Town of Carrboro

Meeting Agenda

Board of Aldermen

Town Hall
301 W. Main St.
Carrboro, NC 27510

Tuesday, October 6, 2015 | **7:30 PM** | **Board Chambers - Room 110**

7:30-7:35

A. REQUESTS FROM VISITORS AND SPEAKERS FROM THE FLOOR

7:35-7:45

B. RESOLUTIONS, PROCLAMATIONS, AND ACKNOWLEDGEMENTS

1. 15-0344 Wear Pink Caring Days Proclamation

PURPOSE:

Attachments: Wear Pink Caring Days

2. 15-0345 Charge Issued to Recently Appointed Advisory Board Member

PURPOSE:

7:45-7:50

C. CONSENT AGENDA

1. 15-0340 Approval of Previous Meeting Minutes

2. 15-0332 Request to Make an Appointment to the Appearance Commission

PURPOSE: The purpose of this item is for the Board of Aldermen to make an appointment to the Appearance Commission.

Attachments: Attachment A - Appointment Resolution

Attachment B - Appearance Commission - Gwen Barlow September 2015.pdf

3. 15-0335 Continuation of June 23rd Public Hearing on Land Use Ordinance Amendments to Modify the Presumptive Parking Requirement for Restaurants with Outdoor Seating

PURPOSE: The purpose of item is for the Board of Aldermen to adopt a resolution to further continue its consideration of amendments to the Land Use Ordinance to modify the presumptive parking requirements for restaurants with outdoor seating in the B-1(c), B-1(g) and B-2 zoning districts.

Attachments: Attachment A - Resolution
Attachment B - Draft Outdoor Seating LUO Amendment - 6-10-15
Attachment C - Excerpt from the Board's 6-23-15 Minutes

7:50-8:00

D. PUBLIC HEARING

1. 15-0319 A Public Hearing on the Temporary Street Closing Permit Application for the Saint Paul AME Church 5K

PURPOSE: The purpose of this item is to receive public input on the Street Closing Permit Application submitted by the Saint Paul AME Church for the temporary closing and usage of streets from 9:00 AM to 10:00 AM on Saturday, March 5th, 2016 to accommodate the *Saint Paul AME Church 5K*.

Attachments: Attachment A: St Paul AME 5K Street Closing Application 2016
Attachment B: St Paul AME Road Race Map
Attachment C: Public Hearing Resolution

E. OTHER MATTERS

8:00-8:15

1. 15-0342 Discussion of Orange County Library Site Selection

PURPOSE: The purpose of this item is to provide the Board of Aldermen with an opportunity to discuss the Board of County Commissioners interest in working with the Town to locate the Southern Branch Library on Town property. A resolution that the Board may use to specify follow-up actions is provided.

Attachments: Attachment A - Resolution
Attachment B- BOCC Agenda materials, 9-15-15
Attachment C - BOA Library Item 13-0363 - 5-7-13
Attachment D - 5-7-13 BOA Min- Library Discusion
Attachment E - June_18__2013_BOCC_Review Sites

8:15-10:15

2. 15-0341 Review of Parking Study Proposals - Responses to Town Request for Proposals

PURPOSE: The purpose of this item is to provide the Board with an opportunity to receive presentations from the three firms that submitted proposals in response to the Town's request and decide to award a contract for the project or take other action. A resolution specifying follow-up action is provided for the Board's use.

Attachments: Attachment A-1 - Contract Award Resolution
Attachment A-2 - Amendment to Budget Ordinance
Attachment B - Parking Plan RFP - Final
Attachment C - JMTeague_proposal
Attachment D - Kimley-Horn_proposal
Attachment E - VHB_proposal

F. MATTERS BY BOARD MEMBERS

G. MATTERS BY TOWN MANAGER

H. MATTERS BY TOWN ATTORNEY

I. MATTERS BY TOWN CLERK

J. CLOSED SESSION

PROCLAMATION
"WEAR PINK CARING DAYS"

WHEREAS, Cancer affects millions each year in the United States and is consistently the second leading cause of death. According to the American Cancer Society, in 2015 there will be an estimated 1,658,370 new cancer cases diagnosed and 589,430 cancer deaths in the United States, accounting for nearly 1 of every 4 deaths; and

WHEREAS, In 2011, Carrboro Fire-Rescue began encouraging public safety professionals, local leaders, and citizens throughout the community to wear pink in honor of all those affected by cancer, and to come together as a collective organization and help in their fight against cancer; and

WHEREAS, Firefighters normally wear duty shirts 365 days a year, but for the month of October, Firefighters and Department personnel can wear the special edition Carrboro Fire-Rescue pink duty shirt in honor and support of those affected with cancer.

NOW, THEREFORE, BE IT RESOLVED that I, Lydia Lavelle, the Mayor of the Town of Carrboro, North Carolina, do hereby proclaim **the month October 2015 as "Wear Pink Caring Days"** in the Town of Carrboro. As part of our support, Carrboro Fire-Rescue Department adopts the **"Wear Pink Caring Days"** in honor of all who battle cancer. During the month of October we encourage all firefighters and Department officials to display an image of hope, courage, love and awareness by wearing pink shirts in support of those battling cancer and those that have survived cancer.

This the 6th day of October 2015

_____

Lydia E. Lavelle, Mayor

Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number: 15-0332

Agenda Date: 10/6/2015

File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:
Request to Make an Appointment to the Appearance Commission

PURPOSE: The purpose of this item is for the Board of Aldermen to make an appointment to the Appearance Commission.

DEPARTMENT: Town Clerk

CONTACT INFORMATION: Cathy Wilson, 919-918-7309

INFORMATION: The Appearance Commission has three vacancies. Emily Kreutzer, the char, has provided a recommendation form for the Board's review. The resolution provided appoints Gwen Barlow to the Appearance Commission.

FISCAL & STAFF IMPACT: N/A

RECOMMENDATION: It is recommended that the Board of Aldermen adopt the attached resolution.

ATTACHMENT A

A RESOLUTION MAKING APPOINTMENTS TO THE
APPEARANCE COMMISSION

THE BOARD OF ALDERMEN HEREBY APPOINTS THE FOLLOWING APPLICANT(S) TO THE APPEARANCE COMMISSION:

Seat Designation	**Appointee**	**Term Expiration**
Member	Gwen Barlow	2/2018

Section 2. This resolution shall become effective upon adoption.

To Board Chairs: Please summarize applications as received; contact each applicant for any update one year after last contact; when positions are open, invite each applicant to attend a board meeting prior to making a recommendation.

ADVISORY BOARD NAME: APPEARANCE COMMISSION

Name: GWEN BARLOW
Date of application/last contact: 4/28/15

Summary of qualifications:

- MEMBER OF PRESERVATION BOARDS
- RESIDENT OF CARRBORO

INTERESTED IN TOWN GROWTH + PRESERVATION

Advisory Board Chair reconfirmed applicant's interest in serving by phone or e-mail.

✓ Yes ____ No (Briefly explain:_____)

Applicant attended Advisory Board meeting prior to BOA review.

✓ Yes (Date: _____) ____ No (Briefly explain:_____)

Applicant has demonstrated a clear understanding of the time commitment, roles and responsibilities of serving on the Advisory Board.

✓ Yes ____ No
Briefly explain:

In addition to your comments above, please check other qualities that the applicant offers that would help the Advisory Board meet its goals for community representation. *Please note that candidates who do not meet any of these qualities are still eligible for appointment.* Please communicate any urgent needs and priorities for Advisory Board composition to your Board of Aldermen Liaison.

____ Gender diversity

To Board Chairs: Please summarize applications as received; contact each applicant for any update one year after last contact; when positions are open, invite each applicant to attend a board meeting prior to making a recommendation.

ADVISORY BOARD NAME: APPEARANCE COMMISSION

____Racial or ethnic diversity
_✓_Age range diversity
____Neighborhood/geographic diversity
_✓_Occupation, experience or special skills
_✓_Previous public service or community involvement
____Other: _____

To Board Chairs: Please summarize applications as received; contact each applicant for any update one year after last contact; when positions are open, invite each applicant to attend a board meeting prior to making a recommendation.

ADVISORY BOARD NAME: APPEARANCE COMMISSION

Applicant(s) recommended at this time (1 per open seat)

Applicant 1: GWEN BARLOW

Outstanding qualifications: INTEREST IN TOWN GROWTH, APPEARANCE + PRESERVATION

How applicant compliments current board composition: YOUNG FEMALE BRINGS NEW PERSPECTIVE + VIEWPOINTS TO COMMISSION

Other comments:

Applicant 2:

Outstanding qualifications:

Town of Carrboro

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Agenda Item Abstract

File Number: 15-0335

Agenda Date: 10/6/2015

File Type: Agendas

In Control: Board of Aldermen

Version: 1

TITLE:
Continuation of June 23rd Public Hearing on Land Use Ordinance Amendments to Modify the Presumptive Parking Requirement for Restaurants with Outdoor Seating

PURPOSE: The purpose of item is for the Board of Aldermen to adopt a resolution to further continue its consideration of amendments to the Land Use Ordinance to modify the presumptive parking requirements for restaurants with outdoor seating in the B-1(c), B-1(g) and B-2 zoning districts.

DEPARTMENT: Planning

CONTACT INFORMATION: Christina Moon - 919-918-7325; Nick Herman - 919-929-3905; Marty Roupe - 919-918-7333

INFORMATION: At the June 23rd regular meeting, the Board of Aldermen opened a public hearing to consider text amendments to the Land Use Ordinance relating to parking requirements for restaurants with outdoor seating. The ordinance under consideration, if adopted, would modify the parking standards from one space per four outdoor seats to one space per eight outdoor seats within the three downtown zoning districts: B-1(c), B-1(g) and B-2 (Attachment B)

Agenda materials are available at the following link:

<https://carrboro.legistar.com/MeetingDetail.aspx?ID=388585&GUID=F75209F2-5E07-4F85-A309-5D9B50F8D7DB&Options=&Search>=.
Meeting minutes, also available at the link above, are included as Attachment C.
Following presentation of the ordinance and discussion, the Board of Aldermen requested additional information relating to travel mode behaviors and directed staff to prepare and distribute questionnaires to restaurants with outdoor seating to determine if outdoor diners are more likely to walk or bicycle to a restaurant than their indoor counterparts.

Staff have delivered outdoor dining surveys to twenty-one restaurants in the downtown area and have, to date, received more than three hundred completed responses. During conversations with restaurant owners, staff identified a metric which may provide additional insight into diner behavior and the relationship between location, outdoor seating and parking demand. Staff would like to pursue this, and requests that the Board of Aldermen further continue the hearing to November 24th.

Agenda Date: 10/6/2015 **File Type:**Agendas

In Control: Board of Aldermen

Version: 1

FISCAL & STAFF IMPACT: Minimal staff impacts are anticipated in relation to continuing consideration of the proposed text amendments.

RECOMMENDATION: Staff recommends that the Board of Aldermen consider the resolution (Attachment A) to continue the public hearing until November 24, 2015.

Attachment A

A RESOLUTION CONTINUING THE PUBLIC HEARING TO CONSIDER TEXT AMENDMENTS TO THE LAND USE ORDINANCE RELATING TO THE PARKING REQUIREMENTS FOR OUTDOOR USES FOR RESTAURANTS
Draft Resolution No.

WHEREAS, an amendment to the text of the Carrboro Land Use Ordinance has been proposed, which amendment is described or identified as follows: AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO MODIFY PROVISIONS RELATING TO PARKING REQUIREMENTS ASSOCIATED WITH OUTDOOR USES FOR LAND USE CLASSIFICATION 8.000 IN CERTAIN ZONING DISTRICTS; and

WHEREAS, the Board directed staff to collect information relating to the travel modes of restaurant patrons choosing outdoor dining; and

WHEREAS, as part of the survey process staff has identified additional questions for restaurant owners to assist with the determination of appropriate parking standards.

NOW, THEREFORE BE IT RESOLVED, that the Carrboro Board of Aldermen continues the public hearing on the proposed amendment until November 24, 2015.

This the 6th day of October 2015.

AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO MODIFY PROVISIONS RELATING TO PARKING REQUIREMENTS ASSOCIATED WITH OUTDOOR USES FOR LAND USE CLASSIFICATION 8.000 IN CERTAIN ZONING DISTRICTS

DRAFT 6-10-2015

THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO HEREBY ORDAINS:

Section 1. Section 15-291(g), Part II Parking Requirements of the Carrboro Land Use Ordinance is amended by adding the following:

8.200 : 1 space for every 8 outdoor seats

Section 2. This ordinance shall become effective upon adoption.

(l) All data service provider facilities shall meet the applicable lighting requirements established in section 15-242.5.

(m) The recipient of the permit for data service provider facilities shall submit to the Zoning Administrator written verification that the facility is being utilized within thirty (30) days of receipt of a written request for such verification. Data service provider facilities which are not used for a period of 6 months or more shall be removed by the recipient of the permit or subsequent permit holder within 90 days thereafter.

Section 4. Section 15-147 Use of the Designation Z, S, C, in Table of Permissible Uses is amended by adding a new subsection (n) that reads as follows:
(n) Notwithstanding the foregoing, the permit requirement for use classification 15.750 data service provider facilities shall be determined by the supplementary use regulations in Section 15-176.6.

Section 5. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 6. This ordinance shall become effective upon adoption.

This the 23rd day of June, 2015

The motion carried by the following vote:

Aye: Mayor Lavelle, Alderman Chaney, Alderman Gist, Alderman Haven-O'Donnell, Alderman Johnson, Alderman Seils and Alderman Slade

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PUBLIC HEARING ON LAND USE ORDINANCE AMENDMENTS TO MODIFYTHE PRESUMPTIVE PARKING REQUIREMENT FOR RESTAURANTS WITH OUTDOOR SEATING

The purpose of this item is for the Board of Aldermen to consider amending the Land Use Ordinance to modify the presumptive parking requirements for restaurants with outdoor seating in the B-1(c), B-1(g) and B-2 zoning districts.

Tina Moon, the Town's Planning Administrator, provided the staff report.

Nathan Milian, property manager for Carr Mill Mall, urged the Board to refrain from adopting the proposed amendment until the parking study was completed and presented the Town Clerk with materials for the record.

Mike Benson, owner of Southern Rail, stated that Carrboro has been growing and that the parking issues are a direct result. He stated that the proposed amendment is a good thing.

Alderman Johnson stated that the advisory boards recommended that the Board wait to act on the proposed amendment until the Parking Study begins.

Alderman Gist stated that she would like to see a survey completed to see if people are biking or walking to outdoor seating. She asked for the parking study to include such a survey.

Alderman Seils stated that it makes sense to continue the public hearing to include a more comprehensive process.

Alderman Slade stated that it makes sense to consider this item for after the parking study and that the Transportation Advisory Board supports this amendment with the caveat of waiting to see if the Parking Study data backs it up. He also asked for clarification from the Nathan Milian (seated in the audience) regarding if "they are litigating the Town" upon which time Mr. Milian nodded to reject that statement and Alderman Slade continued that it would be ironic if Mr. Milian was litigating and wanted to discontinue the study since part of the reason for the Parking Study was to respond to Carr Mill Mall's parking complaint.

Trish McGuire, the Town's Planning Director stated that staff will try to accomplish returning this item to the Board on September 22, 2015 for further discussion.

MOTION WAS MADE BY ALDERMAN SEILS, SECONDED BY ALDERMAN CHANEY TO CONTINUE THIS PUBLIC HEARING UNTIL SEPTEMBER 22, 2015. VOTE: AFFIRMATIVE ALL.

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ENERGY AND CLIMATE ACTION PLANNING TASK FORCE REPORT

The purpose of this item was for the Energy and Climate Action Planning Task Force to present its recommendations.

Randy Dodd, the Town's Environmental Planner, provided an introduction to the report.

Members of the Taskforce were present to provide the report and discuss their recommendations.

Alderman Johnson asked the Town Manager to look into a position of a sustainability coordinator in next year's budget and that interns are used in the interim. She stated that it could be a good idea for the members to meet with the Affordable Housing Taskforce to speak about affordability issues. She asked for shared parking to be looked into for car/vanpool parking. She encouraged staff to work with the school system to have more bike to work and school events. She encouraged the Taskforce to work with school groups that may be interested in assisting.

Alderman Haven-O'Donnell asked the Town Attorney to review the Town's authority to limit idling in the Town. She stated that the Town is looking into the potential to partner with a stormwater utility. She stated that she approves of an extension of their work.

Alderman Chaney suggested a lunch-and-learn event to help promote the goals of the Taskforce. She suggested that the final plan be very clear that the Town would like to prioritize subsidies to barriers for low-income communities so all have equal access to creating a healthy community. She encouraged

Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number: 15-0319

Agenda Date: 10/6/2015 **File Type:** Agendas

In Control: Board of Aldermen

Version: 1

TITLE:
A Public Hearing on the Temporary Street Closing Permit Application for the Saint Paul AME Church 5K

PURPOSE: The purpose of this item is to receive public input on the Street Closing Permit Application submitted by the Saint Paul AME Church for the temporary closing and usage of streets from 9:00 AM to 10:00 AM on Saturday, March 5th, 2016 to accommodate the *Saint Paul AME Church 5K*.

