhouse gases to the environment.

3. **Manage air quality in the community to limit outdoor air pollution, excessive greenhouse gases, and indoor air pollution.**

   3.1 Develop policies to reduce vehicle emissions by reducing the amount of vehicle miles traveled.

   3.2 Development land use planning regulations and incentives to reduce greenhouse gas emissions and pedestrian-scaled development.

   3.3 Work to reduce non-vehicular toxins and emissions in the community, and strive to comply with the Federal clean air standards.

   3.4 Improve indoor air quality to maintain and improve community health.

What is Indoor Air Quality?

Many people associate air quality with emissions that are outside of buildings. However, indoor air quality can be equally as important.

Most people know the effects that outdoor air pollution can have on health, but indoor air pollution can also have significant health effects. The U.S. Environmental Protection Agency indicates that indoor levels of pollutants may be two to five times higher than outdoor levels.

Indoor Air Quality includes:

- Control of airborne pollutants
- Introducing and distributing outdoor air adequately
- Proper temperature and relative humidity

Proper **extraction and remediation** methods are essential to sustainable development activity. Improper extraction or sand, gravel, timber, oil, gas, stone, and others can create numerous negative impacts for the environment.

4. **Properly manage resources ensuring sustainability, marketability, and environmental quality to the community.**

   4.1 Work with partner agencies to develop sustainable harvesting standards and effective reclamation procedures.

   4.2 Document and map active and suspended quarries, and analyze their environmental impacts as operational levels evolve at the sites.

Quarry Operation in Douglas Co.

Recycling in Lawrence.

Proper disposal of **daily, and hazardous, waste** can have dramatic impacts on the natural environment and community health, and can reduce numerous forms of pollution.

5. Reduce the amounts of waste sent to landfills.

5.1 Manage solid waste by emphasizing Reduce, Reuse, Recycle.

5.2 Support proper disposal of household hazardous waste with the Lawrence - Douglas County Household Hazardous Waste Program.

5.3 Encourage recycling efforts throughout Douglas County to reduce the amounts deposited in landfills.


Lawrence Arts Center

Many of the factors that impact the natural environment are products created by built/urban settings in Douglas County. Efforts to improve and advance the **urban environment** can significantly alter the impacts life can have on the natural environment.

6. Strengthen environmental protection through sustainable development of the built/urban environment.

6.1 Mitigate impacts caused by noise and light pollution, and development activities.

6.2 Foster and encourage healthy lifestyle options through development and design of the built environment.

6.3 Develop a sustainable transportation system.

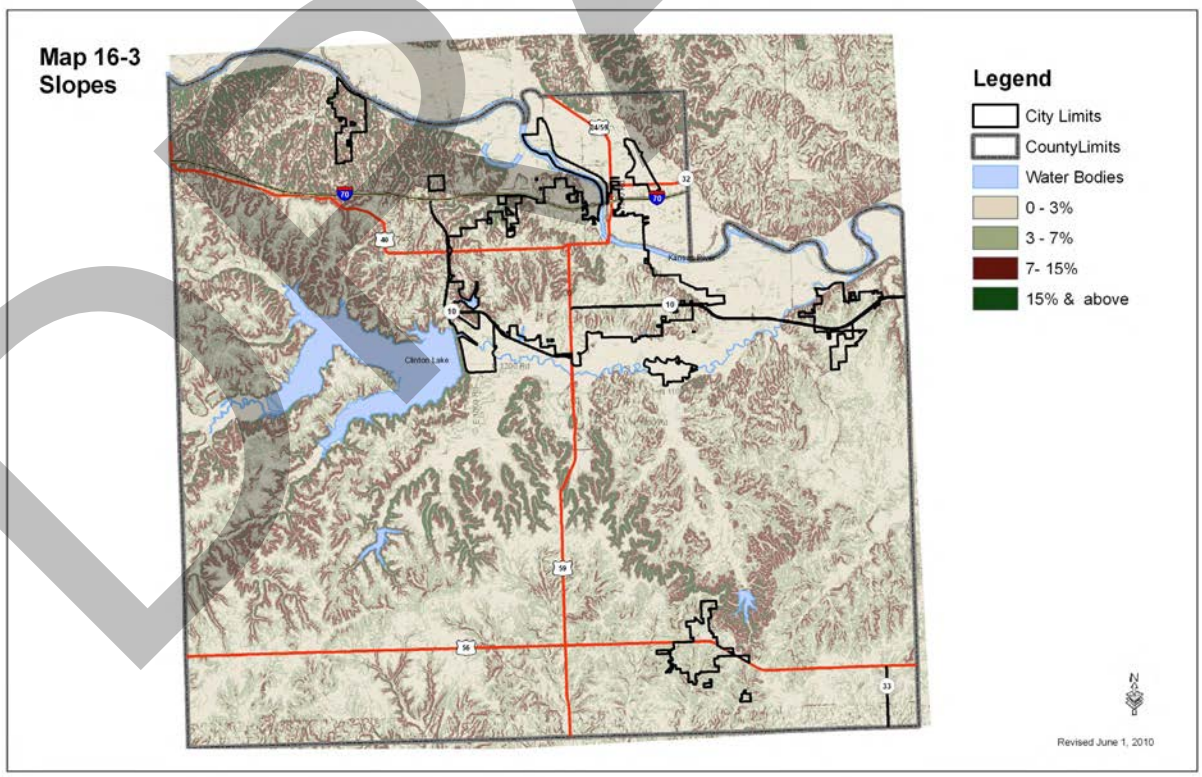
6.4 Encourage development patterns utilizing transit options, provide pedestrian connectivity, and providing a variety of transportation options.

