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The Apex Comprehensive Plan

Apex Today

Prepared for:
Town of Apex
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February 7, 2013

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INTRODUCTION

Since completion of the current Apex Comprehensive Plan in 2004, 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 especially hard hit. And 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 jurisdiction since 2004, with nearly 20% of those homes being built between 2008 and 2010.

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 have opened, four miles of sidewalk have been constructed, three parks, including Apex's first dog park, have opened and nearly 60 miles of roadway have been improved including significant sections of the Apex Peakway.

In Apex's historic downtown, numerous storefronts have been improved through the Façade Grant Program and the Halle Cultural Arts Center opened its doors.

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: the Triangle Expressway and the Western Wake Water Reclamation Facility (WRF).

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 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.

In Apex, "Good Living" can be described any number of ways. From the high quality school system to new infrastructure investments, residents and increasingly businesses will continue to locate in Apex to take advantage of all that Apex has to offer. The purpose of this plan is to ensure that as Apex continues to grow, it remains "The Peak of Good Living."

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

PEAK PLAN 2030: THE APEX COMPREHENSIVE PLAN OVERVIEW

Peak Plan 2030: The Apex Comprehensive Plan will update and replace the current Apex Comprehensive Plan. Over the course of eight months, Peak Plan 2030 will establish a direction for the future and present a decision framework that can be utilized by many people, especially elected officials. The Plan brings together residents, elected officials, town staff, civic groups and other entities in a conversation around how best to ensure that Apex remains a great place to live, work, and play.

PLANNING AREA BOUNDARY

The Planning Area for Peak Plan 2030 includes the current Town corporate limits, Extraterritorial Jurisdiction (ETJ), and future planning areas, including areas south and west of the Town's corporate limits. The Planning Area Map on the following page details the geographic extent of the Planning Area.

PURPOSE OF THIS MEMO

The primary purpose of this memo is to provide a snapshot of the existing characteristics of Apex to gain an understanding of the potential impacts of various factors on the future growth and development of the Town. By documenting the existing conditions in this memo, those involved in the process can identify the potential issues and opportunities, which will be the basis for Peak Plan 2030.

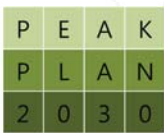
DATA COLLECTION AND RESEARCH

The Plan update is informed by existing plans, reports, policies and regulations. In addition, the project team analyzed data and created maps to further examine the Planning Area's existing condition. The following topics are included in the analysis: demographics, housing and economic conditions, land use, community character, transportation, environment and natural resources, parks and recreation, cultural and historic resources, community facilities, and utilities.

In addition to data collected for mapping purposes, data were also collected to gain a better understanding of the conditions reflected on maps. Many of these additional data were gathered through a review of relevant documents, interviews of key stakeholders, a Planning Area tour, and conversations with Town planning staff.

PLANNING AREA TOUR

The project team participated in a Planning Area tour with Town staff and Advisory Committee members. The purpose was to make observations and gather photos throughout the Planning Area. Also, data gathered and information shown on preliminary mapping were verified. Observations made were intended to understand the Planning Area context and document the established character of the built environment, including the development pattern.



COMMUNITY PARTICIPATION (TO DATE)

Community participation and input helps shape Peak Plan 2030. Understanding community values today ensures that this plan can support recommendations to maintain those priorities in the future.

ADVISORY COMMITTEE

This effort is informed by an Advisory Committee made up primarily of residents and property owners and also includes representatives from Town Council, the Planning Board, the Parks, Recreation and Cultural Resources Board, the Chamber of Commerce, and the development community. This group meets regularly through the process to set goals, provide feedback, and advise the project team on plan concepts and recommendations.

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 Planning Area and the plan. Their input supplements the input received directly from citizens and property owners participating in the process. The stakeholders include key personnel from Town departments as well as representatives of interest groups who can address questions about the following topics: economic development, historic areas in the ETJ, neighborhoods, and emergency services.

CONTEXT

Recently, 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 state capital; the Raleigh-Durham International Airport (RDU); and Research Triangle Park (RTP). As detailed on the Context Map on the following page, Apex is bordered by Cary to the north and east and Holly Springs to the south. All three jurisdictions are growing and planning for the future of their communities. Understanding the implications of regional growth provides the opportunity to identify opportunities for coordination between jurisdictions and works to ensure that each community vision is realized.

For example, Holly Springs recently completed a plan for the Northwest Area which includes portions of this plan's Planning Area. As illustrated in Holly Springs Northwest Area Map in the Appendix of this memo, the plan calls for significant employment uses along US 1 including research technology firms and a high density activity center at the intersection of US 1 and Friendship Road. Understanding neighboring jurisdictions' intentions for future growth areas is necessary to mitigate challenges and advance opportunities to ensure the future success of the Town.

ECONOMIC AND DEMOGRAPHIC CONDITIONS

POPULATION

As noted in the following table, the Planning Area has an estimated 45,523 residents. The 19,783 new residents added between 2000 and 2012 equated to a growth rate of 76.9%. Over the same time period Wake County increased by 50% to 941,825 residents, while the seven-county Raleigh Combined Statistical Area (CSA) has an estimated 1.7 million residents, an increase of 38.3% from 2000.

The 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.

TABLE 1: 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

AGE

Similar to national trends, Generation Y (aged 15 to 34) and Baby Boomers (aged 45-64) make up the two largest age cohorts in the Planning Area. In addition, residents over age 45 experienced large percentage increases between 2000 and 2012. Other significant growth rates in school-aged children indicate an increasing demand on the Wake County Public School System.

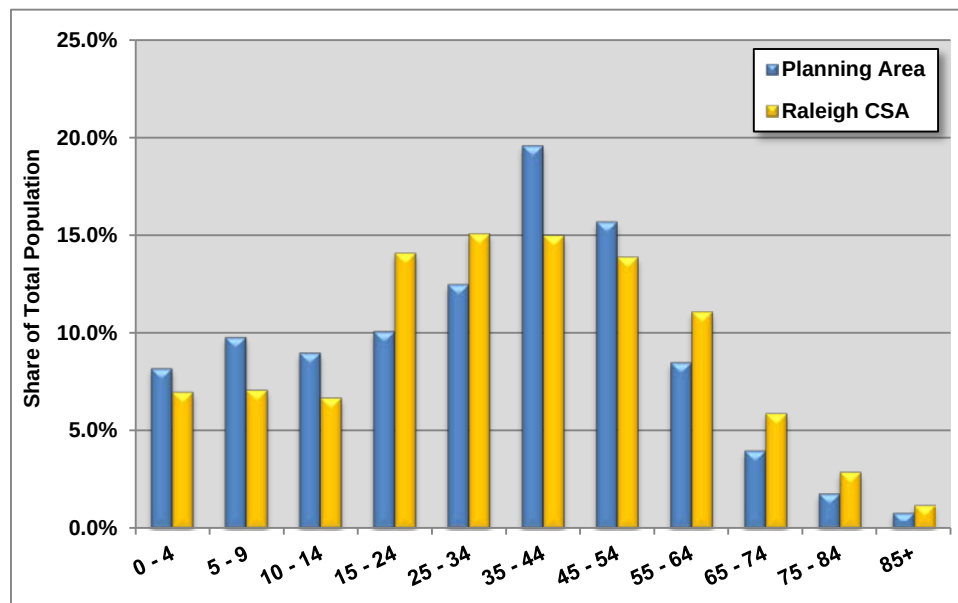
TABLE 2: POPULATION BY AGE COHORT PLANNING AREA, 2000 - 2012

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

In comparison to the larger Raleigh CSA, the 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.

CHART 1: COMPARISON OF SHARES OF POPULATION BY AGE COHORT, 2012



RACE AND ETHNICITY

The Apex Planning Area remains mostly white, but is becoming slightly more ethnically diverse. The Asian/Pacific Islander population experienced the largest percentage change over the 12-year period. In addition, 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. This trend is indicative of Raleigh CSA where Hispanic population nearly doubled.

TABLE 3: CHANGE IN SHARES OF POPULATION BY RACE, PLANNING AREA, 2000-2012

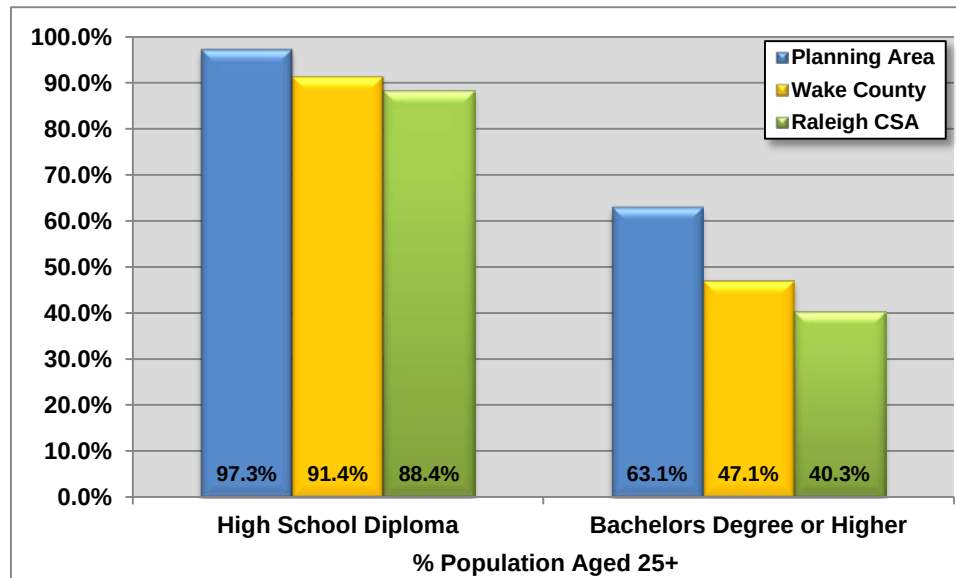
Race/Ethnicity	2000	2012	'00-'12 Change
White Alone	81.8%	78.2%	-3.6%
Black Alone	11.1%	8.8%	-2.3%
American Indian Alone	0.3%	0.4%	0.1%
Asian/Pacific Islander Alone	3.6%	6.8%	3.2%
Other Race Alone	1.6%	3.2%	1.6%
Two or More Races Alone	1.6%	2.6%	1.0%
Total	100.0%	100.0%	

Source: ESRI; Kimley-Horn and Associates

EDUCATIONAL ATTAINMENT

Apex has an extremely well-educated workforce where over 97% of all residents over age 25 in the Planning Area have a High School Diploma. In addition, 63.1% of the population have a Bachelor Degree or higher which is significantly higher than 47.1% for Wake County and 40.3% for the Raleigh CSA.