DEPARTMENT: Public Works

CONTACT INFORMATION: JD Freeman, 919-918-7427

INFORMATION: This is the second year for this event. Proceeds will go to the Saint Paul AME Church located at 101 Merritt Mill Road in Chapel Hill, with ten percent of the proceeds being divided between Club Nova and Table. This event coincides with a church festival that includes children's activities geared towards fitness and healthy lifestyles. The festival is open to the public. The event coordinator, Anissa McLendon, has submitted a Street Closing Permit Application for the temporary closing and usage of the following streets on Saturday, March 5th, 2016 from 9:00 AM to 10:00 AM:

1. Old Fayetteville Road from McDougle School entrance to Hillsborough Rd
2. Hillsborough Rd from Old Fayetteville Rd to Lorraine St
3. Lorraine St from Hillsborough Rd to Carol St
4. Carol St from Lorraine St to Old Fayetteville Rd
5. Old Fayetteville Rd from Carol St to McDougle School entrance

Streets will remain open to traffic during the event. Drivers may experience intermittent interruptions due to runners crossing streets and traffic control by police, public works, and race organizers. Attached is a map of the event.

In accordance with Section 7-19 of the Town Code, a Public Hearing to receive public input prior to issuing a Street Closing Permit is required for this particular event.

Section 7-23 of the Town Code states that permits for road races may be issued only if such event will benefit a non-profit organization based in or providing services in Orange County. This event meets this requirement as proceeds for the event are benefiting organizations based in Orange County.

The applicant has provided Public Works with the required insurance for the event.

FISCAL & STAFF IMPACT: The applicant will be responsible for all costs incurred by Public Works and Police to facilitate this event. The applicant will be sent an itemized bill for the final costs incurred by Police and Public Works. The applicant has paid the application fee.

This event will require an estimated nine hours of staff time (excluding planning) for Public Works and Police staff to provide traffic control. Public Works and Police spend about 1300 hours annually on special events, both Town and privately sponsored events.

RECOMMENDATION: Staff recommends that the Board approve the attached resolution for the temporary closing and usage of the following streets in order to accommodate the *Saint Paul AME Church 5k* under the following stipulations:

1. Applicant shall distribute flyers of notification, to persons occupying property abutting the streets where the event is to take place, of the contents of any resolution passed.
2. Applicant will be responsible for all costs incurred by Public Works and Police to facilitate this event. Applicant will be sent an itemized bill for the final costs incurred by Public Works and Police.

STREET CLOSING PERMIT APPLICATION

CONCERNING THE USE OF STREETS AND PUBLIC RIGHT-OF-WAY FOR STREET FAIRS, FESTIVALS, CARNIVALS, AND OTHER PUBLIC EVENTS

EVENT: St. Paul Village Community Walk/5K Run

EVENT SPONSOR: St. Paul AME Church

IS THE SPONSOR A: ✓ NON-PROFIT _____ FOR PROFIT _____ OTHER: _____

ANY OTHER INFORMATION ABOUT SPONSOR OR EVENT:
Fourth annual event held at McDougle School; route on 3 area roads.

EVENT COORDINATOR INFO:
NAME: Anissa McLendon
ADDRESS: 110 Alabama Ave, Carrboro, NC
TELEPHONE NUMBER: 919-932-5321

PROPOSED DATE AND TIME PERIOD PROPOSED FOR CLOSING:

DATE: March 5, 2016 Time Period: From: 9am
RAIN DATE: _____ To: 10am

APPROXIMATE NUMBER OF PERSONS EXPECTED TO ATTEND THE EVENT: 300-350

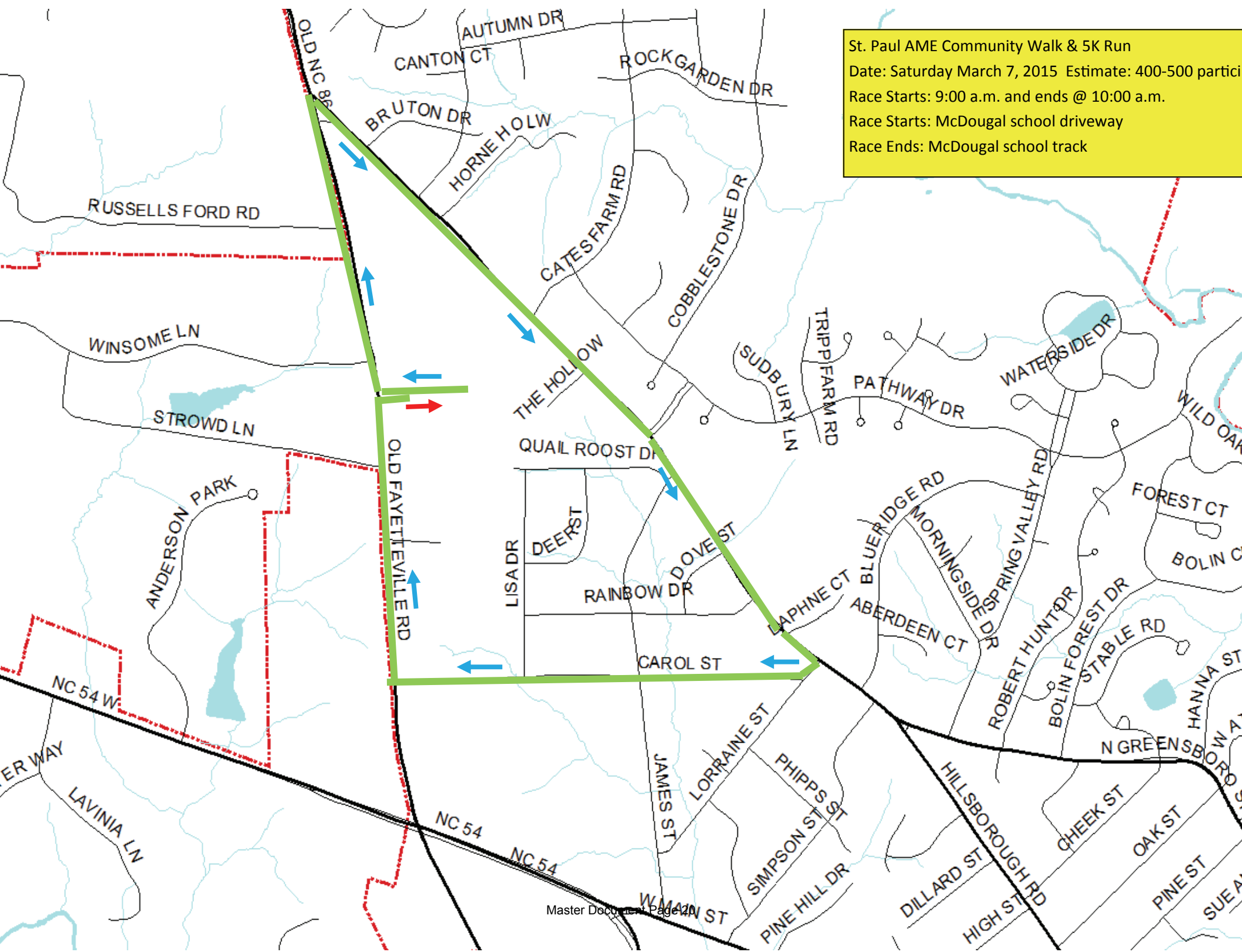
ARE ANY SPECIFIC SERVICES REQUESTED OF THE TOWN? YES ✓ NO _____
(traffic control may be required, and event organizers may be required to reimburse the Town for any related expenses):

If YES, specify
Police and Public Works Departments to assist with traffic controll on Old Fayetteville and Hillsborough Roads and Carol Street.

ATTACH A SKETCH SHOWING:
- *Area where event is to take place* starts at McDougle School
- *Any streets to be closed or obstructed*
- *Any barriers or traffic control devices to be erected*
- *Location of any concession stand, booth or other temporary structures*
- *Location of proposed fences stands, platforms, stages, benches or bleachers*

OTHER INFORMATION: _____

INSURANCE INFORMATION: Church Mutual Insurance Company
3000 Schuster Lane, Merrill, WI 54452
1-800-554-2642


St. Paul AME Community Walk & 5K Run
Date: Saturday March 7, 2015 Estimate: 400-500 partici
Race Starts: 9:00 a.m. and ends @ 10:00 a.m.
Race Starts: McDougal school driveway
Race Ends: McDougal school track
OLD NC 86
AUTUMN DR
CANTON CT
ROCK GARDEN DR
BRUTON DR
HORNE HOLW
RUSSELLS FORD RD
CATESFARM RD
COBBLESTONE DR
WINSOME LN
THE HOLLOW
SUDBURY LN
TRIPP FARM RD
PATHWAY DR
WATERSIDE DR
WILD OAK
STROWD LN
QUAIL ROOST DR
OLD FAYETTEVILLE RD
ANDERSON PARK
LISA DR
DEER ST
DOVE ST
RAINBOW DR
BLUE RIDGE RD
MORNINGSIDE DR
SPRING VALLEY RD
FOREST CT
BOLIN C
DAPHNE CT
ABERDEEN CT
ROBERT HUNT DR
BOLIN FOREST DR
STABLE RD
HANNA ST
CAROL ST
NC 54 W
N GREENSBORO
ER WAY
LAVINIA LN
NC 54
JAMES ST
LORRAINE ST
PHIPPS ST
SIMPSON ST
HILLSBOROUGH RD
CHEEK ST
OAK ST
PINE ST
PINE HILL DR
DILLARD ST
HIGH ST
W MAIN ST

A RESOLUTION AUTHORIZING THE TEMPORARY CLOSING AND USAGE OF THE FOLLOWING STREETS TO ACCOMMODATE THE SAINT PAUL AME CHURCH 5K

Section 1. The following streets shall be temporarily used Saturday, March 5th, 2016 from 9:00 to 10:00 AM for the Saint Paul AME Church 5K. This event is to be held in accordance with the permit issued by the Board of Aldermen pursuant to Article III of Chapter 7 of the Town Code.

1. Old Fayetteville Road from McDougle School entrance to Hillsborough Rd
2. Hillsborough Road to from Old Fayetteville Rd to Lorraine St
3. Lorraine St from Hillsborough Rd to Carol St.
4. Carol St from Lorraine St to Old Fayetteville Rd
5. Old Fayetteville Rd from Carol St. to McDougle School entrance.

Section 1. The Town shall supply the appropriate traffic control devices to give notice of the temporary traffic controls.

Section 2. No person may operate any vehicle contrary to the traffic control devices installed in accordance with Section 2 of this resolution.

Section 3. Applicant shall distribute flyers of notification, to persons occupying property abutting the streets where the event is to take place, of the contents of any resolution passed.

Section 4. Applicant will be responsible for all costs incurred by Police and Public Works to facilitate this event. Applicant will be sent an itemized bill for the final costs incurred by Police and Public Works.

Section 5. The Event Coordinator will be responsible for notifying Central Communications when the street is closed and when it is reopened to vehicular traffic.

Section 6. This resolution is contingent on the applicant providing proper liability insurance to the Town at least 30 days prior the event.

Section 7. This resolution shall become effective upon adoption.

Agenda Item Abstract

File Number: 15-0342

Agenda Date: 10/6/2015 **File Type:** Agendas

In Control: Board of Aldermen

Version: 1

TITLE:
Discussion of Orange County Library Site Selection

PURPOSE: The purpose of this item is to provide the Board of Aldermen with an opportunity to discuss the Board of County Commissioners interest in working with the Town to locate the Southern Branch Library on Town property. A resolution that the Board may use to specify follow-up actions is provided.
DEPARTMENT: Planning and Manager's Office

CONTACT INFORMATION: Trish McGuire, pmcguire@townofcarrboro.org <mailto:pmcguire@townofcarrboro.org>, 919-918-7327; Julie Eckenrode, jeckenrode@townofcarrboro.org, 919-918-7308

INFORMATION: On September 15th, the Board of County Commissioners discussed a report from County staff related to the site selection process for the Southern Branch Library, following from a staff report in June and due diligence that continued during the summer break. A copy of the agenda materials for the Commissioners' meeting was distributed via email by the Town Clerk on Friday afternoon, September 11th and is included as an attachment (*Attachment B*).

Other background materials related to discussion of the 203 S. Greensboro Street property as a possible library site are available as follows:

May 7, 2013	Board of Aldermen Agenda Item and Minutes <https://carrboro.legistar.com/MeetingDetail.aspx?ID=233184&GUID=7A5D7EC8-2DE0-43FA-AC13-54B812A4EBA3&Options=&Search>= or *Attachment C and D*
June 18, 2013	Board of County Commissioner staff memo - *Attachment E*

Orange County webpage on project January 2015 to present: <http://www.orangecountync.gov/departments/library/southern_site_updates.php>
Orange County webpage on project prior to January 2015: <http://www.orangecountync.gov/departments/library/southern_branch_library_project.php>

FISCAL & STAFF IMPACT: None anticipated in association with discussing the item and providing direction to the Town Manager.

RECOMMENDATION: It is recommended that the Board of Aldermen accept the agenda materials and provide direction to the Town Manager regarding any follow-up, if of interest (draft resolution included as *Attachment A*).

A RESOLUTION PROVIDING TOWN MANAGER WITH DIRECTIONS RELATED TO ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS INTEREST IN SITING SOUTHERN BRANCH LIBRARY ON TOWN PROPERTY

WHEREAS, the Town of Carrboro has had a longstanding interest in the siting a new Orange County branch library in Town; and

WHEREAS, the Board of County Commissioners (BOCC) has received a report from its staff that identifies Carrboro Town property at 203 S. Greensboro Street as a preferred site for the new library; and

WHEREAS, the BOCC has directed its Manager, Bonnie Hammersley, to communicate with Town Manager, David Andrews regarding site acquisition options.

NOW, THEREFORE, BE IT RESOLVED that the Board of Aldermen of the Town of Carrboro

1.

2. .

This the 6th day of October in the year 2015.

ORANGE COUNTY
BOARD OF COMMISSIONERS

ACTION AGENDA ITEM ABSTRACT
Meeting Date: September 15, 2015

Action Agenda Item No. 8-a

SUBJECT: Southern Branch Library Siting Criteria, Process Update

DEPARTMENT: Manager's Office, Asset Management Services (AMS), Library, Planning

PUBLIC HEARING: (Y/N) No

ATTACHMENT(S):
1) July 17, 2015 Memorandum from Manager

INFORMATION CONTACT:
Bonnie Hammersley, (919) 245-2306
Jeff Thompson, (919) 245-2658
Lucinda Munger, (919) 245-2528
Michael Harvey, (919) 245-2597

PURPOSE: To receive an update on the Southern Branch Library siting process and provide staff direction regarding next steps.

BACKGROUND: On September 18, 2012 the Board of Orange County Commissioners (BOCC), in conjunction with the Carrboro Board of Aldermen, approved a set of guiding principles and a comprehensive site selection criterion for potentially locating a Southern Branch of the Orange County Library (hereafter "the Branch"). Since that time the BOCC and the Carrboro Board of Aldermen have submitted several properties for review by County staff consistent with the approved Branch siting process. Attachment 1, "July 17, 2015 Memorandum from Manager" outlines these criteria, the sites that have been suggested to staff study, and the sites currently under study:

1) 101 N. Merritt Mill (St. Paul's AME Zion Church)
2) 200 E. Main Street (Municipal Parking – "Armadillo Grill" site)
3) 203 S. Greensboro (Municipal Parking owned by Carrboro)
4) 311 E. Main Street (Fire & Hearth property assembly)

Staff has worked closely with Carrboro staff in evaluating pertinent land use information. The Board may recall that the initial due diligence processes exhaust readily available and cost free information prior to moving into the preliminary phase assessments requiring professional services such as environmental, traffic, geotechnical, and cultural/archeological studies.

The full Preliminary Phase Analysis located at www.orangecountync.gov\AMS\librarysite, evaluates the four sites through the BOCC adopted criteria. The highlights of this analysis are as follows:

Fire & Hearth Site. This site is challenged by its need to aggregate parcels of different ownership to be large enough for the Branch site. The majority of the property is either not for

sale or under contract for sale. Additionally, the property has significant access and potential traffic challenges. Staff does not recommend the County pursue further due diligence at this time.

St. Paul AME Zion Church. The congregation is planning to relocate the church to the Rogers Road Community. This site is too small for an adequate branch library and its location would require off-site parking and designed congestion mitigation efforts. Staff does not recommend the County pursue further due diligence at this time.

200 E. Main Municipal Parking Lot ("Armadillo Grill" site). This was the site of the Carrboro Arts and Innovation Center proposal presented to the Board of Carrboro Aldermen in February, 2015. The site is compact, constrained on the east boundary by the railroad, and would not support a Branch Library with adequate parking. Staff does not recommend further preliminary phase study within the criteria process.

