

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 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, 2015¹

Newer Subdivisions <i>(Lots Platted After January 1, 2005)</i>			
	# 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 Supply²

Total Residential Lot Supply <i>(As of December 31, 2015)</i>			
	Newer Subdivisions <i>(platted after 1-1-2005)</i>	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

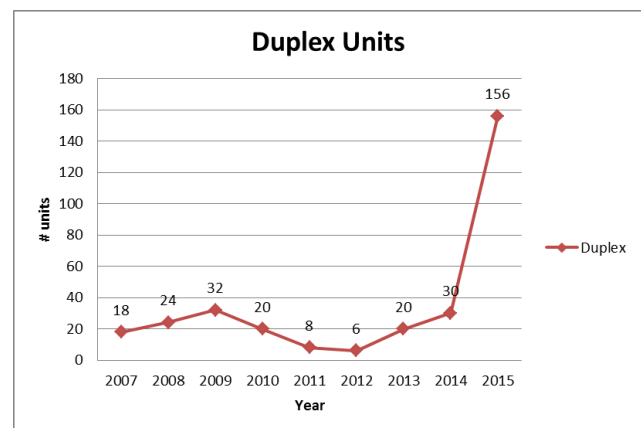
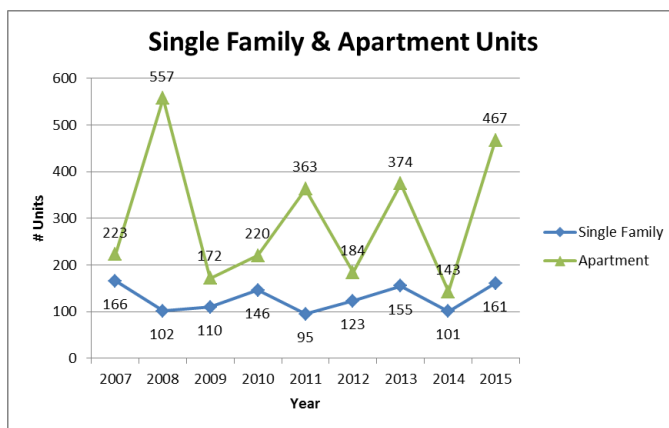
There were 246 residential building permits issued in 2015 for a total of 784 units of new residential housing. Of the permits issued, there were 161 issued for single family homes, 78 for duplex structures, and 7 for apartment buildings.

Table 3: New Residential Building Permits & Units³

	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 <i>(Available Residential Lots as of December 31, 2015)</i>			
	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.

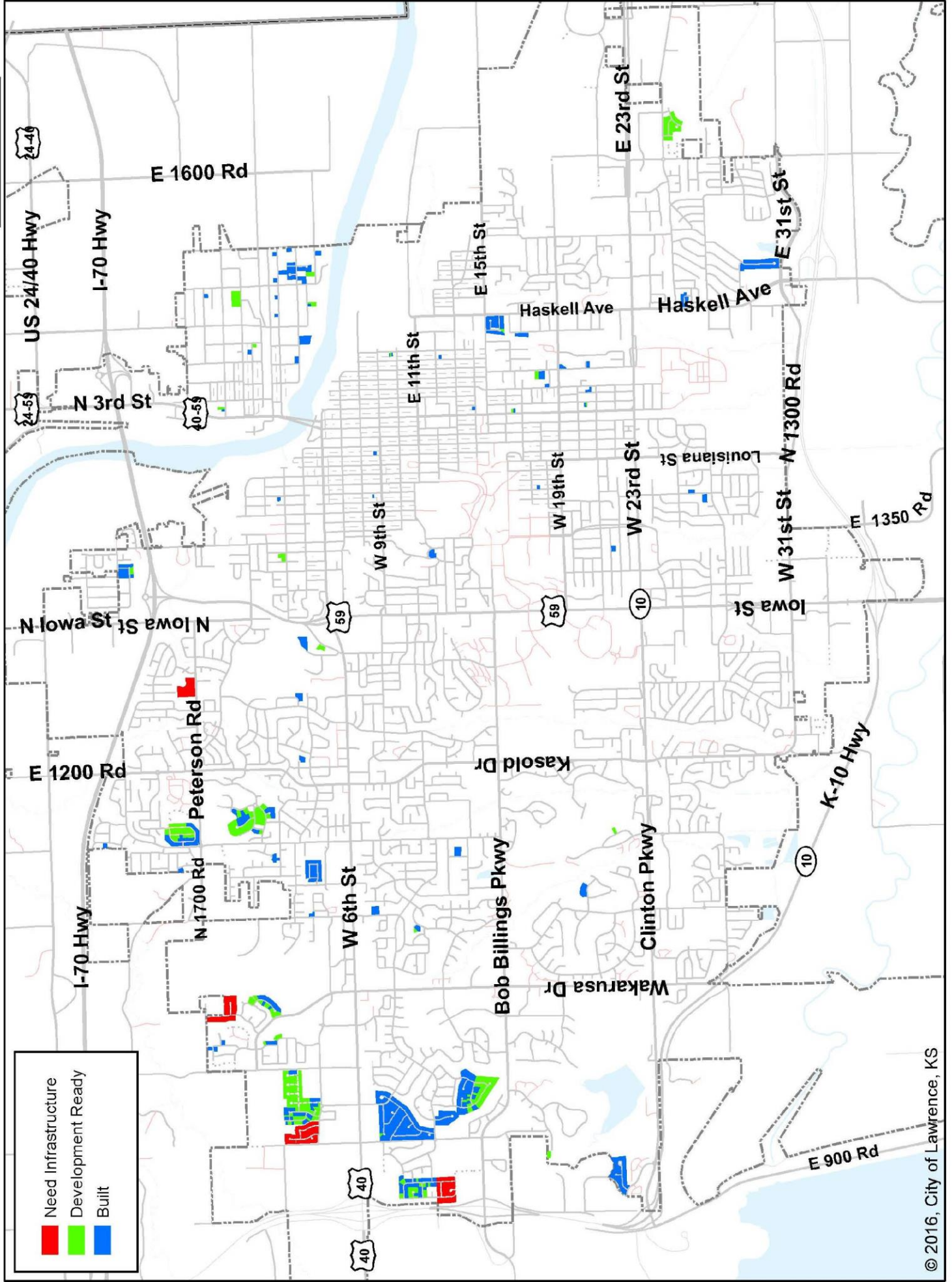
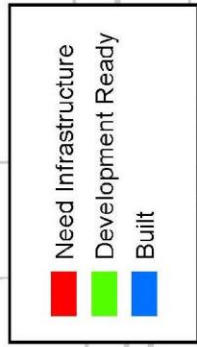
Available Lots: 2014-2015			
	2014	2015	% Change
Newer Subdivisions	469	329	-29.9%
Older Subdivisions	878	509	-42.0%
Total	1347	838	-37.8%

