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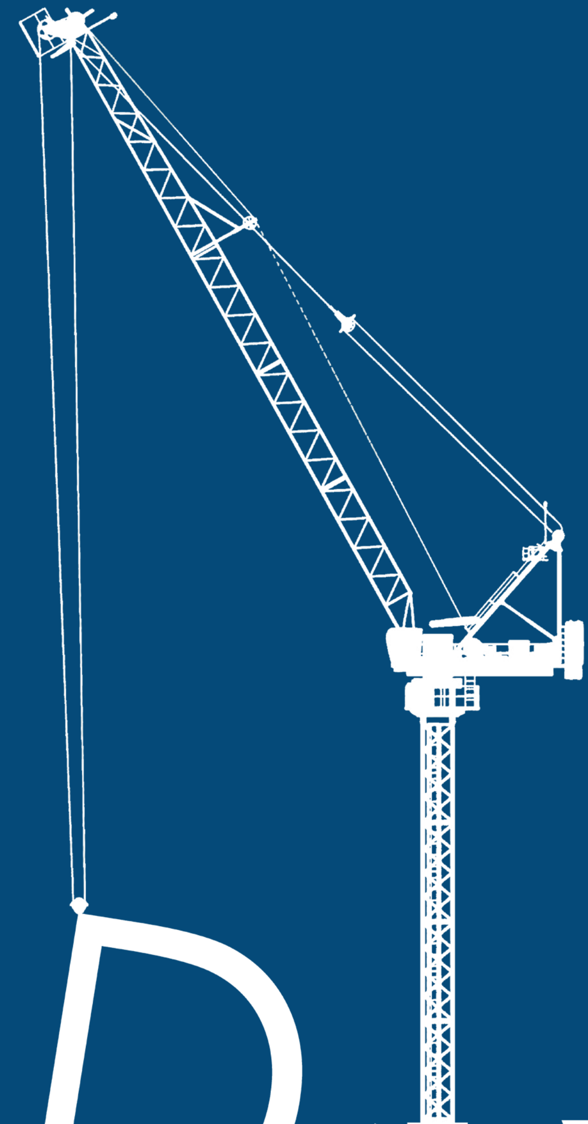

BUILD LV

BUILD LEHIGH VALLEY

Lehigh Valley Annual Development Report

October 2017

LVPC
Lehigh Valley Planning Commission

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Tower 6 in Allentown, Photo courtesy of City Center Allentown

EXECUTIVE SUMMARY

The growth in new warehouse projects, rapid expansion of e-commerce and a housing market dominated by new apartment complexes have placed the Lehigh Valley at an important crossroads. That is the picture painted by the BUILDLV 2017 report through the Lehigh Valley Planning Commission's analysis of subdivision and land development plans.

In 2016, the Lehigh Valley Planning Commission reviewed a total of 429 plans, 42% of which were for subdivision or land developments that had received final approval by the municipalities. These final plans included a total of 2,141 acres, a 36% increase over the 1,579 acres of approved development reviewed in 2015. Of the approved acreage reviewed in 2016, nearly half was related to non-residential development, 20% was related to residential development, and 30% was related to plans involving no new building construction (e.g., lot line adjustments, lot consolidations, parking lot expansions).

The Lehigh Valley Planning Commission's analysis reveals that housing development continued to rebound from its recession-induced low in 2011, but while more homes are being approved, developers are needing less land to build them. That is largely because two-thirds of the new units approved last year were for apartments. The 1,182 apartments approved in 2016 more than doubled the 2015 total and hit a 10-year high. The result was a 37% increase in total approved housing units over 2015, but a decline of 21% in the amount of acreage needed to build them. While the number of assisted-living units also reached a 10-year high of 217 in 2016, the number of age-qualified housing units overall decreased significantly from 2015.

Non-residential activity boomed in 2016, driven by industrial development that was marked by massive buildings, some totaling more than 1 million square feet of floor space. The 10.8 million square feet of approved non-residential development nearly doubled the 5.6 million square feet approved in 2015. Driven largely by warehouse development, approved industrial floor area increased 168%, from 3.4 million square feet in 2015 to 9.2 million square feet in 2016, hitting its highest level in the past ten years.

Approved commercial floor area was also up by 49% from 2015, and office development remained strong again in 2016. In a reversal from 2015 trends, the majority of approved non-residential development in 2016 occurred in Lehigh County, where 7.3 million square feet—82% of it industrial—was approved, quadrupling what was approved the previous year. Regionwide, approved non-residential acreage more than doubled from 439 acres in 2015 to 1,000 acres in 2016.

The brisk pace of 2016 is showing signs of slowing in 2017. In the first half of this year, the Lehigh Valley Planning Commission reviewed 694 approved residential units compared to 825 units during the same period in 2016. Non-residential development activity has slowed even more significantly so far in 2017. Approved square footage has fallen from more than 2 million in the first half of 2016, to less than 900,000 square feet in 2017. However, this total could change quickly considering the large number of proposed non-residential plans currently awaiting submission as final plans.

APARTMENT GROWTH

1,182 units in 2016 from **570** units in 2015

Analysis of trends over the past ten years suggests that growth in the residential sector will continue to be driven by apartment development, with assisted-living housing continuing to be a significant contributor to the housing mix. While the number of approved single-family homes, townhomes and twins has stabilized since their post-recession lows, none of these types have regained the numbers they had ten years ago. Allentown City and Upper Macungie Township have seen the most new housing approvals between 2007 and 2016.

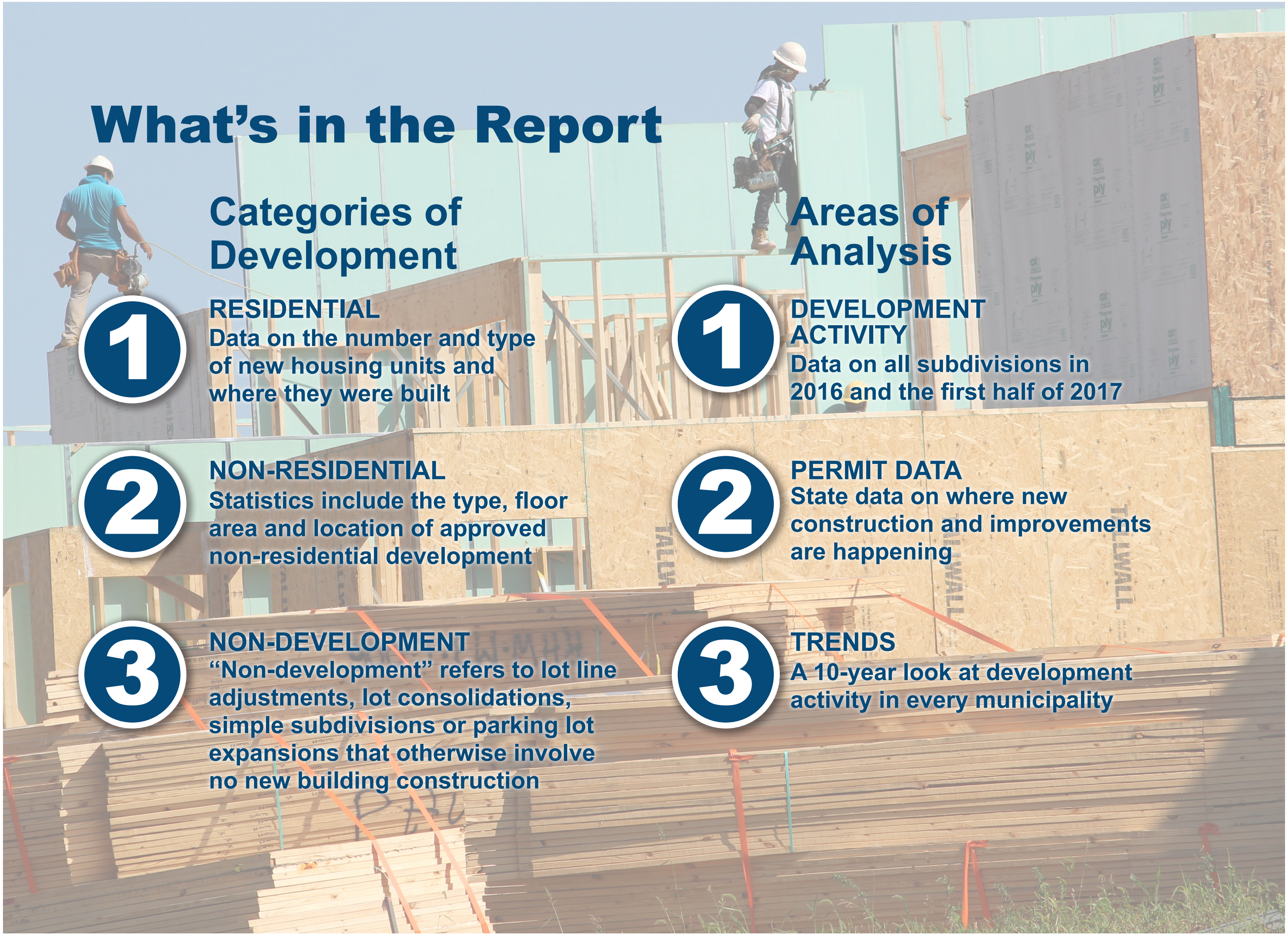
As it has throughout the past decade, industrial development will likely continue to dominate non-residential development in the Lehigh Valley, particularly as the region takes its place as one of the fastest-growing locations for logistics and warehousing. Office development has also been strong over the past two years and remained relatively stable over the past decade. On the other hand, retail, commercial and public/quasi-public development have fluctuated more widely from year to year, making it more difficult to determine any consistent trends. Over the last ten years, Lower Macungie Township and Bethlehem City have had the most approved non-residential square footage.

INTRODUCTION

Land is one of our most precious resources. How we develop it now not only affects the quality of life today, but for generations to come. For that reason, BUILDLV 2017 uses the land development activity of the past to help predict the future. Since 1972, the Lehigh Valley Planning Commission has produced the annual development report for the region.

In the Lehigh Valley, 58 of the region's 62 municipalities have adopted subdivision and land development ordinances that control how development relates to the land where it is located. While the Pennsylvania Municipalities Planning Code (Act 247) largely dictates the general procedures that must be followed, municipal officials are responsible for preparing and enacting reasonable design standards.

As the official planning agency for Lehigh and Northampton counties, the Lehigh Valley Planning Commission reviews all subdivision and land development plans in the two counties for consistency with the policies of the *Comprehensive Plan: The Lehigh Valley…2030*. Through a review process that is required by the Pennsylvania Municipalities Planning Code, the Lehigh Valley Planning Commission collects extensive data on plan activity, residential development activity and non-residential development activity for every municipality in Lehigh and Northampton counties. This data provides important insights into the location, pace and character of development in the Lehigh Valley, helping to illuminate trends in the regional economy and anticipate changes in the region's physical landscape.



What's in the Report

Categories of Development

1. RESIDENTIAL
Data on the number and type of new housing units and where they were built

2. NON-RESIDENTIAL
Statistics include the type, floor area and location of approved non-residential development

3. NON-DEVELOPMENT
"Non-development" refers to lot line adjustments, lot consolidations, simple subdivisions or parking lot expansions that otherwise involve no new building construction

Areas of Analysis

1. DEVELOPMENT ACTIVITY
Data on all subdivisions in 2016 and the first half of 2017

2. PERMIT DATA
State data on where new construction and improvements are happening

3. TRENDS
A 10-year look at development activity in every municipality

Madison Farms in Bethlehem Township, Photo by Craig Kackenmeister/LVPC

DEVELOPMENT ACTIVITY

Bethlehem Area School District's new Nitschmann Middle School, Photo courtesy of D'Huy Engineering, Inc.

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2016 Plan Activity

Plans Submitted

The Lehigh Valley Planning Commission reviews three types of subdivision and land development plans: sketch, preliminary and final. These three plan types fall within two phases of review: proposed (sketch and preliminary plans) and approved (final plans). It is important to note that "approved" almost always refers to the municipality's approval of the final plan. While the Lehigh Valley Planning Commission reviews the final plan, its recommendations are advisory. It generally does not have the authority to approve or reject subdivision and land development plans.[1]

In 2016, the Lehigh Valley Planning Commission reviewed

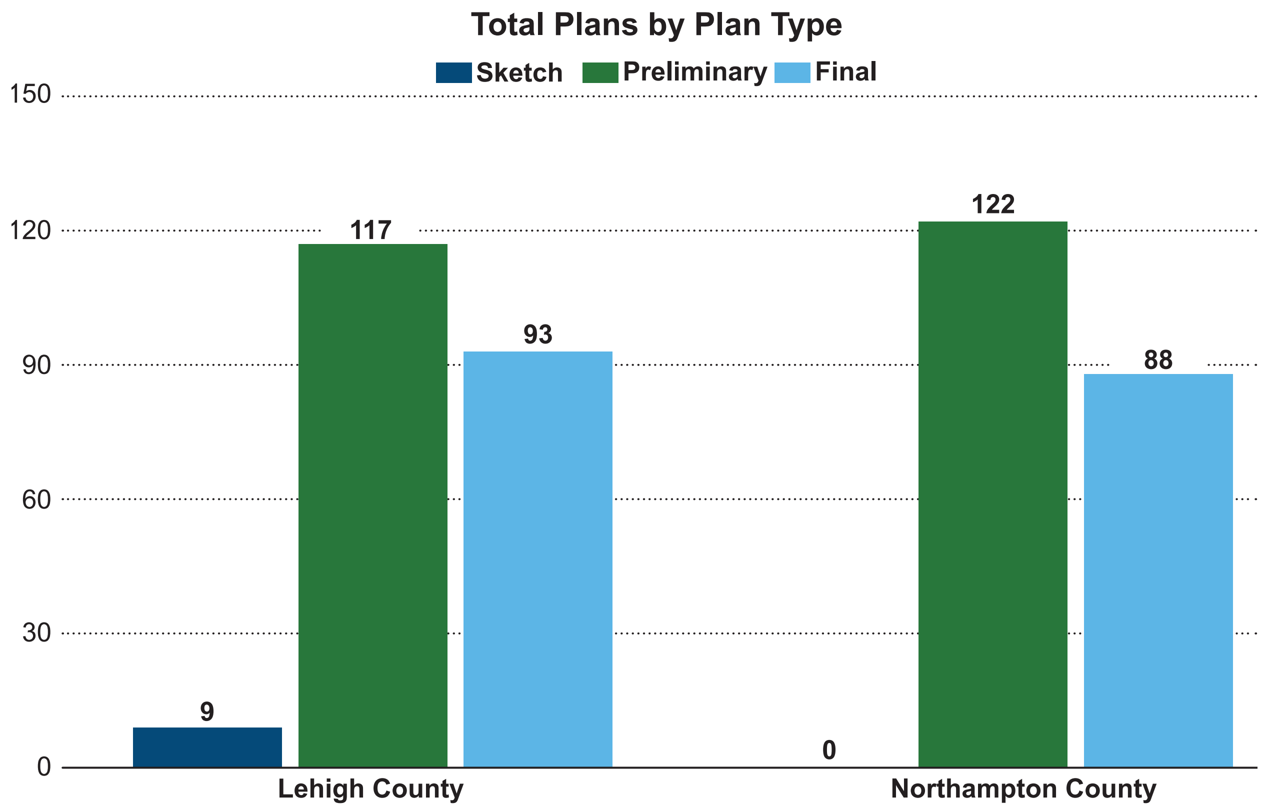
429 Subdivision and Land Development Plans

from

411 Plans in 2015

In 2016, the Lehigh Valley Planning Commission received 429 subdivision and land development plans for review, a 4% increase over the 411 plans received in 2015. Of the plans received in 2016, 58% were in the proposed phase and 42% were in the approved phase. While Lehigh County submitted slightly more plans than Northampton County, both counties had a similar mix of plan types. Of all plans reviewed in 2016, 40% involved no development.

[1] The exception to this statement is when a municipality has not enacted its own Subdivision and Land Development Ordinance (SALDO). In this instance, the municipality relies upon the Lehigh Valley Planning Commission to review and approve plans in accordance with the county SALDO. Municipalities that have not enacted their own SALDO include Slatington Borough in Lehigh County and the boroughs of Chapman, Glendon and West Easton in Northampton County.



Total Plans by Plan Type
Sketch
Preliminary
Final
150
120
90
60
30
0
9
117
93
0
122
88
Lehigh County
Northampton County

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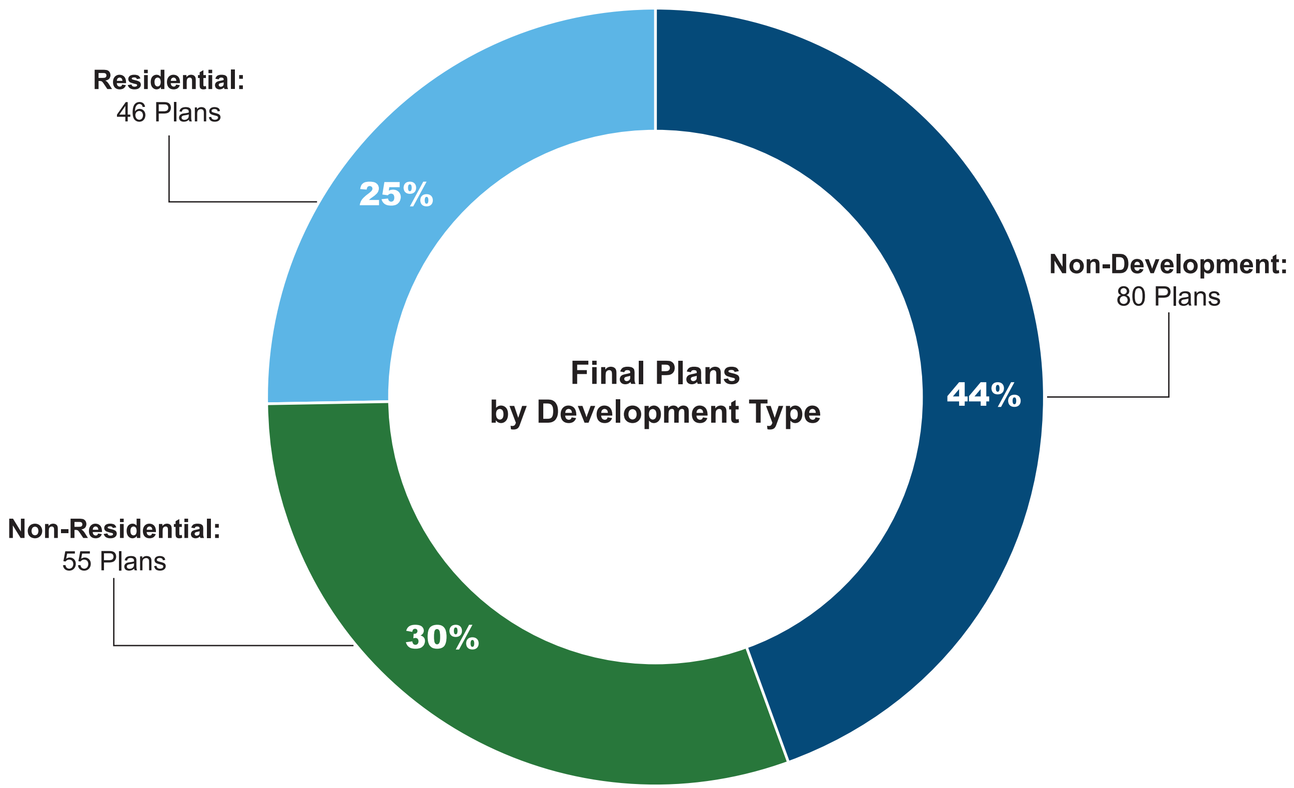
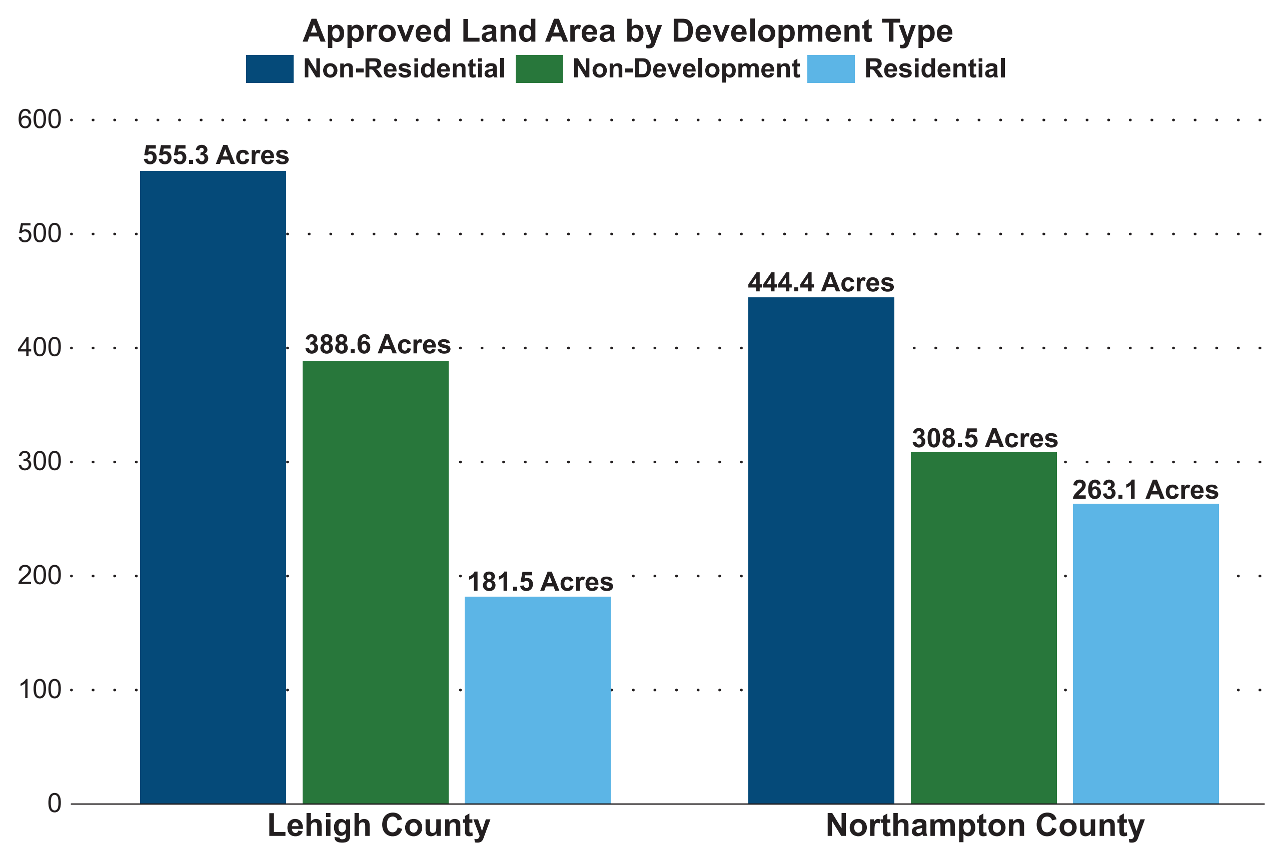
Final Plan Types

The share of approved plans involving some form of development (residential or non-residential) was 56% in 2016, a 4% increase over 2015.