203 S. Greensboro Street. This site is owned by Carrboro and was offered for study by the Town Board of Aldermen. The site is adequately sized to support a Branch Library with on-site parking. It offers reasonable access, visibility, and is zoned appropriately for a library purpose. Staff does recommend further preliminary phase study within the criteria process.

At the invitation of Carrboro, County staff continues to participate in a parallel process of exploratory discussions with Kidzu, The Arts Center, and Carrboro regarding the concept of the Branch Library being co-located with these groups as part of a Carrboro Arts and Innovation Center ("CAIC").

SOCIAL JUSTICE IMPACT: The Southern Branch Library will 1) provide more convenient and accessible access to Orange County Library services; 2) further the Library's mission to support and enrich the residents in northern Orange County; and 3) addresses the following three Orange County Social Justice Goals:

- ***GOAL: FOSTER A COMMUNITY CULTURE THAT REJECTS OPPRESSION AND INEQUITY***
  The fair treatment and meaningful involvement of all people regardless of race or color; religious or philosophical beliefs; sex, gender or sexual orientation; national origin or ethnic background; age; military service; disability; and familial, residential or economic status.

- ***GOAL: ENSURE ECONOMIC SELF-SUFFICIENCY***
  The creation and preservation of infrastructure, policies, programs and funding necessary for residents to provide shelter, food, clothing and medical care for themselves and their

- ***GOAL: ENABLE FULL CIVIC PARTICIPATION***
  Ensure that Orange County residents are able to engage government through voting and volunteering by eliminating disparities in participation and barriers to participation.

FINANCIAL IMPACT: There is no financial impact associated with the analysis of these sites to this point of the preliminary phase of the analysis. Should be BOCC ask that preliminary phase activities continue that involve more in-depth study, these estimated costs would range from $10,000 to $15,000 per site. Adequate funds are available within the appropriated Southern Library capital project for these in-depth studies.

RECOMMENDATION(S): The Manager recommends that the Board allow the Manager to initiate discussions with the Carrboro Town Manager on property acquisition options for the 203 S. Greensboro property.

Attachment 1

ORANGE COUNTY
NORTH CAROLINA

MEMORANDUM

Date: July 17, 2015

To: Board of Orange County Commissioners

From: Bonnie Hammersley, Orange County Manager

Subject: Southern Branch Library and CAIC Discussions

The purpose of this memo is to provide a summary of the discussion from meetings that occurred on the Carrboro Arts and Innovation Center (CAIC) and the Southern Branch Library project for the Board of Orange County Commissioners (BOCC) and Town of Carrboro Board.

On July 7, 2015, the County Manager, Deputy County Manager, County Asset Management Services Director, Town of Carrboro Manager, and the Town of Carrboro Planning Director met to discuss the CAIC and the status of the Southern Branch Library sighting process. The County reiterated that it will continue to participate in the CAIC process with the understanding that the evaluation of sites for a stand-alone Southern Branch Library will run on a parallel track. At the next CAIC meeting (July 20), County staff will provide an update regarding the County's role in the CAIC as well as the status of the library siting process. In an effort to keep the Town of Carrboro Aldermen and the BOCC informed it was decided that County staff would provide a chronological list of events related to the Southern Branch Library from 2010 to present (Attachment A). Also, the managers agreed to expand efforts to keep their boards informed throughout the process of any changes as they occur.

On July 8, 2015, the BOCC Chair, the Town of Carrboro Mayor, the Town Manager and the County Manager met to discuss the recent concerns regarding the communication to the Town of Carrboro Aldermen on CAIC and the Southern Branch Library project. The Mayor and the Chair asked the managers to continue to share routine as well as sensitive information with the Boards throughout the duration of the project. A discussion of the next steps in the process took place and is summarized below.

The County staff is currently evaluating a number of sites from the County's list of potential sites (Attachment B). This attachment includes all the sites evaluated by the County; the strikethroughs constitute sites that do not meet the specified criteria adopted by the BOCC on September 18, 2012:

- Visibility
- Site Capacity, Parking
- Access (pedestrian, cycling, vehicular, public transportation)
- Alignment with Planning Tools and Comprehensive Plan
- Acquisition Considerations (lease vs. purchase)
- Centrality of Location
- Physical Site Conditions, Allowances and Constraints
- Site Cost and Availability
- Community Preference
- Advantages of Partnerships

The County staff intends to narrow the evaluated sites down to the top two (2) sites and present to the BOCC in a "Staff Report" for the September 1, BOCC next regularly scheduled meeting. The County staff will solicit input from the Town of Carrboro staff as these remaining sites are further evaluated so that the Town of Carrboro's interests and concerns are considered and presented in the Staff Report.

If you have questions, please do not hesitate to contact me. Thank you.

cc: Town of Carrboro Aldermen

Attachment A: Southern Branch Library Project Chronology

2010-2012 - Evaluation and ultimate BOCC rejection of 210 Hillsborough Street location as a Southern Branch Library site.

September, 2012 - BOCC adopted site selection criteria.

December, 2012 - Letter from Carrboro Manager to the County Manager suggesting 3 sites be evaluated.

May, 2013 - Letter from Carrboro Manager to the County Manager suggesting 4 additional sites be evaluated.

November, 2013 - BOCC authorized staff to begin primary phase 1 due diligence on 120 Brewer Lane site.

January, 2014- BOCC authorized staff to begin the public input work as part of the primary phase due diligence on 120 Brewer Lane site.

May, 2014 - Staff report to BOCC updating the primary phase due diligence and public input process for the 120 Brewer Lane site.

October, 2014 - Staff report to joint meeting of BOCC and Carrboro Board of Aldermen on progress of 120 Brewer Lane Memorandum of Understanding and Development Agreement negotiations.

June, 2015 - Southern Branch Library site criteria update staff report to BOCC CAIC Steering Committee update reports to BOCC and Carrboro Board of Aldermen.

Attachment B: Potential Southern Branch Library Sites Submitted for Evaluation

~~1. 210 Hillsborough Street, Carrboro~~

~~2. 1128 Hillsborough Street, Carrboro (Shetley Property adjacent to MLK Park)~~

~~3. 401 Fidelity, Carrboro (Adjacent to Westwood Cemetery)~~

~~4. 301 West Main Street (Carrboro Town Hall)~~

~~5. 120 Brewer Lane, Carrboro (Butler Property)~~

6. 203 S. Greensboro, Carrboro (Municipal Parking Lot)

~~7. 201 N. Greensboro, Carrboro ("CVS" site)~~

~~8. 300 E. Main Street, Carrboro~~

~~9. Century Center, Carrboro~~

~~10. 501/503 Franklin Street, Chapel Hill~~

11. 311 E. Main, Carrboro (Fire & Hearth Assembly)

12. 200 E. Main Street, Carrboro (Municipal Parking - "Armadillo" Property)

13. 101 N. Merritt Mill, Carrboro (St.Paul AME Zion Church Property)

Town of Carrboro

Town Hall
301 W. Main St.
Carrboro, NC 27510

Agenda Item Abstract

File Number: 13-0263

Agenda Date: 5/7/2013 **Version:** 1 **Status:** Other Matters

In Control: Board of Aldermen **File Type:** Abstract

Agenda Number: 2.

TITLE:
Discussion of Potential Sites for Southern Branch of Orange County Library

PURPOSE: The purpose of this agenda item is for the Board of Aldermen to receive information requested about four additional potential library sites.

DEPARTMENT: Town Manager, Planning

CONTACT INFORMATION: Matt Efird (918-7314); Trish McGuire (918-7327)

INFORMATION: Over the past year, there has continued to be a number of official actions and discussions of a potential Orange County Library branch site in Carrboro. A brief list of the actions that lead directly to the formation of tonight's agenda item is as follows:

- At their June 14, 2012 meeting, the BOCC discussed modifications to the criteria based on comments by the Board of Aldermen. At that time, Town Staff began developing a list of potential library sites and evaluating those sites based on the criteria suggested by both the Board of Aldermen and BOCC.
- In August 2012, staff met with several Board of Aldermen members to discuss the potential sites and receive feedback on the evaluation process.
- On September 18, 2012, the BOCC approved the siting criteria and requested that the Town initiate public solicitation and review of properties for the southern branch of the Orange County library property based on the approved criteria.
- On November 20, 2012, Town Staff presented three potential sites for consideration by the Board of Aldermen. The sites were 1128 Hillsborough Rd. (adjacent to MLK Park), 401 Fidelity St. (cemetery property) and 301 W. Main St. (Town Hall). The Board of Aldermen approved submitting all three sites for further consideration by the Orange County BOCC, and approved keeping the process open for additional sites.
- On April 9, 2013, Orange County staff presented preferred sites (1128 Hillsborough (primary) and 401 Fidelity (secondary)) to the Board of Aldermen. The Board requested additional information from County staff and asked Town staff to evaluate four additional sites.

Town staff evaluated the following sites in response to the April 9th, 2013 meeting:

- 120 Brewer Lane (Butler Property)
- 203 S. Greensboro St. (Town-owned parking lot)
- 201 N. Greensboro St. (CVS property)

- 300 E. Main St.

A comparison of these additional potential sites based on the same criteria the previous sites were evaluated on is included as an attachment. The identified sites are smaller than the sites previously evaluated, and differ in that previous sites were evaluated based on the ability to build a freestanding library, whereas the sites currently under evaluation have had proposed or are currently permitted for commercial or mixed-use projects, which potentially could accommodate the library site. All four sites are located in downtown Carrboro and are in close proximity to Chapel Hill Transit stops. All sites are connected to downtown via sidewalks and bike lanes (and/or bike paths). The sites are proximate to schools and within a short distance of retail establishments. The sites offer an opportunity to create a "beneficial joint development". All of the sites are at least partially zoned appropriately for a library use.

FISCAL & STAFF IMPACT: There is no fiscal impact associated with this item.

RECOMMENDATION: Staff recommends that the Board of Aldermen receive the report and provide staff with direction on how to proceed.

	120 Brewer Ln.	203 S. Greensboro St.	201 N. Greensboro St.	300 E. Main St.
PRELIMINARY PHASE–TECHNICAL SITE REVIEW AND ASSESSMENT				
Visibility				
Visible from Street	Visible from Brewer/Libba Cotton Bike Path	Visibile from Greensboro/Roberson/Carr	Visible from Weaver/Greensboro	Visible from Main/Franklin/Rosemary/Brewer
Classification of street where property will be accessed from	Subcollector	Arterial (Greensboro) / Local (Roberson) / Subcollector (Carr)	Arterial (Weaver) / Local (Short)	Arterial
Visual Appeal	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Site Capacity				
Able to provide comprehensive library services to all the residents of southern Orange County	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Meets Minimum Acerage	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Space for building and on-site parking	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Adequate Utilities and Availability	Yes	Yes	Yes	Yes
Space for future expansion (building to allow for additional library services, parking, etc.) to serve all the residents of southern Orange County.	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Space to accommodate the necessary setbacks, road expansions and other site amenities	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Access				
Accessability for Pedestrians	0.3 miles from downtown Carrboro, approximatley 5 minutes walk time. Property abuts Libba Cotton Bike Path. Sidewalks and bike lanes exist and connect the property to downtown.	Less than 0.1 miles from downtown Carrboro, approximatley 1 minute walk time. Sidewalks and bike lanes exist and connect the property to downtown.	Less than 0.1 miles from downtown Carrboro, approximatley 1 minute walk time. Sidewalks and bike lanes exist and connect the property to downtown.	0.3 miles from downtown Carrboro, approximatley 5 minutes walk time. Sidewalks and bike lanes exist and connect the property to downtown.
Accessability for Vehicles	Access would be from Brewer Lane or through the 300 E. Main Development. Proximity to public parking at 300 E. Main, 203 S. Greensboro, and corner of Roberson/Main	Access could be from Roberson or Carr.	Site plans include access from Weaver and Greensboro.	Access is availble from Main Street, and Boyd Street
Accessability for public transportation	CHT Stop for CW/F/J Route located at 300 E. Main St (connected to this property by Padgett Ln. Also, property abuts Libba Cotton Bikeway	CHT Stop for J Route located across street	CHT Stop for F Route located Greensboro St.@ Fitch Lumber. CHT Stop for CW Route located @ Weaver Street Market	CHT Stop for CW/F/J Route located on-site
Design capacity and existing traffic load of roadway proposed to access site	3000 (est. cap.) / 2000 (est. vol.)	13700 (cap.) / 12000 (vol.)	13700 (cap.) / 11000 (vol.)	27400 (cap.) / 17000 (vol.)
Alignment with Planning Tools (Comprehensive Plan)				

	120 Brewer Ln.	203 S. Greensboro St.	201 N. Greensboro St.	300 E. Main St.
Alignment with planning tools applicable for the subject property (County Comprehensive Plan, adopted Small Area Plans, Strategic Plans, etc.)	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Lease Vs. Purchase				
Analysis of long-term viability of site	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Availability of Property for Lease	This property has a permit for a planned development. Space within that development could be purchased or leased by Orange County	This property could be leased to Orange County by the Town	Unknown	This property has a permit for later phases of a planned development. Space within that development could be pruchased or leased by Orange County
Centrality of Site				
Existing and potential future population in given area	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Growth and development opportunities/constraints in a given area	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Proximity to Schools	0.2 Miles from Community Schools for People Under Six, 1.2 miles from Northside Elementary	0.6 Miles from Carrboro Elementary, 0.7 miles from Frank Porter Graham Elementary	0.5 Miles from Carrboro Elementary	1.0 miles from Northside Elementary
Proximity to Retail	Closest retail opportunities are in 300 E. Main development. The planned development for this site does include commercial space.	Property is located in Downtown Carrboro commercial district, and the potential exists for commercial construction as a part of the library site	Property is located in Downtown Carrboro commercial district	The planned development for this site includes commercial space, and is located within the Downtown Carrboro commercial district and in proximity to Franklin Street
Proximity to Other Libraries	Existing branch library at Carrboro Cybrary (0.6 miles)	Existing branch library at Carrboro Cybrary (<0.1 miles)	Existing branch library at Carrboro Cybrary (<0.1 miles)	Existing branch library at Carrboro Cybrary (0.3 miles)
Site Conditions, Allowances, and Constraints				
The cost-benefit conclusions of physical, legal, and land-use allowances/constraints	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Technical and Environmental Assessments (Planning/Zoning, jurisdictional processes, etc.)	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Environmentally Sustainable (C&A, stormwater mgmt., buffers, energy "net zero capacity")	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Operationally Sustainable	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Defeats Obselescence	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Cost and Availability				
Cost for Site Acquisition	Unknown	Owned by the Town of Carrboro	Unknown	Unknown
Availability of Property for Lease	A project built at this site could include leased space for the County	This property could be leased to Orange County.	A project built at this site could include leased space for the County	This property is currently leasing space.
Analysis of long-term viability of site	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			

	120 Brewer Ln.	203 S. Greensboro St.	201 N. Greensboro St.	300 E. Main St.
Timeframe for development of site	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
Terms for site control necessary for development of site	THIS CRITERIA WILL BE EVAULATED BY ORANGE COUNTY STAFF			
PRIMARY PHASE-PUBLIC INPUT AND ASSESSMENT				
Community Preference				
Input from Elected Officials	THIS CRITERIA WILL BE EVALUATED IN A LATER PHASE			
Input from a broad cross-section of the area to be served	THIS CRITERIA WILL BE EVALUATED IN A LATER PHASE			
Orange County & Carrboro Friends of the Library	THIS CRITERIA WILL BE EVALUATED IN A LATER PHASE			
Partnerships				
Co-location with other private or public entity	Opportunity to develop jointly with The Butler development and increase commercial development in Carrboro and Orange County	Opportunity to develop site jointly with the Town of Carrboro	Opportunity to develop jointly with CVS project and increase commercial development in Carrboro and Orange County	Opportunity to develop jointly with later phases of 300 East Main development and increase commercial development in Carrboro and Orange County
Mutually beneficial joint development				
Enhances service possibilities				

WHEREAS, the Town Manager presented the FY 2013-14 Recommended Budget to the Board of Alderman on May 7, 2013; and,

WHEREAS, the Town is required by North Carolina General Statute 159-12(b) to hold a public hearing before adopting the budget ordinance;

NOW, THEREFORE, THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO HEREBY RESOLVES THAT,

The Board of Aldermen will hold a public hearing on Tuesday, May 21, 2013 at 7:30 p. m. in Town Hall Board Room to receive citizen comments on the Town of Carrboro Recommended Budget for 2013-14. Citizens are invited to make written or oral comments. Comments may be emailed to cwilson@townofcarrboro.org. The entire budget document may be viewed in the Town Clerk's Office Hall from 8:30 a.m. to 5:00 p.m. weekdays or on the Town website at www.townofcarrboro.org .

