

Apex Transportation Plan



2011 Plan Update

Town of Apex, North Carolina

Apex Transportation Plan

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Town of Apex

Transportation Plan Update

1.0 Introduction

The Town of Apex is located in southwest Wake County, generally between highways US 1 and US 64. Its location, southwest of Raleigh and Cary and south of Research Triangle Park, makes it an attractive residential location for people who work in the surrounding communities. Despite rapid growth in the past decade, Apex has maintained the small-town atmosphere its residents cherish. The downtown area is comprised of a grid of interconnected streets, while the outskirts consist of new suburban-oriented development intermingled with older rural farms and residences. Salem Street is the core of the historic downtown area and is lined with thriving businesses in preserved and restored storefronts.

Today, Apex is primarily a satellite town with most new growth coming from residential and commercial development. The majority of traffic generated during peak travel periods is attributed to commuters traveling to the region's employment centers such as Research Triangle Park (RTP) and downtown Raleigh. Other peak hour traffic generators in the Town include EMC² Corporation, Apex Tool Group, Tipper Tie, Apex High School, Apex Middle School, and several elementary schools. Beaver Creek Commons, Beaver Creek Crossings, WakeMed Healthplex, and Broadstone Station have led to an increase in the local traffic in recent years which continues to impact major thoroughfares in Apex.



The Historic District is one of the most visible aspects of Apex.



Living up to its motto as the "Peak of Good Living," the Town of Apex is rich in history and brimming with opportunities. This town has earned the reputation for a willingness to grow

while remaining true to its small-town roots as a railroad community. In 2007, Apex was ranked #14 in the nation (and first in North Carolina) by *Money Magazine's 100 Best Places in America to Live*. Apex has a revitalized downtown listed on the National Register of Historic Places. Yet Apex is still changing.

Between 1990 and 2010, the population grew from 5,000 to over 37,000. Current predictions estimate the town population to reach 43,000 by 2015 and 70,000 by 2030. Inevitably, this kind of growth is accompanied by more people driving on the roads, more people in search of convenient ways to travel around town, and more demand for transportation amenities. In order to maintain the quality of life for which Apex is recognized while supporting this growth, the town must plan for future transportation needs.



The Scotts Mill neighborhood is a popular place to live and shop.

1.1 About the Apex Transportation Plan



A boardwalk along the Beaver Creek Greenway connects Beaver Creek Commons with the Becketts Crossing neighborhood.

This document is an update of the original Apex Transportation Plan from 2002 with current information regarding the changes that have happened to the Apex community and the transportation network. The Plan identifies both general and specific transportation system improvement recommendations and strategies to help accommodate this growth in travel demand. At the same time, these recommendations are intended to support a diversified transportation system that considers not only the motorist, but also the bicyclist, the pedestrian, and the transit patron. This plan also examines how the Parks, Recreation, Greenways, and Open Space Master Plan, as well as other small area plans, can be incorporated into the overall transportation network. Finally, the Apex Transportation Plan includes discussion on strategies, methods, and sources of funding for implementation.

The goal of the Plan is to provide mobility for Apex residents and choice in travel, by foot, bicycle, car, or transit. In addition to discussion of transportation issues and needs, this Plan provides objectives to measure successful implementation of the policies and goals herein.

1.2 Public Process

The citizens of Apex are a key component of the Apex Transportation Plan document. Citizens have an intimate knowledge of the issues and opportunities specific to the places they live and travel, as well as the problems they encounter along the way. Input received through the public hearing process, workshops, meetings, telephone calls, and e-mails was used to update the Plan.

To ensure that the Apex Transportation Plan considered these important issues while also keeping the community's best interest in mind, a Transportation Plan Advisory Group (TPAG) was formed and engaged early in the planning process for the original plan. In order to make sure that the community was adequately represented, citizens from a broad range of backgrounds were invited to participate in the TPAG.

The first task undertaken by the TPAG was to generate a list of the characteristics of Apex, specifically of the transportation system, that they are fond of and would like to retain in their community. Characteristics that the TPAG mentioned included:

- the historic aspect of the town
- sidewalks
- Scenic roads
- Apex's small-town feel

In addition to the visioning exercise, the TPAG also created a list of favorite roads in Apex, which included:

- Olive Chapel Road – for its scenery and homey feel
- Salem Street – for the homey feel, the pedestrian friendliness, and the feeling of history
- Apex Barbecue Road and the Scotts Mill subdivision



Citizens participate in a workshop to shape the Apex Transportation Plan.



Olive Chapel Road was a favorite road for its scenery and homey feel.

