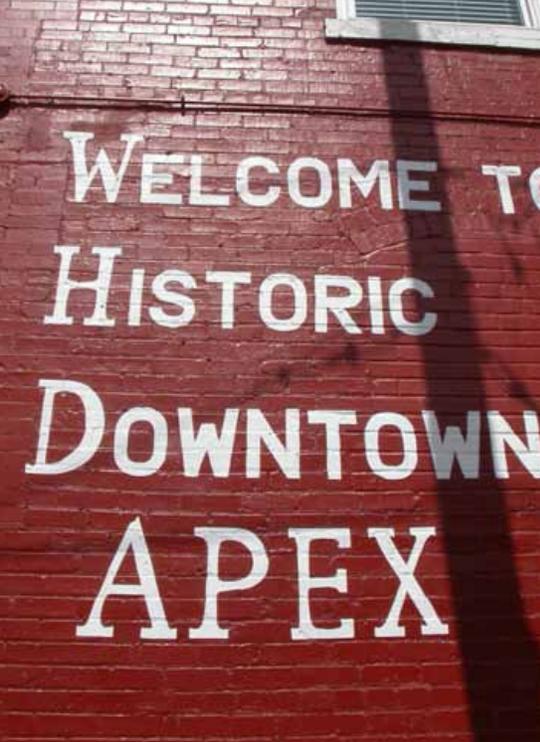


THE PEAK OF GOOD LIVING

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P	L	A	N
2	0	3	0

The Apex Comprehensive Plan



ENVISIONING A FUTURE

Peak Plan 2030 envisions a future where Apex continues to grow and prosper in a way that preserves the small town character and ensures the Town remains "The Peak of Good Living."



A Special Thanks to the Members of
the Peak Plan 2030 Advisory Committee

Steve Adams

Jonathan Allen

Tom Colhoun

Liana Diberto

Jeff Hastings

Larry Jordan

Cat Kearns

Sheila Morrison

PJ Puryear

Dianne Reaves

Jeff Roach

Gene Schulze

Mack Thorpe

Molly Weston

Graham Wilson

**THE
PEAK OF
GOOD LIVING**

P	E	A	K
P	L	A	N
2	0	3	0

The Apex Comprehensive Plan

Town of Apex

73 HUNTER STREET • APEX NC 27502 • 919.249.3400

Prepared by

LandDesign

223 North Graham Street

Charlotte, NC 28202

In Association with

Kimley Horn & Associates

JULY 2013

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7	02	PLAN FRAMEWORK Peak Plan 2030 Goals Issues and Opportunities
19	03	2030 LAND USE MAP 2030 Land Use Map Description of Land Uses Description of Mixed-Use Nodes
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PEAK PLAN 2030 RECOMMENDATIONS*

BALANCED GROWTH

- Revise the Unified Development Ordinance. Virtually all of the recommendations pertaining to land use and development design can be implemented through the application of land development regulations. The traditional vehicle for these regulations is the community's Unified Development Ordinance (UDO). The UDO establishes allowable uses by district and sets forth provisions for development design, such as standards for subdivisions and commercial centers.
- Encourage non-residential land uses to achieve a more sustainable, balanced tax base in Apex.

PLACEMAKING

- Conduct and adopt detailed, special studies or small area plans for key activity centers.
- Encourage both vertical and horizontal integration of uses in mixed-use districts, with an emphasis on pedestrian linkages.

HOUSING

- Accommodate a mix of housing by type (e.g. single-family homes, townhomes, multi-family) and tenure (own/rent) to serve a growing and increasingly diverse population.
- Encourage density increases that do not alter the character of downtown through lot size changes and coverage modifications, cottage and cluster housing development models and accessory units.

ECONOMIC DEVELOPMENT

- Identify new industrial/business/office park sites totaling 100-150 contiguous acres on NC-55, US-64, US-1, and Jessie Drive to accommodate non-retail employment growth.
- Partner with Town of Apex Economic Development staff and the Chamber of Commerce to market these sites to potential employers.

TRANSPORTATION

- Implement the Apex Transportation Plan 2011 Plan Update.
- Conduct an inventory of informal trails such as worn footpaths along roads, through parks and open spaces, and neighborhood street corridors without dedicated sidewalks in the Town and ETJ to identify future potential additions to the greenway network and to help prioritize sidewalk projects.

PUBLIC SERVICES & FACILITIES

- Provide adequate fire, police, and emergency service in all areas.
- Continue to assess public facility needs to meet demand generated by existing, as well as future growth and development.

PARKS, RECREATION FACILITIES, GREENWAYS & OPEN SPACES

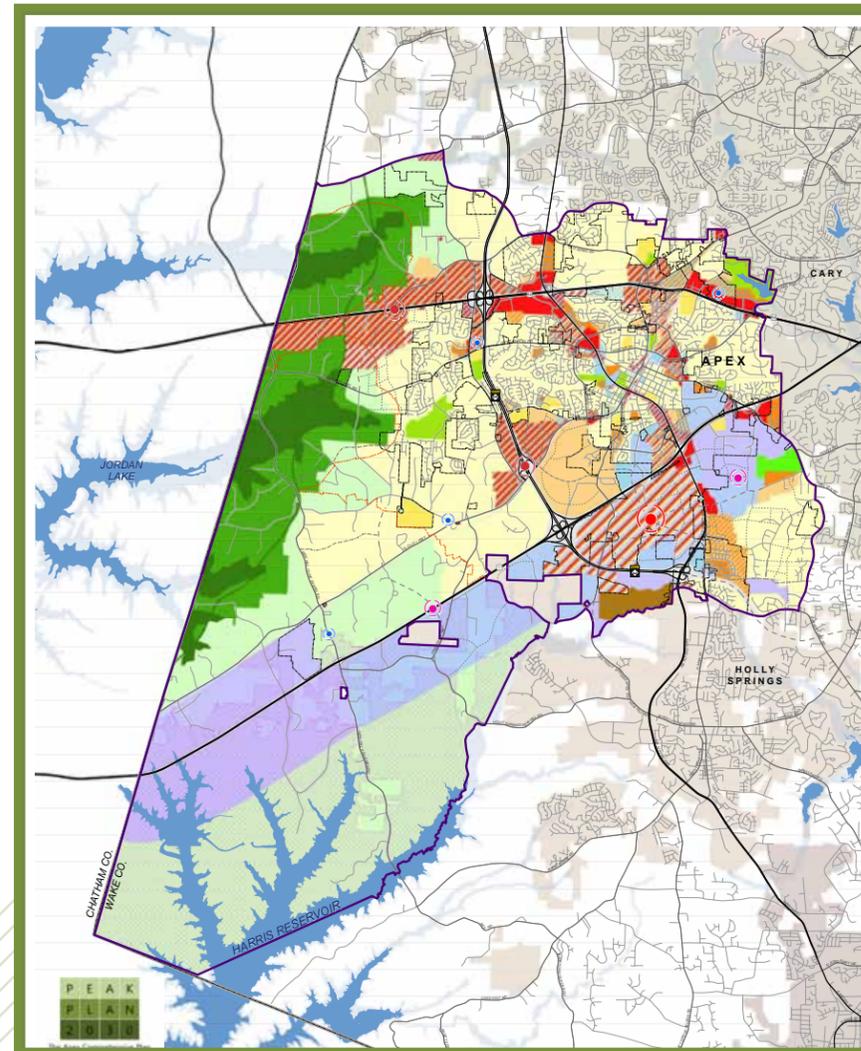
- Implement recommendations of the Parks, Recreation, Greenways and Open Space Master Plan.
- Develop criteria for the prioritization of funding for greenway connections.

ENVIRONMENTAL & NATURAL RESOURCES

- Promote the use of green building techniques and rainwater capture systems in new developments.
- Encourage low impact site development and more ecologically designed and sustainable sites with functional landscapes.

HISTORIC & CULTURAL RESOURCES

- Continue to protect historic resources using tools like the National Register of Historic Places Historic District designation, the Apex demolition disincentive, landmarking, the powers of the Wake County Historic Preservation Commission, and the Resource Conservation Area standards found in the Town's Unified Development Ordinance.



PEAK PLAN 2030 LAND USE MAP



PEAK PLAN 2030 GOALS

- **Balanced growth supporting a greater diversity of uses in Apex**
- **Infrastructure that helps achieve land use and growth management objectives**
- **Preservation of Apex's character**
- **A diversified economy that encourages entrepreneurs, supports existing businesses, and attracts new employers**
- **Walkable, mixed-use developments and pedestrian-oriented streets that encourage active lifestyles by integrating physical activity into daily routines**
- **Employment centers in Apex**
- **Enhancement and extension of Apex's downtown**
- **Preservation of historic places and cultural resources**
- **Transition between new development and existing development**
- **Protection of environmental and natural resources**
- **A variety of transportation options to enhance mobility**
- **A well-connected pedestrian and bicycle network**
- **A variety of housing types available to a range of incomes**

Executive Summary

PEAK PLAN 2030 ENVISIONS

a future where Apex continues to grow and prosper in a way that preserves the small town character and ensures the Town remains "The Peak of Good Living."

Peak Plan 2030 envisions a development pattern that balances the economic, social, and environmental needs of Apex, strengthens the local economy and preserves the high quality-of-life for all residents. It works to preserve and support Apex's small town character, provide a variety of transportation options, and ensure that development is supported by an efficient and effective system of utility infrastructure. The Plan promotes a place that preserves its historic and iconic areas and provides opportunities for cultural enrichment. Peak Plan 2030 ensures that as Apex continues to grow, it remains "The Peak of Good Living."

Purpose of the Plan

The Peak Plan 2030 is a policy document intended to guide development of the Town of Apex to desired community outcomes. The plan identifies specific issues and opportunities facing Apex today in order to proactively address concerns and capitalize on possibilities to improve the quality of life for Apex citizens. It provides a broad vision of the future for Apex based on a set of goals defined by residents, business owners, community leaders and other stakeholders. In addition, the plan presents strategies for achieving that vision.



*partial set (refer to Chapter 4 on page 29 for full set)

01



Introduction

PEAK PLAN 2030 ENVISIONS A FUTURE WHERE Apex continues to grow and prosper in a way that preserves the small town character and ensures the Town remains “The Peak of Good Living.”

Apex has experienced exceptional growth over the past two decades. From a population of just 4,968 in 1990, to a 2012 population estimate of 45,523 residents within the study area, the town has evolved from a small, rural community to a thriving suburban destination in the Triangle Region of North Carolina. According to the State Office of Budget and Management, Apex is now the 22nd largest municipality in North Carolina.

The population in Apex has also diversified. Similar to national trends, the combined 15 to 34 age groups, or Generation Y, and the Baby Boomers (aged 45-64) make up the two largest age groups in the study area. In addition, residents classifying themselves as having Hispanic origin increased from 927 people in 2000 to 3,414 in 2012, a 268.5% increase in 12 years.

During this same time period, the nation suffered one of the worst economic and fiscal

crises in recent history. In many communities economic stagnation resulted in declining home values, widespread foreclosures, limited consumption, and high unemployment. High growth areas were hit especially hard. While Apex can definitely be considered a high growth community with an average compounded annual growth rate of approximately 5% over the last ten years, the Town weathered the difficult economic downturn with encouraging resiliency.

In fact, in a recently published study comparing the 2012 average assessed value to sales price ratio of homes in the Triangle, Apex’s homes retained their value better than all neighboring jurisdictions¹. In addition, since 2004 the average single-family home price has risen from \$178,800 to \$249,274 today. Approximately 3,725 housing units have been built in Apex’s jurisdiction² since 2004, with nearly 20% of those homes being built between 2008 and 2010.

¹*Birch Appraisal Group of Cary, Market Update, Summary of Residential Activity, RTP, North Carolina, 2012.*

²*Apex’s jurisdiction includes corporate limits and extraterritorial jurisdiction (ETJ).*

INTRODUCTION

Not only have property values increased significantly, but the Town has continually added facilities and services to ensure a high quality of life for residents. Approximately 9,000 linear feet of new greenways and four miles of sidewalk were constructed, three parks, including Apex's first dog park opened, and nearly 60 miles of roadway were either constructed or improved, including several sections of the Apex Peakway.

Today, Apex looks forward to continued growth as one of North Carolina's fastest developing communities. Driving much of this growth over the next 20 years are two major regional infrastructure projects: a portion of the Triangle Expressway and the Western Wake Regional Water Reclamation Facility (WRF).

A portion of the Triangle Expressway (NC-540) opened in December of 2012. This new toll road provides a direct connection between Apex, Research Triangle Park (RTP), and the Raleigh-Durham International Airport (RDU). Employers looking for potential headquarter sites, workers seeking a high quality of life a short drive from major employment centers, and retailers identifying sites in close proximity to growing residential populations will increasingly make Apex a destination of choice.

Scheduled for completion in 2014, the new Western Wake Regional Water Reclamation Facility will provide Apex, Morrisville, and Cary a solution to existing and future wastewater treatment capacity issues. The facility, which will be able to treat 18 million gallons each day, ensures that as each community continues to grow there will be ample supply to serve both existing and future businesses and residents.

The projected population and changes in the Town's demographics, along with the potential development pressure generated by the completion of NC-540 and the Western Wake Regional Water Reclamation Facility, will result in significant development, land use, and transportation impacts on the existing character of Town. For these, as well as many other reasons, the Town of Apex once again decided to proactively address the direction of growth through an update to the comprehensive plan.



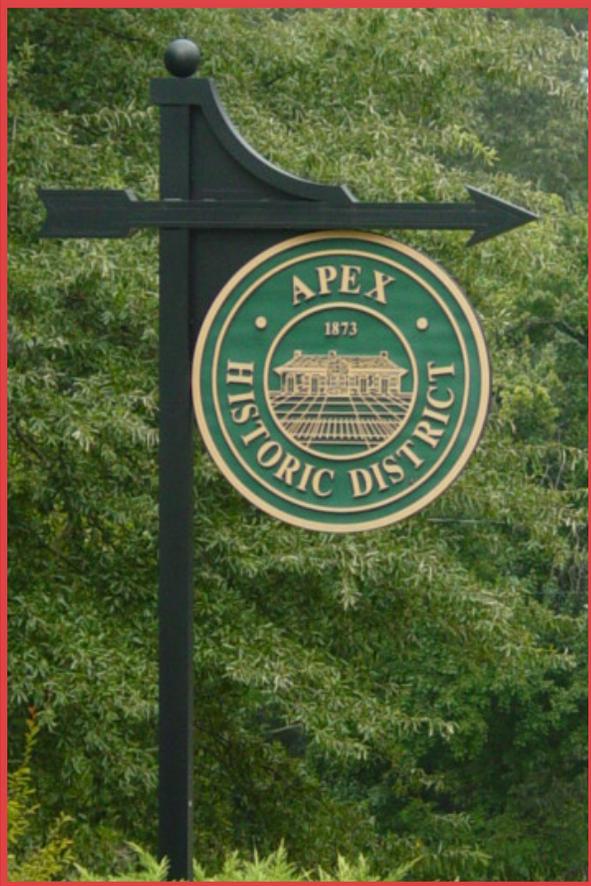
The portion of the Triangle Expressway (NC-540) that connects Apex with RTP and points north opened in December 2012.



Western Wake Regional Water Reclamation Facility is scheduled to open during the summer of 2014.

Purpose of the Plan

Peak Plan 2030 is a policy document intended to guide development of the Town of Apex to desired community outcomes. The plan identifies specific issues and opportunities facing Apex today in order to proactively address concerns and capitalize on possibilities to improve the quality of life for Apex citizens. It provides a broad vision of the future for Apex based on a set of goals defined by residents, business owners, community leaders, and other stakeholders. In addition, the plan presents strategies for achieving that vision.



Apex Historic District Marker

Relationship to Other Plans

Apex has a long-standing tradition of preparing plans to help guide growth and development decisions in the community. The most recent Apex Comprehensive Plan was adopted in 2004. The 2004 Plan responded to a period of unprecedented growth in the community and identified strategies to preserve and promote the quality of life in Apex. The Small Town Character Overlay District, the Western Area Plan, and the NC-540/South Salem Street Plan resulted from recommendations in the 2004 plan.

In 2008, the Western Area Plan was completed as an update and complement to the Apex Comprehensive Plan. The Western Area Plan anticipated changes and addressed potential issues with the construction and opening of a portion of NC-540 and the expansion of the Town's extraterritorial jurisdiction (ETJ). In addition, plans were also completed for the areas around the NC-540/Salem Street interchange and North Salem Street Corridor. These plans explored specific development opportunities and helped to manage changes in these specific areas to outcomes desired by the community. Peak Plan 2030 will supercede these plans.

More recently, the Town completed an update to the Transportation Plan and is currently in the process of updating the Parks, Recreation and Cultural Resources Plan. Each of these efforts resulted in a set of recommendations that provide the Town with a decision-making framework. The findings and recommendations of these plans inform Peak Plan 2030.

INTRODUCTION

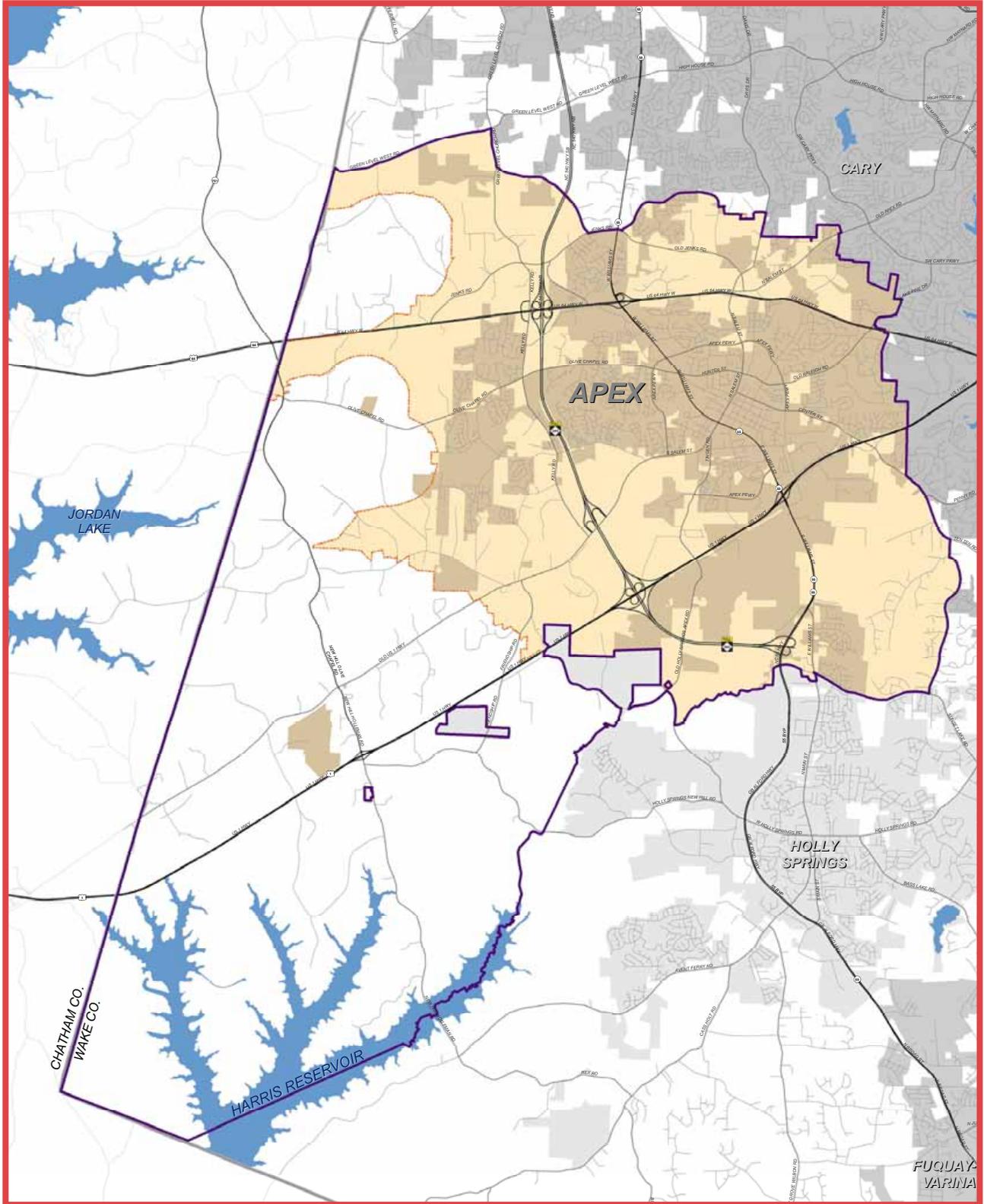


Figure 1: Study Area Map

Context

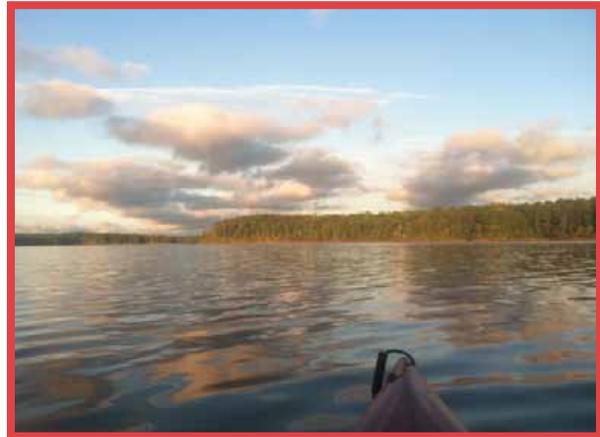
Apex has become a key player in the system of small towns and urban centers in the Triangle region of North Carolina. Understanding the larger regional context of the Triangle provides greater insight into the challenges and opportunities that Apex will face over the coming years.

Apex sits in the southwestern portion of Wake County in the Piedmont section of North Carolina less than 15 miles from three major activity centers: Raleigh, the Raleigh-Durham International Airport, and Research Triangle Park (RTP). As detailed in *Figure 1: Study Area Map* on the previous page, Apex is bordered by Cary to the north and east, Holly Springs to the south, and Chatham County to the west. All three jurisdictions are growing and planning for the future of their communities. As the region continues to grow, coordination between jurisdictions will be increasingly important in order to ensure that each community vision is realized.

Directly west of Apex is Jordan Lake. The lake serves as a main water supply for many surrounding communities in addition to being a recreation destination for the region and a critical habitat for many plant and animal species. Shearon Harris Nuclear Power Plant and Harris Reservoir form the southwestern border of the study area. As Apex continues to grow, it is important to consider the impact of new development on these areas.



