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## Bicycle & Pedestrian Focus Group Meeting Summary

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**Date:** Tuesday, November 14, 2017

**Time:** 4:00 pm – 6:00 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Meeting Purpose

The purpose of this meeting was to explain to participants the purpose and steps of the Advance Apex planning process, learn more about the group's vision for bicycle and pedestrian travel in Town, introduce the Town's Comprehensive Bicycle Plan development process, and consider the details about how bicycle and pedestrian mobility can be enhanced through Advance Apex.

### Meeting Outcome

Feedback from the meeting will guide the development of bicycle and pedestrian recommendations for Advance Apex. Input will also guide how the bicycle and pedestrian network is related to other transportation modes and surrounding land uses.

### Meeting Attendees

This focus group will also serve as the Steering Committee for the Town's Comprehensive Bicycle Plan. The standard focus group format was supplemented with an overview of the bike plan purpose and process. Participants in the November 14 meeting represented several citizen cyclists, Police, Planning Committee of Town Council, Economic Development, Safe and Active Routes to School, Parks and Recreation, NCDOT, CAMPO, WakeMed Apex, and Wake County Public School System.

### Key Takeaways

- Half of the attendees believed that the overall quality of the bicycle network in Apex is poor while 25% found it fair and an additional 25% found it good. The group found the existing pedestrian network to be 13% poor, 40% fair, and 47% good.
- The group discussed varying facility type preferences for different skill levels of bicyclists, and expressed a desire for a mix of facility types to accommodate all users.
- Gaps, or lack of connectivity between, sidewalks were continuously mentioned as an issue.
- There is a need for more bike and pedestrian infrastructure, especially along and across major corridors.
- Mixing land use types (e.g., ensuring retail is in close proximity to residential) was also identified as a strategy for promoting biking and walking.
- Attendees were very interested in identifying key origin and destination points and ensuring bicycle/pedestrian connectivity between them.

## Agenda and Summary

The meeting agenda and discussion items are reviewed in this section.

### Introduction and Purpose of Advance Apex

- Participants were introduced to each other and the project team.

### Meeting Purpose and Format

- The role and importance of the focus group and the meeting was explained and supplemented with information in a presentation.

### Apex Comprehensive Bicycle Plan

- Alta Planning + Design introduced the Comprehensive Bicycle Plan through a PowerPoint presentation. They discussed the role of the Committee in the plan's development, briefly highlighted outcomes, and discussed the integration of the plan with Advance Apex.

### Initial Survey Results Discussion

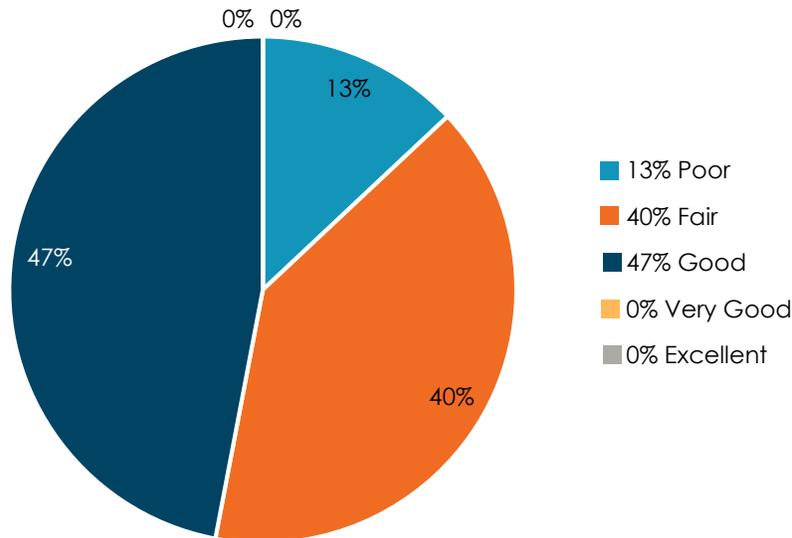
- Feedback from the Advance Apex online survey was discussed with the group. At the time of this meeting, the survey was still open for comment. Therefore, the results shown at the meeting and communicated in this summary were only preliminary.
  - Generally, the group concurred that the most immediate transportation issue facing Apex is congestion. Following that is the disconnect between land use and transportation decisions.
    - The group noted that locating commercial and office employment areas in proximity to residential areas, would facilitate bicycling and walking.
  - When reviewing the question of what tax dollars should be spent on transportation in Apex, the group was unsurprised that widening was ranked the highest. The group felt that recommendations for widening and new location roadways are what the public is used to seeing, thereby yielding a heavy response in the survey.
    - The group's discussion noted that not all solutions are mutually exclusive – many of these funding categories can be implemented in concert with one another.
  - When discussing reasons for not riding a bike, members of the group believed that the introduction of electric bicycles may change the landscape of the top two opinions ("There aren't enough bike lanes or greenways"; "It doesn't feel safe").
    - Participants stated that debris is an issue on mainly state-maintained roads. The Town has a contract with a street sweeping service to clean locally-maintained roads. This is supplemented with the Town's sweeper.
    - Participants noted that continued maintenance along S. Salem would help as well.
  - The group noted that strategic partnerships, separated facilities, and attractive mixed use are ways to promote travel by biking and walking.

- The group believed US 64, Old US 1, and Olive Chapel Road are ideal for expansion of the bicycle and pedestrian network since they are pipelines to the west. These corridors also serve areas that have seen large amounts of residential growth in recent years.
  - Attendees mentioned that developments along these major roads should include bike/ped interconnectivity not only along the corridors, but across the road as well. Specifically, it was noted that there are too few connections across major roads or to schools.

### Poll with Discussion Questions

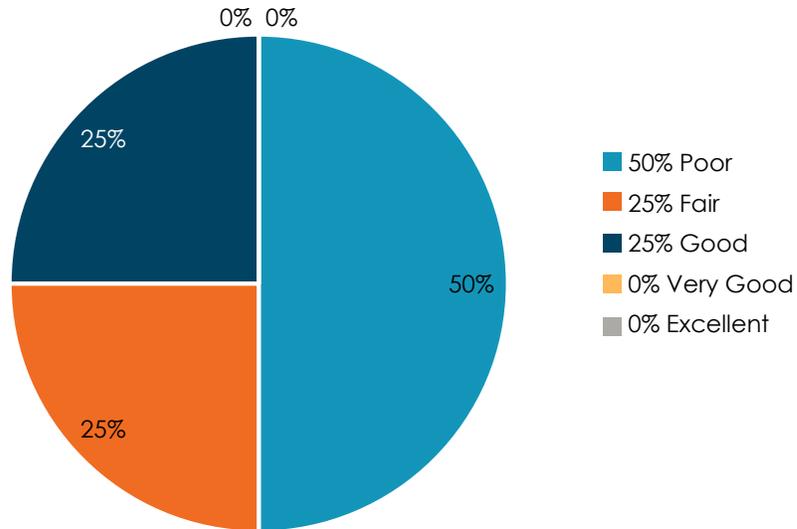
Following the initial survey results discussion, the Focus Group was given the opportunity to take an interactive survey focused on bicycle and pedestrian needs. The survey was conducted through Publicinput.com and allowed respondents to input their answers using their cell phones.

#### Question 1: Rate the overall quality of the existing pedestrian network in Apex.



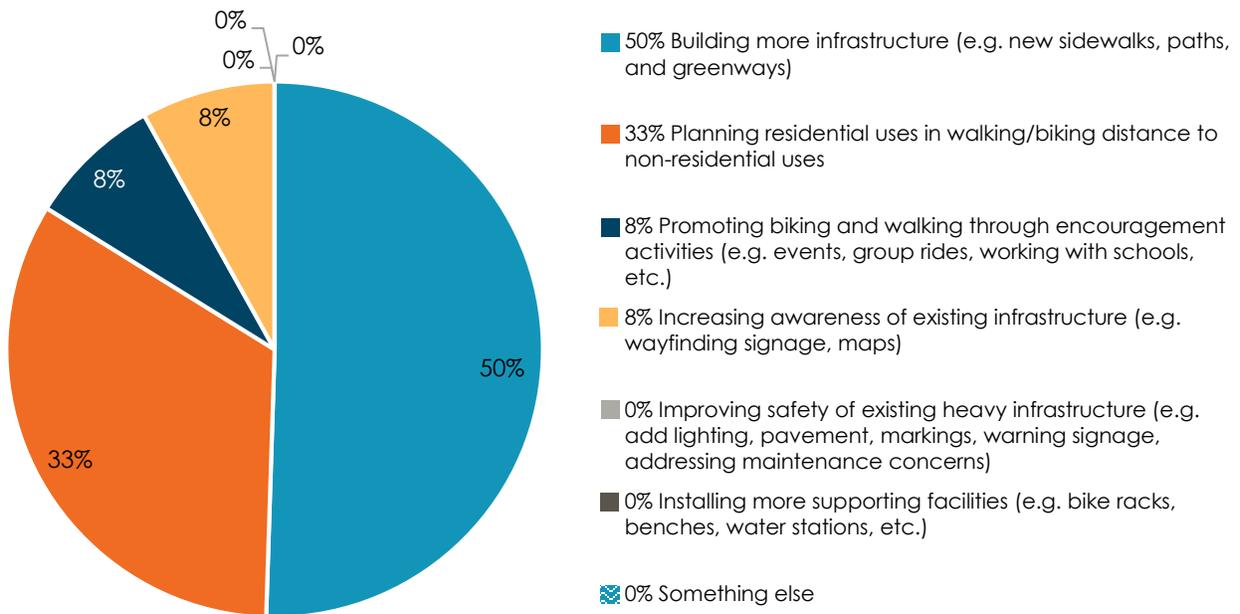
- The vast majority of respondents indicated they feel the current pedestrian facilities in Apex are fair or good. This question led to the remark that significant gaps in the pedestrian network remain.

**Question 2: Rate the overall quality of the existing bicycle network in Apex.**



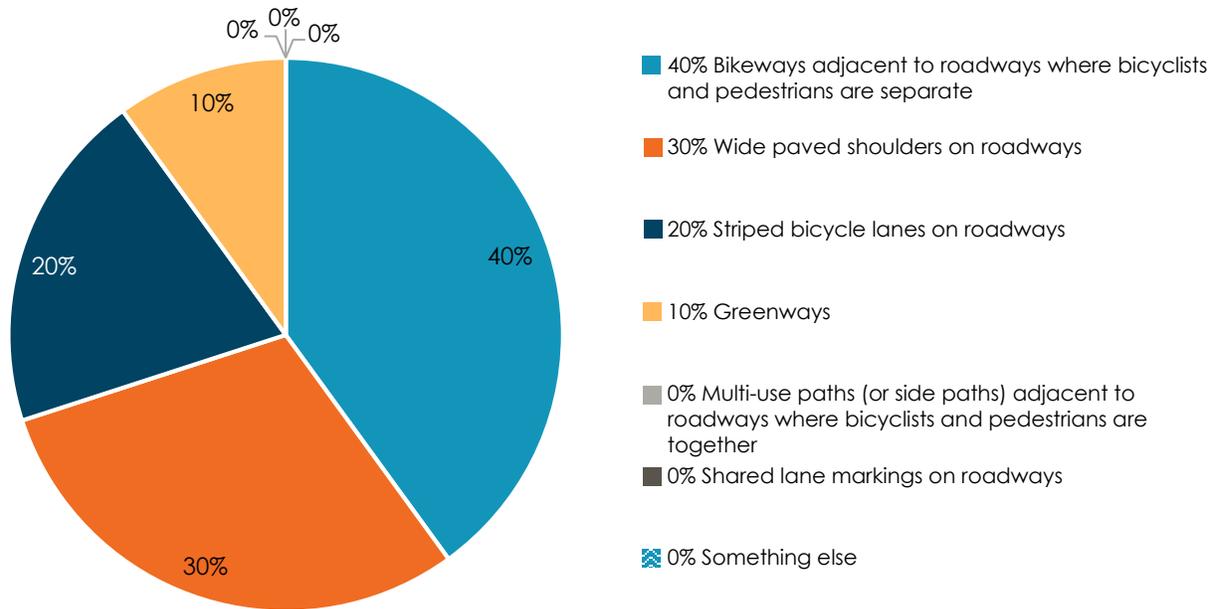
- Participants expressed varying opinions about the quality of the current bicycle network. Feedback was provided from members of the group that voted “poor” because of the lack of dedicated bicycle facilities in many parts of the study area.

