Proposal

Parking Study

RFP #540-2016-1

Submitted to:

TOWN OF CARRBORO
MARCH 3, 1911
NORTH CAROLINA

Submitted by:

Kimley»Horn

September 2015

RFP #540-2016-01

Parking Study

September 10, 2015

Bergen Watterson, Project Manager
Town of Carrboro
301 W. Main Street
Carrboro, NC 27510

RE: Request for Proposals for a Parking Plan for the Town of Carrboro

Dear Ms. Watterson and Members of the Board of Aldermen,

Innovative solutions are developed when the right team of creative people with relevant experience is focused on the challenge at hand. **Kimley-Horn** has carefully assembled such a team for the Town of Carrboro. We are committed to delivering exceptional service and innovative solutions that will make this Parking Plan for the Town of Carrboro a success.

As you review our response to your RFP, please consider the following benefits the Kimley-Horn team offers you:

You get a team that proactively communicates with all stakeholders, leading to increased engagement and reducing stress and political pressure on you. Vanessa Solesbee will lead task 5.1 — Public Participation. Vanessa provides expertise in creating strategic communications and community outreach campaigns that integrate planning and development efforts into a community's shared values. She is passionate about empowering people and organizations to create world-class communities through the use of innovative digital engagement tools and by building strong public/private partnerships. Our outreach approach is proven and effective. *Our soft skills complement our technical skills, enabling us to communicate effectively with diverse groups of project stakeholders.*

You get a customized approach that addresses your needs. Kimley-Horn developed the Park+™ tool because we know that solutions are never one size fits all. Park+ is a parking modeling software that allows users to manage parking demand, monitor parking supply, and develop solutions tailored to development and phasing, event management, transportation demand management, and sustainability. Park+ is an add on to ArcGIS and allows for more dynamic data management and robust evaluations. Whether your goal is to identify the appropriate location of your next parking facility or identify transportation management techniques to mitigate existing issues, Park+ is a comprehensive parking software that can be customized to meet your needs. *We listen carefully to understand your needs, then apply our experience and expertise to develop a tailored approach that meets your objectives.*

You get peace of mind knowing that your budget and deadlines will be met. We recognize that budget and schedule control are critical to the success of your program. Meeting your schedule for deliverables is not just a goal to us—it is a requirement. Kimley-Horn has a long history of achieving successful project completion through a combination of effective project management and technical expertise. Kimley-Horn's local engineering staff is backed by more than 263 employees in 5 offices in North Carolina, and more than 2,500 employees nationwide. What this means to you is that the professionals leading the tasks to serve you have a wealth of resources and experience at their disposal. *We meet deadlines, stay within budgets, and deliver on our commitments.*

RFP #540-2016-01

Parking Study

The following information is provided as outlined in your request for proposals:

- **Project Team.** Kimley-Horn will serve as the primary consultant supporting the Town of Carrboro on the Parking Study. Our skills and services will be supplemented by Alta Planning + Design.
- **Firm Status.** Neither Kimley-Horn nor Alta Planning + Design is minority certified in any capacity. However, our firm is committed to providing opportunities for Disadvantaged Business Enterprise (DBE) and Minority Business Enterprise (MBE) firms. We regularly subcontract specific elements of our projects to a range of professional service firms and vendor/supplier companies classified as DBEs or MBEs. Kimley-Horn's commitment to DBE/MBE firms is illustrated by the fact that, for 2014, our payments to such firms represented 10% of our total expenditures for goods and services for all projects. In addition to project-specific participation, Kimley-Horn has a firmwide policy of affirmative action and equal opportunity in employee recruitment, hiring, training, and professional development. We would be happy to provide copies of our corporate AA/EEO policy and annual progress report upon request.
- **Conflict of interest.** To the best of our knowledge and belief, we have no conflict of interest regarding this project or its location.
- **Summation of information.** The remainder of this submittal contains the items specified in your request for proposals, including our responses to your required contents and evaluation criteria.

Attached you will find our fee estimate. We are aware this fee estimate exceeds the budget originally established. We believe our fee is fair for the scope of services as we understand it. However, there can always be different interpretations of scope–our assumptions may differ than the services you desire.

After preparing our response and spending time in Carrboro, we have developed an alternative scope of services, that we believe would be beneficial to the Town. This alternative, streamlined scope would address the major policy issues confronting the Town and the Board of Aldermen.

We estimate the fee for this alternative, streamlined scope would be approximately $30,000 and would take approximately 60-90 days to complete. If we are shortlisted, we would like to discuss this alternative scope with the selection committee.

Thank you for your consideration of our proposal. If you have any questions, please contact me at 919 677 2085 (o), 919 219 3891 (m) or fred.burchett@kimley-horn.com.

Sincerely,

KIMLEY-HORN

Thomas F. Burchett, Jr.

Thomas F. Fred Burchett, Jr., P.E., PTOE, PMP

Project Manager

RFP #540-2016-01

Parking Study

Table of Contents

Experience, Knowledge, Familiarity, and Past Performance 4

- Firm Overview 4
- Project Understanding 4
- Project Staff's Experience, Expertise, and Availability 5
- Resumes 6
- Project Experience 13

Project Approach 18

- Project Management Strategy 18
- Consultant Staff Roles 18
- Proposed Methodology 19

Cost Proposal Sheet 32

References 35

Subconsultants 36

Experience, Knowledge, Familiarity, and Past Performance

Firm Overview

Kimley-Horn is one of the nation's premier planning and design consulting firms. Whether your project is national or local, involving public infrastructure or private development, we look out for your best interest, reduce your risk, and deliver great value. Our engineers, planners, and environmental scientists combine the creativity to develop insightful solutions with the rigor to deliver practical results that consistently exceed your expectations.

Long-range program strategies. Complex planning and design projects. Development and construction projects. Since 1967, Kimley-Horn has delivered outcomes you can depend on—projects that can be successfully developed, permitted, and built on time and within budget.

With more than 70 offices from coast to coast, Kimley-Horn is your one-stop consultant for:

- Parking
- Transportation
- Roadway and Bridge
- Land Planning and Landscape Architecture
- Integrated Water
- Site Development
- Survey
- Technology
- Transit
- Asset Management
- Aviation
- Energy
- Environmental
- Forensics

In each of these disciplines, we offer you premium solutions and a premium level of service.

Project Understanding

Kimley-Horn initiated discussions with the Town of Carrboro in 2013 regarding this Parking Study. We have followed the issues with overnight parking, towing from the Carr Mill Mall, and the ongoing concerns about parking in the Town.

To prepare for our eventual role in this parking study, our team reviewed the 2008 parking study conducted for the Town by the Department of City and Regional Planning at the University of North Carolina at Chapel Hill. We also reviewed the May 12, 2013 meeting minutes of the Board of Aldermen meeting where parking (including unbundling of parking) was discussed as well as the meeting minutes of the November 12, 2013 meeting of the Board of Aldermen where the Parking Study was discussed and the following observations were provided by the Board:

- The study should not just look at the downtown, but consider how to encourage other modes of transportation
- The study should evaluate the current available parking and provide a projection of how the supply and demand will change in the next few years
- The study should review shared parking models and see if they will work in Carrboro
- The study should find a balance between the dependency on cars and the need for businesses to have parking
- The study should consider perimeter lots served by shuttles to bring people downtown

Parking issues are not new–in fact they have existed as long as the automobile. On July 16th of this year, the 80th anniversary of the installation of the first parking meter occurred. Parking meters were one of the first efforts made to manage parking in urban environments.

Carrboro, like many towns, is experiencing parking pressures. These pressures come about due to a vibrant economy, a strong sense of place, and growth. At Kimley-Horn, we often say that "parking problems, are good problems. You would rather deal with needing parking than having a dormant downtown."

Kimley-Horn has a track record of helping communities similar to Carrboro manage their parking. As an example, we have been assisting the City of Asheville since 2007 with parking in their downtowns and have completed a number of projects for them including a Comprehensive Parking Study (2007), a Parking Rate Study, the 2010 update to the Comprehensive Study, the Biltmore Village Parking Study, the West Asheville Parking Study, the River Arts District On-Street Parking Study, and many others.

Kimley-Horn knows parking. We know people don't come to Carrboro to park–they come to experience the Town and all it has to offer. We strive to achieve the balance in parking that is necessary in thriving, successful communities.

We hope you will review our tailored project approach and contact our references to discuss the services we have provided to other clients. When you choose Kimley-Horn, you can expect more and experience better.

Project Staff's Experience, Expertise, and Availability

The Kimley-Horn team offers a blend of seasoned parking planning, management, and public outreach professionals who have worked together to successfully complete similar projects. Our team has been assembled to include complementary skills that together provide innovative, actionable, and sustainable solutions to our clients. For this project, Kimley-Horn is teaming with Alta Planning + Design. They will be assisting us with the walkability micro-audit and bike parking recommendations tasks.

Fred Burchett, P.E., PMP has over 35 years of experience. Prior to joining our firm in 1988, he worked in municipal government where his duties included working with the on- and off-street parking programs. He is currently managing parking studies for the Cities of Asheville, NC and Covington, GA as well as a number of medical campuses and private developments. He also recently completed a parking study for the City of Durham. Fred is a certified by the Project Management Institute of America as a Project Management Professional. With a technology-based background, Fred is knowledgeable in the latest applications in the parking industry, including electronic wayfinding, mobile payment applications, and dynamic pricing. He was the 2010 Regional Transportation Alliance (RTA) Transportation Champion for his work with the RTA Multimodal Committee in the Triangle. Fred has been a speaker at numerous local and national professional meetings, including the Institute of Transportation Engineers and the International Parking Institute.

Sam Veraldi, CAPP has 29 years of experience and specializes in parking operations and finance. He is thoroughly familiar with the transportation needs and parking operations in a campus environment. Prior to joining Kimley-Horn in 2014, Sam worked for Duke University for 17 years where he served in several roles, including Director of Parking and Transportation Services for the health system and University. In this capacity, he managed 26,000 parking spaces and the transit system, created a five-year strategic parking and transportation plan, and developed the University's first five-year economic model to become receipt supported.

Vanessa Solesbee provides expertise in creating strategic communications and community outreach campaigns that integrate planning and development efforts into a community's shared values. She is passionate about empowering people and organizations to create world-class communities through the use of innovative digital engagement tools and by building strong public/private partnership. Vanessa has served on numerous advisory panels through her involvement with the International Parking Institute.

Aaron Heustess, P.E. has 7 years of progressive experience in transportation planning and design, as well as parking. Aaron has managed data collection on a number of recent projects, including the Moses Cone Hospital Parking Study, City of Asheville River Arts District On-Street Parking Study, and the City of Durham Comprehensive Parking Study. Aaron's software expertise includes AutoCAD, MicroStation, ArcGIS, Adobe Creative Suite, Park+, and various traffic modeling platforms.

Brett Wood, P.E., CAPP has extensive experience in parking demand and management analysis, including supply and demand evaluations, parking operations management, and strategic parking planning for downtown areas, larger communities, universities, and medical campuses. Brett led the development of Kimley-Horn's unique Park+ software application, which helps municipalities monitor changes to parking demand based on development intensity, transportation mode choices, and zoning changes. Over the past four years, Brett has implemented variations of this platform in more than 25 municipalities, universities, and medical campuses throughout the country, including Durham and Asheville.