Much of Apex's identity is tied to its picturesque downtown.



Jordan Lake serves as a main water supply for many surrounding communities in addition to being a recreation destination for the region.



Abbingdon is one of many family-friendly neighborhoods in Apex.



Stakeholder interviews involved meetings with a variety of interest groups, including real estate developers.



Project team members worked with the Advisory Committee on the plan.



Over 180 people attended the community workshop held in March.

Public Involvement Process

Key to the update of Peak Plan 2030 is an inclusionary public engagement process. Understanding community values today ensures that this plan, implemented in accordance with the recommendations, supports and advances those priorities over the long term.

ADVISORY COMMITTEE MEETINGS

This effort is informed by the Peak Plan 2030 Advisory Committee made up primarily of residents and property owners throughout the study area and also includes representatives from Town Council; the Planning Board; the Parks, Recreation, and Cultural Resources Advisory Committee; the Chamber of Commerce; and the development community. This group met regularly through the process to set goals, provide feedback, and advise the project team on plan concepts and recommendations. A list of the Peak Plan 2030 Advisory Committee members can be found in the acknowledgements section of this document.

STAKEHOLDER INTERVIEWS

Stakeholder interviews were conducted to verify and supplement the data gathered and mapped, to explain the conditions observed, and to further understand the issues and opportunities that affect the study area and the plan. Their input supplemented the feedback received directly from citizens and property owners participating in the process. The stakeholders included key personnel from Town departments as well as representatives of interest groups who could address questions about the following topics: economic development, historic areas in the ETJ, neighborhoods, and emergency services.

COMMUNITY MEETINGS

A community workshop was held March 6-7, 2013. This two-day workshop provided an opportunity for Town staff, property owners, residents, and other key stakeholders to work together to develop the 2030 Land Use Map and plan components. The draft map was presented during a public open house. All feedback provided during the community workshop was considered in the refined land use map.

A second meeting was held on May 9, 2013. During this meeting community members reviewed the final plan, discussed recommendations to implement the vision, and prioritized action steps.



Community members provided comments on a variety of themes including land use and transportation.



Community members worked with the project team to refine the land use concept during the workshop.



Community members reviewed mixed-use area concepts.

02

Historic
Downtown
Apex



Established
1873

Plan Framework

PEAK PLAN 2030 WAS DEVELOPED THROUGH A six-month process that incorporated an analysis of existing conditions, series of community meetings, and work sessions with Town of Apex planning staff.

Peak Plan 2030 Goals

The Peak Plan 2030 Advisory Committee worked with the project team to develop the following goals. These goals, which were vetted at the community meetings, were used to guide the development of Peak Plan 2030.

- Balanced growth supporting a greater diversity of uses in Apex
- Infrastructure that helps achieve land use and growth management objectives
- Preservation of Apex's character
- A diversified economy that encourages entrepreneurs, supports existing businesses, and attracts new employers
- Walkable, mixed-use developments and pedestrian-oriented streets that encourage active lifestyles by integrating physical activity into daily routines
- Employment centers in Apex
- Enhancement and extension of Apex's downtown
- Preservation of historic places and cultural resources
- Transition between new development and existing development
- Protection of environmental and natural resources
- A variety of transportation options to enhance mobility
- A well-connected pedestrian and bicycle network
- A variety of housing types available to a range of incomes

The following section details the framework that guided development of the plan.

Summary of Issues & Opportunities

The following section summarizes the key issues and opportunities identified through the assessment of existing conditions and analysis of market conditions as well as input from the citizens and key stakeholders. The existing conditions report, "Snapshot of Apex Today," is attached to this report. An analysis of market conditions is located in Appendix A of this report.

POPULATION GROWTH & DIVERSIFICATION

The Town of Apex has experienced exceptional growth over the past two decades. From a population of just 4,968 in 1990, to a 2012 population estimate of 45,523 residents within the study area, the Town has evolved from a small rural community to a thriving suburban destination in the Triangle Region of North Carolina. According to the State Office of Budget and Management, Apex is now the 22nd largest municipality in North Carolina. As detailed in *Figure 2: Population Growth*, it is projected that the

study area will continue to grow at around 3.2% each year. By 2030 the population of Apex could top 85,000.

With this growth come a variety of opportunities and challenges. Continued population growth will demand more housing. Additional households will boost retail spending potential in the area and drive commercial development. In addition, there will be demand for more community services such as schools, parks, and recreation facilities. New facilities for police, fire, and EMS will also be required to adequately serve the area. Similarly, infrastructure improvements will be needed to manage the demand placed on transportation and utility systems.

Similar to national trends, Apex's population is diversifying. Generation Y (aged 15 to 34) and Baby Boomers (aged 45-64) make up the two largest age cohorts in the study area. In addition, the study area is becoming slightly more ethnically diverse. The number of residents classifying themselves as having Hispanic origin grew from 927 people in 2000 to 3,414 in 2012, a 268.5% increase in 12 years.

Figure 2: Study Area Population Growth

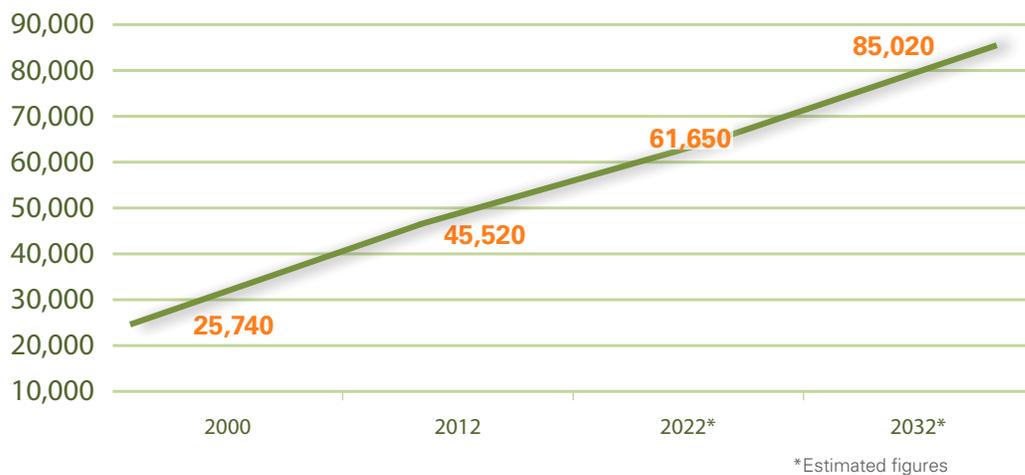


Table 1: Population by Age Cohort

Cohort	2000	2012	2000-2012	
			#	%
0 - 4	2,497	3,733	1,236	49.5%
5 - 9	2,445	4,461	2,016	82.4%
10 - 14	1,931	4,097	2,167	112.2%
15 - 24	2,291	4,598	2,307	100.7%
25 - 34	5,174	5,690	517	10.0%
35 - 44	5,534	8,923	3,388	61.2%
45 - 54	3,166	7,147	3,981	125.7%
55 - 64	1,467	3,869	2,402	163.7%
65 - 74	695	1,821	1,126	162.0%
75 - 84	412	819	408	99.0%
85+	129	364	235	183.0%
TOTAL	25,740	45,523	19,783	76.9%

Source: ESRI; Kimley-Horn and Associates

Table 2: Change in Share of Population by Race

Race/Ethnicity	2000	2012	00-12 Change
White Alone	81.8%	78.2%	-3.6%
Black Alone	11.1%	8.8%	-2.3%
American Indian Alone	0.3%	0.4%	0.1%
Asian/Pacific Islander Alone	3.6%	6.8%	3.2%
Other Race Alone	1.6%	3.2%	1.6%
Two or More Races Alone	1.6%	2.6%	1.0%
TOTAL	100.0%	100.0%	

Source: ESRI; Kimley-Horn and Associates



Generation Y (aged 15 to 34) and Baby Boomers (aged 45-64) make up the two largest age cohorts in Apex.

There are a few interesting parallels between Generation Y and aging Boomers. First, both groups prefer smaller homes that require little maintenance in close proximity to services and retail options. In addition, both age groups place a premium on being able to walk to destinations². Aging adults increasingly are looking for communities that provide options and services that allow them to age-in-place. Similarly, Generation Y places a premium on the co-location of housing to amenities such as parks, community facilities, and cultural institutions.

²"No McMansions for Millenials," Wall Street Journal, January 13, 2011, RTP, North Carolina, 2012.

LAND USE

Since 2004, approximately 1,200 acres of agricultural lands and 1,000 acres of vacant lands have been converted to other uses. As detailed in *Table 3: Land Use Change from 2004 to 2012*, land use categories with the greatest increases in acreage are residential (+1,200 acres) and commercial (+785 acres).

With a predominantly residential development pattern, Apex continues to be a bedroom community to Raleigh and RTP. The mix of non-residential and residential uses is not very diverse which affects the area’s ability to support and sustain a strong tax base. As illustrated in *Figure 3: Existing Land Use*, forty-six percent of the study area is currently residential. Commercial and industrial uses only make up 4.2% of the study area. The remaining 50% is either state-owned, parkland, or other exempt land use.

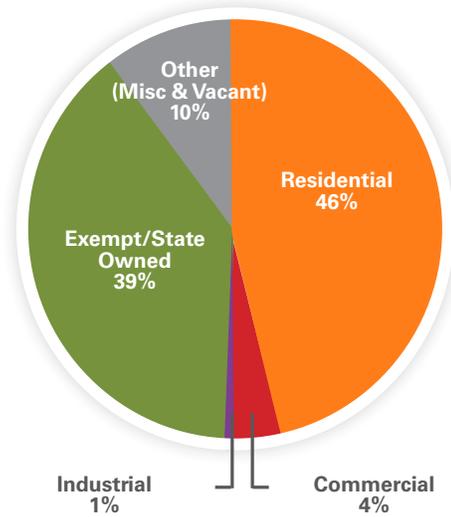
As illustrated in *Figure 4*, a detailed comparison of land use to the assessed value of land indicates that townhomes have the highest average assessed value per acre at \$4.4 million but cover only 0.2% of the land area. Apex has the opportunity to diversify land uses and capitalize on market opportunities in order to generate revenue to continue to provide facilities, services, and infrastructure that ensure Apex remains a great place to live, work, and play.

Table 3: Land Use Change from 2004 to 2012

Land Use	2004 Acres	2012 Acres	00-12 Change
Agriculture	9,165	7,869	-3.3%
Commercial	802	1,587	2.0%
Industrial	206	239	0.1%
Residential	10,133	11,367	3.1%
Exempt/State Owned	12,206	12,552	0.9%
Vacant	6,505	5,490	-2.6%
Misc.	487	401	-0.2%

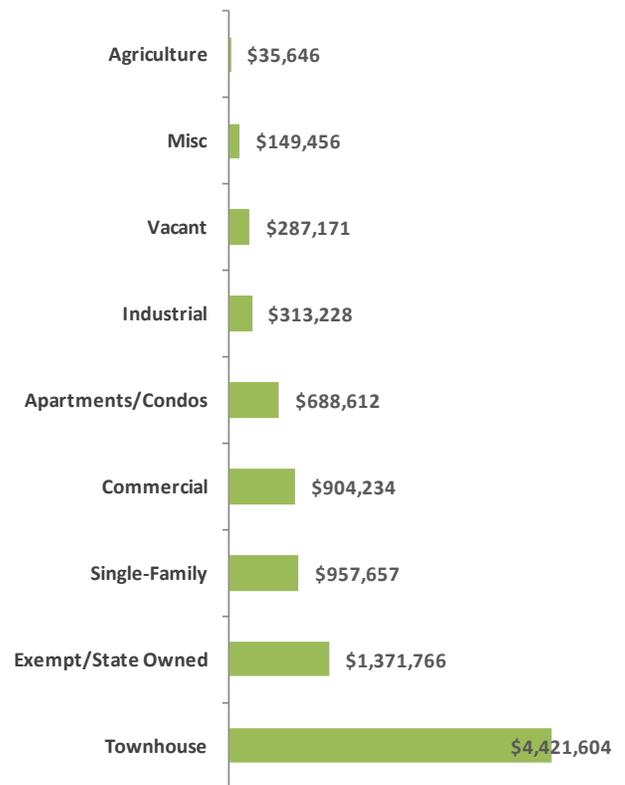
Source: Wake County Tax Parcel Data, LandDesign

Figure 3: Existing Land Use



Source: Wake County Tax Parcel Data, LandDesign

Figure 4: Averaged Assessed Value per Acre



Source: Wake County Tax Parcel Data, LandDesign

HOUSING

Nearly 7,000 housing units have been built in the study area since 2004. As noted in *Table 4: Housing Unit Trends*, eighty percent of these units are single-family; however, the number of townhouses and multi-family units grew significantly between 2000 and 2012. Similar to national trends, the share of owner-occupied housing units in the Apex study area decreased between 2000 and 2012. During the same time period, the renter-occupied share increased. The moderate 15.8% share of multi-family housing in the study area indicates that renter-occupied units also include investor-owned single-family and townhouses.

Apex will remain a place that attracts family households. The high-quality school system, child-friendly amenities, small town character and convenience to major employment centers make Apex an ideal

location choice for families. This is evidenced by the fact that from 2000 to 2012 average household size increased from 2.73 to 2.81 persons per household.

Demographic trends, such as the “graying” of the population, will drive demand for more housing options for seniors. In addition, generational preferences and economic conditions will continue to impact the homeownership rate in Apex. The inability to obtain a mortgage and Generation Y’s inclination toward renting are two of the contributing factors to this trend.

To accommodate this diversity of housing demand, Apex will continue to need to allow and encourage the development of a variety of housing types, including multi-family housing. *Table 5: Housing Unit Growth* illustrates the projected demand for housing in the study area over the next twenty years.

Table 4: Housing Unit Trends, 2000-2012

Type	2000	2012	2000-2012	
			#	% Δ
Single Family, Detached	7,833	12,063	4,230	54.0%
Single Family, Attached	400	1,646	1,246	311.7%
Multi-Family	1,343	2,695	1,352	100.7%
Mobile Home/Other	677	653	-24	-3.5%
TOTAL	10,252	17,057	6,805	66.4%

Source: ESRI; Kimley-Horn and Associates

Table 5: Housing Unit Growth 2012-2032

Unit Type	2012-2022	2022-2032	Total	% of Total
Single-Family	3,600	5,610	9,210	61.4%
Townhouse	1,100	1,450	2,550	17.0%
Apartments/ Condos	1,500	1,750	3,250	21.7%
TOTAL	6,200	4,000	15,010	100.0%

Source: ESRI, Kimley-Horn and Associates, Town of Apex

Table 6: Comparison of Median Household Incomes, 2000-2012

Area	2000	2012	2000-2012	
			#	%Δ
Study Area	\$69,441	\$77,328	\$7,887	11.4%
Wake County	\$55,024	\$60,412	\$5,388	9.8%
Raleigh CSA	\$48,424	\$53,749	\$5,325	11.0%

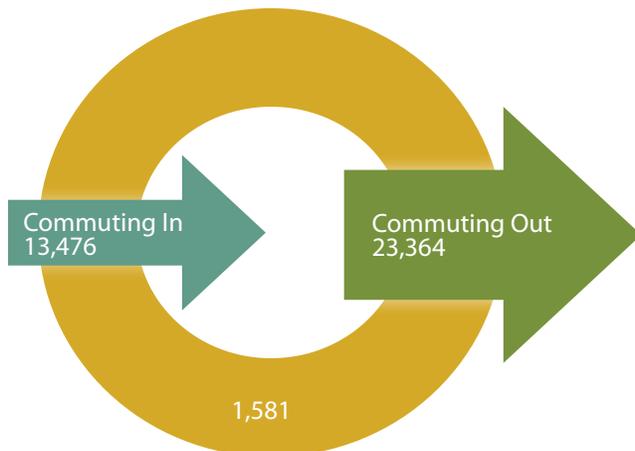
Source: ESRI, Kimley-Horn and Associates, Town of Apex

Table 7: Jobs/Housing Unit Ratio Comparison, 2012

Area	At-Place Jobs	Housing Units	Jobs/Housing Units
Study Area	15,057	17,057	.88
Wake County	441,863	389,517	1.13
Raleigh CSA	759,640	715,119	1.06

Source: US Census, NCEC, Kimley-Horn and Associates

Figure 4: Employment Inflow and Outflow, 2012



ECONOMIC DEVELOPMENT

Over time Apex has transitioned from a quiet small town to a bedroom community serving the larger employment centers of Raleigh and RTP. This proximity to key regional economic drivers will continue to attract development that will positively impact Apex’s economy.

Between 2000 and 2012, the study area experienced strong growth in households earning between \$100,000 and \$149,999 annually. This group now makes up the largest share at 23.9% (3,863 out of 16,163 households). The number of households earning over \$100,000 annually more than doubled during this time period. As detailed in Table 6: Comparison of Median Household Incomes, compared to the region, the Apex study area has a substantially higher median income than the Raleigh Combined Statistical Area (CSA).

There are an estimated 15,057 total jobs at places of employment in the Apex study area. Other Services, which includes Accommodation and Food Services, made up the greatest share these jobs, followed by Retail Trade (19.3%), Construction (11.1%), and Professional Services (10.1%). Of these positions, 13,476 are filled by in-commuters and the remaining 1,581 jobs are held by residents. Over 23,000 residents of workforce age commute outside of the study area for employment. Even if every job in Apex was filled by a resident, there would still be a net outflow of over 8,000 workers.

According to national targets, suburban communities should have a jobs-to-housing unit ratio between 1.0 and 1.1. The ratio in the Apex study area is .88. The opportunity exists to strike more of a balance between residents and employment by encouraging economic development initiatives that could result in jobs for the highly educated and skilled workforce in Apex.

Retail demand was forecasted based on the study area’s total household income, potential expenditure base, and sales capture rates. The

study area has a forecasted retail demand of approximately 1.2 million square feet of additional retail space between 2012 and 2032. Demand for net new retail square footage is expected to increase due to household growth and forecasted average income increases. Supermarkets, building materials, and restaurants make up the largest growth categories for net new demand. Given an average grocery store size of 50,000 to 60,000 square feet, this equates to approximately three new stores in the study area through 2032. *Table 8: Net New Retail Demand, 2012-2032* summarizes the expected demand by retail category in the study area over the next 20 years.

Demand for office space in the study area is based on office-occupying employment growth. Currently the study area captures approximately 1.5% of employment growth in Wake County. It is projected that Apex will capture more of Wake County's office-occupying employment growth over the next 20 years. In total, the study area is expected to have a demand for approximately 800,000 square feet of office space through 2032. This equates to office land demand of approximately 62 acres through 2032. It is projected that the highest share of office users will continue to be in the professional and business services and finance and insurance industry sectors. However, this analysis does not consider the impact that large scale development, such as Veridea, would have on projections.

Demand for industrial land is also based on Wake County employment growth trends. The study area currently captures approximately 5.5% of Wake County's industrial growth. This analysis assumes an increasing capture rate every five years. The study area industrial capture rates start at 6% between 2012 and 2017, and increase to 12% between 2027 and 2032. In total, the study area is expected to have a demand for approximately 980,000 square feet of industrial space through 2032. This equates to industrial land demand of approximately 110 acres through 2032.

Table 8: Net New Retail Demand, 2012-2032

Retail Category	2012-2032 Change (Sq. Ft.)	% of Total
Supermarkets & Groceries	186,619	14.7%
Building Materials & Supply	180,274	14.2%
Food Services- Restaurants	166,979	13.1%
Other General Merchandise	124,280	9.8%
Pharmacies & Drug Stores	102,104	8.0%
Clothing Stores	86,108	6.8%
Discount Department Stores	67,577	5.3%
Department Stores	45,273	3.6%
Furniture Stores	40,687	3.2%
Electronics & Appliances	39,251	3.1%
All Other	233,499	18.3%
TOTAL	1,272,650	100.0%

Source: Kimley-Horn and Associates

Table 9: New Office & Industrial Demand, 2012-2032

	Office Demand	Industrial Demand
Jobs	3,766	1,354
Square Feet	807,359	981,522

Source: Kimley-Horn and Associates, Woods & Poole

The opportunity exists to accommodate more non-residential uses in Apex. The 2030 Land Use Map identifies those areas where retail, office, and industrial uses are most appropriate in the study area.

TRANSPORTATION

As noted in the 2011 Transportation Plan Update, there have been many improvements to the roadway network since 2004, most notably the opening of a portion of the Triangle Expressway (NC-540) and construction of two miles of the Apex Peakway. In addition to these projects, there have been numerous enhancements to the local street network including two intersection upgrades (Lake Pine Drive at US-64 and Salem Street at NC-55), numerous widening projects, and crosswalk and signal upgrades.

Projected growth will continue to cause congestion management issues on Apex's roadways. The new toll road should alleviate some of this traffic, but issues along NC-55 and other major thoroughfares need to be evaluated to ensure mobility through the Apex system. In addition, securing funding for the completion of the Peakway is an immediate issue to address.

Since 2002, the Town has constructed over 23,000 linear feet (over 4 miles) of sidewalk, bringing the entire network to nearly 500,000 linear feet. While connectivity remains an issue in some areas, the Transportation Plan identifies 15 priority sidewalk projects to fill gaps and create linkages in the network.

In addition, there are identified needs for safety improvements along the CSX corridor and general maintenance concerns such as resurfacing of the local street network.

Funding will remain the greatest barrier to realizing the recommendations of the 2011 Transportation Plan.

WATER & WASTEWATER INFRASTRUCTURE

Apex's main water source is Jordan Lake. The water treatment plant co-owned and co-operated with the Town of Cary has a current capacity of 40 million

gallons per day (MGD) of which Apex has a 9.2 MGD capacity share. According to Town of Apex Public Works, "The plant will be expanded to 56 MGD with construction beginning in 2014. Apex will have a 12.9 MGD share of the expanded capacity." With this additional capacity, Apex should have ample supply to meet projected water demand.

Completion of the Western Wake Regional Water Reclamation Facility will reduce Apex's need to purchase sewer capacity from Raleigh for existing services. The proposed facility will provide the capacity needed for future development on the western side of Town. In addition, upgrades to existing pump stations, such as the one at Kelly Road, will provide additional service for existing and future development. However, as Apex continues to grow, additional wastewater pump stations and infrastructure will be needed to meet demand.