CHART 2: COMPARISON OF EDUCATIONAL ATTAINMENT, 2012



HOUSEHOLDS

There are an estimated 16,163 households in the Apex Planning Area, an increase of 71.5% since 2000. The Apex Planning Area captured 3.7% of the total household growth in the larger Raleigh CSA between 2000 and 2012.

TABLE 4: COMPARISON OF HOUSEHOLD TRENDS, 2000-2012

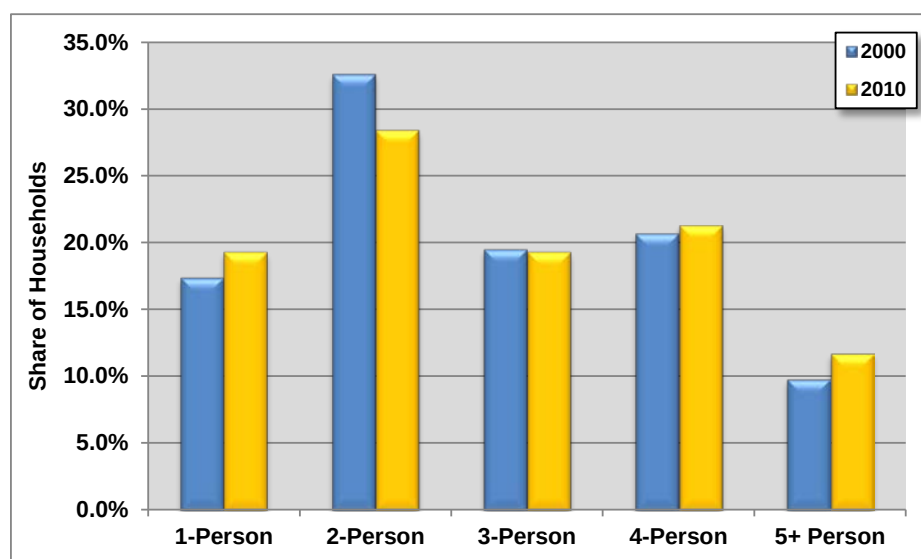
Area	2000	2012	2000-2012 Δ		
			#	%	CAGR
Planning Area	9,426	16,163	6,737	71.5%	4.6%
Wake County	242,031	362,685	120,654	49.9%	3.4%
Raleigh CSA	475,173	657,986	182,813	38.5%	2.7%
Planning Area % of CSA	2.0%	2.5%	3.7%		

Source: ESRI; Kimley-Horn and Associates

HOUSEHOLD SIZE

While the national average household size declined slightly from 2.59 to 2.58 people, the average household in the Planning Area increased from 2.73 to 2.81 persons indicating that the area is primarily attracting family households.

CHART 3: SHARE OF HOUSEHOLDS BY SIZE, 2000-2010



HOUSEHOLD INCOME

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 out of 16,163 households). The number of households earning over \$100,000 annually more than doubled during this time period.

TABLE 5: 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

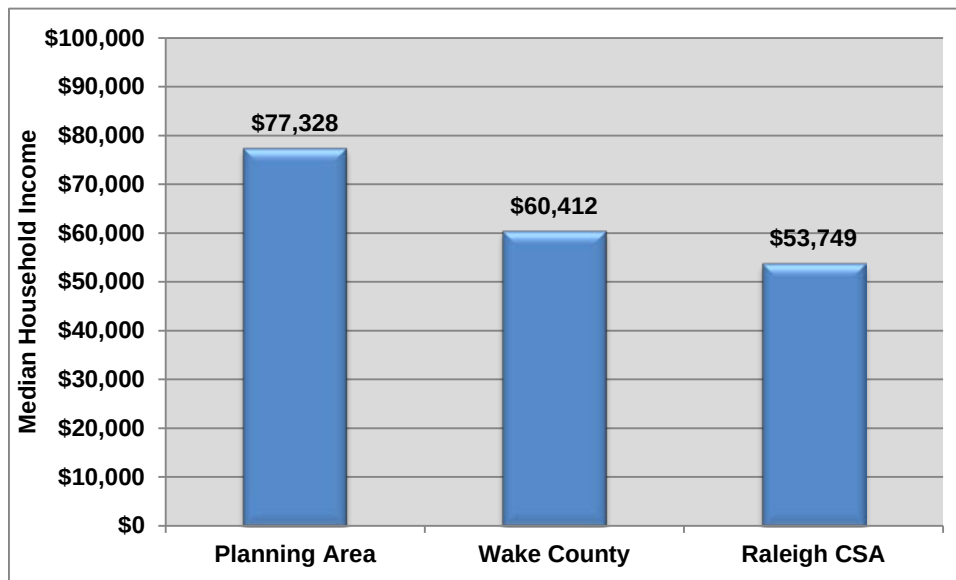
Compared to the region, the Apex Planning Area has a substantially higher share of households earning \$100,000 to \$149,999 than the Raleigh CSA. It also has higher shares of middle-income (\$35,000-\$99,999) households.

CHART 4: COMPARISON OF HOUSEHOLDS BY INCOME COHORT, 2012



The median household income for the Planning Area is currently estimated at \$77,328. This value increased by 11.4% from \$69,441 in 2000. In addition, the 2012 measure is substantially higher than \$60,412 for Wake County and \$53,749 for the Raleigh CSA.

CHART 5: COMPARISON OF MEDIAN HOUSEHOLD INCOMES, 2012



HOUSING UNITS

The 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 rate of 50.4%, and housing units in the larger CSA increased by 39.9% during the same time period. The Planning Area accounted for 3.3% of net new housing unit growth in the region.

TABLE 6: 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 UNITS BY TYPE

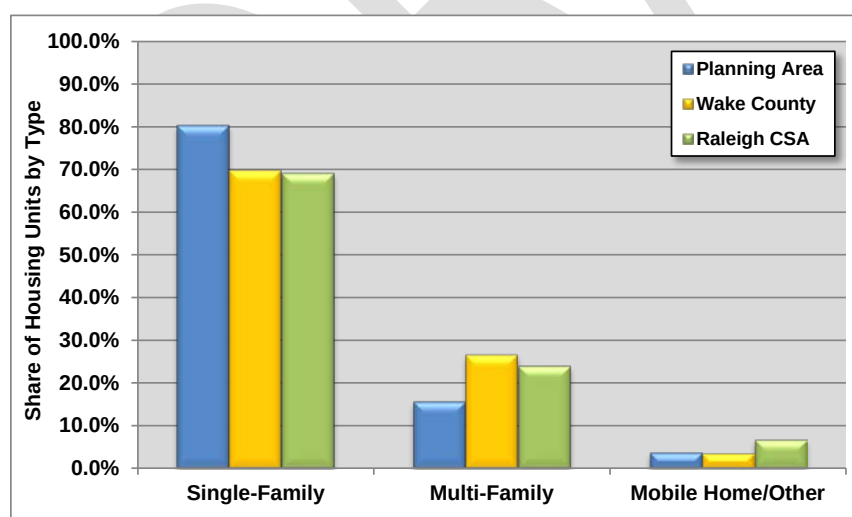
Eighty percent of housing units in the Apex Planning Area are single-family detached. However, strong growth was experienced in single-family attached (townhouses) and multi-family product between 2000 and 2012. Comparatively, Wake County and the Raleigh CSA have lower shares of single-family detached (each at approximately 70%) and higher shares of multi-family.

TABLE 7: 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

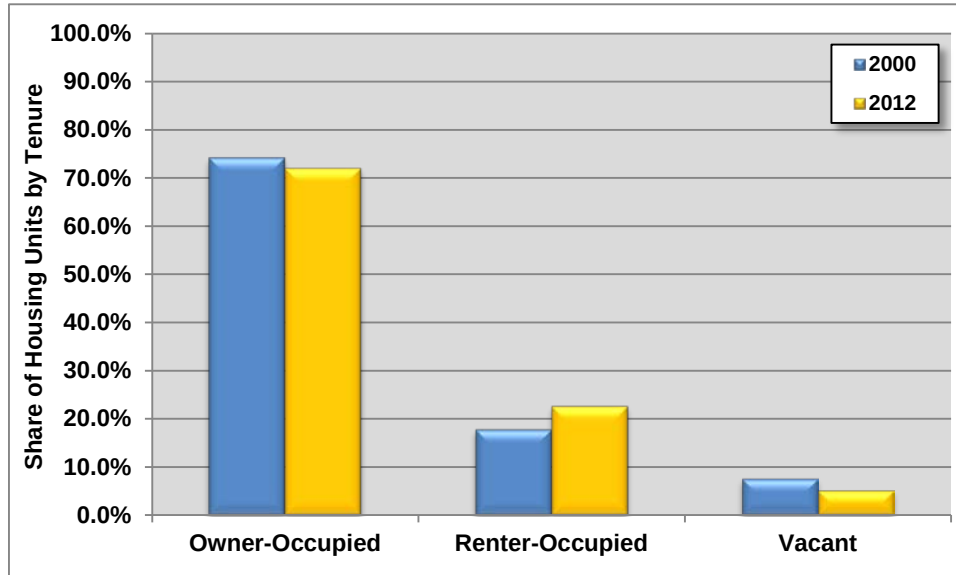
CHART 6: COMPARISON OF HOUSING UNIT TRENDS, 2012



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.