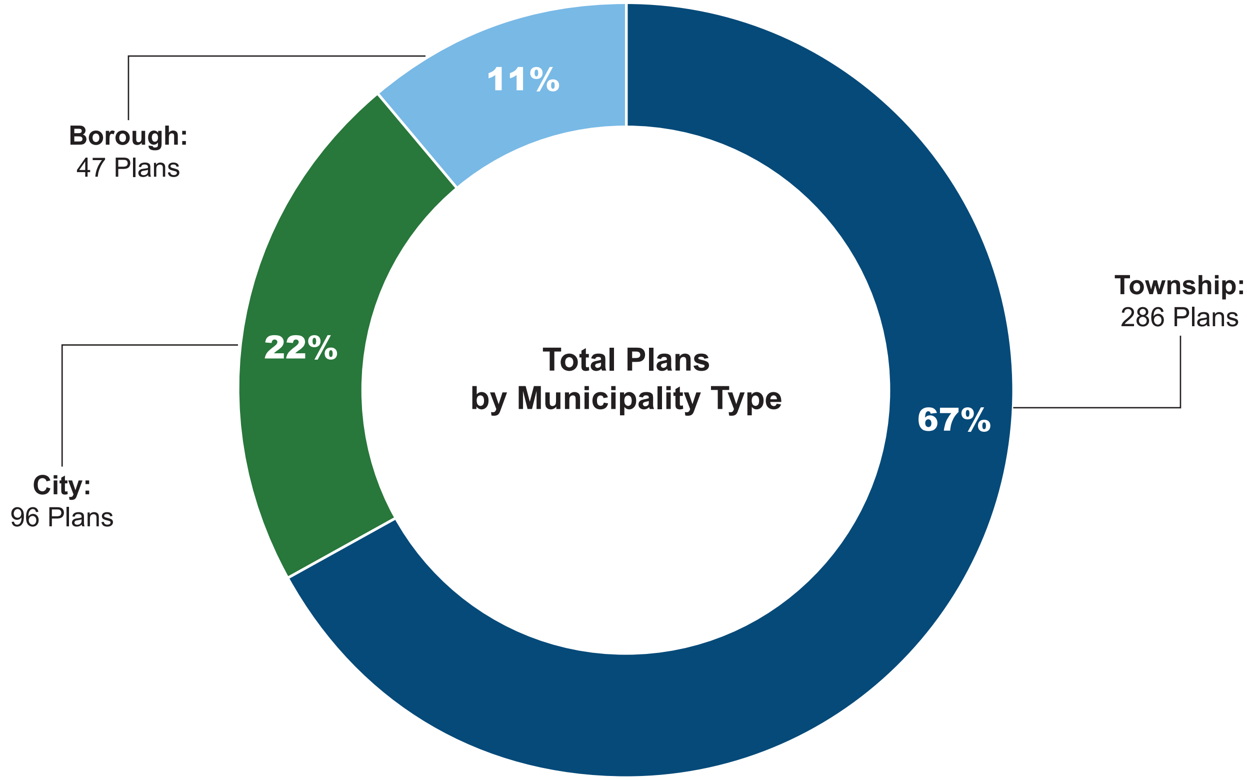
Final Plan Land Area

Final plans reviewed in 2016 included a total of 2,141 acres, a 36% increase over the 1,579 acres reviewed in 2015. Nearly half of that approved land area was related to non-residential development, an increase of 20% from 2015. In Lehigh County, this increase was even more dramatic, rising from 15% to 49% between 2015 and 2016, reflecting the substantial growth in industrial development in Lehigh County. In Northampton County, the share of approved residential acreage declined about 4%, while the share of approved non-residential acreage declined about 2%.

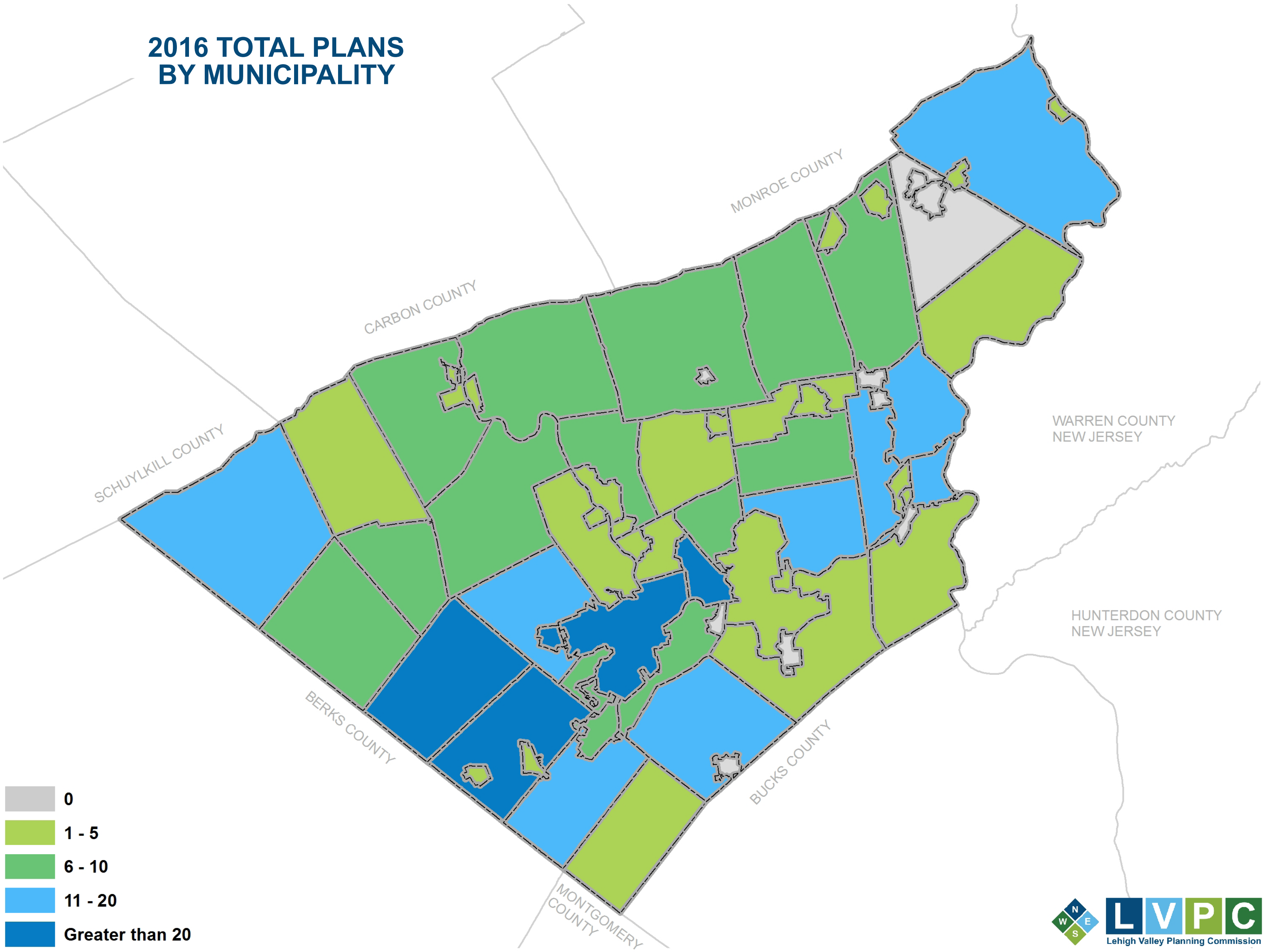


Plan Location

In 2016, the Lehigh Valley's townships submitted two-thirds of the plans for review, driven by the region's largest municipalities and those with the fastest-growing populations. Bethlehem City led the way with 47 plans submitted in 2016, followed by Allentown City with 35 plans, Upper Macungie Township with 27 plans and Lower Macungie Township with 23 plans. No plans were submitted by Washington Township in Northampton County or by the boroughs of Bangor, Chapman, Coopersburg, Fountain Hill, Glendon, Hellertown, Roseto, Stockertown and Tatamy. While plan activity trends have remained generally consistent over the past decade, it is notable that activity in the boroughs hit a ten-year high in 2016, while plan activity in the cities hit a ten-year low.



2016 TOTAL PLANS BY MUNICIPALITY



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Residential Development

Residential Plan Activity

In 2016, the Lehigh Valley Planning Commission reviewed 105 residential subdivision and/or land development plans. These plans contained 3,454 residential units, 48% of which were proposed and 52% of which were approved units. Adjusting for the 24 plans that were reviewed twice in 2016—once as a proposed plan and again as an approved plan—the Lehigh Valley Planning Commission reviewed a total of 3,011 unique units.

The number of approved residential units reviewed by the Lehigh Valley Planning Commission in 2016 increased 37% over the previous year. The rise in the number of apartment units was even more dramatic, increasing from 570 units in 2015 to 1,182 units in 2016. Regionally, apartments constituted 66% of approved residential units, a 22% increase from 2015. Single-family detached homes and assisted-living units each made up 12% of approved residential units.

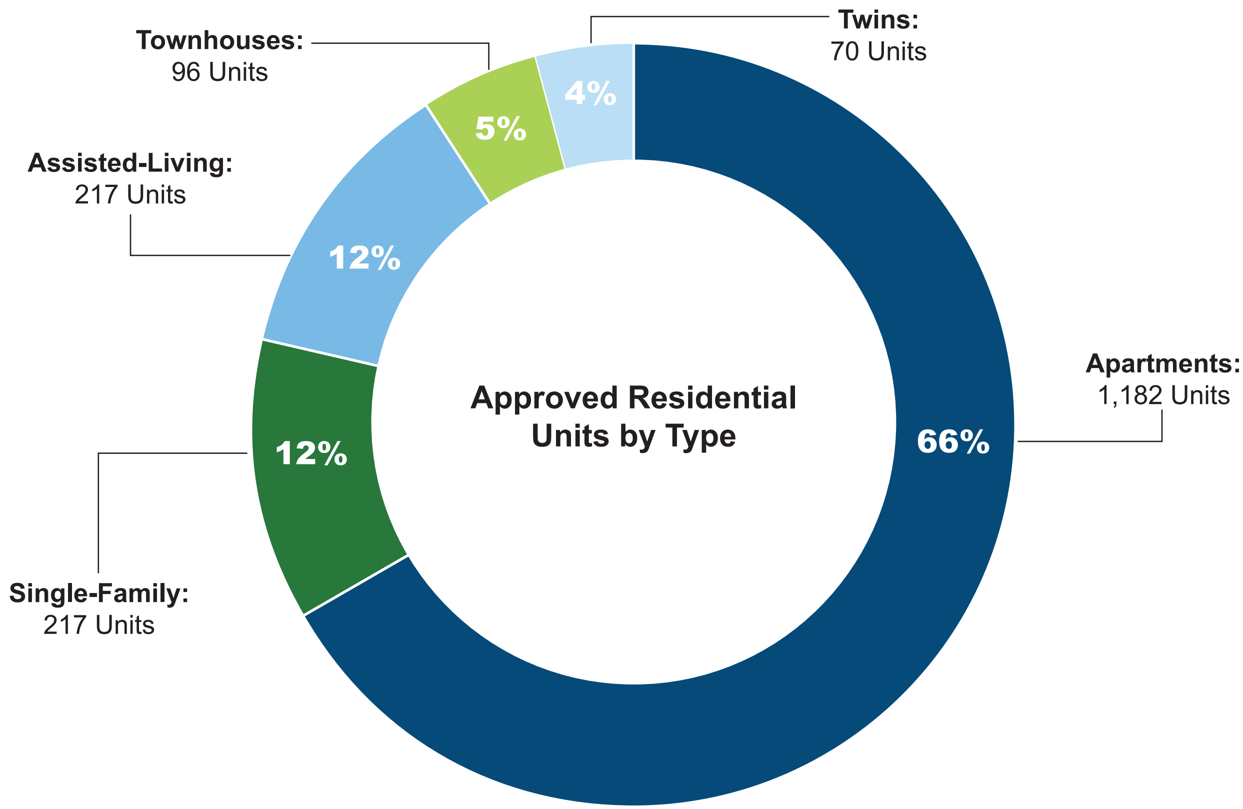
The number of approved apartment units in 2016 was

1,182

from

570

in 2015


Approved Residential Units by Type
Twins: 70 Units
4%
Townhouses: 96 Units
5%
Assisted-Living: 217 Units
12%
Single-Family: 217 Units
12%
Apartments: 1,182 Units
66%

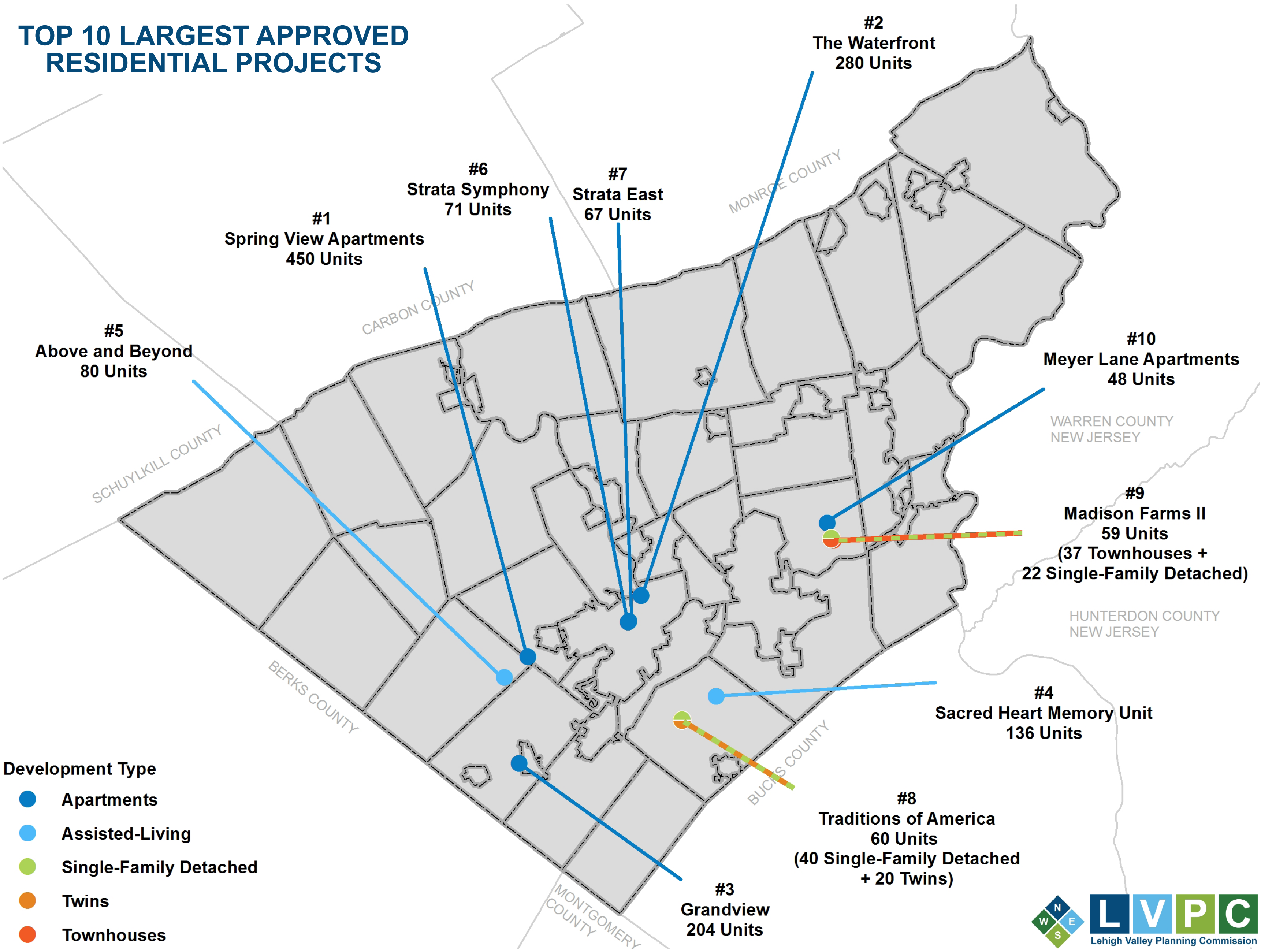
The Top Ten

In 2016, the top ten largest approved residential projects accounted for 1,455, or 82%, of all approved residential units in the Lehigh Valley. Three of those are high-profile urban infill projects in Allentown City, two are assisted-living developments and one is an age-qualified development.