PUBLIC SERVICES & FACILITIES

Apex remains a great place to live due to a variety of high-quality public services and facilities. Exceptional schools are one of the reasons families choose Apex as a place to live. There are plans for four additional schools in Apex to accommodate western Wake County's growing school-aged population. In addition, Apex has an extremely efficient and dedicated team of first responders. Crime rates are low. The majority of emergency response calls are traffic-related.

However, there is an immediate need for additional fire services to provide adequate coverage in the western portion of the study area. Current fire department staffing levels do not meet Wake County service level goals. As growth continues, additional stations for police and EMS will also be needed to adequately serve the area. In addition, a lack of street connectivity near industrial areas such as Motiva and Dixie Pipeline make it difficult to access and serve the eastern side of Town.

PARKS, RECREATION FACILITIES, GREENWAYS & OPEN SPACES

Apex offers a number of park, recreation, and greenway amenities. Since 2004, the inventory of town-owned park facilities has increased to include Hunter Street Park, Seagroves Farm Park, and Salem Pond Park. The Apex Nature Park, located on Evans Road, is currently under construction. Once completed, the Nature Park will be a 160-acre facility with a variety of amenities including an amphitheater, disc golf course, dog park, lighted multi-use fields, trail system, and picnic and restroom facilities. Publicly-funded and maintained facilities are supplemented by a variety of amenities in privately-developed communities.

There are approximately five miles of greenways located in Apex, not including portions of the 22-mile American Tobacco Trail that connects downtown Durham to New Hill Olive Chapel Road in the western portion of the study area. In addition to park facilities, the Halle Cultural Arts Center, located in the historic downtown, opened its doors in January 2008. There is strong support for parks, recreation, greenways, and community facilities in Apex.

As noted in the recent update to the Parks, Recreation, Greenways, and Open Space Master Plan, there is a need for more connections between existing greenway facilities and community activity centers. Wayfinding signage is also needed. In addition, Apex could benefit from a dedicated festival space in the downtown area.



There are approximately five miles of greenways located in Apex.



Completion of, and connections to, the Beaver Creek Greenway is a priority of the Town.



The original Apex Town Hall, built in 1912, was renovated in 2008 and reopened as the Halle Cultural Arts Center.

ENVIRONMENTAL & NATURAL RESOURCES

Apex is located just east of one of the region's best natural amenities, Jordan Lake. The lake also serves as the study area's main water supply. As the town continues to grow, runoff from development will continue to be one of the biggest threats to water quality in the area.

Large homesteads and farms make up a significant portion of the western part of the study area. Not only do these lands contribute to the rural character of the area they are a low-impact, low-intensity set of uses in the critical area of the Jordan Lake water supply watershed. In addition, game lands adjacent to Jordan Lake support plant and animal habitats and provide recreational and hunting opportunities.

Encroaching development could negatively impact these resources by fragmenting wildlife corridors and contributing to non-point source pollution.



The New Hill Historic District is listed on the National Register of Historic Places.

HISTORIC & CULTURAL RESOURCES

Apex's beloved small-town atmosphere and welcoming character is tied to its historic and cultural assets. There is active community support for the preservation and renovation of historic places. Local preservation efforts have contributed to the reputation of downtown Apex as one of the most intact turn-of-the-century railroad towns in North Carolina. In addition, the Apex National Register Historic District includes 180 contributing structures. For the most part, development has respected these historic assets.

There is an enduring legacy of events and celebrations in Apex. From PeakFest to the Christmas Parade, there is a strong sense of community in the area. As previously mentioned, Apex could benefit from a dedicated festival space in the downtown area to host community events.

Within the study area, but outside of Apex's jurisdiction, sits the community of New Hill. The New Hill Historic District is listed on the National Register of Historic Places, but due to a lack of resources many of the contributing structures are falling into a state of irreversible disrepair.

Just up the road from New Hill is the community of Friendship. Settled prior to the Civil War, Friendship developed as a community of whites, freed blacks and Native Americans. Local tradition has it that several families of whites and free blacks met together with these Native Americans "in traditional Indian peace-making fashion and vowed to live as neighbors and to call their community Friendship in evidence of this mutual goal." (Source: *The Historic Architecture of Wake County, North Carolina*. Kelly Lally, 1994. Published by Wake County Government.) Interpretative signage and/or an historical marker would capture the history of Friendship for existing and future generations.



03

2030 Land Use Map

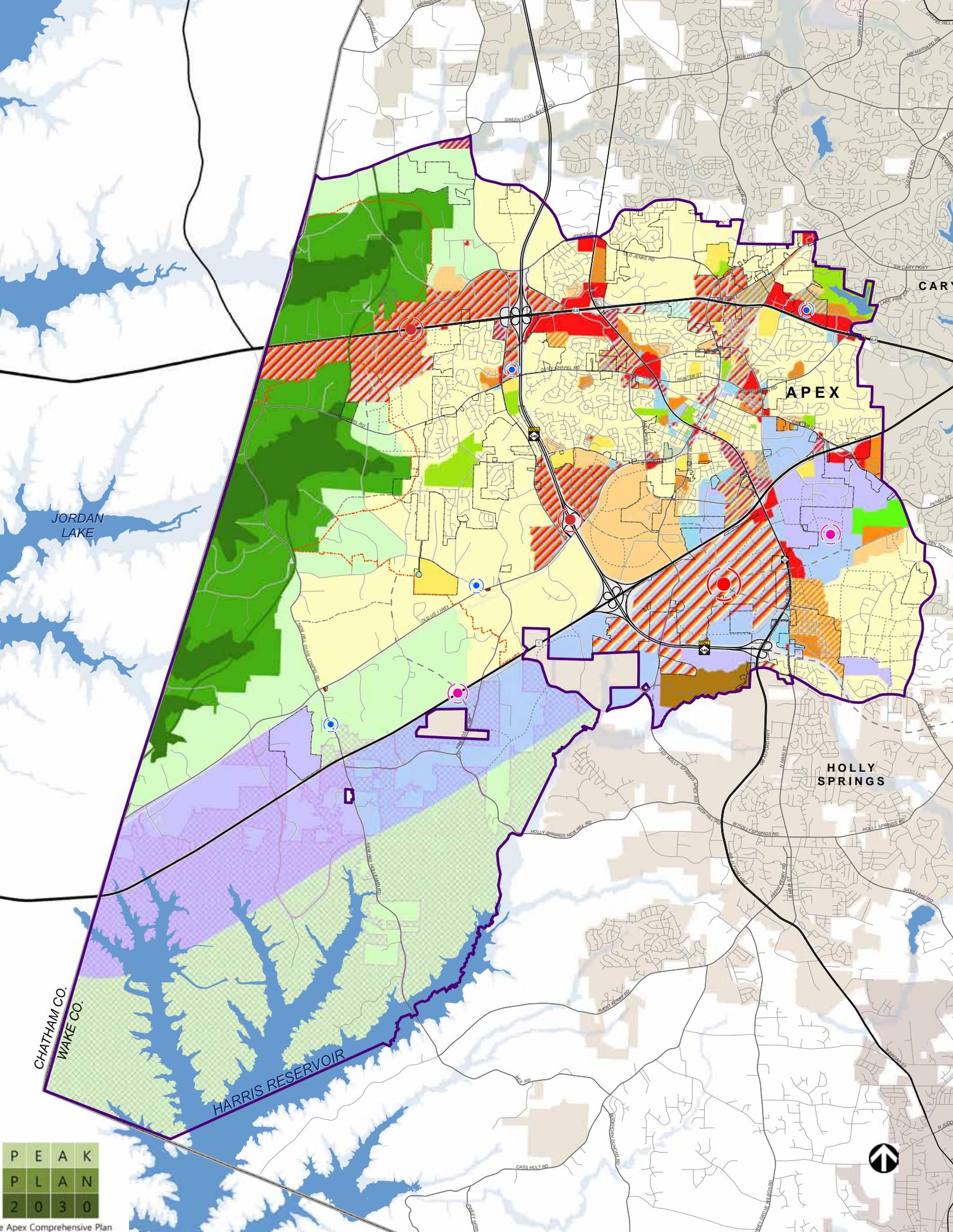
PEAK PLAN 2030 LAND USE MAP ENVISIONS a development pattern that balances the economic, social, and environmental needs of Apex, strengthens the local economy, and preserves the high quality-of-life for all residents.

2030 Land Use Map

The 2030 Land Use Map is a conceptual representation of the development patterns leaders and citizens of the Apex envision for the future of the study area. The map is descriptive, not prescriptive, conveying the community's desires for the future and the flexibility needed to accommodate unforeseen opportunities.

The 2030 Land Use Map evolved through a public process that began at a workshop with Advisory Committee members, community stakeholders, developers, local business owners, and Town staff. The two-day, on-site workshop culminated in a community open house where planners and residents worked together to refine the map that would ultimately reflect the community's desires and goals. The map's features include the following:

- Existing uses, including residential neighborhoods and publicly owned and maintained sites and facilities (e.g. parks and schools), that are likely to remain;
- Clearly defined and delineated development areas (land use categories) that reflect the community's desire to encourage growth in specific geographic areas; and
- Transportation network improvements, identified in the 2011 Transportation Plan update, that support the future land use pattern envisioned by the community.



CHATHAM CO.
WAKE CO.

HARRIS RESERVOIR

APEX

HOLLY SPRINGS



2030 Land Use Map



Description of Land Uses

Fourteen land use categories are depicted on the map, including variations of mixed-use development in certain areas. Each category is intended to indicate a predominant land use—or set of uses—as well as other features that define the character of the category. A brief description of each category is provided below. Each description is consistent with the ideas and vision the community has for the future development pattern. These descriptions do not propose a change to existing development within each category; instead, they suggest a direction moving forward and list qualities to be embodied by new development and redevelopment. *Table 4* details the relationship between categories on the 2030 Land Use Map and existing zoning districts.

PROTECTED OPEN SPACE

- Protected Open Space characterizes the areas around the Shearon Harris Reservoir and large portions of the land adjacent to Jordan Lake owned by the federal government and managed by the North Carolina Wildlife Resources Commission.
- The area will remain largely undeveloped because of the desire of the landowners to preserve the area as protected open space.

RURAL RESIDENTIAL

- Rural Residential is intended to protect and enhance the rural character of the western-most and southwestern portions of the study area. The land is to remain minimally developed with single-family residential uses at very low densities.
- The area is characterized by homestead properties, defined as one home on more than ten acres, and large tracts of agricultural lands.
- Rural Residential provides a transition from the Protected Open Spaces around Jordan Lake and Shearon Harris Reservoir to Low Density Residential.

LOW DENSITY RESIDENTIAL

- Low Density Residential is intended to remain predominately rural in character and provide for low density single-family residential development on lots smaller than those in Rural Residential areas.
- The area is characterized by single-family homes on lots averaging 10,000 square feet with densities not to exceed three units per acre.
- Low Density Residential provides a transition from the more suburban areas of Apex to the rural edges of western Wake County.

MEDIUM DENSITY RESIDENTIAL

- Medium Density Residential primary uses include both single-family homes and townhomes up to 6 units per acre.
- Medium Density Residential provides a transition from the more urbanized areas of Apex to the Low Density neighborhoods in the western part of the study area.

MEDIUM/HIGH DENSITY RESIDENTIAL

- Medium/High Density Residential primary uses include single-family homes and townhomes up to 14 units per acre.
- Medium Density/High Density Residential provides for a variety of housing options located in close proximity to major transportation corridors.

HIGH DENSITY RESIDENTIAL

- Townhomes and apartments up to 20 units per acre are included in the High Density Residential category.
- High Density Residential provides for housing options to be located in close proximity to major commercial areas and transportation corridors.

OFFICE EMPLOYMENT

- Office Employment is intended to provide land that allows for a wide range of businesses

that provide professional, managerial, or administrative services in the study area.

- Depending on the location in question and the mixture of uses the character and intensity of Office Employment varies from neighborhood business services to large-scale regional employment centers.

COMMERCIAL SERVICES

- Commercial Services is intended to delineate land where commercial uses are appropriate to serve the residents of Apex and the greater region.
- A mix of commercial conveniences is encouraged in the areas defined as Commercial Services.
- The mixture of uses, character of development, and intensity of Commercial Services varies from neighborhood serving commercial to large-scale regional retail centers.

INDUSTRIAL EMPLOYMENT

- Industrial Employment is intended to delineate land that allows for industrial uses such as light

manufacturing, tech-flex, warehousing, and processing facilities in the study area.

GOLF COURSE

- Golf Course recognizes the existing Knight's Play Golf Center.

PARKS

- Parks recognizes existing parks serving the study area. They vary in size, range of activities offered and level of programming depending on the type of park.

SCHOOL

- School recognizes existing and planned schools serving the study area.

LANDFILL

- Landfill notes the site of the existing landfill in Apex. Particular attention should be paid to adjacent uses to avoid nuisance conflicts.

RIGHT-OF-WAY

- Right-of-way illustrates the major transportation corridors in the study area.

Table 4: Relationship Between Land Use Map and Zoning Districts

2030 Land Use Map Classification	Allowable Zoning Districts
Protected Open Space	CB
Rural Residential	RA, RR, PUD
Low Density Residential	RA, RR, LD, PUD
Medium Density Residential	MD, PUD
Medium/High Density Residential	HDSF, MH, MHP, PUD, TND
High Density Residential	HDME, PUD, TND
Office Employment	O&I, TF, PUD, MEC
Commercial Services	B1, B2, PC, PUD
Industrial Employment	LI, TF, PUD, MEC
Mixed-Use	MORR*, PUD, TND, MEC, SD

*The MORR (Mixed Office-Residential-Retail) is only allowed where office, residential, and retail uses are depicted by the striped area.

Description of Mixed-Use Nodes

The 2030 Land Use Map identifies four types of mixed-use designations, each with their own character and economic development potential. While the uses within each may vary, all should be designed as walkable, pedestrian-oriented areas. In addition, this plan recognizes that economic and market conditions fluctuate. While the specific location and development program of each may change over time, the primary characteristics of each should serve as a flexible guide to help shape growth in Apex.

NEIGHBORHOOD MIXED-USE

As illustrated in *Figure 5: Humie Olive Development Concept*, neighborhood mixed-use is suited for a variety of residential uses developed around a concentration of retail and commercial uses. The scale of a neighborhood mixed-use node varies depending on the market, purchasing power of surrounding neighborhoods, and number of competing centers in close proximity. Typical neighborhood mixed-use nodes range from 30,000 square feet to 100,000 square feet of retail and have a service area of one to two miles.

Key characteristics of neighborhood mixed-use nodes include an interconnected street system that



Figure 5: Humie Olive Development Concept

provides linkages to shopping, services, housing, and amenities and a well-connected pedestrian and bicycle network. Residential development should be most dense around the retail core. Apartments and townhomes in close proximity to convenience retailers provide for more daily trips to be taken on foot or by bike. New single-family homes should provide the transition from the center to existing residential neighborhoods. Pocket parks and community greens should be connected by an internal network of sidewalks and greenways. In addition, the neighborhood center should be connected to adjacent facilities (in this case, the planned High School site) by greenways and trails to provide a safe, off-road transportation facility.

COMMUNITY MIXED-USE

Compared to neighborhood mixed-use, community mixed-use typically serves a larger population and includes up to 350,000 square feet of leasable space. The typical trade area of a community mixed-use node is four to six miles.

As illustrated in *Figure 6: Westford Development Concept*, a community mixed-use node should be anchored by a large commercial use such as a grocery store. Additional retail and commercial services should be oriented on an internal network of streets. Office and civic uses such as libraries or recreation facilities are also appropriate in community mixed-use nodes. Where the market permits, housing could



Figure 6: Westford Development Concept

be integrated as part of a vertical mix of uses in the community center core. Parking requirements should be reduced to maximize the amount of land used for buildings or public space. As with a neighborhood mixed-use node, apartments and townhomes in close proximity to retailers provide for more daily trips to be taken on foot or by bike. All portions of the development should be accessible by both a direct and convenient road network and a system of sidewalks and greenways. A safe and attractive pedestrian network should also connect community amenities such as pocket parks, pedestrian plazas, and recreation facilities. Single-family homes should provide the transition from the denser core of the commercial activity to adjacent developments.

EMPLOYMENT MIXED-USE

Employment mixed-use supports a greater diversity of land uses in Apex and promotes areas for job growth. Employment nodes could include a variety of uses including light industrial, warehousing, office, research, tech-flex, etc. As illustrated in *Figure 7: Middle Creek Development Concept*, the employment uses should be mixed with a limited amount of supporting commercial uses such as restaurants and convenience retailers to serve employees. Where feasible, buildings should be oriented around a common focal point such as a common green space or water feature. An internal network of sidewalks and pedestrian plazas would encourage employees to walk between destinations promoting a healthy workforce.



Figure 7: Middle Creek Development Concept

REGIONAL MIXED-USE

A regional mixed-use node, like the development planned at Veridea, provides the best opportunity for a vertical mixture of retail, employment, and residential uses in Apex. Regional nodes are ideally located at the intersection of major regional thoroughfares. These prime locations provide the high-visibility and accessibility sought by large-scale retailers and businesses. Regional mixed-use nodes typically have over 300,000 square feet of leasable area and draw from a trade area that ranges from ten to twenty-five miles.

An interconnected system of roadways and pedestrian and bicycle facilities should provide a variety of transportation options that are safe and accessible to all users internal and external to the site. Transit and transit stops should be integrated into the development. Residential options should vary from apartments, condominiums, and townhomes to detached single-family units. A network of parks, plazas, and natural areas should provide residents, employees, and visitors alike an opportunity for both active and passive recreation.

Veridea, a 1,100-acre mixed-use development in southern Apex, is expected to have 10 million square feet of office, 3.5 million square feet of retail, and approximately 2 million square feet of manufacturing space, in addition to 20,000 residents at build-out.

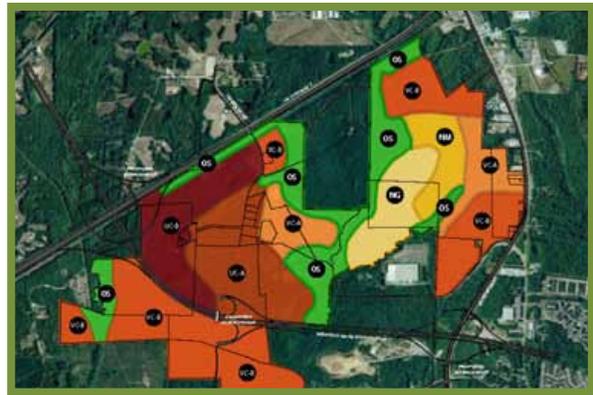


Figure 8: Veridea Development Concept Plan



04

Supporting Recommendations

PEAK PLAN 2030 ENVISIONS A FUTURE WHERE there is a more sustainable, balanced tax base in Apex. The following section provides a detailed description of the character and quality of place envisioned in the plan.

In 2030, there are a number of mixed-use developments in town that offer distinct living, working, and shopping options. Land suitable for industrial and office development is preserved which results in attracting employers that offer jobs to Apex's highly-educated workforce. Fewer people commute to other places such as RTP and downtown Raleigh for work. In addition, there are a variety of housing options, including townhomes and apartments, to accommodate Apex's diversifying population. Older residents are able to age-in-place in close proximity to downtown services and amenities. Existing neighborhoods are complemented by new single-family developments of similar character and scale. The more rural portions of the study area remain largely undeveloped and critical open spaces are protected.

The pulse of Apex remains in its historic downtown. More people live within and in close proximity to Salem Street. Local retailers and small business owners are thriving. Most downtown facades are restored. A streetscape and wayfinding program has enhanced the character of the historic district

and a new festival space was constructed to host downtown events. A streetscape and access management program resulted in the redevelopment of NC-55. Uses along Center Street and Schieffelin Road complement each other. New development draws inspiration from the downtown area and is compatible with existing neighborhoods in terms of scale and quality of construction.

The Peakway is complete and serves as a main thoroughfare around town. The Triangle Expressway has alleviated congestion along NC-55 which now mainly carries local traffic. Pedestrian and bike facilities including sidewalks and greenways connect key locations through town and serve as both recreational and transportation corridors for residents. Regional rail stops in Apex and carries residents and visitors in and out of town.

Infrastructure supports new development throughout the area. All areas are adequately served by police, fire, and emergency services. There are staff positions dedicated to both the Capital Improvements Program and bicycle and pedestrian planning.

SUPPORTING RECOMMENDATIONS



Beaver Creek Commons is one of the main shopping destinations in Town.



Downtown Apex supports a variety of independent and small business owners.

All Apex residents live within an half mile of a park or recreational facility. Greenways connect all major facilities. There are plenty of ball fields, community centers, and programmed activities to serve Apex's growing population.

New development respects the Lake Jordan Watershed. The public is keenly aware and active in the preservation of Apex's natural resources. Low-impact development techniques are commonly used in new projects. Historic assets are identified and preserved. Properties are landmarked and have been added to the National Register. Apex is a recognized as a Certified Local Government by the National Park Service. Greenways and sidewalks connect Apex's historic places to the greater community network of assets. New Hill and Friendship receive historic markers.

The following set of recommendation support the goals of the Peak Plan 2030 and the vision for the future of Apex. The recommendations are organized by theme but not prioritized.

BALANCED GROWTH

- Revise the Unified Development Ordinance. Virtually all of the recommendations pertaining to land use and development design can be implemented through the application of land development regulations. The traditional vehicle for these regulations is the community's Unified Development Ordinance (UDO). The UDO establishes allowable uses by district and sets forth provisions for development design, such as standards for subdivisions and commercial centers.
- Encourage non-residential land uses to achieve a more sustainable, balanced tax base in Apex.
 - Promote a mixed-use development pattern in activity centers identified on the 2030 Land Use Map.
 - Preserve industrial and office lands identified on the 2030 Land Use Map

for employment use through zoning mechanisms.

- o Support retail growth near already-developed areas.
- Support additional residential development at varying densities based on the 2030 Land Use Map.
 - o Promote townhomes and apartments in designated areas for medium and high density residential uses on the 2030 Land Use Map.
 - o Allow single-family homes where adequate utility and transportation infrastructure is available to support such development.
 - o Maintain low density residential uses as a transition to rural areas and protected open space areas.

PLACEMAKING

- Conduct and adopt detailed, special studies or small-area plans for key activity centers. These small area plans should focus initially on the following areas:
 - o Downtown
 - › Include a parking analysis and wayfinding component.
 - › Identify a potential location for a programmed community/festival space downtown.
 - o Midtown/55
 - › Include a streetscape program and access management component.
 - o Center Street/ Schieffelin Road
 - › Identify an optimal mix of land uses at the intersection of Center Street and Schieffelin Road.
- Encourage both vertical and horizontal integration of uses in mixed-use districts, with an emphasis on pedestrian linkages.