CHART 7: HOUSING UNIT TENURE, PLANNING AREA, 2000-2012



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 during that same year, showing a higher concentration of people than jobs.

Other Services, which includes Accommodation and Food Services, made up the greatest share of jobs in the Planning Area, followed by Retail Trade (19.3%), Construction (11.1%), and Educational Services (10.1%).

TABLE 8: 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

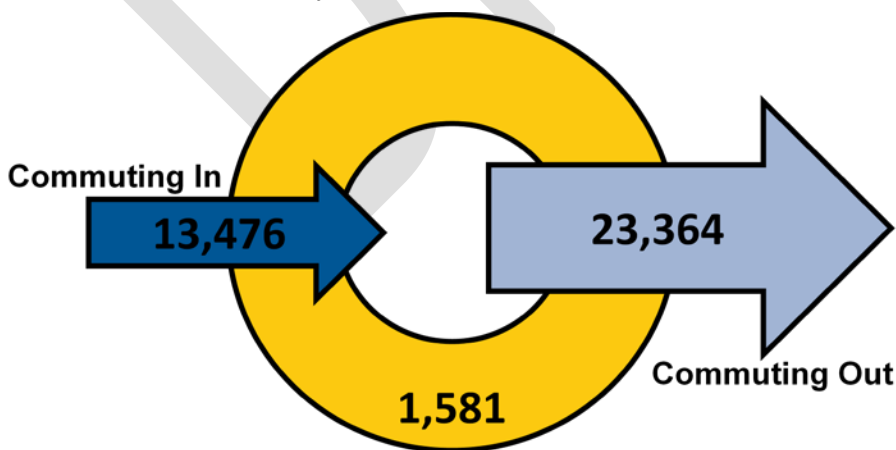
EMPLOYMENT INFLOW AND OUTFLOW

There are an estimated 15,057 total jobs at places of employment in the Apex Planning Area. 13,476 of these positions are filled by in-commuters and the remaining 1,581 jobs are held by residents. Over 23,000 residents of Apex commute outside of the Planning 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.

TABLE 9: EMPLOYMENT INFLOW/OUTFLOW, PLANNING AREA, 2012

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

The Apex Planning Area has a 0.88 jobs/housing unit ratio. A ratio of 1.0 and 1.1 jobs per household is a target for suburban markets. Comparatively, Wake County has a 1.13 jobs/housing unit ratio, and the Raleigh CSA reported 1.06.

TABLE 10: 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

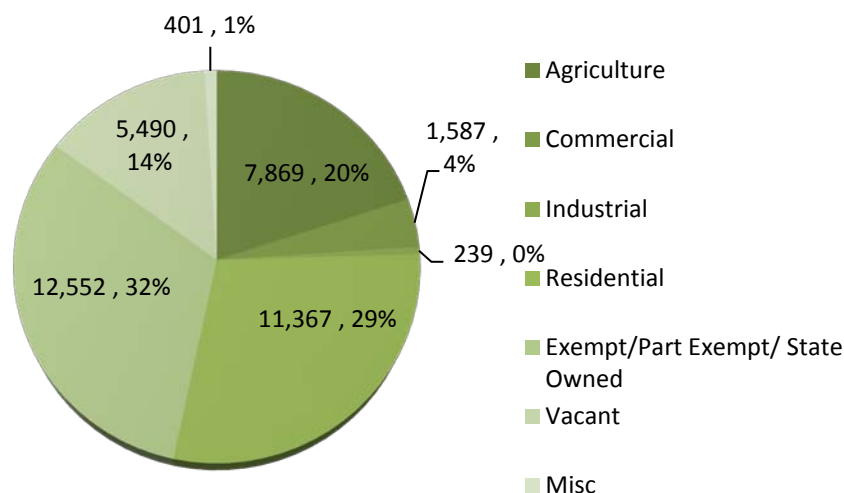
Source: US Census; NCESC; Kimley-Horn and Associates

LAND USE

CURRENT LAND USE

The chart below displays existing land use in the Planning Area. Currently 66% of the Planning Area can be classified as either agriculture or vacant, exempt, or state-owned². The largest portion of this is the land that surrounds Shearon Harris Nuclear Power Plant, owned by Progress Energy. In addition, large portions of the land adjacent to Jordan Lake are owned by the Federal Government and managed by the North Carolina Wildlife Resources Commission. The second largest use is residential development. Half of the residential land (approximately 2,700 acres) can be considered “homestead” properties, defined as one home on more than ten acres. The third largest use category is agricultural. There are still large tracts of agricultural land west of the Triangle Expressway. Combined industrial and commercial use make up only five percent of the Planning Area. The map on the following page illustrates existing land use in the Planning Area.

CHART 8: EXISTING LAND USE

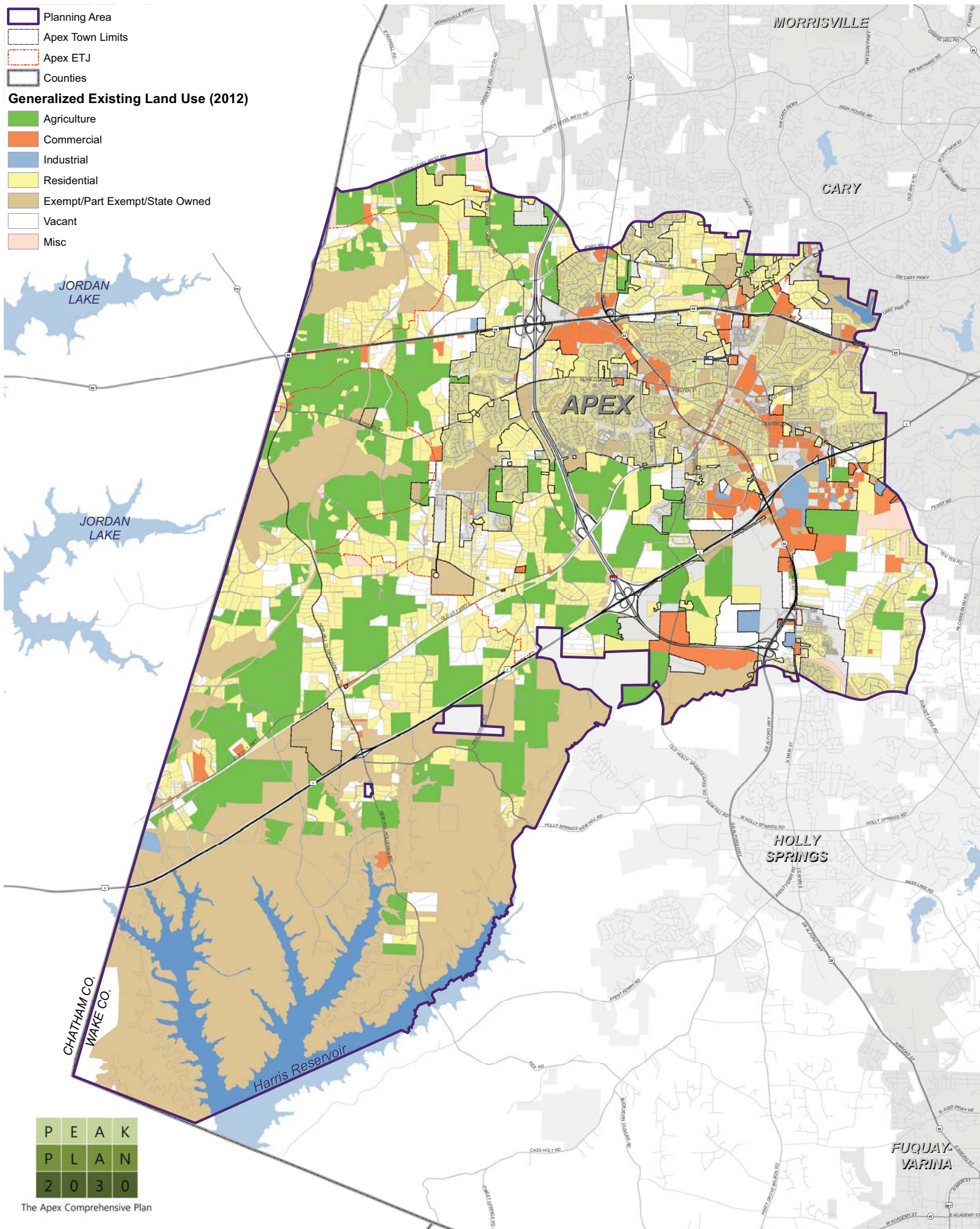


² The exempt/part-exempt/state-owned classification also includes school properties and those parcels owned by the Town of Apex and Wake County.

- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties

Generalized Existing Land Use (2012)

- Agriculture
- Commercial
- Industrial
- Residential
- Exempt/Part Exempt/State Owned
- Vacant
- Misc



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The Apex Comprehensive Plan

LAND USE CHANGE

The table below details land use changes between 2004 and 2012. Since 2004, approximately 1,200 acres of agricultural lands and 1,000 acres of vacant lands have been converted to other uses. Categories with the greatest increases in acreage are residential (+1,200 acres) and commercial (+785 acres).