6.5 Promote sustainable building practices by leading and promoting green building standards and practices.

6.6 Promote responsible use and conservation energy and natural resources.

6.7 Continue developing local food programs throughout Douglas County and Lawrence.

Earth Day in Watson Park.



A Plan for Balanced Growth

Development Criteria:

Tier 1

- Within City Limits
- Readily serviceable with utilities (water, sewer, stormwater) with minor system enhancements
- Serviceable by fire with current infrastructure

Tier 2

- Requires Annexation
- Readily serviceable with utilities (water, sewer, stormwater) with minor system enhancements necessary for development
- Serviceable by fire with current infrastructure

Tier 3

- Requires Annexation
- Major utility system enhancements (water, sewer, stormwater) necessary for development
- Requires investment in fire infrastructure and personnel

Minor Utility System Enhancements (primarily at developer's cost):

- Extension of main
- Upsizing Lines

Major Utility System Enhancements (primarily at city-wide cost):

- Water Tower
- Treatment Plant Expansion
- Pump Station

Other Growth Factors to consider:

- Initial & On-going Maintenance Infrastructure Costs
- Multi-Modal Transportation Infrastructure
- Floodplain
- Public Safety & General Government Services
- Private Infrastructure
- Environmental Factors
- Parks & Open Space Development
- Stormwater management
- Supply/Demand
- School district planning
- Community Benefit

Growth Policies:

The policies below set forth locations and timing of growth, balanced with addressing identified community needs:

Policy 1.1

Tier 1 is prioritized for development at any time.

Policy 1.2

Tier 2 shall only be considered for annexation if the need to accommodate demand is established ***and*** if a community benefit is provided.

At a minimum, the following indicators should be considered when establishing need for residential land uses:

- Lot inventory (5 or less years of undeveloped lots remain in Tier 1 as measured by the Lot Inventory Report using the 10-year market average of all platted lots).
- Valuation to Income ratio (Ratio of property valuation to per capita income rises above a rolling 10-year average).

Establishing need for non-residential land uses (retail, industrial, tourism, education, etc.) shall take into consideration at least the following:

- Health of the retail market as tracked by the city's Retail Market Report.
- Studies intended to assess a specific market or land use (tourism, conference space, education, etc.).
- An identified need by city and economic development partners for land for primary jobs.

Policy 1.3

Tier 3 is not designated to be annexed within this plan's time horizon, though requests to annex in Tier 3 should be considered if the proposal is found to be the only way to address an identified community benefit.

Community Benefit:

A Community Benefit may be any of the following:

- Creation of permanently affordable housing
    - Provide land and donation to trust fund or partner for permanently affordable units. (All requests for annexation to accommodate any type of land use should contribute at some level toward meeting this goal.)
- Provision of land, amenities, and/or facilities for a public purpose, such as parks, public safety facilities, education facilities, cultural & arts amenities, utility enhancements, etc. (All requests for annexation to accommodate any type of land use should contribute at some level toward meeting this goal.)
- Preservation of significant amounts of environmentally sensitive lands
- Creation of primary employment opportunities