**Question 3: What would most encourage people to walk or bike in Apex?**



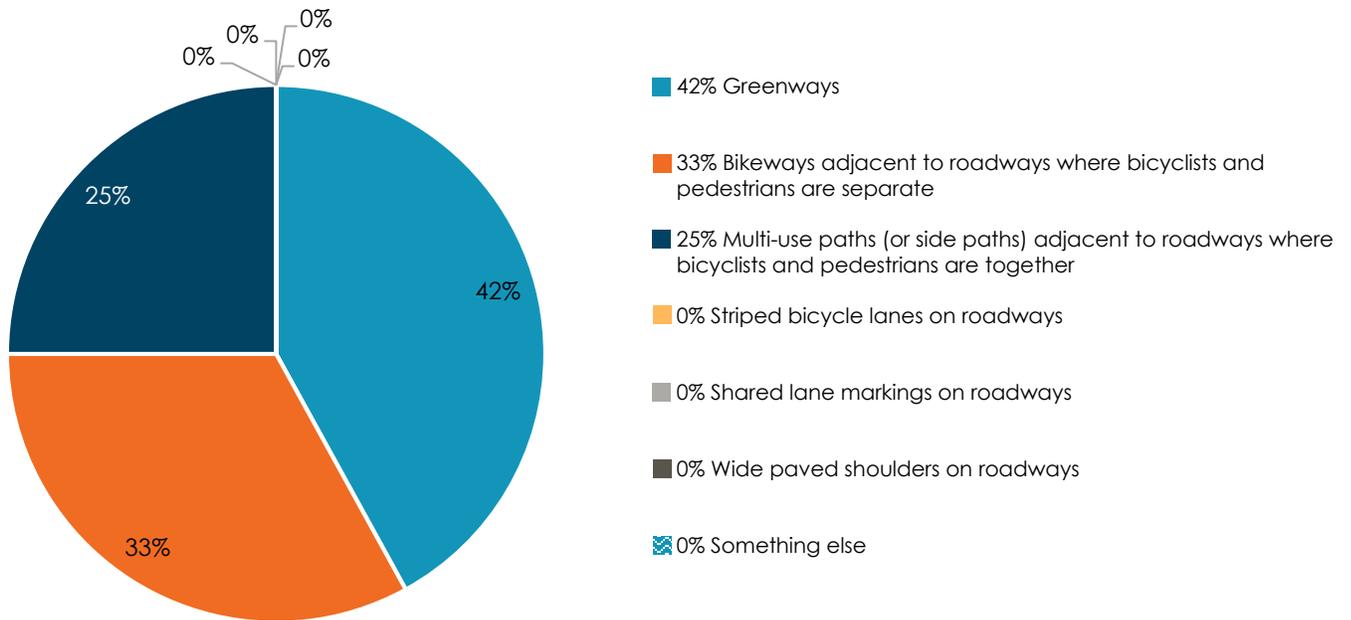
- In the discussion of this question, participants discussed the balance between the overall need for facilities and the importance of prioritizing those facilities to serve key origin and destination points.
- Discussion of the need for wayfinding signage focused around maximizing the effectiveness of the existing network, and tying into the origin and destination points discussion.
- Discussion on the need for encouragement and education focused around the school-age subset of the area, and the notation that bicycle and pedestrian usage is tied not only to infrastructure, but also to the way it is discussed and advocated for in certain settings.

**Question 4: What is the preferred type of infrastructure for experienced cyclists?**



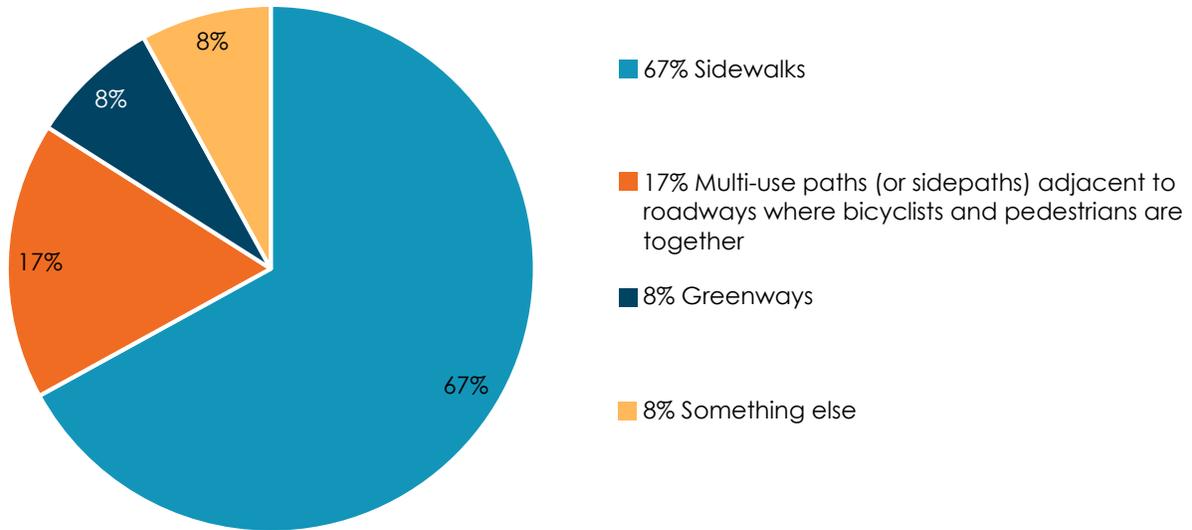
- Participants stated that finding attractive secondary routes for biking is important and that shared lane markings on roadways can be equally important for pedestrians than cyclists.
- The group pointed out that preferred infrastructure is likely related to respondents' purpose for biking.
- The group would like to have downtown Apex tied into the regional biking system to allow people to visit in ways other than cars.
- Attendees mentioned that an increased level of awareness would be helpful so people know they can use the sidewalk. Having bike lanes or other protected bicycle treatments at intersections would make biking more attractive and predictable.

**Question 5: What is the preferred type of infrastructure for inexperienced cyclists?**



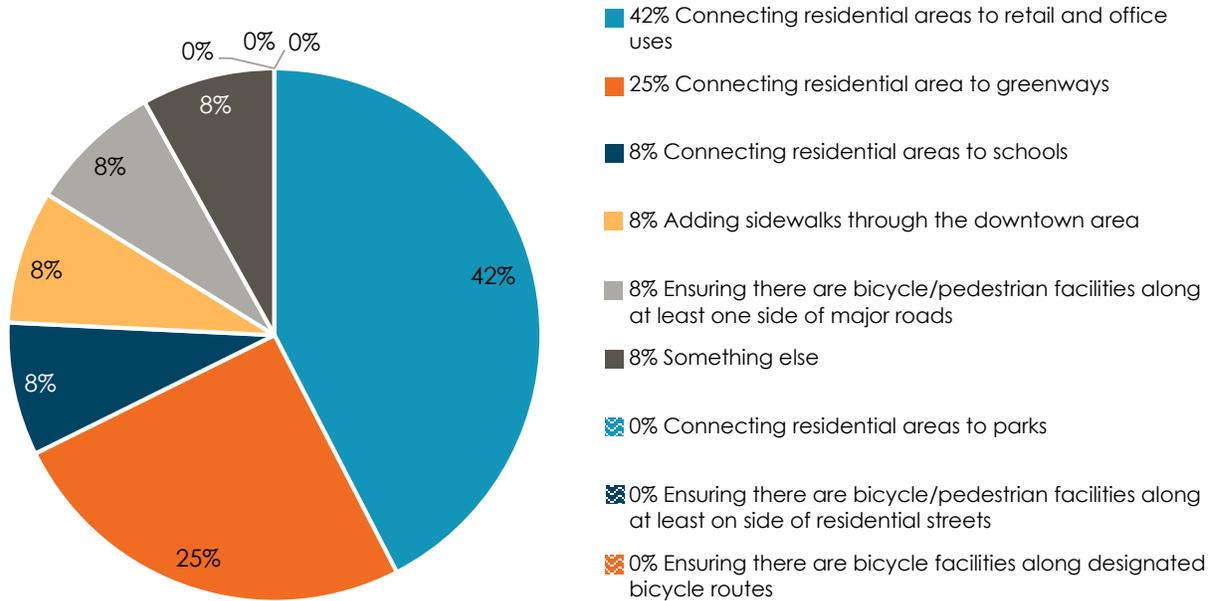
- Participants stated that roads over 35 mph can get scary and that curbs are a bike safety concern because there is no opportunity to “bail out” in case of an emergency.
- The group said that multi-use paths are statistically more dangerous for cyclists as compared to on-road facilities because of the uncertainty of turning conflicts. However, cycle tracks can remediate this issue as long as they are properly planned.
  - Participants noted that wide paved shoulders do not attract the concerned but interested. While a blend of facilities should be considered, the majority of our bike/ped investments should be aimed at this population.
- The group mentioned how popular the American Tobacco Trail is with cyclists. The more connections that can be made that facility, the more barriers can be overcome.

**Question 6: What is the preferred type of infrastructure for pedestrians?**



- Participants felt strongly that sidewalks are the key element of the pedestrian network.
- Having eyes on the street and appropriate lighting versus a greenway aids in safety. Participants discussed the perception of safety versus the reality, and how that can be shifted given certain travel conditions.

## Question 7: What should be the highest priority for new bicycle and pedestrian facilities?



- Discussion around this question reemphasized the importance of linking key destination points.

### Pre-Wrap Up

- The project team emphasized how the group's feedback will be used.