Top Ten Largest Approved Residential Projects

	Municipality	Project	Units	Land Use
1	South Whitehall Township	Spring View Apartments	450	Apartments
2	Allentown City	The Waterfront	280	Apartments
3	Lower Macungie Township	Grandview	204	Apartments
4	Upper Saucon Township	Sacred Heart Memory Unit	136	Assisted-Living
5	Upper Macungie Township	Above and Beyond	80	Assisted-Living
6	Allentown City	Strata Symphony	71	Apartments
7	Allentown City	Strata East	67	Apartments
8	Upper Saucon Township	Traditions of America	60	Single-Family (40) and Twins (20)
9	Bethlehem Township	Madison Farms II	59	Townhouses (37), Single-Family (22)
10	Bethlehem Township	Meyer Lane Apartments	48	Apartments

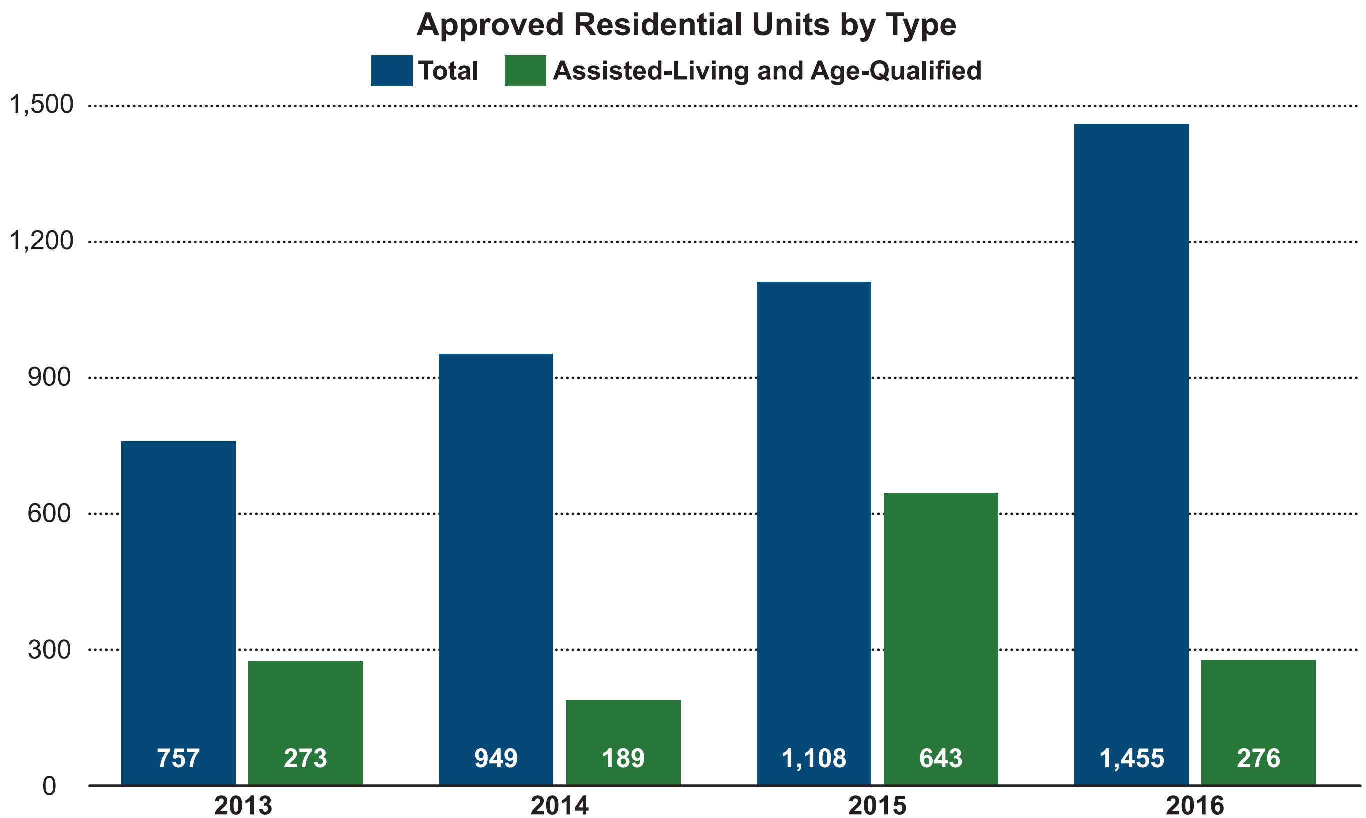
TOP 10 LARGEST APPROVED RESIDENTIAL PROJECTS



Lehigh Valley Planning Commission

Assisted-Living and Age-Qualified

Because of the unique position they occupy within the larger regional housing market, the Lehigh Valley Planning Commission monitors the number and share of assisted-living and age-qualified developments. While the number of assisted-living units was up in 2016, age-qualified housing was down significantly from 2015. In 2015, six of the top ten approved residential projects were either assisted-living or age-qualified developments totaling 643 units. By comparison, in 2016, the top ten approved residential projects included only three assisted-living or age-qualified developments totaling 276 units—a decline of 57%.



Location of Proposed Residential Development

Most of the proposed residential units in 2016 were concentrated within a handful of municipalities. In Lehigh County, 95% of all proposed residential units were located in Upper Macungie Township, Allentown City, Upper Saucon Township and Upper Milford Township. In Northampton County, proposed residential development in Bethlehem Township, Palmer Township and Bethlehem City represented 80% of all proposed residential units. Of the 1,672 proposed units reviewed in 2016, 443 units were subsequently reviewed as approved units within the same year.

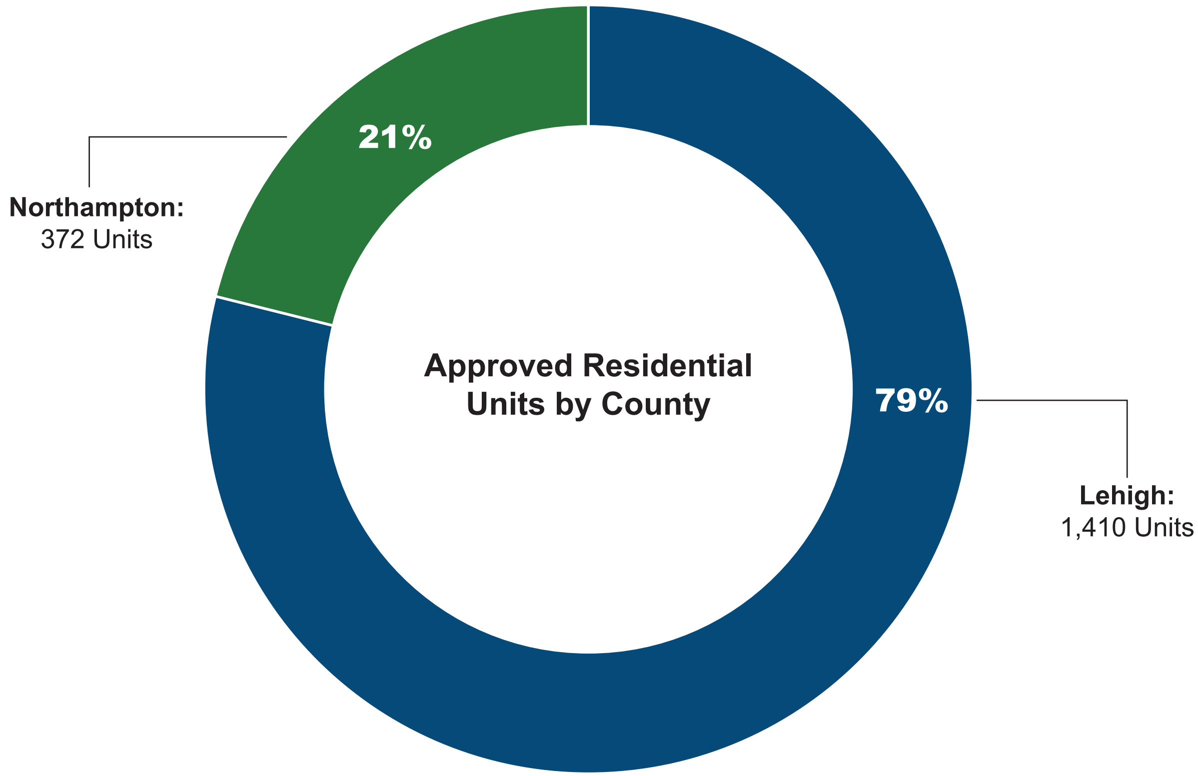
Proposed Residential Units

	Lehigh County	Units	% of Total
1	Upper Macungie Township	411	42.4%
2	Allentown City	245	25.3%
3	Upper Saucon Township	137	14.1%
4	Upper Milford Township	126	13.0%
5	Weisenberg Township	22	2.3%
6	Lower Macungie Township	8	0.8%
7	Lynn Township	5	0.5%
8	Bethlehem City	4	0.4%
9	Washington Township	4	0.4%
10	Emmaus Borough	3	0.3%
	All Other Municipalities	4	0.4%
	TOTAL	**969**	**100.0%**

	Northampton County	Units	% of Total
1	Bethlehem Township	231	32.9%
2	Palmer Township	189	26.9%
3	Bethlehem City	143	20.3%
4	Lower Nazareth Township	53	7.5%
5	West Easton Borough	34	4.8%
6	Nazareth Borough	17	2.4%
7	Bushkill Township	6	0.9%
8	Lehigh Township	5	0.7%
9	Wind Gap Borough	5	0.7%
10	Northampton Borough	4	0.6%
	All Other Municipalities	16	2.3%
	TOTAL	**703**	**100.0%**

Location of Approved Residential Development

The overwhelming majority of approved units were concentrated in the townships and the cities of Allentown and Bethlehem. In Lehigh County, South Whitehall Township, Allentown City, Lower Macungie Township and Upper Saucon Township accounted for 90% of all approved residential units. In Northampton County, 82% of approved residential units were located in Bethlehem Township, Bethlehem City, Lower Nazareth Township, Allen Township and East Allen Township.



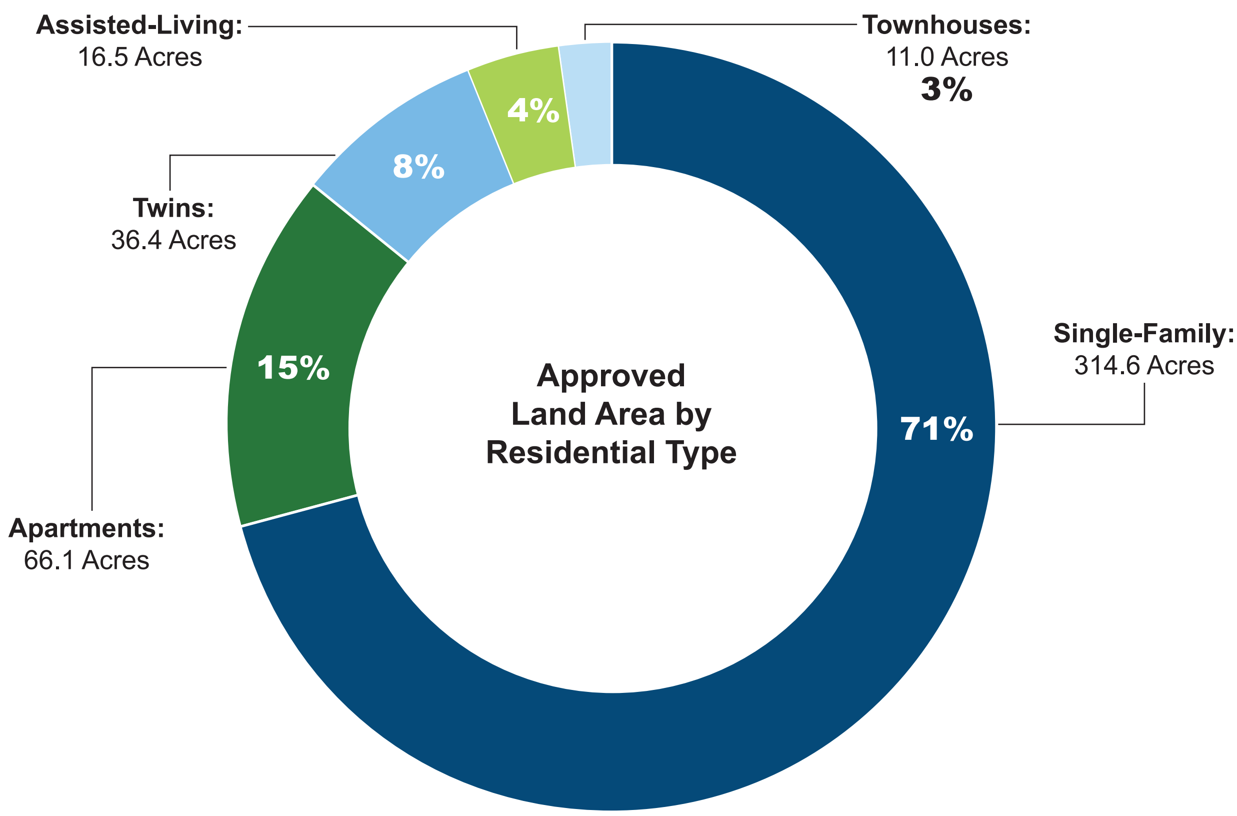
Approved Residential Units

	Lehigh County	Units	% of Total
1	South Whitehall Township	450	31.9%
2	Allentown City	418	29.6%
3	Lower Macungie Township	205	14.5%
4	Upper Saucon Township	196	13.9%
5	Upper Macungie Township	82	5.8%
6	Upper Milford Township	43	3.0%
7	Lynn Township	5	0.4%
8	Weisenberg Township	2	0.1%
9	Emmaus Borough	2	0.1%
10	Lowhill Township	2	0.1%
11	North Whitehall Township	2	0.1%
	All Other Municipalities	3	0.2%
	TOTAL	**1,410**	**100.0%**

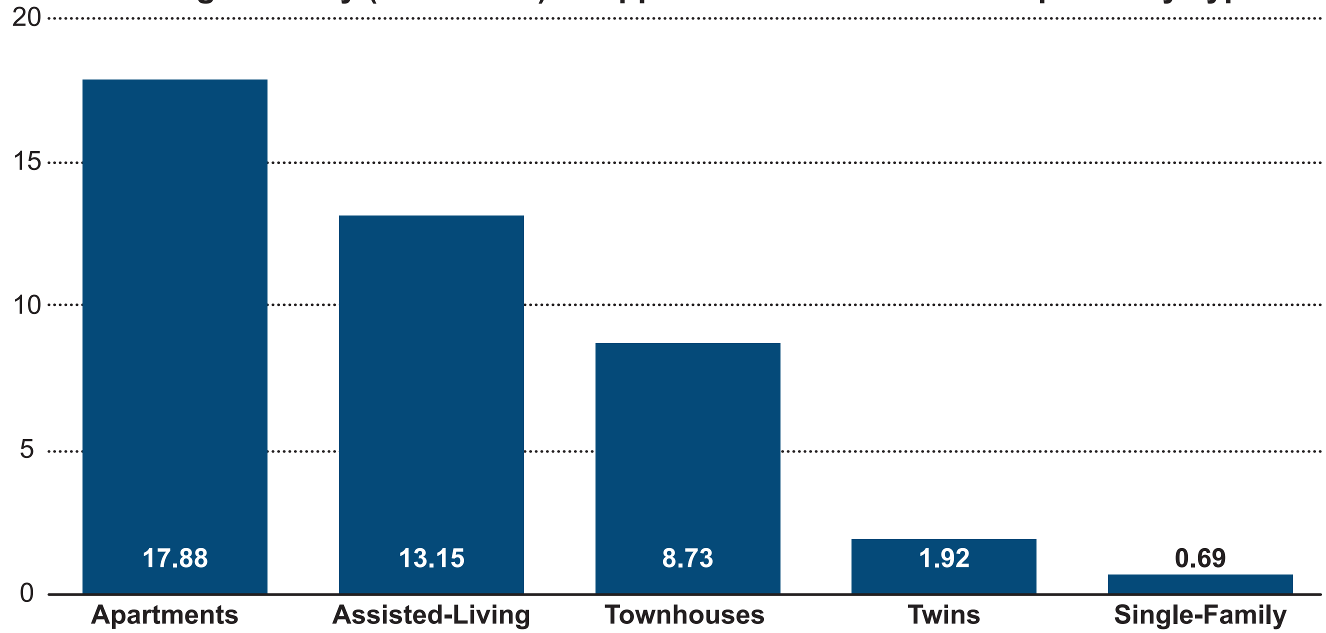
Northampton County		Units	% of Total
1	Bethlehem Township	107	28.8%
2	Bethlehem City	62	16.7%
3	Lower Nazareth Township	53	14.2%
4	Allen Township	42	11.3%
5	East Allen Township	42	11.3%
6	West Easton Borough	34	9.1%
7	Bushkill Township	12	3.2%
8	Upper Mt. Bethel Township	6	1.6%
9	Wind Gap Borough	5	1.3%
10	Lehigh Township	3	0.8%
	All Other Municipalities	6	1.6%
	TOTAL	**372**	**100.0%**

Approved Residential Land Area and Density

Again in 2016, the townships accounted for nearly all of the approved residential acreage. Single-family housing continues to be the most land intensive housing type, representing only 12% of all approved residential units but accounting for 71%, or 315 acres, of the total land area for approved residential development.



Average Density (Units/Acre) of Approved Residential Development by Type



Despite the 37% increase in approved residential units in 2016, the acreage associated with that residential development actually declined 21% from the previous year, from 566 acres to 445 acres. This decline can be attributed to the increase in the share of approved apartment units coupled with a modest decline in the number of approved low-density single-family housing units.

Using the data for residential development approved in 2016, the Lehigh Valley Planning Commission calculated the average density of each dwelling unit type, then used the average density to group these dwelling unit types into three density categories: High (apartments and assisted-living), Medium (townhouses) and Low (twins and single-family houses). In the region's townships, the number of approved high-density dwelling units increased 128% from the previous year, driven by large-scale projects such as the Spring View Apartments in South Whitehall Township, Grandview in Lower Macungie Township and Sacred Heart Memory Unit in Upper Saucon Township. The region's cities and boroughs also shared in the apartment boom, with approved high-density residential development up by 52% from 2015.

Water and Sewer Infrastructure

While higher density suburban and urban housing tends to be served by public sewer and community water systems, very low density housing beyond the urban and suburban centers (also known as exurban housing) tends to be served by on-lot systems. In 2016, only 4.2% of approved residential units relied on on-lot sewer systems. The median lot size for these units was 2.1 acres, and all of these units were single-family homes, with the exception of a four-unit apartment complex utilizing on-lot water service in Lynn Township. Northampton County has historically accounted for the majority of housing utilizing on-lot services in the region, but in 2016, the number of units relying on on-lot sewer systems in Northampton County spiked from 7.9% in 2015 to 17.6% in 2016, largely due to a 41-unit, single-family subdivision approved in East Allen Township.

Percentage Of Approved Residential Units Using On-lot Water and Sewer

	% of Units with On-Lot Water	% of Units with On-Lot Sewer
Lehigh County	1.0%	0.6%
Northampton County	6.5%	17.6%
Lehigh Valley	2.1%	4.2%

4.2%

of approved residential units relied on on-lot sewer systems with the median lot size being

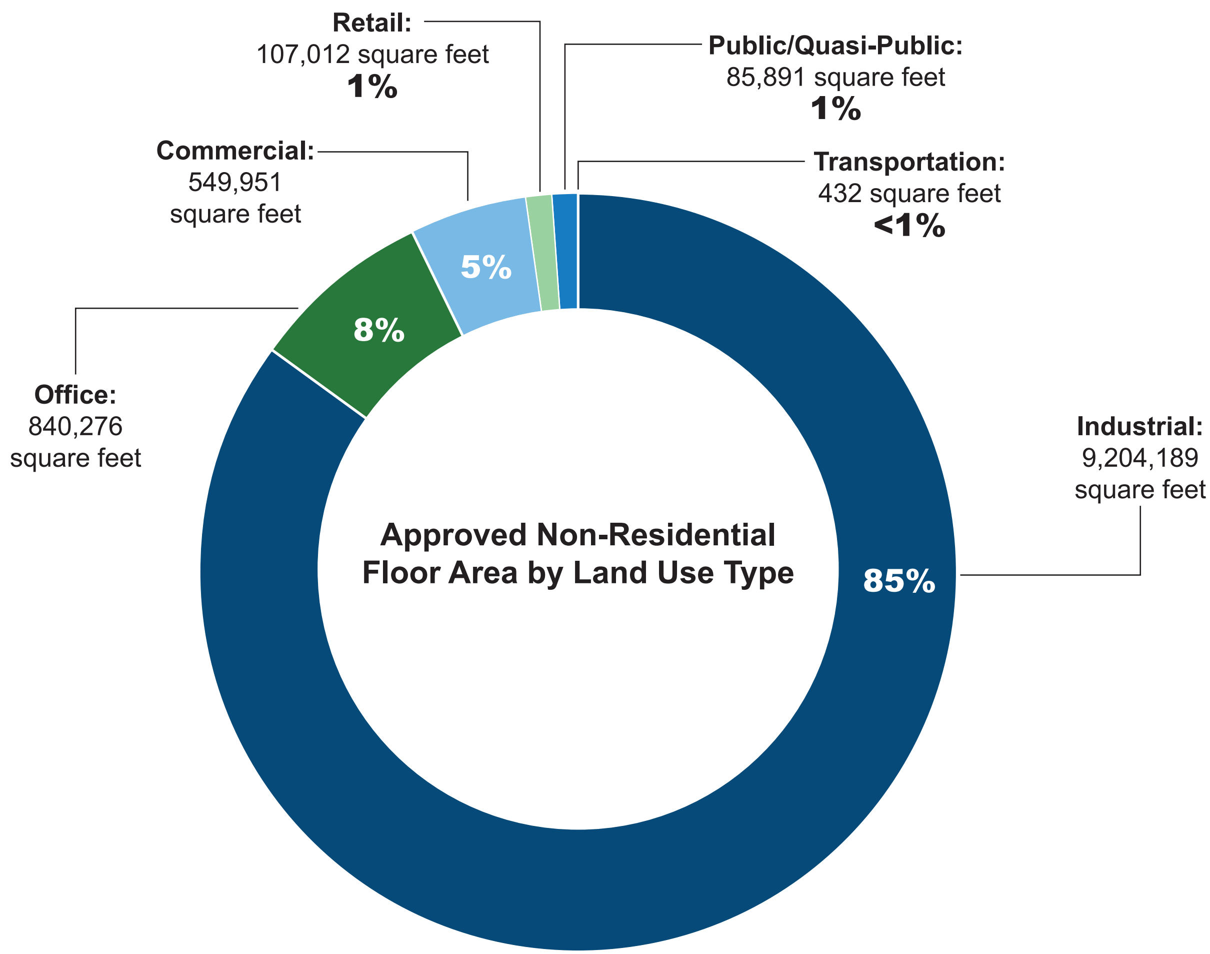
2.1 acres

Non-Residential Development

Non-Residential Plan Activity

The Lehigh Valley Planning Commission reviewed 154 non-residential subdivision and/or land development plans in 2016, representing 36% of all plans reviewed. Of these plans, 99 were submitted as proposed plans (64%) and 55 were submitted as approved (36%). Lehigh County submitted 28 approved plans compared to 27 approved plans submitted by Northampton County. There were 25 non-residential plans submitted both in the proposed phase and subsequently in the approved phase within the 2016 review window.