The motion carried by the following vote:

Aye: 7 - Mayor Chilton, Alderman Gist, Alderman Haven-O'Donnell, Alderman Johnson, Alderman Lavelle, Alderman Slade and Alderman Seils

Alderman Gist asked for staff to report back on the details of all "placeholder funding."

Alderman Haven-O'Donnell asked that staff prepare a report to the Board on the status of retiree health insurance during the fall of 2013.

MOTION WAS MADE BY ALDERMAN LAVELLE, SECONDED BY ALDERMAN HAVEN-O'DONNELL TO CANCEL THE BOARD OF ALDERMEN MEETING SCHEDULED FOR MAY 28. VOTE: AFFIRMATIVE ALL

****

DISCUSSION OF POTENTIAL SITES FOR SOUTHERN BRANCH OF ORANGE COUNTY LIBRARY

The purpose of this agenda item was for the Board of Aldermen to receive information requested about four additional potential library sites.

Matt Efird, the Assistant to the Town Manager, made the staff presentation. He presented the following sites in response to the April 9th, 2013 Board of Aldermen Meeting:

- 120 Brewer Lane (Butler Property)
- 203 S. Greensboro St. (Town-owned parking lot)
- 201 N. Greensboro St. (CVS property)
- 300 E. Main St.

Mayor Chilton stated that the Butler property is the most appealing site because of the significant economic development aspect associated with the location. He noted that the building, with its proposed

commercial and residential use, would also be a net positive for the Town and County tax base.

MOTION WAS MADE BY ALDERMAN SEILS, SECONDED BY ALDERMAN SLADE FOR TOWN STAFF TO PRESENT ALL FOUR PROPERTIES TO THE COUNTY NOTING THAT THE BOARD HAS A PREFERENCE FOR THE 120 BREWER LANE PROPERTY (BUTLER PROPERTY), FOR THE REASONS AS STATED BY THE MAYOR. VOTE: AFFIRMATIVE ALL

Alderman Seils requested information from the County on the intention behind the name change of the library to the "Southern Branch Library." Mayor Chilton stated that he will work with Sharmin Mirman to draft a letter to the chair of the board of commissioners to request clarification on the name change of the library.

****

UPDATE FROM THE TOWN ATTORNEY ON HB 150 AND VARIOUS ISSUES RELATED TO THE CONSTRUCTION OF DUPLEXES CONTAINING MORE THAN THREE BEDROOMS

The purpose of this item was to provide the Board with an update on HB 150 and respond to questions associated with duplexes and rental issues.

Mike Brough, the Town Attorney, updated the Board on HB 150.

Alderman Gist asked for the ordinance to prohibit parking outside of defined parking areas. She also mentioned that the town will need to look into on-street parking and further follow-up on inspection after the "mini dorms" have been constructed.

MOTION WAS MADE BY ALDERMAN HAVEN-O'DONNELL, SECONDED BY ALDERMAN GIST FOR STAFF TO SEND THE DRAFT ORDINANCE TO ADVISORY BOARDS AND TO SET A PUBLIC HEARING. VOTE: AFFIRMATIVE ALL

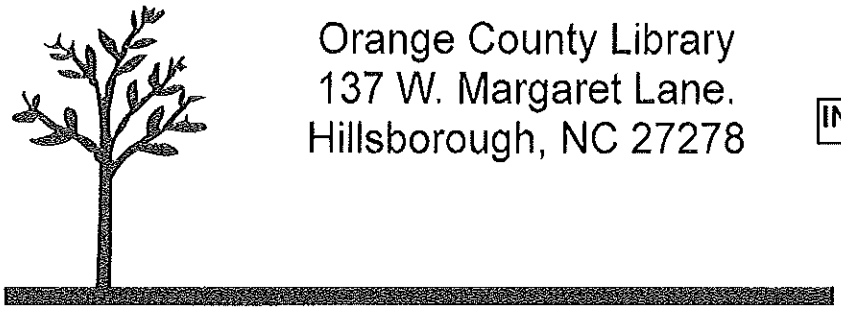
MOTION WAS MADE BY ALDERMAN SLADE, SECONDED BY ALDERMAN SEILS REQUESTING THAT STAFF ALSO LOOK INTO SETTING A CAP ON PARKING SPACES ALLOWED BY THE ORDINANCE. VOTE: AYES 4, NAYS 3 (GIST, HAVEN-O'DONNELL, CHILTON)

Alderman Gist also asked that current parking enforcement be looked into.

****

WEAVER STREET CLOSING

Alderman Slade suggested that the Board have a conversation about closing a portion of Weaver Street every Saturday morning.



Orange County Library
137 W. Margaret Lane.
Hillsborough, NC 27278

INFORMATION ITEM

To: Orange County Board of Commissioners
Frank Clifton, Manager
Michael Talbert, Assistant County Manager

From: Lucinda Munger, Orange County Library Director

Cc: Jeff Thompson, Asset Services Management, Director
Michael Harvey, Current Planning Supervisor, Planning Department
Andrea Tullos, Assistant Library Director

Subject: Future Southern Branch Site Selection Analysis

Date: June 18, 2013

To update the Board of County Commissioners (BOCC) on the activities and next steps associated with the Southern Branch Library Site selection analysis. In March 2013, staff presented the preliminary staff evaluation of Phase I, Technical Site Review and Assessment for the three (3) sites submitted by the Town of Carrboro to the County. At that meeting, the BOCC encouraged the Town of Carrboro to continue to submit sites for review. County staff attended the April 9, 2013 Town of Carrboro Board work session to present the Siting Criteria process update on the first three (3) sites and relevant BOCC comments from the March 2013 meeting.

On May 10th, 2013, the Manager received a memo from the Town of Carrboro submitting four (4) additional sites for review.

- 120 Brewer Lane
- 300 E Main Street
- 203 S Greensboro Street
- 201 N Greensboro Street

Over the next 3 months, staff intends to work on the first phase of the preliminary review - technical site assessment. On September 17, 2013, staff will present the analysis of these additional sites for BOCC feedback and direction.

Agenda Item Abstract

File Number: 15-0341

Agenda Date: 10/6/2015 **File Type:** Agendas

In Control: Board of Aldermen

Version: 1

TITLE:
Review of Parking Study Proposals - Responses to Town Request for Proposals

PURPOSE: The purpose of this item is to provide the Board with an opportunity to receive presentations from the three firms that submitted proposals in response to the Town's request and decide to award a contract for the project or take other action. A resolution specifying follow-up action is provided for the Board's use.
DEPARTMENT: Planning, Finance

CONTACT INFORMATION: Bergen Watterson, Transportation Planner - 919-918-7329, bwatterson@townofcarrboro.org, Patricia McGuire 919-918-7327, pmcguire@townofcarrboro.org; Christina Moon 919-918-7325, cmoon@townofcarrboro.org; Arche McAdoo 919-918-7439, amcadoo@townofcarrboro.org

INFORMATION: The Town released a Request for Proposals (RFP) for the Parking Study on August 20th (*Attachment B*). Following the Board's direction and considering that the RFP could yield more respondents than could reasonably be considered in an interview process involving the whole of the Board of Aldermen, the RFP included a provision that the top two proposals would be required to present their proposals. Three submittals were received by the deadline of September 10th and, while varying in approaches, all exhibit understanding of the project's goals, experience with comparable efforts and capacity to carry out the requested study. The Town is requesting that all three firms meet with the Board of Aldermen to present their proposals and provide other information that may assist the Board in determining how it wishes to proceed with the project.

The three proposals received were:

- JM Teague - $67,355
- Kimley-Horn - $163,530
- VHB - $73,000

For additional background information on the development of the parking study vision and RFP, please see materials from the following meetings:

November 12, 2013	February 11, 2014	April 21, 2015

Agenda <https://carrboro.legistar.com/View.ashx?M=A&ID=261239&GUID=CB9C3EF5-D685-4141-8622-

7D7AE61A83AE>
Minutes <https://carrboro.legistar.com/View.ashx?M=M&ID=261239&GUID=CB9C3EF5-D685-4141-8622-7D7AE61A83AE>Agenda <https://carrboro.legistar.com/View.ashx?M=A&ID=278065&GUID=E8AC0D05-F7B8-43C3-B25F-CF5F9790490A>
Minutes <https://carrboro.legistar.com/View.ashx?M=M&ID=278065&GUID=E8AC0D05-F7B8-43C3-B25F-CF5F9790490A>
Agenda <https://carrboro.legistar.com/View.ashx?M=A&ID=388576&GUID=CAB62CA9-BDB7-4AA9-9DE0-44258BF2403F>
Minutes <https://carrboro.legistar.com/View.ashx?M=M&ID=388576&GUID=CAB62CA9-BDB7-4AA9-9DE0-44258BF2403F>

Proposals from the three respondents are provided, in alphabetical order (*Attachments C, D, and E*).

FISCAL & STAFF IMPACT: The Board appropriated $75,000 in the current year's general fund budget for this project. This is sufficient to award a contract for two of the proposals. An additional $88,530 of budget appropriation would need to be made if the Board of Aldermen should desire to award a contract for the third proposal. If the Board elects to award a contract to the third proposal, an amendment to the budget ordinance is provided in Attachment A-2.

RECOMMENDATION: Staff recommends that the board review the proposals, receive presentations from the three firms, make a contract award to one of the firms, and authorize the Town Manager to negotiate and execute the contract. Should the Board not make a contract award, further direction for staff is requested.

A RESOLUTION AWARDING A CONTRACT FOR
A PARKING STUDY OF THE TOWN OF CARRBORO, NORTH CAROLINA

BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO THAT:

Section 1. The contract for a parking study in response to the RFP issued August 20, 2015 is awarded to _____ in an amount not to exceed $75.000.

Section 2. The Town Manager is authorized to negotiate and execute a contract with _____, and to amend or make changes in such contract provided they are consistent with the purposes and goals of the RFP and do not exceed the contract amount in Section 1.

Section 3. This resolution shall become effective upon adoption.

AMENDMENT TO ANNUAL BUDGET ORDINANCE FY 2015-16

WHEREAS, the Town Board of the Town of Carrboro on June 16, 2015 adopted annual budget ordinance number 16/2014-15 for the fiscal year beginning July 1, 2015 and ending June 30, 2016; and

WHEREAS, it is appropriate to amend certain budget accounts in the general fund to provide for increased revenues and expenses for the reasons stated.

NOW, THEREFORE, BE IT ORDAINED, that in accordance with authority contained in G.S. 159-15, the following revenue and expense accounts are amended as shown and that the total amount for the funds are herewith appropriated for the purposes shown:

ACCOUNT NAME	CURRENT BUDGET	INCREASE (DECREASE)	REVISED BUDGET
PARKING STUDY	$ 75,000.00	$ 88,530.00	$ 163,530.00
FUND BALANCE APPRIATION	$ 624,916.00	$ 88,530.00	$ 713,446.00

REASON: To provide additional funding for parking study.

Parking Study for the Town of Carrboro, NC

Request for Proposals

Planning Department

RFP #540-2016-01

Issue Date: August 20, 2015

Proposals Due: September 10, 2015, 5:00 p.m. EDT

Project Manager: Bergen Watterson

Table of contents

1 Purpose and Intent

The Town of Carrboro, North Carolina ("Town"), requests sealed proposals for consulting services to prepare a Parking Plan for the Town. These consulting services are to focus on two main tasks. First, to provide an analysis of how much parking is currently needed in the downtown area and how much parking will be needed in the next five to ten years. Second, to provide guidance on what the Town's role, if any, should be in providing and managing parking in the downtown area as well as evaluating what metrics to use for the Town's payment-in-lieu parking provision.

2 Introduction

Carrboro is a vibrant and densely developed town of approximately six square miles and 21,000 people, located in the Piedmont region of North Carolina. The Town is adjacent to the Town of Chapel Hill, home of the UNC flagship campus and includes among its residents sizable undergraduate and graduate student populations. Carrboro has high bicycle and transit commute mode shares. The Town has a long standing commitment to alternative transportation is evident by the Town's support of a fare-free transit system, extensive bicycle infrastructure, and Silver-level bicycle friendly community designation. The downtown core is a major destination for services, shopping and dining. It lies at the crossroads of two major north-south corridors and experiences significant congestion at peak hours, particularly during the evening peak.

Downtown destinations include two full-service grocery stores, two banks, rescue squad, fire department, police and other municipal departments, lumber yard, health center, numerous restaurants, shops, offices and services, a hotel, arts center, music venues, car repair businesses, and gas stations. It is a busy place throughout the day with lots of commerce; in the evening the town is active with people seeking restaurants and music venues. 'Pop-up' activities, such as parades, farmers markets, outdoor dining and performances spaces are regular occurrences.

Unlike many areas, Carrboro has almost no space for on-street parking. While the Town provides some public parking throughout the downtown, parking is primarily private and off-street and is reserved for specific uses. Satellite parking is permitted subject to certain criteria, and bicycle parking for most land uses has been a requirement since 2012.

3 Background

In 2000, the Town of Carrboro adopted, *Carrboro Vision 2020*, to guide decision-making and planning activities for the next twenty years. This policy document led to changes to the Land

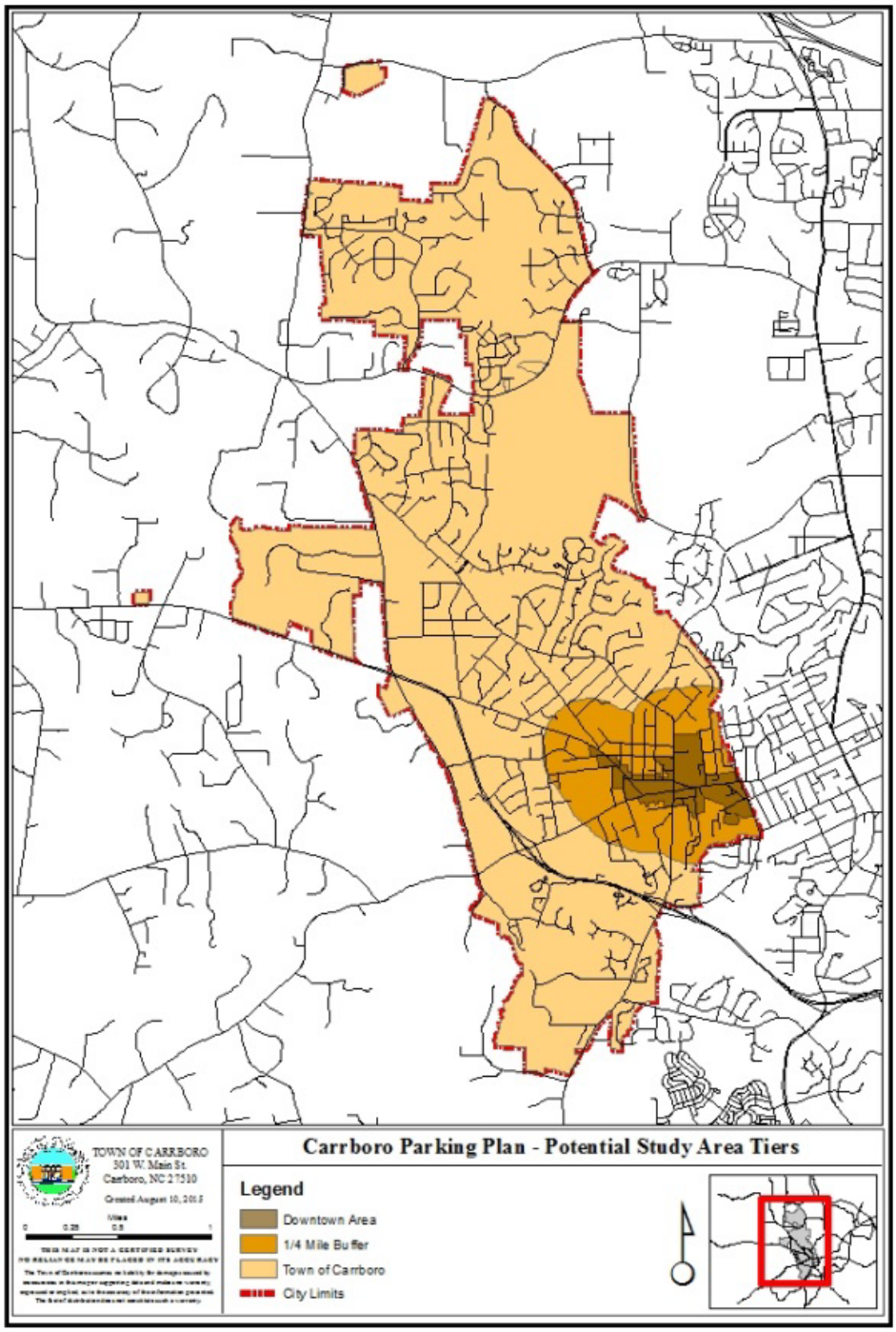
Use Ordinance to allow higher density and taller buildings in the downtown area. These changes also prompted concern that over time existing surface parking might not be sufficient to accommodate future development. The 2001 document, *Downtown Carrboro New Vision*, reported ample parking in the downtown area, but noted a perception of insufficient parking, concluding that the location of the parking may be problematic. Subsequent student projects have reported similar results.