Photo Credit: Duffy

Low density residential preserves the rural character of the western area.



One key recommendation is to initiate a Downtown Small Area Plan for the Apex CBD.

- Modify the procedural section of the Unified Development Ordinance (UDO) to allow for administrative review and approval of site plans that meet all provisions set forth in the UDO.
- Initiate a Town Sign Master Plan to provide uniform wayfinding to major destinations in Town.
 - o Ensure signage is appropriate for a variety of users including pedestrians, bicyclists, and motorists.
 - o Update signage at the major entries into Town with clear graphics, landscaping, and/or other gateway features.

SUPPORTING RECOMMENDATIONS



Eighty percent of housing units in the Apex are single-family.



Townhomes have the highest average value per acre of any use in Apex.



Preservation of single story residences near downtown not only increases the amount of affordable housing in Apex, but allows for aging in place.

HOUSING

- Accommodate a mix of housing by type (e.g. single-family homes, townhomes, multi-family) and tenure (own/rent) to serve a growing and increasingly diverse population.
- Encourage density increases that do not alter the character of downtown through lot size changes and coverage modifications, cottage and cluster housing development models, and accessory units.
- Allow and encourage residential development, especially rental housing, above commercial uses in the downtown area.
- Facilitate the reuse of abandoned, vacant, and tax-delinquent properties for workforce housing.
- Amend ordinances to permit cottage housing or other alternative housing models in appropriate locations to provide housing options for a variety of age and income groups.
- Additional consideration should be given to providing housing options for Baby Boomers who wish to age-in-place. This includes owner and renter options within close proximity to retail and medical services.
 - Provide accessible, safe, and affordable home for older adults.
 - Support alternative housing models geared to older adults.
- Encourage weatherization of existing homes to improve energy-efficiency and reduce utility costs.
- In order to improve and maintain existing public spaces in neighborhoods, consider starting a Neighborhood Improvement Grant program that provides matching funds for aging neighborhoods without Homeowner Associations and for those with expired covenants.

ECONOMIC DEVELOPMENT

- Identify new industrial/business/office park sites totaling 100-150 contiguous acres on NC-55, US-64, US-1, and Jessie Drive to accommodate non-retail employment growth. These corridors capitalize on access to NC-540.
- Partner with Town of Apex Economic Development staff and the Chamber of Commerce to market these sites to potential employers.
- Identify and reserve at least one industrial/business park parcel over 50 acres near an NC-540 interchange for a potential major employer relocation, taking advantage of the attractiveness of the confluence of three limited-access highways. Continue dialogue with the developer of Veridea, who has assembled acreage bound by NC-540, NC-55, and US-1.
- Preserve access and visibility for large parcels that could be developed as employment centers or mixed-use communities on key transportation corridors such as US-64, NC-55, South Salem Street, and Jessie Drive.
- Pursue completion of the Apex Peakway, which is needed to relieve downtown traffic pressures and provide access to infill commercial and residential development sites over the next decade.
- Participate in infrastructure improvements such as streets, sidewalks, and parking decks that provide catalysts for more urban scale development around potential regional rail stations near the center of town and the NC-540/Old US-1 interchange.
- Prepare a Strategic Economic Development Plan for Apex. The plan should address the following:
 - Inventory and analysis of existing businesses and industry
 - Analysis of competitive advantage for Apex
 - Identification of target industries for Apex
- Promote entrepreneurs and small business owners to locate their operations in the Central Business District (CBD).
 - Strategies for increasing percentage of employees who live and work in Town
 - Downtown development strategy
 - Continue reduction of capacity fees for businesses locating in the CBD.
 - Continue to partner with the Chamber of Commerce and Downtown Businesses Association to create a “Buy Local” brand for Apex.
 - Improve public access to wireless internet in the CBD.
 - As vacancies are filled downtown, allow for the full complement of MORR uses along South Salem Street, Saunders Street, and Chatham Street.
- Encourage and support small and independent businesses.
 - Inventory existing small and in-home businesses to collect data for grant applications.
 - Consider small grants or loans to encourage entrepreneurs and small businesses.
 - Partner with the Chamber of Commerce to host an Apex Start-Up Day to encourage entrepreneurship.
 - Identify partners to provide technical assistance (e.g. legal and financial advice for entrepreneurs and small business owners).



The Apex Peakway will eventually run for almost six miles.



The third leg of the Triangle Expressway from Apex to Holly Springs is currently under construction. (Photo Credit: NewsObserver.com).

TRANSPORTATION

- Implement the Apex Transportation Plan 2011 Plan Update.
- In addition to the recommendations outlined in the Apex Transportation Plan 2011 Plan Update, consider the following:
 - Conduct an inventory of informal trails to identify future potential additions to the greenway network and to help prioritize sidewalk projects.
 - Support future transit by reserving land and enabling transit-supportive development in future transit station locations.
 - Evaluate the effectiveness of existing park and ride stations. Given the 2030 Land Use Map, identify potential future locations for park and ride facilities.
 - Initiate a study to identify mechanisms to fund the completion of the Apex Peakway.
 - Protect rights-of-way for future corridors identified in the transportation plan. Consider mechanisms to protect right-of-way. For example, continue to allow parcels impacted by right-of-way acquisition to maximize density on remaining acreage.
 - Improve coordination with NCDOT and Capital Area MPO (CAMPO) to maintain, improve existing, or construct new transportation facilities in a strategic manner.

- Build organizational support for bicycle and pedestrian facilities in Apex.
 - Establish a bicycle and pedestrian planner position within the Apex Planning Department.
 - Establish a bicycle and pedestrian citizen advisory committee.
- Continue integration of the Transportation Plan with development reviews.

WATER & WASTEWATER INFRASTRUCTURE

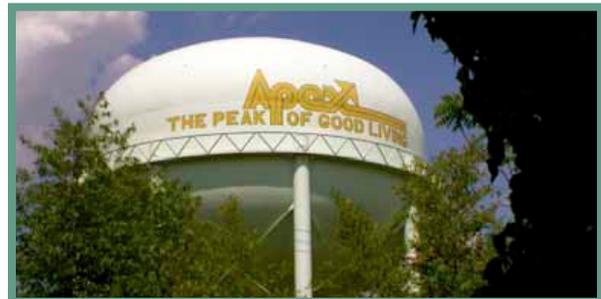
- Continue to direct capital investments to activity centers to support development and redevelopment consistent with the 2030 Land Use Map.
- Continue to assess, plan, and fund infrastructure needs through the annual capital needs assessment, capital improvements program, and capital improvements budget process.
- Establish an administrative position working interdepartmentally dedicated to expanding the Capital Improvements Planning program.
- Consider alternative funding mechanisms to fund infrastructure improvements in key economic development areas.

PUBLIC SERVICES & FACILITIES

- Provide adequate fire, police, and emergency service in all areas.
 - Support the Apex Fire Department's staffing and facilities plan in order to achieve Wake County service level goals:
 - › Construction of Public Safety Station #5 to serve the western area of Town.
 - › Additional firefighters to man Station #5.
 - Continue to work with the Apex Police Department to ensure Apex remains a safe, secure Town for existing and

future residents.

- › Consider incorporating CPTED (Crime Prevention through Environmental Design) measures in updated UDO.
- Continue to assess public facility needs to meet demand generated by existing, as well as future, growth and development.
 - Town Campus Building 3 - relocation of Town Council, Administrative, Legal, and IT functions.
 - Public Works, Electrical Division - relocation to Mount Zion Church Road Site.
 - Senior Center - location to be determined.
 - Historic Tunstall House renovation - to restore the historic home to a usable office, meeting, or cultural space.



Apex will continue to manage growth through utility investments.



In order to meet existing and future service demands, the Apex Fire Department will need to expand.

SUPPORTING RECOMMENDATIONS



Hunter Street Park is one of eleven programmed park facilities owned and maintained by the Town.



Additional multi-use fields are needed to meet existing demand.



Apex youth attend a Bike Safety Workshop.

PARKS, RECREATION FACILITIES, GREENWAYS & OPEN SPACES

- Implement recommendations of the recently updated Parks, Recreation, Greenways, and Open Space Master Plan.
- Develop criteria for the prioritization of greenway connections for funding such as:
 - Greenways that serve both as transportation and recreation corridors.
 - Greenways that connect schools, civic facilities, historic sites, downtown, and recreation areas.
- Raise awareness of greenway connections with a wayfinding program.
- Develop standards for the co-location of greenways within utility easements. Determine optimal width of greenway corridor and guidelines for integrating some features and separating others. Such standards should provide guidance for land acquisition and design and be incorporated into the UDO and the Standard Specifications and Standard Details Manual.
- Build organizational support for bicycle and pedestrian facilities in Apex.
 - Establish a bicycle and pedestrian planner position within the Apex Planning Department.
 - Establish a bicycle and pedestrian citizen advisory committee.

ENVIRONMENTAL & NATURAL RESOURCES

- Promote the use of green building techniques and rainwater capture systems in new developments.
- Encourage low impact site development and more ecologically designed and sustainable sites with functional landscapes.
- Partner with Environmental Services to continue to raise awareness of the value of environmental and natural resources in Apex's Study area.
 - Create a brochure to educate the public about the Lake Jordan Watershed and Neuse River Watershed.
 - Initiate a speaker series on a variety of topics related to natural resource protection such as green building practices, xeriscaping, lake-friendly lawn care, etc.
 - › Install demonstration water management projects on public properties.
 - Promote the development of a healthy tree canopy in all areas of Apex, especially downtown.
 - › Educate the public about the benefits of a well-pruned, healthy tree canopy.
 - › Consider using only non-invasive native and adaptive species in town-initiated and/or town-funded landscaping projects.
 - › Where feasible, bury utility lines along public streets or investigate options to move lines to less conspicuous locations.



Photo credit: Duffy

The western portions of Apex remain largely rural.



209 E. Chatham Street has recently been fully renovated.



The restored Hinton and Son Hardware building in Apex's Historic Downtown.

HISTORIC & CULTURAL RESOURCES

- Continue to protect historic resources using tools like the National Register of Historic Places Historic District designation, the demolition disincentive, landmarking, the powers of the Wake County Historic Preservation Commission, and the Resource Conservation Area standards found in the Town's Unified Development Ordinance.
- Inventory potential future properties not currently designated or on any registry for future designation.
- Enable and continue the preservation program at the local level. The local program brings decision-making to the citizens of Apex, with support and expertise from the Town of Apex Planning staff and Wake County Historic Preservation Commission staff.
- Initial tasks include the following to establish a local district if desired:
 - Establish a historic preservation commission and have it certified by the North Carolina State Historic Preservation Office (SHPO). This enables a commission composed of Apex residents to review and approve changes to local landmarks and local districts. Primary initial goals of the commission should be to develop commission bylaws; to establish a local historic district and designate individual landmarks; and to produce design guidelines for use in reviewing exterior changes to historic properties.
 - Have the Town of Apex become a Certified Local Government (CLG) as recognized by the National Park Service (NPS). As a CLG, Apex can take advantage of technical expertise from NPS and the SHPO and become eligible for matching grants to help fund cultural resource surveys, National Register Nominations, Technical and Planning Assistance,

Educational and Interpretative Programs, Staffing and Training, and other programs. (At the moment, Apex participates in CLG programs through its participation in the Wake County preservation program; the County has CLG status. By becoming a municipal CLG, Apex could run its own preservation program, as Raleigh and Wake Forest do, without having to compete with other Wake County towns for attention and grants awarded to the county.)

- Develop wayfinding and bicycle and pedestrian connections to historic places throughout Apex.
- Develop a historic marker program to identify area resources and to educate the public on the history of Apex as well as create an understanding of the communities surrounding Apex such as Friendship, New Hill, and Green Level.
- In partnership with the Apex Historical Society and Capital Area Preservation, educate citizens in order to get them involved in local preservation efforts.
 - Create a brochure to educate the public about the tax advantages of historic preservation.
 - Organize regular walking tours of downtown Apex.
 - Initiate a speaker series on a variety of topics related to historic resource protection such as historic tax credits, home and building restoration, etc.



The tree lighting at Christmas on Salem is a popular event.



APPENDIX A

MARKET CONDITIONS

APEX TODAY

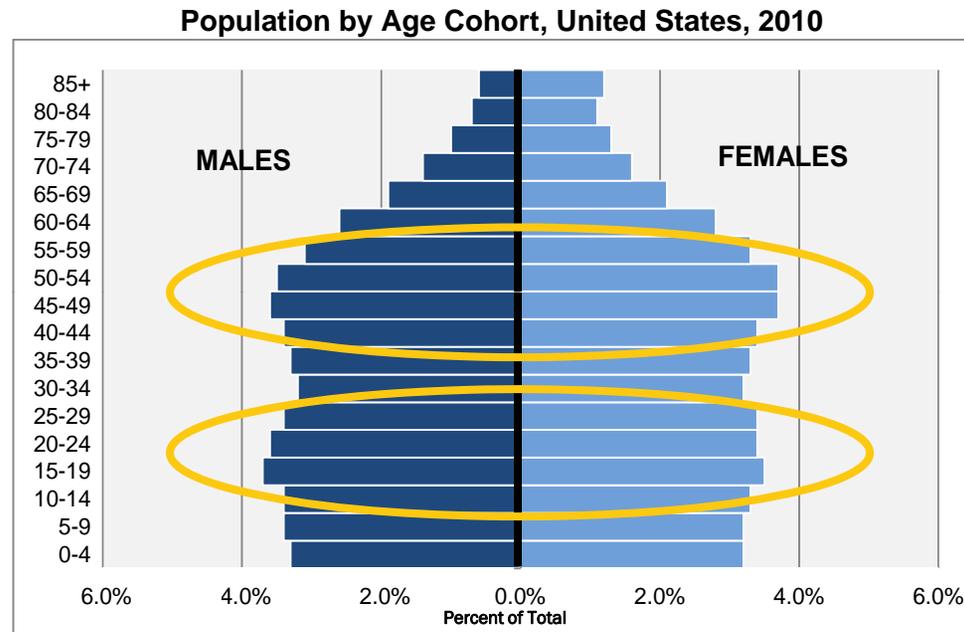
Population
Households
Housing Units
Employment



POPULATION



National Population Trends



- Notable shift in national population attributes between 2000 and 2010
- The younger Generation Y cohort (aged 15-32) became the largest group, making up one-quarter of the total population
- Baby Boomers (aged 46-64) make up the second largest age cohort
- Demonstrated shift in age cohorts towards Generation Y and the Baby Boomers is shaping housing demand across the county

Population Trends

Comparison of Population Trends, 2000-2012

Area	2000	2012	2000-2012 Δ		
			#	%	CAGR
Planning Area	25,740	45,523	19,783	76.9%	4.9%
Wake County	627,823	941,825	314,002	50.0%	3.4%
Raleigh CSA	1,223,541	1,698,375	474,834	38.8%	2.8%
Planning Area % of CSA	2.1%	2.7%	4.2%		

Note: Raleigh CSA includes Chatham, Durham, Franklin, Johnston, Orange, Person, and Wake counties.

Source: ESRI; Kimley-Horn and Associates

- The Apex Planning Area contains an estimated 45,523 residents
- The 19,783 new Planning Area residents added between 2000 and 2012 equated to a growth rate of 76.9%
- Wake County increased 50% to 941,825 residents
- The seven-county Raleigh Combined Statistical Area (CSA) has an estimated 1.7 million residents, an increase of 38.3% from 2000
- Planning Area made up 6.3% of Wake County's growth, and 4.2% of the net population increase in the Raleigh CSA
- The Planning Area's Compound Annual Growth Rate (CAGR) of 4.9% was higher than 3.4% for Wake County and 2.8% for the Raleigh CSA.

Population by Age Cohort

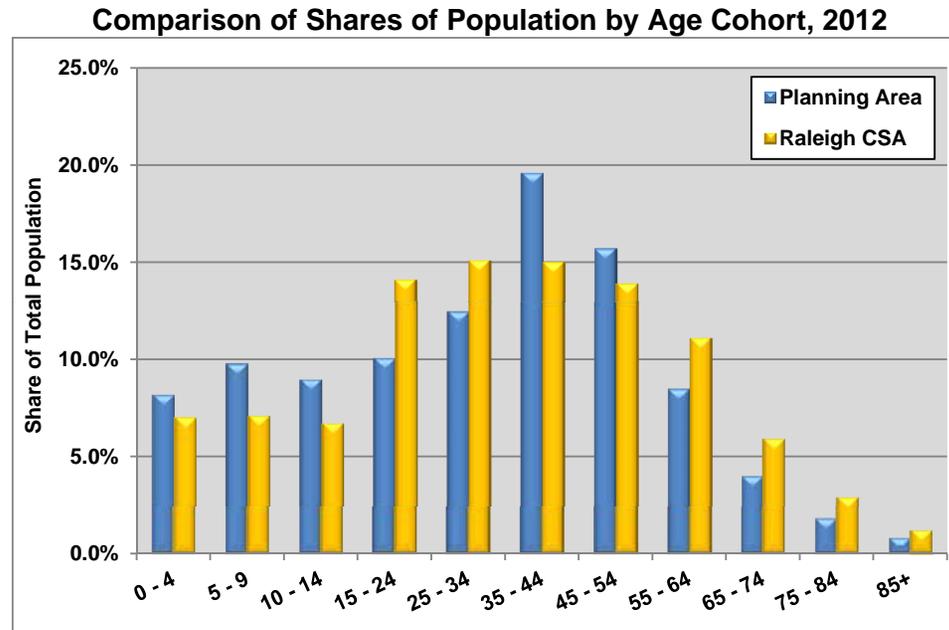
- Similar to national trends, the combined 15 to 34 cohorts, or Generation Y, and the Baby Boomers (45-64) make up the two largest cohorts in the Planning Area
- Residents over age 45 experienced large percent increases between 2000 and 2012; lifespan and aging in place trends
- Other significant growth rates in school-aged children, indicating increasing demand on the Wake County school system

Population by Age Cohort,
Planning Area, 2000-2012

Cohort	2000	2012	2000-2012 Δ	
			#	%
0 - 4	2,497	3,733	1,236	49.5%
5 - 9	2,445	4,461	2,016	82.4%
10 - 14	1,931	4,097	2,167	112.2%
15 - 24	2,291	4,598	2,307	100.7%
25 - 34	5,174	5,690	517	10.0%
35 - 44	5,534	8,923	3,388	61.2%
45 - 54	3,166	7,147	3,981	125.7%
55 - 64	1,467	3,869	2,402	163.7%
65 - 74	695	1,821	1,126	162.0%
75 - 84	412	819	408	99.0%
85+	129	364	235	183.0%
Total	25,740	45,523	19,783	76.9%

Source: ESRI; Kimley-Horn and Associates

Population by Age Cohort



- In comparison to the larger Raleigh CSA, the Apex Planning Area has higher shares of residents aged 35-44 (Generation X) and young children
- This mix of age cohorts, representing families, has historically created demand for single-family housing
- Alternatively, the CSA has higher shares of Generation Y residents, Baby Boomers, and older seniors

Race & Ethnicity

- Apex Planning Area remains mostly white, but is becoming slightly more ethnically diverse
- Asian/Pacific Islander experienced the largest percent change over the 12-year period
- Residents classifying themselves as having Hispanic origin (categorized separately) in the Apex Planning Area increased from 927 people in 2000 to 3,414 in 2012, a 268.5% increase in 12 years
- Trend indicative of Raleigh CSA where Hispanic population nearly doubled

Change in Shares of Population by Race, Planning Area, 2000-2012

Race/Ethnicity	2000	2012	'00-'12 Change
White Alone	81.8%	78.2%	-3.6%
Black Alone	11.1%	8.8%	-2.3%
American Indian Alone	0.3%	0.4%	0.1%
Asian/Pacific Islander Alone	3.6%	6.8%	3.2%
Other Race Alone	1.6%	3.2%	1.6%
Two or More Races Alone	1.6%	2.6%	1.0%
Total	100.0%	100.0%	

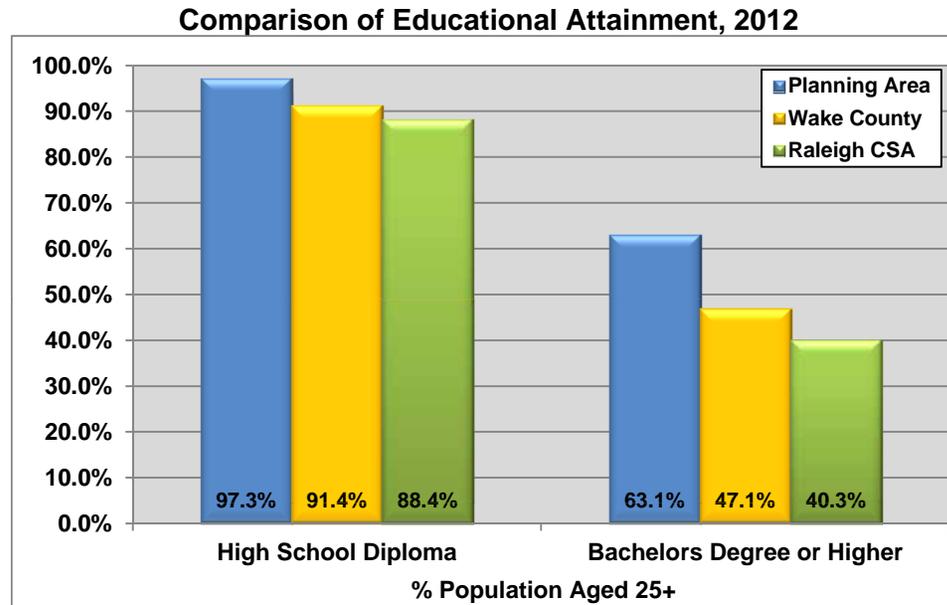
Source: ESRI; Kimley-Horn and Associates

Population by Race, Planning Area, 2000-2012

Race/Ethnicity	2000	2012	2000-2012 Δ	
			#	%
White Alone	21,055	35,599	14,544	69.1%
Black Alone	2,857	4,006	1,149	40.2%
American Indian Alone	77	182	105	135.8%
Asian/Pacific Islander Alone	927	3,096	2,169	234.1%
Other Race Alone	412	1,457	1,045	253.7%
Two or More Races Alone	412	1,184	772	187.4%
Total	25,740	45,523	19,783	76.9%
Hispanic Origin (Any Race)	927	3,414	2,488	268.5%