Approved non-residential floor area totaled 10.8 million square feet in 2016, nearly doubling the 2015 total of 5.6 million square feet. Industrial development accounted for the entirety of that growth, increasing 168% from 3.4 million square feet in 2015 to 9.2 million square feet in 2016—the highest level for this land use category in the ten-year reporting window.



Retail:
107,012 square feet
1%
Public/Quasi-Public:
85,891 square feet
1%
Commercial:
549,951
square feet
Transportation:
432 square feet
<1%
5%
8%
Office:
840,276
square feet
Industrial:
9,204,189
square feet
Approved Non-Residential
Floor Area by Land Use Type
85%

The Top Ten

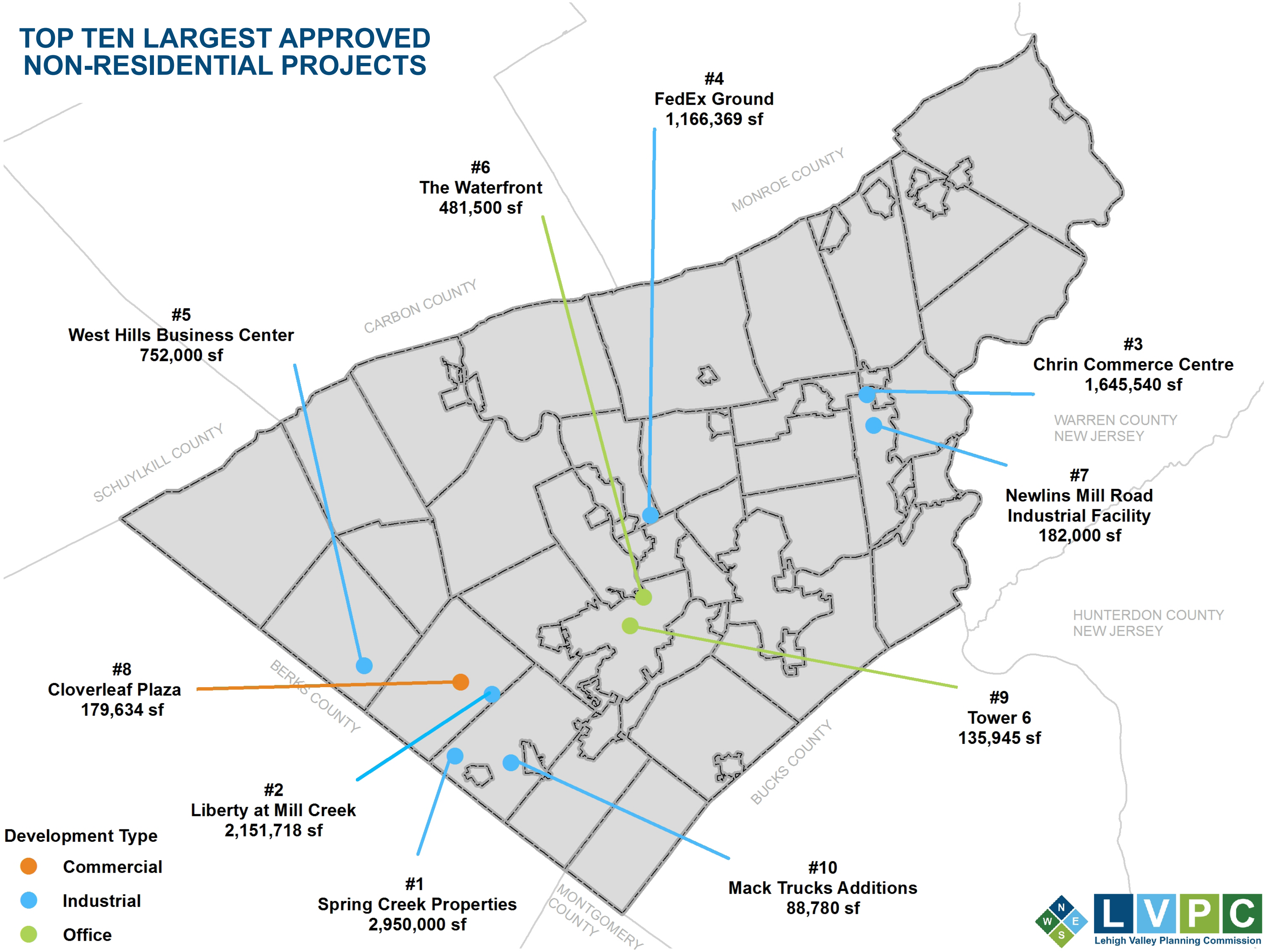
Driven largely by warehouse development, Lehigh County's 7.3 million square feet of approved non-residential development was roughly four times more than what was approved in 2015, while Northampton County's 3.5 million square feet in 2016 represented a decline from the 3.8 million square feet in approved floor area reviewed in 2015.

Lehigh County in particular experienced a steep rise in industrial development, with approved industrial floor area rising from 347,000 square feet in 2015 to more than 6 million square feet in 2016. This increase was driven by the fact that seven of the top ten largest non-residential projects in 2016 were located in Lehigh County. By comparison, approved industrial floor area in Northampton County remained stable in 2016 at 3.2 million square feet.

Top Ten Largest Approved Non-Residential Projects

	Municipality	Project	Square Feet	Land Use
1	Lower Macungie Township	Spring Creek Properties	2,950,000	Industrial
2	Upper Macungie Township	Liberty at Mill Creek	2,151,718	Industrial
3	Palmer Township	Chrin Commerce Centre	1,645,540	Industrial
4	Allen Township	FedEx Ground	1,166,369	Industrial
5	Weisenberg Township	West Hills Business Center	752,000	Industrial
6	Allentown City	The Waterfront	481,500	Office
7	Palmer Township	Newlins Mill Road Industrial Facility	182,000	Industrial
8	Upper Macungie Township	Cloverleaf Plaza	179,634	Commercial
9	Allentown City	Tower 6	135,945	Office
10	Lower Macungie Township	Mack Trucks Additions	88,780	Industrial

TOP TEN LARGEST APPROVED NON-RESIDENTIAL PROJECTS

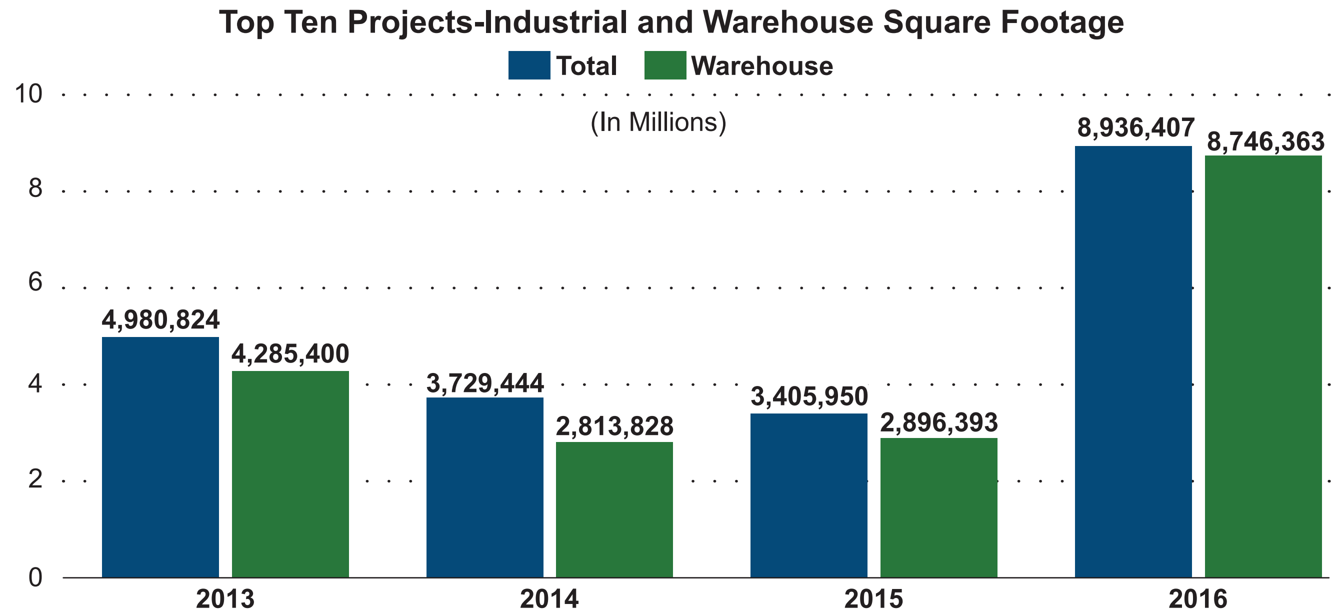


LVPC Lehigh Valley Planning Commission

Industrial and Warehousing

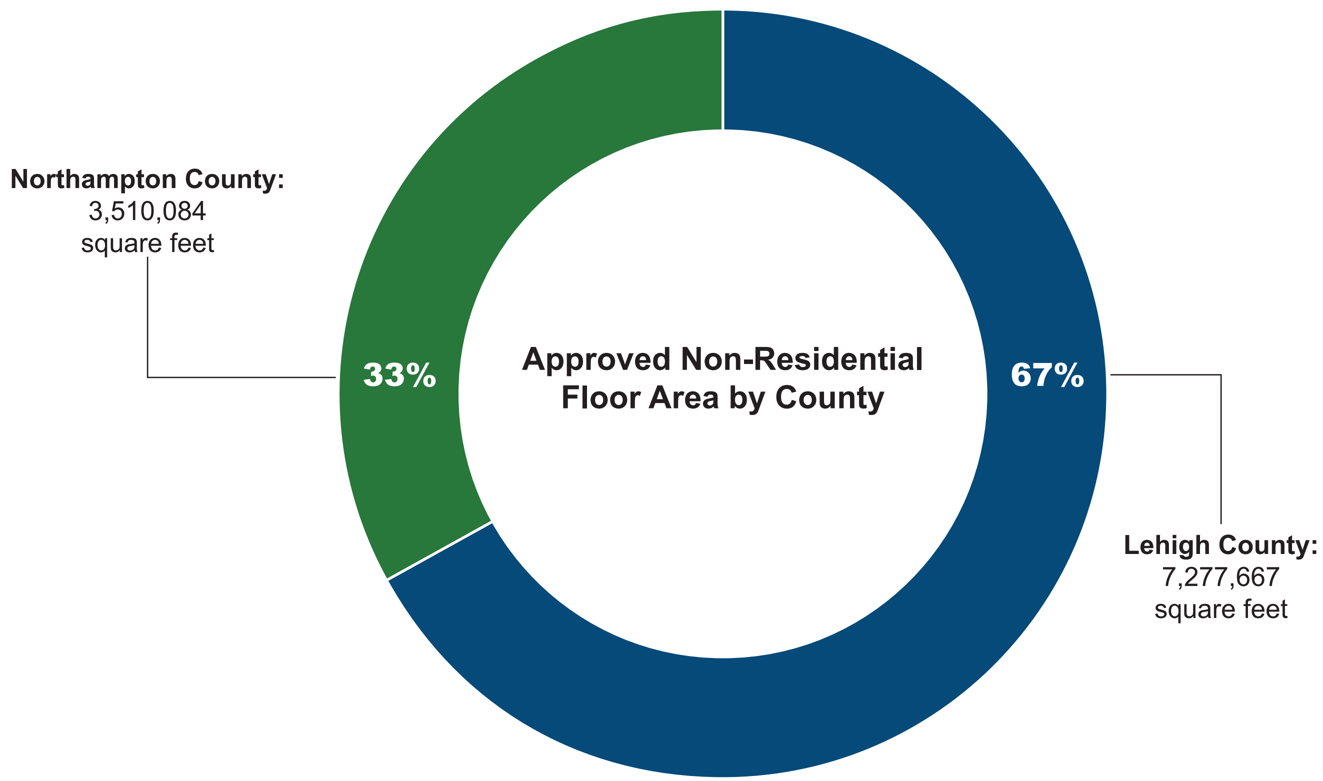
Even more than in previous years, approved industrial development was dominated by warehousing and logistics projects, which accounted for 98% of the floor area in the year's top ten approved industrial projects.

Commercial development remained strong, with approved commercial square footage up by 49% from 2015, driven largely by a 180,000 square-foot hotel in the Cloverleaf Plaza development in Upper Macungie Township. Office development was also robust again in 2016, though it is important to note that the largest approved office development, Phase I of The Waterfront in Allentown, was previously recorded in 2015 and has since been revised to include a total of 481,500 square feet of approved office floor area. Approved square footage for retail and for public/quasi-public was down in 2016, reflecting an established pattern of annual fluctuation for these land use types.



Location of Approved Non-Residential Development

As with residential activity, the majority of non-residential activity was concentrated in the townships. In Lehigh County, Upper and Lower Macungie townships alone accounted for 75% of all approved non-residential floor area, while in Northampton County, 87% of approved non-residential floor area was located in Palmer and Allen townships. The Lehigh Valley's three cities also accounted for 9% of all approved non-residential floor area, while the boroughs accounted for less than 1%.



Approved Non-Residential Floor Area

	Lehigh County	Square Feet	% of Total
1	Lower Macungie Township	3,129,512	43.0%
2	Upper Macungie Township	2,337,633	32.1%
3	Allentown City	785,540	10.8%
4	Weisenberg Township	752,000	10.3%
5	Upper Saucon Township	112,629	1.5%
6	South Whitehall Township	89,029	1.2%
7	Lynn Township	32,250	0.4%
8	Bethlehem City	22,584	0.3%
9	Whitehall Township	8,841	0.1%
10	Upper Milford Township	3,200	0.0%
11	Salisbury Township	2,800	0.0%
12	Macungie Borough	1,649	0.0%
	TOTAL	**7,277,667**	**100.0%**

	Northampton County	Square Feet	% of Total
1	Palmer Township	1,885,105	53.7%
2	Allen Township	1,166,369	33.2%
3	Bethlehem Township	139,587	4.0%
4	Forks Township	115,696	3.3%
5	Bethlehem City	106,208	3.0%
6	Hanover Township	70,644	2.0%
7	Easton City	18,659	0.5%
8	Wind Gap Borough	6,816	0.2%
9	Walnutport Borough	1,000	0.0%
	TOTAL	**3,510,084**	**100.0%**

Location of Proposed Non-Residential Development

Because non-residential site plans can change significantly between initial proposal and final approval, the Lehigh Valley Planning Commission only tracks the floor area of approved non-residential developments. However, a look at the number and type of proposed non-residential plans reviewed in 2016 reveals that proposed plan activity was concentrated in a handful of municipalities. In Lehigh County, proposed plans in Allentown City, Lower Macungie Township, Upper Macungie Township and South Whitehall Township represented 64% of all proposed non-residential plans. In Northampton County, proposed plans in Bethlehem City, Bethlehem Township, Palmer Township and Forks Township represented 60% of all proposed plans.

Approved non-residential land area more than doubled in 2016:

1,000 acres

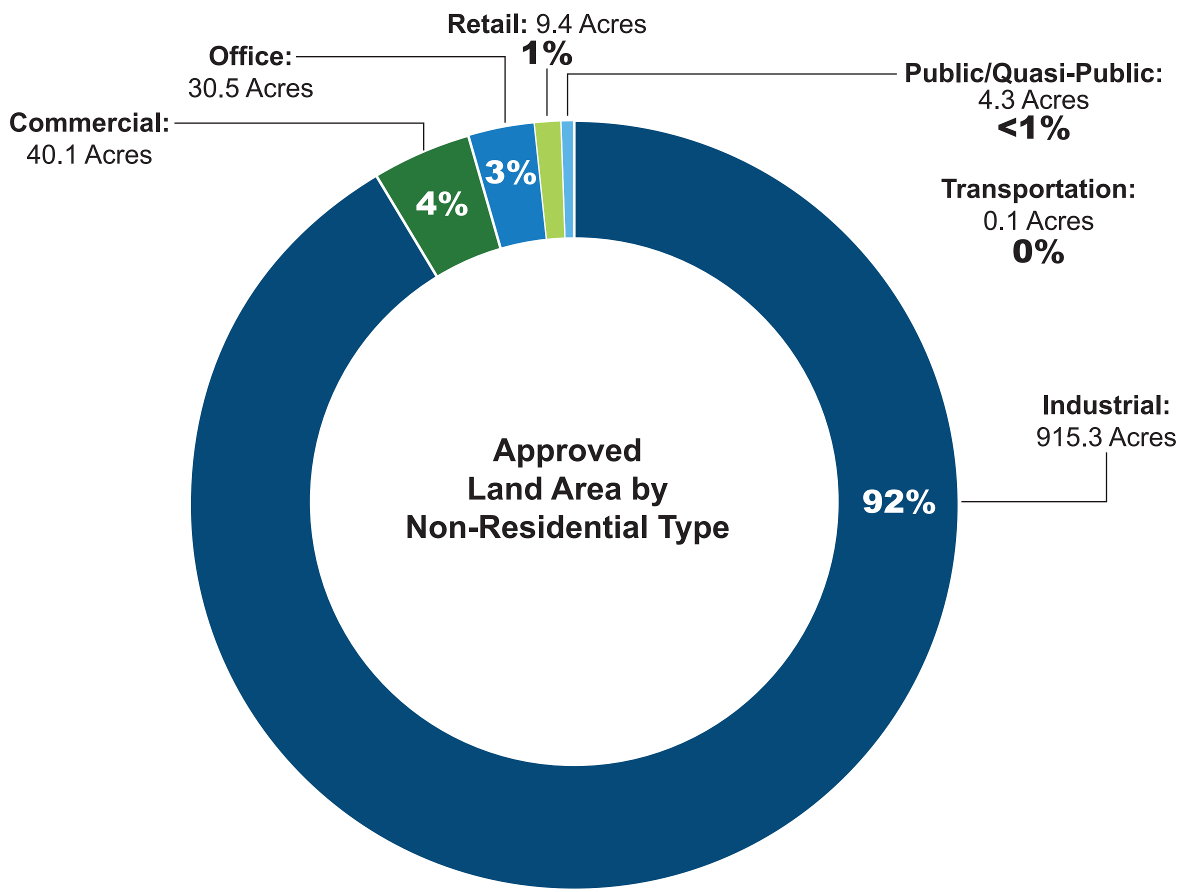
compared to

439 acres

in 2015

Approved Non-Residential Land Area

The land area associated with approved non-residential development more than doubled from 439 acres in 2015 to 1,000 acres in 2016. The overwhelming majority of that approved acreage was located in the townships (984 acres) and was related to industrial development (915 acres).