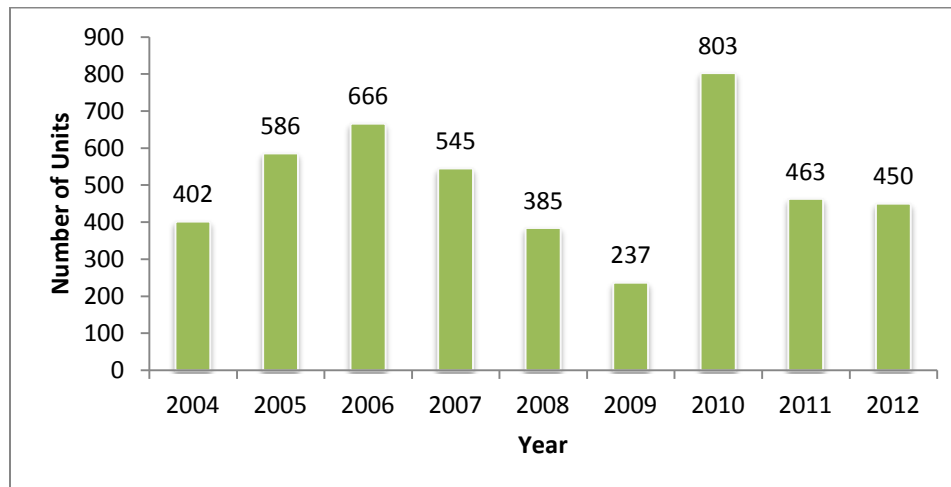
TABLE 11: LAND USE CHANGE FROM 2004 TO 2012

Land Use Classification	2004				2012				Change	
	Parcels	Units	Acres	Percent	Parcels	Units	Acres	Percent	Acres	Percent
Agriculture	270	73	9,165	23%	272	104	7,869	20%	(1,296)	-3.3%
Commercial	312	840	802	2%	421	2,471	1,587	4%	785	2.0%
Industrial	14	6	206	1%	14	8	239	1%	33	0.1%
Residential	9705	10,384	10,133	26%	13,966	16,052	11,367	29%	1,234	3.1%
Exempt/Part Exempt/ State Owned	210	120	12,206	31%	338	139	12,552	32%	346	0.9%
Vacant	2411	-	6,505	16%	2,077	1	5,490	14%	(1,016)	-2.6%
Misc	152	7	487	1%	88	6	401	1%	(87)	-0.2%
Total	13,074	11,430	39,504	100%	17,176	18,781	39,504	100%		

RECENT DEVELOPMENT ACTIVITY

A query of Wake County parcel data shows that over 3,700 housing units have been built in the Planning Area since 2004. The following chart and map on the next page provide details on the year and location of housing units built since completion of the current Apex Comprehensive Plan.

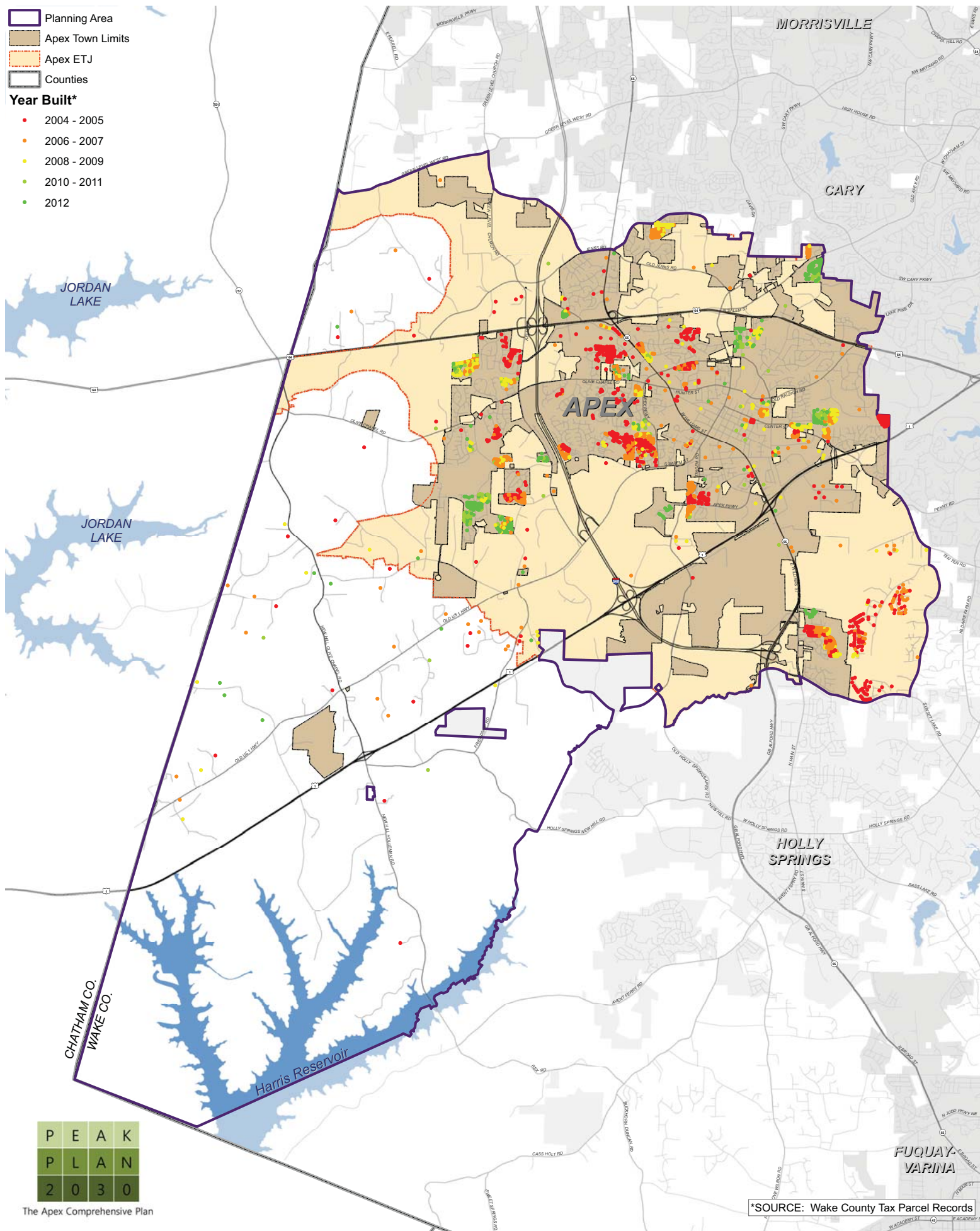
CHART 8: HOUSING UNITS BUILT PER YEAR (2004-2012)



- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties

Year Built*

- 2004 - 2005
- 2006 - 2007
- 2008 - 2009
- 2010 - 2011
- 2012



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*SOURCE: Wake County Tax Parcel Records

A few large commercial developments have been constructed since 2004. Beaver Creek Commons/Crossings were the largest of these sites. The 160+ -acre development added 1 million square feet of retail at the intersection of US 64 and NC 55.

FIGURE 1: BEAVER CREEK COMMONS/CROSSINGS 2003



FIGURE 2: BEAVER CREEK COMMONS/CROSSINGS 2012



In addition to built projects, a number of other non-residential projects have been approved since completion of the current Apex Comprehensive Plan. 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 feet of manufacturing space, in addition to 20,000 residents at build-out.

LAND SUPPLY

In order to determine the amount of land in the Planning Area that could be available for future development, a land supply analysis was conducted. The supply is derived from an inventory of available land (vacant or undeveloped land) and underutilized land (land likely to be redeveloped or be further developed with "infill"). All developed land that is not likely to be redeveloped is considered utilized and therefore not part of the supply.

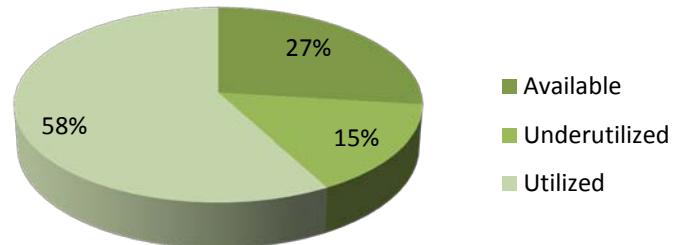
Land Supply = Available Parcels + Underutilized Parcels

Tax parcel data from Wake County was used to develop an existing land use inventory and improvement value (structure value)/land value ratio for each parcel. The existing land use inventory and improvement value ratio were used, in combination with datasets provided by the Town of Apex and Wake County, to determine whether a parcel was utilized, underutilized or available. The table and graph below illustrate that approximately 27% of the land in the Planning Area is available or vacant and 15% could be considered underutilized and has the potential to redevelop. The map on the following page illustrates the land supply in the Planning Area.