Source: ESRI; Kimley-Horn and Associates

Educational Attainment



- Educational attainment is measured for all residents ≥ 25 years old
- Well-educated workforce where over 97% of all residents over age 25 in the Planning Area have a High School Diploma
- Planning Area population with Bachelors Degree or higher (63.1%) is significantly higher than 47.1% for Wake County and 40.3% for Raleigh CSA

HOUSEHOLDS



Household Trends

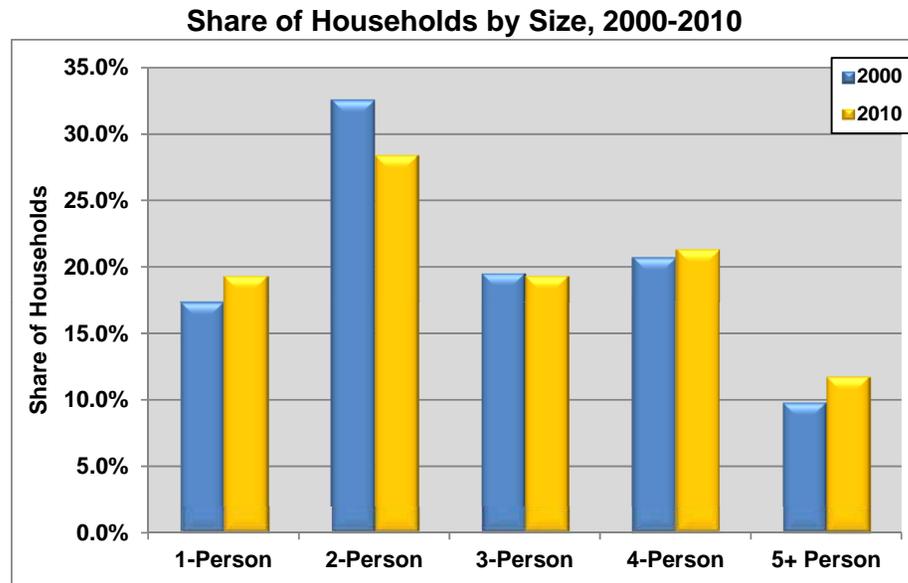
Comparison of Household Trends, 2000-2012

Area	2000	2012	2000-2012 Δ		
			#	%	CAGR
Planning Area	9,426	16,163	6,737	71.5%	4.6%
Wake County	242,031	362,685	120,654	49.9%	3.4%
Raleigh CSA	475,173	657,986	182,813	38.5%	2.7%
Planning Area % of CSA	2.0%	2.5%	3.7%		

Source: ESRI; Kimley-Horn and Associates

- There are an estimated 16,163 households in the Apex Planning Area, an increase of 71.5% since 2000
- Wake County experienced a lower 49.9% growth rate, but still well above the Raleigh CSA's 38.5%
- The Apex Planning Area captured 3.7% of the total household growth in the larger Raleigh CSA between 2000 and 2012

Household Size



- Nationally, average household slightly declined from 2.59 to 2.58 people
- Trend due, in part, to the expanding Baby Boomer and Generation Y cohorts that typically have a smaller household size than Generation X
- Since 2000, the Apex Planning Area has increased 71.5%; lower growth rate in households than 76.9% for population indicates an upward shift in average household size
- Average household size increased from 2.73 to 2.81 in the 12-year period
- Indicates that Planning Area is primarily attracting family households

Households by Income Cohort

- Between 2000 and 2012, the Apex Planning Area experienced strong absolute growth in households earning between \$100,000 and \$149,999 annually
- This cohort now makes up the largest share of the Planning Area, at 23.9% (3,863 households out of 16,163)
- Households earning over \$100,000 annually more than doubled between 2000 and 2012

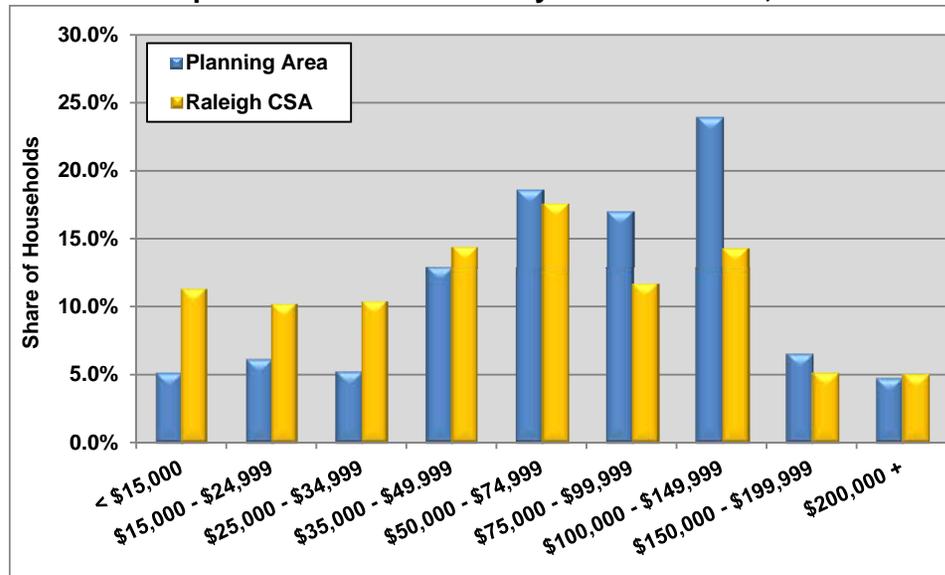
Households by Income Cohort,
Planning Area, 2000-2012

Cohort	2000	2012	2000-2012 Δ	
			#	%
< \$15,000	452	824	372	82.2%
\$15,000 - \$24,999	603	986	383	63.4%
\$25,000 - \$34,999	622	840	218	35.1%
\$35,000 - \$49,999	1,338	2,085	747	55.8%
\$50,000 - \$74,999	2,093	3,006	914	43.7%
\$75,000 - \$99,999	1,819	2,748	928	51.0%
\$100,000 - \$149,999	1,857	3,863	2,006	108.0%
\$150,000 - \$199,999	405	1,051	645	159.2%
\$200,000 +	236	760	524	222.4%
Total	9,426	16,163	6,737	71.5%

Source: ESRI; Kimley-Horn and Associates

Households by Income Cohort

Comparison of Households by Income Cohort, 2012



- The Apex Planning Area has a significantly higher share of households earning \$100,000 to \$149,999 than the Raleigh CSA
- It also has higher shares of middle-income (\$35,000-\$99,999) households than the CSA
- The CSA has higher shares of lower-income households, earning less than \$35,000 annually

Median Household Income

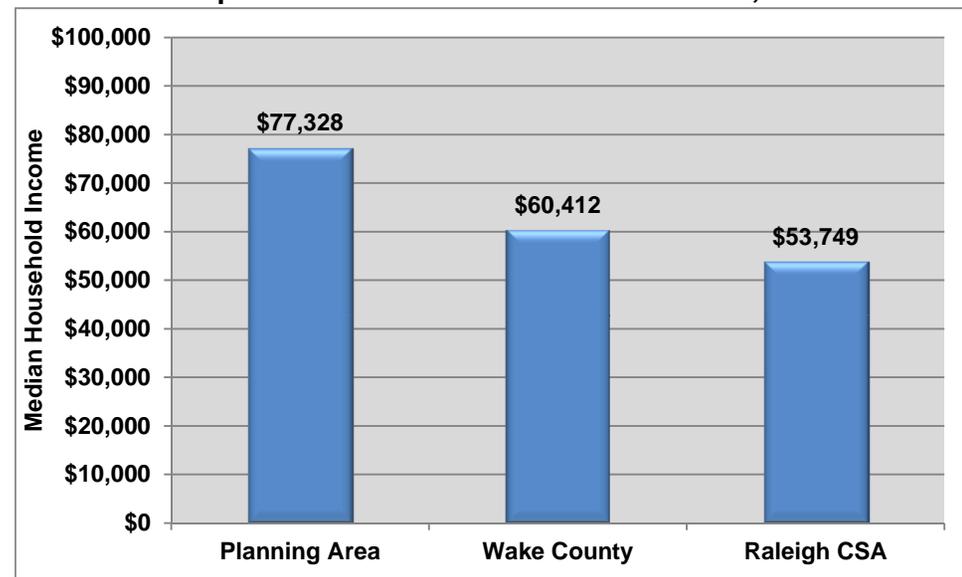
- The median household income for the Planning Area is currently estimated at \$77,328
- Median household income increased 11.4% from \$69,441 in 2000, more than the increases reported in Wake County and the CSA
- Provides additional evidence of Apex’s longstanding competitiveness to attract higher-earning households
- The 2012 measure is significantly higher than \$60,412 for Wake County and \$53,749 for the Raleigh CSA

Comparison of Median Household Incomes, 2000-2012

Geography	2000	2012	2000-2012 Δ	
			#	%
Planning Area	\$69,441	\$77,328	\$7,887	11.4%
Wake County	\$55,024	\$60,412	\$5,388	9.8%
Raleigh CSA	\$48,424	\$53,749	\$5,325	11.0%

Source: ESRI; Kimley-Horn and Associates

Comparison of Median Household Incomes, 2012



HOUSING UNITS



Housing Unit Trends

Comparison of Housing Unit Trends, 2000-2012

Area	2000	2012	2000-2012 Δ		
			#	%	CAGR
Planning Area	10,252	17,057	6,805	66.4%	4.3%
Wake County	258,944	389,517	130,573	50.4%	3.5%
Raleigh CSA	511,107	715,119	204,012	39.9%	2.8%
Planning Area % of CSA	2.0%	2.4%	3.3%		

Source: ESRI; Kimley-Horn and Associates

- Housing inventory in the Apex Planning Area increased by over 6,800 units, or 66.4%, between 2000 and 2012
- Wake County grew at a slower 50.4% rate, and housing units in the larger CSA increased by 39.9% during the same time period
- The Planning Area experienced a CAGR of 4.3%, compared to 3.5% for Wake County and 2.8% for the Raleigh CSA
- It also accounted for 3.3% of net new housing unit growth in the CSA

Housing Units by Type

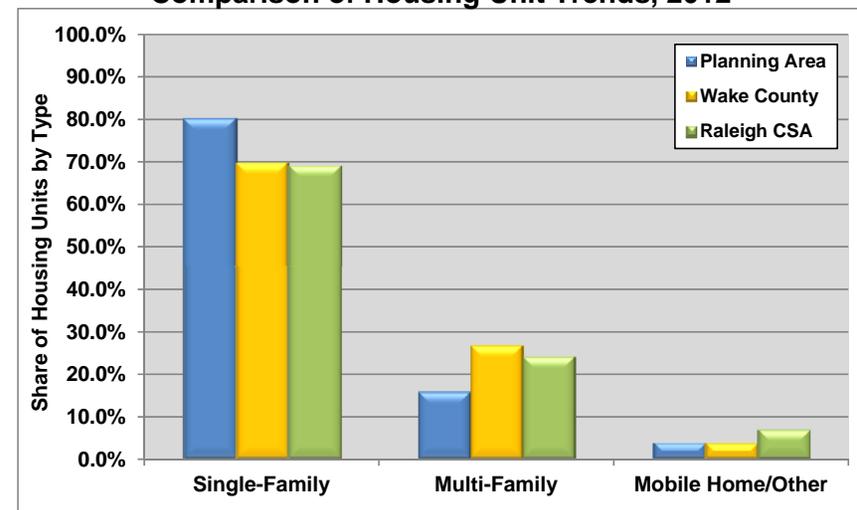
- The majority of housing units in the Apex Planning Area are single-family detached, making up 80% of the inventory
- However, strong growth was experienced in single-family attached (townhouses) and multi-family product between 2000 and 2012
- Comparatively, Wake County and the Raleigh CSA have lower shares of single-family detached (each at approximately 70%) and higher shares of multi-family
- Reflects a lower-density development pattern in the Planning Area

Housing Unit Trends, Planning Area, 2000-2012

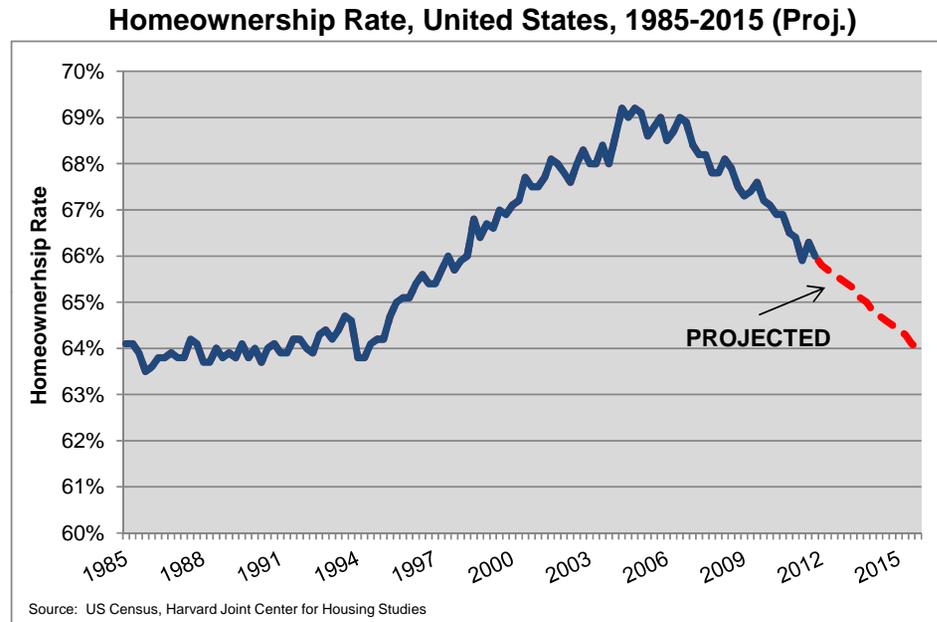
Type	2000	2012	2000-2012 Δ	
			#	%
Single-Family, Detached	7,833	12,063	4,230	54.0%
Single-Family, Attached	400	1,646	1,246	311.7%
Multi-Family	1,343	2,695	1,352	100.7%
Mobile Home/Other	677	653	-24	-3.5%
Total	10,252	17,057	6,805	66.4%

Source: ESRI; Kimley-Horn and Associates

Comparison of Housing Unit Trends, 2012

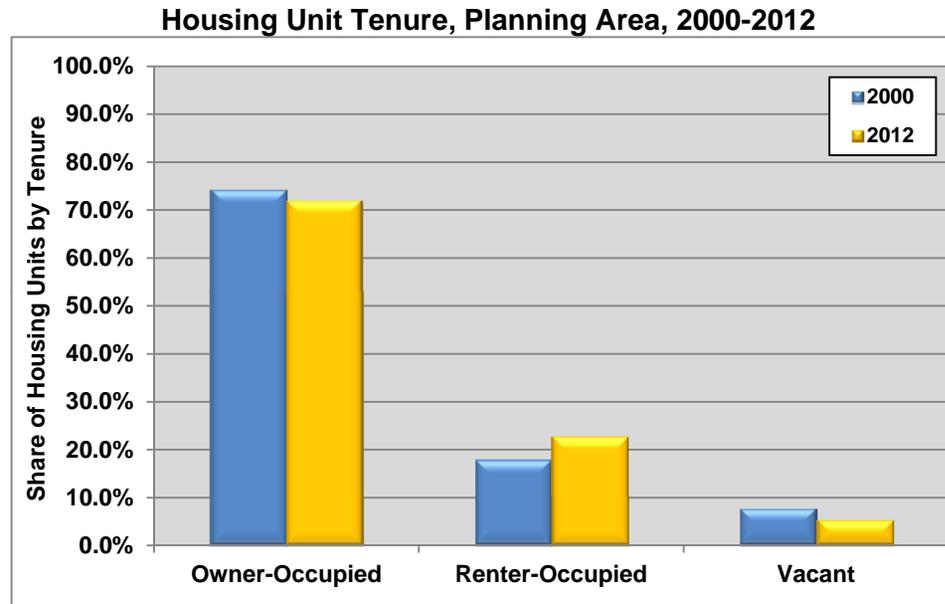


National Homeownership Rate



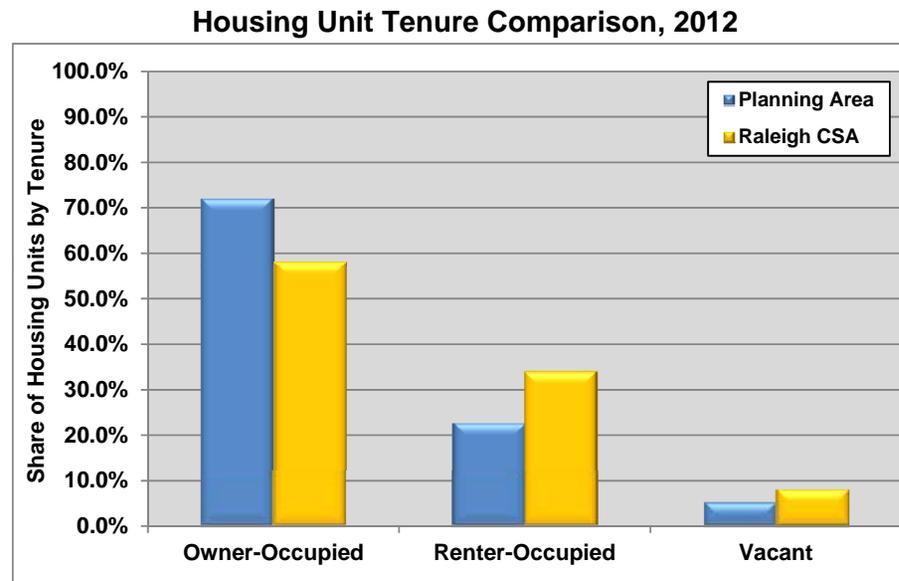
- Following the 2007-2009 Recession and mortgage crisis, the national homeownership rate has declined sharply from a peak of approximately 69% in the mid-2000s
- Decline was due, in part, to an inability to sell housing units, difficulties getting a mortgage, and the Generation Y cohort showing preferences towards renting
- Homeownership rate is expected to continue to decline over the next two to three years, reaching the long-term average of approximately 64%

Housing Units by Tenure



- Similar to national trends, the share of owner-occupied housing units in the Apex Planning Area decreased between 2000 and 2012
- During the same time period, the renter-occupied share increased
- The moderate 15.8% share of multi-family housing in the Planning Area indicates that renter-occupied units also include investor-owned single-family detached and attached properties

Housing Units by Tenure



- Owner-occupied units accounted for over 70% of all units in the Planning Area, significantly higher than the Raleigh CSA
- Inversely, the Planning Area's renter-occupied share is well below the CSA

EMPLOYMENT



Wake County Major Employers

Major Employers, Wake County, 2012

Employer	Industry	Estimated Employment
State of North Carolina	Public Administration	24,739
Wake County Public School System	Education Services	17,572
IBM Corporation	Professional and Technical Services	10,500
North Carolina State University	Education Services	7,730
WakeMed Health & Hospitals	Healthcare and Social Assistance	7,607
GlaxoSmithKline	Professional and Technical Services	4,900
Rex Healthcare	Healthcare and Social Assistance	4,800
SAS Institute	Information	4,742
Wake County Government	Public Administration	4,272
Cisco Systems	Information	3,800
City of Raleigh	Public Administration	3,000
Verizon Business	Information	3,000
Progress Energy	Trade, Transportation, and Utilities	2,500
Affiliated Computer Services	Information	2,300
RTI International	Professional and Technical Services	2,200
Fidelity Investments	Finance and Insurance	2,200
U.S. Environmental Protection Agency	Public Administration	2,000

Source: Wake County Economic Development

- The largest employers in Wake County are the State of North Carolina and Wake County Public School System
- Other Government employers include N.C. State, Wake County, City of Raleigh, and EPA
- Significant employment sectors include Public Administration, Education, Professional and Technical Services, and Information; related to Raleigh's prominence in state government, higher education, and research

Wake County Employment

Annualized At-Place Employment by Industry, Wake County, 2000-2011

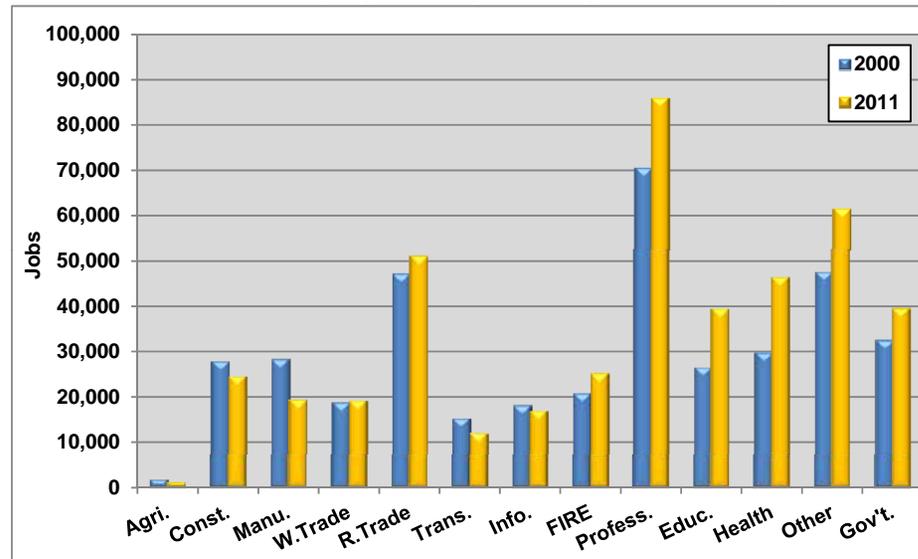
Industry	2000	2006	2011	2000-2011 Δ	
				#	%
Agriculture and Mining	1,724	1,342	1,007	-717	-41.6%
Construction	27,779	31,558	24,506	-3,273	-11.8%
Manufacturing	28,257	21,719	19,324	-8,933	-31.6%
Wholesale Trade	18,743	19,051	19,152	409	2.2%
Retail Trade	47,133	49,343	51,037	3,904	8.3%
Transportation, Warehousing & Utilities	15,206	13,268	11,921	-3,285	-21.6%
Information	18,110	16,629	16,963	-1,147	-6.3%
F.I.R.E.	20,760	23,362	25,143	4,383	21.1%
Professional Services	70,458	78,535	85,987	15,529	22.0%
Educational Services	26,501	36,251	39,388	12,887	48.6%
Healthcare and Social Assistance	29,695	41,483	46,392	16,697	56.2%
Other Services	47,510	56,258	61,552	14,042	29.6%
Public Administration	32,424	37,222	39,491	7,067	21.8%
Total	384,300	426,021	441,863	57,563	15.0%