Approved Office Floor Area

Municipality	Project	Square Feet
Allentown City	The Waterfront, Phase 1	481,500
Allentown City	Tower 6	135,945
Bethlehem Township	St. Luke's Hospital Anderson Campus	75,000
Palmer Township	Anchor Health	57,565
Bethlehem City (LC)	834 Medical Offices	22,584
South Whitehall Township	Liquor Control Board	18,573
Forks Township	Sullivan's March Enterprises	16,536
Hanover Township (NC)	LVIP 4, Embassy Holding	10,467
Lower Macungie Township	Spring Creek Properties	10,000
Bethlehem City (NC)	LVIP 7, Phase 5	8,275
Easton City	Tencza Dental Addition	3,050
Macungie Borough	BDI Machinery Sales Company	672
Hanover Township (NC)	2414 Schoenersville Rd	109
TOTAL OFFICE		**840,276**

Approved Industrial Floor Area

Municipality	Project	Square Feet
Lower Macungie Township	Spring Creek Properties	2,950,000
Upper Macungie Township	Liberty at Mill Creek	2,151,718
Palmer Township	Chrin Commerce Centre	1,645,540
Allen Township	FedEx Ground	1,166,369
Weisenberg Township	West Hills Business Center	752,000
Palmer Township	Newlins Mill Road Industrial Facility	182,000
Lower Macungie Township	Mack Trucks Additions	88,780
Forks Township	Fort James III, Brownstone Development	79,160
Bethlehem Township	Old Dominion	48,486
Lynn Township	KMS, LLC	32,250
Hanover Township (NC)	Ungerer & Company	28,843
Allentown City	The Waterfront, Phase 1	23,000
Forks Township	Fort James II, Polykote Expansion	20,000
Allentown City	FilmTech Building Addition	14,500
Allentown City	Elias Market	6,562
Upper Macungie Township	Canteen Vending	6,281
Hanover Township (NC)	Splendor Industries	5,500
Upper Milford Township	Zgura's Concrete Services	3,200
TOTAL INDUSTRIAL		**9,204,189**

Approved Commercial Floor Area

Municipality	Project	Square Feet
Upper Macungie Township	Cloverleaf Plaza	179,634
Upper Saucon Township	Stabler Center	82,363
Lower Macungie Township	Grandview	75,000
Bethlehem City (NC)	Sands Casino Expansion	58,000
South Whitehall Township	Dorney Park	33,600
Hanover Township (NC)	LVCC, Phase 2	25,725
Allentown City	The Waterfront, Phase 1	19,000
Bethlehem Township	8030 William Penn Highway	12,960
Allentown City	Posh Properties, Hamilton St	12,515
Allentown City	Quebec Realty Storage Units	12,480
Wind Gap Borough	AutoZone	6,816
Allentown City	Turkey Hill Minit Market	5,200
Whitehall Township	Chick-fil-A	4,727
Whitehall Township	Mission BBQ	4,114
Bethlehem Township	Goddard School Annex	3,141
Lower Macungie Township	Cambridge Day School Addition	2,952
Lower Macungie Township	Hamilton Boulevard Veterinary Hospital	2,780
Bethlehem City (NC)	Taco Bell	2,717
South Whitehall Township	Dorney Park	2,500
South Whitehall Township	Cedar Point West	1,750
Walnutport Borough	Dunkin' Donuts	1,000
Macungie Borough	17 N Poplar Street	977
TOTAL COMMERCIAL		**549,951**

Approved Retail Floor Area

Municipality	Project	Square Feet
Allentown City	The Waterfront, Phase 1	52,600
South Whitehall Township	Spring View Apartments	32,606
Allentown City	Strata East	8,551
Allentown City	Elias Market	6,698
Allentown City	Tower 6	5,500
Allentown City	Strata Symphony	1,057
TOTAL RETAIL		**107,012**

Approved Public/Quasi-Public Floor Area

Municipality	Project	Square Feet
Upper Saucon Township	Sacred Heart Memory Unit	30,266
Bethlehem City (NC)	Moravian College Health Sciences Building	19,636
Bethlehem City (NC)	Negrao Personal Care Facility/Preschool	17,580
Easton City	30 North Fourth	15,609
Salisbury Township	Western Salisbury Volunteer Fire Co.	2,800
Allentown City	Muhlenberg College Temporary Modular Housing	0
Bethlehem City (NC)	Moravian College Synthetic Turf Field	0
TOTAL PUBLIC/QUASI-PUBLIC		**85,891**

Approved Transportation Floor Area

Municipality	Project	Square Feet
Allentown City	CenturyLink	432
TOTAL TRANSPORTATION		**432**

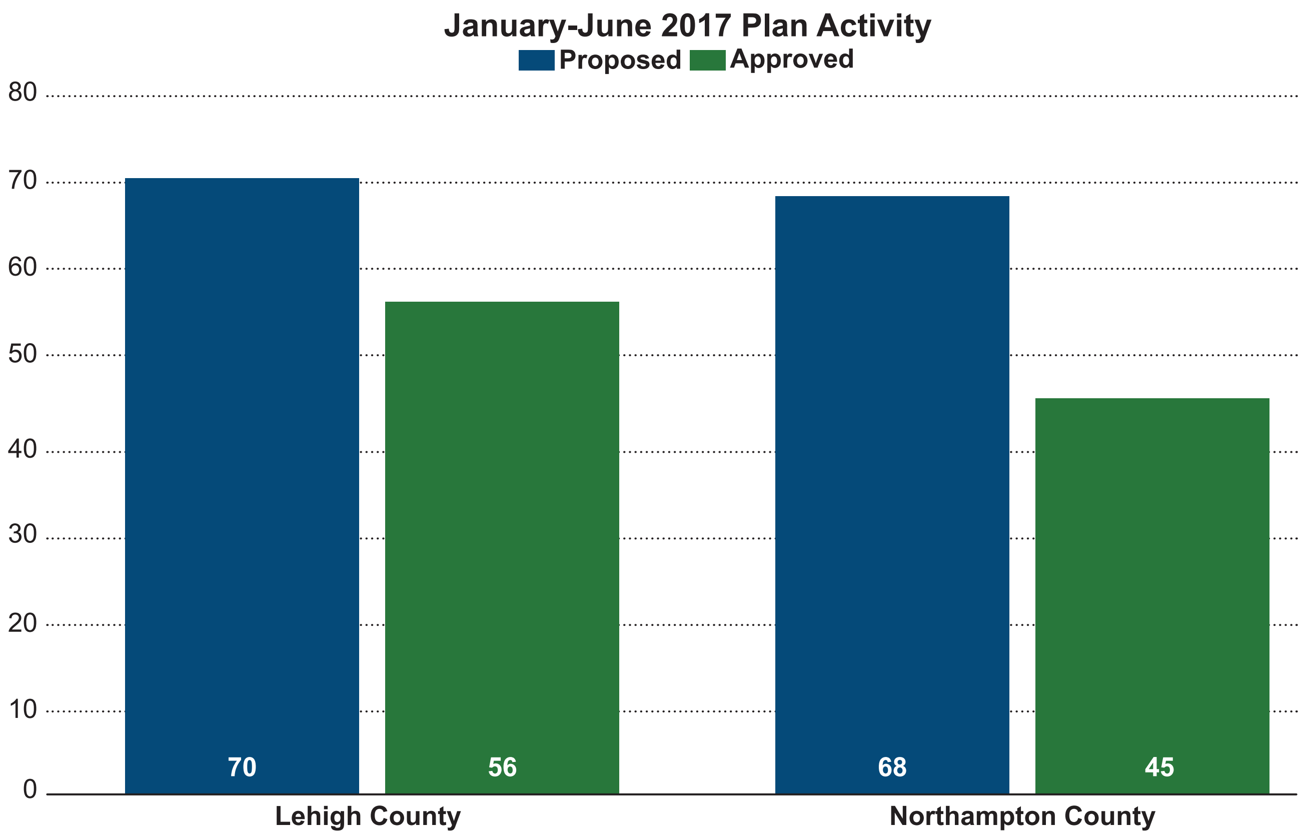
2017 AT A GLANCE

In the first six months of 2017, the Lehigh Valley Planning Commission reviewed 239 plans compared to 205 plans in the first half of 2016. Of the plans reviewed so far in 2017, about 35% (83) were for non-residential development, 23% (56) were for residential development and 42% (100) involved no development.

The pace of residential activity appears to be slowing, with 694 residential units approved so far in 2017 compared to 825 approved residential units during the same period in 2016. The number of apartment units in particular was down by more than half, while single-family housing has kept pace with last year. An age-qualified planned residential development in Upper Nazareth Township, the Heritage Village Campus of Moravian Hall Square, accounted for 143 new approved units including a mix of single-family homes, twins and multi-family buildings. The number of townhouse units more than tripled from 30 approved units in the first half of 2016 to 96 units so far in 2017, again driven primarily by a single development—the 91-unit Blue Barn Meadows in South Whitehall Township.

The number of townhouse units more than tripled	30 approved units in first-half 2016	96 approved units in first-half 2017

Non-residential activity has slowed even more significantly from 2016, with approved square footage down from more than 2 million square feet in the first half of 2016 to just under 900,000 square feet so far in 2017. While approved public/quasi-public floor area more than quadrupled, and approved commercial floor area has tripled over this time last year, approved industrial, office and retail square footage is substantially lower in the first half of 2017. However, the industrial total could change quickly considering the significant number of proposed plans for large industrial projects that the Lehigh Valley Planning Commission has received in the first half of 2017.


January-June 2017 Plan Activity
Proposed
Approved
80
70
60
50
40
30
20
10
0
70
56
68
45
Lehigh County
Northampton County

Approved Residential

	Units	Acres
Assisted-Living	24	1.1
Apartment	284	15.1
Planned Residential Development	143	48
Single-Family	125	130
Townhouse	96	9.7
Twin	22	2.7
TOTAL	**694**	**206.6**

Approved Non-Residential

	Square Feet	Acres
Commercial	243,608	37.7
Industrial	366,944	35.7
Office	128,015	7.6
Public/Quasi-Public	102,501	28.5
Retail	54,703	8.9
TOTAL	**895,771**	**118.4**

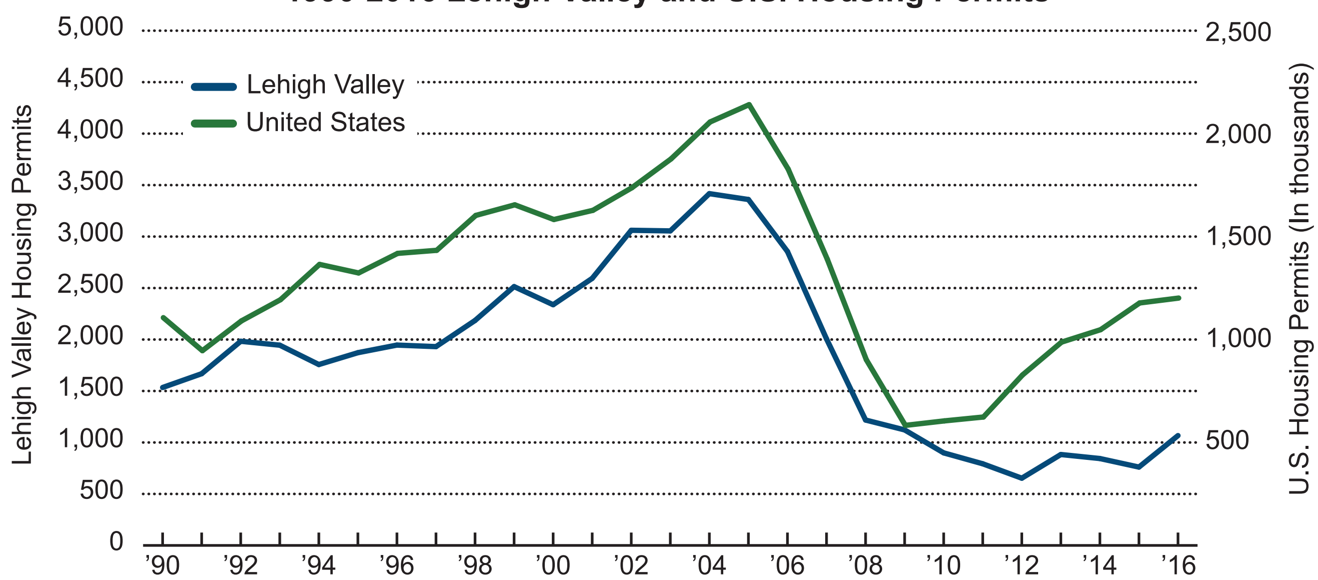
Medical offices at 834 Eaton Avenue in Bethlehem City, Photo by Craig Kackenmeister/LVPC

PERMIT DATA

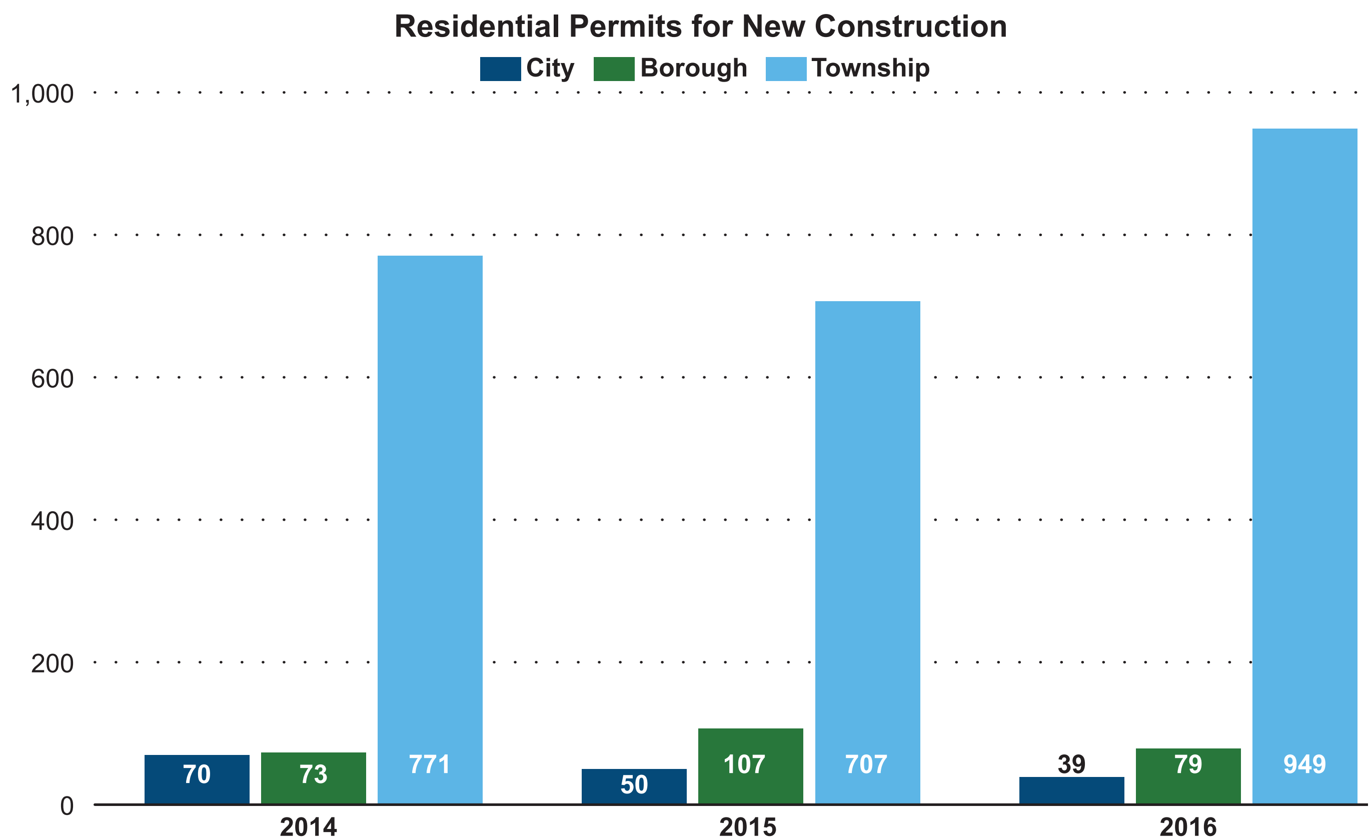
Since 2004, Pennsylvania law has required all municipalities to adopt the Uniform Construction Code. Intended to protect public health while reducing compliance burdens, the Uniform Construction Code requires municipalities to issue permits for: 1) residential new construction, 2) residential additions, alterations or changes of occupancy, 3) commercial new construction and 4) commercial additions, alterations or changes of occupancy. The state defines residential buildings as “detached one-family and two-family dwellings...which are not more than three stories in height” and defines commercial buildings to include multi-family dwellings. Municipalities are required to report the number of building permits issued on a quarterly basis.

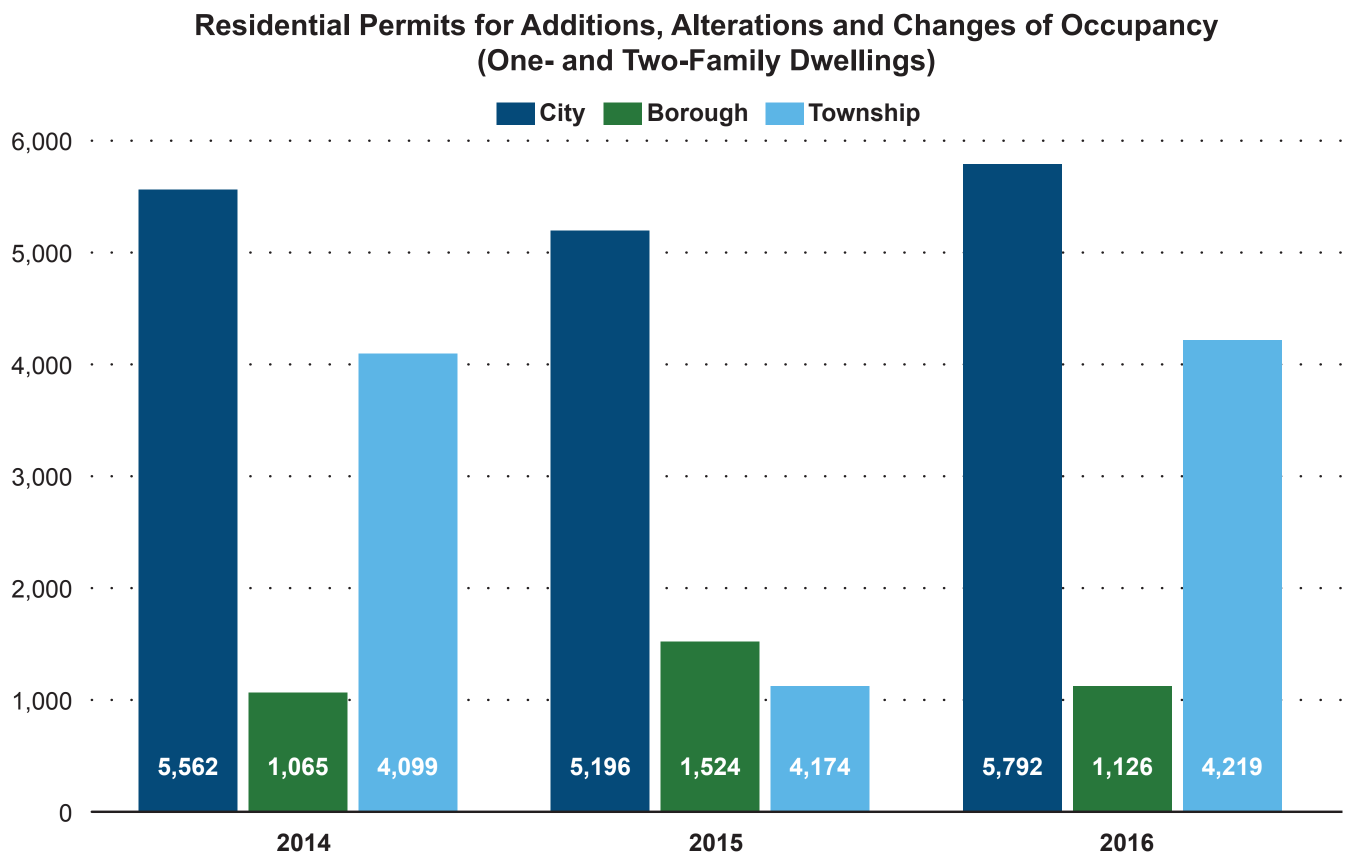
New residential construction continues to rebound more slowly in the Lehigh Valley than at the national level. Lehigh Valley housing permits are only at 31% of their 2004 peak in spite of their 22% increase from last year.