Over the course of the last fifteen or more years, the Town has gradually acquired or leased properties to use as municipal parking lots, and currently maintains close to 600 parking spaces in the downtown area. The Town does not charge for the use of those spaces. Despite this investment, concerns relating to insufficient parking in the downtown have re-emerged particularly, during the last few years as larger-scale development projects have come on line leading the Town to reconsider its role in providing or managing parking for commercial uses.

4 Geographic Study Area

The study should focus its most rigorous data collection and analysis on the downtown area, which contains the majority of Carrboro's principal trip attractors. Special attention should be paid to the ¼ mile buffer around the downtown area that has the potential to receive parking spillover. The entire Town will be included in outreach events, surveying activities, and overall analysis. The following map delineates the Town boundaries and study areas.

Study Area Map



5 Scope of Work

The Town is seeking to have the Parking Plan completed within one year after the contract is awarded. The selected Consultant will be expected to perform tasks including, but not limited to: 1) public and stakeholder participation; 2) extensive data collection; 3) data and policy

analysis; 4) public presentations; and 5) preparation of a parking plan document. The scope of work is divided into specific tasks described in more detail below. A consulting team may, based on their professional expertise, offer minor modifications to scope of work in their proposal as an alternative, so long as the consultant provides 1) an estimate for the original scope of work and 2) an estimate for the alternative scope of work along with a clear explanation as to why the alternative is preferable.

The final deliverable, i. e., the Parking Plan should speak to parking needs throughout the Town. The Parking Plan should provide sufficient analysis to: 1) determine how much parking is needed in the downtown based on existing uses; 2) forecast how much parking will be needed in the future based on potential uses (per zoning); and 3) identify where additional parking could be located, if it would create gridlock situations during peak demand, and how it could be managed and funded. The final document should also reference local values and perceptions, safety and walking distance comfort levels. It should speak to the different experiences of residents living downtown with those living further out. The analysis should also provide clear recommendations relating to the Town's involvement in providing and managing parking, and utilization of the payment in lieu provisions in the Land Use Ordinance.

5.1 Public participation

5.1.1 Public participation strategy

At the outset of the planning process, the Consultant will develop a public participation strategy with approximate dates, content, including the Consultant and Town staff responsibilities for the public participation activities described in this section. The strategy must describe how the Consultant will reach out to traditionally underserved and non-English-speaking community members. The Strategy, at a minimum, should include the following elements:

- Social Media
- Public Open House
- General Public Engagement
- Public Meetings

Consultant tasks

- Prepare Public Participation Strategy
- Present Strategy for review by staff
- Revise if necessary based on staff review comments

5.1.2 Kickoff meeting/Public forum

A kickoff meeting will be held to obtain input on parking and access issues downtown. Big-picture themes and goals will be discussed at this meeting. This will be an opportunity to educate the community on parking management strategies and best practices from other

communities of similar size. It will also be an opportunity for community members to identify issues and challenges related to parking in Carrboro. Any speakers from the consulting team should present a range of methods to effectively and efficiently manage parking.

Consulting team tasks

- Coordinate with Town staff in designing the agenda for the event
- Lead the event with assistance from Town staff
- Give a presentation at the event
- Compile and summarize written and verbal comments and group reports

5.1.3 Social media and outreach

A social networking page, video channel, and/or other social media should be considered as tools to connect people with information about the development of a parking plan. Use of Engage Carrboro, a public input site, or other Wiki-type tool, is expected. Outreach at events or locations with heavy foot traffic may also be considered to inform attendees/customers of the parking plan. Consultants should include various social media and outreach ideas as part of their proposals.

5.1.4 Resident/visitor parking survey

The resident/visitor parking survey is intended to collect perceptions and attitudes with regard to accessing destinations and parking in Carrboro. Residents and visitors who live further away from downtown and other destinations, and/or have limited transit service available and are more likely to rely on an automobile for access, should be targeted for input. The survey is expected to include a wide sample of local residents, including households outside of the downtown area and should identify how parking and access opinions and experiences positively or negatively affect residents' travel choices within Carrboro. Surveys should include questions relating to the respondent's neighborhood or address to ensure that the data provides a representation of the Town. A range of resident survey methodologies should be included in Consultant's proposal.

Consultant tasks

- Develop survey for Town staff review and approval
- Finalize the survey
- Administer the survey
- Tabulate survey results

5.1.5 Draft plan public open house

An initial draft of the parking plan will be presented at a public open house, where interested residents and stakeholders can view plan goals and recommendations.

Consultant tasks

- Print draft copies of the plan to be displayed and/or available for review at the open house
- Create maps, graphic boards, and electronic media, as appropriate, to display at the open house
- Attend the open house, providing a brief presentation and answering questions from the public
- Compile public comments into a document that can be presented along with the revised draft plan to Town Staff, advisory boards, and Board of Aldermen

5.2 Data collection

5.2.1 Data collection strategy

The Consultant will prepare a data collection methodology, including a timeline for implementing each data collection task, and specific strategic information where necessary, e.g. expected times during the day parking utilization counts will be conducted. Town staff will review and approve the strategy.

Consultant tasks

- Produce a data collection strategy
- Prepare maps as needed to support data collection

5.2.2 Parking space inventory

The Consultant will assemble a comprehensive GIS-based inventory of parking spaces, utilizing existing data (where available) and collecting new data using on-site counts, viewing satellite imagery, approved site plans or other planning documents. The inventory should classify spaces by:

- Accessibility (ADA or non-ADA),
- Public/private,
- Time restricted,
- Trip purpose restricted, and
- Any other significant attributes

Consultant tasks

- Coordinate with Town staff for GIS layer on parking spaces
- Collect additional data via hand counts or satellite imagery or other methods as necessary
- Update GIS layer to include parking data

5.2.3 Parking utilization surveys

The Consultant will conduct parking utilization surveys of private and public lots. Town staff will request permission from private property owners for surveys on private lots. Counts will be conducted at multiple times on both weekdays and weekends and will show how many vehicles use parking spaces and for how long.

Consultant tasks

- Design the surveys in consultation with Town staff
- Organize, manage, and conduct the surveys
- Input the counts into the GIS layer and review the data to ensure quality, enabling the data to be used to report occupancy at various times in the day

5.2.4 Targeted, detailed turnover studies

Detailed turnover studies will be conducted where this level of data is expected to be useful. While parking utilization surveys count the raw number of cars in each lot, detailed turnover studies track individual space utilization, logging the times when motor vehicles park at and depart from each space.

Consultant tasks

- Identify the specific turnover study areas in consultation with Town staff
- Conduct the counts
- Compile the data into the GIS layer

5.2.5 Loading zone utilization surveys

These surveys will determine utilization of loading zones throughout the day by delivery vehicles.

Consultant tasks

- Collect loading zone utilization data, where appropriate

5.3 Analysis

5.3.1 Future parking demand scenarios

Using current parking supply-demand data and future land use scenarios, including build-out under current zoning, the Consultant will prepare future parking demand scenarios for the downtown area. In addition to land use scenarios, the analysis should take into account a range of factors – such as demographics (e.g. number of households without a vehicle); pricing;

presence of car/bike-sharing, transit service, and bicycle and pedestrian amenities; and transportation demand management (TDM) measures that could be implemented by tenants – that could affect demand for residential and commercial parking. The potential for spillover parking within the ¼ mile buffer should also be considered in this analysis. ITE parking generation data may be considered as part of the analysis but should not be the sole or primary methodology for determining parking demand. Parking occupancy data from land uses in similar contexts in other communities may be helpful in projecting demand. In summary, the analysis should be careful not to underestimate or overestimate future parking demand.

Consultant tasks

- Conduct the analysis
- Include the analysis in the parking plan document
- Present analysis to staff

5.3.2 Parking supply, management, and enforcement recommendations

Taking into consideration the parking demand scenarios, goals established during the process, public and stakeholder input, collected data, and professional judgment, the Consultant will make recommendations on parking supply and management in Carrboro. Recommendations should address:

- Shared parking arrangements
- Need for, and potential locations of, additional lots or structures
- Pricing, and method of payment
- Employee parking
- Loading zone supply and locations
- Legal parking restrictions (e.g. duration, use)
- Enforcement
- Potential greenhouse gas implications

Consultant tasks

- Include the recommendations in the parking plan document

5.3.3 Land Use Ordinance parking requirement review

The Consultant will conduct a review of parking requirements included in Article XVIII of the Carrboro Land Use Ordinance, with particular attention to the Table of Parking Requirements in 15-291(g). The review should make use of the data collected as described above, and recommendations should be tailored based on different land use and transportation contexts, such as downtown vs. non-downtown and whether areas are transit-accessible. The review should also include an assessment of the Payment of Fee In Lieu of Providing Parking Spaces,

15-292.1 with information relating to appropriate fees and anticipated construction costs and financing modes.

Consultant tasks

- Conduct the review
- Include the analysis in the parking plan document
- Recommend changes to reflect parking use and travel/parking behavior

5.3.4 Walkability micro-audit

Since downtown Carrboro's street network has very limited on-street parking, public parking supply substantially depends on surface lots and decks. This means that parkers may have to walk a distance to some destinations. Whether a destination is seen as walkable and comfortable from a particular parking lot is a factor in the perception of parking availability. The consulting team will therefore conduct a walkability micro-audit in the downtown and make recommendations for improving the safety, comfort, aesthetic quality, and accessibility for persons with disabilities, of pedestrian facilities in the vicinity of parking lots and the parking deck that are on a common walking route to destinations.

Consultant tasks

- Schedule and lead a field walk downtown, noting problem areas
- Complete maps of issues and recommended improvements to be included in the parking plan
- Complete a table of recommendations and accompanying text as necessary to include in the parking plan

5.3.5 Park-and-ride analysis

The plan should include an analysis of park-and-ride provisions in Carrboro. This would inform Town and transit agencies (both local and regional) planning for access to transit services. The analysis should include examination of potential additional park-and-ride locations in Carrboro.

Consultant tasks

- Complete a park-and-ride analysis to include in the Parking Plan

5.3.6 Bike parking recommendations

The Consultant will prepare recommendations on where bike parking may need to be enhanced in the downtown. This is not expected to be a detailed analysis, but should provide recommendations for both short-term and long-term (including covered) parking. Sec. 2.4 (pp. 2-7 to 2-10) of the *Comprehensive Bicycle Transportation Plan (2009)* ("Bike Plan") may serve as

a useful reference, though several bike parking installations have been made since the plan was adopted. There should be mention of the relationship between park-and-ride lots and bike parking with associated recommendations in either this section or the previous one.

Consultant tasks

- Develop bike parking recommendations for inclusion in the plan

5.4 Presentations

5.4.1 Board of Aldermen presentations

The Consultant will be expected to make two (2) presentations on the parking plan to the Carrboro Board of Aldermen. Timing of presentations will be determined with the selected Consultant during contract finalization.

Consultant tasks

- Develop slideshows
- Make two (2) presentations at Board of Aldermen meetings

5.4.2 Advisory board presentation

The Consultant will be expected to make one (1) presentation to the Town's advisory boards during a joint review advisory board meeting. This meeting brings together several advisory boards in the same room to streamline review of development concept plans, applications, and planning topics. The Consultant is expected to present the draft plan for review at the meeting.

Consultant tasks

- Develop slideshow
- Make presentation at joint advisory board review meeting

5.5 Plan development

5.5.1 Writing of the plan

The Consultant will compile the information collected from the aforementioned public outreach, data collection, and analysis into a comprehensive, well-organized plan that describes parking access issues and opportunities, and provides recommendations to inform future parking strategies in Carrboro. The report should speak to Town values, goals and objectives relating to parking, the benefits and challenges of requiring parking, the effect of excessive parking requirements, and role of local government to provide parking, etc., as well as any

other relevant aspect of parking analysis that the consulting firm offers based on its specialized expertise.

Consulting team tasks

- Develop a draft version of the parking plan for staff review
- Develop a revised draft version for presentation to the public, advisory boards, and Board of Aldermen
- Revise the plan into a final draft to be considered for adoption

5.6 Staff meetings, coordination, and contract management

5.6.1 Bi-weekly plan update calls

It is expected that, bi-weekly, the Consultant and Town staff will have conference calls or meetings to check in on the progress of the plan, address issues that arise, and plan for upcoming tasks. Meetings could be in-person if more effective or convenient. The call/meeting frequency could increase or decrease depending on the number of issues to address or upcoming tasks for which to plan.

Consulting team tasks

- Participate in bi-weekly (on average) check-in calls (or in-person meetings)
- Email a summary and list of action items after each call/meeting

5.6.2 General coordination

The Consultant will maintain a project schedule, to be coordinated with Town staff. In addition to the aforementioned check-in calls, it is expected the Consultant and Town staff will occasionally have additional phone and email conversations when needed.

6 Timeline

- Top two Candidates Presentation to Board of Aldermen: October 6, 2015
- Consultant selection: October 2015
- Contract execution: October 2015
- Project kickoff: 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: *Tentative dates* - January 2016, September 2016

- Presentation to advisory boards May-June 2016
- Completion of draft plan: August 2016
- Completion of final plan: October 2016

7 Format of proposals

Sections and required contents

1. Cover letter
    a. Reference to the "Parking Plan for the Town of Carrboro Request for Proposals"
    b. Listing of all firms on the project team
    c. Statement regarding specific statuses of firms, such as DBE, HUB, WBE, etc.
    d. Conflict of interest statement
2. The firm or firms' experience, knowledge, familiarity, and past performance with the desired services
    a. The firm's understanding of the project, the tasks, and the Town of Carrboro in general
    b. The proposed project staff's experience, expertise, and availability
    c. The proposed project staff's resumes
3. Project approach
    a. Project management strategy
    b. Consultant staff roles
    c. Proposed methodology for specific tasks
4. Cost proposal sheet
5. Contact information for three references for similar projects

6. Proposers are welcome to include qualified subconsultants in their proposals.

8 Submittal of proposals

8.1 How to submit proposals

Proposals may be submitted by USPS mail or other delivery service to the Project Manager. Respondents may also bring proposals to Town Hall at the address listed in this section. Electronic copies may be submitted via email along with hard copies.

Nine (9) paper copies of proposals shall be sent or delivered to Carrboro Town Hall and arrive by the deadline. The proposal name and number should be listed in the lower left corner of the envelope.

If using USPS mail or another shipping/delivery service, **please use the following address**:

Bergen Watterson, Project Manager
Town of Carrboro
301 W. Main St.
Carrboro, NC 27510
bwatterson@townofcarrboro.org

Proposals submitted after **5:00 p.m. EDT on Thursday, September 10, 2015** may not be considered for evaluation.

9 Questions

Substantial questions are requests for information about the RFP or parking in Carrboro that, if answered individually, may provide an unfair advantage for a potential proposer.

Unsubstantial questions are requests for information that, if answered individually, do not provide an unfair advantage for a potential proposer. They include requests for logistical details for submitting proposals.

Town staff will determine whether a question is substantial or unsubstantial. Responses to all substantial questions may result in the issuance of addenda to the RFP (see Addenda section below).

All questions are to be submitted in writing and reference the specific section (s) in the RFP. Questions are to be sent to:
Bergen Watterson via email at bwatterson@townofcarrboro.org, or via mail at 301 W. Main St., Carrboro, NC 27510.

Questions submitted after Tuesday, September 1, at 5:00 p.m. EDT will not be considered for evaluation.

The Town reserves the right to address substantial questions via a published addendum to this RFP. This includes publishing the question verbatim or paraphrased (information about the person submitting the question, or their firm, will not be published.) See the Addenda section for more information.

10 Addenda

After it is released, the Town may revise the RFP with one or more addenda. All addenda will be posted at the following page: http://www.townofcarrboro.org/967/Bid-Opportunities, to ensure all potential proposers have equal access to the information.

Proposals must include statements acknowledging that the proposer has read and understands all addenda. Proposers are responsible for checking the website for addenda.

All addenda will be posted by Thursday, September 3, at 5:00 p.m. EDT to assist in providing certainty for proposers as proposals are completed, with the following exception. If, after the aforementioned time, an addendum is deemed necessary to address an issue that substantially affects the ability of consulting teams to submit proposals, the deadline for submitting proposals may be extended, and therefore the deadline for additional addenda would be extended.

11 Evaluation

11.1 Evaluation criteria

The evaluation criteria will be used to choose the top two firms to present to the Board of Aldermen in October 2015.

1. **Understanding of the Project—25%**
    a. How well has the candidate demonstrated a thorough understanding of the purpose and scope of the project?
    b. How well has the candidate identified issues and potential problems related to the project?
    c. How well has the candidate demonstrated that it understands the deliverables the Town expects it to provide?
    d. How well has the candidate demonstrated that it understands the unique character and needs of Carrboro?