Kelley Klepper, AICP has 23 years of planning experience, including a thorough knowledge of comprehensive planning, growth management, public policy, form based codes, developments of regional impact, budgeting, urban growth boundaries and management, transportation, development-related issues facing growing communities, and urban/rural design. He has extensive experience in development-related projects and practices.

Matt Hayes is a principal and the group leader of Alta's local office. He brings 14 years of experience leading planning and GIS-based projects and has managed over 40 bicycle and pedestrian planning projects. Matt has contributed to more than 100 planning and design projects and is accomplished in meeting facilitation, fieldwork analysis, plan development, and GIS/GPS.

Our team has the experience, expertise, and availability to successfully complete this project on-time and within budget. Fred Burchett, your proposed project manager, has recently completed managing a parking study for the City of Covington and is available to manage the Carrboro Parking Study and make it his number one priority.

Staff Name	Availability
Fred Burchett	80%
Sam Veraldi	25%
Vanessa Solesbee	15%
Aaron Heustess	20%
Brett Wood	10%
Kelley Keppler	15%
Matt Hayes	25%

Team Member Resumes

Thomas F. (Fred) Burchett, P.E., PMP
PROJECT MANAGER

EDUCATION

- Master of Business Administration, University of North Carolina at Greensboro, 1988
- Bachelor of Science, Civil Engineering, North Carolina State University, 1979

PROFESSIONAL REGISTRATION

- Professional Engineer in North Carolina and South Carolina
- Certified Project Management Professional

PROFESSIONAL AFFILIATIONS

- Institute of Transportation Engineers
- International Parking Institute
- Multimodal Regional Transportation Priorities, Regional Transportation Alliance, Vice Chair
- Transportation Research Board, Parking Management Subcommittee

Fred served as project director, manager, or engineer on the following projects:

- West Asheville Parking Study, Asheville, NC
- City Center Mixed-Use Development Parking Study, Durham, NC
- Moses Cone Hospital Clinic Expansion Parking Study, Greensboro, NC
- Downtown Parking Study, Covington, GA
- Davie Street Garage Parking Guidance System Feasibility Study, Raleigh, NC
- Comprehensive Parking Study, Durham, NC
- Langtree Mixed-Use Development Parking Study, Mooresville, NC
- Parking Rate Study, Greensboro, NC
- Parking Wayfinding for State Government Complex, statewide, NC
- Vehicular Wayfinding System (Parking Guidance System), Charlotte, NC
- City Center Parking Study, Sandy Springs, GA
- City Center Parking Study Update, Sandy Springs, GA
- Downtown Parking Assessment, Atlanta, GA
- On-Street Parking Performance Study, Arlington, VA
- Parking Assets Management Plan, Arlington County, VA
- Celebration Point Mixed-Use Development Parking Study, Gainesville, FL
- Live Nation, White River Amphitheatre Parking and Traffic Study, Aurora, WA
- Oregon Coast National Wildlife Refuge Parking Management System Feasibility Study, Six Sites, OR
- River Arts District On-Street Parking Study, Asheville, NC
- UNC-Chapel Hill Transportation and Parking System Assessment and Feasibility Study, Chapel Hill, NC

Samuel A. Veraldi, CAPP

PARKING SUPPLY, MANAGEMENT, AND ENFORCEMENT RECOMMENDATIONS

EDUCATION

- Master of Business Administration, Duke University, 1987
- Master of Education, Counseling, St. Lawrence University, 1979
- Bachelor of Arts, Sociology, St. Lawrence University, 1978

PROFESSIONAL REGISTRATION

- Certified Administrator of Public Parking

PROFESSIONAL AFFILIATIONS

- International Parking Institute, Education Committee
- Mid-South Transportation and Parking Association, Past Director

Sam served as parking specialist or project planner on the following projects:

- Parking and Mobility Enterprise System Business Plan, Aurora, CO
- Capital City Development Corporation, Parking Consultant On-Call, Boise, ID
- Washington State University, Comprehensive Transportation Master Plan, Pullman, WA
- San Diego County Regional Airport Authority, Terminal 2 Parking Garage, San Diego, CA
- West Asheville Parking Study, Asheville, NC
- Port of New York and New Jersey Parking Access and Revenue Control System, NY and NJ
- Parking Plan, Greenville, SC
- Florida State University Strategic Parking Plan, Tallahassee, FL
- University of Virginia, After Hours Transportation Study, Charlottesville, VA
- Parking Management Plan, Trenton, NJ
- City Center Parking Study, Sandy Springs, GA

Below is an excerpt of Sam's experience prior to joining Kimley-Horn:

- Duke University, Parking and Transportation Services, Durham NC
- Duke University, Duke in New York, Financial Markets and Institutions, Durham, NC
- Duke University, Fuqua School of Business Admissions, Durham, NC
- Duke University, Markets and Management Studies, Durham, NC
- IBM Corporation, Business Development Executive
- IBM Corporation, Finance and Operations

Vanessa Solesbee
PUBLIC PARTICIPATION

EDUCATION

- Master of Arts, Interpersonal Communications Studies, University of Texas at Austin, 2003
- Bachelor of Arts, Communications Studies, Southwestern University, 2002

Vanessa served as public involvement specialist on the following projects:

- Parking and Mobility Enterprise System Business Plan, Aurora, CO
- Capital City Development Corporation, Parking Consultant On-Call, Boise, ID
- Access Management and Parking Strategies, Boulder, CO
- Prospect Park Parking Study, Pullman, WA
- Strategic Parking Management Plan, Provo, UT
- Washington State University, Comprehensive Transportation Master Plan, Pullman, WA

Vanessa served as public involvement specialist on the following projects prior to joining Kimley-Horn:

- Marketing and Branding Study, Wheat Ridge, CO
- Midtown Urban Design Plan, Fort Collins, CO
- Downtown Design Guidelines, Milliken, CO
- Colorado State University, Parking and Transportation Study, Fort Collins, CO
- Parking Strategic Plan, Houston, TX
- Parking Strategic Plan, Sandusky, OH
- University of Oregon, Parking and Transportation Study, Eugene, OR
- Program Assessment and Strategic Implementation Plan, Stockton, CA
- Transit Oriented Development Parking Study, Fort Collins, CO
- Parking Pay Station Project, Missoula, MT
- Parking Strategic Plan, Billings, MT
- University of North Dakota Parking Enterprise Assessment, Grand Forks, ND
- California State University – Long Beach, Off-Campus Shuttle Assessment, Long Beach, CA

Aaron M. Heustess, P.E.
DATA COLLECTION

EDUCATION
- Bachelor of Science, Civil Engineering, North Carolina State University, 2007

PROFESSIONAL REGISTRATION
- Professional Engineer in North Carolina, South Carolina, and Virginia

PROFESSIONAL AFFILIATIONS
- American Society of Civil Engineers
- Institute of Transportation Engineers
- Transportation Research Board

Aaron served as project engineer on the following projects:

- Comprehensive Parking Study, Durham, NC
- Biltmore Village Parking Study, Asheville, NC
- CAMPO, NC 50 Corridor Study, Raleigh, NC
- CAMPO, Southwest Area Study (SWAS), Raleigh, NC
- NC 24 Corridor Study, Jacksonville, NC
- Comprehensive Pedestrian Transportation Plan, Southport, NC
- Corolla Club and Resort, Parking and Transportation Services, Corolla, NC
- Downtown Durham Loop Two-Way Feasibility Study, Durham, NC
- Durham-Chapel Hill MPO, Hillsborough Downtown Traffic Study, Hillsborough, NC
- FAMPO, Raeford Road Corridor Study, Fayetteville, NC
- Bicycle and Pedestrian Master Plan, Greenville, NC
- Signal System Timing, Hickory, NC
- Community Transportation Service Plan, Hoke County, NC
- Village District Area Plan, Holly Springs, NC
- Kerr Area Rural Transportation System (KARTS) Facility Feasibility Study, Henderson, NC
- US 17 Business (R-4467), Hertford, NC
- Military Growth Task Force (MGTF), Transportation Demand Management (TDM) Plans, Jacksonville and Havelock, NC
- NCDOT, Mooresville Road Widening (U-3440), Kannapolis, NC
- NCDOT, US 64 Bypass Design Noise Report (R-2536), Asheboro, NC
- NCDOT, Traffic Noise Embedded Consultant, statewide, NC
- Sneads Ferry Community Plan, Jacksonville urban area, NC
- Comprehensive Transportation Plan, Holly Springs, NC
- UNC-Greensboro, Transportation Master Plan, Greensboro, NC
- Signing and Pavement Marking Review, Pinehurst, NC
- Community Transportation Plan, Wrightsville Beach, NC

J. Brett Wood, P.E., CAPP
ANALYSIS

EDUCATION
- Master of Science, Civil Engineering, University of Alabama, 2004
- Bachelor of Science, Civil Engineering, University of Alabama, 2002

PROFESSIONAL REGISTRATION
- Professional Engineer in North Carolina and Arizona
- Certified Administrator of Public Parking

PROFESSIONAL AFFILIATIONS
- International Parking Institute, Advisory Council, Technology Committee
- Southwest Parking Association, Immediate Past President

Brett served as project manager or engineer on the following projects:

- Midtown Alliance, Midtown Atlanta Parking Action Plan, Atlanta, GA
- Comprehensive Parking Study, Durham, NC
- Downtown Comprehensive Parking Study, Asheville, NC
- Downtown Parking Strategic Plan 2013, Tempe, AZ
- Downtown Strategic Parking Plan 2010, Tempe, AZ
- Arizona State University and Tempe Park+ Model, Phoenix, AZ
- Multimodal Passenger Terminal Master Plan, Atlanta, GA
- Beverly Hills Park+ Model, Beverly Hills, CA
- Downtown Parking Assessment, Atlanta, GA
- Parking and Mobility Enterprise System Business Plan, Aurora, CO
- Access Management and Parking Strategies (AMPS), Boulder, CO
- Vehicular Wayfinding System (Parking Guidance System), Charlotte, NC
- On-Call Parking Services, Lincoln, NE
- On-Street Parking Study, Phoenix, AZ
- Central Business District Parking Strategic Plan, Wilmington, NC
- Colorado State University, Parking and Transportation Master Plan, Fort Collins, CO
- Downtown Parking Master Plan, Fort Collins, CO
- Comprehensive Parking Analysis, Santa Ana, CA
- Comprehensive Parking Enforcement Manual and On-Street Parking Program Audit Checklist, Lincoln, NE
- Colorado State University, Park+, Fort Collins, CO
- Downtown Parking Study, Dallas, TX
- Florida State University, Parking and Transportation Master Plan, Tallahassee, FL
- 2040 Long Range Transportation Plan, Sumter, SC
- University of North Carolina Hospitals, Transportation Element of Campus Master Plan, Chapel Hill, NC
- University of Washington, Campus Park+ Model, Seattle, WA
- Washington State University, Comprehensive Transportation Master Plan, Pullman, WA