- Cooke Street
- Old US 1 – for its rolling hills and historic atmosphere
- Apex Peakway – for the future traffic benefits
- Old Raleigh Road
- Waterford Green Drive – for the median and sidewalks
- US 1 South of Highway 64
- Green Level Church Road
- Olive Street and the downtown grid system

The public involvement process was not limited to members of the TPAG. A public workshop was held on May 8, 2002, to allow members of the community to express their transportation concerns and list their priorities. The top priorities that came from that meeting were:

- Bicycle and pedestrian
 - connectivity of sidewalks and greenways
 - lack of adequate facilities
- Congestion/access management
 - need for turn lanes and intersection improvements
 - concern with commuter traffic passing through town
- Local connectivity
 - too many cul-de-sacs
 - need for grid pattern of roads
 - concern over cut-through traffic
- Transit
 - lack of bus, rail, carpool services
 - meet the needs of elderly or disabled
- Dangerous streets and intersections
- Western Wake Freeway / NC540
 - need for the freeway
 - need for additional access points in Apex
- Apex Peakway
 - use for commuter traffic
 - bypass for NC 55
 - need for 4 lanes



Citizens participate in a planning exercise at the 2006 Apex Transportation Plan update workshop.

As part of the plan update process, a public workshop was held on January 5, 2006, to allow members of the community again to express their transportation concerns and priorities. Staff used this opportunity to “overhaul” the Apex Transportation Plan maps. The workshop was attended by more than 150 participants. Attendees were given the opportunity to view transportation maps and to discuss issues with Town staff, NCDOT staff, environmental experts, and Capital Area MPO staff. Citizens were also given the opportunity to view a slide presentation entitled “Introduction to Transportation Planning” which was developed by Town staff.

A matrix was developed from the questions and comments received during the workshop. Town Planning and Engineering staff met to address each question and comment. The Plan map was updated where possible and both the response matrix and map were posted on the Town website. This Plan Update incorporates the issues raised during this public process.

The Town held another public workshop on January 27, 2011, to gather input from the public. Participants responded to survey questions, made comments on maps, and discussed transportation issues with Town staff. From these discussions and responses Town staff was able to hear the top concerns and priorities held by citizens. The top five transportation funding priorities were:

- Complete the Apex Peakway
- Widen congested roads
- Build sidewalks
- Build greenways
- Provide bicycle facilities

Citizens preferred the sections of the Apex Peakway between Center Street and Old Raleigh Road for its landscaped median and bike lanes. NC 55 between US 1 and US 64 was criticized for its congestion and unattractive design. Other concerns identified at the workshop include roadway congestion, lack of sidewalks, and roadway safety.

In addition to the public meetings to update the plan, staff regularly fields comments from the public regarding transportation needs and opportunities around town. The needs include sidewalk extensions, bike parking locations, and parking opportunities, as well as opportunities to increase future connectivity through additional roadway corridors. The comments are assessed by staff, brought before a public hearing, and considered by the Apex Town Council.

“Finish Peakway to help alleviate Ten Ten Rd and Salem St congestion.”

“Hope you build the proposed greenways sooner rather than later.”

Comments received during 2011 workshop



Sidewalk construction along Olive Chapel Road has helped address the lack of adequate pedestrian facilities.

1.3 Updates from the Original Plan

Many of the top priorities from original Apex Transportation Plan have been addressed:

- **Bicycle and pedestrian issues — connectivity of sidewalks and greenways; lack of adequate facilities**

- o The Town has constructed over 23,000 linear feet (over 4 miles) of sidewalk since 2002 in order to ensure there is an interconnected network of pedestrian facilities throughout the Town (see Table 1.1 below)
- o Additional sections of planned greenways have been constructed
- o Dozens of bicycle racks have been installed at new residential and commercial developments
- o Future projects are included in the Town's Long Range Capital Improvement Program (CIP)



The intersection upgrade at NC 55 and Salem Street has helped with congestion along NC 55.

- **Congestion/access management — need for turn lanes and intersection improvement; commuter traffic passing through town**

- o Intersection upgrade projects have been completed at the following locations:
 - ◆ Lake Pine Drive/US 64
 - ◆ NC 55/Salem Street
- o Closed-loop signal systems maintained by NCDOT serve NC 55 and the Downtown area with a third system planned for Ten-Ten Road through the US 1 interchange.
- o NCDOT, private developers, and the Town have all provided for numerous upgrades and new installations to improve efficiency and pedestrian safety at intersections throughout Apex



A new bus shelter welcomes riders at the Triangle Transit stop near Lake Pine Drive and US 64.