2. **Methodology used for the project—10%**
    a. How well does the methodology depict a logical approach to fulfilling the requirements of the RFP?
    b. How well does the methodology match and contribute to completing the tasks set out in the RFP?
    c. How well does the methodology interface with the schedule in the RFP?

3. **Management plan for the project—10%**
    a. How well does the management plan support all of the project requirements and logically lead to the deliverables required by the RFP?
    b. How well is accountability completely and clearly defined?
    c. Is the organization of the project team clear?
    d. How well does the management plan illustrate the lines of authority and communication?
    e. Does it appear that the candidate can meet the schedule set out in the RFP?

f. Has the candidate gone beyond the minimum tasks necessary to meet the objectives of the RFP?
g. Is the proposal practical, feasible and within budget?

4. **Experience and qualification—35%**
   a. Do the individuals assigned to the project have experience on similar projects?
   b. Do the individuals assigned to the project have experience with the specific tasks outlined in the RFP?
   c. Are resumes complete and do they demonstrate backgrounds that are desirable for individuals engaged in the work the project requires?
   d. How well has the candidate demonstrated experience in completing similar projects on time and within budget?
   e. How successful is the general history of the candidate regarding timely and successful completion of projects?
   f. Has the candidate provided letters of reference from clients?
   g. How reasonable are the candidate's cost estimates?
   h. If subcontractors will perform work on the contract, how well do they measure up to the evaluation used for the candidate?

5. **Contract cost—20%**
   Candidates will be evaluated on whether the proposed cost is reasonable in relation to the strategy and methodology proposed.

11.2 Recommendations to Board of Aldermen

Proposals from consulting teams will be evaluated by a Town staff panel according to the criteria and weights listed below. The evaluation will yield a list of the top two proposals.

The top two firms will be required to present their proposals to the Town's Board of Aldermen at an October meeting. The firms and proposals will be interviewed and evaluated at this meeting and a decision will be made following the meeting.

12 Additional information

12.1 Disclaimer

This RFP does not form or constitute a contract with any responder. The Town of Carrboro shall not be liable for any loss, expense, damage or claim arising out of the advice given or not given or statements made or omitted to be made in connection with this RFP. The Town will not be responsible for any expenses which may be incurred in the preparation of this RFP. Any cost incurred by respondents in preparing or submitting a proposal for the project shall be the respondents' sole responsibility.

Ownership of all data, materials and documentation originated and prepared for the Town of Carrboro pursuant to a contract resulting from a proposal submitted for this RFP shall belong exclusively to the Town and be subject to public inspection in accordance with the Freedom of Information Act. Trade secrets or proprietary information submitted shall not be subject to public disclosure under the Freedom of Information Act; however, the respondent must invoke the protections of the appropriate section of the Code of North Carolina, in writing, either before or at the time the data or other materials are submitted to the Town of Carrboro and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire document, line item prices and/or total costs as proprietary or trade secrets is not acceptable and may result in rejection of the proposal.

The Town of Carrboro reserves the right to reject any or all proposals received or to request additional information as may be needed to clarify or determine qualifications.

Appendix A. Policy and planning documents for reference

The following documents contain past community expressions of goals, objectives, and policies directly or indirectly related to parking and access, focusing on downtown.

A.1.1 Carrboro Vision 2020 (2000)

Now approaching its 15-year anniversary, *Carrboro Vision 2020* still serves as the broad policy-making document to guide the Town's planning activities.
Carrboro Vision 2020 is available
here: http://www.townofcarrboro.org/DocumentCenter/Home/View/1371

A.1.2 Downtown Carrboro: New Vision (2001)

This planning process involved a multi-day charrette that "provided citizens and staff with multiple opportunities to voice their concerns and contribute their ideas to define a vision of the future for the downtown core."
Link: http://www.townofcarrboro.org/DocumentCenter/Home/View/170

A.1.3 Parking Task Force Report (2002)

Charged with reviewing options for future short-term and long-term public and private parking, the Parking Task Force included findings and recommendations in this report.
Link: http://www.townofcarrboro.org/DocumentCenter/Home/View/1947

A.1.4 Carrboro Downtown Transportation Study (2005)

This study, conducted in 2005, provides recommendations for improving traffic circulation in downtown Carrboro while enhancing bicycle and pedestrian access and safety.
The study is available electronically under here:
https://nc-carrboro.civicplus.com/DocumentCenter/Home/View/1941

A.1.5 Carrboro Parking: An Exploratory Study (2008)

Conducted by a team of graduate students from the UNC Department of City and Regional Planning, this study addressed four major tasks:

1. Administration and analysis of a parking survey of downtown business owners;
2. data collection and analysis of the supply of parking within the Carrboro CBD;
3. data collection and analysis of the demand for parking at varying times of day and days of the week; and
4. analysis of how future approved and proposed development could affect parking supply and demand.

The study is available electronically under
here: http://www.townofcarrboro.org/DocumentCenter/Home/View/1946

A.1.6 Comprehensive Bicycle Transportation Plan (2009)

This plan, particularly Sec. 2.4, may serve as a useful reference for bike parking in Carrboro. It is available under here: http://www.townofcarrboro.org/DocumentCenter/Home/View/1949

Appendix B. Draft Contract

THIS CONTRACT is made, and entered into this the ____ day of _____, 20___, by and between the **TOWN of CARRBORO**, a political subdivision of the State of North Carolina, (hereinafter referred to as "**TOWN**", party of the first part and _____, (hereinafter referred to as **"CONTRACTOR"**), party of the second part.

1. SERVICES TO BE PROVIDED

CONTRACTOR hereby agrees to provide services and/or materials under this contract (hereinafter referred to collectively as **"SERVICES"**) pursuant to the proposal identified in "Attachment 1". **Attachment 1 is incorporated herein by reference and made a part of this contract.**

2. TERM OF CONTRACT

The term of this **CONTRACT** is from _____ to _____.

3. PAYMENT TO CONTRACTOR

CONTRACTOR shall receive from **TOWN** per unit prices as stated in the proposal/pricing form of the bid, which is included in Attachment 1. **CONTRACTOR** agrees that the quoted per person per week price will be held firm for the length of this **CONTRACT**. **TOWN** agrees to pay at the rates specified for services, satisfactorily performed, in accordance with this contract. Unless otherwise specified, **CONTRACTOR** shall submit an itemized invoice to Attn: Project Manager Planning Department, Town of Carrboro, 301 West Main Street, Carrboro, NC 27510. Payment will be processed within 30 days upon receipt and approval of the invoice by **TOWN**.

4. INDEPENDENT CONTRACTOR

TOWN and **CONTRACTOR** agree that **CONTRACTOR** is an independent contractor and shall not represent itself as an agent or employee of **TOWN** for any purpose in the performance of **CONTRACTOR'S** duties under this contract. Accordingly, **CONTRACTOR** shall be responsible for payment of all federal, state and local taxes as well as business license fees arising out of **CONTRACTOR'S** activities in accordance with this contract. For purposes of this contract taxes shall include, but not be limited to, Federal and State Income, Social Security and Unemployment Insurance taxes.

CONTRACTOR, as an independent contractor, shall perform said services in a professional manner and in accordance with the standards of applicable professional organizations and licensing agencies.

5. INSURANCE AND INDEMNITY

To the fullest extent permitted by laws and regulations, the **CONTRACTOR** shall indemnify and hold harmless the **TOWN** and its officials, agents, and employees from and against all claims, damages, losses, and expenses, direct, indirect, or consequential (including but not limited to fees and charges of engineers or architects, attorneys, and other professionals and costs related to court action or arbitration) arising out of or resulting from the performance of this Contract or the actions of the **CONTRACTOR** or its officials, employees, or contractors under this Contract or under the contracts entered into by the **CONTRACTOR** in connection with this Contract. This indemnification shall survive the termination of this agreement.

In addition, **CONTRACTOR** shall comply with the North Carolina Workers' Compensation Act and shall provide for the payment of workers' compensation to its employees in the manner and to the extent required by such Act**. CONTRACTOR** shall supply **TOWN** with certification of insurance for workers' compensation coverage with North Carolina statutory limits.

CONTRACTOR shall maintain, at its expense, the following minimum insurance coverage:

> General Liability with Combined Single Limit Bodily Injury and Property Damage not less than $1,000,000 and Products and Completed Operations Liability not less than $1,000,000.

CONTRACTOR agrees to furnish **TOWN** proof of compliance with the insurance coverage requirements of this contract prior to commencing work. **CONTRACTOR** shall furnish **TOWN** a certificate of insurance from an insurance company, licensed to do business in the State of North Carolina and acceptable to **TOWN** verifying the existence of any insurance coverage required by **TOWN**. The certificate will provide for thirty (30) days advance notice in the event of termination or cancellation of coverage.

6. HEALTH AND SAFETY

CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs required by OSHA and all other regulatory agencies while providing services under this contract.

7. NON-DISCRIMINATION IN EMPLOYMENT

CONTRACTOR shall not discriminate against any employee or applicant for employment because of age, sex, race, creed, national origin, disability or on the basis of sexual orientation or gender expression/identity. **CONTRACTOR** shall take affirmative action to ensure that applicants are employed and that employees are treated fairly and legally during employment with regard to their age, sex, race, creed, national origin, disability or on the basis of sexual orientation or gender expression/identity. In the event **CONTRACTOR** is determined by the final order of an appropriate agency or court to be in violation of any non-discrimination provision of

federal, state or local law or this provision, this Contract may be canceled, terminated or suspended in whole or in part by **TOWN**, and **CONTRACTOR** may be declared ineligible for further **TOWN** contracts.

8. GOVERNING LAW

This contract shall be governed by and in accordance with the laws of the State of North Carolina. All actions relating in any way to this contract shall be brought in the General Court of Justice in the County of Orange and the State of North Carolina.

9. E-VERIFY

HB369, which became effective October 1, 2014, states that no city may enter into a contract subject to G.S. 143-129 unless the contractor and the contractor's subcontractors comply with the requirements of Article 2 of Chapter 64 of the General Statutes. Contractors will need to submit an E-Verify Affidavit. Contracts subject to G.S. 143-129 are those for the purchase of apparatus, supplies, materials, or equipment with an estimated cost of $90,000 or more, and for construction or repair work with an estimated cost of $500,000 or more.

10. AMENDMENT

This contract may be amended only in writing by mutual agreement by both parties.

11. TERMINATION OF AGREEMENT

This contract may be terminated at any time by either party by written notice of a minimum of ninety (90) days.

This contract may be terminated, for cause, by the non-breaching party notifying the breaching party of a substantial failure to perform in accordance with the provisions of this contract and if the failure is not corrected within ten (10) days of the receipt of the notification. Upon such termination, the parties shall be entitled to such additional rights and remedies as may be allowed by relevant law.

Termination of this agreement, either with or without cause, shall not form the basis of any claim for loss of anticipated profits by either party.

12. SUCCESSORS AND ASSIGNS

CONTRACTOR shall not assign its interest in this contract without the written consent of **TOWN**. **CONTRACTOR** has no authority to enter into contracts on behalf of **TOWN**.

12. COMPLIANCE WITH LAWS

CONTRACTOR represents that it is in compliance with all Federal, State, and local laws, regulations or orders, as amended or supplemented. The implementation of this contract will be carried out in strict compliance with all Federal, State, or local laws regarding discrimination in employment.

13. NOTICES

All notices which may be required by this contract or any rule of law shall be effective when received by certified mail sent to the following addresses:

TOWN OF CARRBORO
PURCHASING DEPARTMENT
301 WEST MAIN STREET
CARRBORO, NC, 27510

14. AUDIT RIGHTS

For all services being provided under this contract, **TOWN** shall have the right to inspect, examine, and make copies of any and all books, accounts, invoices, records and other writings relating to the performance of said services. Audits shall take place at times and locations mutually agreed upon by both parties, although **CONTRACTOR** must make the materials to be audited available within one (1) week of the request for them.

15. TOWN NOT RESPONSIBLE FOR EXPENSES

TOWN shall not be liable to **CONTRACTOR** for any expenses paid or incurred by **CONTRACTOR** unless otherwise agreed in writing.

16. ENTIRE AGREEMENT

This Agreement and the attached document labeled “Attachment 1” shall constitute the entire understanding between **TOWN** and **CONTRACTOR** and shall supersede all prior understandings and agreements relating to the subject matter hereof and may be amended only by written mutual agreement of the parties.

17. HEADINGS

The subject headings of the paragraphs are included for purposes of convenience only and shall not affect the construction or interpretation of any of its provisions.

Appendix C. Cost Proposal Sheet

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: _____

Contact Person: _____

Phone #: _____

Authorized Signee: _____

Print Name: _____

Print Title: _____

#	DESCRIPTION	COST
1	Public participation	$
2	Data collection	$
3	Analysis	$
4	Presentations	$
5	Plan development	$
6	Staff meetings, coordination, contract management	$
		$
		$
		$
	Total	**$**

TOWN OF CARRBORO

Parking Plan

Request for Proposals

RFP # 540-2016-01

September 10, 2015

J.M. Teague Engineering & Planning
525 N. Main Street
Waynesville, NC 28786
(828) 456-8383
www.jmteagueengineering.com

With:
Chipley Consulting
TC-2, LLC
Quality Counts

J.M. TEAGUE
Engineering & Planning

525 North Main Street
Waynesville, NC 28786
Phone: (828) 456-8383
Fax: (828) 456-8797
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Mark Teague, P.E., CPM
Owner & Principal Engineer

Kristy Carter, AICP
Transportation Planner

Laura Green
Engineering Technician

Candace Hladick, CADD/LID
GIS Specialist, CAD Technician

Jim Kellenberger, P.E.
Transportation Safety Engineer & Lead Instructor,
J.M. Teague Engineering Academy

Nicole Pozella
Office Manager

Reuben Moore, P.E.
Engineering Specialist

Rick Smith
Technician

Wesley Stokes, EI
Engineer

Patience Stepp
Assistant Office Manager

JMTE is an NCDOT Approved Small Professional Services Firm

JMTE is Licensed in NC, AL,GA, SC, and TN

September 10, 2015

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

Re: Parking Plan for the Town of Carrboro Request for Proposals

Dear Ms. Watterson,

On behalf of J.M. Teague Engineering & Planning and our partnering firms, I am pleased to submit our response to the request for proposals for the Town of Carrboro's Parking Plan.

The J.M. Teague Engineering & Planning team assembled for this project is a combination of small consulting firms that bring together more than 75 years of transportation planning, local government, and engineering experience. Our companies are nimble and diverse in their collective project portfolios, enabling us to bring a deep pool of experience to the Town of Carrboro's Parking Plan.

Our team is more than a group of nerdy number-crunching engineers and land use planners. We are active transportation engineers, planners, and involvers who understand that solving parking problems is much more than building lots and squeezing in spots. We are excited about the opportunity to work in Carrboro because we know that your town, like us, believes that fostering a bicycle, pedestrian, and transit friendly environment is a sustainable solution to long term parking management. Our traditional engineering and parking management experience combined with our passion for active transportation and experience in working with main street communities results in a team that can develop a context-sensitive parking plan.

The firms comprising the JMTE Planning Team include **J.M. Teague Engineering and Planning**, **Chipley Consulting**, and **Quality Counts**. Former Chapel Hill Planning Director, **J.B. Culpepper, AICP** with **TC-2, LLC,** will join Chipley Consulting to conduct the public involvement portions of the Parking Plan and to provide out team with her local knowledge and expertise.

J.M. Teague Engineering & Planning

J.M. Teague Engineering & Planning (JMTE) is an engineering and planning firm that manages a wide range of projects across North Carolina and the Southeast. Founded in 2010, JMTE specializes in providing traffic engineering and planning expertise to municipalities, school systems, private institutions, and professional clients such as landscape architects, developers, and civil engineering firms. Our work includes bicycle and pedestrian planning, downtown traffic flow, land use planning, complete streets, and parking

management. Our firm has extensive experience working with NCDOT, MPOs, RPOsand other stakeholders on many projects throughout the region and is well networked within NCDOT. JMTE, located in Waynesville, North Carolina, is licensed to practice engineering in NC, SC, GA, TN, and AL and Kristy Carter, JMTE's Transportation Planner, is a member of the American Institute of Certified Planners (AICP). Our firm is an NCDOT Small Professional Services Firm, we are prequalified to provide a wide variety of engineering and planning services, and we are on NCDOT's list of on-call data collection firms and their on-call list of bicycle and pedestrian planning firms.

In addition to project management, JMTE will lead the analysis, presentation, and plan development components of Carrboro's Parking Plan and will assist with the Public Participation and Data Collection components.