B. Kelley Klepper, AICP
ANALYSIS

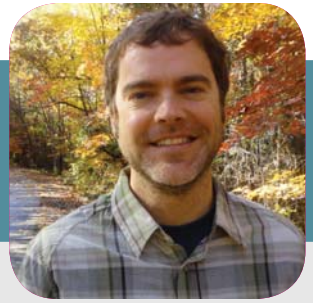
EDUCATION
- Master of Arts, Geography and Urban Planning, East Tennessee State University, 1995
- Bachelor of Science, Psychology, East Tennessee State University, 1991

PROFESSIONAL REGISTRATION
- American Institute of Certified Planners

PROFESSIONAL AFFILIATIONS
- American Planning Association
- Florida Planning and Zoning Association
- Institute of Transportation Engineers

Kelley served as project manager or planner on the following projects:

- Finding of Necessity and Community Redevelopment Area (CRA) Master Plan, Cape Canaveral, FL
- Bicycle and Pedestrian Master Plan, Longwood, FL
- Countywide Multimodal Greenway, Bicycle, and Sidewalk System Master Plan, DeSoto County, FL
- Land Development Code, Berry Hill, TN
- Comprehensive Pathway Plan, Hendry County, FL
- Downtown Mobility Study, Venice, FL
- Bicycle and Pedestrian Master Plan, Blueways Plan, Gadsen County, FL
- Tom Bennett Park, Manatee County, FL
- Community Redevelopment Needs Study/CRA Master Plan and Finding of Necessity, West Melbourne, FL
- Downtown Master Plan and Streetscape, Stallings, NC
- Gulf Coast Gardens, North Port, FL
- Transportation Investment Generating Economic Recovery (TIGER) Grant Application Assistance, Sarasota County, FL
- Lehigh Acres Mixed-Use Activity Center, Master Plan, and Form-based Code Update, Largo, FL
- Sustainable Community-Wide Visioning, Hardee County, FL
- Comprehensive Economic Development Strategy (CEDS)/Finding of Necessity and CRA Master Plan, Edgewater, FL
- Continuing Services for Community Planning, FDOT District Five, FL
- CRA Finding of Necessity, Dunnellon, FL
- Energy Efficiency and Conservation Strategy (aka EECBG Strategy), Seminole County, FL
- FDOT Aviation Office Consultant Contract, statewide, FL
- General Landscape Architectural Services Contract, Palmetto Bay, FL
- Gran Paradiso, North Port, FL
- West Villages Improvement District, North Port, FL
- CRA Master Plan Update, Zephyrhills, FL



Matt Hayes, AICP | Alta Planning + Design
ANALYSIS

EDUCATION

- Master of Arts, Geography, University of North Carolina at Chapel Hill, 2002
- Bachelor of Science, Biology (Specialization in Environmental Science/GIS), Samford University, 1999

PROFESSIONAL REGISTRATION

- American Institute of Certified Planners

Carrboro Bicycle Plan, NC — Matt was the project manager for the 2009 Carrboro Bicycle Plan. He led committee meetings, public engagement, and plan development. Over 400 residents participated in the planning process, identifying needs for bicyclists in Carrboro. The Plan was developed with the Five E's as the framework to help advance Carrboro from a bronze-level Bicycle Friendly Community (BFC) to a silver-level BFC. The Plan included tables that addressed specific questions of the BFC application, a comprehensive network of recommended bicycle facilities and featured project cutsheets for the top priority projects, policy recommendations, and a full suite of design guidelines.

NC Comprehensive Statewide Pedestrian and Bicycle Transportation Plan (WalkBikeNC), NC — Working with NCDOT, Alta led a team that developed a plan with a vision for the future of bicycling and walking in North Carolina. Tasks included a review of current routes, an ongoing public outreach strategy using an innovative online input tool, and detailed recommendations for an updated, modernized route system. The development of this plan was a year-long process, beginning in July 2012. Matt served as co-project manager for this national APA-award winning plan.

Raleigh Bicycle Transportation Plan, NC — The City of Raleigh and NCDOT Division of Bicycle and Pedestrian Transportation commissioned Alta to develop a citywide comprehensive bicycle plan for the Capital City. As co-project manager, Matt promoted an integrated, seamless transportation framework for bicycling as a viable transportation alternative. Today, Raleigh is implementing over 50 recommended miles of facilities and has become a bicycle-friendly community.

Mebane Bicycle and Pedestrian Plan, NC — Matt co-managed the Mebane Bicycle and Pedestrian Plan. Alta conducted a complete field analysis of roadway corridors and greenway opportunities in the Mebane area. Recommendations included corridor safety improvements and enhancements such as bike boulevards and intersection crossing improvements.

Jacksonville MPO Bicycle and Pedestrian Plan, NC — Matt served as project manager for the plan that addressed the area's significant need for pedestrian and bicycle improvements. This study inventoried over 50 intersections, prioritized pedestrian and bicycle corridors, and paved the way for implementation of pedestrian crossing improvements during future resurfacing projects. Matt led a stakeholder committee, conducted public engagement, and led plan development.

Project Experience

City Center Parking Study

SANDY SPRINGS, GA

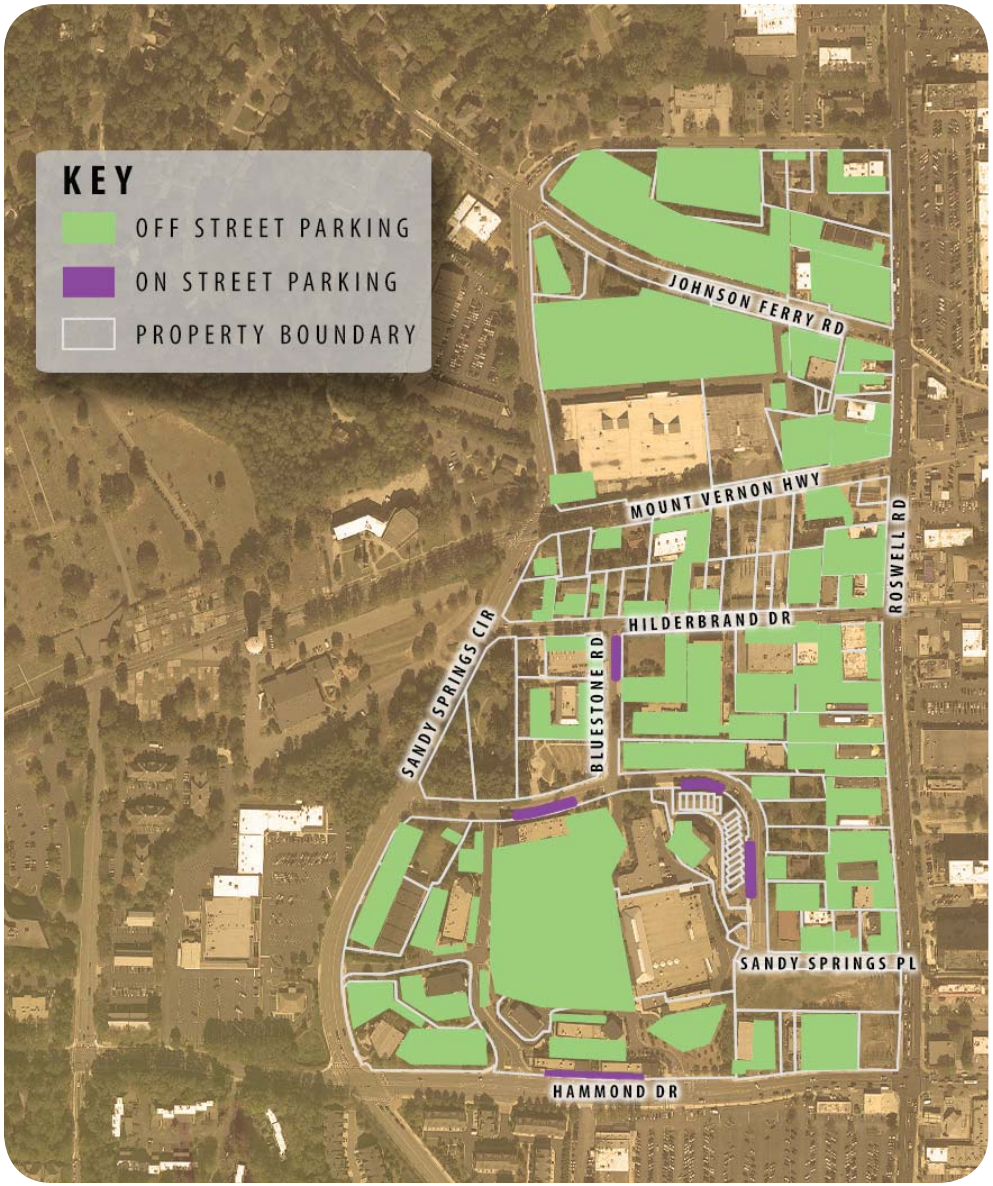
Kimley-Horn completed a parking study for the City Center area to help the City of Sandy Springs realize a renaissance by setting a platform by which redevelopment can be initiated. The study helped to position the area to support construction of the catalyst project (a municipal complex) while also setting a vision for longer-term parking solutions that will support further redevelopment of the entire City Center over time.

Project tasks included an inventory of existing parking facilities and parking occupancy data collection during weekday and weekend peak and off-peak periods. Following our assessment of the area and data collection, we used Kimley-Horn's exclusive Park+ software to model several downtown development scenarios. This software allows different user inputs to be used to develop more appropriate parking demand projections than are typically found using industry standard ULI and ITE parking generation rates. The results of the Park+ analysis will help develop parking demand projections for the City Center as it redevelops.

Following our analysis, we developed a list of recommendations including future parking demands and function design of three different parking structures, parking allocation among off- and on-street assets, management strategies and best practices, pricing and enforcement strategies, technology recommendations, and a financial assessment. We also provided training for City staff on how to use the Park+ software, enabling the City to maintain a current parking model after the contract is complete.

Client Contact

Bryant Poole, City of Sandy Springs
770 206 1415
bpoole@sandyspringsga.gov



RFP #540-2016-01

Parking Study

Downtown Comprehensive Parking Study

ASHEVILLE, NC

Kimley-Horn was responsible for developing a comprehensive parking study that evaluated all phases of the parking system within Asheville's Central Business District. The study included an assessment of management, operations, enforcement, revenue generation and projections, and parking demand.

The demand evaluation included the development of a parking demand model that allows the City to monitor how changes in development intensity or parking inventory affect the overall parking system. The model also provides the City with the ability to evaluate special event parking conditions and the effects of enhanced multimodal transportation alternatives on the parking system.