### Mapping Session

- Participants were invited to partake in a discussion/mapping activity to locate specific areas of interest regarding biking and walking. Their comments can be found below and a map is attached for reference.
- Specific Comments
  - US 64 is in development stage for the section east of Lake Pine Plaza
  - Davis Drive near Salem Middle School creates a difficult connection
  - US 64 and Laura Duncan Road is a major crossing for students
    - Look at future interchange configuration close to parks, school, downtown
  - Infill sidewalks were suggested in the following areas:
    - Create a neighborhood connector from Bodeswell Road to Parliament Place
    - Provide sidewalks on Ten Ten Road from Pine Hill Business Center to Jessie Drive
    - Provide sidewalks on the Jessie Drive Extension from 55 to Ten Ten Road

- Provide sidewalk on S Tunstall Avenue between Apex Middle School and Vineyard Station Shopping Center
- Provide sidewalk on E Chatham Street between S Tunstall Avenue and N Mason Street
- Provide sidewalk on N Hughes Street between E Chatham Road and Culvert Street
- Pedestrian connections to the Eva Perry Library
- Pedestrian connections between the neighborhoods south of Jessie Drive between Ten Ten Road and 55
- Pedestrian connections to existing sidewalks along Olive Chapel Road
- Provide sidewalk on James Street (from Apex Elementary School to Schieffelin Road); Apex Peakway (from James Road to Old Raleigh Road); Old Raleigh Road (from Apex Peakway to 64)
- Provide sidewalk on Old Jenks Road between W Williams Street and Davis Drive
- Provide sidewalk on Davis Drive/Salem Street from Old Jenks Road to Apex Peakway
- There is no pedestrian access across Ten Ten Road at Lufkin Road interchange area, creating a gap in the system.
- A linear park could be created with a multi-use path along Old US 1
- Consider providing improved pedestrian accommodations on NC 55 as a part of the NCDOT widening effort between US 1 and Olive Chapel Road
- Think about crossing challenges unique to schools; dealing with NCDOT roads for Apex Friendship
- There have been conversations about a parallel bicycle route to I-40 connecting RTP and Raleigh. Could a similar facility be implemented parallel to US 64?





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## Bike Apex Committee Meeting #2 Summary

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**Date:** Monday, February 26, 2018

**Time:** 4:00 pm – 6:00 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Meeting Purpose

This was the second steering committee meeting for the Apex Bike Plan. The purpose of this meeting was to discuss the current conditions for bicycling in the Town of Apex, and to begin exploring a conceptual bicycle route network. Staff from Alta Planning + Design (project consultants) led a presentation and facilitated discussion.

### Meeting Outcome

Feedback from the meeting will help guide the development of bicycle network recommendations for the Apex Bike Plan.

### Meeting Attendees

- Linda Barrett – WakeMed Apex
- Steve Bzomowski – Alta Planning + Design
- David Cole – Apex resident
- Tom Colwell – Apex Parks, Recreation & Cultural Resources
- Shannon Cox – Apex Planning
- Russell Dalton – Apex Public Works & Transportation
- Jennifer Delcourt – Active Routes to School
- Joanna Helms – Apex Economic Development
- Bill Jensen – Apex Town Council
- David Keilson – NCDOT Division 5
- Angela Reincke – Apex Parks, Recreation & Cultural Resources
- Jason Reyes – Alta Planning + Design
- Reggie Skinner – Apex Planning Board
- Stephen Sposato – Wake County Public Schools
- Ann Stephens – Apex PD
- Allison Wright – Kimley-Horn and Associates

## Key Takeaways

- Apex currently has an extensive greenways system that is geared more towards recreation rather than transportation – need to add transportation element into the developing bicycle network.
  - Several roadway projects (NC 55, US 64, and Ten Ten Road) are programmed to include bicycle facilities.
  - Multiple greenway projects have been submitted for funding.
  - 23 neighborhoods are building greenways as part of residential development – this will more than double existing greenway mileage in Apex.
- Most Apex residents (92%) commute out of town for work, with an average 23.8 minute commute (on par with the regional and national averages).
  - Apex Commuter Outflow: 22,678 people, mostly going to Raleigh (24%), Cary (18%), and Durham (11%), and mostly driving alone (81%)
  - This plan could aim to improve bicycle transportation options for those commuting close to Apex (to Cary, for example), and to improve bicycle transportation within town for local trips.
- Residents ranked the most important challenges facing Apex as part of an Advance Apex survey. Implementing a successful bicycle, pedestrian, and greenway network will help to address many of the top ranked challenges, such as population growth, traffic congestion, loss of small town charm, natural resource preservation, community beautification, business recruitment, and lack of transportation options.
- Future local funding in Apex will likely include increased allocations for bicycle, pedestrian, and greenway projects. Local funding will be a key part of implementing the Bike Plan, with the goal of leveraging state and federal funding when possible.
- Committee members used the mapping exercise during the meeting to begin identifying a potential network of future bicycle facility connections that would connect to key destinations throughout Apex. This committee input will be used by the consultants as a key resource in the production of a full draft bike network.

## Agenda and Discussion

The meeting agenda and discussion items are reviewed in this section.

### Introductions

- Participants were introduced to each other and everyone gave an example of a personal experience of where they like to bike – locally or in other parts of the US or abroad. Highlights from this discussion included:
  - **Apex area specific:**
    - The American Tobacco Trail (ATT) – enjoyable for relaxed paced riding with family, but not conducive to riding fast – pedestrians, dogs, etc.
    - Commute from Apex to Cary to Raleigh on a combination of greenways and neighborhood streets
    - Many local greenways feel more conducive to riding recreationally – less for utilitarian purposes
    - US 64 and Lake Pine Drive towards Home Depot

- Challenging
- Wider highways/shoulders needed
- Shoulder widens and then narrows
- Ride the sidewalk where it is too narrow
- Ride for exercise and to reach a destination
- Kelly Road to Jaycee Park and ATT – recreational route
- Awareness and safety is critical from the public health perspective
  - Many people don't feel safe due to the number of cars, traffic, the way bikers are treated
  - Felt more comfortable riding calmer, residential streets in Wilson, NC
- Police:
  - Lots of complaints about bicyclists – particularly groups of cyclists on the main thoroughfares
  - Within the city limits you can't ride more than two abreast
  - Slows traffic down
  - Partially an education issue
  - Cyclists must obey traffic laws – issues with weaving
- There are a few bad apples within the cycling groups in Town
  - Issues with racing groups – running lights to prevent falling off the back
- Look at ways to get to the ATT for commuter routes – Middle Creek and Beaver Creek
- Don't see much biking in and around Apex, especially for transportation
- The number of greenways is much greater than what many other NC communities have, even if it is segmented. Apex can build off of these segments to create a connected network.
- Some parents are worried about their kids on greenways – meandering, secluded paths can have perception of being less safe.
  - The consultant noted that studies show that the rate of crime on greenways generally reflects the rate of crime in the surrounding area. Greenways also offer an opportunity for increased connections between neighbors, potentially strengthening communities.
- Bike on the sidewalks to the Cary YMCA
  - Sidewalk riding is addressed in an Apex ordinance. Respect for the pedestrian is key to making sidewalk riding work well.
- Group rides – Sometimes two or three cyclists will ride abreast for safety; many roads do not feel safe, like Old US 1, because people are driving above the posted speed limit, sometimes at 70 mph.
- **Outside of Apex:**
  - Telluride, Colorado: Large number of cyclists, differing skill level
  - East Boston Greenway
    - School children and commuters were using the trail

- 2 10-foot paths at some points
- Lanes were marked
- Runs from the water to the airport
- Density in Boston accommodates this
- Copenhagen, Denmark
- Greenville, SC: Swamp Rabbit Trail – meandering but connects smaller communities to larger communities; Great example of economic benefits of trails, with shops and services along the trail.
- New Zealand: Rural roads
- Toronto: Harbor Front

## Scope/Schedule Overview



## The Big Picture: Apex as a Bicycle-Friendly Community

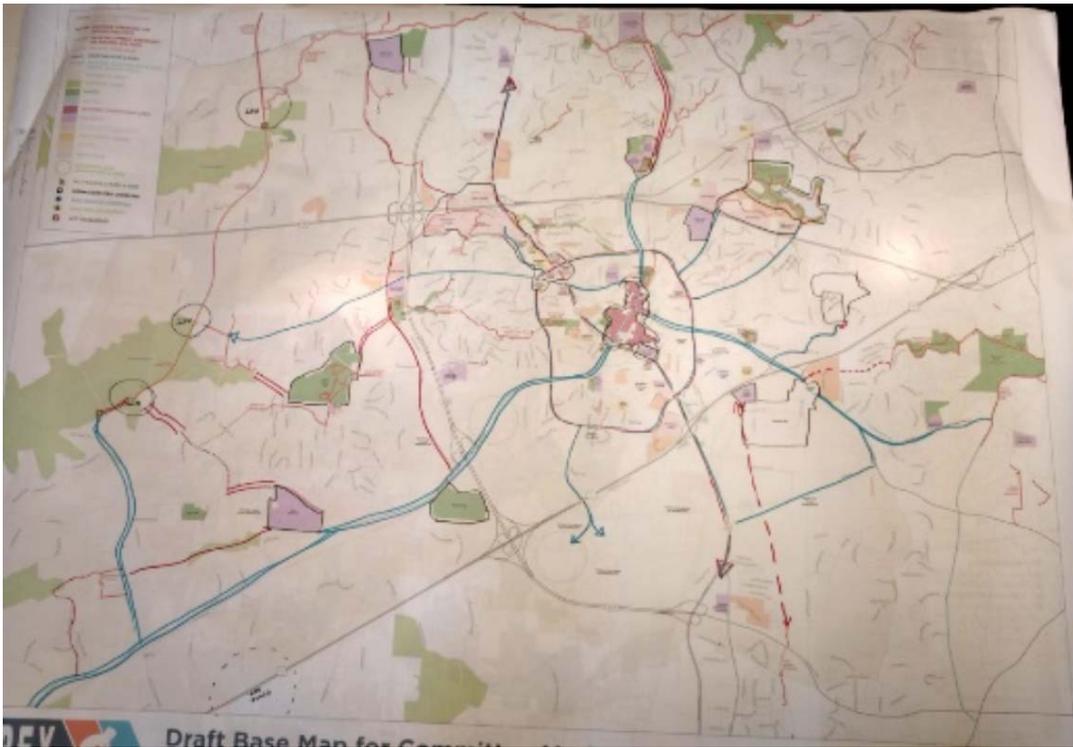
- Jason Reyes (Alta Planning + Design) led a presentation covering aspects of the existing conditions in Apex for bicycling, and how those conditions may influence the ability of Apex to become a 'bicycle friendly' community.
- The second part of the presentation discussed some guiding principles for bicycle network design, primarily focused on the "Hub & Spokes" model, where the "hubs" represent destinations, and the "spokes" represent bicycle facility connections and corridors. Several examples were given of other communities in NC that have taken this approach, and how this might apply in Apex.

- Please see the slides for this presentation attached at the end of this document.