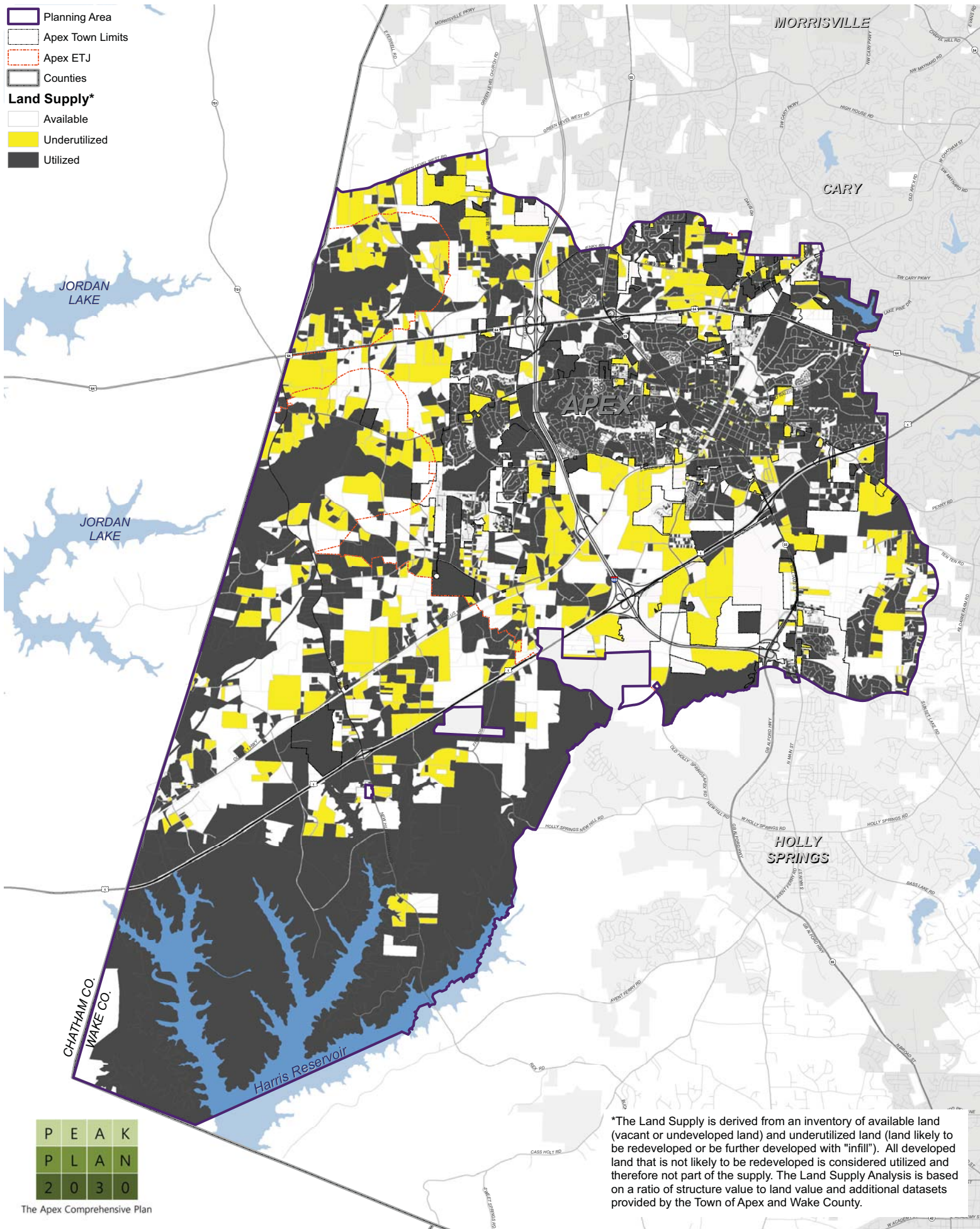
TABLE 12: LAND SUPPLY

Land Supply	Parcels	Acres	Percent
Available	2,722	11,172	27%
Underutilized	540	6,283	15%
Utilized	13,914	24,042	58%
Total	17,176	41,498	100%

CHART 9: LAND SUPPLY ACREAGE



- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties
- Land Supply***
- Available
- Underutilized
- Utilized



COMMUNITY CHARACTER

The character of Apex is evolving. While the essence of Apex will always be reflected in the storefronts of the historic downtown and on the porches of the historic neighborhoods, periods of unprecedented growth have noticeably altered the Town's landscape. From 1990 to 2000 the Town grew from 4,986 to an estimated 28,130 residents representing a 466% increase over a 13-year period. From 2000 to 2012 that number increased by 76.9% to 45,523. The corporate limits of Apex have grown from approximately 11 square miles in 2004 to roughly 16 square miles today. In addition, with the expansion of the Extraterritorial Jurisdiction line in 2007, the Town's planning and zoning jurisdiction has increased by approximately 250% to 21 square miles.

DOWNTOWN & SURROUNDING NEIGHBORHOODS

Much of Apex's idyllic character is captured in its historic downtown and surrounding neighborhoods. Landmarks such as the Union Depot and the Maynard-Pearson House contribute to this identity. In addition, preservation and restoration programs such as the Façade Grant Program and Small Town Character Overlay District take proactive steps to ensure that this character remains intact for generations to come. From the Christmas on Salem Street Celebration to the weekly farmers' market, downtown Apex is the heart of community events and identity.

Like many towns at the turn of the century, Apex generally developed on a grid pattern with residential streets running perpendicular to a main commercial zone that funneled traffic to the railroad station. The architectural legacy in downtown Apex is one of a traditional brick vernacular. One- to two-story structures line the main corridor. Today, those buildings are again filled with merchants, specialty shops, restaurants, and offices.

There is a diversity of architectural styles in the historic neighborhoods immediately adjacent to downtown. From Craftsman to Queen Anne, housing styles in the older neighborhoods vary, contributing to the unique and distinct character of Apex. Many of these homes are contributing structures to the National Register Historic District. More information on these assets is located in the Historic and Cultural Resources section of this memo.

RESIDENTIAL SUBDIVISIONS

The majority of growth in Apex over the last decade has come in the form of residential subdivisions. Since completion of the 2004 Plan, 3,725 housing units have come on the market. Approximately 80% of these units have been in single-family developments.

The character of these neighborhoods vary from places that embody tenants of traditional neighborhood development (TND), such as alley-loaded homes, shallow setbacks, and a mixture of uses and housing product types, to traditional large-lot single-family developments. Developments like the Villages of Apex and the Green at Scotts Mill offer a variety of housing types from single-family homes to apartments, the highest density of these centered on a community space such as a green or commercial area. There is an architectural diversity in these developments that references the past but is modern in application.

On the other hand, Bella Casa, in the western portion of the Planning Area, is a conventional neighborhood with large-lot single-family homes of uniform size and traditional aesthetics, typical of suburban development.

MULTI-FAMILY

Multi-family developments continue to add an alternative of rental and smaller-footprint housing stock to the Apex supply. Since 2004, 609 multi-family units have been built. These units are mostly three- to four-story apartment buildings with shared amenities such as fitness centers and pools.

NEW COMMERCIAL DEVELOPMENT

Since completion of the Comprehensive Plan in 2004 there have been a number of commercial facilities built in the Planning Area. Most notable is the Beaver Creek Commons/Crossings shopping complex located at the intersection of US Highway 64 and NC Highway 55. Beaver Creek Commons/Crossings is a 160-acre traditional retail power center anchored by a Super Target and Lowes Home Improvement with several restaurants and service-oriented outparcels. The Beaver Creek Crossings phase has similar outparcels, a theater, and smaller footprint retailers such as Dick's Sporting Goods and Old Navy.

HISTORIC RURAL CENTERS

In the western section of Apex's Planning Area are two unincorporated communities with deep ties to the land and history of southwestern Wake County. As this area continues to grow, understanding of the unique historic and community assets is necessary to preserve and promote the character and culture of these places.

NEW HILL

New Hill, centered at the intersection of Old US Highway 1 and New Hill Olive Chapel Road, developed as a vibrant community along the old Raleigh and Augusta Railroad corridor. In 2001, the New Hill historic district was listed on the National Register of Historic Places. The 60 contributing structures to the District consist of a variety of residential, civic, and commercial buildings, including the W.T. Roundy complex which features a store, bungalow, and five motel cottages. Two churches, the New Hill Baptist Church and the New Hill First Baptist Church, "are two of only four turn-of-the-century frame church buildings still used by their congregations in Wake County."³

In 2008 the Samuel Bartley Holleman House in New Hill was added to the National Register Historic District. The house, a classic example of Colonial Revival architecture, with six out-buildings including a smokehouse and well house, is a well-preserved example of a farming homestead from late 1800s.

Today, New Hill remains a close-knit community. In 2010, the New Hill Community Association (NHCA) organized to formally oppose the construction of the Western Wake Water Reclamation Facility. After a lengthy and public fight, the NHCA, "reached a compromise to allow the treatment plant in return for \$500,000, which will be used to build a community center, a long-held goal of residents."⁴

In addition, a unique asset in the New Hill community is the New Hope Valley Railway. For \$7 visitors can ride the short line railroad from Bonsal to New Hill and back.

³ Brook, Christopher, "Historic District or Sewage Plant?" Preservation North Carolina, June 2009.

⁴ "New Hill's sensible sewer plant settlement" The Sanford Herald, February 2011.

FRIENDSHIP

Just north of New Hill along Old US Highway 1 is the community of Friendship. Settled prior to the Civil War, Friendship developed as a community of freed blacks and Native Americans⁵. Strong 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.” These families intermarried and assumed active roles as small farm owners, merchants, and millers. Some of them joined the local Olive Chapel Baptist Church but later organized churches of their own, including Christina Chapel and Mount Zion Baptist.

Many of the families that originally settled the area still call Friendship home. There is a strong sense of community and pride in the history and unique culture of the area. Friendship is also the site of the new West Apex school sites. A high school, middle school, and elementary school are all planned for a 108-acre parcel near the intersection of Humie Olive Road and Evans Road.

⁵ Lally, Kelly. The Historic Architecture of Wake County, North Carolina. Wake County Government, 1994.

COMMUNITY FACILITIES & SERVICES

The following section provides an overview of the services the Apex community relies on a daily basis. The Utility Map on the following page details the extent of utility service in the Planning Area.