Client Contact

Ken Putnam, City of Asheville
828 259 5943
kputnam@ashevillenc.gov

RFP #540-2016-01

Parking Study

Downtown Comprehensive Parking Study

DURHAM, NC

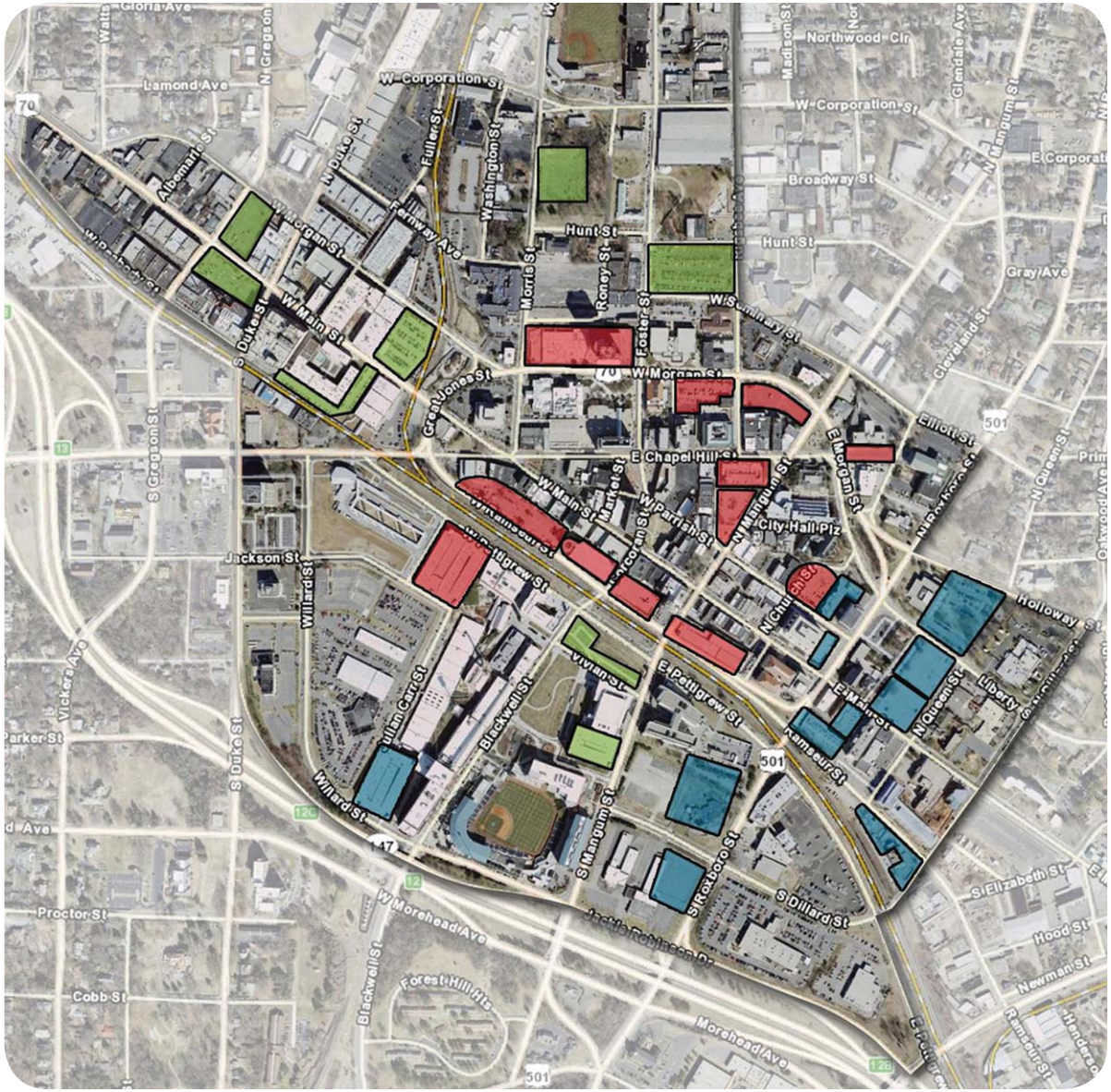
Kimley-Horn helped the City of Durham evaluate existing parking operations and the potential need for additional parking structures to accommodate growth in the downtown study area. Recent developments and redevelopments in Downtown Durham have positioned the City for significant growth. At present, there are over 500,000 square feet of new commercial development and over 400 dwelling units planned for construction in the next 24 months. Additionally, there is another 1.1 million square feet of development and redevelopment in various stages of planning within the downtown study area.

Kimley-Horn was charged with helping the City and the development community plan for this growth. The study effort was guided by a parking study team that was made of representatives of the City, Durham County, downtown development partners, and developers.

The study featured an extensive stakeholder outreach program that included on-line surveys, small group meetings, and one-on-one, in-person meetings with stakeholders. Estimates of future parking demand were made using Park+. This model used "right-sized" parking techniques to estimate the future parking demand to help prevent overbuilding of parking.

Client Contact

Mark Ahrendsen, City of Durham
919 560 4366
mark.ahrendsen@durhamnc.gov



Midtown Parking Action Plan

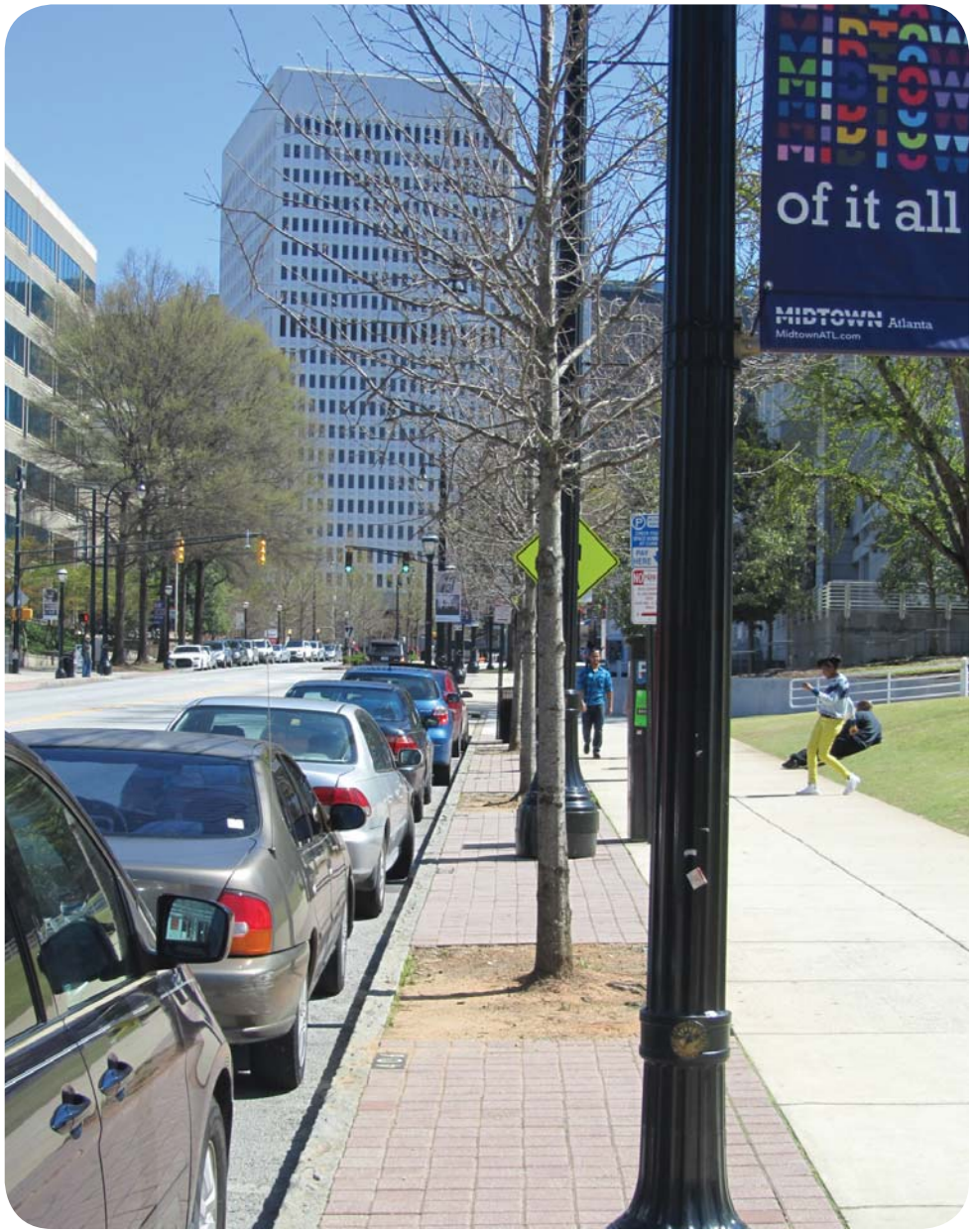
ATLANTA, GA

Located in the geographic center of the Atlanta region, the core of Midtown is a dense, pedestrian-friendly, mixed-use district with 43,000 daytime workers, 13,000 residents, and over 9 million visitors each year.

Kimley-Horn was selected to conduct a parking assessment and implementation strategy for the core of Midtown. The goal of the project was to develop an implementable parking management plan that encouraged continued economic development, improved the user experience, enhanced the pedestrian realm, and supported existing investments in transit infrastructure. Elements of our work included an extensive community engagement process, assessment of existing and future parking conditions, recommendation of strategies to address on- and off-street parking challenges, and a pilot parking collaborative project.

Client Contact

Dan Hourigan, Midtown Alliance
404 892 0050
dan@midtownatl.com



RFP #540-2016-01

Parking Study

Downtown Parking Strategic Plan

TEMPE, AZ

To create a strategic parking plan for Tempe's downtown area, Kimley-Horn identified potential sites for a future parking structure, investigated long-term plans for addressing the need for bigger and/or more loading zones, reviewed current on- and off-street parking technology, evaluated ways to create more user-friendly streets that accommodate the needs of all users, and examined ways to maximize shared-parking arrangements. Through this project, Kimley-Horn recommended draft parking standards and provided a Park+ modeling approach that allowed users to evaluate new development proposals as they impact the overall parking supply.

Kimley-Horn's approach to this project included a robust set of parking and transportation planning tools intended to help the City of Tempe better understand its parking and transportation issues within the community, including mini-charrettes and stakeholder outreach to help define recommendations that fit the context of the community. The centerpiece of our approach was the unique and innovative Park+ model.

Client Contact

Adam Jones, Downtown Tempe
480 355 6070
adam@downtowntempe.com

Project Approach

Project Management Strategy

Kimley-Horn has reviewed the request for proposals and has developed a project approach tailored to the Town of Carrboro. The project will be managed by Fred Burchett, P.E., PMP who has more than 35 years of experience and has managed numerous parking studies for communities similar to Carrboro. Fred is a certified Project Management Professional and uses the project management techniques espoused by the Project Management Institute (PMI) to manage projects.