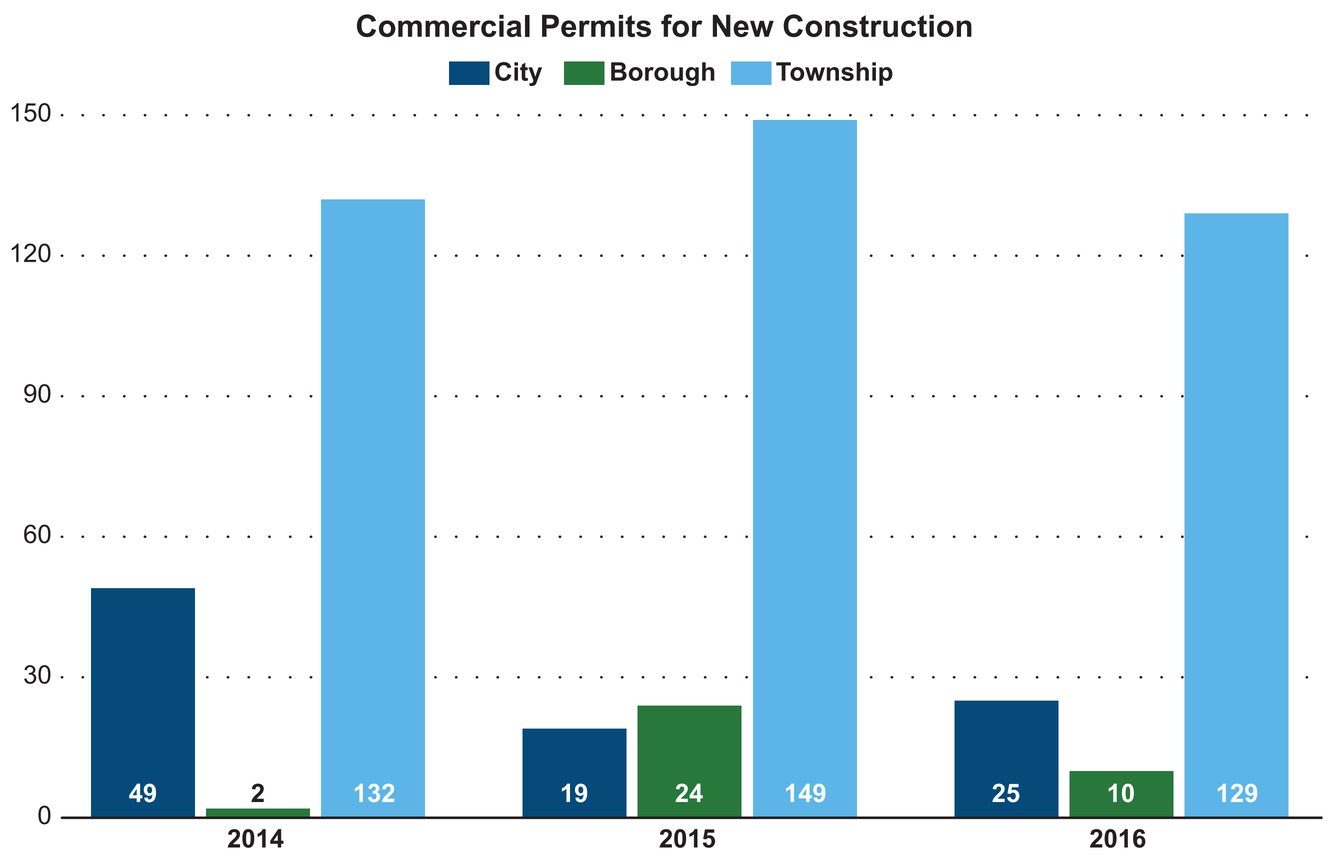
1990-2016 Lehigh Valley and U.S. Housing Permits



A review of building permits issued in the Lehigh Valley reveals that new construction remains mostly concentrated in the townships, while the region's cities and townships capture a greater share of improvements to existing buildings. From 2014 to 2016, new construction of one-family and two-family dwellings was overwhelmingly concentrated in the townships, where 2,427 of 2,845 (85%) residential permits for new construction were issued. Townships also accounted for most of the commercial new construction (including multi-family dwellings), with 410 of 539 (76%) permits issued in townships. In contrast, 51% of all residential improvement permits and 65% of all commercial improvement permits were in the cities.




Residential Permits for Additions, Alterations and Changes of Occupancy
(One- and Two-Family Dwellings)
City
Borough
Township
6,000
5,000
4,000
3,000
2,000
1,000
0
5,562
1,065
4,099
5,196
1,524
4,174
5,792
1,126
4,219
2014
2015
2016


Commercial Permits for New Construction
City
Borough
Township
150
120
90
60
30
0
49
2
132
19
24
149
25
10
129
2014
2015
2016

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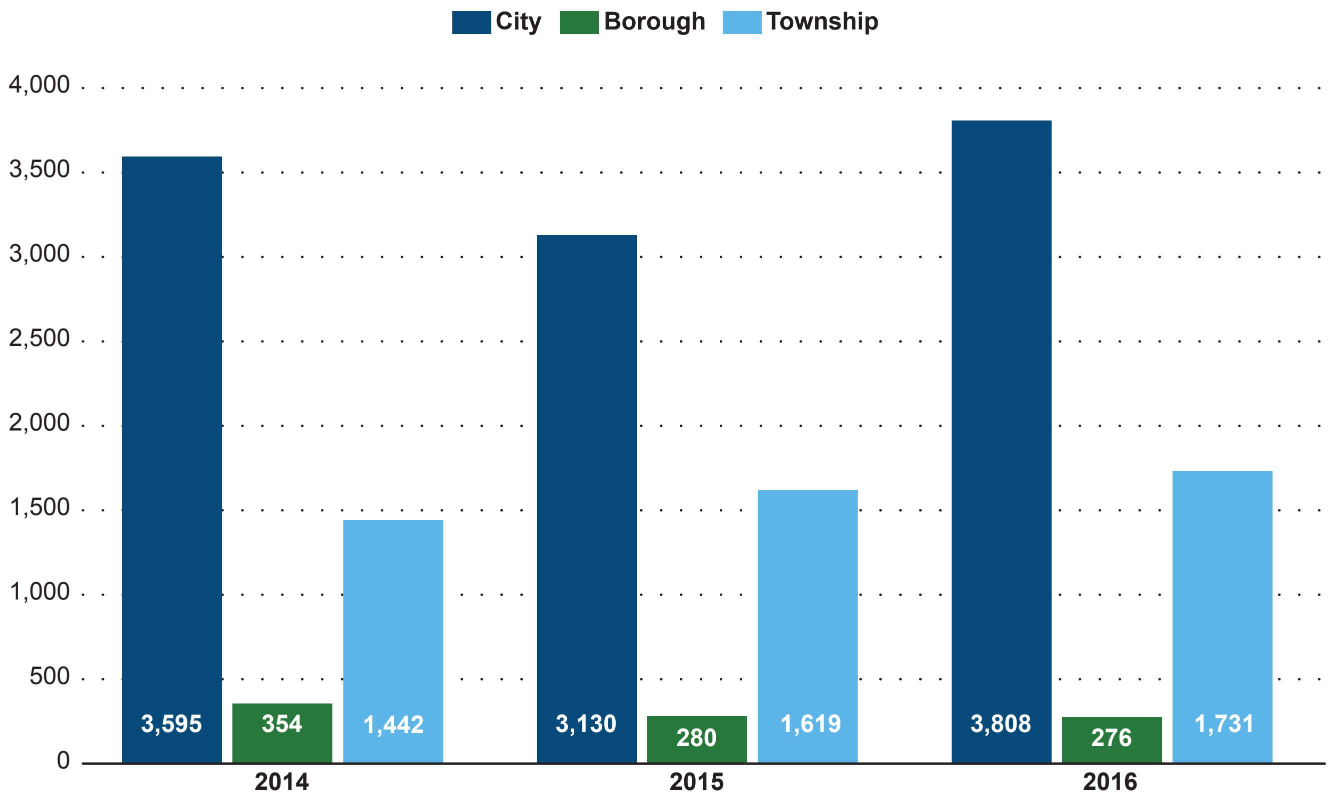
Commercial Permits for Additions, Alterations and Changes of Occupancy



TRENDS

Strata East in Allentown, Photo courtesy of City Center Allentown

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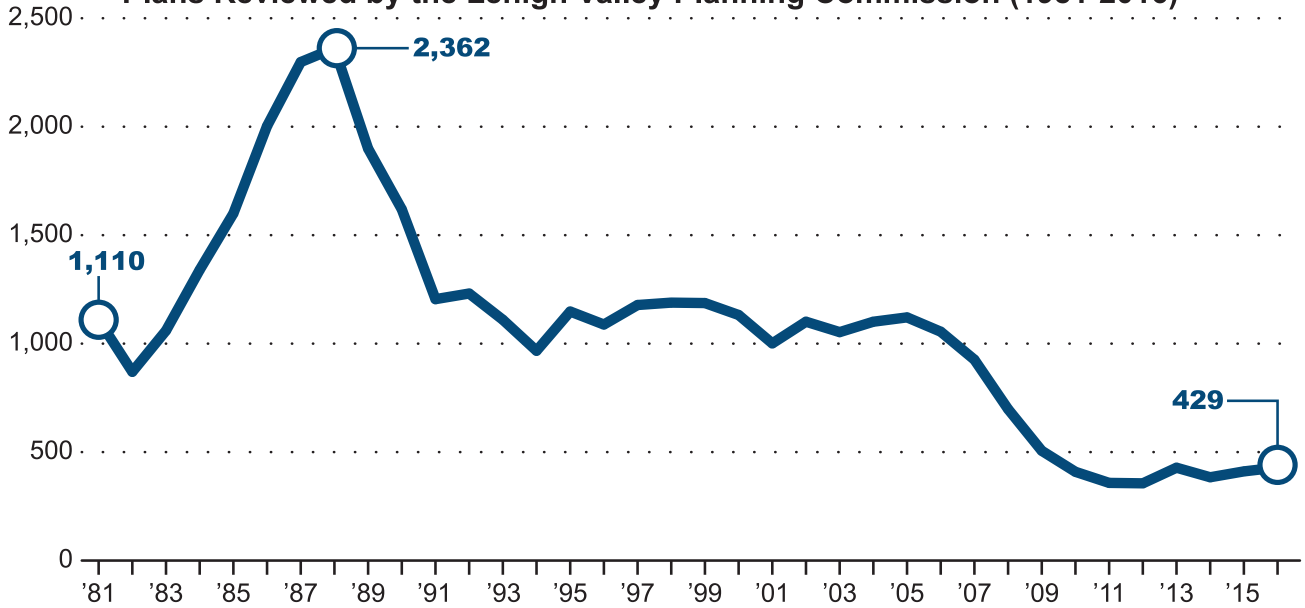
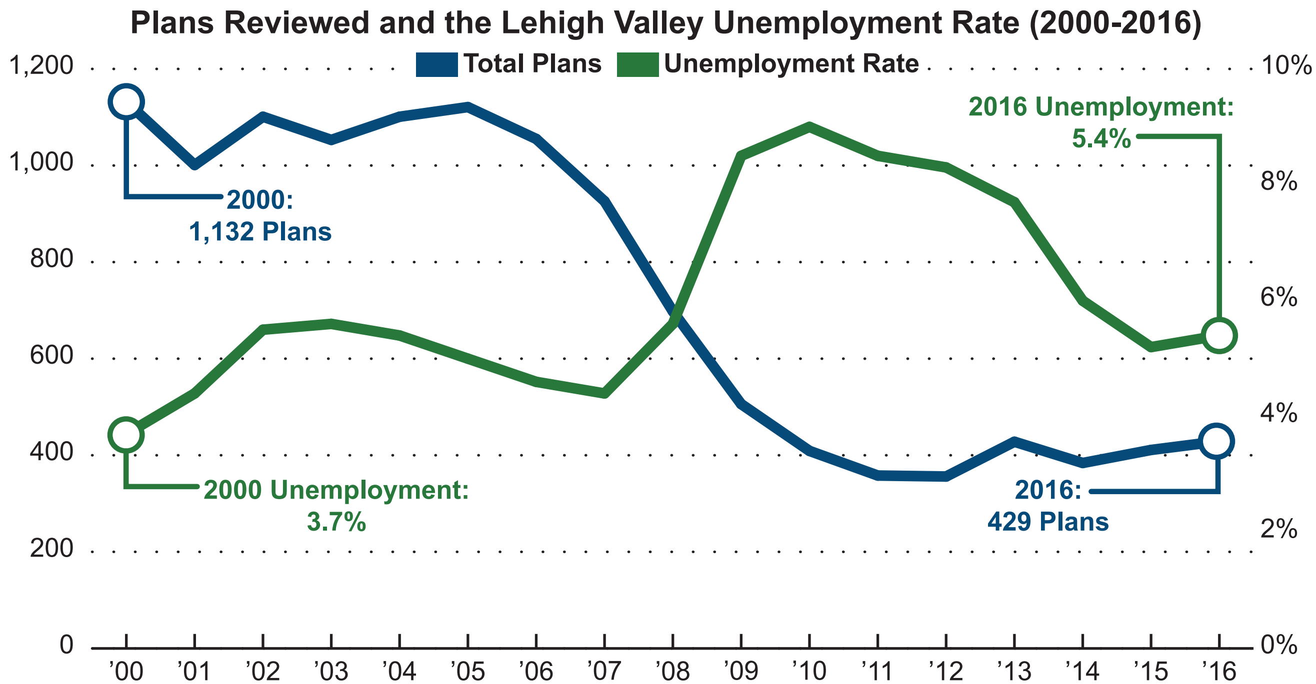
Plan Activity

The number of plans reviewed annually by the Lehigh Valley Planning Commission tends to rise and fall with changes in the U.S. housing market and economy. Plan activity spiked in the 1980s with the booming national economy, then declined sharply in the early 1990s with the onset of recession following the savings and loan crisis. After a period of relative stability throughout the 1990s and up to 2005, plan reviews dropped again following the financial crisis of 2007-2008, reaching a record low of 356 plans in 2012. In recent years, plan activity in the Lehigh Valley has stabilized around a "new normal" of around 400 plans a year.

Plans Reviewed by the Lehigh Valley Planning Commission (1981-2016)



Despite this new normal of fewer plan reviews per year, unemployment has steadily declined from its 2010 peak, suggesting that real estate and construction are not the sectors driving the region's economic growth. Reflecting demographic changes and post-recession shifts in the residential market, apartments have increasingly supplanted single-family homes as the dominant residential type being developed in the Lehigh Valley. Additionally, with increasing globalization and advances in logistics, the Lehigh Valley has emerged as a key location in the nation's supply chain, generating new employment while spurring development of large-scale warehousing and shipping facilities.



Sources:Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis; additional analysis by the Lehigh Valley Workforce Development Board

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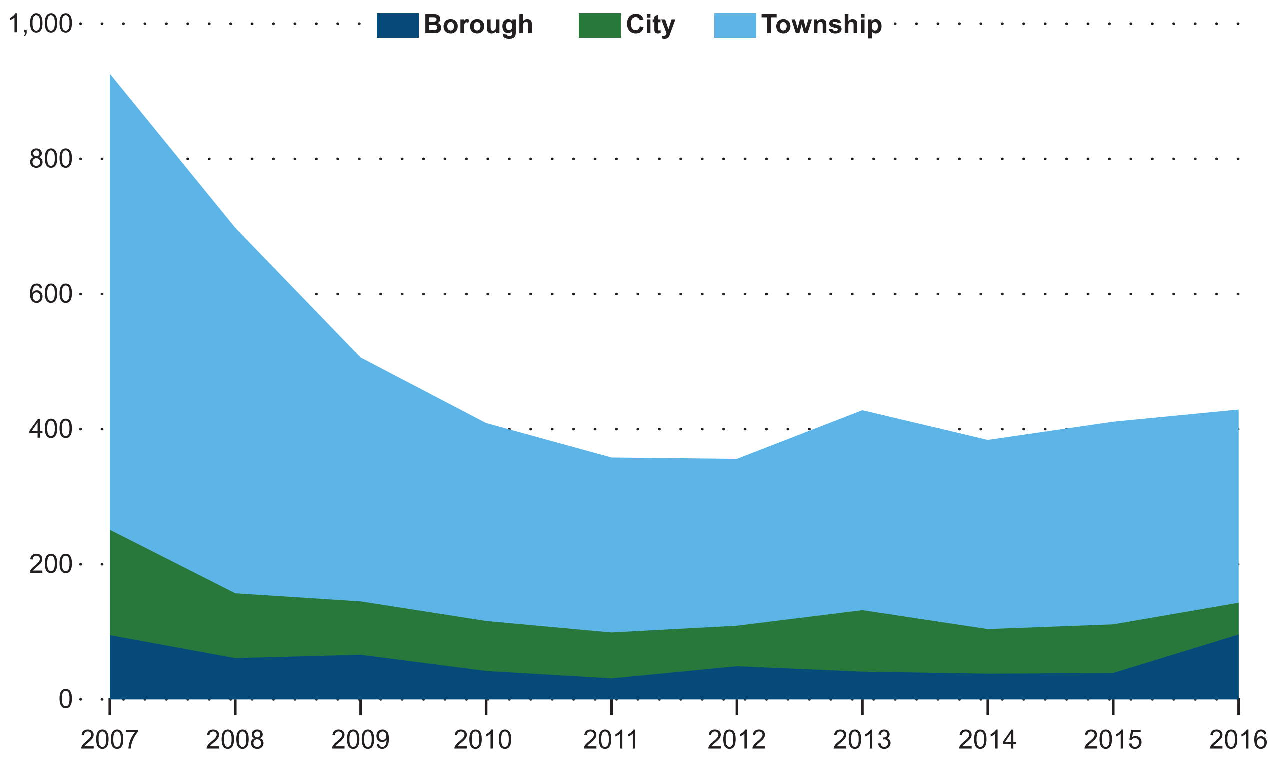
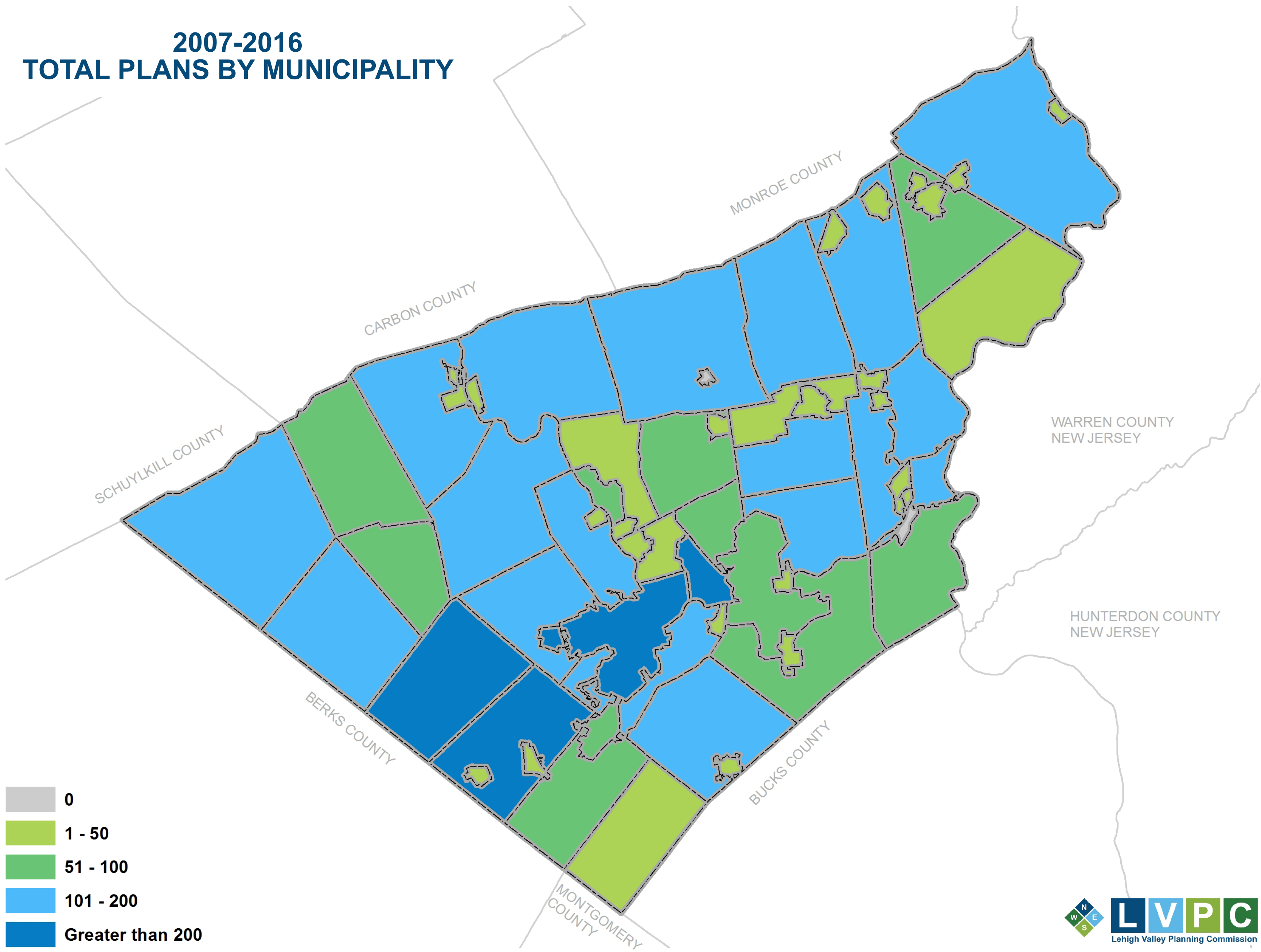
Plan Location

In 2016, plan activity hit a ten-year high in the boroughs, hit a ten-year low in the cities and remained stable in the townships. Looking at the cumulative number of plans submitted since 2007, the largest and fastest-growing municipalities submitted the most plans over the last ten years. The five municipalities with the highest ten-year cumulative plan totals were the cities of Bethlehem and Allentown and the townships of Upper Macungie, Lower Macungie and South Whitehall. Since 2007, the region's townships have accounted for about 72% of all plans submitted.