## Developing a Draft Network

- The steering committee split into two groups to discuss and identify the potential ‘hubs’ and ‘spokes’ of a future bicycle network in Apex. Committee members participated through conversation and by drawing on large format base maps (see photos of base maps at the end of this section below).
- Key for notes below:
  - Hubs identified by the committee are in **black bolded text** below
  - Spokes identified by the committee are *in italics for potential on-road corridors*, and *underlined italics for potential off-road corridors*
- Mapping Notes:
  - Downtown Apex:
    - **N. Salem Street to Salem Pond Park/Davis Drive Village/Salem Elementary and Middle Schools**
    - **Laura Duncan Road and Old Raleigh Road to Apex Community Park, Apex High School and surrounding commercial/residential area**
    - **Center Street/Ten Ten Road/Penny Rd and Swift Creek Greenway link to Regency Park/Hemlock Bluffs Nature Park/Koka Booth Amphitheatre/Surrounding residential neighborhoods/Swift Creek Greenway/Penny Road Elementary**
    - **E Williams Street (off-road sidepath potential as well) toward Lufkin Middle School/Surrounding commercial and industrial area/Future Middle Creek Greenway (toward Holly Springs)**
    - **West Williams Street (off-road sidepath potential as well) toward WakeMed Healthplex/Apex Med Center/Haddon Hall Greenway/Commercial destinations/Surrounding neighborhoods/Beaver Creek Greenway**
    - **S. Salem Street/Old US 1 (potential linear park) southwest toward Apex Friendship High School/Pleasant Park/Future West Village development**
    - **Olive Chapel Road toward NC 55 commercial corridor and further west to ATT Trailheads**
    - **Apex Peakway (could be off-road/on-road combination) – circulation around downtown area**
  - North Apex:
    - **Salem Pond Park/Davis Drive Village/Salem Elementary and Middle Schools**
      - *Salem Street* south toward **downtown Apex**
      - *Davis Drive (or off-road sidepath)* north toward **Cary**
    - **Apex Community Park, Apex High School and surrounding commercial/residential area**
      - *Laura Duncan Road and Old Raleigh Road* to **downtown Apex**
    - **WakeMed Healthplex/Apex Med Center/Haddon Hall Greenway/Commercial destinations/Surrounding neighborhoods/Beaver Creek Greenway**
      - *East Williams Street (off-road sidepath potential as well)* toward **downtown Apex**

- **Green Level High School/Surrounding residential neighborhoods/White Oak Greenway (East Coast Greenway)**
  - *Green Level Church Road/Jenks Road (sidepath)* toward **WakeMed Healthplex/Apex Med Center/Haddon Hall Greenway/Commercial destinations/Surrounding neighborhoods/Beaver Creek Greenway/Apex Crossing**
  - *West Williams Street (off-road sidepath potential as well)* toward north Apex residential areas and **Cary**
- **East Apex:**
  - **Regency Park/Hemlock Bluffs Nature Park/Koka Booth Amphitheatre/Surrounding residential neighborhoods/Swift Creek Greenway/Penny Road Elementary**
    - *Center Street/Ten Ten Road/Penny Rd* and *Swift Creek Greenway link* to **downtown Apex**
- **West Apex:**
  - **Olive Chapel Road – Olive Chapel Elementary/Kelly Road Park/Publix Pointe Super Market/Beaver Creek Greenway/Surrounding residential areas**
    - *Olive Chapel Road* east toward **NC 55 commercial corridor and downtown Apex**
    - *Olive Chapel Road and Beaver Creek Greenway corridor* west toward **ATT Trailheads/Apex Nature Park/Surrounding neighborhoods**
  - **ATT Trailheads/Apex Nature Park/Surrounding neighborhoods**
    - *Olive Chapel Road and Beaver Creek Greenway corridor* east toward **Olive Chapel Road destinations, NC 55 commercial corridor and downtown Apex**
- **Southwest Apex:**
  - **Existing and future residential neighborhoods/Little Beaver Creek Greenway/Apex Friendship High School**
    - *S. Salem Street/Old US 1 (potential linear park)* northeast toward **downtown Apex**
    - *Greenway corridors (including Little Beaver Creek)* northwest toward **ATT Trailheads/Apex Nature Park/Surrounding neighborhoods**
- **South/Southeast Apex:**
  - **Lufkin Middle School/Surrounding commercial and industrial area/Future Middle Creek Greenway (toward Holly Springs)**
    - *West Williams Street (off-road sidepath potential as well)* toward **downtown Apex**



## Future Projects

Several potential bicycle facility projects that have been submitted for funding were also discussed during the mapping exercise. The following have been included in the most recent CIP request for the current Town of Apex funding cycle (not approved currently). These projects can serve as some of the 'hubs & spokes' identified in the mapping exercise above

- Kelly Rd Sidewalk & Apex Barbecue Rd Path - "Park to School"
- Safe Routes to School Multiple Projects
- U-2901: NC 55 Middle Creek Greenway (Phase I Construction)
- U-5301 - US 64 Sidewalk and Enhancement Cost Share
- U-5825: Ten Ten Rd and Center St Sidewalk and Enhancement Cost Share
- Middle Creek Greenway (Phase I Construction)
- Middle Creek Greenway (Phase II Construction)
- Middle Creek Greenway (Phase III Design)
- Middle Creek Greenway (Phase III Construction)
- Pleasant Park - (Phase I,II & III)
- Beaver Creek Greenway Construction (Phase I & II)
- Salem Pond Park (Phase III)
- Greenway Repair and Resurface - Apex Community Park
- Jaycee Park Expansion
- Olive Farm Park Design and Construction
- NorthWest Park (Lewter/Mills) Design and Construction\

## Next Steps

- Refine the draft bikeway network using the input from this committee meeting
- Review of the draft network by Alta's Engineering Team
- Field review & ground-truthing of key corridors (bikeway & greenway)
- Next Meeting: Discuss alternative recommendations for facility types on key corridors



## May 2018 Public Open House Workshop Summary

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**Date:** Monday, May 21, 2018

**Time:** 4:00 pm – 6:00 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Overview and Purpose

This open house workshop was focused on introducing the purpose of the plan, existing conditions overview, and gathering input on opportunities and constraints for bicycling in Apex. The meeting was facilitated by a combination of staff from Alta Planning + Design, KHA, and the Town of Apex. Members of the steering committee also participated. The room was organized with a rolling Power Point presentation, existing conditions maps, a “StreetMix” station, and information boards detailing the planning process, overall concepts, educational information, and infrastructure/programming ideas. These materials are included at the end of the summary.

### Meeting Outcome

Thirty-eight people attended the meeting, providing a large volume of feedback regarding opportunities and constraints for bicycling in Apex. Participants provided positive verbal feedback to the project staff, and the overall message was one of support for improving conditions for bicycling in Apex. Input was collected through several means, with key take-aways summarized below:

- **Dot-Voting Boards:** Certain display boards allowed people to vote for their favorite ideas using stickers, with the key topics being programs and bicycle facility types.
  - The most popular program ideas noted were bike lane sweeping, increased trail maintenance, and the Watch For Me NC program.
  - The most popular bicycle facility types were buffered bicycle lanes, standard bicycle lanes, and shared use paths (greenways).
- **StreetMix Station:** This station allowed participants to learn about the trade-offs involved in street design by moving various street elements within a set right-of-way, both online at <https://streetmix.net/>, and using a hardcopy set of pieces. The most people who participated created designs with bicycle lanes (standard and separated).

- **Mapping Comments:** Large-format maps showing existing conditions were on display on tables for participants to mark up their thoughts, ideas, and concerns regarding opportunities and constraints for bicycling in Apex. Key themes included:
  - The general idea of connectivity was a key theme in the mapping comments, with many comments focused on connections from neighborhoods and existing greenways to Downtown Apex. Other commonly mentioned examples included connectivity to the American Tobacco Trail, the East Coast Greenway, and the Town of Cary.
  - Safety was also a key theme. Examples include:
    - Many comments regarding a recent roadway redevelopment south of Apex in Holly Springs, on Woods Creek Rd, where the travel lanes were narrowed and a median was added, creating a pinch-point for bicyclists.
    - Other safety concerns were about key roadway crossings, such as NC 55/Williams Street at Jaycee Park, Olive Chapel Road at Fairfax Woods Dr, and multiple locations along US 64 (Laura Duncan Road, Lake Pine Drive, N. Salem Street, and Jenks Road).
    - The most noted safety concerns for entire corridors included Old US 1/Salem Street through Apex (also US Bike Route 1), NC 55, and Ten Ten Road.
  - Comments about desired bicycle treatments for future roadway projects, such as parts of Ten Ten Road, US 64 and NC 55.
  - Additions & corrections to existing and planned facilities (and those currently in different stages of development)

## Meeting Comment Digest

Extensive feedback was recorded during the session through comments written on the existing conditions maps and boards, written comments on open-ended comment sheets, and through interaction with the project team. These comments are summarized below:

### Opportunities

- Future Ten Ten Road widening project and NC 55 project – several attendees asked about bicycle facilities for these upcoming projects.
  - Ten Ten Road – preliminary designs can be found here - <https://www.ncdot.gov/projects/publicmeetings/?search=U-5825>
    - Both Ten Ten Road widening project preliminary design alternatives includes a multi-use path along the north side as well as 5' on-street bike lanes.
  - NC 55 – preliminary designs can be found here – <https://www.ncdot.gov/projects/publicmeetings/?search=U-2901>
    - The selected alternative includes a multi-use path for the entire length of the project. It is anticipated there will be an overlap with multi-use path on both sides of the road between Hughes and Salem Street.
- Feasibility Study for Apex Peakway SE Connector project, connecting the existing Apex Peakway segments from NC 55 to Center Street – opportunity to include separated bicycle facility with future roadway project.
- Space exists for linear park/sidepath/greenway along Old US 1 between road and railroad tracks heading south through Apex.

- Proposed greenway/sidepath line from Horton Ridge Road to Little Beaver Creek (connection is in development - Jordan Manors)
- US 64 intersection improvements at Lake Pine Drive/Old Raleigh Road and Laura Duncan Road – proposed grade separated crossing for bicyclists and pedestrians as part of US 64 improvements along this section.
  - Alternatives include a proposed overpass of US 64 at Shepherd’s Vineyard Drive with bicycle and pedestrian facilities. Maps are available at: <https://publicinput.com/U-5301-US64-Apex-Cary#>
  - Improved connectivity to Cary to the northeast via Laura Duncan Road and Old Raleigh Road noted multiple times in map comments.
- Proposed greenway with existing easements along creek corridor east and parallel of Tingen Road – potential greenway connecting to south end of downtown Apex.
- Apex Peakway SW Connector project will include a grade separated crossing (overpass) of Salem Street and the railroad tracks currently being reviewed by CSX (Tingen Road crossing will be subsequently closed) – connection opportunity across Salem Street/US 1 for bicyclists.
- Grade separated crossing of I-540 proposed in the South Salem Street Small Area Land Use Plan connecting to Holland Road – opportunity to include I-540 crossing for bicycles as well.
- Potential to connect through the Green Level High School property and ballfields to make direct connection from Roberts Road to the White Oak Creek Greenway (in Town of Cary)
  - Town of Cary has a plan for a trailhead at Green Level High for the White Oak Creek greenway
- Potential to connect Tobacco Trail to western terminus of Ragan Road (~700 feet).

## Constraints

- Pinch points for bicyclists noted at the following locations:
  - Existing median on Woods Creek Rd west of Veridea Parkway creates pinch point for bicyclists (in Town of Holly Springs)
  - Pinch point for bicyclists along Lake Pine Dr just north of US 64 intersection.
  - Pinch point currently along Apex Barbecue Road as it crosses Beaver Creek (bridge).
  - Pinch point just east of Apex Peakway and Old Raleigh Road intersection.
- Apex Barbecue Road/S. Salem Street intersection – need bicycle actuated signal on Apex Barbecue Road turning onto S. Salem Street, current signal is not actuated by bicycles.
  - Same improvement needed for Humie Olive Road and US 1 intersection.
- Apex Barbecue Road – from eastern terminus of existing sidepath to Kelly Road – poor visibility, can be dangerous section for bicyclists.
- Apex Barbecue Bridge is programmed for replacement
- Ten Ten Road east of US 1 is currently especially narrow for bicyclists.
- Beaver Creek Greenway to downtown Apex currently difficult to navigate – NC 55 crossing needed.