One of first tasks we propose is to review and analyze the previous study material. This effort is important to understand past planning efforts as well as community culture. During our review of information for this proposal, we found that the Team Carrboro Action Plan for FY 2014-2015 identified five strategic priorities for the Board of Aldermen for the past fiscal year. Those priorities were:

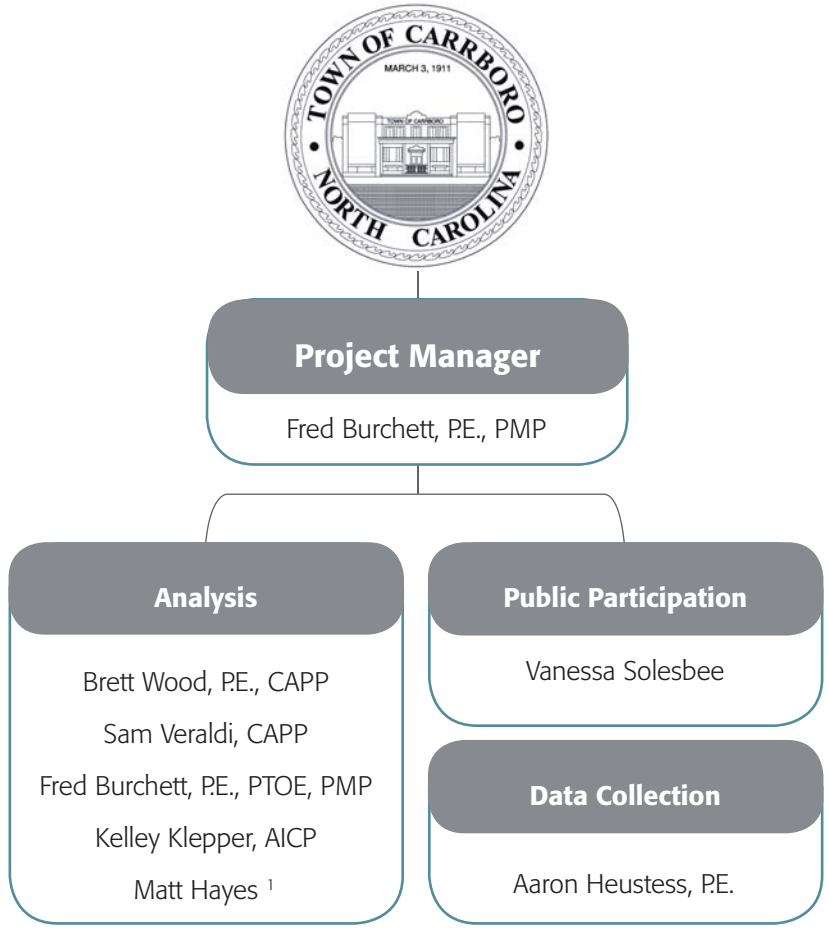
- Diversify revenue stream to maintain ethnic and economic diversity
- Protect historic neighborhoods and maintain Carrboro's unique identity
- Improve walkability and public transportation
- Encourage development that is compact, dense, and appeals to diverse lifestyles and incomes
- Enhance and sustain quality of life/place issues for everyone

It is important for Kimley-Horn to understand how priorities and past planning efforts relate to the Carrboro Parking Study.

The next task will be the development of a project work plan for the Carrboro Parking Study. This plan will identify the team members responsible for each task and subtask, the necessary resources for each task, the task dependencies, the schedule, task budgets, and task deliverables. This project work plan will be provided to the Town and will be used by Kimley-Horn to manage the project to a successful conclusion.

We realize that we work and live in a dynamic environment and that project management plans must be flexible. It will be Fred's responsibility as the project manager to monitor the plan, keep the project on schedule, and meet the project's and Town's needs.

Consultant Staff Roles



1 Alta Planning + Design

Completing Projects On Time and Within Budget

Kimley-Horn has a proven record of performing on time and within budget, and Fred is in an excellent position to provide responsive service to you on this contract. The key to our success in this area is managing the right resources at the right time. Kimley-Horn uses a workload forecasting technique (known as our cast-ahead process) to determine manpower requirements by division, office, and region. We emphasize project management using bimonthly effort reports that give our project managers up-to-date staffing and expense information related to their projects. This information enables them to continuously monitor the status of project cost, cost control effectiveness, and schedule. Our division and regional managers then shift manpower and workloads as needed to meet all demand-supply needs. This cast-ahead process enables us to assign ample staff and technical resources to complete each project on time and to our clients' satisfaction.

Proposed Methodology

1. Public Participation

Vanessa Solesbee will lead Kimley-Horn's public participation effort. Vanessa provides expertise in creating strategic communications and community outreach campaigns that integrate planning and development efforts into a community's shared values. She recently has led community outreach efforts in Pullman, WA; Long Beach, CA; Fort Collins, CO; and Eugene, OR.

Proactive and thoughtful dialogue with campus stakeholder and local community partners is key to the Kimley-Horn approach. An effective public participation process:

- Places parking strategies, programs, and policies within the context of a community's larger strategic goals
- Identifies key messaging that will resonate with a community's diverse user groups
- Provides insight into both real and perceived parking challenges, as well as areas of opportunity for future development
- Includes key constituencies, both internal (e.g., Town of Carrboro staff, Advisory Boards, Board of Aldermen) and external (e.g., downtown stakeholders, visitors, residents, regional partners and institutions), in planning and development efforts from the beginning, building a strong foundation for plan implementation and buy-in.

Kimley-Horn strongly believes in using the planning process as an opportunity to educate key stakeholder groups about the complexity of parking planning and management. As such, we propose a thorough program of outreach and feedback to support the creation of a Parking Plan for the Town of Carrboro.

At the onset of the project, we would develop a comprehensive public participation strategy specifically tailored to meet the goals and objectives of this parking planning effort. This work would be performed in close concert with Town of Carrboro staff to ensure the proposed tools and methodologies will engage the Town's diverse constituencies.

Kimley-Horn understands the importance of employing a wide range of public engagement methodologies to ensure that the thoughts, opinions, and concerns of residents and visitors from varying cultural, socioeconomic, and ability backgrounds are heard.

An example of this comprehensive process includes, but is not limited to, the following approach:

Develop a Stakeholder Engagement and Education Strategy

The Kimley-Horn team will review existing materials, plans, and studies related to stakeholder engagement, communications, educational campaigns, and special projects. This review is not necessarily limited to parking and mobility efforts, as good data can be found using a variety of public participation campaigns.

We will identify outreach formats and tools that will be effective in engaging the Town of Carrboro community, leadership, and regional partners. Outreach strategies likely would encompass a blend of both traditional (in person) and digital (online) methodologies, including:

- Focus groups
- Individual interviews
- Public open houses and/or charrettes
    - Could be enhanced with instant participation tools like PollEverywhere and/or interactive visual preference activities
- Presentations to community groups
    - (e.g., Chapel Hill-Carrboro Chamber of Commerce, Chapel Hill/Orange County Visitors Bureau, Greater Chapel Hill Association of REALTORS)

- Customer/user surveys
    - Online, using a tool like SurveyMonkey
    - Hard copy via utility bill
- Social media
    - Town of Carrboro Pages (Facebook, Twitter, Pinterest, and YouTube)
    - Key partner social media sites (Chapel Hill/Orange County Visitors Bureau Facebook, Twitter, Pinterest)
    - Engage Carrboro MindMixer (mySidewalk) virtual town hall site
- User intercept surveys
    - Preferably at well-attended, established events like the Carrboro's Farmer's Market, 2nd Friday ArtWalk, etc.
- Walking audit
    - Conducted in partnership with a select group of key Town stakeholders, this methodology allows for the consultant team and community members to physically interact with downtown parking and access infrastructure. This activity also helps incorporate youth audiences.

Please note: Meeting and survey materials can be provided in both English and Spanish.

Conduct Stakeholder Outreach

This effort will be undertaken in partnership with and under the guidance of Town of Carrboro staff. The following is a sample of stakeholder groups we will include in outreach efforts:

- Downtown business and property owners
- Merchants, restaurants, retailers, and service industry representatives
- Residents–both downtown and community-wide
- Arts, culture, and entertainment venues
- Local and regional transit/transportation providers
- Bicycle advocacy groups
- Entrepreneurial and creative communities
- Town of Carrboro staff and leadership
- Key community partner organizations
- Differently abled communities/ADA advocacy groups
- Culturally diverse communities

Data Analysis and Integration of Public Participation Findings

Information and data collected from the stakeholder outreach methodologies of choice will be collected, documented, and analyzed. Findings from the data will be presented in a written report that will outline the key themes and suggested messaging strategies that support the larger project objectives.

2. Data Collection

Aaron Heustess of Kimley-Horn will lead our efforts in this task. Aaron has led data collection efforts for Kimley-Horn on recent parking studies for the cities of Durham and Asheville, NC.

2.1 — Data Collection Strategy

Kimley-Horn will work with the Town to develop a schedule and timeline for completing the data collection task. For the purpose of this proposal, we have assumed that parking inventory, occupancy, turnover, and loading zone utilization data will be collected in the study area.

2.2 — Parking Space Inventory

Kimley-Horn will collect the necessary data in the study area to understand the existing parking inventory. The inventory will include the following elements:

- A photographic inventory of existing conditions and any observed deficiencies in Town parking lots
- Type of parking (identified principal user, on-street vs. off-street, public vs. private, surface vs. structured, etc.)
- Location and general configuration
- Capacity (number of spaces)
- Time limits and use restrictions
- Designated on-street bus stops
- Designated on- and off-street ADA-accessible spaces
- Designated compact spaces
- Designated motorcycle spaces
- Designated electric vehicle charging spaces
- Loading zones
- Number and capacity of bicycle racks or bicycle storage units

As part of our research for this project, Kimley-Horn staff visited the Town of Carrboro on Wednesday, August 25 to review the Town's existing off-street parking facilities and prepare a preliminary inventory of parking assets. Prior to this visit, we consulted the Town's website for identified public parking areas. The Geographic Information Systems (GIS) map from the Town's website and our numbering system is shown as **Figure 1**. A summary of the observed parking conditions in Town parking lots is shown in **Table 1**.

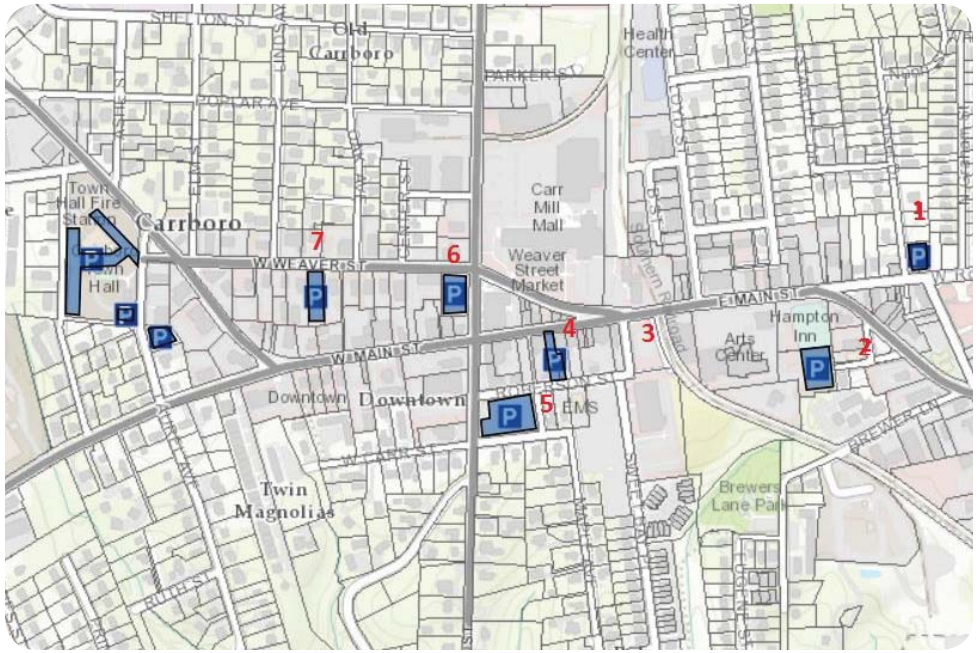
Kimley-Horn will summarize the parking information collected and present the data graphically for meetings with stakeholders and for final reporting. We will coordinate with the Town to obtain its existing GIS map. All mapping developed by Kimley-Horn for the project will be prepared using GIS, allowing us to seamlessly integrate the parking facility database and mapping with the parking demand model that will be developed in Task 3.1 (see page XX). Linking the database to the mapping will allow input changes in the database to have a dynamic impact on the mapping output. This ability to visualize existing conditions using different metrics will be valuable when identifying problems and determining recommendations.