- **Local connectivity — too many cul-de-sacs; need for grid pattern of roads; cut-through traffic concentrated on a few roads**

- o The Town prohibits cul-de-sacs in new development except where environmental features make through streets unfeasible
- o The Town requires stub streets to be constructed as parts of new residential projects

- **Transit — lack of bus, rail, carpool services; need for services for the elderly**
 - Transit shelters have been added to 2 existing Triangle Transit stops and 2 more have been installed awaiting future bus service
 - Town staff is coordinating with C-Tran to provide future service from Cary to Beaver Creek Commons
- **Dangerous streets and intersections**
 - Pedestrian signals have been installed at multiple intersections
- **Western Wake Freeway / NC540 — need for the freeway; need for additional access points in Apex**
 - Construction of the freeway began in 2009 and is expected to be complete in 2012
 - There are 5 planned interchanges within Apex's jurisdiction
- **Apex Peakway — use for commuter traffic; bypass for NC 55; need for 4 lanes**
 - Since 2002 the Apex Peakway has more than doubled in length to approximately 4 miles of roadway
 - Plans are underway to construct portions of the Peakway to make a continuous route from NC 55 near US 1 clockwise to Center Street, leaving the portion connecting Schieffelin Road with NC 55 as the only remaining unscheduled gap in the loop road
 - A 0.4 mile section of the Peakway from NC 55 through the Broadstone Station development has been constructed to the ultimate 4-lane section

1.4 Other Changes

Several other important changes have occurred since the original Apex Transportation Plan was adopted:

- Since its adoption in 2002 the Apex Transportation Plan was amended 7 separate times to reflect new information about existing and future development and the planned transportation network.
- The Urban Growth Boundary established in April 2002 was removed February 2005.
- The Town's Extra-Territorial Jurisdiction expanded in 2007 creating the need for additional transportation considerations in the Plan.
- In November 2007 and December 2010 the Town updated its Standard Specifications and Construction Details. Staff modified the roadway typical sections listed in the original Apex Transportation Plan as a result of the update.

1.5 Purpose

The purpose of the Apex Transportation Plan is to anticipate and meet the growth demands in and around Apex by providing a resource for creating a complete and efficient transportation network.

1.6 Vision

The Town of Apex will be a welcoming community that promotes healthy, sustainable choices in transportation, encourages natural mixes of land uses, embraces its historic and cultural resources, and provides an interconnected network of streets, all while balancing urban functionality with rural charm. In Apex, people of all ages want to live, work, play, shop, visit, and relax. Children will walk to school, families ride bikes to the neighborhood park, and a trip to neighboring towns will be just a short transit ride away.

1.7 Authorization

This document, including its accompanying maps and figures, is the official Transportation Plan for the Town of Apex. It is intended to be a complementary resource for other Town documents such as the Unified Development Ordinance, the Apex Comprehensive Plan, and the Parks, Recreation, Greenways, and Open Space Master Plan.

Objectives of the Apex Transportation Plan (as determined by the TPAG)

1. Create a system of interconnected streets to improve mobility and to distribute traffic efficiently and appropriately by purpose and function
2. Encourage streetscape and “built-in” traffic calming in roadway designs
3. Support “mixed use” development to encourage walking and biking by promoting context-sensitive roadway design
4. Encourage 2-lane and 3-lane roads with street trees and plantings between roadway and development
5. Promote a pedestrian-friendly environment by filling in gaps and improving interconnectivity in the sidewalk system
6. Implement roadway system improvements to accommodate growth and minimize roadway congestion
7. Develop a plan compatible with land use
8. Support more bike lanes and trails to parks and community activity centers
9. Encourage a rail system spurring Triangle Transit’s plans for passenger rail service
10. Support the use of roundabouts as gateway and traffic calming devices in local street design standards
11. Minimize property impacts to existing homes and businesses by promoting context-sensitive roadway design

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Table 1.1 — Town-funded sidewalk projects since 2002