- Consistent flooding of the Beaver Creek Greenway at the turn in the greenway just east of the 540 undercrossing.
- Blind curve along Olive Chapel Road just west of Apex Barbecue Road, improvement needed.
- Olive Chapel Road is difficult to cross at key locations – example – crossing improvement needed at Olive Chapel Road and Fairfax Woods Drive intersection.
- Multiple driveway conflicts along Beaver Crossing Multi-use Path section.
- Railroad tracks along the east side of Davis Drive are a barrier to connectivity between neighborhoods and destinations on either side.
  - US 64 bridge along N. Salem Street is currently a barrier for bicyclists as well – need improved crossing to connect neighborhoods toward downtown Apex.
- NC 751/New Hill Olive Chapel Road has truck traffic and relatively high speeds and high traffic volumes.
- Shoulder disappears along South Salem Street just south of Salem Creek Drive.
- Pleasant Park is isolated by roadway network, need connectivity.
- Jenks Road/US 64 intersection includes pedestrian crossing, but is difficult for bicyclists to connect through – was created with pedestrians in mind but not bicyclists.

### Additional Public Comments/Notes:

- Existing paved shoulders along Old US 1 and the 540 interchange.
- Existing marked crosswalk across Apex Peakway into Apex Jaycee Park from Bexley Hills Bend.
- Consider implementing shared lane markings or ‘sharrows’ along Salem Street through downtown Apex.
- Existing sidewalk along Patterson Grove Road connects existing greenway segments.
- Existing pedestrian median island crossing of Tingen Road just south of Harbor Haven Drive.
- On-road bicycle facility improvements needed along Olive Chapel Road.
- Existing sidewalk connector links the N. Beaver Creek Greenway from Patterson Grove Road, along Olive Chapel Road to Fairfax Woods Drive (crossing improvement needed at the Olive Chapel Road/Fairfax Woods Drive intersection).
- Short existing sidewalk connects the Beaver Creek Greenway to the Apex Peakway crossing (to Jaycee Park) along Bexley Hills Bend.
- Local bicyclist’s connection from Beaver Creek Commons Drive Multi-use Path to the Haddon Hall Greenway includes cutting through big box store parking lots to Zeno Road, and utilizing Haddon Hall Drive to connect across NC 55.
  - Proposed greenway link following easement paralleling the US 64 entrance ramp to NC 55 with crossings into Haddon Hall neighborhood and Haddon Hall Drive toward Apex Peakway.
- Olive Street, Marco Drive, and Schieffelin Road currently used by some local bicyclists connecting between and across downtown Apex, NC 55, and Ten Ten Road (to be addressed by the future Apex Peakway SE project)

- Connect James Street (and surrounding neighborhoods) to N. Hughes Street with improved crossing facilities of NC 55 at N. Hughes Street to connect into downtown Apex grid network.
- Lake Pine Drive – show bike lanes in Cary as well (just northeast of Apex town limits).
- Consider adding sharrows to Laura Duncan Drive along existing sidepath section for bicyclists wanting to travel at higher speeds (this section of sidepath is only conducive for lower speed riding), some bicyclists need to go faster and utilize existing roadway.
- Improve Roberts Road to Tobacco Trail/Green Level High School for enhanced connectivity to northwest Apex.
  - Improving bicycle connectivity to northwest Apex via Kelly Road is another option to consider for comprehensive connectivity.
    - Kelly Road section between Jenks Road and US 64 is especially dangerous for bicyclists due to width, traffic volumes and speeds, and current pavement condition.
- Holt Road to Jenks Carpenter Road highlighted as a current option for bicyclists (that is better than other alternatives) connecting north into Cary.
- Tingen Road/Veridea Parkway – popular route for bicyclists, consider adding shoulder/bike lane.
- Apex Peakway – add bike lanes that are physically separated from automobile traffic.
- Need more bike lanes and greenway connectivity to Apex Nature Park in general.
- Safe crossings of Humie Olive Road needed to connect neighborhoods to Apex Friendship High School.
  - There is a current project to add multi-use path along the north side of Humie Olive between Blazing Trail and Whistling Quail and to shift the cross-walk to Whistling Quail
- Improvement for bicyclists needed to bridge along Center Street/Ten Ten Road over US 1 (this will be improved as part of future roadway widening project).
- Apex Peakway – pavement damage along southern east/west section where creek crosses under the roadway.
- Improve Tobacco Trail southern terminus trailhead driveway for bicyclists (currently rough gravel).
- Construct path on school side (west side of Laura Duncan Road) to connect to Apex High School property.
- Route noted along Walden Road, Terrmini Drive, and Holland Road.
- Connect across southern Apex with bicycle facilities along future roadway extending west of Jessie Drive.
- Need safe connection from downtown Apex to Jordan Lake.
- Is Salem Street a no-pass zone? If so, updated signage to include requirement for 4' clearance for passing bicyclists.
- Bicycle Level of Comfort Map – Time of day affects roadway comfort – avoiding rush-hour significantly enhances bicycle level of comfort in general.
- Concept Map – add Jordan Lake, also add connectivity beyond Cary to Lake Johnson, Raleigh, Neuse River Greenway, Falls Lake, Clayton, etc.

## Add to greenways that are "In Development" (under construction/funded)

- Swift Creek Greenway from Apex Community Park to Regency Park ('Fill the Gap' project from the Wake County Greenway System Plan')
- Greenway along Reedy Branch from Bryant Pond Lane to the American Tobacco Trail
- Greenway segment east from Richardson Road south of Arcadia West neighborhood
- Remove from 'in development' section of Beaver Creek Greenway north of Apex Nature Park (planned but not in development) – also move GIS line a little to the south to follow existing sewer easement.
- Cary – East Coast Greenway/White Oak Greenway gap connection from Davis Drive to Macarthur Drive
- Cary – Greenway east from the existing Higgins Greenway to Cary Elementary School

## General comments

- Pedestrian crossings – need space for bicyclists as well
- Need more 'Watch for Bicyclists' signage throughout Apex
- Need bicycle detection at traffic signals
- Connect schools and parks with bicycle infrastructure
- Continue filling gaps in the greenway system
- Streets/bike lanes need to be kept free of debris
- When medians are built (ie Woods Creek Road), include space for bicycles instead of potentially creating pinch points (see comments about specific pinch points under 'Constraints' below).
- Dedicated bicycle lanes, especially with painted buffer or physical buffer preferred (see dot voting board below).
- Bike lane sweeping and increased trail maintenance received the most dots on the programs board (along with the Watch for Me NC program).



## June 2018 Committee Meeting #3 Summary

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**Date:** Monday, June 18, 2018

**Time:** 4:00 pm – 6:00 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Meeting Purpose

The purpose of this meeting is to gather committee feedback and direction for the draft proposed bike network for the Town of Apex.

### Meeting Outcome

Feedback from the meeting, as outlined in these notes, will help guide revisions to the draft bicycle network.

### Meeting Attendees

- Paul Black – Capital Area Metropolitan Planning Organization
- Steve Bzomowski – Alta Planning + Design
- Tom Colwell – Apex Parks, Recreation & Cultural Resources
- Shannon Cox – Apex Planning
- Russell Dalton – Apex Public Works & Transportation
- Jennifer Delcourt – Active Routes to School
- Shannon Flaherty – Apex Chamber of Commerce
- Joanna Helms – Apex Economic Development
- Adam Huffman – Town of Holly Springs, Parks & Recreation
- Bill Jensen – Apex Town Council
- David Keilson – NCDOT Division 5
- Margot Knepp – Apex resident
- Angela Reincke – Apex Parks, Recreation & Cultural Resources
- Jason Reyes – Alta Planning + Design
- Jenna Shouse – Apex Planning

- Reggie Skinner – Apex Planning Board
- Stephen Sposato – Wake County Public Schools
- Allison Wright – Kimley-Horn and Associates

## Key Takeaways

The Steering Committee divided into five groups to review different focus areas of the Draft Proposed Bike Network and provided their feedback. They made comments on key destinations, missing links, feasibility of proposed routes, key connections across the focus area, and what they considered to be the most important segments of the proposed network.

**Destinations** (not in order of priority; see full group summaries that follow for all destinations mentioned):

- Downtown Apex
- The American Tobacco Trail (ATT)
- Pinnacle Park area
- East Coast Greenway (ECG)
- Apex Community Park
- Apex Nature Park
- Pleasant Park
- Future High School
- Olive Chapel/Hunter St/NC 55 area

### Missing Links & Corridor Comments:

- Strategic sections of sidepath on US 64 towards the ATT
- Suggested greenways along riparian corridors
- Regional connections outside of Apex, like US 64 to over Lake Jordan, and connection into Cary and Holly Springs
- Examining strategic connections over US 1
- Mostly minor changes to the type of facility recommended for certain segments (e.g., from bike lane to sidepath, or shared roadway to bike lane, etc.)

### Least Feasible Sections:

- Need context-sensitive design for sidepaths on rural roads (Morrisville Parkway was suggested as a model cross section)
- Need to identify most feasible route over US 1
- West Village roads already in-design approval stage – may be too late for bike lanes
- Olive Chapel Rd bike lanes and Richardson Rd bike lanes are good proposals, but concerns about cost and feasibility

### Most Important Segments:

- North Salem St, from Hunter St to Old Jenks Rd
- Salem Church Rd/Davis Dr, from Old Jenks Rd to Farmpond Rd
- Salem St/Chatham St intersection to NC 55/Apex Peakway
- Olive Chapel Rd/Hunter St/Old Raleigh Rd, from Apex Peakway to Apex Peakway
- Salem St, from Hunter St to center of Downtown

- Laura Duncan Road sidepath, from Apex Peakway to US 64
- Proposed sidepath along Old US 1, from Downtown Apex to Pleasant Park
- Build to fill gaps (one group felt like filling small gaps within their focus area would be the best strategy):
  - Apex Barbecue Rd sidepath (Brasstown Rd to Kelly Rd)
  - Humie Olive Rd sidepath (Olive Farm Rd to Apex Friendship Schools)
  - Little Beaver Creek Greenway through Friendship Station to Richardson Rd
  - Beaver Creek Greenway (Arcadia West connection to Apex Nature Park)
  - Ragan Rd sidepath (ATT to existing sidepath on Ragan Rd)

## Agenda and Discussion

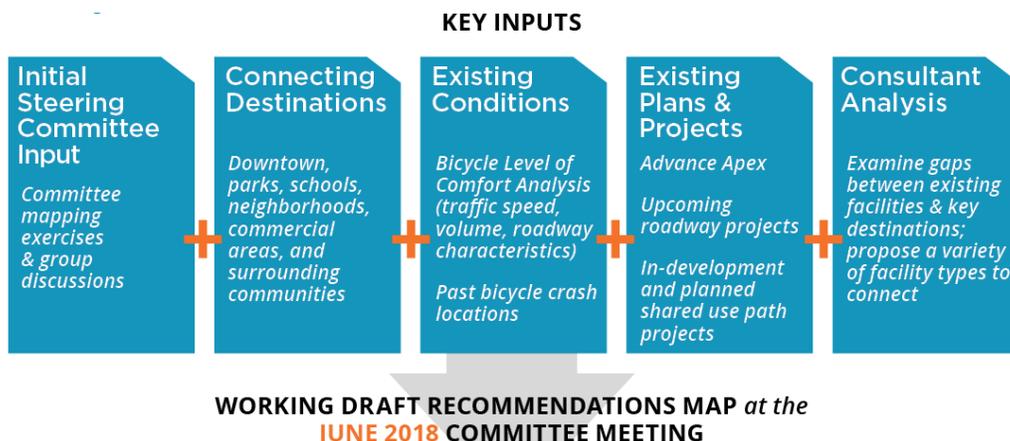
### Recap

The meeting started with a brief recap of the planning process to-date, followed by highlights from the May Public Workshop (see slides in appendix and notes from the May workshop).



### Overview of the Proposed Network

As a way of introducing the proposed network, the consultant (Reyes, Alta Planning + Design) covered the key inputs involved in network development, as shown below.