UTILITIES

ELECTRIC

The Town owns and operates its own electric distribution system. Currently the system serves approximately 14,300 residential and commercial customers through four points of delivery and approximately 315 miles of distribution lines. In addition, parts of Cary and some rural areas also receive power from the Apex system. The majority of power is generated by nuclear plants (53%), followed by coal (22%). The remaining 25% is provided through supplemental power purchased from Progress Energy with a variety of generation mixes and SEPA.

WATER & WASTEWATER INFRASTRUCTURE

The Town of Apex maintains over 155 miles of waterline serving approximately 11,000 customers. Jordan Lake provides the drinking water supply which is then processed at a facility co-owned and operated with Cary. The water treatment plant currently operates at 40 million gallons per day (MGD), of which Apex can receive up to 9.2MGD. In order to meet existing demand, the plant will be expanded to 56MGD, of which Apex can receive up to 12.9MGD. Improvements to the facility are expected to begin in 2014.

Currently the Town maintains 159 miles of sewage collection lines, 21 sewage pump stations and the Middle Creek Water Reclamation Facility. As previously mentioned, the Western Wake Water Reclamation Facility will reduce the Town's need to purchase sewer capacity from Raleigh for existing services. In addition, the proposed facility will provide adequate capacity for future development on the western side of the Planning Area. Of the 18MGD permitted at the new facility, 6MGD is allotted for Apex.

Stakeholders suggest that with the new Water Reclamation Facility and upgrades to existing pump stations, such as the one at Kelly Road, the Town will have ample sewer service for existing and future development. However, the one outstanding service concern is Veridea. At build-out Veridea is expected to have 10 million square feet of office, 3.5 million square feet of retail, and approximately 2 million feet of manufacturing space, in addition to 20,000 residents. Stakeholders note that additional capacity will be needed to serve Veridea at build-out.

-  Planning Area
-  Apex Town Limits
-  Apex ETJ
-  Counties

Pump Stations

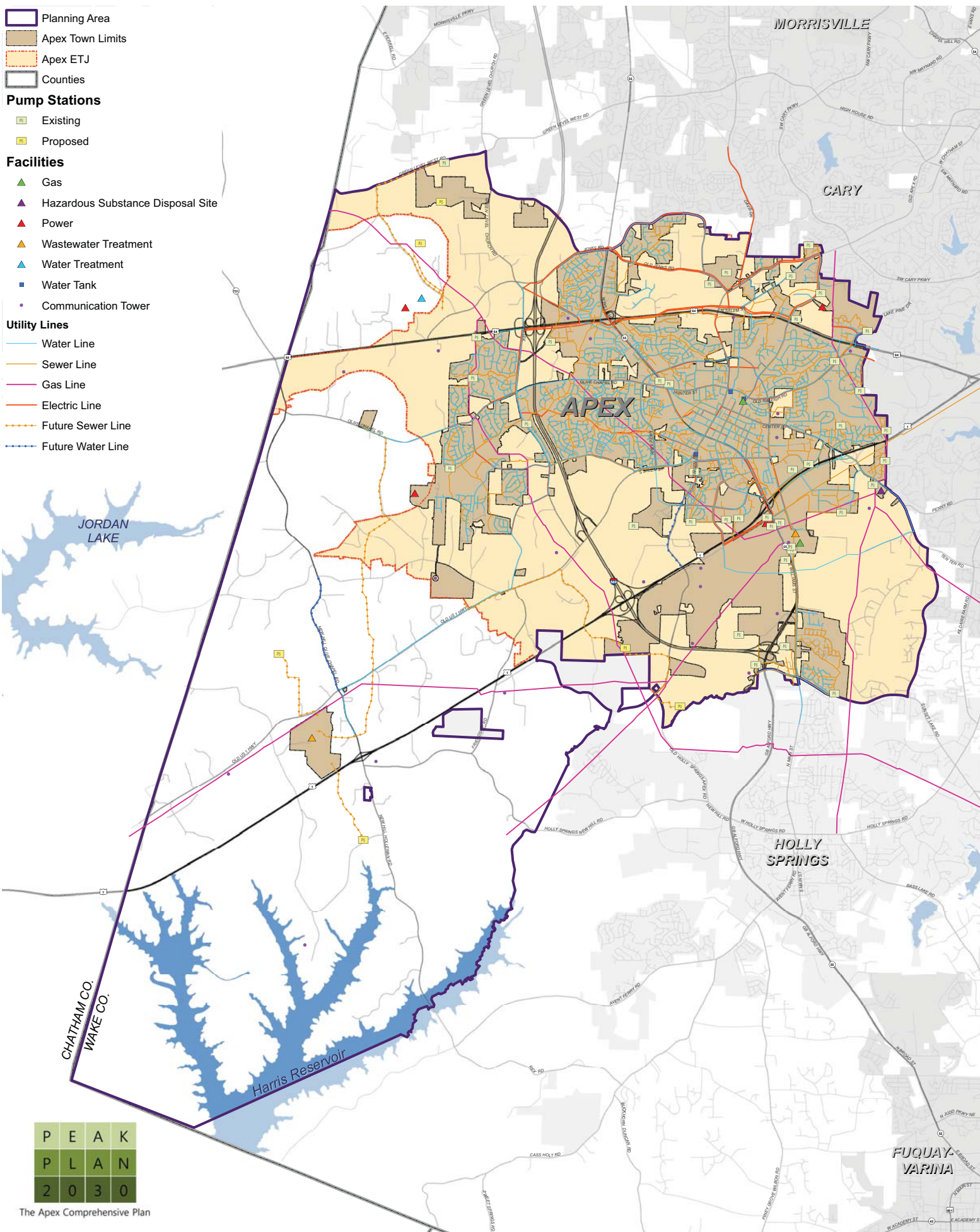
-  Existing
-  Proposed

Facilities

-  Gas
-  Hazardous Substance Disposal Site
-  Power
-  Wastewater Treatment
-  Water Treatment
-  Water Tank
-  Communication Tower

Utility Lines

-  Water Line
-  Sewer Line
-  Gas Line
-  Electric Line
-  Future Sewer Line
-  Future Water Line



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LandDesign

Kimley-Horn
and Associates, Inc.

EXISTING AND PLANNED UTILITIES

APEX, NORTH CAROLINA

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TRANSPORTATION

The Apex Transportation Plan was recently updated in 2011. As the Peak Plan 2030 process unfolds it is important to recognize complementary planning efforts and their findings.

In addition to key recommendations that will be noted later in this section, the Apex Transportation Plan identifies a set of characteristics critical to maintain for the future of Apex including the historic aspect of town, sidewalks, scenic roads, and Apex's small-town feel. The Transportation Plan includes input gathered from the public on the top five transportation priorities for the community including completing the Apex Peakway, widening congested roads, building sidewalks and greenways, and providing bicycle facilities.

Supporting these characteristics and priorities are a set of general policy statements to guide realization of the Transportation Plan. These policy statements are:

- Increase transportation choices
- Make transit a real choice
- Encourage walking and biking as an easy, healthy way to get around town
- Maintain infrastructure

The following sections highlight main improvements made to the network since completion of the 2004 Apex Comprehensive Plan and general recommendations for future facilities.

ROADWAYS

As previously noted, there have been many improvements to the roadway network since 2004, most notably the opening of the Triangle Expressway (NC540) and construction of two miles of the Apex Peakway. In addition to these projects, there have been numerous enhancements to the local network including two intersection upgrades at Lake Pine Drive and US 64 and at Salem Street and NC 55, numerous widening projects, and crosswalk and signal upgrades. As detailed in the Transportation Map, the current Transportation Plan includes recommendations for a series of improvements that will alleviate congestion and enhance the local network. According to the Long-Range Capital Improvement Program (CIP), the short-term, fully funded roadway projects include the following:

- Safety Improvements along the CSX Corridor
- General resurfacing of local street network

Future projects include various intersection improvements, road widening, and completion of the Peakway. In addition to these local projects, the planned conversion of US 64 to an expressway/freeway from Pittsboro to Cary will impact circulation in and through the Planning Area.

PEDESTRIAN AND BICYCLE FACILITIES

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. To ensure future connectivity, sidewalks on both sides of the roadway are required along all new thoroughfares and collector streets.

In addition to sidewalk facilities, Apex residents have access to several local greenways. Further information on the greenway network is provided in the Parks, Recreation, Greenways and Open Space portion of this memo.

The local bicycle network is far less developed. There is less than a combined 1.5 miles of cycle lanes and wide outside lanes in town. However, there are three state-designated bicycle routes in Apex. The Carolina Connection runs through the center of Apex along Davis Drive, Salem Street, and Old US 1 Highway. The Mountains to Sea Trail runs along Green Level West Road on the northern portion of the Planning Area and the Cape Fear Run begins in Apex at the intersection of Center Street and Salem Street.

As noted, bicycle and pedestrian facilities are a priority for the Town as it continues to grow. Ensuring a well-connected, safe network of bicycle and pedestrian facilities contributes to the overall quality-of-life, health, social, and economic well-being of residents.

TRANSIT

Currently the Planning Area is served by two transit providers. Triangle Transit operates two bus routes during peak hours in Apex. Route 311 provides service to Research Triangle Park (RTP). Route 305 provides service to Cary, Raleigh and RTP. Wake Coordinated Transportation Service provides an on-demand, shared transit service to residents in the non-urbanized areas of Wake County called TRACS. Service is provided on a first-come, first-seat available basis. Reservations for TRACS service must be made 24-hours in advance.