Location	Length (feet)	Cost
Peakway at Haddon Hall from Hillcrest Drive to N. Chatham	1 610	\$54,000
James Street from Hughes Street to NC 55	642	\$20,110
Peakway at Olive Chapel Road to S. Salem Street	5,650	\$83,000
East Chatham Street from Elm Street to N. Mason Street	573	\$17,280
Lake Pine Drive at US 64	375	\$7,160
S. Salem Street at NC 55	453	\$10,410
Lake Pine Parking Lot from Apex Community Park to Picardy Pointe Subdivision in Cary	470	\$11,810
Saunders Street Parking Lot across from Apex Police Station in front of the parking lot	130	\$2,500
Bus Shelter Installation Project - South Hughes Street at Galaxy Foods	130	\$3,200
Mason Street from Center Street to Town Hall Campus	746	\$10,770
Lynch Street from S. Salem Street to Gumdrop Path	1,212	\$24,410
N. Salem Street to Haddon Hall subdivision entrance	1,490	\$112,580
NC 55 at Olive Chapel Road	915	\$31,760
NC 55 widening - Hunter Street to Haddon Hall from Healthplex Way to Olive Chapel Road	870	\$26,670
Laura Duncan Road from Vineyard Station Shopping Center to Apex High School	2,500	\$143,940
Cameron Park subdivision to Dogwood Ridge subdivision	841	\$72,840
Surrey Meadows - from Rainesview Lane to Satinwood Drive	1,135	\$36,620
Hughes Street - from Olive Street to Moore Street	2,426	\$68,340
Hughes Street - from James Street to Williams Street	1,210	\$45,850
TOTAL	23,378	\$784,240

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Table 1.2 — Town-funded roadway projects since 2002

Roadway Improvements Using Town of Apex Funds Since 2002	Year Completed
Apex Pewy – 2-lane divided from Old Raleigh Rd to Center St	2002
Hunter St – Widen to 3-lane curb and gutter in front of Town Hall	2002
Mason St – Widen to 3-lane curb and gutter from Old Raleigh Rd to Center St	2003
Lynch St – Widen with valley curb (CDBG federal funding with local match)	2004
Perry Rd – Terric Summit to NC 55 (public participation)	2004
Center St/Apex Pewy – New traffic signal	2005
NC 55/Olive Chapel Rd – Crosswalks and signal upgrade	2006
NC 55/Apex Pewy – Crosswalks and signal upgrade	2006
NC 55 Widening to 5-lane – Haddon Hall Dr to Olive Chapel Rd	2007
US 64/Kelly Rd – New traffic signal (temporary until interchange)	2007
Apex Pewy – 2-lane from Hillcrest Rd to N Salem St	2008
James St – Widen to 35' curb and gutter roadway from Hughes St to NC 55	2008
Harwood St – Widen with valley curb (CDBG federal funding with local match)	2008
NC 55/Salem St – Crosswalks, turn lane improvements and signal upgrade	2008
Old Raleigh Rd/Lake Pine Dr & US 64/Lake Pine Dr – Turn lane improvements and signal upgrade	2008
Apex Pewy – 2-lane from S Salem St to Olive Chapel Rd and traffic signal at Olive Chapel Rd	2008
Chatham St – Widen to 35' curb and gutter roadway from Mason St to Elm St	2008
Evans Rd – 2-lane with valley curb extension to Apex Barbecue Rd	2009
Apex Pewy – 2-lane from Anterbury Dr to Tingen Rd (public participation)	2009
NC 55 at PSS #4 – Emergency response traffic signal	2009
Center St/Salem St – New traffic signal (ARRA federal construction funds)	2010
NC 55/Hughes St (north) – Crosswalk across NC 55 added to traffic signal (NCDOT provided signal design and components)	2010
West St – Widen with valley curb (CDBG federal funding with local match)	2010
Apex Pewy – 2-lane from N Salem St to Laura Duncan Rd	2011 (est)
Apex Pewy – 2-lane from Laura Duncan Rd to New Dover Rd	2011 (est)

Apex Fact Sheet

Motto: The Peak of Good Living
Population: 37,886 (2010 Census)
5-year Average Growth Rate: 3.32%
Corporate Area: 15.47 square miles
ETJ: 19.17 square miles

Median Household Income (3-mile radius of Hunter/Salem Intersection):
\$109,348
Average Sale Price of Residential Property: \$249,274

2010 Census

Wake County Population: 900,993
Raleigh MSA Population: 1,125,827
North Carolina Population: 9,535,483

2010-2011 Tax Base: 77% Residential
23% Commercial

Tax Rates

Apex: 0.340/\$100.00
Wake County: 0.534/\$100.00

(Data from Town of Apex Development Report, Apex Chamber of Commerce, and Wake County Tax Assessor)

Apex Tax Distribution	
Public Safety	33.988 %
Recreation	13.523 %
Public Works	12.500 %
Solid Waste	11.425 %
Administration	8.089 %
Construction Management	6.946 %
Information Systems	6.048 %
Community Development	4.586 %
Public Buildings	2.895 %

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