## Small Group Review of Network Focus Areas

Participants were divided into five groups, covering the following five focus areas within Apex:

1. Apex Peakway to ATT north & ECG (north of Olive Chapel Rd & west of US Bike Route 1)
2. Apex Peakway to Cary (east of US Bike Route 1 & north of NC Bike Route 5)
3. Apex Peakway to ATT south (north of US Bike Route 1 & south of Olive Chapel Rd)
4. Apex Peakway to Holly Springs (south of US Bike Route 1 & south of NC Bike Route 5)
5. Apex Peakway & Inside the Apex Peakway

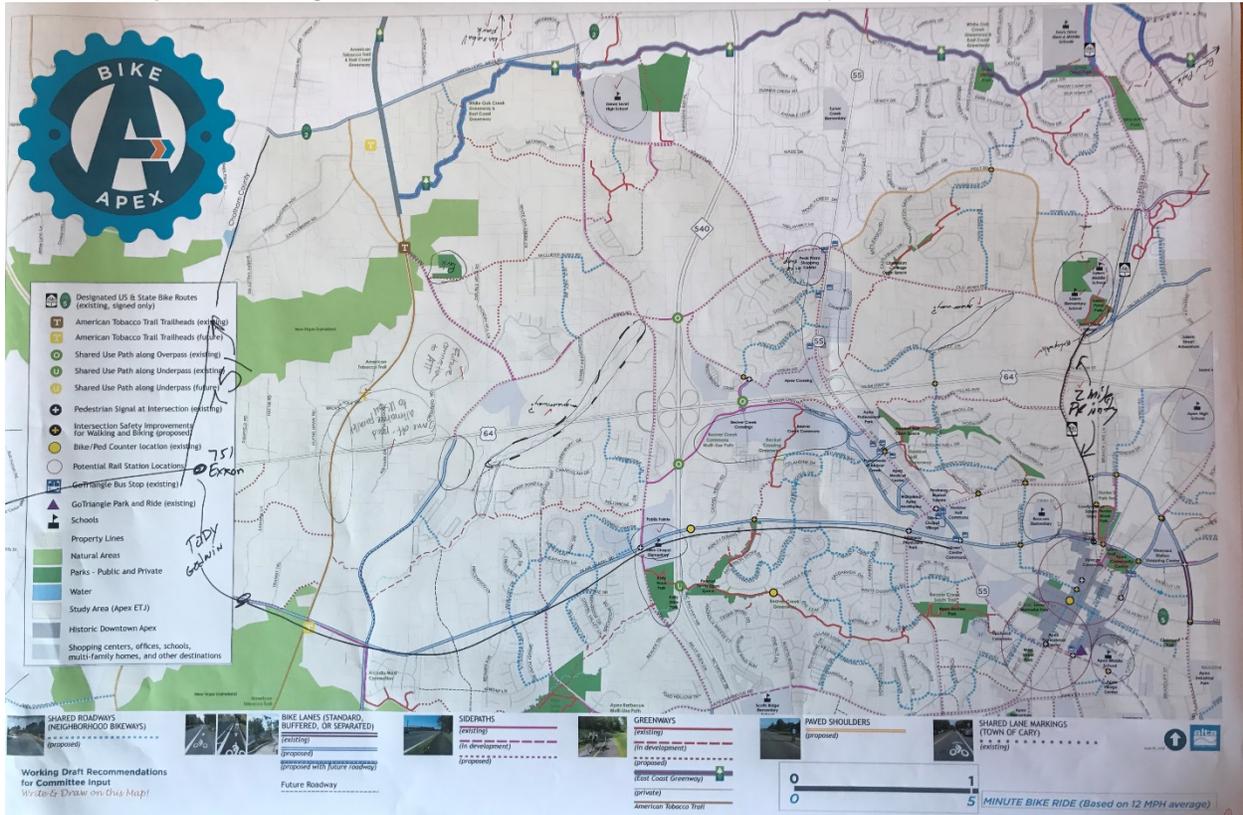
The groups were given the following instructions for review of their focus areas:

- Identify a group leader
- Identify a note-taker
- Discuss and answer the following as a group:
- List the destinations in or near your focus area, then prioritize them
- Is the network in your focus area complete (e.g., are the key destinations connected to the network)? If not, draw-in the missing links or suggested alternative links.
- Begin reviewing the main corridors of proposed facilities in your study area. Are there facilities proposed on specific routes that you do not agree with, or that you have doubts about for feasibility? For a given route, would a bike lane vs. shared use path vs. shared roadway better? Would no facility be better?
- Pick a point at the far end of your focus area (farthest from Downtown Apex) and highlight what your group feels would be the most ideal route back to Downtown Apex. Do this for multiple locations if necessary/if time allows.
- What is the least feasible part of the network in your focus area? What does the project team need to revisit & look at more closely?
- If your group could only build two miles of facilities in your focus area, what would they be?

## Share-back From Small Groups

The following summary of group feedback is based on the verbal feedback given at the meeting, supplemented by hand-written notes and map mark-ups provided by the groups.

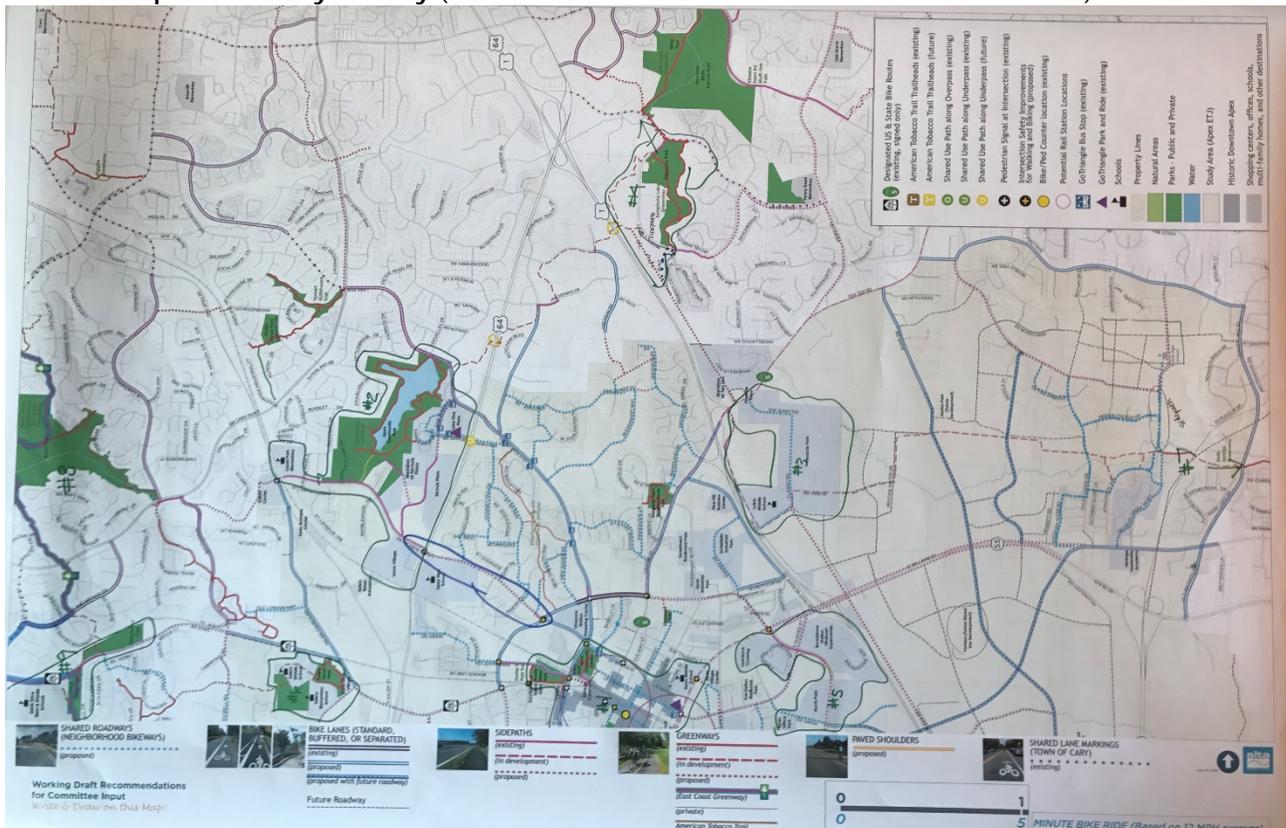
**GROUP 1: Apex Peakway to ATT north & ECG (north of Olive Chapel Rd & west of US Bike Route 1)**



- **Key Destinations:**
  1. ATT
  2. ECG
  3. Downtown
  4. Jordan & Harris Lake
  5. Schools (all in this focus area)
  6. Beaver Creek Commons
- **Missing Links & Suggested Alternatives:**
  - Need a sidepath or off-road alternative connection parallel to US 64 (noted along north side of US 64, between ATT and Jenks Rd)
  - Future connection to ATT (noted at ATT & Goodwin Rd)
  - Potential riparian greenways noted on map:
    - From Thorn Hollow Dr to Old Jenks Rd (challenging due to established/built-out residential area)
    - Reedy Branch, from just south of Tinken Forest Dr to Jenks Rd (challenging due crossing US 64, in addition to some established residential areas)
- **Notes on Main Corridors:**
  - Section of Davis Dr in Apex: Change recommendation to sidepath
  - Roberts Rd: sidepath is a good recommendation, but also look at roadway design for bicyclists

- US 64 over Jordan Lake: How will bicyclists be accommodated? Consider a sidepath for a section from Beaver Creek Rd to the west side of the lake (this is outside of Apex; in Chatham County)
- *Ideal Route (from Jordan Lake to Apex Peakway):*
  - From Jordan Lake at US 64 and Beaver Creek Rd: Beaver Creek Rd > Tody Goodwin Rd > Olive Chapel Rd > Hunter St
- *Least Feasible Sections:*
  - 751: Need a rural context for whatever bicycle facilities are proposed (the trail along Morrisville Parkway at Green Level Church was brought up as a specific example)
- *Most Critical Two-Mile Section(s):*
  - North Salem St, from Hunter St to Old Jenks Rd; and
  - Salem Church Rd/Davis Dr, from Old Jenks Rd to Farmpond Rd
- *Miscellaneous Notes:*
  - Bike Shop as a destination at Peak Plaza Shopping Center
  - "To baseball park" noted off map near Green Level West Rd
  - "To Bond Park" noted off map near MacArthur Dr