In addition to existing transit service, the Capital Area MPO (CAMPO) and Durham Chapel Hill Carrboro MPO recommended new region-wide bus and rail improvements.. Specifically, the CAMPO plan calls for a light rail line to extend from the Cary train station to Veridea through downtown Apex.

- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties

Thoroughfares

2 Lanes:

- Existing
- New Location

3 Lanes:

- Existing
- New Location
- Widening

4 Lanes with Median:

- Existing
- New Location
- Widening

5 Lanes:

- Existing
- Widening

Freeway:

- Existing
- New Location

Collector Streets

Minor Collector:

- Existing
- New Location

Major Collector:

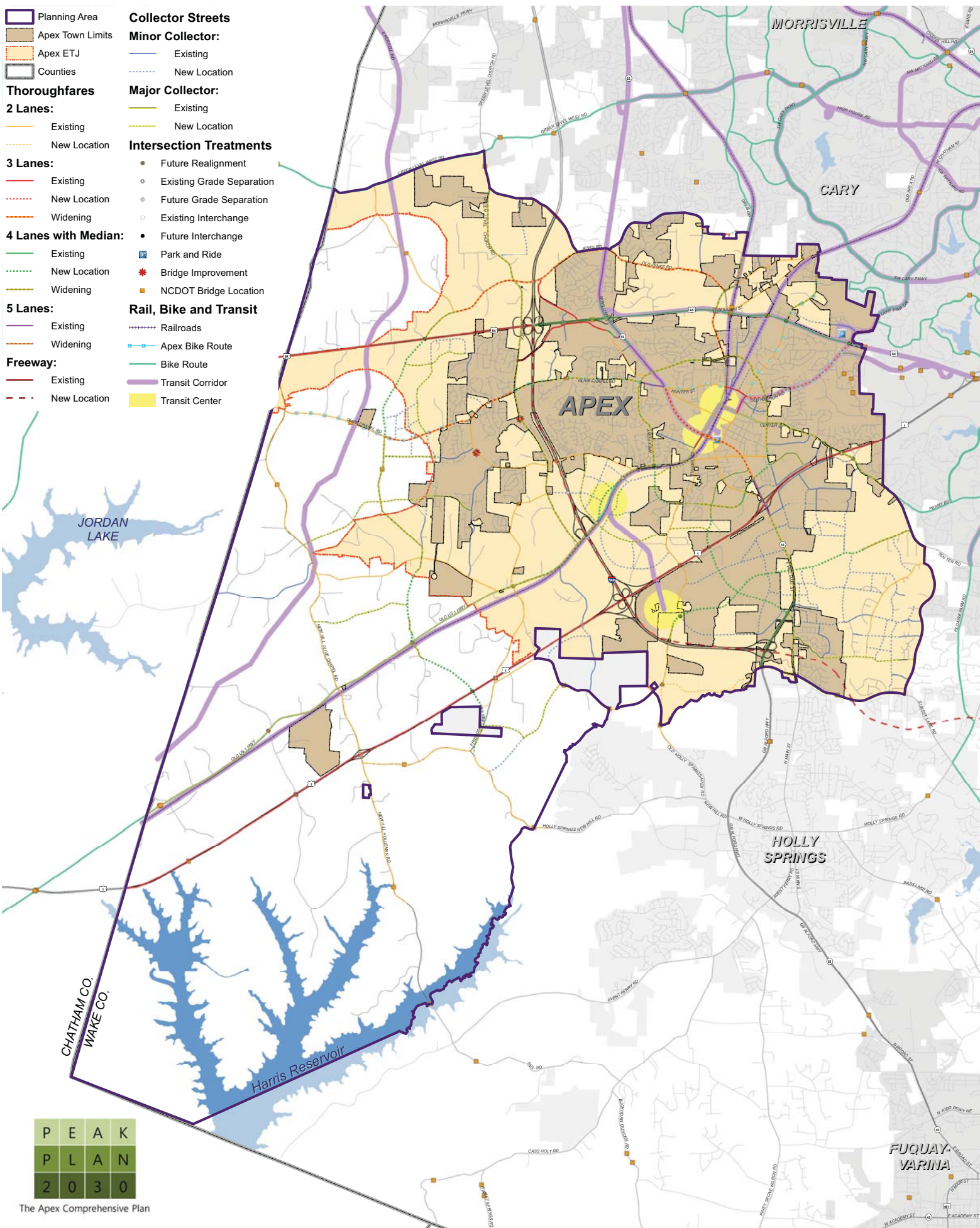
- Existing
- New Location

Intersection Treatments

- Future Realignment
- Existing Grade Separation
- Future Grade Separation
- Existing Interchange
- Future Interchange
- Park and Ride
- Bridge Improvement
- NCDOT Bridge Location

Rail, Bike and Transit

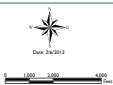
- Railroads
- Apex Bike Route
- Bike Route
- Transit Corridor
- Transit Center



EXISTING AND PLANNED TRANSPORTATION

APEX, NORTH CAROLINA

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FIRE

The Apex Fire Department currently operates four engines out of four stations. The Department's service area includes the Town of Apex and unincorporated portions of Wake County. In total, the Department serves an area of approximately 62.3 square miles. In 2011, the Department responded to 1999 EMS calls and 665 fire-related calls. The firefighter per resident ratio is approximately 1 to 2293. This ratio is well below comparable services in towns similar in size and population to Apex. In order to meet current Wake County standard service levels, the Town would need to add three firefighters to existing companies. A fifth fire station is needed on the western side of Town to provide adequate coverage to existing and planned residential properties. Station #5 would also provide service to the Nature Park and the proposed West Apex school sites.

POLICE

The Apex Police Department operates out of one central facility. The Department receives approximately 2,600 calls a year; the majority of these calls are traffic-related incidents. Similar to the Fire Department, representatives from the Police Department indicate that current staff levels are 1.55 officers per 1,000 residents. An ideal level of service is 2.3 officers per 1,000 residents. In addition to protection and response calls, the Police Department also responds to power outages further straining resources.

SCHOOLS

The Wake County Public School System operates 8 facilities in Apex. The following table provides additional details on the type of school and calendar of operation of these facilities.

TABLE 13: APEX PLANNING AREA EXISTING SCHOOL FACILITIES

Name of School	Calendar
Apex Elementary	Traditional
Apex Middle	Traditional
Apex High	Traditional
Baucom Elementary	Traditional
Lufkin Road Middle	Multi-Track, Year-Round
Olive Chapel Elementary	Multi-Track, Year-Round
Salem Elementary	Multi-Track, Year-Round
Salem Middle	Multi-Track, Year-Round

In addition to existing facilities, the following schools are planned to accommodate existing and forecasted growth in the western portion of the Planning Area:

Scotts Ridge Elementary, 6601 Apex Barbecue Road
West Apex Elementary, 7901 Humie Olive Road
West Apex Middle School, 7701 Humie Olive Road
West Apex High School, 7801 Humie Olive Road

Two private schools operate in Apex, St. Mary Magdalene School and Thales Academy. The Community Facilities Map on the following page locates these major service providers in the Planning Area.



PARKS, RECREATION & GREENWAYS

Residents of Apex enjoy access to a number of regional and local park, recreation, and greenway amenities. The Parks, Recreation & Greenways map highlight these assets.

Note: The Town is currently in the process of updating their 2001 Parks, Recreation, Greenways and Open Space Master Plan.

PARKS & RECREATION

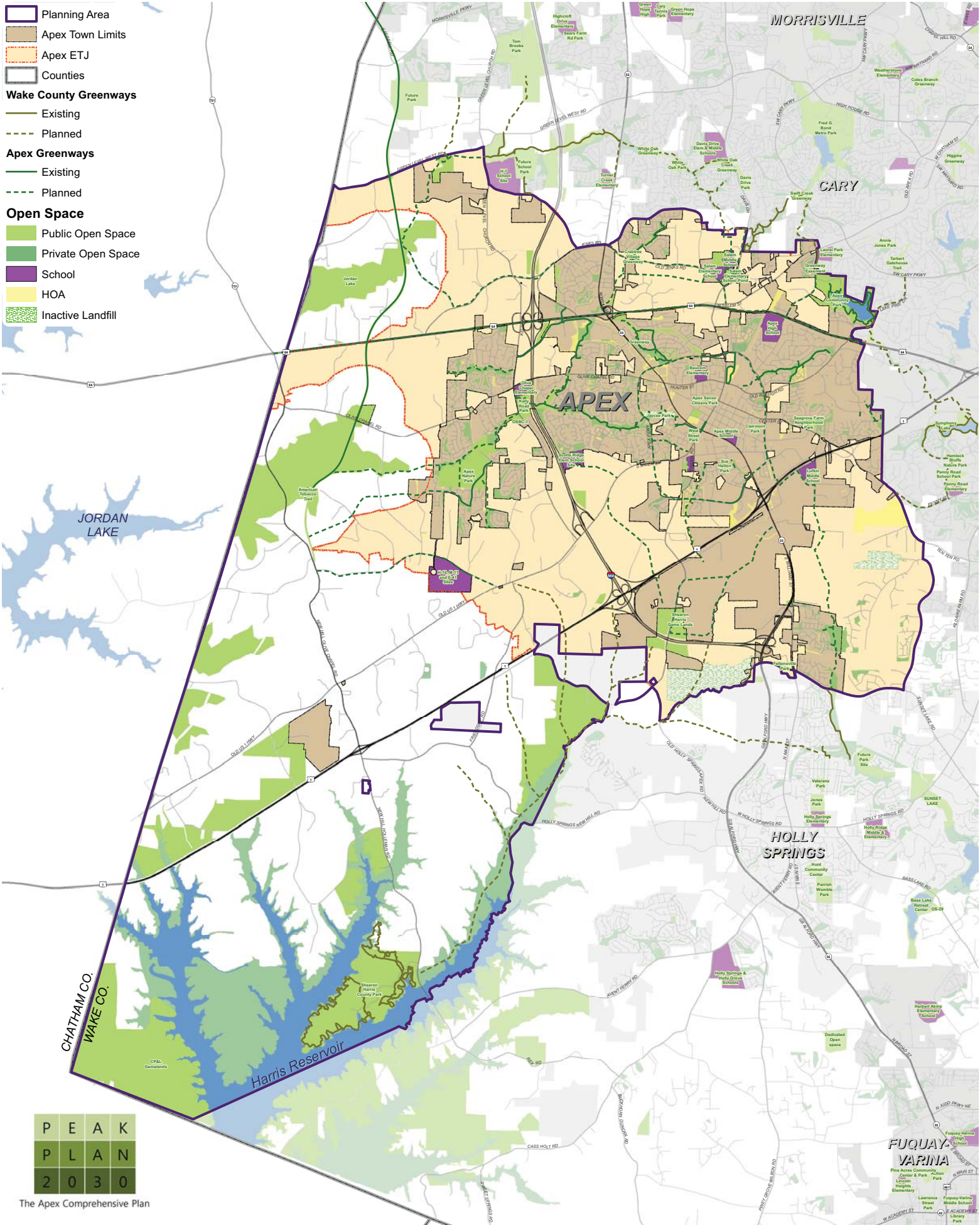
Since 2004, the inventory of local park facilities has increased to include Hunter Street Park, located across from Town Hall with the newly-completed dog park, Seagroves Farm Park, and Salem Pond Park. The Apex Nature Park, located on the western side of Town on Evans Road, is currently under construction. 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.