Plans Reviewed by the Lehigh Valley Planning Commission by Municipality Type



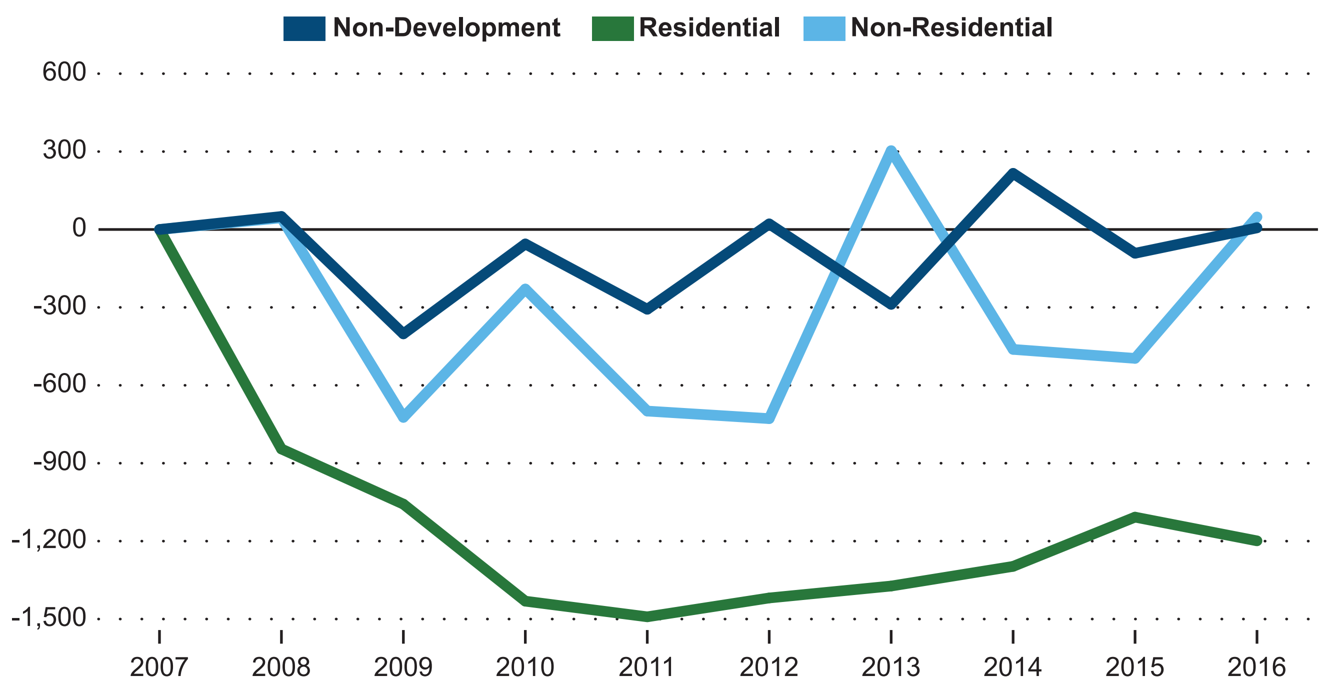
2007-2016
TOTAL PLANS BY MUNICIPALITY



Final Plan Types and Area

Using the 2007 land area totals as a baseline, annual non-residential and non-development acreage reviewed by the Lehigh Valley Planning Commission has been fairly steady despite some fluctuation from year to year. In comparison, annual residential acreage has decreased substantially over the past decade, with residential acreage in 2016 at roughly a quarter of the 2007 baseline acreage. Because single-family homes typically consume the most land per unit, this decrease in residential acreage can be attributed in part to the drop off in single-family housing development from 2007 to 2009. However, considering the rapid increase in approved residential units over the past four years, the sustained low levels of residential acreage suggests that new residential development in the Lehigh Valley is making more efficient use of the land it occupies.

Approved Land Area by Type Compared to 2007 Baseline

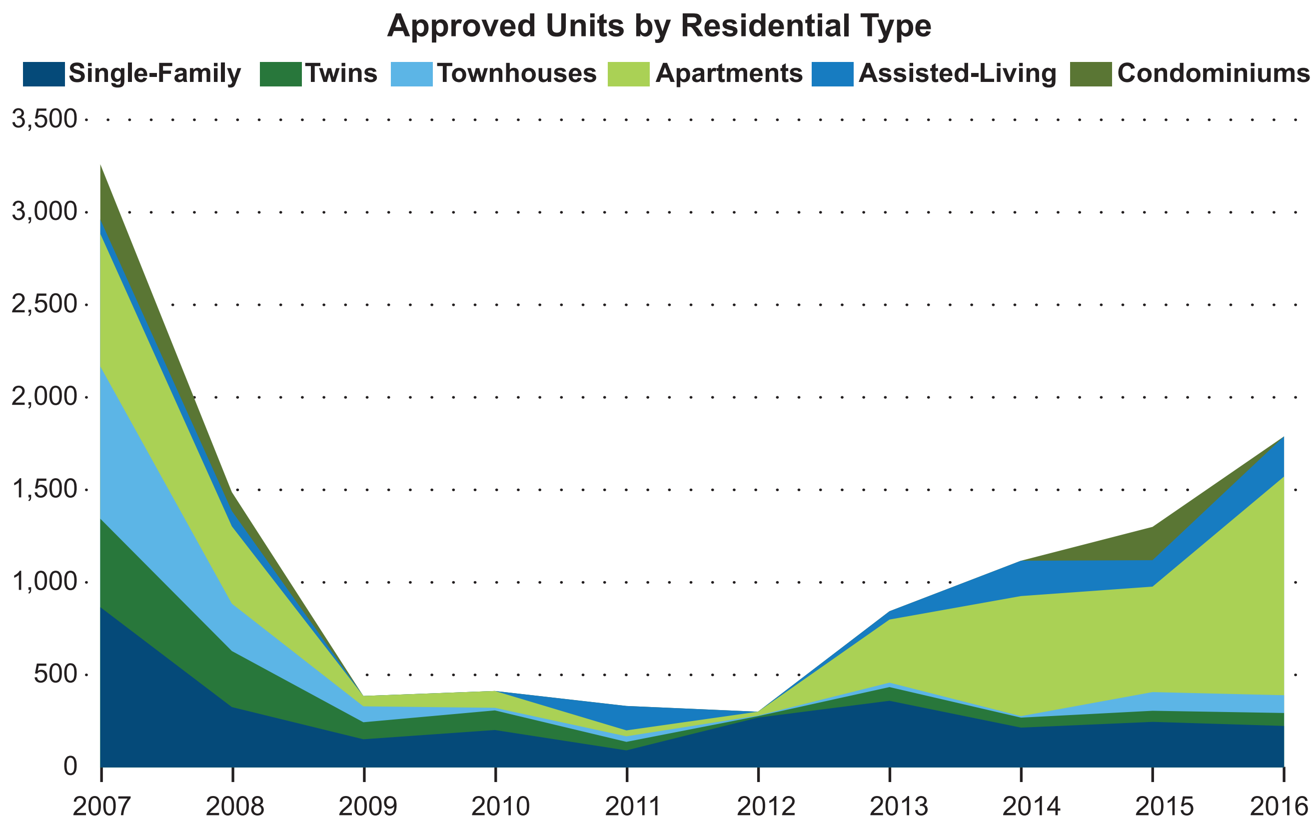


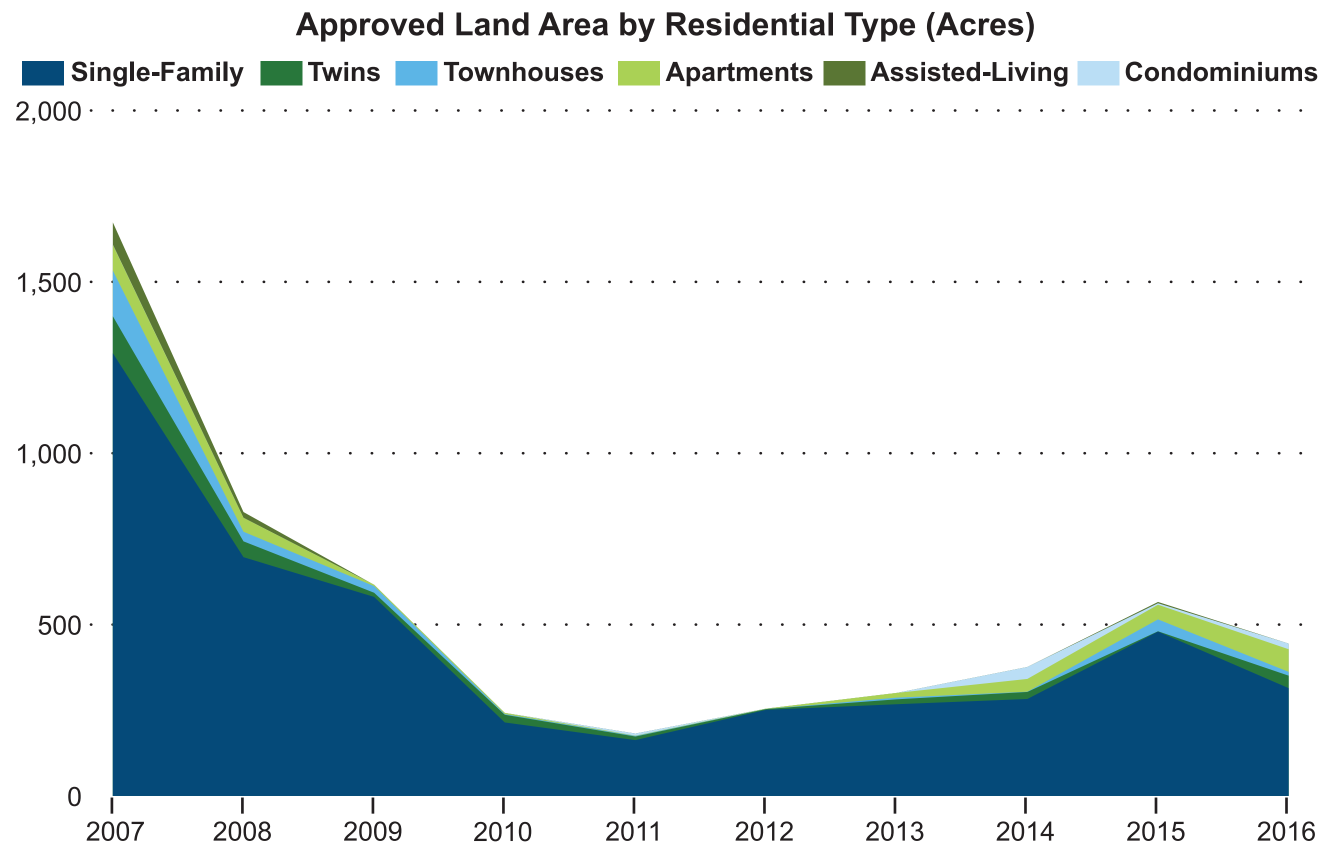
Approved Residential Types and Land Area

The number of approved residential units has rapidly increased in recent years, reaching 844 units in 2013, 1,117 units in 2014, 1,300 units in 2015 and 1,789 units in 2016. This growth has been driven largely by apartment development, which reached a ten-year high in 2016 and is expected to continue driving new residential construction in the coming years.

Despite the improving economy, demand for single-family home development remains stunted due to the lingering effects of the recession as well as changing consumer preferences. In 2016, the number of approved single-family housing units remained down three-quarters from ten years ago. This has been accompanied by a decline in the amount of acreage approved for residential development, from 1,674 acres in 2007 to under 445 acres in 2016. However, the rising number of approved housing units has not resulted in a corresponding increase in approved residential acreage, reflecting the growth of apartments as well as the decline of single family homes in the region's new housing mix.

Due to its high quality of life, abundant heath care options and lower taxes (including no taxation of retirement income) compared to neighboring New Jersey, the Lehigh Valley has attracted an increasing amount of assisted-living developments. In 2016, the number of approved assisted-living units reached a ten-year high of 217 units, due in large part to the aging of the baby boom generation. Assisted-living developments can pose unique planning challenges related to their long-term marketability and financial viability, their role in the fiscal strategies of municipalities and school districts, and their design in relation to surrounding development and the local and regional transportation network.


Approved Units by Residential Type
Single-Family
Twins
Townhouses
Apartments
Assisted-Living
Condominiums
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016



Approved Land Area by Residential Type (Acres)
Single-Family
Twins
Townhouses
Apartments
Assisted-Living
Condominiums
2,000
1,500
1,000
500
0
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

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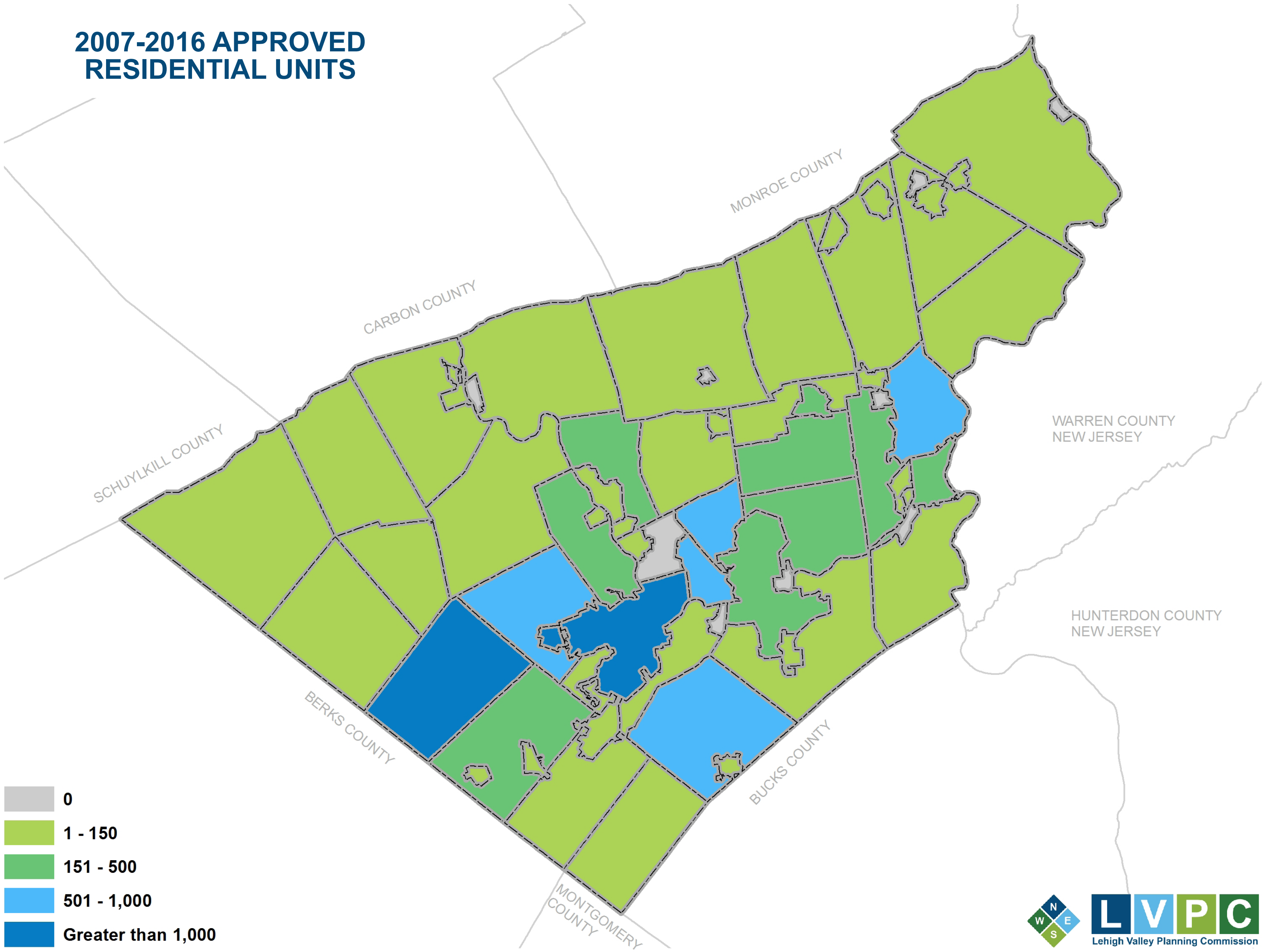
Location of Approved Residential Development

Over the last ten years, Upper Macungie Township (2,504) and Allentown City (1,374) saw the most approved residential units, followed by Upper Saucon Township (980), Bethlehem City (785), Hanover Township (590) in Northampton County, South Whitehall Township (589) and Forks Township (586). The region's boroughs have experienced limited residential development activity since 2007. Of the Lehigh Valley's 27 boroughs, about one-third saw no approved units over the last ten years, about another third saw less than ten approved units, and only one saw more than 100 approved units.