Deliverables

Kimley-Horn will prepare digital maps, in GIS format with a reference numbering system, that identify existing parking facilities and the inventory data described above.

Kimley-Horn will provide a brief condition assessment technical memorandum with photographs of any observed deficiencies at Town-owned parking lots. This will be a useful tool to the Town in identifying and prioritizing potential maintenance needs.

Figure 1 | Public Parking Areas in Carrboro, NC



2.3 — Parking Utilization Surveys

Accurate data is vital to a successful parking study. However, data collection can be expensive and time consuming. We will strive to balance the quantity and quality of colleted data with the cost of data collection.

For this project, Kimley-Horn is proposing to collect data hourly from 10 AM–10 PM on a typical weekday and from 11 AM–11 PM on a typical weekend in the downtown private parking lots, public parking lots, and on-street parking locations. In most locations, the typical daytime peak occurs around 2 PM. Evening peaks vary greatly depending upon the nearby land uses. We have proposed 12 hours of data collection for both weekday and weekend scenarios, but are willing to adjust the data collection times after further discussions with the Town.

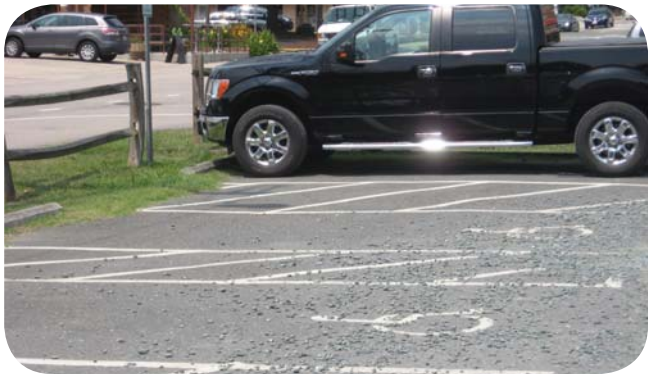
For enhanced accuracy and efficiency, Kimley-Horn proposes to use a vehicle equipped with License Plate Reader (LPR) technology to collect parking occupancy data. We will use the vehicle equipped with LPR and drive the designated parking areas in the study area. Kimley-Horn has used LPR on a number of recent parking studies, including studies for the City of Asheville, NC and Arlington County, VA.

Table 1 | Off-Street Parking Inventory

Lot Number	Location	Number of Spaces	Number of ADA spaces	Overall Occupancy @ 2 PM	Comments
1	W. Rosemary St. – Sunset Dr.	24	1	104%	Two vehicles illegally parked
2	Hampton Inn	Over 100 vacant parking spaces were observed on levels 2 and 3 (see **Photo 1**)			
3	East Main St. – Roberson St.	28	1	50%	Parking lot not shown on Town's online parking map
4	Between Main St. and Roberson St.	19	1	63%	Includes six additional spaces marked as reserved
5	Greensboro St. – Roberson St. – Carr St.	90	5	66%	Gravel in ADA spaces is potential tripping hazard; needs sweeping. (see **Photo 2**)
6	Greensboro St. – Weaver St.	33	6	76%	Additional 10 spaces were observed in this lot designated as reserved; These spaces are not included in space count or occupancy
7	300 Block of Weaver St.	33	2	81%	No turnaround provided at back of lot

Photo 1 | Level 3 of Hampton Inn Parking Garage

Photo 2 | Greensboro St. – Roberson St. – Carr St. Parking Lot



The LPR system reads the license plate, and the GPS-enabled equipment determines the location of the parking space. This process documents the occupancy of the space through vehicular presence. (North Carolina does not require front license plates, so this can be a challenge when vehicles park rear-end in, but we have effective work-arounds to address this situation.) The use of an LPR-equipped vehicle allows us to cover larger areas of parking more quickly using fewer personnel. In addition, the license plate data collected with the LPR can be used to calculate vehicle turnover (Task 2.4).

Deliverables

Kimley-Horn will provide the Town with the raw data, an Excel version of the parking occupancy for each hour, and a GIS shapefile. The occupancy data will be summarized and presented in a format similar to the data shown in **Figure 2**.

2.4 — Targeted, Detailed Turnover Studies

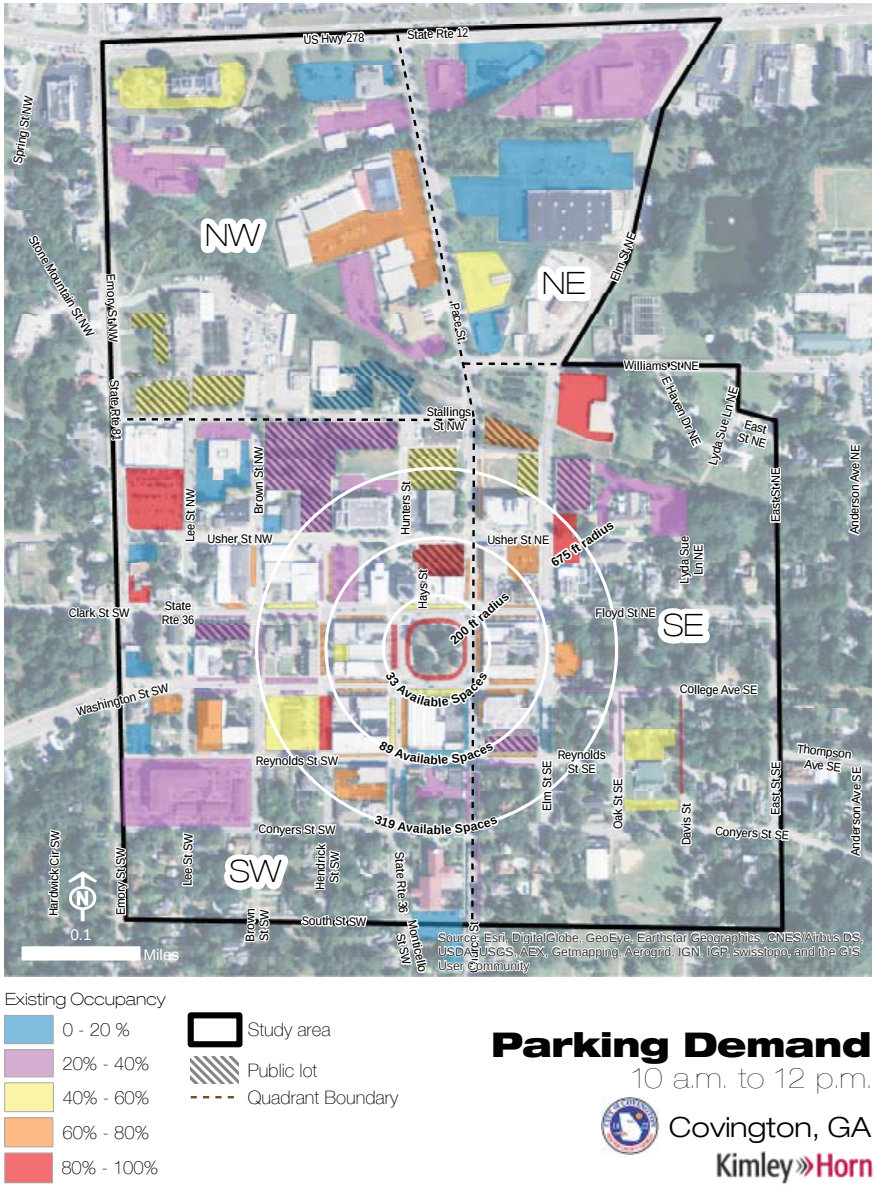
As noted in Task 2.3, the use of LPR technology will allow us to use the photographic inventory of vehicles and license plates to calculate parking space turnover at any location where data has been collected. An example of turnover calculations and parking duration from a recently completed study in the Rosslyn section of Arlington County is shown in **Figure 3**.

The use of LPR allows us to perform turnover and length of stay calculation at any location where the LPR has been used to collect occupancy data. For the purpose of our cost estimate, Kimley-Horn has assumed that turnover data will be calculated for 10 block faces. The blocks to be analyzed will be jointly selected by the Town and Kimley-Horn.

Deliverable

Kimley-Horn will prepare a technical memorandum that documents the methodology and findings of the turnover studies for submittal to the Town. The number of turns and the calculated length of stay information will be provided to the Town in a graphic format for the selected study block faces.

Figure 2 | Sample Parking Occupancy



2.5 — Loading Zone Utilization Studies

The LPR technology described above also can be used to document loading zone utilization. Assuming the loading zones to be studied are near the locations of on-street parking, the LPR will record the license plate of vehicles parked in the designated loading zones. LPR will provide a snapshot of the use of any loading zone within the on-street parking study area.

Since we are planning to only survey the on-street spaces on an hourly basis, the Town may desire to have loading zone observations conducted more frequently than once per hour. If more frequent observations are required, we would propose to observe up to four loading zones for up to six hours per day and calculate the turnover and length of stay for vehicles parked within the designated loading zone.

Deliverable

Kimley-Horn will prepare a technical memorandum that documents the methods and findings of the loading zone utilization studies. The number of turns and the calculated length of stay information for each loading zone will be provided to the Town in a graphic format for the selected study block faces.

Figure 3 | Arlington County Parking Study Sample

3. Analysis

The data collected in Task 2 will be analyzed by Kimley-Horn. Our efforts in Task 2 will be led by Fred Burchett. Where appropriate, designated task managers will manage the subtasks in Task 3.

3.1 — Future Parking Demand Scenarios

Task Manager: Brett Wood

The projection of future parking demand requires assumptions about future land use and development patterns and typically is a highly iterative process. Existing conditions must be verified, assumptions regarding future conditions must be made, and projections completed. After the initial round of projections, it often is necessary to adjust the assumptions and make additional projections. Depending on the number of scenarios analyzed, the projection of future parking demand can be a time consuming task.

The RFP states projections should be made for "… future land use scenarios, including build-out under current zoning." Kimley-Horn's Park+ model is the right tool to analyze the parking demands of future build-out as well as any other land use scenario.

The Park+ model will use the data collected in Task 2 and existing land use data—often maintained by the Town or County Planning Department—to calculate parking generation rates that are specific to Carrboro and then use those rates to estimate future parking demand. The model includes user inputs to adjust the impact of TDM measures and multimodal uses upon parking demand.