GREENWAYS

In 2004, approximately 19,536 linear feet of greenways existed in the Planning Area. Today, that number has increased to 28,420 linear feet. This total includes the construction of a portion of the Beaver Creek Greenway.

In addition to the local system of greenways, the American Tobacco Trail, a 22-mile trail system that connects downtown Durham to New Hill Olive Chapel Road in the western portion of the Planning Area, has opened 2 trailheads in Apex.

- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties
- Wake County Greenways**
 - Existing
 - Planned
- Apex Greenways**
 - Existing
 - Planned
- Open Space**
 - Public Open Space
 - Private Open Space
 - School
 - HOA
 - Inactive Landfill



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HISTORIC & CULTURAL RESOURCES

The story of Apex's history can be seen in the facades of its buildings and on the porches of its historic homes. Successful preservation of these structures has contributed to the reputation of downtown Apex as one of the most intact turn-of-the-century railroad towns in North Carolina.

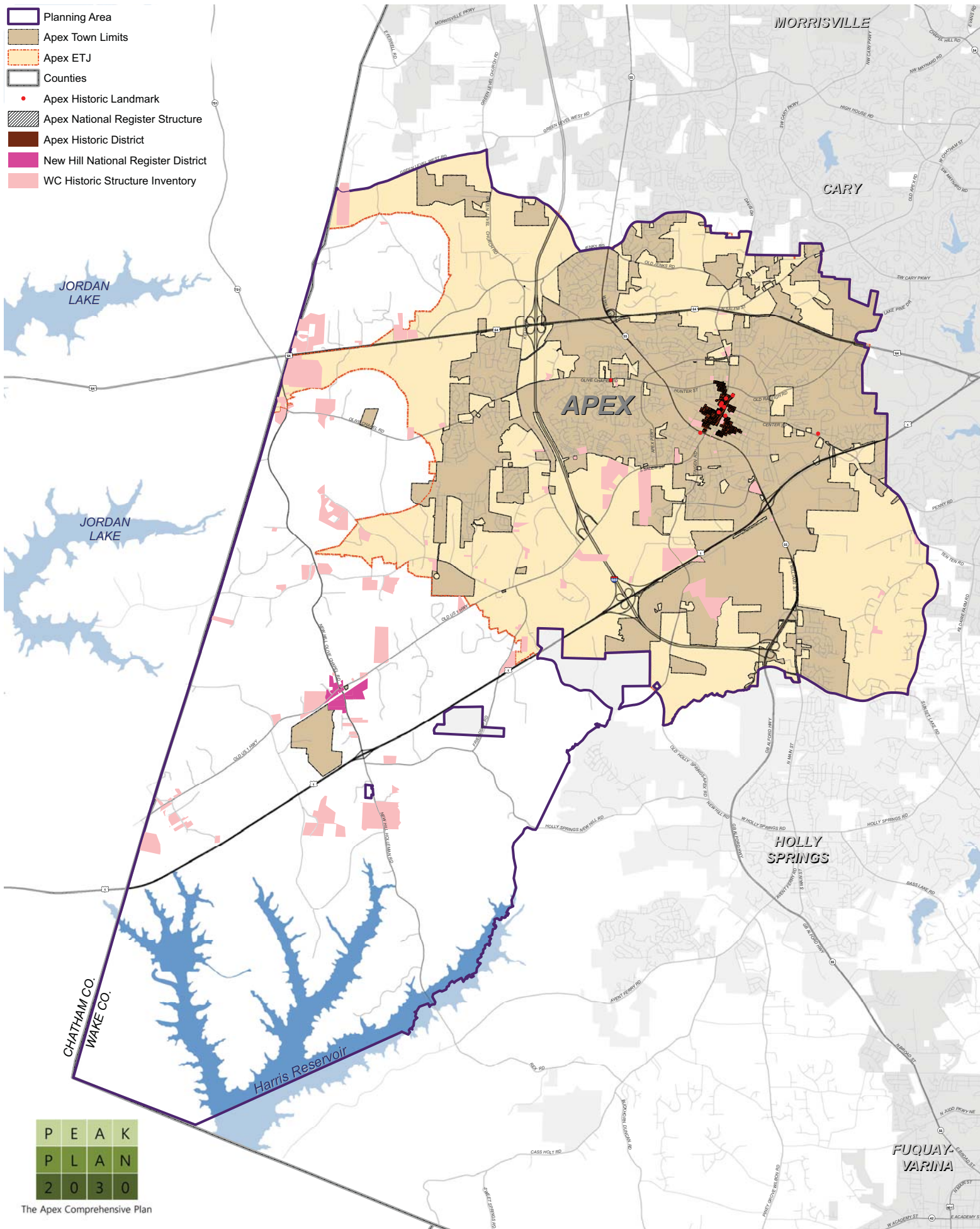
The Apex historic district, listed on the National Register of Historic Places in 1994, includes approximately 180 contributing structures. Many of these buildings date back to the late 19th Century. In 2008 the historic district was expanded, adding 43 additional contributing structures.

Since completion of the 2004 Apex Comprehensive Plan six properties have been added to the Wake County Historic Landmark registry. These are the Apex Geodesic Dome Building in 2006, the Calvin Wray Lawrence House in 2008, the White-Duncan House in 2009, the Harward-Bagley House in 2010, Seagroves Farm in 2011, and the Harward House in 2012. With the addition of these sites, there are now 13 properties in Apex listed on the registry.⁶

The Halle Cultural Arts Center, located in the historic downtown, opened its doors in January 2008. The building, which once housed the Town Hall, was originally constructed in 1912. Today the Halle Center hosts a variety of events in its gallery, classrooms, and theater space. The map on the following page illustrates the historic and cultural resources in the Planning Area.

⁶ Wake County Capital Area Preservation, www.cappresinc.org

- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties
- Apex Historic Landmark
- Apex National Register Structure
- Apex Historic District
- New Hill National Register District
- WC Historic Structure Inventory



ENVIRONMENT & NATURAL RESOURCES

Apex lies on the rural fringe of the Raleigh-Durham urbanized area. It is bounded by large landscape features—the Army Corps lands of Jordan Lake to the west and forested lands bordering Harris Reservoir to the south.

The Town sits at the apogee of a 500-foot plateau along a ridge that separates the Cape Fear and the Neuse River basins. The Planning Area is drained by a few major creeks that are bordered by forested riparian areas, wetlands, and floodplain.

The majority of the Apex Planning Area lies in the Cape Fear River Basin. Beaver Creek, Little Beaver Creek and White Oak Creek drain to Jordan Lake. The Jordan Lake Watershed is classified as a Water Supply IV Nutrient Sensitive Water (WS-IV NSW) by the North Carolina Division of Water Quality.

The Neuse River Basin lies on the east side of town. NC 55 south of downtown and North Salem Street roughly mark the dividing line between the two basins. A portion of the area that drains to the Neuse River first drains to Lake Benson through the Swift Creek watershed. The Swift Creek Watershed is classified as a Water Supply III Nutrient Sensitive Water (WS-III NSW). Jordan Lake, Swift Creek, and the Neuse River suffer from nutrient pollution due to point and non-point sources. Agriculture and runoff from urbanized lands contribute to non-point source nitrogen and phosphorus loads. Lands in both the Jordan Lake and Neuse River watershed are subject to DWQ regulations that include sedimentation and erosion control plan requirements, stormwater management standards, and stream buffers.

There have been 1,034 housing units constructed in the portion of the Planning Area in the Jordan Lake WS-IV NSW watershed since 2004. There have been 704 new homes built in the Swift Creek WS-III NSW watershed since 2004.

The map on the following page depicts the Natural Resources in Apex's Planning Area.

- Planning Area
- Apex Town Limits
- Apex ETJ
- Counties
- Natural Resources
 - Basins
 - Water Supply Watershed
 - Lakes
 - Wetlands
 - Floodplain
 - Streams