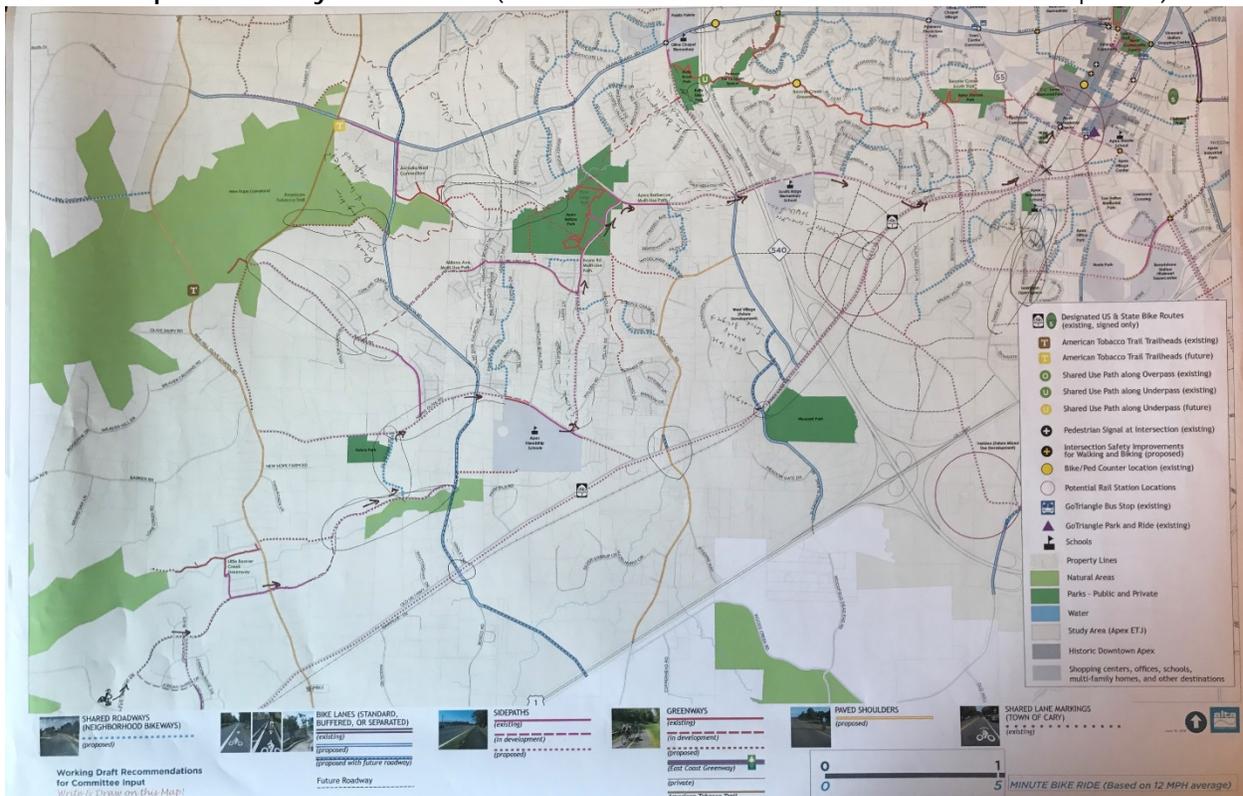
**GROUP 2: Apex Peakway to Cary (east of US Bike Route 1 & north of NC Bike Route 5)**



- *Key Destinations:*
  1. *Downtown Apex*

2. *Apex Community Park & adjacent shopping area*
  3. *Lufkin Middle School & Pinnacle Park area*
  4. *Regency Park (Town of Cary)*
  5. *Norris Park/Broadstone Station/Lawrence Crossing*
  6. *Salem Schools & Park*
  7. *Holly Springs connection (along Middle Creek Greenway)*
  8. *Bond Park (Town of Cary)*
  9. *Davis Drive Park/MacArthur Park (Town of Cary)*
- *Missing Links & Suggested Alternatives:*
    - With proposed changes, it seems like all key areas connect at the same level
    - Change to a sidepath along Reunion Creek Parkway, heading east from the Middle Creek corridor to the future High School (currently show as shared road)
    - Town of Cary at Regency Park: Realign proposed greenway and sidepath at west end of the park (see map mark-up)
  - *Notes on Main Corridors:*
    - [group did not get to this question]
  - *Ideal Route (from Park Areas to Apex Parkway):*
    - Downtown Apex > Apex Community Park > Regency Park > Pinnacle Park > back to Downtown Apex
  - *Least Feasible Sections:*
    - [group did not get to this question]
  - *Most Critical Two-Mile Section(s):*
    - Laura Duncan Road sidepath, from Apex Parkway to US 64

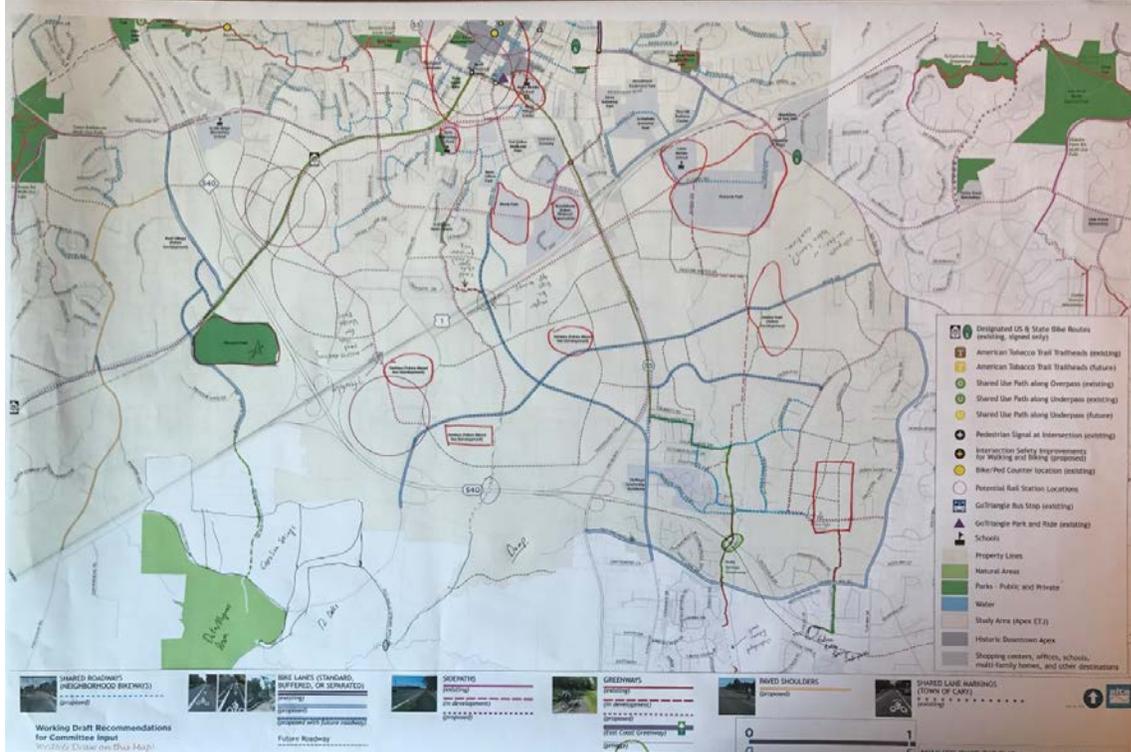
**GROUP 3: Apex Peakway to ATT south (north of US Bike Route 1 & south of Olive Chapel Rd)**



- **Key Destinations:**
  1. ATT
  2. Downtown
  3. Nature Park
  4. Pleasant Park
  5. Kelly Road Park
  6. Schools (all in this focus area; elementary schools are probably a lower need)
  7. Beaver Creek Greenway
- **Missing Links & Suggested Alternatives:**
  - This focus area looks like it will be connected with existing and proposed facilities as shown
  - Consider a proposed sidepath for Hammocks Beach Trail (existing and future road sections) and Mount Zion Church Rd
- **Notes on Main Corridors:**
  - Old US 1: add additional paved shoulder space as sections are repaved (not to replace the sidepath recommendation, but in addition to it)
  - See Peakway SW plans along Salem St – 8' wide sidewalk through interchange?
  - Kelly Rd, south of Kelly Road Park to Apex Barbecue Rd: This is already in-development as a sidewalk LAPP project; Sidewalk in this location and MUP east along Apex BBQ to the path at Scotts Ridge ES.
- **Ideal Route (from Jordan Point to Apex Peakway):**

- Horton Ridge Dr > Little Beaver Creek Greenway > Olive Farm Rd > Humie Olive Rd > Evans Rd > Apex Barbeque Rd > S Salem St
- *Least Feasible Sections:*
  - Crossing US 1 and railroad corridor will be difficult
  - Olive Chapel Rd bike lanes and Richardson Rd bike lanes are good proposals, but concerns about cost and feasibility
    - Richardson Rd could have paved shoulder in the interim, and bike lanes in the long term
  - Old US 1 sidepath: Will avid bicyclists want to use it? If they do, will they take the whole path if it is a group?
  - The future West Village roads are already in construction review stage, so proposed bike lanes may not be possible
    - Related note: Are the bike lanes crossing to Pleasant Park in future park plans?
- *Most Critical Two-Mile Section(s):*
  - Build to fill gaps:
    - Apex Barbecue Rd sidepath (Brasstown Rd to Kelly Rd)
    - Humie Olive Rd sidepath (Olive Farm Rd to Apex Friendship Schools)
    - Little Beaver Creek Greenway through Friendship Station to Richardson Rd
    - Beaver Creek Greenway (Arcadia West connection to Apex Nature Park)
    - Ragan Rd sidepath (ATT to existing sidepath on Ragan Rd)

**GROUP 4: Peakway to Holly Springs** (south of US Bike Route 1 & south of NC Bike Route 5)



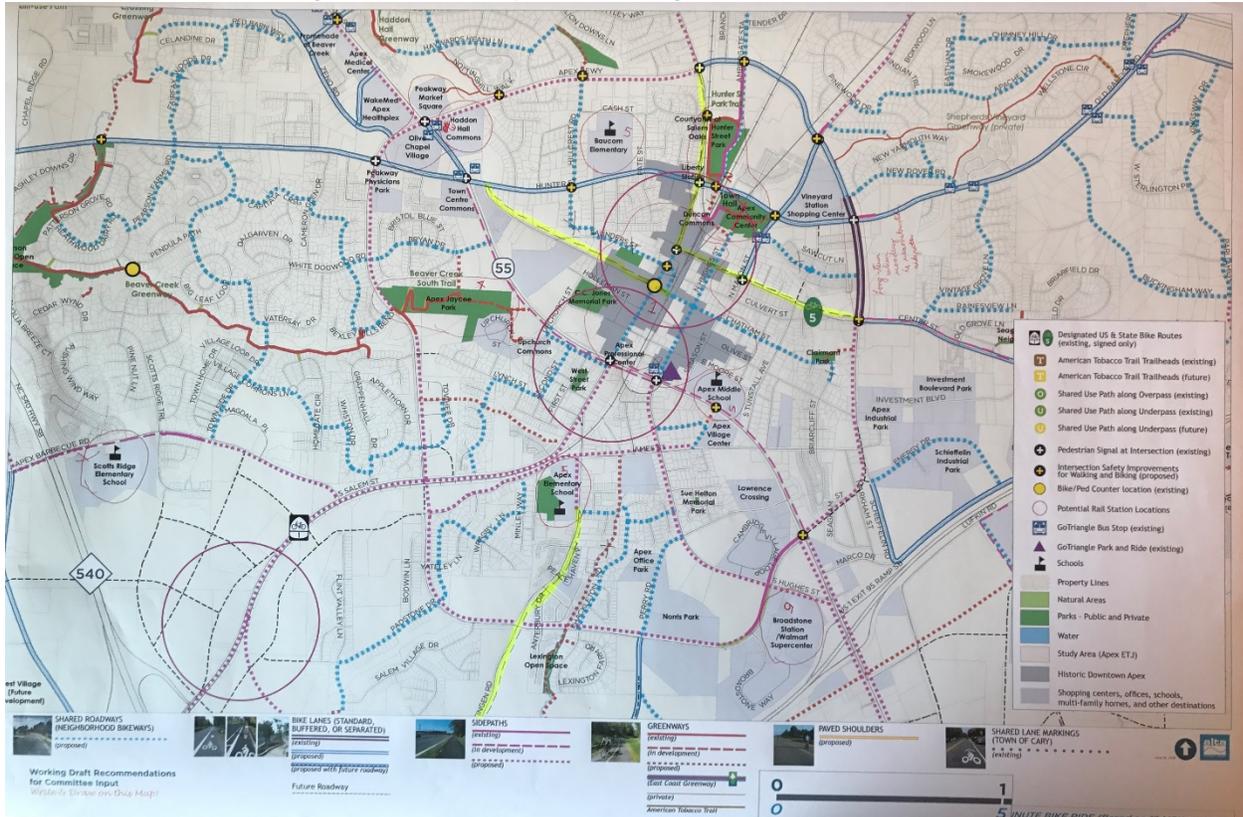
- *Key Destinations:*
  1. *Pleasant Park*
  2. *Pinnacle Park*
  3. *Future High School*
  4. *Horton Park*
  5. *Downtown Apex*
  6. *Lufkin Middle School*
  7. *Apex Elementary*
  8. *Broadstone Station/Walmart Supercenter*
  9. *Veridea*
  10. *Norris Park*