Source: NC Employment Securities Commission; Kimley-Horn and Associates

- Wake County had a total of 441,863 annualized full-time jobs at place of employment in 2011, an increase of 15% since 2000
- Professional Services, which are often higher-paying jobs, made up the largest share of Wake County employment in 2011 at nearly 20%
- The largest declines, in Construction, Manufacturing, and Warehousing, were consistent with both national and state economic trends

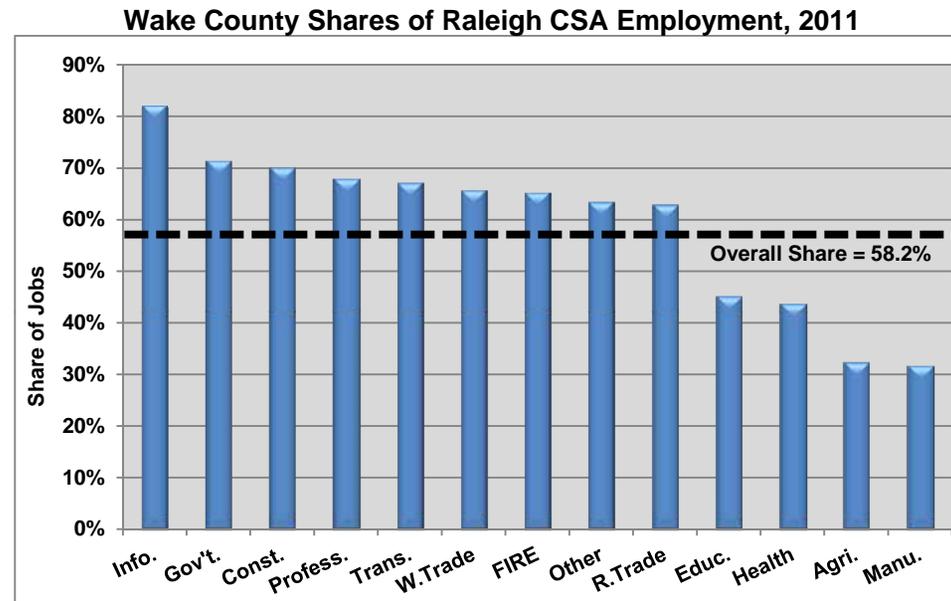
Wake County Employment

Annualized At-Place Employment by Industry, Wake County, 2000-2011



- Professional Services, Education, Healthcare, and Other Services all experienced a significant increase between 2000 and 2011
- Moderate increases were experienced in Retail Trade, Finance and Real Estate, and Government Sectors
- The most notable declines were experienced in Construction and Manufacturing

County Share of CSA



- Overall Wake County jobs make up approximately 58.2% of the total in the seven-county Raleigh CSA
- The industries that make up the largest shares of CSA jobs by sector are Information, Government, Construction and Professional Services; they all exceed the overall Wake County share
- Sectors with lower shares than the CSA average include Education and Health reflecting the presence of Duke University Hospital in Durham and UNC & Hospital in Chapel Hill
- The 58.2% share of CSA jobs was slightly higher than the County's 55.4% share of population in 2012

Planning Area Employment

- In 2012, the Apex Planning Area had over 15,000 estimated jobs, comprising 3.4% of the Wake County total
- The Planning Area had a 4.8% share of the County's population in 2012, showing a higher concentration of people than jobs
- Other Services, which includes Accommodation and Food Services, made up over 20% of the total in jobs in the Planning Area, followed by Retail Trade (19.3%), Construction (11.1%), and Educational Services (10.1%)

Annual Employment by Industry,
Planning Area, 2012

Industry	Jobs	% of Total
Agriculture and Mining	50	0.3%
Construction	1,672	11.1%
Manufacturing	1,399	9.3%
Wholesale Trade	1,050	7.0%
Retail Trade	2,903	19.3%
Transportation, Warehousing & Utilities	276	1.8%
Information	270	1.8%
F.I.R.E.	515	3.4%
Professional Services	1,527	10.1%
Educational Services	1,085	7.2%
Healthcare and Social Assistance	940	6.2%
Other Services	3,047	20.2%
Public Administration	323	2.1%
Total	15,057	100.0%

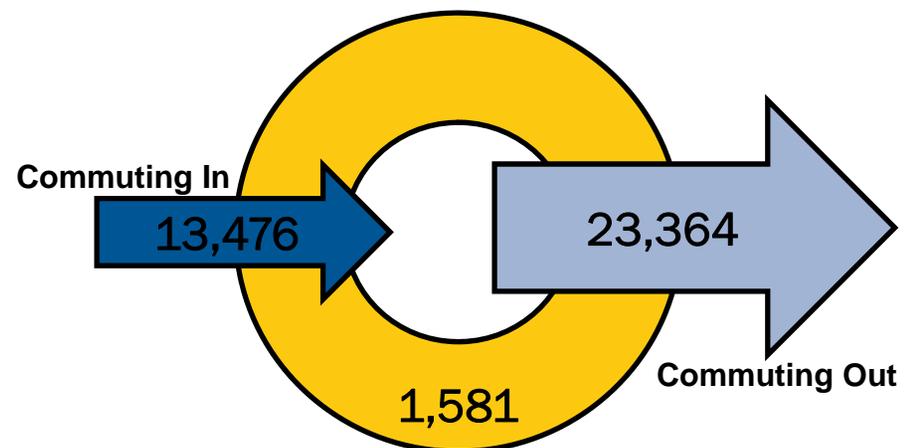
Source: ESRI; Kimley-Horn and Associates

Employee Inflow/Outflow

- There are an estimated 15,057 total jobs at place of employment in the Apex Planning Area, combining the 13,476 positions filled by in-commuters and the 1,581 jobs held by residents
- Over 23,000 residents of Apex commute outside of the Planning Area for employment
- The 13,476 Planning Area jobs are not enough to off-set residents commuting elsewhere for employment, equating to a net outflow of over 8,000 workers

Apex Jobs Filled by In Commuters	13,476
Apex Jobs Filled by Residents	1,581
Total Apex Jobs	15,057
Apex Residents Commuting Elsewhere	23,364
Net Inflow/Outflow	-8,307

Source: ESRI; U.S. Census; Kimley-Horn and Associates



Jobs/Housing Unit Ratio

Jobs/Housing Unit
Ratio Comparison, 2012

Geography	At-Place Jobs	Housing Units	Jobs/ Housing
Planning Area	15,057	17,057	0.88
Wake County	441,863	389,517	1.13
Raleigh CSA	759,640	715,119	1.06

Source: US Census; NCESC; Kimley-Horn and Associates

- The Apex Planning Area has a 0.88 jobs/housing unit ratio
- Measure further investigates where people live and work
- Ratio of 1.0 and 1.1 jobs per household is a target for suburban markets
- Important to match available jobs with highly educated labor force in Apex
- Comparatively, Wake County has a 1.13 jobs/housing unit ratio, and the Raleigh CSA reported 1.06



DEMAND FORECASTS

Residential

Retail

Office

Industrial



RESIDENTIAL



For-Sale Detached Residential

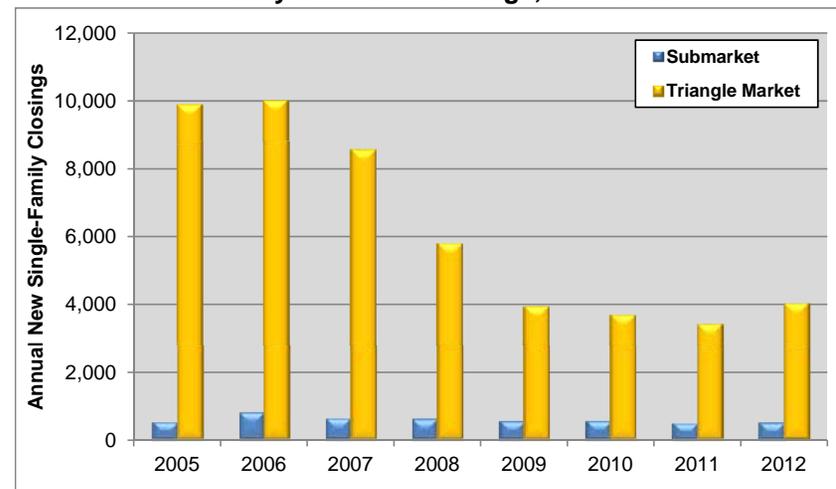
- Annual closing trends provided by third-party data source; includes transactions through MLS and units sold directly by builders
- Data provided on township-level; White Oak Township most closely aligns with Planning Area
- There were 10,647 new and resale closings in White Oak Township between 2005 and 2012, 9.2% of the combined closings in Wake, Durham, and Orange counties (Triangle market)
- Closings peaked in 2006 at over 1,800 before declining, consistent with national trends of job losses and reduced mobility due to economic downturn, and conservative mortgage lending standards
- New single-family detached product has made up approximately 43% of the closings between 2005 and 2012

For-Sale Detached Closings, White Oak Township, 2005-2012

Year	Units		Total Units	New % of Total
	New	Resale		
2005	507	957	1,464	34.6%
2006	795	1,073	1,868	42.6%
2007	617	917	1,534	40.2%
2008	599	650	1,249	48.0%
2009	535	600	1,135	47.1%
2010	541	641	1,182	45.8%
2011	477	570	1,047	45.6%
2012	486	682	1,168	41.6%
Total	4,557	6,090	10,647	42.8%

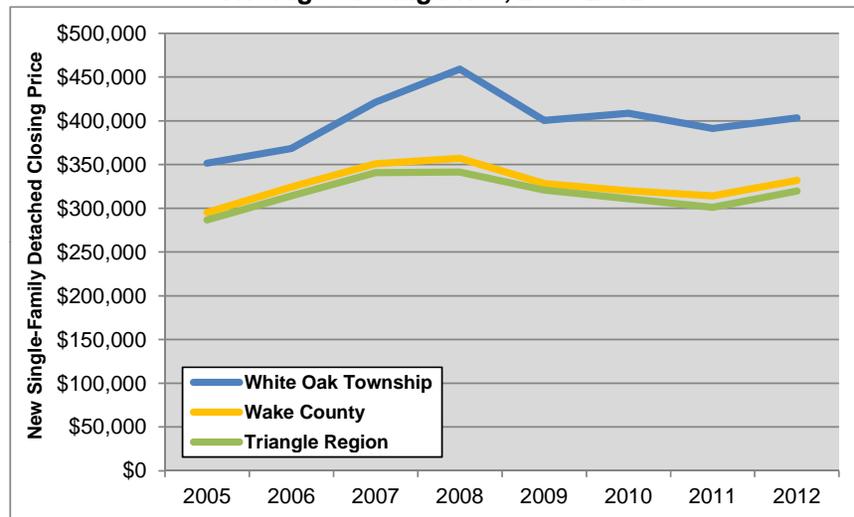
Source: M.O.R.E.; Kimley-Horn and Associates

Comparison of Annual New Single-Family Detached Closings, 2005-2012



For-Sale Detached Residential

Comparison of New For-Sale Detached
Average Closing Price, 2005-2012



- Average closing price for new single-family detached units was compared to Wake County and the three-county Triangle region
- White Oak Township demonstrated a noticeable premium over the other two geographies
- The average closing price for new units decreased 17.4% from a peak of \$459,053 in 2008 to \$391,109 in 2011
- White Oak Township experienced a slight increase in average closing price in the last year, indicating market stabilization and recovery

For-Sale Attached Residential

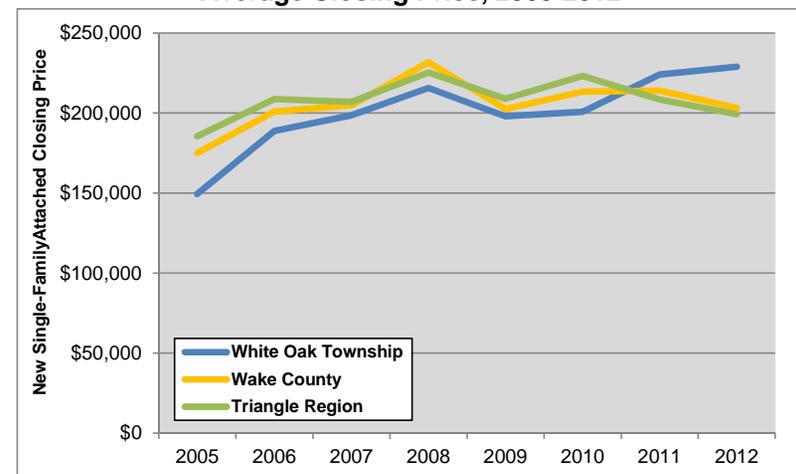
- For-sale attached includes both townhouse and condominium units
- There were 2,228 townhouse or condominium closings in White Oak Township between 2005 and 2012, making up only 5.9% of the three-county Triangle market
- Similar to detached product, the decline in new closings reflected builder response to declining demand during the national housing crisis
- The average new townhouse and condominium closing price was comparable to Wake County and the three-county market
- While the other two geographies saw townhouse/condominium prices continuing to decline, White Oak Township experienced an increase over the last two years

For-Sale Attached Closings, White Oak Township, 2005-2012

Year	Units		Total Units	New % of Total
	New	Resale		
2005	142	99	241	58.9%
2006	165	118	283	58.3%
2007	392	124	516	76.0%
2008	262	109	371	70.6%
2009	204	92	296	68.9%
2010	76	51	127	59.8%
2011	83	66	149	55.7%
2012	131	114	245	53.5%
Total	1,455	773	2,228	65.3%

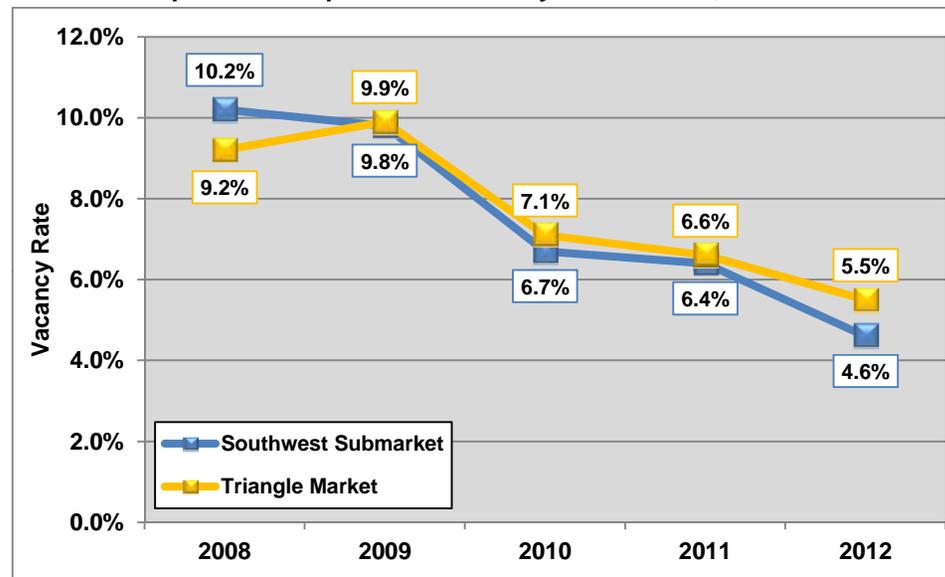
Source: M.O.R.E.; Kimley-Horn and Associates

Comparison of New For-Sale Attached Average Closing Price, 2005-2012



Apartments

Comparison of Apartment Vacancy Rate Trends, 2008-2012



- There are nearly 2,000 apartment units in the Apex Planning Area, primarily completed since the 1990s (newest community, Village Summit, completed in 2012)
- Annual apartment data provided by third-party data source; Southwest Submarket (includes Cary and Apex) used as a proxy for the Planning Area
- Following the 2007-2009 Recession, apartment demand has steadily increased
- Coupled with limited supply increases between 2008 and 2010, vacancy rates have rapidly declined
- Similar trend experienced nationally and in other North Carolina markets

Residential Development

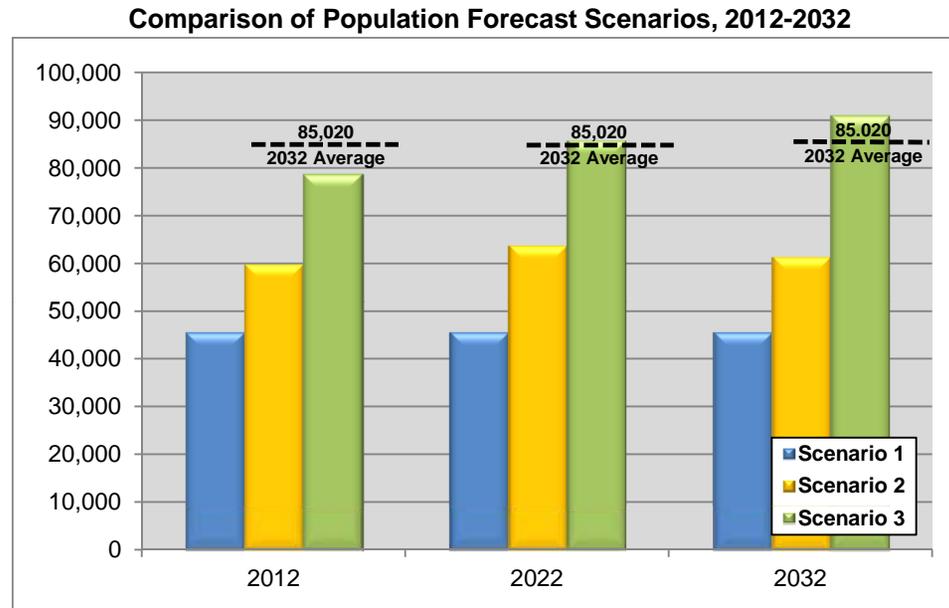
- Of the 4,456 units approved as part of active or proposed residential projects, over 3,600 lots remain to be developed
- Single-family detached and townhouse developments are the predominate development type
- It should be noted that this project does not include Veridea or Westford as no site plans have been submitted
- Veridea could have an estimated 8,000 residential units, and Westford could have up to 900

Under Construction & Approved Residential Development, 2013

Name of Project	Address	Residential Units			Residential Type
		Complete	Remaining	Total	
Villages of Apex	Apex Peakway/US-64	85	576	661	SFD
Salem Village	Apex Peakway/S. Salem St.	785	386	399	SFD
Parkside at Bella Casa	Mt. Zion Rd.	238	135	373	SFD
Beckwith Farms	Green Level Church Rd.	0	321	321	SFD
Columns at Broadstone	Broadway Way	0	300	300	APT
Cambridge Village of Apex	Apex Peakway/S. Hughes St.	85	199	284	SENIOR
Pemberley	E. Williams St/NC-55	18	209	227	SFD & TH
Olive Chapel Park	Olive Chapel Rd.	151	44	195	SFD
Beaver Creek Crossing	Chapel Ridge Rd.	0	162	162	CONDO
Ellington Place	Laura Duncan Rd.	94	57	151	SFD
Colvin Park	Stephenson Rd.	0	144	144	SFD
Bella Casa, Cottages & Manors	Evans Rd.	63	80	143	SFD
Hunt at Green Level	Roberts Rd.	0	140	140	SFD
Old Mill Village	Old Raleigh Rd./Apex Peakway	16	122	138	SFD & TH
Crossings at Haddon Hall	Eyam Hall Dr.	54	77	131	CONDO
55 James at Midtown	James St.	0	109	109	TH
James Street Station	James St.	0	97	97	SFD & TH
Villages of Whitehall	Apex Peakway/S. Salem St.	70	22	92	SFD
The Orchards	US-64/Blackburn Rd.	23	63	86	CONDO
Holland Farm	Holland Rd.	66	15	81	SFD
Covington	Olive Chapel Rd.	0	77	77	SFD
Bella Casa, Traditions	Evans Rd.	37	36	73	SFD
Creekside	Olive Chapel Rd./Kelly Rd.	41	31	72	SFD
Salem Creek Townhomes	S. Salem St.	0	65	65	TH
Edgewater Townhomes	Laura Duncan Rd.	0	48	48	TH
Groves II	Myrtle Grove Ln.	23	22	45	SFD
Bella Casa, Estates	Evans Rd.	11	25	36	SFD
Kelly Grove I & II	Kelly Rd./Grand Kelly Dr.	15	20	35	SFD
Green at Scotts Mill (Section 8)	Town Side Dr./Village Commons Dr.	0	22	22	TH
Total		1,826	3,604	4,456	

Source: Town of Apex

Population Forecast



- Three residential growth scenarios were evaluated to forecast population, households, and housing units for the Planning Area through 2032
 - Scenario 1 (Baseline): Uses ESRI’s 2.8% CAGR forecasted between 2012 and 2017
 - Scenario 2 (Absorption Trends): Average for-sale and rental residential absorption trend data used to forecast housing unit growth
 - Scenario 3 (Accelerated Growth): Scenario 1 forecast accelerated post-2015 to indicate improvements to the economy following the recession

Population Forecast

- This analysis utilized a straight average of the three scenarios as the basis for the residential demand forecast
- Housing unit forecasts are based on average household sizes and a 6% vacancy rate, reported by ESRI
- Population in the Planning Area could increase by 39,500 people, equating to an annual growth rate of 3.2%
- Continued recovery from the Recession and the completion of the Regional Wastewater Plant will positively impact housing unit delivery post-2014

Averaged Residential Forecast, 2012-2032

	2012	2022	2032	2012-2032 Δ		
				#	%	CAGR
Housing Units	17,060	23,260	32,070	15,010	88.0%	3.2%
Households	16,160	21,940	30,260	14,100	87.3%	3.2%
Population	45,520	61,650	85,020	39,500	86.8%	3.2%

Source: ESRI, Kimley-Horn & Associates, Town of Apex

Residential Unit Demand

- New housing unit completions in the Planning Area are expected to be majority single-family detached (61.4%)
- This estimate takes into consideration southwestern Wake County's attraction to families
- Of the 15,010 new residential units, 2,550 are expected to be townhouse and 3,250 are expected to be multi-family
- The overall share of single-family detached units is expected to continue to decline, falling from 81.8% in 2000 to 73.5% in 2012, to 67.7% in 2032

Housing Unit Growth, Planning Area, 2012-2032

Unit Type	Housing Unit Growth				Total	% of Total
	2012-2017	2017-2022	2022-2027	2027-2032		
Single-Family Detached	1,370	2,230	2,550	3,060	9,210	61.4%
Townhouse	500	600	700	750	2,550	17.0%
Multi-Family	1,000	500	750	1,000	3,250	21.7%
Total	2,870	3,330	4,000	4,810	15,010	100.0%

Source: ESRI, Kimley-Horn & Associates, Town of Apex

Share of Residential Units by Type, Planning Area, 2012-2032

Type	Share of Total		
	2000*	2012*	2032
Single-Family, Detached	81.8%	73.5%	67.7%
Single-Family, Attached	4.2%	10.0%	13.4%
Multi-Family	14.0%	16.4%	18.9%

Note: Share excludes units classified as mobile home/other.