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.

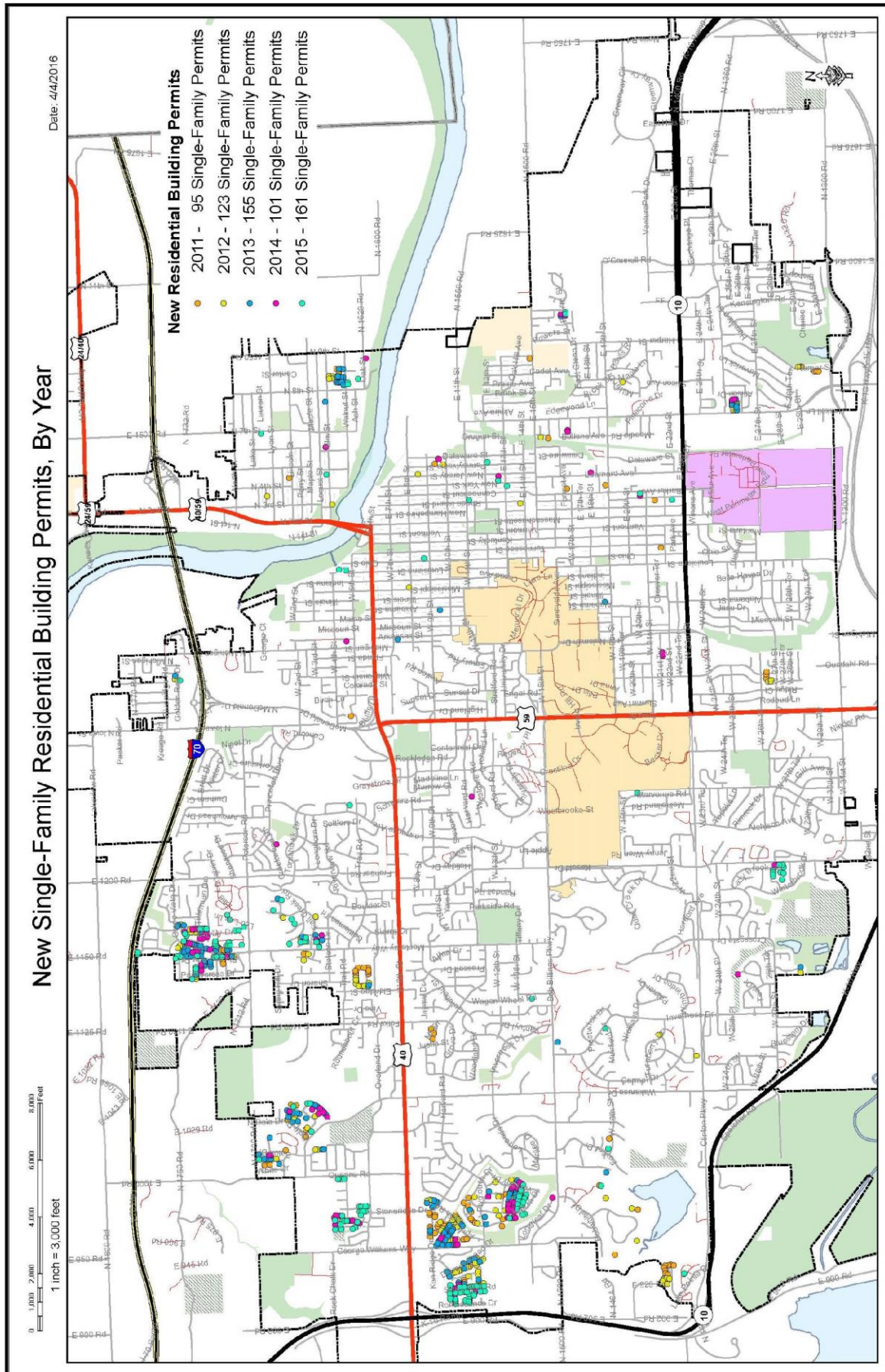
Estimated Inventory (2015 market conditions)			
	2014	2015	% Change
Newer Subdivisions	4.6	2.8	-39.1%
Older Subdivisions	9.9	4	-59.6%
Total	14.5	6.8	-53.1%

APPENDIX

Lawrence Single Family Residential Lot Inventory 2005-2015



5-Year Map: Building Permits by Year



10-Year Map: Building Permits by Year