*\*This group also rated nearby destinations in Holly Springs: 1) Carolina Springs (future development); 2) Twelve Oaks (future development); and 3) Downtown Holly Springs*

- *Missing Links & Suggested Alternatives:*
  - Crossing US 1: The future Perry Rd section with bike lanes heading south to Veridea has a parallel greenway corridor to the west. Rather than continuing the greenway corridor with its own crossing of US1, consider connecting the proposed greenway to the future Perry Rd bike lanes to cross over US 1 (see map mark-up)
  - Holly Springs connections:
    - There is an planned underpass of I-540 (in addition to Middle Creek), just east of River Falls Dr, that could connect to Heritage Meadows Lane and the future roads connecting to the future High School
    - There is a planned greenway connection along Middle Creek to fill in the missing gap just east of Creek Haven Dr in Holly Springs
- *Notes on Main Corridors:*
  - Ten Ten Rd: Map should show 10' sidepath to Penny Rd on N side and 5' bike lanes to Kildaire Farm Rd (project extends from Apex Peakway to Kildaire Farm Rd).
- *Ideal Route (from Holly Springs to Apex Peakway):*
  - Ting Park > Anchor Creek Way > Middle Creek Greenway > Colby Chase Dr > Wickham Ridge Rd > NC 55 > S Salem St
- *Least Feasible Sections:*
  - Connecting west of Holly Springs to west Apex (limited north-south connection opportunities over US 1); two greenway crossing are shown for US 1, less than a mile apart, but neither seem particularly feasible since they would require a major overpass or underpass.
- *Most Critical Two-Mile Section(s):*
  - Proposed sidepath along Old US 1, from Downtown Apex to Pleasant Park
    - Town of Holly Springs would be interested in a future connection from Pleasant Park, south across US 1 to Carolina Springs development, along Pleasant Plains Rd/Woodfield Dead End Rd)
- *Miscellaneous Notes:*
  - Add label for the Hwy 55 C & D Landfill just south of I-540; it's not a destination, but still is a feature that might impact greenway planning

- Add label for "Duke Energy Progress" on land that shows as a "natural area" in Holly Springs

## GROUP 5: Apex Peakway & Inside the Apex Peakway



- **Key Destinations:**
  1. Downtown from Hunter St to William Street
  2. Hunter St/Town Campus Park
  3. Olive Chapel/Hunter St/NC 55 intersection
  4. Jaycee Park
  5. Apex Middle School, Baucom Elementary & Apex Elementary
  6. Broadstone Station/Walmart Supercenter
- **Missing Links & Suggested Alternatives:**
  - Most of the main roads seem to be covered/complete
  - Add proposed sharrows to Center St, from Apex Peakway to Salem St
  - Add proposed sharrows to Salem St, from Center St to Apex Peakway
  - Consider removing proposed greenway paralleling Shackleton Rd, so construction funds can be used elsewhere (routing bicyclists along Shackleton Rd instead)

- Comment was made that there is value in keeping the proposed greenway since Apex already has easements for much of this section
  - The route does seem to be proposed through some pretty tight residential parcels
- *Notes on Main Corridors:*
  - Consider removing shared roadway designation for Old Mill Village Dr through townhomes
  - Consider removing proposed greenway segment between Hunter St Park and Town Hall
  - Consider removing very short shared roadway designation on north end of Briarcliff St, just south of Clairmont Park
  - Consider adding shared roadway designation on Chatham St, from Salem St to Hunter St
    - *Post-meeting note: This section of roadway had a bicycle level-of-comfort rating of "caution", meaning that it may not be best as a recommended shared roadway without other additional improvements to either slow the traffic speeds, reduce traffic volume, or add more space for bicyclists. If none of these are feasible, then Saunders St & Hillcrest St would be a better alternative connection west from the downtown core. Consultant team to investigate further.*
  - Consider removing shared roadway designation for Saunders St & Hillcrest St
    - *Post-meeting note: See note above.*
  - Consider adding recommended bike lanes on Tingen Rd, from Apex Elementary, heading south
    - *Post meeting note: Tingen railroad crossing will close when Apex Peakway SW opens. Need to keep James St in mind as a new important connection between Tingen, the Peakway, and E Williams.*
  - Consider a sidepath on the Apex Peakway where bike lanes are shown (for the long-term when the rest of the Apex Peakway has sidepaths).
- *Ideal Route (from Outer Study Area to Apex Peakway):*
  - *Group notes: "Done!"*
- *Least Feasible Sections:*
  - *Group notes: "N/A"*
- *Most Critical Two-Mile Section(s):*
  - Salem St/Chatham St intersection to NC 55/Apex Peakway
  - Hunter St, from Apex Peakway to Apex Peakway
  - Salem St, from Hunter St to center of Downtown

## Next Steps

*Refine bikeway network based on May 2018 public input & the June 2018 Committee Meeting*

*Develop draft planning report with proposed phasing & project cutsheets*

*Launch Public Survey for Input on top recommendations*

**DRAFT RECOMMENDATIONS MAP at the  
AUGUST 2, 2018 PUBLIC WORKSHOP**





## August 2018 Public Open House Workshop Summary

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**Date:** Thursday, August 2, 2018

**Time:** 4:00 pm – 6:30 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Overview and Purpose

This open house workshop was focused on introducing the draft recommended bicycle network, and gathering further input on opportunities and constraints for bicycling in Apex. The meeting was facilitated by a combination of staff from Alta Planning + Design, KHA, and the Town of Apex. Members of the steering committee also participated. The room was organized with a input area dedicated to Bike Apex, with complementary materials from the Advance Apex planning process at other stations. Public input maps, planning staff facilitation, flip charts, comment cards, and surveys were provided and used to gather input.

### Meeting Outcome

Workshop participants shared written comments through the comment form, and those responses were later compiled through the online version of the form, the results of which are summarized at the end of Chapter 2 in the Bike Apex plan (the results are not duplicated here to save space). There were a total of 55 participants with over 404 responses and 144 comments. Participants also provided positive verbal feedback to the project staff, and the overall message was one of support for improving conditions for bicycling in Apex.



## October 2018 Committee Meeting #4 Summary

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**Date:** Monday, October 15, 2018

**Time:** 4:30 pm – 6:30 pm

**Location:** 3<sup>rd</sup> Floor Training Room, Apex Town Hall, 73 Hunter Street

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### Meeting Purpose

The draft plan was provided to the committee via email on 10/10/2018. The purpose of this meeting was to gather initial committee comments and feedback. Additional comments will be collected via email to Shannon Cox by 10/22/2018.

### Meeting Outcome

Feedback from the meeting, as outlined in these notes, will help guide final revisions to the draft plan.

### Meeting Attendees

- Shannon Cox – Apex Planning
- Linda Barrett – WakeMed Apex
- Russell Dalton – Apex Public Works & Transportation
- Jennifer Delcourt – Active Routes to School
- Shannon Flaherty – Apex Chamber of Commerce
- Bill Jensen – Apex Town Council
- David Keilson – NCDOT Division 5
- Margot Knepp – Apex resident
- Jason Reyes – Alta Planning + Design
- Kenneth Withrow – CAMPO
- John Vine-Hodge – NCDOT-DBPT

## Summary of Committee Feedback

Jason Reyes led an overview and orientation presentation of the draft plan, covering key aspects of the plan, and reviewing the priority projects in detail.

During and after the presentation, the committee asked questions and made several comments. Those comments, including ones written on maps and cut-sheets provided to the group, are summarized below:

### Overall for the Draft Plan

- The balance of content for existing conditions vs. recommendations and implementation is good. Some plans go into too much detail for existing conditions at the expense of recommendations, and this plan did well in having detail in recommendations.

### Executive Summary:

- Update page number references in text on page 6.

### Chapter 3:

- Update page number references in text on page 50.
- Prioritization Table: Rather than publishing the entire scoring table, consider showing just the results and how they were arrived at generally in the text. Prioritization scoring is expected to be updated more regularly than the plan itself, so not having scoring in the plan may make more sense. Town staff to decide on this.
- Signage to go with shared lane marking recommendations:
  - “Bike May Use Full Lane” signage is recommended in this draft, but some committee members expressed they would like to see other signage considered in place of this.
  - Plan will be updated to offer greater flexibility and guidance on this topic. Specifically, this sign type is called out on pages 67 and 71, and is mentioned in the legend of cut-sheets.
- Speed limit reductions: For many of the recommended shared-lane markings, the plan says “may include speed limit reduction”. Town transportation staff noted that speed limit reductions should be studied before implemented, and noted this for N Salem St on page 75 specifically.
- Project Cut Sheet #1: Correct spelling of Beckett Crossing label on map.
- Project Cut Sheets #1 & #3: Add future Wake County ATT trailhead at the southeastern corner of the intersection of Olive Chapel Rd and the ATT.
- Project Cut Sheet #6:
  - Add a recommendation to sweep outside lanes and shoulders underneath the US 64 bridge along Davis Dr.
  - Add recommendations for signage needed underneath (and approaching) the US 64 bridge along Davis Dr. Even in the best case scenario, the side path would be reduced to 8' wide in this section; it's possible only a standard sidewalk will be feasible. Need recommendations for signage to address this pinch point.

- Reducing travel lane widths under the bridge was proposed to create space for a side path. However, lanes should not be reduced to the point of negatively impacting on-road bicyclist safety and comfort.
- Need to get confirmation from the Town on the total ROW width available under the bridge with future improvements related to Crossroads Ford. The plan assumed 84' in the cross-section on page 74, based on email communication on this topic.
- Constraints may necessitate the sidewalk/side path be built to edge of curb. Alta to confirm standards for space needed between edge of curb and travel lanes.
- Project Cut Sheet #7: Update text at top of cut sheet on page 77 from a consideration to a recommendation (extending the proposed side path north of US 64 to Pine Plaza Dr, along the west side of Laura Duncan).
- Project Cut Sheet #8: Town to send Alta updated Apex Peakway alignment near Old US 1 and the Peakway.
- Programs, page 84: Confirm that the WalkYourCity program is still active.
- Design Resources: Add a bicycle facility selection matrix with speed and volume information. Alta to send a copy of the table to David Keilson at NCDOT Division 5 too.

## Next Steps

- **10/22/2018:** Remaining comments from Steering Committee due to Shannon by email
- **12/01/2018:** Comments due from NCDOT Division of Bicycle & Pedestrian Transportation
- **12/04/2018:** Town Council Final Plan Presentation