Chipley Consulting

Chipley Consulting is a small, woman-owned firm based in Asheville that provides communities with a range of communications and planning services. The firm manages public and stakeholder involvement for projects across North Carolina. The firm is now managing all aspects of community engagement for Rutherford College and Valdese's Pedestrian Plan; resulting recommendations will be grounded in the input from the towns and support the development of complete streets and enhance walkability. Chipley is also leading community engagement efforts for the bicycle plan in the Town of Black Mountain. The multi-pronged approach includes working with small groups and community leaders to gather input and using a visual preference survey to identify priority bicycle amenities and other components. Another innovative element includes the use of an online, interactive map that allows residents to provide place-specific input regarding bicycling. Chipley is a DBE/WBE/SPSF certified firm and prequalified by NCDOT to provide public involvement services. Brian Taylor, Chipley's Planner and Economist, is a member of the American Institute of Certified Planners (AICP).

Joining Chipley is J.B. Culpepper, AICP from the firm TC-2, LLC. J.B. is an independent consulting planner, recently retired from her role as Planning Director for the Town of Chapel Hill. In her role with Chapel Hill, she helped foster and maintain collaborative intergovernmental relationships with neighboring communities, resulting in productive inter-jurisdictional linkages. As an independent consulting planner, J.B. provides communities with a number of services, including growth management and neighborhood plans, comprehensive planning, small area plans/transportation plan, intergovernmental agreements, town county development regulations, and public engagement and group facilitation.

Chipley Consulting will lead the Plan's Public Participation component and will assist with Analysis and Presentation elements.

Quality Counts

Quality Counts (QC) is a full-service traffic data collection firm founded in 2003 in Portland, Oregon. Since its inception, QC has grown to a nationwide data collection firm with offices around the country, including an office in Charlotte, NC. JMTE has a long-standing relationship with Keith Ripperton, the Senior Operations Manger (of the Carolinas) in QC's Charlotte office. QC's dedication to its core values of Quality, Character, and Customer Attentiveness are the not-so-secret keys to its success. Combine this with their drive to stay at the cutting-edge of data collection technology, and clients get the most accurate, efficient, and easy-to-use data collection firm in the country. They work with clients to ensure that they get exactly the data they need, data they can rely on, when and where they need it.

Quality Counts will lead the Data Collection section of the Parking Plan.

JMTE and its partnering firms have no known conflicts that would prohibit us from working on the Parking Plan or with the Town of Carrboro.

Thank you for providing this opportunity to respond. If we can provide additional information about our proposal, please do not hesitate to contact me at (828) 456-8383 (o) or (828) 776-7374 (c) or by email at kristy.carter@jmteagueengineering.com.

We are confident that our team can help the Town of Carrboro develop a Parking Plan to guide parking decisions as the town grows and develops over the next five to ten years.

Sincerely,

Kristy Carter, AICP
Transportation Planner / Parking Plan Project Manager
J.M. Teague Engineering & Planning

Table of Contents

PART ONE : Firm Experience, Knowledge, Familiarity, and Past Performance

Project Understanding

Located in the Durham/Chapel Hill/Carrboro region the Town of Carrboro has evolved from a small textile-manufacturing town to a vibrant community with a strong downtown, engaged citizens, and a progressive transportation approach. Carrboro is the first and so far only "Silver" level community in North Carolina as recognized by the League of American Bicyclists, and some of us attended North Carolina's 2013 Bicycle Summit held there.

Between 1980 and 2010, the Town of Carrboro's population increased by an impressive 167%. Today, over 20,000 residents call Carrboro home compared to just over 7,000 in 1980. Municipal growth at this rate brings with it the gains of expanded economic opportunity, the increased ability to provide municipal services, and an overall high quality of life for town residents. For all the positives growth provides, growth is not without challenges. Any growing municipality finds itself asking a variety of questions. How can we build more roads? Where are all of these people going to live? How many more feet of water line, officers on patrol, or slides and swing sets do we need to keep up with demand?

Another question arising from growth—one that Carrboro has grappled with in previous years—is where to park all of these people who come downtown to visit, work, shop, and live. First in 2002 through the *Parking Task Force Report* and again in 2008 with the *Carrboro Parking: An Exploratory Study*, the Town of Carrboro analyzed the state of and developed solutions for in-town parking. Carrboro has addressed parking in other guiding plans such as the *Carrboro Vision 2020* (2000), *Downtown Carrboro: New Vision* (2001), the *Carrboro Downtown Transportation Study* (2005), and the *Comprehensive Bicycle Transportation Plan* (2009). Interestingly, a common theme in these studies is that many in the community believe there is a shortage of parking even though evidence indicates an adequate supply of parking.

The discussion that needs to guide Carrboro's new parking plan is not, "Does Carrboro have adequate parking today?" Rather, the discussion should be, "Does Carrboro have a plan for parking infrastructure to meet the growth planned for tomorrow?" What follows is J.M. Teague Engineering & Planning's (JMTE) proposal to lead the Town of Carrboro and its stakeholders through an innovative Parking Plan process that answers that very question. Our team and process will engage citizens, gather quality data, and carry the Town through a detailed analysis to develop a package of recommendations that will guide Carrboro's parking strategies in the coming years.

Team Experience & Knowledge

The Town of Carrboro's Parking Plan is not as simple as analyzing today's capacity to identify a set of new parking recommendations. JMTE realizes that parking solutions can be expensive and parking management is a complex, and sometimes contentious and emotional, community issue. We understand that conflict results when the differing needs of stakeholders collide. Retail and service business owners want parking places in proximity to their businesses. Shoppers and visitors want parking that is convenient and free, or at least cheap. Neighbors along residential streets want streets free from overflow parking. Public transportation riders want timely routes unimpeded by drivers circling the block for a parking spot. Bicyclists and pedestrians want the feeling of safety that comes from fewer curb cuts and parking access points. JMTE cannot promise a parking plan that meets every need of every user; what we can provide is a Plan that effectively balances the needs of the parking system's many users and meets the Plan's purpose and intent which is to:

- Provide an analysis of how much parking will be needed in the next five to ten years;
- Provide guidance on what the Town's role, if any, should be in providing and managing parking in the downtown area, and;
- Evaluate what metrics to use for the Town's payment-in-lieu parking provision.

JMTE and its partners have worked with numerous communities to deliver parking plan, traffic flow/parking access analysis, parking lot design, and active transportation planning projects. Our assembled team offers Carrboro deep expertise combined with local knowledge. We bring detailed parking and traffic engineering analysis skills as well as expert future land use scenario and active transportation planning abilities. Our strengths include our engaging public participation strategies, our innovative data collection practices, and our ability to analyze and communicate complicated issues in a way that is accessible to most people. We have attached JMTE project examples and our team member resumes to highlight relevant project experience. The following table provides a snapshot of our experience and abilities.

Selected Team Project Experience

<table>
<tr>
<th>J.M. Teague Engineering</th>
<th>Chipley Consulting</th>
<th>Quality Count</th>
</tr>
<tr>
<td>
• Two-Way Conversion & Greenway Connection Plan, Franklin, NC
• Planning Policy Review and Recommendations, Webster, NC
• Parking Study, Rutherfordton, NCParking Lot Study - Vantage Point HomesN. Main Street Complete Streets Study, Waynesville, NC
• Washington and Warren Lane Reductions, Shelby, NC
• Citizens Fuel Co: Dunkin' D - Parking/Access, Sylva, NC
• Rutherford County TDA Wayfinding Master Plan, Rutherfordton, NC
• NC-9 Land Use Build Out and Complete Streets Corridor Plan, Lake Lure, NC
• Pisgah Forest Small Area Plan, Brevard, NC
• Multiple Future Land Use Scenarios, Including Clay County and Cherokee County, NC; Cramerton, NC
• Multiple Traffic Impact Studies, Including Parking Lot/Roadway Intersection Impacts and Mitigation Strategies, Southeastern US
</td>
<td>
• Community Vision, Cullowhee, NC
• Development Workshop, Village of Forest Hills, NC
• Parks and Recreation Plan, Union County, NC
• Bike Tourism Study, Haywood County, NC
• WikiMaps Management for a Variety of Plans
• Public & Stakeholder Engagement for I-26 Connector, Asheville, NC
• NC Public Electric Vehicle Charging Station Assessment

TC-2, LLC

• Growth Management and Neighborhood Plans, Chapel Hill, NC
• Comprehensive Plan, Chapel Hill, NC
• Small Area Plans & Transportation Plans, Chapel Hill, NC
• Neighborhood Conservation Districts, Chapel Hill, NC
• Intergovernmental Agreements, Orange County, NC
• City Development Regulations, Chapel Hill, NC
</td>
<td rowspan="2">
• City of Durham/DCHC MPO Data Collection, Durham, NC
• City of Raleigh Bicycle/Pedestrian Counts, Raleigh, NC
• Downtown Corvallis Parking Study, Corvallis, OR
• I-40 Expansion Project, Hillsborough to Benson, NC
• I-485 Managed Lanes, Charlotte, NC
• NCHRP 17-56: Development of Crash modification Factors for Uncontrolled Pedestrian Crossing Treatments, , UNC Highway Safety Research Center, Chapel Hill, NC
• NCHRP Charlotte Bike/Ped Study, Charlotte, NC
• North Carolina DOT On Call Data Collection, Statewide
• Old Town Alexandria Parking Study, Alexandria, VA
• Oregon State University Parking Study, Corvallis, OR
• San Luis Obispo COG - Model Improvement Plan, San Luis Obispo, CA
• Traffix San Ramon Valley School District Congestion Management Study, Contra Costa County, CA

JMTE and Quality Counts have partnered on many data collection projects across North Carolina.
</td>
</tr>
<tr>
<td colspan="2">
JMTE & Chipley Strategic Alliance Projects

• Comprehensive Bike Plan, Black Mountain, NC
• Comprehensive Bicycle and Pedestrian Plan, Franklin, NC
• Regional Bicycle Plan, Southwestern NC (Cherokee, Clay, Graham and Macon Counties)
• Comprehensive Pedestrian Plan, Rutherford College and Valdese, NC
• Comprehensive Pedestrian Plan, Forest City, NC
• Comprehensive Land Use Plan, Laurel Park, NC
• Town Center Master Plan, Maggie Valley, NC
</td>
</tr>
</table>

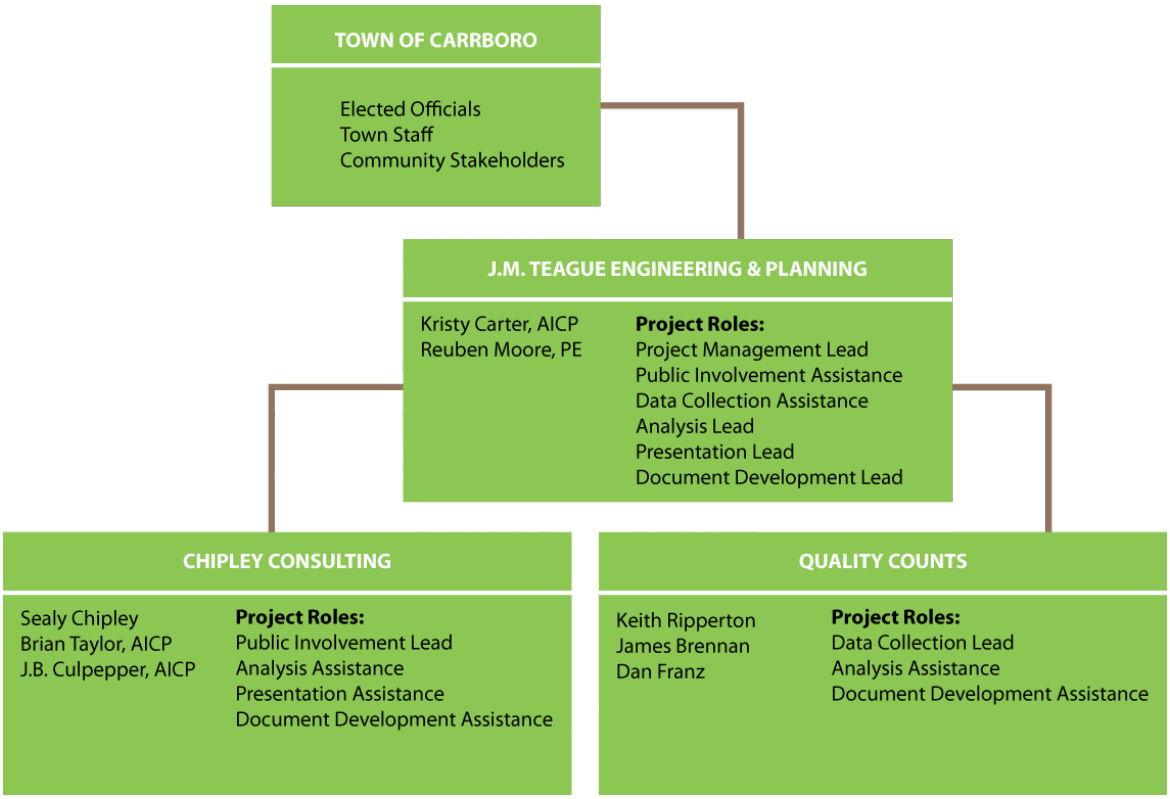
Project Manager

Kristy Carter, AICP, will serve as project managers for Carrboro's Parking Plan. Kristy has over 15 years of program planning project management experience. She has managed small and large land use, main street development, economic analysis, regional vision, and transportation projects. In addition to her planning experience, Kristy is serving her second term as a member of the City of Asheville's Planning and Zoning Commission; she knows first hand the challenge of balancing development and parking needs with community

perception and concerns. Kristy will lead the JMTE Team and will be the Town of Carrboro's primary point of contact.

Project Team

The JMTE Team for the Town of Carrboro's Parking plan incudes Kristy Carter and Reuben Moore from J.M. Teague Engineering & Planning, Sealy Chipley, Brain Taylor, and J.B. Culpepper with Chipley Consulting and TC-2, LLC, and Keith Ripperton, James Brennan, and Dan Franz with Quality Counts. A resume for each team member is attached.



PART TWO : Project Approach

1. Public Participation Strategy

Based on our experience, we know that parking supply and utilization data is important to document Carrboro's parking activity quantitatively. However, utilization data cannot fully tell the story. We need to hear parking system user experiences – the customer circling for a spot, the resident with long-term parkers out front, and the bike commuter worried that her bike may get stolen.

The JMTE Team will undertake a multi-faceted approach to community outreach and engagement to understand more about the preferences and behaviors of those who use, interact with, or have a stake in Carrboro's parking system. Our team will use methods that ensure all residents and visitors have an opportunity to share their voice in the plan development process.

1.1 Public Participation Strategy Document

Prior to implementing the public participation strategy, the JMTE Team will prepare and submit to Town of Carrboro staff a written Public Participation Strategy with approximate dates, content, responsibilities, and activities. The Strategy will include social media, public open house, general public engagement, and formal public meeting strategies.

The strategy will also document our team's plan to reach out to traditionally underserved and non-English-speaking community members. Claudia Sibila, a Durham resident and professional translator, is on call to assist with translation services, including document translation—we have included her resume with this proposal. We will identify venues, times, and input methods that make participation convenient for underrepresented populations. We will discuss with the Town of Carrboro the avenues to reach out to other groups, such as Carrboro's Burmese population.

We'll engage people at popular locations like the Weaver Street Market

DELIVERABLES

- A written Public Participation Strategy submitted for review by staff followed by a revised version based on staff review comments

Social Media & Outreach Links

Events & Happenings, Where to Engage People

- 2nd Friday Art Walks
- Carrboro Farmer's Market
- Johnny's Market
- Info Tables at Community Events
- Weaver Street Market
- Century Center Events
- Open Eye

Group & Organizational Connections

- Carrboro Bicycle Coalition
- Carrboro Business Alliance
- Center for Employment and Leadership
- Chamber of Commerce
- Chapel Hill Transit
- El Centro Hispano
- Spanish Language Credit Union
- UNC-Chapel Hill Networks
- Walk Carrboro

Electronic Networks & Connections

- Engage Carrboro
- HOA email lists
- Next Door
- The Daily Tar Heel
- Carrboro recreation newsletter
- Town of Carrboro website & media outlets
- Email Blasts
- E-Newsletters

1.2 Kickoff Meeting/Public Forum

The JMTE Team will work with the Town of Carrboro to invite residents, business owners, and employees to a hands-on kickoff meeting to provide input related to Carrboro's parking and access issues, and to gather as much qualitative input as possible. The purpose of the Kickoff Meeting/Public Forum is to introduce the study to the general public. The Team will begin the meeting with a presentation that covers background information, a parking management education component, and highlights from other communities with innovative parking management practices.

We will then have a set of maps of the Town and ask participants to provide information about where they park, walk, bike, access public transportation, or meet to car/vanpool. The team will ask questions and design and conduct activities that identify issues, opportunities and concerns, parking priorities, and parking needs and opportunities. During the Open House, the consultant team will provide draft parking management approaches that may meet the Town's future parking demand. Meeting participants will then vote on their preferred strategies. We have the option to conduct the familiar typical sticky dot style voting exercise or we can use interactive keypad polling technology to rate the appeal of these alternative strategies in Carrboro.