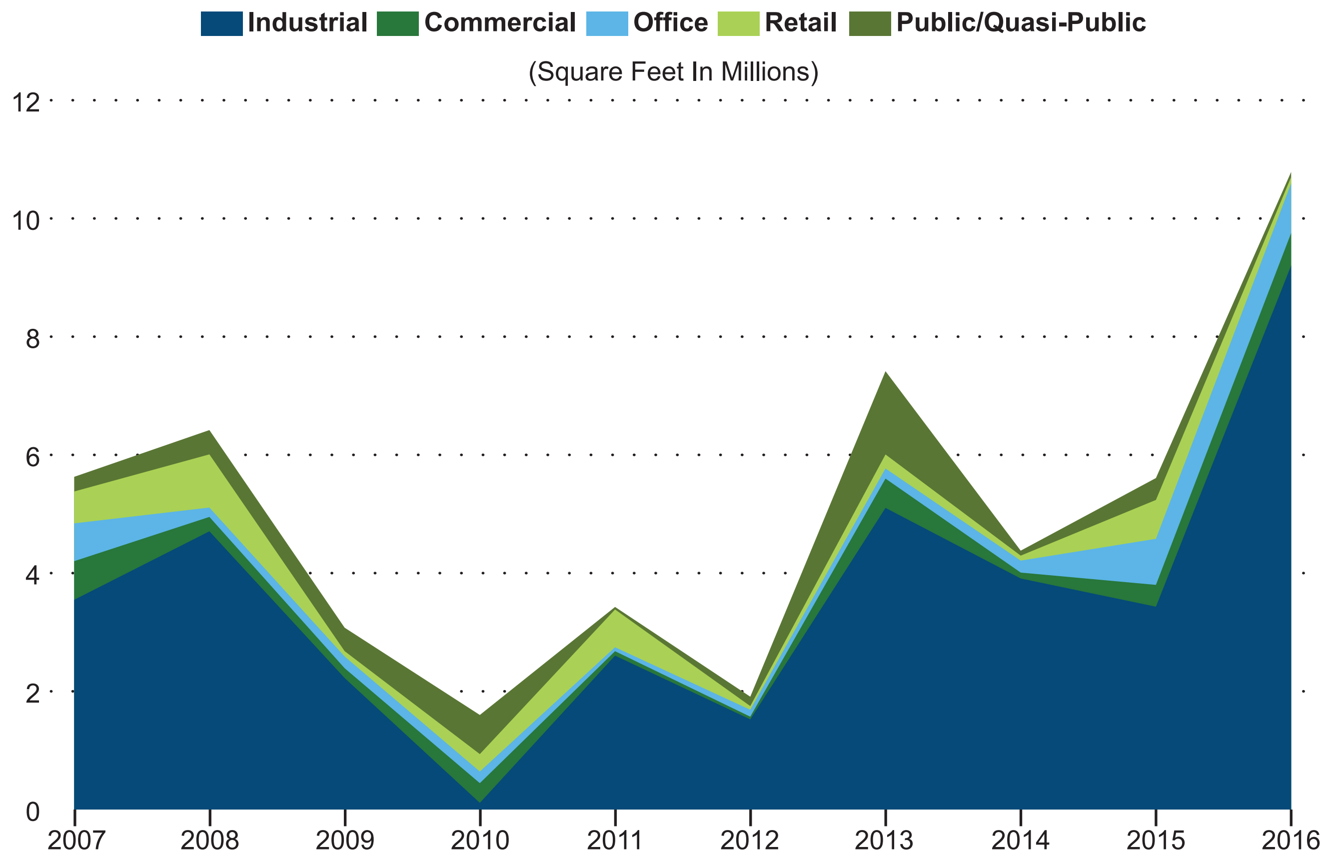
Haven Ridge by Paxos Homes in Whitehall Township, Photo by Craig Kackenmeister/LVPC

2007-2016 APPROVED RESIDENTIAL UNITS



Approved Non-Residential Floor Area by Type

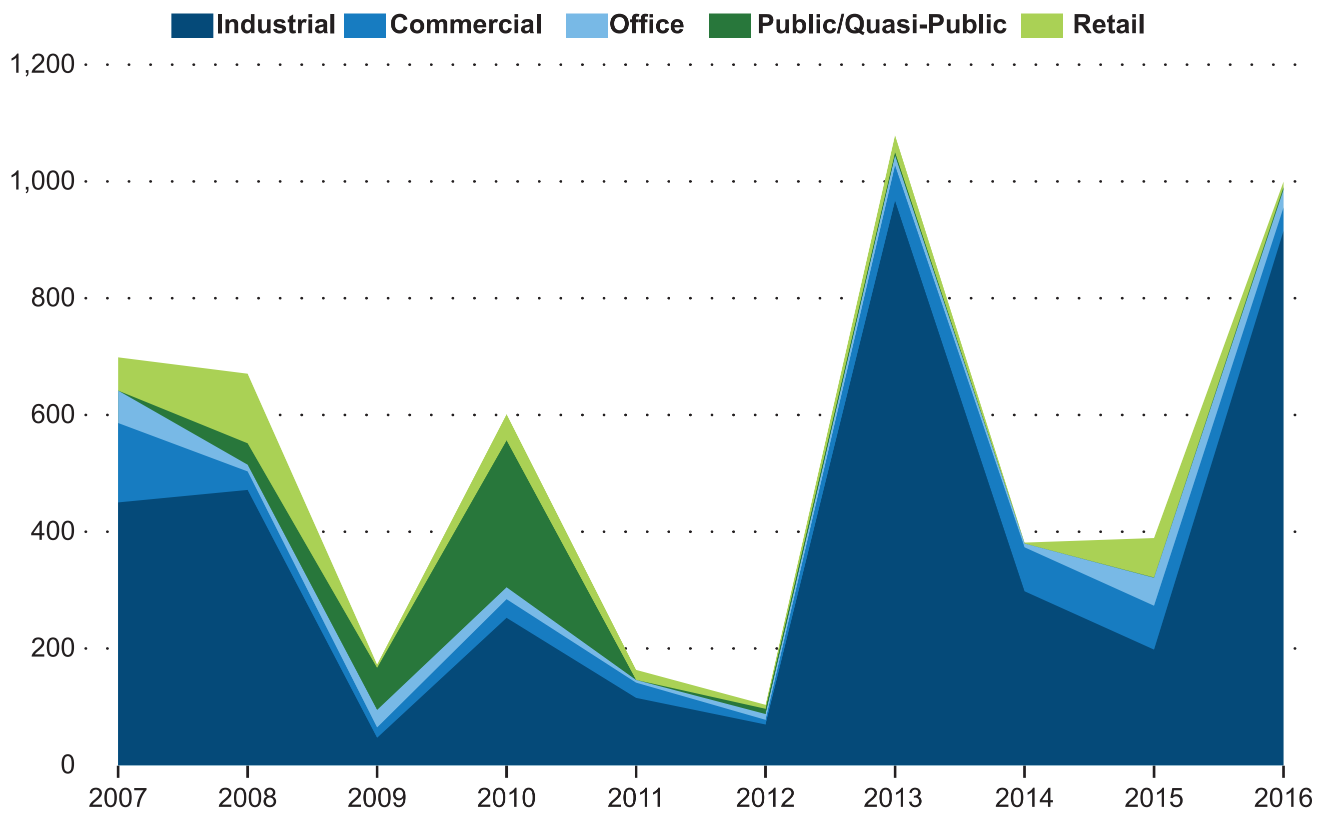
The total approved non-residential floor area for 2016 increased by 92% over the previous year, reaching its highest level within the past ten years.



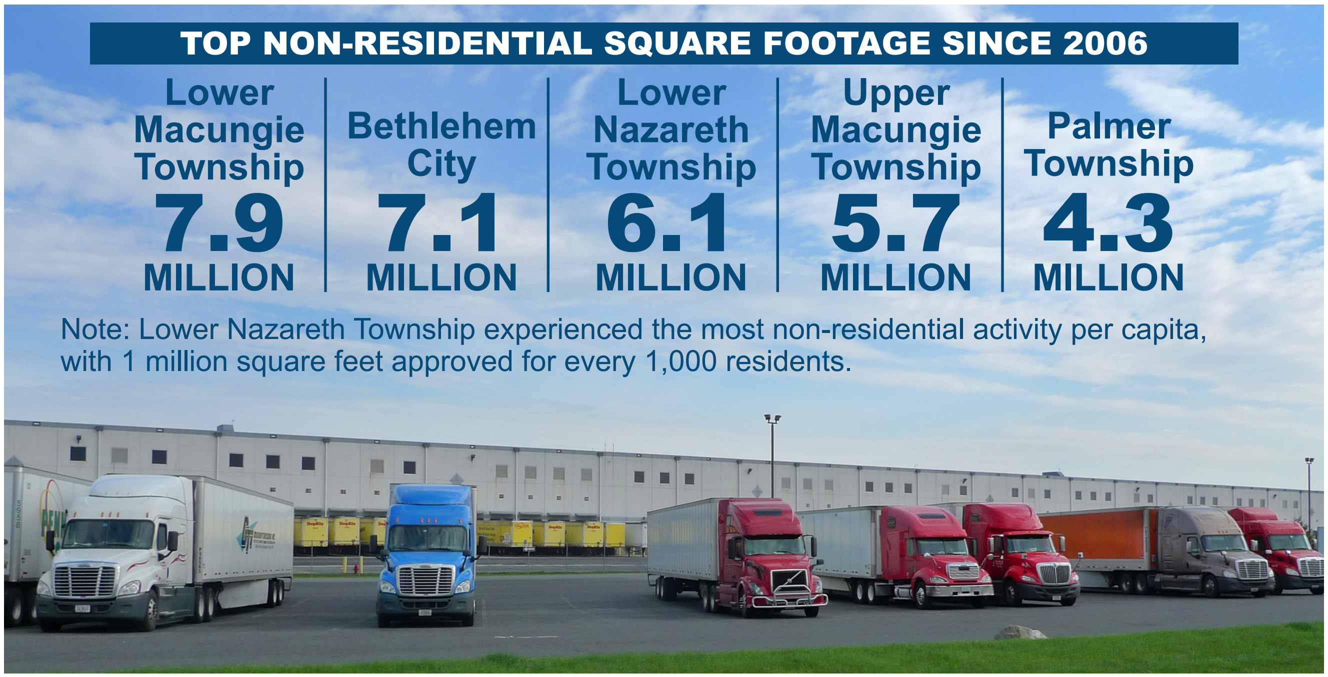
Industrial development continues to dominate non-residential development in the Lehigh Valley, as it has for most of the last decade. Much of this industrial development is related to logistics and warehousing. With its locational advantages, robust transportation infrastructure, large labor force, and competitive land prices and commercial rental rates, the region is an attractive location for large-scale warehouse and distribution properties. This recent growth in industrial development is only expected to be amplified by the recently completed Panama Canal expansion and the continuing rise of online retailing. However, despite the peak in non-residential floor area reached in 2016, the 1,000 acres of associated land area was still below the 1,239 acres of non-residential land area approved in 2013.

Office development activity continues to gain momentum in recent years, while activity in the remaining non-residential sectors continue to fluctuate from year to year, showing no decisive trends over the past ten years.

Approved Non-Residential Land Area by Type (Acres)



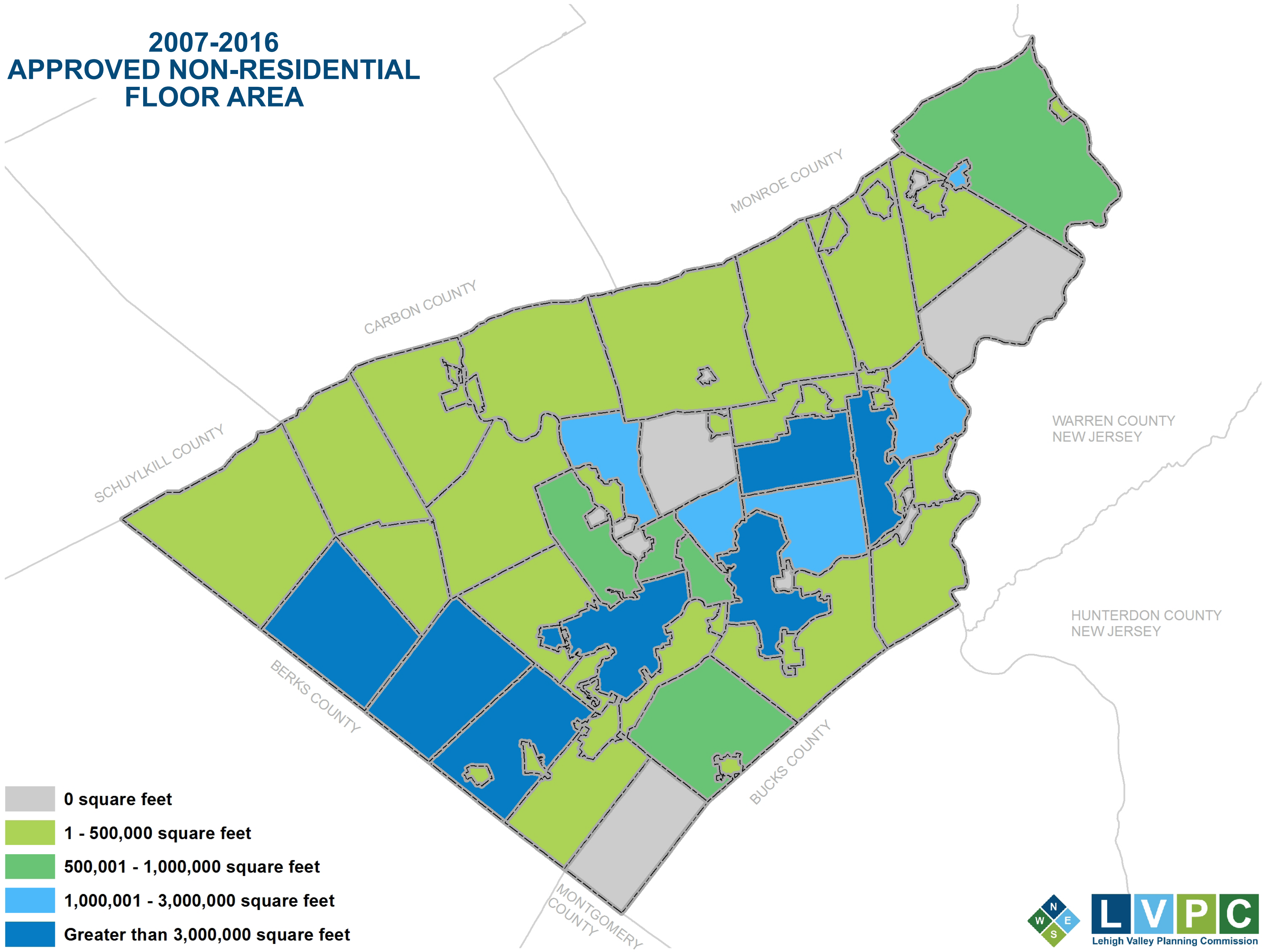
Location of Approved Non-Residential Development



Nestle's Warehouse in Upper Macungie Township, LVPC file photo

The region's boroughs have experienced limited non-residential development activity since 2007. Of the Lehigh Valley's 27 boroughs, nine saw no approved square footage over the last decade, and only three saw more than 50,000 square feet. Wilson Borough approved 200,000 square feet, Northampton Borough approved 140,000 square feet and Tatamy Borough had 100,000 square feet approved. Of the region's three cities, Bethlehem had the most approved square feet per 1,000 residents with 95,000, followed by Allentown with 29,000 and Easton with 10,000.

2007-2016 APPROVED NON-RESIDENTIAL FLOOR AREA



LVPC Lehigh Valley Planning Commission

CONCLUSION

In 2016 and 2017, the Lehigh Valley finds itself at a crossroads.

Residential development continued to gain momentum in 2016, as an apartment boom swept into Allentown, Bethlehem and some of the region's largest townships. As apartment building takes on a much larger share of the post-recession residential profile and single-family home development remains slow, significantly less land is being consumed annually for housing development. These trends represent a unique opportunity for the region's municipalities to proactively plan for more compact residential development patterns, encourage revitalization of the region's cities and boroughs, reduce dependence on automobile travel, and promote better urban design. The growth in assisted-living, and age-qualified developments, poses unique planning challenges and warrants continued observation to ensure their long-term sustainability and viability.

While development pressure from residential uses has eased over the past decade, pressure from non-residential uses is only expected to grow as the Lehigh Valley emerges as a key location within the national logistics network and supply chain. Growth within the warehousing and logistics sector will continue to impact the region's transportation infrastructure, while exerting more and more development pressure on agricultural and open space land.

The regional distribution of approved non-residential development raises several planning issues related to employment and transportation infrastructure. Infill and adaptive reuse development in the region's cities and boroughs are bringing new housing, employment and commerce into historic urban cores and reinforcing a more centralized transportation network. However, the warehouse projects currently driving non-residential development are generating employment largely at the urban periphery, creating challenges to providing adequate transit service and reducing employee dependence on automobile use. Likewise, the rise of e-commerce, which is driving much of the growth in warehousing and logistics, will continue to reshape the local retail and commercial landscape in many unpredictable ways.

Butz Corporate Center III in Allentown, Photo courtesy of Alvin H. Butz, Inc.

The challenges for local and regional planners include developing and maintaining the transportation network to accommodate anticipated growth, ensuring that new development is appropriately and effectively designed, and coordinating development to minimize conflicts and potential impacts.

As the economy and landscape of the Lehigh Valley continue to evolve, it is critical that the region works together to achieve the balance of development, redevelopment and conservation that best meets the needs of its residents. The update of the Comprehensive Plan for Lehigh and Northampton counties, which is currently underway, represents an important opportunity for the region to assess its current position and chart a path forward into a promising future.

GLOSSARY

Approved Development: The land development activity described in approved final plans. Once the final plan is approved and recorded, lot sales and/or development may commence. According to the Pennsylvania Governor's Center for Local Government Services, "no building permit should be issued unless the lot or parcel of ground is part of an approved and recorded plan."[2]

Building Permit: A permit to build or construct improvements to real estate. Only once the county has recorded the final plan can the developer or lot purchaser apply for building permits. The Lehigh Valley Planning Commission does not issue building permits, nor oversee any aspect of the building permit process.

Final Plan: The final plan is generally the second plan to be reviewed by the municipality and the Lehigh Valley Planning Commission. The final plan depicts all of the content in the preliminary plan, but adds detailed survey, construction, and engineering data and is signed and sealed by a licensed engineer. Once the final plan is determined to comply with the requirements of the municipal SALDO, the municipality will generally approve the plan, and the developer/landowner will submit the plan to the county Recorder of Deeds. Only after the plan is recorded can the landowner commence lot sales and/or development. It is important to note that for smaller proposals the preliminary plan may double as the final plan.

Land Development: The construction of public or private improvements. Land development plans are submitted in two to three stages: an optional sketch plan, followed by a preliminary plan, followed by a final plan. All land development plans must be approved by the municipality and reviewed by the Lehigh Valley Planning Commission in their preliminary stage.

Note that the Lehigh Valley Planning Commission follows the state definition of "land development." This definition is articulated in the Pennsylvania Municipalities Planning Code as including:

[2] Pennsylvania Governor's Center for Local Government Services, 2015. Planning Series #8: Subdivision and Land Development in Pennsylvania.

1) The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:

   (i) a group of two or more residential or non-residential buildings, whether proposed initially or cumulatively, or a single non-residential building on a lot or lots regardless of the number of occupants or tenure; or

   (ii) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.

2) A subdivision of land.

Non-Development: Subdivision activity that creates new lots, expands a parking lot or involves some other physical improvements, but otherwise involves no new proposed construction.

Non-Residential Development: Subdivision or land development activity for commercial or industrial uses, including warehouses, retail, transportation, recreation, office, agriculture and non-development. Plans for non-residential development include information on non-residential acreage and square feet of building floor area.

Preliminary Plan: The preliminary plan is generally the first plan to be reviewed by the municipality and the Lehigh Valley Planning Commission. Required by law, the preliminary plan includes information about the existing conditions of the site and the general plan of development. Information on proposed streets, lot layout, building dimensions and other project attributes are provided with engineering and surveying detail, as required by the municipal Subdivision and Land Development Ordinance (SALDO). In general, once a municipality has approved a preliminary plan, the landowner must submit a final plan responding to any conditions required by the municipality.

Proposed Development: The land development activity described in sketch and preliminary plans. Note that years may pass between the approval of the preliminary plan and the submission of the final plan, and sometimes no final plan is ever submitted.

Residential Development: Subdivision or land development activity for residential uses, including single family homes, twins, townhouses, apartments, condominiums, mobile home parks, assisted living and planned residential development. Plans for residential development include information on residential acreage and number of units.

Sketch Plan: Sketch plans provide the developer and the municipality an opportunity to discuss a proposed project on an informal basis. Though not required by law, a municipality may mandate a sketch plan for projects meeting certain criteria. Since sketch plans are less expensive to prepare than preliminary and final plans and are drafted much earlier in the development process, a developer may be more willing to respond to comments on a sketch plan than comments on a preliminary plan. Sketch plans will usually include a location map, a property line map, and the general layout of the proposed subdivision or land development.

Subdivision: The creation of new property lines. Subdivision plans are typically submitted in two stages: a preliminary plan followed by a final plan. All subdivision plans must be approved by the municipality and reviewed by the Lehigh Valley Planning Commission.

Note that the Lehigh Valley Planning Commission follows the state definition of "subdivision." This definition is articulated in the Pennsylvania Municipalities Planning Code as follows:

> The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development.

Lehigh Valley Planning Commission

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