Park+ Model Development and Calibration

Kimley-Horn will develop the Park+ model for the Town of Carrboro. The model will be based in an ArcGIS format, with specific add-on analysis tools developed to manage parking data, maintain parking occupancy and study area information, perform parking demand analyses, and provide the City the ability to develop and evaluate multiple scenario combinations (e.g., Town growth, special events, and multimodal and transportation enhancements).

At the initiation of this task, Kimley-Horn will submit a data request to the Town related to the needs of the Park+ model. This data request will include any existing shapefiles for land use and parking infrastructure, as well as information about parking occupancy and building utilization. Upon receipt of the requested data, Kimley-Horn will review the provided data and begin development of an ArcGIS database for use in the Park+ model.

In addition to parking occupancy data, Kimley-Horn will use existing building, land use, and parking ArcGIS shapefiles provided by the Town to develop the foundation for the Park+ model. The Town will provide land use information (typically in the form of parcel or building footprint shapefiles) for inclusion in the Park+ model. The Kimley-Horn team will work with Town staff to define the appropriate land use designations to use in the Park+ model to ensure consistency with Town-maintained data. Kimley-Horn will use the parking occupancy data, collected in Task 2, for the study area to populate the parking database layers for the Park+ model.

Following the initial discussion of model assumptions with the Town, Kimley-Horn will develop the Park+ model. The model will be built upon the data provided by the Town and collected by Kimley-Horn as well as the assumptions and discussions held between the Town and Kimley-Horn. The model will be based on the concept of proximity demand, which is a calculation methodology that assigns parking generation characteristics for specific uses, based on actual parking occupancy and utilization data.

The model calibration process will be completed using the parking occupancy data collected by Kimley-Horn in Task 2. This data will be used to ensure that demand ratios used in the model project conditions that reflect study area peak parking conditions.

The model also will be calibrated with Urban Land Institute (ULI) shared parking methods to simulate the effects of sharing parking spaces between compatible uses (e.g., residential and office space). The shared parking methods also will be calibrated to the study area conditions, using the same proximity demand methods outlined above.

The model will include an inventory of existing and proposed parking supply within the study area, warehoused in ArcGIS shapefiles provided by the Town and modified by Kimley-Horn. The parking inventory will be based on data collected by Kimley-Horn in Task 2. The model will include an inventory of building and land use intensities within the study area, warehoused in ArcGIS shapefiles provided by the Town and modified by Kimley-Horn. The land use inventory will be based on data provided by the Town.

The Park+ model will include analysis tools created and calibrated specifically for use in this parking demand model application. These tools will include a scenario evaluation tool, shared use parking overlay, peak period analysis tools, special event tool (calibrated to local conditions), parking and transportation demand management analysis overlays, and pricing evaluation. The specific special events to be included will be defined based on conversations with the Town. Additionally, Kimley-Horn staff will work with the Town to define generic special event scenarios that can be located and scaled based on user preference to simulate the impacts of events of varied location and size.

Kimley-Horn team members will prepare future parking demands for up to three scenarios as defined by the Town.

Deliverables

Kimley-Horn will prepare a technical memorandum that documents the methodology and processes used to project future parking demand for up to three scenarios and will submit the draft technical memorandum to the Town. The findings of the analyses will be presented to the Town at a regularly scheduled project meeting.

As an additional service, the Town may receive training in the use and management of Park+ and may take ownership of the model, which would enable the Town to evaluate additional parking scenarios after the completion of this project. This is a powerful benefit to communities experiencing rapid change in their study areas or continuing pressures related to parking.

3.2 — Parking Supply, Management, and Enforcement Recommendations

Task Manager: Sam Veraldi

Kimley-Horn will use the data collected in Task 2 and the analyses conducted in Task 3.1 to prepare parking recommendations.

In conjunction with this task, Kimley-Horn proposes to request data from the Town regarding the maintenance and operational costs associated with the existing parking assets. We will review this data to estimate the current expenses incurred by the Town in providing parking. While the existing parking spaces are free to the user, there is a cost to the Town for enforcing the posted time restrictions and to maintain the parking areas (e.g., trash collection, electricity for lights, etc.). Kimley-Horn believes it is important for the Town to understand these costs.

Kimley-Horn also proposes to engage the Town in a discussion on design standards for Town parking areas. A number of the existing Town parking lots do not meet industry design standards for surface conditions, turn-around locations, and drive aisle width. It is important for us to understand the Town's desired design standards before we formulate recommendations.

Parking management recommendations typically can be categorized as either supply-side or demand-side solutions.

Supply-side parking management solutions are recommendations to either increase or enhance the parking supply. For example, as we noted in Section 2, the surface parking lot near the intersection of W. Rosemary Street and Sunset Drive was over capacity at 2 PM. However, at that time, the public parking in the Hampton Inn Deck approximately 500 feet away had over 100 vacant spaces. A potential solution may be to improve the signing and wayfinding for Town parking lots to let people know of the availability of parking. Constructing additional parking supply often is an expensive recommendation; on a recent project, we estimated the cost to construct a surface parking space was approximately $1,500-$3,000 per space. The addition of parking supply should be considered only after other solutions are considered.

Demand-side parking management solutions are approaches intended to reduce the demand for parking. Fees for parking, enhanced transit services, and better facilities for bicycles are all examples of demand-side parking management solutions we will evaluate.

As stated in the RFP, Kimley-Horn will specifically evaluate:

- Shared parking
- Additional parking supply
- Fee based parking
- Designated employee parking areas
- Loading zone supply and placement
- The collection and use of citation revenues
- Parking restrictions
- Enforcement organization sizing and approach
- The enforcement of parking regulations
- The potential greenhouse gas implications of parking

Deliverable

Kimley-Horn will prepare a technical memorandum and action plan that describes short- and long-term strategies with the goal of improving the accessibility, efficiency, and utilization of parking in the study area. The memorandum will include the following:

- A matrix of alternatives evaluated, including for each alternative goals and objectives, key issues and challenges, a schedule for implementation and proposed sequencing, and a general assessment of applicability, effectiveness, and feasibility
- An opinion of probable costs for the recommended alternative
- An action plan that identifies the role of the City, developers, property owners, parking managers, and parking companies in the implementation

3.3 — Land Use Ordinance Parking Review

Task Manager: Kelley Klepper

Kimley-Horn will conduct a review of the parking requirements in the Carrboro Land Use Ordinance. This review should use the data collected in Task 2 and consider land uses. It should also include an assessment of the Payment of Fee in Lieu of Providing Parking.

With the Park+ model, Kimley-Horn calculates actual average parking demand based upon data we collect to build and calibrate the model. Table 2 includes actual parking demand rates for a variety of land uses from other cities compared with the Carrboro Land Use Ordinance and other traditional parking reference materials.

Table 2 | Comparison of Parking Generation Rates from Various Cities and the Carrboro Land Use Ordinance

Parking Generation Rates Number of Spaces						
Land Use Category	City of Tempe, AZ Average Observed Rate[1]	Fort Collins, CO Average Observed Rate[1]	Downtown Asheville, NC Average Observed Rate[1]	Downtown Durham, NC Average Observed Rate[1]	Carrboro Land Use Ordinance	Traditional Generation Rate[1,2]
Apartments	0.38	0.69	0.70	0.81	1.5 – 2.0 per DU; use 1.300	1.61
Condominiums	0.55	1.43	0.45	-	1.5 – 2.0 per DU; use 1.300	1.52
Auto Service	-	2.41	2.61	2.58	-	4.17
Bank	3.44	1.85	2.55	1.56	5.0 per kSF; use 3.230	2.64
Church	0.94	4.17	1.15	1.75	-	1.17
Government Building	0.69	0.51	1.75	2.75	5.0 per kSF; use 13.000	4.20
Lounge	1.62	-	5.80	4.78	-	16.5
Office	1.53	0.2	1.38	1.77	5.0 per kSF; use 3.110	3.50
Restaurant	4.4	7.55	5.55	6.83	10.0 per kSF; use 8.100	18.0
Retail	1.53	0.92	0.43	0.98	5.0 per kSF; use 2.110	2.13
Warehouse	0.12	0.54	0.35	0.51	2.5 per kSF; use 3.120	0.81

As can be quickly discerned from this table, the parking requirements in the Carrboro ordinances are not only higher than traditional reference materials, but they also are much higher than observed, actual parking demand in a variety of locales. For example, the Carrboro Land Use Ordinance requires five parking spaces per 1,000 square feet (kSF) of a bank. The traditional generation rate is 3.5 spaces/1kSF. However, the Park+ calculations for cities throughout the country found the parking demand in banks ranges from 1.5 – 3.4 spaces/1kSF.

The Kimley-Horn Park+ model provides our clients with real world information they can use in setting parking standards. We propose to use the Park+ model in Carrboro, and the data we have collected from other cities, to perform an analyses of the Carrboro parking requirements.

We have conducted fee-in-lieu analyses for a number of cities, which begin by calculating the cost of implementing parking and include a discussion with the jurisdiction as to what level, if any, they are willing to subsidize parking. In other words, should the parking fee be the replacement cost of parking, or is the Town willing to contribute to the cost of parking? This is a policy decision that requires the input of elected officials.

Deliverables

Kimley-Horn will prepare a technical memorandum that documents our research and findings regarding our review of the Town's Land Use Ordinance. We will provide the Town with actual parking generation rates from other cities for land uses similar to the Town's Land Use Ordinance and will make recommendations on revisions to the ordinance.

The technical memorandum also will document our fee-in-lieu research from other cities and provide a recommendation for the Town of Carrboro.

3.4 — Walkability Micro-Audit

Task Manager: Matt Hayes | Alta Planning + Design

Alta Planning + Design will lead the walkability micro-audit in the downtown area. Alta will develop a checklist based on national, best practice walk audits that Alta has conducted around the United States. The Alta team will lead the audit on foot, with interested Town staff and committee members. The team will use a base map with aerial photography to mark specific locations of interest; note the presence or lack of pedestrian treatments such as sidewalks, crosswalks, and curb ramps and also note visibility, safety, accessibility, and comfort issues; and experience walking to and from parking lots and on-street parking to gauge user safety and perceived safety issues. This audit will include an examination of roadway crossing treatments from separated Town parking surface lots and decks.

The Alta team will use the results of the fieldwork to develop a map of issues and recommended improvements. Improvements may include curb ramps, marked crosswalks, wayfinding signage/kiosks, refuge islands, curb extensions, traffic calming, short sidewalk/trail connections, within-parking-lot pedestrian connections, and more. A companion table to the map will be developed to detail the locations and recommended improvements.

3.5 — Park-and-Ride Analysis

Task Manager: Fred Burchett

Chapel Hill Transit presently offers park-and-ride transit services from Carrboro Plaza and the Jones Ferry Road Park-and-Ride Lot. We know from our research that community groups in Carrboro have proposed the expansion of park-and-ride services in conjunction with shuttle services as a potential solution to improve parking in Downtown Carrboro.

Kimley-Horn proposes to collect parking occupancy data using LPR in the two designated park-and-ride lots used by Chapel Hill Transit for the same time periods identified in the data collection task and to analyze this data to understand the demand for remote parking in Carrboro.