Source: U.S. Census ACS, Kimley-Horn and Associates

Residential Land Demand

Residential Land Demand, Planning Area, 2012-2032

Type	Residential Acreage				Total
	2012-2017	2017-2022	2022-2027	2027-2032	
Single-Family¹	228 - 457	372 - 743	425 - 850	510 - 1,020	1,535 - 3,070
Townhouse²	50 - 83	60 - 100	70 - 117	75 - 125	255 - 425
Multi-Family³	50 - 63	25 - 31	38 - 47	50 - 63	163 - 203
Total	328 - 603	457 - 875	533 - 1,014	635 - 1,208	1,953 - 3,698

¹ Acreage assumption for single-family is three to six units per acre.

² Acreage assumption for townhouses is six to ten units per acre.

³ Acreage assumption for apartments is 16 to 20 units per acre.

Source: ESRI, Kimley-Horn and Associates, Town of Apex

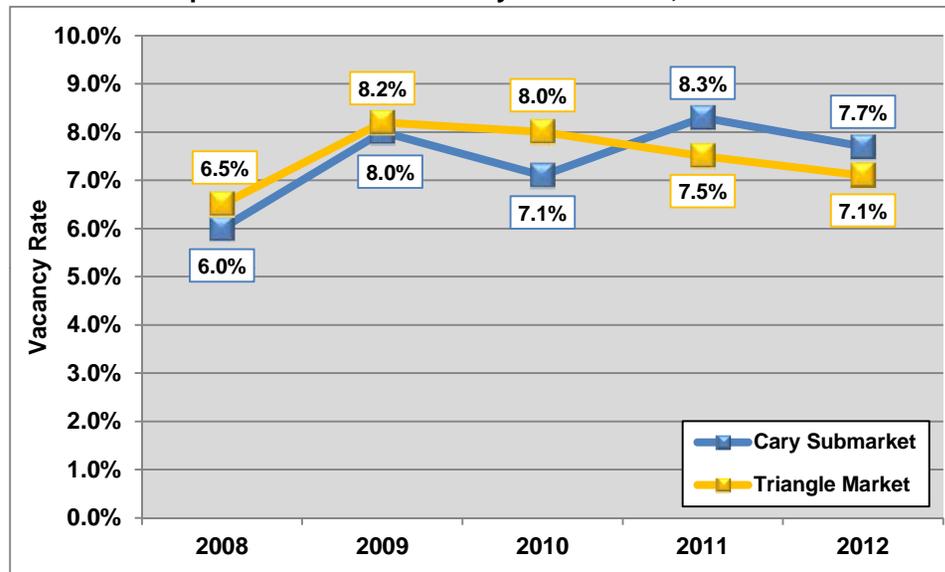
- The 2012-2032 land demand for new residential units is based on standard ranges for units per acre by type
- Density assumption for single-family detached in the Planning Area is three to six units per acre, equating to demand of 1,500 to 3,000 acres
- Townhouses are assumed to have a density of six to 10 units per acre, with total land demand of 255 to 425 acres
- Assuming a density of 16 to 20 units per acre, multi-family would have land demand of 163 to 203 acres
- In total, the 2012-2032 residential land demand range from 1,950 to 3,700 acres
- Residential land demand could also be accommodated in mixed-use developments

RETAIL



Retail

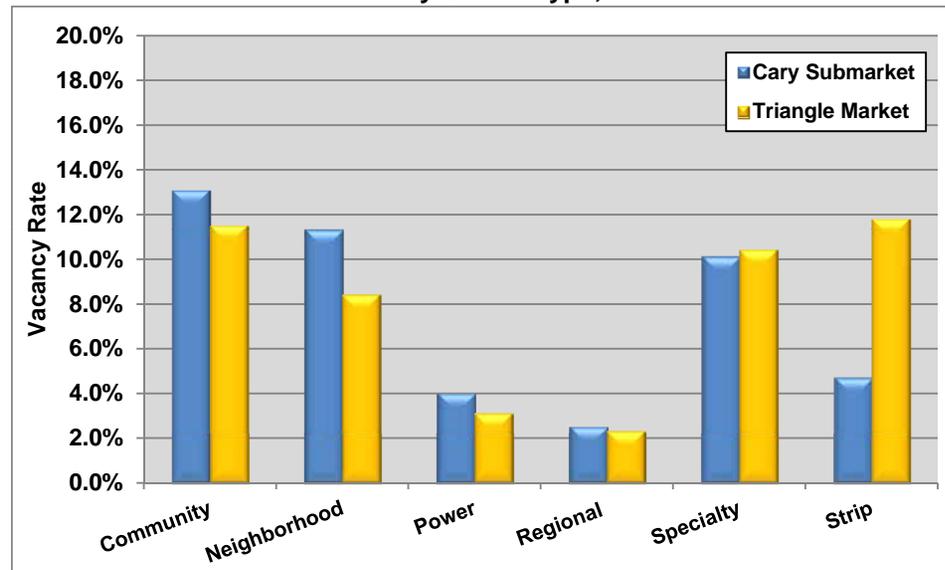
Comparison of Retail Vacancy Rate Trends, 2008-2012



- Annual retail data provided by third-party data source; Cary Submarket (includes Cary and Apex) used as a proxy for the Planning Area
- Both Cary Submarket and larger three-county Triangle market have reported vacancy rates between 6% and 8% over the last five years, indicating limited impact from the 2007-2009 Recession
- Average rents per square foot for both geographies have consistently remained between \$20 and \$22

Retail

Comparison of Retail Vacancy Rate
Trends by Center Type, 2012



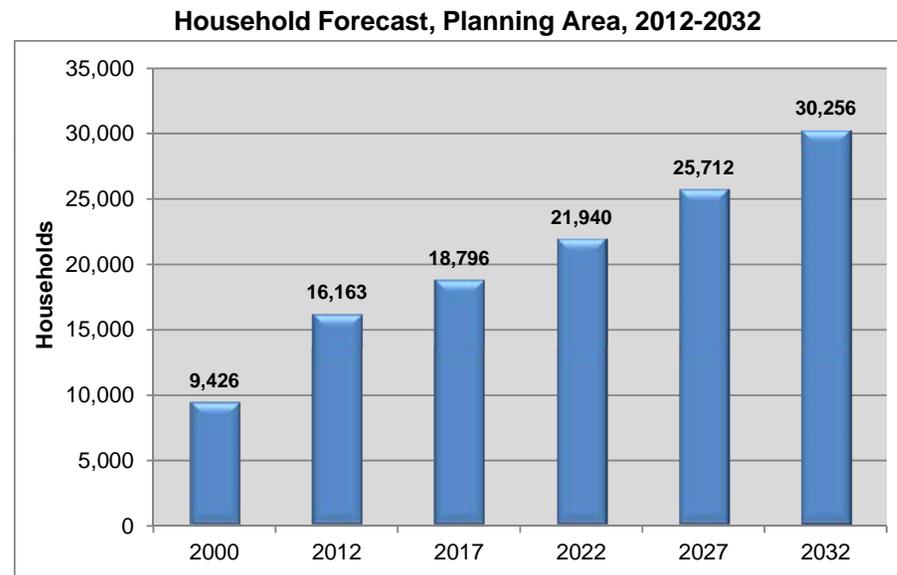
- For the Cary Submarket, community and neighborhood centers have reported the highest vacancy rates of all retail types, at 13% and 11% respectively
- The Cary Submarket has higher vacancy rates for community and neighborhood shopping centers than the larger Triangle market, but comparable rates for power and regional centers and specialty shops

Retail Demand Methodology

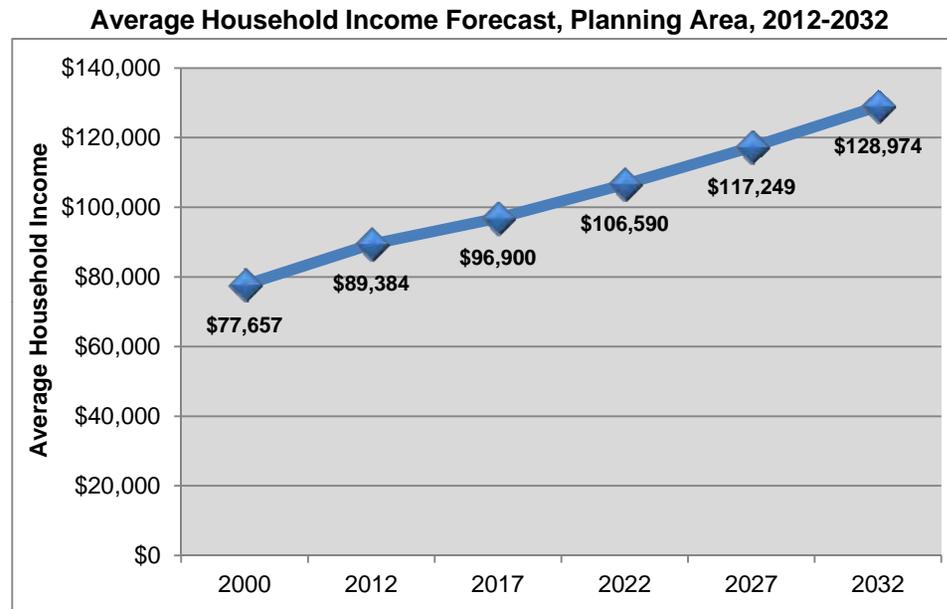
- The 2012-2032 retail demand for the Planning area was forecasted using the following method:
 - Calculating the Planning Area's total household income in 2012 and 2032 by applying the forecasted households to average income projections derived from ESRI trends and proprietary population forecasts
 - Estimating Wake County's expenditure potential based on data from the North Carolina Department of Revenue that indicates the percentage of income spent on various goods and services
 - Determining the Planning Area sales capture in five-year increments through 2032, taking into account leakage resulting from resident commuting patterns
 - Estimating sales inflow from non-Planning Area residents, including those who work there and commuters
 - Converting retail sales to square feet based on sales per square feet data by type of retail

Household Forecast

- Based on the population forecast presented in the residential demand forecast, the Planning Area is expected to add 14,100 new households through 2032, a 87.3% increase over 20 years
- In 2032, a total of 30,256 households could be located in the Planning Area



Average Household Income



- Retail demand forecasts generally rely on average household income, which is typically higher than the median income statistics
- According to ESRI, the Planning Area had an average income of \$89,384 in 2012, a 15.1% increase from \$77,657 in 2000
- Based on income projections derived from ESRI trends, the average household income in the Planning Area could increase to \$128,974 by 2032

Net New Retail Demand

Net New Retail Demand, Planning Area, 2012-2032

Retail Category	Net New Retail Demand (Sq.Ft.)				2012-2032	% of
	2012-2017	2017-2022	2022-2027	2027-2032	Change	Total
Supermarkets & Other Groceries	32,272	42,339	50,799	61,209	186,619	14.7%
Building Material & Supply Dealers	31,175	40,899	49,072	59,128	180,274	14.2%
Food Services - Restaurants	28,876	37,883	45,453	54,767	166,979	13.1%
Other General Merchandise Stores	21,492	28,196	33,830	40,762	124,280	9.8%
Pharmacies & Drug Stores	17,657	23,165	27,793	33,489	102,104	8.0%
Clothing Stores	14,891	19,536	23,439	28,242	86,108	6.8%
Discount Department Stores	11,686	15,331	18,395	22,165	67,577	5.3%
Department Stores	7,829	10,271	12,324	14,849	45,273	3.6%
Furniture Stores	7,036	9,231	11,075	13,345	40,687	3.2%
Electronics & Appliances	6,788	8,905	10,684	12,874	39,251	3.1%
All Other	40,379	52,975	63,560	76,585	233,499	18.3%
Total	220,080	288,730	346,425	417,415	1,272,650	100.0%

Source: Kimley-Horn and Associates

- The Planning Area has a forecasted demand of approximately 1.2 million square feet of new retail space between 2012 and 2032
- Demand for net new retail square footage is expected to increase in every five-year forecast period due to household growth and forecasted average income increases
- Supermarkets, Building Materials, and Restaurants make up the largest growth categories for net new demand
- Given an average grocery size of 50,000 to 60,000 square feet, this equates to approximately three new stores in the Planning Area through 2032

Retail Land Demand

- Retail land demand is based on floor area ratios (FAR) ranging from 0.25 to 0.30, which are typical industry standards for suburban retail development
- Applying the assumed FARs to the forecasted 2012-2032 net square footage for the Planning Area equates to a land demand of approximately 97 to 117 acres through 2032
- This acreage could also be accommodated in mixed-use developments

**Retail Land Demand,
Planning Area, 2012-2032**

Density Assumption	2012-2032	
	Forecast (Sq.Ft.)	Land (Acres)
0.25 FAR	1,272,650	117
0.30 FAR	1,272,650	97

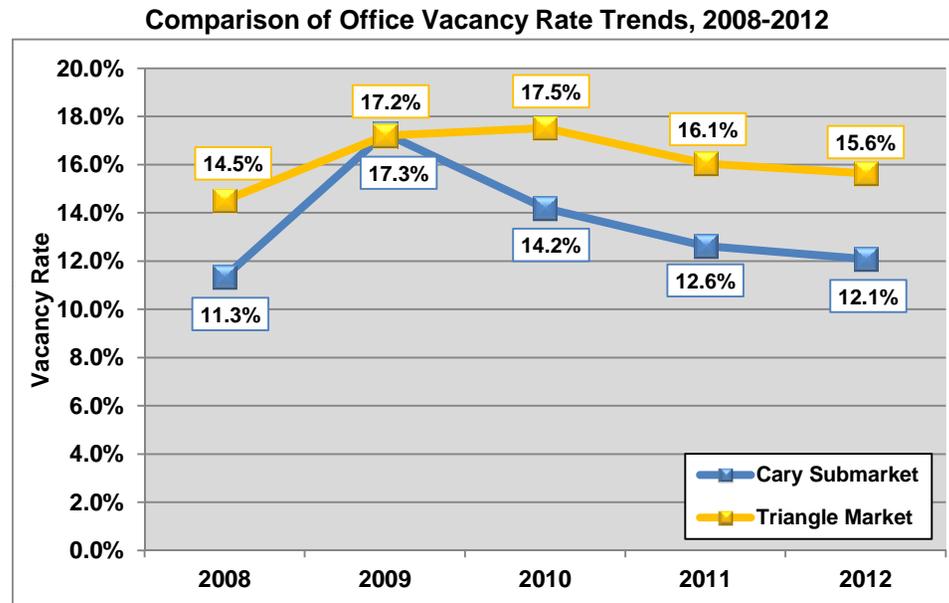
Source: Kimley-Horn and Associates

OFFICE



Kimley-Horn
and Associates, Inc.

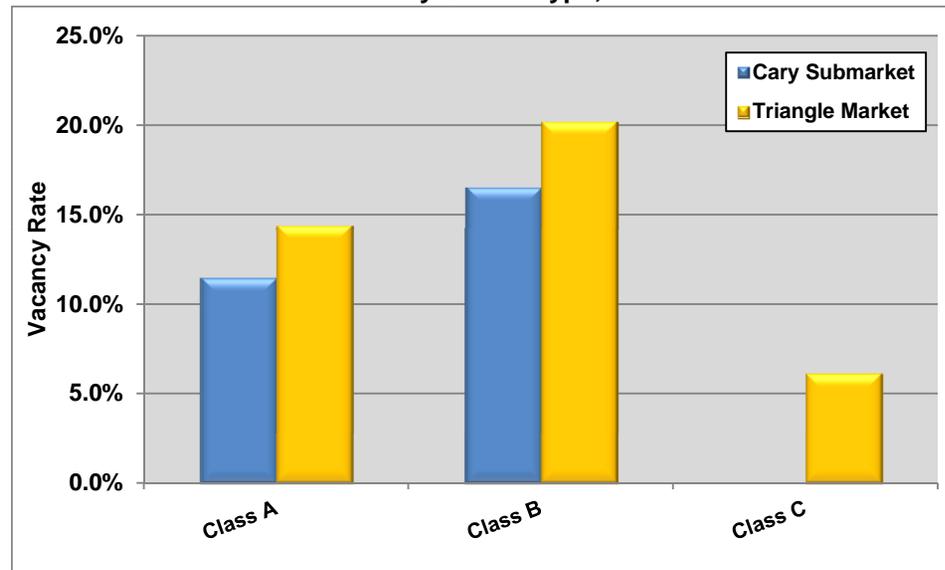
Office



- Annual retail data provided by third-party data source; Cary Submarket (includes Cary and Apex) used as a proxy for the Planning Area
- In comparison to the larger Triangle market, the Cary Submarket has generally experienced lower vacancy rates
- The 2012 office vacancy rate in the Cary Submarket was 12.1%, compared to 15.6% for the larger market

Office

Comparison of Office Vacancy Rate
Trends by Center Type, 2012



- Class A office space in the Cary Submarket was approximately 11% at year-end 2012, compared to 16% for Class B
- There is no Class C office space in the Cary Submarket
- For all office classes, the Cary Submarket has posted stronger vacancy rates than the three-county Triangle market

Employment Forecast

Employment Forecast, Wake County, 2012-2032

Industry	2012	2017	2022	2027	2032	2012-2032 Δ	
						#	%
Agriculture Forestry Fishing & Hunting	750	758	766	781	797	48	6.3%
Mining	260	268	276	285	293	35	13.4%
Transportation, Warehousing, and Utilities	11,888	11,677	11,401	11,044	10,624	-1,297	-10.9%
Construction	25,085	28,143	31,476	35,100	39,026	14,520	59.3%
Manufacturing	19,286	19,069	18,814	18,522	18,197	-1,127	-5.8%
Wholesale Trade	19,291	19,938	20,500	20,963	21,317	2,165	11.3%
Retail Trade	51,383	53,049	54,608	56,047	57,360	6,323	12.4%
Information	17,107	17,824	18,533	19,230	19,911	2,948	17.4%
Finance and Insurance	17,809	19,597	21,474	23,436	25,475	8,012	45.9%
Real Estate and Rental and Leasing	7,778	8,275	8,785	9,306	9,838	2,158	28.1%
Professional and Business Services	92,130	101,343	113,504	130,530	150,109	64,122	74.6%
Educational Services	39,770	41,676	43,568	45,436	47,276	7,888	20.0%
Health Care and Social Assistance	47,922	52,715	59,040	67,896	78,760	32,368	69.8%
Arts Entertainment and Recreation	9,300	10,325	11,438	12,647	13,955	4,850	53.3%
Accommodation and Food Services	39,444	42,693	46,092	49,635	53,314	14,501	37.4%
Other Services	13,939	15,546	17,295	19,190	21,241	7,607	55.8%
Public Administration/Government	40,147	43,441	46,724	49,992	53,173	13,682	34.6%
Total	453,289	486,337	524,292	570,041	620,666	178,803	40.5%

Sources: NCESC; Woods & Poole; Kimley-Horn and Associates

- Office demand for the Planning Area is based on office-occupying employment growth as reported for Wake County by Woods & Poole
- Wake County is expected to add over 178,000 jobs over the next 20 years, a 40.5% increase
- In 2032, the largest sectors are expected to be Professional and Business Services, Healthcare, and Retail Trade

Office-Occupying Employment Forecast

Office-Occupying Employment Forecast, Wake County, 2012-2032

Industry	Office Share	2012	2017	2022	2027	2032	'12-'32 Change	
							#	%
Agriculture Forestry Fishing & Hunting	5.0%	38	38	38	39	40	2	0.0%
Mining	5.0%	13	13	14	14	15	2	0.0%
Transportation, Warehousing, and Utilities	25.0%	2,972	2,919	2,850	2,761	2,656	-316	-10.6%
Construction	10.0%	2,509	2,814	3,148	3,510	3,903	1,394	55.6%
Manufacturing	5.0%	964	953	941	926	910	-54	-5.6%
Wholesale Trade	25.0%	4,823	4,984	5,125	5,241	5,329	507	10.5%
Retail Trade	10.0%	5,138	5,305	5,461	5,605	5,736	598	11.6%
Information	30.0%	5,132	5,347	5,560	5,769	5,973	841	16.4%
Finance and Insurance	95.0%	16,919	18,617	20,400	22,264	24,201	7,282	43.0%
Real Estate and Rental and Leasing	85.0%	6,611	7,033	7,467	7,910	8,363	1,752	26.5%
Professional and Business Services	95.0%	87,523	96,276	107,829	124,003	142,604	55,080	62.9%
Educational Services	30.0%	11,931	12,503	13,070	13,631	14,183	2,252	18.9%
Health Care and Social Assistance	35.0%	16,773	18,450	20,664	23,764	27,566	10,793	64.3%
Arts Entertainment and Recreation	15.0%	1,395	1,549	1,716	1,897	2,093	698	50.1%
Accommodation and Food Services	10.0%	3,944	4,269	4,609	4,963	5,331	1,387	35.2%
Other Services	25.0%	3,485	3,887	4,324	4,798	5,310	1,825	52.4%
Public Administration/Government	70.0%	28,103	30,408	32,706	34,995	37,221	9,118	32.4%
Total		198,272	215,367	235,922	262,090	291,433	93,161	47.0%

Sources: NCEC; Woods & Poole; Kimley-Horn and Associates

- To determine the forecasted increase in office-occupying employment, office shares were applied to each industry projection
- Finance and Insurance and Professional and Business Services have the highest shares of office-occupying employment at 95%
- Wake County is expected to have an increase of 93,161 office-occupying employees, or 47%, between 2012 and 2032

Office Forecast

Net New Office Demand, Wake County, 2012-2032

	Net Office Demand (Sq.Ft.)				2012-2032
	2012-2017	2017-2022	2022-2027	2027-2032	Total
Jobs	17,095	20,555	26,168	29,343	93,161
Square Feet	3,846,317	4,522,014	5,626,124	6,162,123	20,156,578

* Assumes declining square foot need per employee for each five-year period.