We would use the results of Tasks 3.1 (Future Parking Demand Scenarios) and 3.2 (Parking Supply, Management, And Enforcement Recommendations) to evaluate the need for additional park-and-ride parking locations in the Town. This evaluation would include the probable cost of shuttle service between the park-and-ride lots and the Downtown.

Deliverable

Kimley-Horn will prepare a technical memorandum that documents the findings of our analysis of existing conditions and our evaluation of the need (and potential costs) for additional park-and-ride parking facilities and shuttle services.

3.6 — Bike Parking Recommendations

Alta will lead the development of bike parking recommendations. Alta will build on its work (as Greenways Incorporated) on the Carrboro Bicycle Plan to drill down into more detail. Because Carrboro has one of the highest bicycle mode shares in North Carolina, bike parking is essential so that bicyclists can complete their trips. Both short- and long-term advanced bike parking options, including covered parking and bike lockers, will be considered.

To initiate this task, Alta will work with the Town to identify and map existing bike parking accommodations within Downtown, both at public and private locations. Alta will conduct fieldwork to examine the use of existing bike parking options and the use of other locations where bike parking is not provided. Alta will create a table that includes counts of bicycles that each parking area/rack can accommodate. Alta will generate a map that recommends upgrades to existing bike racks and locations/numbers of new bike racks to accommodate the heavy demand in Carrboro.

4. Presentations

Project manager Fred Burchett will lead our presentation efforts. Fred will be assisted by the Kimley-Horn team members most appropriate for the meeting and the information to be presented.

4.1 — Board of Alderman Presentations

Kimley-Horn will prepare for and deliver two presentations to the Board of Aldermen. While the RFP states the timing will be finalized during contract negotiations, we propose holding one presentation after the initial public outreach and upon the conclusion of the data collection tasks to provide the Alderman with information on what we are hearing from the public and the results of the data collection tasks.

The proposed Parking Plan should be the content of the second presentation to the Board of Aldermen. It is assumed that this meeting will occur after the presentation to the joint advisory boards.

A draft copy of the presentation will be provided to the Town's project manager approximately five working days prior to the date of the scheduled presentation. Kimley-Horn will review the draft presentation with Town staff and revise it as necessary based on input from the Town.

4.2 — Advisory Board Presentations

Kimley-Horn will prepare for and make a presentation to the Town's advisory board during a joint advisory board meeting.

A draft copy of the presentation to the joint advisory board will be provided to the Town's project manager approximately five working days prior to the date of the scheduled presentation. Kimley-Horn will review the draft presentation with Town staff and revise it as necessary based on input from the Town.

The draft plan will be presented to a joint meeting of the Town's advisory boards.

5. Plan Development

Kimley-Horn will compile all of the information from the above tasks into a comprehensive plan that discusses the methods used, findings, and recommendations for parking in Carrboro. As noted in the RFP, the plan must address the Town's values, goals, and objectives related to parking, the benefits and challenges of requiring parking, the effect of excessive parking requirements, and the role of the Town in managing and enforcing parking.

Kimley-Horn believes the most effective plans are those that provide implementable solutions. The plan we prepare will include a phased set of recommendations that include actions that can be implemented in the short term (less than six months); mid-term recommendations that will require longer lead times (six months to a year) due to the need for funding, design, and procurement; and longer-term recommendations (over one year) for implementation after the implementation of the earlier of actions. Our report will include the probable costs of the recommended actions and next steps in the implementation.

Kimley-Horn will prepare a draft plan and submit it to the Town in electronic format for review by the Town's project advisory team. We will meet with the team to receive their input and comments and will revise the plan as necessary.

Kimley-Horn will prepare a revised draft plan for presentation to the public, advisory boards and Board of Aldermen. If necessary, the plan will be revised into a final draft to be considered for adoption.

6. Meetings, Coordination, and Contract Management

The core members of the Kimley-Horn team are located approximately 25 minutes away from Carrboro in our Raleigh office. We are well positioned to offer the Town the outstanding service necessary for a successful plan.

Kimley-Horn proposes the Town appoint a project advisory team that will work with the selected consultant. We would recommend this team include representatives of the Planning Department as well as the entities in the Town responsible for the maintenance of parking facilities (Public Works), enforcement of parking regulations (Police), and Economic & Community Development. The input of this team will be vital in determining the Town's goals and preparing the plan.

Due to our proximity to Carrboro, Kimley-Horn proposes to hold a number of the biweekly conference calls as face-to-face meetings. Our experience on other projects has found that scheduled, recurring meetings facilitate communication among the project team and result in a more effective planning process.

Kimley-Horn proposes to prepare an agenda for each meeting that summarizes the topics to be covered and the necessary action items. We will review the agenda with the Town's project manager prior to the meeting. As noted in the RFP, Kimley-Horn will prepare a summary of the meeting and action items and e-mail it to the project advisory team.

While structured meetings are important, there are times when informal communications are needed for a successful plan. Kimley-Horn is available for these meetings and is committed to being the Town's trusted resource on this project.

Kimley-Horn will prepare a monthly progress report summarizing tasks accomplished in the preceding month, outstanding issues, and other information and include this report with our monthly project invoice.

7. Schedule

The RFP includes the following proposed schedule:

Task	Proposed Date
Project Kick-off	November 2015
Public Participation and Stakeholder Activities	Ongoing
Policy Analysis	Winter 2015/spring 2016
Data Collection and Analysis	Winter 2015/spring 2016
Presentations to Board of Aldermen	November 2015; June 2016
Presentation to Advisory Boards	May/June 2016
Completion of Draft Plan	August 2016
Completion of Final Plan	October 2016

Kimley-Horn offers the following observations on the schedule. In our experience, it is challenging to achieve good public participation during the period from approximately mid-November to mid-January. In addition, we typically avoid data collection during this period due to the irregular travel patterns.

Depending upon the timing of the project initiation, it may be possible to perform some data collection and public outreach in early November.

Kimley-Horn believes the schedule of a draft plan by August 2016 is achievable, and we will work with the Town and project advisory team to schedule the necessary project tasks in a manner that obtains accurate data while maximizing the opportunity for public input.

COST PROPOSAL SHEET

FOR

PROJECT: Town of Carrboro Parking Plan

In the table below, please provide an estimated cost for producing a parking plan, including specific costs for each of the task categories. Firms will be evaluated on whether the proposed cost is reasonable in relation to the strategy and methodology proposed. Please refer back to Section 11.0 Evaluation, to assist in the preparation of the cost proposal. Please note per in the description of the Scope of Work in Section 5.0; the Town of Carrboro is seeking the Consultant's expertise for the preparation a quality parking plan. If there are tasks that are not listed in the scope that are integral to a plan, please provide them in a second, alternative proposal, and explain why they are critical.

VENDOR:

The contents of this proposal are known to no one outside the undersigned company.

Company Name: Kimley-Horn

Contact Person: Fred Burchett, P.E., PMP

Phone #: 919 677 2085

Authorized Signee: Thomas F. Burchett, Jr.

Print Name: Thomas F. Burchett, Jr., P.E., PMP

Print Title: Senior Vice President/Principal

#	DESCRIPTION	COST
1	Public participation	$ 21,580
2	Data collection	$ 22,900
3	Analysis	$ 57,290
4	Presentations	$ 11,680
5	Plan development	$ 14,170
6	Staff meetings, coordination, contract management	$ 35,910
		$
		$
		$
	Total	**$** 163,530

*Please see the chart on the following page for a subtask breakdown of the fee.

Carrboro Parking Study - Fees by Task and Subtask

1	Public Participation		
	1.1	Kick-Off Meeting	$5,620
	1.2	Social Media and outreach	$7,910
	1.3	Survey	$3,200
	1.4	Open House	$1,920
	1.5	Public Participation Report	$2,930
Fee by Task			**$21,580**

2	Data Collection		
	2.1	Data Collection Strategy	$1,580
	2.2	Inventory	$3,370
	2.3	Utilization with Automated License Plate Reader	$9,420
	2.4	Turnover Analysis	$2,530
	2.5	Loading Zone Utilization	$2,600
	2.6	Tech Memo and GIS File Preparation	$3,400
Fee by Task			**$22,900**

3	Analysis		
	3.1	Future Parking Demand	$30,520
	3.2	Parking Supply Recommendations	$8,020
	3.3	Land Use Ordinance	$3,340
	3.4	Walkability Micro-Audit	$8,000
	3.5	Park and Ride Analysis	$4,910
	3.6	Bike Parking	$2,500
Fee by Task			**$57,290**

4	Presentations		
	4.1	Board of Alderman (two)	$7,920
	4.2	Advisory Board	$3,760
Fee by Task			**$11,680**

5	Plan Development		
	5.1	Draft Plan	$9,920
	5.2	Draft Final Plan	$4,250
Fee by Task			**$14,170**

6	Meetings and Contract Management		
	6.1	Bi-Weekly Conference Calls	$13,850
	6.2	General Coordination	$6,180
	6.3	Meeting Summaries	$4,630
	6.4	Project Management and Accounting (12 Months)	$11,250
Fee by Task			**$35,910**

Total	**$163,530**

References

Our clients know that with Kimley-Horn they experience better. How do we know this? They consistently tell us we deliver remarkable results and we're good people to work with—and we live for that. In addition to reading the ways in which we've served our clients on the previous pages, we invite you to contact them personally regarding our work history and quality of service.

Ken Putnam
City of Asheville
Director of Transportation
kputnam@ashevillenc.gov
828 259 5943

Bryant Poole
City of Sandy Springs
Assistant City Manager
bpoole@sandysprings.gov
770 206 1414

Mark Ahrendsen
City of Durham
Director of Transportation
mark.ahrendsen@durhamnc.gov
919 560 4366 Ext. 36410

Adam Jones
Downtown Tempe Authority
Vice President/Deputy Director
adam@downtowntempe.com
480 355 6070

Adam Fischer
City of Greensboro
Director of Transportation
adam.fischer@greensboro-nc.gov
336 373 4368

Subconsultants

In an effort to provide the Town of Carrboro with the best possible service, Kimley-Horn has added Matt Hayes from Alta Planning + Design to our team. He will assist Brett Wood with the analysis task. Alta is a leading multimodal transportation firm that specializes in the planning, design, and implementation of bicycle, pedestrian, greenway, park, and trail corridors and systems.

Founded in 1996, Alta has more than 150 staff in 28 offices across North America and an international workload. On any given day, most staff walk, bike, or take transit to work. They are committed to transforming communities, one trip at a time, one step at a time, and one street, intersection, and park at a time.

Alta has experience working in all size communities. The firm strives to tailor each project to the community's unique setting, history, and culture through an active public participation process. Alta staff are proud to have designed and implemented over 8,000 miles of bikeways, walkways, and trails.

Alta staff are at the forefront of the sustainable transportation movement. They are active in the Association of Pedestrian and Bicycle Professional (APBP), the Institute of Transportation Engineers, the Transportation Research Board, the Complete Streets Coalition, and have conducted national studies for the U.S. Department of Transportation. Alta is proud to be a founder of the NACTO Urban Bikeway Design Guide, the Initiative for Bicycle and Pedestrian Innovation at Portland State University, and APBP.