Source: Kimley-Horn and Associates; Woods & Poole

- Forecasted office-occupying jobs have been used to estimate square footage demand
- National trends indicate declining space per employee
- Estimates for office demand are based on square feet per employee averages, as follows:
 - 2012-2017: 225 square feet/employee
 - 2017-2022: 220 square feet/employee
 - 2022-2027: 215 square feet/employee
 - 2027-2032: 210 square feet/employee
- Office demand in Wake County is expected to increase by over 20 million square feet over the 20-year period

Office Forecast

Net New Office Demand, Planning Area, 2012-2032

	Net Office Demand (Sq.Ft.)				2012-2032
	2012-2017	2017-2022	2022-2027	2027-2032	Total
Jobs	342	617	1,047	1,761	3,766
Square Feet	76,926	135,660	225,045	369,727	807,359

* Assumes increasing capture for each five-year period.

Source: Kimley-Horn and Associates; Woods & Poole

- The capture for the Planning Area is based on its current share of Wake County office space, estimated at approximately 1.5%
- This analysis assumes an increasing capture rate for each five year period, and does not forecast for the impact that Veridea would have on the Planning Area
- Planning Area capture rates start at 2% between 2012 and 2017, increasing to 6% between 2027 and 2032
- In total, the Planning Area is expected to have a demand for approximately 800,000 square feet of office space through 2032

Office Land Demand

- Similar to retail, land demand for office is based on industry-standard floor area ratios (FAR) ranging from 0.30 to 0.40
- Applying the assumed FARs to the forecasted 2012-2032 spare footage equates to office land demand of approximately 46 to 62 acres through 2032 in the Planning Area
- This acreage could also be accommodated in mixed-use developments

Office Land Demand,
Planning Area, 2012-2032

Density Assumption	2012-2032	
	Forecast (Sq.Ft.)	Land (Acres)
0.30 FAR	807,359	62
0.40 FAR	807,359	46

Source: Kimley-Horn and Associates

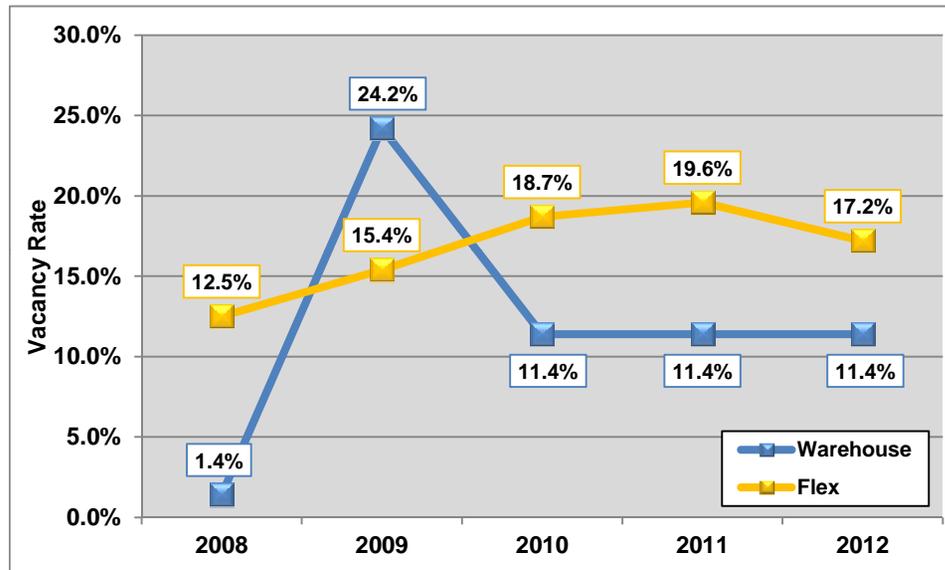
INDUSTRIAL



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Industrial

Comparison of Industrial Vacancy Rates, Cary Submarket, 2000-2012



- Annual retail data provided by third-party data source; Cary Submarket (includes Cary and Apex) used as a proxy for the Planning Area
- For the Cary Submarket, flex office space makes up only 15% of the total inventory, warehouse space is not as prevalent
- Until 2012, flex industrial product in the Cary Submarket has experienced a steadily increasing vacancy rate, consistent with state-wide and national trends

Industrial-Occupying Employment Forecast

Industrial-Occupying Employment Forecast, Wake County, 2012-2032

Industry	Industrial Share	2012	2017	2022	2027	2032	'12-'32 Change	
							#	%
Agriculture Forestry Fishing & Hunting	0.0%	0	0	0	0	0	0	0.0%
Mining	0.0%	0	0	0	0	0	0	0.0%
Transportation, Warehousing, and Utilities	60.0%	7,133	7,006	6,841	6,627	6,375	-758	-10.6%
Construction	15.0%	3,763	4,221	4,721	5,265	5,854	2,091	55.6%
Manufacturing	90.0%	17,357	17,162	16,932	16,670	16,377	-980	-5.6%
Wholesale Trade	90.0%	17,362	17,944	18,450	18,867	19,186	1,824	10.5%
Retail Trade	10.0%	5,138	5,305	5,461	5,605	5,736	598	11.6%
Information	65.0%	11,120	11,586	12,046	12,499	12,942	1,822	16.4%
Finance and Insurance	5.0%	890	980	1,074	1,172	1,274	383	43.0%
Real Estate and Rental and Leasing	5.0%	389	414	439	465	492	103	26.5%
Professional and Business Services	5.0%	4,606	5,067	5,675	6,526	7,505	2,899	62.9%
Educational Services	15.0%	5,965	6,251	6,535	6,815	7,091	1,126	18.9%
Health Care and Social Assistance	10.0%	4,792	5,271	5,904	6,790	7,876	3,084	64.3%
Arts Entertainment and Recreation	10.0%	930	1,032	1,144	1,265	1,396	466	50.1%
Accommodation and Food Services	5.0%	1,972	2,135	2,305	2,482	2,666	694	35.2%
Other Services	10.0%	1,394	1,555	1,729	1,919	2,124	730	52.4%
Public Administration/Government	5.0%	2,007	2,172	2,336	2,500	2,659	651	32.4%
Total		84,820	88,102	91,593	95,466	99,552	14,732	17.4%

Sources: NCESC; Woods & Poole; Kimley-Horn and Associates

- Using the same Wake County employment forecasts as presented for office demand, industrial-occupying shares are applied to each sector to forecast future industrial employment
- Shares range from 0% for Agriculture and Mining to 90% for Wholesale Trade and Manufacturing
- Wake County is expected to have an increase of 14,732 new industrial-occupying jobs between 2012 and 2032, a 17.4% increase

Industrial Forecast

Net New Industrial Demand, Wake County, 2012-2032

	Net Industrial Demand (Sq.Ft.)				2012-2032
	2012-2017	2017-2022	2022-2027	2027-2032	Total
Jobs	3,282	3,491	3,873	4,086	14,732
Square Feet	2,379,721	2,496,010	2,750,123	2,859,885	10,485,739

* Assumes declining square foot need per employee for each five-year period.

Source: Kimley-Horn and Associates; Woods & Poole

- Forecasted industrial-occupying jobs have been used to estimate square footage and land demand
- Estimates for industrial demand are based on an average of 725 square feet per employee
- Square feet per employee estimates vary from 300 square feet to 1,000 square feet, depending on use; typically, manufacturing and wholesale trade sectors require the most space per employee
- Wake County is expected to have demand for over 10 million square feet of additional industrial space between 2012 and 2032

Industrial Forecast

Net New Industrial Demand, Planning Area, 2012-2032

	Net Industrial Demand (Sq.Ft.)				2012-2032
	2012-2017	2017-2022	2022-2027	2027-2032	Total
Jobs	197	279	387	490	1,354
Square Feet	142,783	202,474	280,822	355,443	981,522

* Assumes increasing capture for each five-year period.

Source: Kimley-Horn and Associates; Woods & Poole

- The capture for the Planning Area is based on its current share of Wake County industrial space, estimated at approximately 5.5%
- This analysis assumes an increasing capture rate for each five year period, and does not forecast for the impact that Veridea would have on the Planning Area
- Planning Area capture rates start at 6% between 2012 and 2017, increasing to 12% between 2027 and 2032
- In total, the Planning Area is expected to have a demand for approximately 980,000 square feet of office space through 2032

Industrial Land Demand

- Land demand for industrial space is based on industry-standard floor area ratios (FAR) ranging from 0.20 to 0.30
- Applying the assumed FARs to the forecasted 2012-2032 spare footage equates to industrial land demand of approximately 74 to 110 acres through 2032 in the Planning Area

**Industrial Land Demand,
Planning Area, 2012-2032**

Density Assumption	2012-2032	
	Forecast (Sq.Ft.)	Land (Acres)
0.20 FAR	960,663	110
0.30 FAR	960,663	74

Source: Kimley-Horn and Associates



APPENDIX B
IMPLEMENTATION MATRIX

	Recommendations	Implementation Partners	Timeframe
Balanced Growth	Revise the Unified Development Ordinance. Virtually all of the recommendations pertaining to land use and development design can be implemented through the application of land development regulations. The traditional vehicle for these regulations is the community's Unified Development Ordinance (UDO). The UDO establishes allowable uses by district and sets forth provisions for development design, such as standards for subdivisions and commercial centers.	Planning Department	Short Term
	Encourage non-residential land uses to achieve a more sustainable, balanced tax base in Apex. Promote a mixed-use development pattern in activity centers identified on the 2030 Land Use Map. Preserve industrial and office lands identified on the 2030 Land Use Map for employment use through zoning mechanisms. Support retail growth near already developed areas.	Planning Department	Ongoing
	Support additional residential development at varying densities based on the 2030 Land Use Map. Promote townhomes and apartments in designated areas for medium and high density residential uses on the 2030 Land Use Map. Allow single-family detached where adequate utility and transportation infrastructure is available to support such development. Maintain low density residential uses as a transition to rural areas and protected open space areas.	Planning Department	Ongoing
Placemaking	Conduct and adopt detailed, special studies or small area plans for key activity centers. These small area plans should focus initially on the following areas: Downtown Include a parking analysis and wayfinding component. Identify a potential location for a programmed community/festival space in downtown. Midtown/55 Include a streetscape program and access management component. Center Street/ Schieffelin Road Identify an optimal mix of land uses at the intersection of Center Street and Schieffelin Road.	Planning Department	Short Term
	Encourage both vertical and horizontal integration of uses in mixed-use districts, with an emphasis on pedestrian linkages.	Planning Department	Ongoing
	Modify the procedural section of the Unified Development Ordinance (UDO) to allow for administrative review and approval of site plans that meet all provisions set forth in the UDO.	Planning Department	Short Term
	Initiate a Town Sign Master Plan to provide uniform wayfinding to major destinations in Town. Ensure signage is appropriate for a variety of users including pedestrians, bicyclists and motorists. Update signage at the major entries into Town with clear graphics, landscaping and/or other gateway features.	Planning Department	Ongoing Short Term
	Ensure new development is compatible with existing neighborhoods in terms of scale, character and quality of construction.	Planning Department	Ongoing
Housing	Accommodate a mix of housing by type (e.g. single-family homes, townhouses, multi-family) and tenure (own/rent) to serve a growing and increasingly diverse population.	Planning Department	Ongoing
	Encourage density increases that do not alter the character of downtown through lot size changes and coverage modifications, cottage and cluster housing development models and accessory units.	Planning Department, Downtown Business Association, Chamber of Commerce	Short Term
	Allow and encourage residential development, especially rental housing, above commercial uses in the downtown area.	Planning Department	Short Term
	Facilitate the reuse of abandoned, vacant and tax-delinquent properties for workforce housing.	Planning Department	Mid Term
	Amend ordinances to permit cottage housing or other alternative housing models in appropriate locations to provide housing options for a variety of age and income groups.	Planning Department	Short Term
	Additional consideration should be given to providing housing options for Baby Boomers who wish to age-in-place. This includes owner and renter options within close proximity to retail and medical services. Provide accessible, safe, and affordable home for older adults. Support alternative housing models geared to older adults.	Planning Department	Mid Term
	Encourage weatherization of existing homes to improve energy-efficiency and reduce utility costs.	Planning Department, North Carolina Department of Energy	Mid Term
In order to improve and maintain public spaces in neighborhoods, consider starting a Neighborhood Improvement Grant program to provide matching funds for aging neighborhoods without Homeowner Associations and for those with expired covenants.	Planning Department	Mid Term	

	Recommendations	Implementation Partners	Timeframe
Economic Development	Identify new industrial/business/office park sites totaling 100-150 contiguous acres on NC-55, US-64, US-1 and Jessie Drive to accommodate non-retail employment growth. These corridors capitalize on access to NC-540.	Planning Department, Economic Development Staff, Chamber of Commerce	Short Term
	Partner with Town of Apex Economic Development staff and the Chamber of Commerce to market these sites to potential employers.	Planning Department, Economic Development Staff, Chamber of Commerce	Ongoing
	Identify and reserve at least one industrial/business park parcel over 50 acres near an NC-540 interchange for a potential major employer relocation, taking advantage of the attractiveness of the congruence of three limited-access highways. Continue dialogue with the developer of Veridea, who has assembled acreage bound by NC-540, NC-55 and US-1.	Planning Department, Economic Development Staff, Chamber of Commerce	Mid Term
	Preserve access and visibility for large parcels that could be developed as employment centers or mixed-use communities on key transportation corridors such as US-64, NC-55, Old US-1 and Jessie Drive.	Planning Department, Economic Development Staff, Chamber of Commerce	Ongoing
	Pursue completion of the Apex Peakway, which is needed to relieve downtown traffic pressures and provide access to infill commercial and residential development sites over the next decade.	Planning Department, Economic Development Staff, Chamber of Commerce	Short Term
	Participate in infrastructure improvements such as streets, sidewalks and parking decks that provide catalysts for more urban scale development around potential regional rail stations near the center of town and the NC-540/Old US-1 interchange.	Planning Department, Economic Development Staff, Chamber of Commerce	Ongoing
	Prepare a Strategic Economic Development Plan for Apex. The plan should address the following: Inventory and analysis of existing businesses and industry Analysis of competitive advantage for Apex Identification of target industries for Apex Strategies for increasing percentage of employees who live and work in Town Downtown development strategy	Economic Development Staff	Short Term
	Promote entrepreneurs and small business owners to locate their operations in the Central Business District (CBD). Continue reduction of capacity fees for businesses locating in the CBD. Continue to partner with the Chamber of Commerce and Downtown Businesses Association to create a "Buy Local" brand for Apex. Improve public access to wireless internet in the CBD. As vacancies are filled downtown, allow for the full complement of MORR uses along South Salem Street, Saunders Street, and Chatham Street.	Planning Department, Economic Development Staff, Chamber of Commerce	Ongoing
	Encourage and support small and independent businesses. Inventory existing small and in-home businesses to collect data for grant applications. Consider small grants or loans to encourage entrepreneurs and small businesses. Partner with the Chamber of Commerce to host an Apex Start-Up Day to encourage entrepreneurship. Identify partners to provide technical assistance (i.e., legal and financial advice for entrepreneurs and small business owners).	Planning Department, Economic Development Staff	Ongoing

	Recommendations	Implementation Partners	Timeframe
Transportation	Implement the Apex Transportation Plan 2011 Plan Update.	Planning Department	Ongoing
	In addition to the recommendations outlined in the Apex Transportation Plan 2011 Plan Update, consider the following: Conduct an inventory of informal trails in the town and ETJ to identify future potential additions to the greenway network and to help prioritize sidewalk projects. Support future transit by reserving land and enabling transit-supportive development in future transit station locations. Evaluate the effectiveness of existing park and ride stations. Given the 2030 Land Use Map, identify potential future locations for park and ride facilities. Initiate a study to identify mechanisms to fund the completion of the Apex Peakway. Protect rights-of-way for future corridors identified in the transportation plan. Consider mechanisms to protect right-of-way. For example, continue to allow parcels impacted by right-of-way acquisition to maximize density on remaining acreage.	Planning Department	Ongoing
	Improve coordination with NCDOT and CAMPO to maintain, improve existing, or construct new transportation facilities in a strategic manner.	Planning Department, CAMPO	Ongoing
	Build organizational support for bicycle and pedestrian facilities in Apex. Establish a bicycle and pedestrian planner position within the Apex Planning Department. Establish a bicycle and pedestrian citizen advisory committee.	Planning Department, Parks, Recreation & Cultural Resources	Short Term
	Continue integration of the Transportation Plan with development reviews.	Planning Department	Ongoing
Water & Wastewater Infrastructure	Continue to direct capital investments to activity centers to support development and redevelopment consistent with the 2030 Land Use Map.	Planning Department, Public Works & Utilities	Ongoing
	Continue to assess, plan, and fund infrastructure needs through the annual capital needs assessment, capital improvements program, and capital improvements budget process.	Public Works & Utilities	Ongoing
	Establish an administrative position working interdepartmentally dedicated to expanding the Capital Improvements Planning program.	Public Works & Utilities	Ongoing
	Consider alternative funding mechanisms to fund infrastructure improvements in key economic development areas.	Public Works & Utilities	Ongoing
Public Services & Facilities	Provide adequate fire, police and emergency service in all areas.	Apex Fire Department, Apex Police Department, Planning Department	Ongoing
	Support the Apex Fire Department's staffing and facilities plan in order to achieve service level goals: Construction of Public Safety Station #5 to serve the western area of Town. Additional firefighters to man Station #5. Continue to work with the Apex Police Department to ensure Apex remains a safe, secure town for existing and future residents. Consider incorporating CPTED (Crime Prevention through Environmental Design) measures in updated UDO.	Apex Fire Department	Short Term
		Apex Police Department	Ongoing
	Continue to assess public facility needs to meet demand generated by existing, as well as future growth and development.	Apex Fire Department, Apex Police Department, Planning Department	Ongoing

	Recommendations	Implementation Partners	Timeframe
Parks, Recreation Facilities, Greenways & Open Space	Implement recommendations of the Parks, Recreation, Greenways and Open Space Master Plan.	Apex Parks, Recreation & Cultural Resources, Planning Department	Ongoing
	Develop criteria for the prioritization of greenway connections for funding such as: Greenways that serve both as transportation and recreation corridors; Greenways that connections to schools, civic facilities, historic sites, downtown, and recreation areas.	Apex Parks, Recreation & Cultural Resources, Planning Department	Short Term
	Raise awareness of greenway connections with a wayfinding program.	Apex Parks, Recreation & Cultural Resources, Planning Department	Short Term
	Develop standards for the co-location of greenways within utility rights-of-way. Determine optimal width of greenway corridor and guidelines for integrating some features and separating others. Such standards should provide guidance for land acquisition and design and be incorporated into the UDO and the Standard Specifications and Standard Details Manual.	Apex Parks, Recreation & Cultural Resources, Planning Department	Short Term
	Build organizational support for bicycle and pedestrian facilities in Apex. Establish a bicycle and pedestrian planner position within the Apex Planning Department. Establish a bicycle and pedestrian citizen advisory committee.	Planning Department, Apex Parks, Recreation & Cultural Resources, Planning Department	Mid Term Mid Term
		Planning Department	Ongoing
Environmental & Natural Resources	Promote the use of green building techniques and rainwater capture systems in new developments.	Planning Department	Ongoing
	Partner with Environmental Services to continue to raise awareness of the value of environmental and natural resources in Apex's Study area. Create a brochure to educate the public about the Lake Jordan Watershed and Neuse River Watershed. Initiate a speaker series on a variety of topics related to natural resource protection such as green building practices, xeriscaping, lake-friendly lawn care, etc. Install demonstration water management projects on public properties.	Planning Department, Environmental Services, Apex Smart Growth	Ongoing
	Promote the development of a healthy tree canopy in all areas of Apex, especially downtown. Educate the public about the benefits of a well-pruned, healthy tree canopy. Consider using only native, drought-tolerant species in town-initiated and/or town-funded landscaping projects. Where feasible, bury utility lines along public streets or investigate options to move lines to less conspicuous locations.	Planning Department, Environmental Services, Apex Smart Growth	Ongoing
Historic & Cultural Resources	Continue to protect historic resources using tools like the National Register of Historic Places Historic District designation, the demolition disincentive, landmarking, and the powers of the Wake County Historic Preservation Commission.	Planning Department, Wake County Historic Preservation Commission, Capital Area Preservation	Ongoing
	Enable and continue the preservation program at the local level. The local program brings decision-making to the citizens of Apex, with support and expertise from the Town of Apex Planning staff and Wake County Historic Preservation Commission staff. Initial tasks include the following to establish a local district if desired: Establish a historic preservation commission and have it certified by the North Carolina State Historic Preservation Office (SHPO). This enables a commission composed of Apex residents to review and approve changes to local landmarks and local districts. Primary initial goals of the commission should be to develop commission bylaws; to establish a local historic district and designate individual landmarks; and to produce design guidelines for use in reviewing exterior changes to historic properties. Have the Town of Apex become a Certified Local Government (CLG) as recognized by the National Park Service (NPS). As a CLG, Apex can take advantage of technical expertise from NPS and the SHPO and become eligible for matching grants to help fund cultural resource surveys, National Register Nominations, Technical and Planning Assistance, Educational and Interpretative Programs, Staffing and Training, and other programs. (At the moment, Apex participates in CLG programs through its participation in the Wake County preservation program; the county has CLG status. By becoming a municipal CLG, Apex could run its own preservation program, as Raleigh and Wake Forest do, without having to compete with other Wake County towns for attention and grants awarded to the county.)	Planning Department	Ongoing
	Develop wayfinding and bicycle and pedestrian connections to historic places throughout Apex.	Planning Department, Parks, Recreation & Cultural Resources	Short Term
	Develop a historic marker program to identify area resources and to educate the public on the history of Apex as well as create an understanding of the communities surrounding Apex such as Friendship, New Hill and Green Level. In partnership with the Apex Historical Society and Capital Area Preservation, educate citizens in order to get them involved in local preservation efforts.	Planning Department, New Hill Neighborhood Association, Apex Historical Society	Short Term
	Create a brochure to educate the public about the tax advantages of historic preservation. Organize regular walking tours of downtown Apex. Initiate a speaker series on a variety of topics related to historic resource protection such as historic tax credits, home and building restoration, etc.	Planning Department, Apex Historical Society, Capital Area Preservation	Short Term