Sharing a meeting flyer on social media

DELIVERABLES

- Kickoff Meeting advertisement materials and social media/outreach posts
- Kickoff Meeting agenda, presentation, and materials
- Facilitated Kickoff Meeting
- Written Kickoff Meeting Summary

1.3 Outreach and Awareness Strategies

Social Media Connections: Based on our experience gained from recent projects, we have found that the best way to spread the message, raise awareness, or solicit input about the parking survey, meetings, and events is

through established social media and outreach links. Examples of these include existing email blast lists, list serves, newspaper/radio outlets and posting printed outreach materials with QR codes at popular locations like the Weaver Street Market and the Open Eye. Therefore, we will work with the Town and other stakeholders to identify established Facebook and Twitter accounts that already have a strong base. We will work with the town and stakeholders to determine which electronic tools are used heavily by residents or by downtown employees, and visitor information networks. We will also investigate methods that have worked well for past planning efforts.

Event Outreach: Our team will use a proactive in-person approach to reach different audiences that online outreach efforts may miss. We will use existing community events to engage the public, which may include setting up a booth at Weaver Street Market on Saturday mornings, Johnny's Market, Art Walks, or the Carrboro Farmer's Markets. We will also ask the town to connect us with community members and other trusted leaders to serve as gatekeepers of communities less likely to attend a public meeting or event. In order to get input from some of these populations, we recommend reaching out to organizations such as the Spanish Language Credit Union in Carrboro Plaza, El Centro Hispano, the Center for Employment and Leadership, and HOA's (Lake Hogan Farms, Spring Valley, Canterbury Townhomes).

Capturing people at a community event in Black Mountain

DELIVERABLES

- A comprehensive list of popular social media list serves and news sources and connections
- Regular updates on plan events, surveys and other opportunities to participate, including print materials with a project specific QR code
- Attendance at community/in-person events

Website: We will create and regularly update a stand-alone project website, or provide materials to update a Town of Carrboro/Engage Carrboro project page. The website is the platform where parties can access existing documents, upcoming events, links to the survey and interactive online map, as well as draft reports. It will be used as a tool to educate people about the plan and collect feedback on downtown access issues.

We'll get our message out through traditional and non-traditional methods

DELIVERABLES

- Stand-alone website or content for a Town of Carrboro web page
- Regular content updates

1.4 Public Input Survey

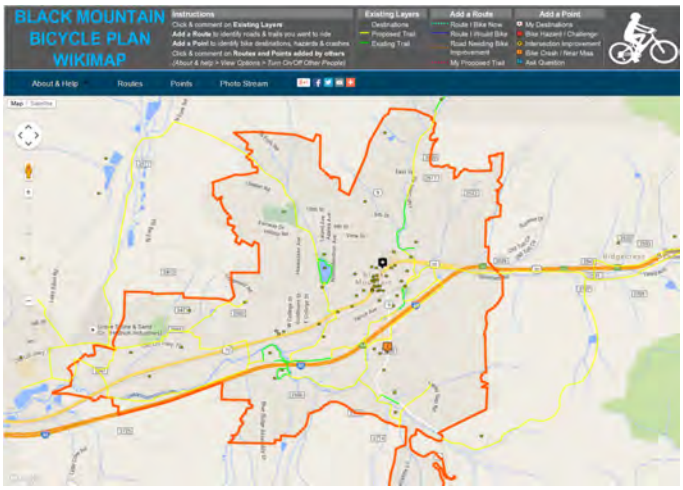
Public Input Survey: The team will develop a public input survey with input from Town Staff to ensure we ask the right questions to get insights from a variety of users, including those who are more likely to drive to town, and a version of the survey that is tailored to visitors. We will develop a survey that assesses parking activities, experiences, perceptions, and preferences. To collect this data, we will post an online survey (using Survey Monkey) that includes both closed- and open-ended questions. We will also make available printed copies of the survey and we will attend a large community-gathering event where team members will circulate in the crowd to provide survey reminders (for those who want to complete online) and paper surveys for those who are willing to complete the survey on demand—this is an important step to obtain visitor responses.

We will distribute an online version of the survey through the electronic outreach channels described above, and also make printed copies of the survey available at community events, popular downtown destinations, and other venues frequented by underrepresented populations. Spanish versions of the survey will be made available as needed.

Potential Survey Questions

- Demographic Info
- Residence (Closest Street Intersection)
- Frequency of Trips Downtown by Mode
- Where Do People Park
- Where Do People Prefer to Park
- Why People Park Where They Do
- How Far Traveled to Parking Location
- Final Destination(s)
- Length of stay
- Purpose of visit
- User type (retail employee, service customer, office employee, etc.)
- Perception of parking availability
- Awareness of alternate parking locations (e.g. park-and-ride)
- Use of alternate parking locations (e.g. park-and-ride)
- Awareness of alternate mode options
- Use of alternate mode options
- Willingness to pay for parking
- Willingness to access downtown by alternative mode

Interactive Map (WikiMap): As a supplement to the survey, we propose creating an online interactive mapping tool hosted by Wikimapping.com. This interactive map will allow community members to provide place-specific input on parking and access issues in Carrboro as well as opportunities for improvement.



WikiMap example

DELIVERABLES

- Printed and electronic survey announcements
- Online survey tailored to residents and a version tailored to visitors
- Attendance at a large community event to solicit survey responses
- Community input and survey results in a summary document
- WikiMap to supplement the survey

1.5 Draft Plan Public Open House

The Draft Plan Public Open House is an opportunity to present a summary of the study, including the parking inventory and utilization maps and charts, the final survey results, and draft recommendations. The primary purpose of the meetings is to have a substantial discussion on the draft recommendations, and the attendees who are involved will be encouraged to participate throughout the entire meeting.

Participant mapping exercise

DELIVERABLES

- Draft Plan Public Open House advertisement materials and social media/outreach posts
- Draft Plan Public Open House agenda, presentation, and materials (maps, graphic boards, etc.)
- Facilitated Draft Plan Public Open House
- Written Draft Plan Public Open House Summary

Optional Involvement Services

Steering Committee: According to the RFP Addendum, the Town of Carrboro does not plan do use a steering committee to guide the Parking Plan process. Should the Town determine a committee is needed, we are prepared to use the Steering Committee effectively by ensuring that meetings are purposeful and meaningful, start and end on-time, and assist the Project Team and Town Staff with decision-making and moving the Plan process forward. We will seek to ensure that the Steering Committee plays an active role in the public engagement process, using their connections to the community to reach a variety of participants.

Stakeholder Interviews: The project team can conduct an agreed upon number (to be determined during scoping) of in-person stakeholder interviews during the public participation phase of the project. Working with the Town, the team may interview business owners, landowners, parking managers, employees, and residents. The interviews will use a general template of questions as a basis for the interviews, but the primary goal is a free flowing exchange about parking to gather an understanding of the specific experiences with the Carrboro's parking system.

Fore example, interview questions for downtown merchants may address their employees (how many, how they get to work, whether or not they need a car during the day, where they park, and parking concerns), their customers (parking and length of stay), opinions on general parking needs and concerns, and other suggestions and ideas for improving access to downtown.

Community Speaking Events: We have found that speaking to community groups (at their invitation) is a good way to generate awareness and ownership of a plan and its final recommendations. Should the opportunity arise to attend a community speaking/education event, our team can accommodate the request with reasonable notice. We will work with the Town of Carrboro to establish a per event rate.

2. Data Collection

Working closely with the Town of Carrboro, the JMTE Team will collect data using industry accepted standards and will document and evaluate the parking environment in the Town of Carrboro's two major sub-centers, Downtown Carrboro and the ¼ mile buffer around the downtown area. If deemed necessary, the team will further divide the two sub-centers into smaller sub-areas.

2.1 Data Collection Strategy

The team will produce a data collection strategy that details the methodology to conduct extensive data collection in order to document on the ground parking assets. The intent of this effort is to establish a broad, yet detailed, benchmark of current parking practices in Carrboro. Through close correspondence with the Town, the team will define the activity centers in the study area to ensure that all critical parking assets are included in the project's data collection phase.

Public Parking Map to aid data collection

DELIVERABLES

- A written Data Collection Strategy submitted for review by staff followed by a revised version based on staff review comments
- Maps to support data collection

2.2 Parking Space Inventory / Existing Conditions

To catalog all of the parking spaces, the JMTE team will use desktop analysis tools (GIS, Google Earth, aerial imagery) and on-the-ground field work to document all on street, public, restricted, and bicycle parking facilities. We will use Carrboro/Orange County GIS parcel data to identify existing land use conditions. The inventory will serve as the base component to understand parking patterns and behaviors. The team will compile the inventory into a parking database; including geocoding the data to display the existing parking areas on maps in a spatial context.

Counting on street parking spots

DELIVERABLES

- Maps to support data collection
- A printed and digital inventory of available parking spots with identified attributes pertaining to accessibility (ADA or non-ADA), ownership (public/private), time restriction, restricted trip purpose, and adjoining land use
- Updated GIS layer

2.3 Parking Utilization

The goal of parking utilization counts is to provide a time series of an area's typical parking demand on a typical day. To complete these counts, the JMTE Team will conduct field surveys of parking utilization for identified publicly and privately owned parking lots and on street parking segments in the study area. These surveys will establish the peak daily parking and daily utilization for the study area's parking.

Surveys will be conducted every two hours for 14-hour periods on weekdays and weekends. The team will work with the Town of Carrboro to determine the best times and days to conduct weekday and weekend counts. Data collectors will capture weekday parking demand for 14 hours, beginning at 7 AM and ending at 9 PM, with counts every two hours. Data collection will begin in the early morning to identify if/when commuter and employee parking fills to capacity. In the evening, data will be collected until 9 PM to assess parking demand associated with the town's restaurants and other evening activities. We will work with the Town of Carrboro to determine the best times for the weekend counts.

JMTE will collate the gathered data in a Technical Summary Memo that will provide charts and data to present parking utilization profiles to document the patterns identified on counting days. The Team will indicate the nationally recognized "functional capacity" standard to indicate when a parking area is effectively full; meaning on steep spots have a 15% vacancy rate (about 1 out of 8 on street spaces) and off-street lots have a 10% vacancy rate.

Carrboro public parking lot

DELIVERABLES

- Data collection materials (tracking sheets, maps, etc.)
- Data collection days (at least three weekdays on one weekend day – to be negotiated during scoping)
- Updated GIS layers
- Technical Summary Memo

2.4 Targeted Turnover Studies

The team will consult with the Town of Carrboro to identify the key block faces and lots targeted for an intensive turnover analysis. The team will track vehicle turnover using video technology to determine the number and length of stay of vehicles in an area for a given period. Based on the preferences of the Town, data collectors can track turnover during the peak periods on each of the data collection days or complete longer and more intensive 14-hour counts.

The data collected during the turnover analysis will be summarized in the Technical Summary Memo. Data likely to be summarized in the Memo may include: Daily peak accumulation and occupancy counts and estimates for publicly-accessible parking spaces categorized by time periods (e.g weekday morning, weekday daytime, weekday evening, Saturday morning, and Saturday daytime), length of stay and turnover data for agreed upon time periods and key locations, and parking supply categorized by time period (short and long term), including duration of stays where available and parking utilization rates.

The Carr Mill Lot supports a variety of parking users

DELIVERABLES

- Data collection materials (tracking sheets, maps, etc.)
- Data collection days (at least three weekdays on one weekend day – to be negotiated during scoping)
- Updated GIS layers
- Technical Summary Memo

2.5 Loading Zone Utilization Surveys

The team's data collectors will conduct the loading zone surveys in conjunction with the parking utilization survey. Additional services including vehicle length, loading zone turnover, etc. can be added for additional fees.

2.6 Existing Parking Regulations

JMTE will gather and summarize Carrboro's existing parking regulations and policies as they relate to enforcement, management, and zoning. We will investigate the Town's policies related to parking minimum/maximums, joint use parking arrangements, the Town's fee-in-lieu policy, dimensional standards, review standards, parking agreements, and other policies and procedures.

USE	PART I. PARKING REQUIREMENT (EXCEPT AS NOTED IN PART II OF THIS TABLE)
1.200	2 spaces for each dwelling unit, except that one bedroom units require only one space.
1.300	With respect to multi-family units located in buildings where each dwelling unit has an entrance and living space on the ground floor, the requirement shall be 1½ spaces for each one bedroom unit and 2 spaces for each unit with two or more bedrooms. Multi-family units limited to persons of low- or moderate-income or the elderly require only 1 space per unit. All other multi-family units require 1 space for each bedroom in each unit plus 1 additional space for every four units in the development. **(AMENDED 5/10/83)**
1.340	1 space per every four dwelling units. **(AMENDED 01/11/00)**
1.410 1.420	1 space for each bedroom.
1.430	1 space for each room to be rented.

Sample of Land Use Ordinance Parking Requirements

DELIVERABLES

- Technical Summary Memo
- Updated GIS Layers

2.7 Data Collection Technical Memo

The team will summarize existing conditions in a Technical Summary Memo. Topics covered in the existing conditions analysis will likely include: an inventory of current supply and utilization of on and off street parking in the study's sub areas and maps, tables, and summaries of existing conditions pertinent to the Team's findings.

The summary will also include a more detailed technical appendix with electronic versions of all data available for future use and review.

DELIVERABLES

- A written Technical Memo and electronic appendix documenting current supply and utilization of on and off street parking in the study's sub areas and maps, tables, and summaries of existing conditions pertinent to the Team's findings.

3. Analysis

Parking in Carrboro does not exist independently; the parking system is intertwined with the mix of land uses and activities it serves. An analysis of the relationship between parking and land use in Carrboro is especially important in that the study area's undeveloped land is at a premium.

3.1 Future Parking Demand Scenarios

Using Orange County's and Carrboro's GIS and tax parcel data, land development regulations, local knowledge, development history, and staff expertise, JMTE will classify existing land uses in the study area to develop two future parking demand scenarios. The analysis will also take into account the factors outlined in the RFP.

The team will use the future land use scenarios to calculate the peak period parking demand rates recommended using national standards. While the ITE's *Parking Generation Manual, 4th Edition* will be our jumping off point, we are aware of the limitations of solely relying on ITE guidance. Therefore, we will consult other publications from other well-known and accepted parking models such as LEED's *Alternative Transportation – Parking Capacity Guidance*, recommendations from Urban Land Institute's *The Dimensions of Parking, 5th Edition*, and the American Planning Association's *Flexible Parking Requirements*. Comparing the ITE model and the ULI (and other) models side-by-side provides a method to examine the amount of parking that Carrboro may need to support the projected level of development within the study area. We will also compare results from the parking analysis with parking demand data observed and recorded by our technicians. Our analysis will investigate Carrboro's required bicycle parking standards to determine if the Town's required parking standards are higher or lower than national standards and how well existing standards match with the future parking demand scenarios.

Carrboro parking deck

DELIVERABLES

- Two Future Land Use Scenarios
- Future Parking (Vehicle and Bicycle) Demand Outcomes Based on Scenarios

Potential Parking Solutions

Supply Solutions

- Shared parking
- Regulation changes
- Flexible parking standards
- Increase capacity of existing facilities
- Improve user information
- Improve parking facility and design and operation
- Wayfinding and education
- Residential parking permits
- On street commercial area parking
- Remote parking, Park-and-Ride lots
- Structured parking
- Bicycle parking
- Parking technology
- Education and marketing

Demand Solutions

- Parking pricing (e.g. variable pricing)
- Charge for employee parking
- Improved mass transit
- Walking and bicycling improvements/facilities
- Employee financial incentives and/or transit incentives for mode shift
- Mobility management
- Employer/Institutional
- Improve enforcement
- Unbundled parking
- Telecommute incentives

3.2 Parking Supply, Management, and Enforcement Recommendations

After comparing Carrboro's existing parking supply with projected demand to determine how much parking the town needs to meet the demand, JMTE will review parking standards in the Town of Carrboro's Land Development Ordinance to determine how existing parking standards support or hinder the Town's parking management program; serving as the base for the Plan's parking recommendations. The team will provide a set of recommendations that align parking standards with current and future parking demand.

When thinking about parking shortages, the perceived problem is, "There is not enough parking," or "I don't know where to find parking." The perceived solution is often, "Someone should build more parking places." Rather than first jumping to the "build more" solution, JMTE will work with the Town of Carrboro to identify supply-side and demand-side parking solutions and recommendations that will meet Downtown Carrboro's present and future parking needs. Our team will aim the proposed solutions at increasing the efficiency, accessibility and usability of existing parking assets (supply-side) as well as reducing the overall need for parking (demand-side).

Supply-Side Solutions: The JMTE team will employ a variety of strategies to evaluate parking assets to determine how or if assets may be used to supply parking more efficiently. Some of the strategies JMTE will evaluate to identify how the Town may enhance parking assets include:

Off-street parking: Some parking assets may be used inefficiently due to the configuration of parking spaces.

On street parking: Even though Carrboro does not have a lot of on street parking, the efficiency of on street parking change depending on the spacing and the angle of stripping.

Shared parking: Using the data gathered in earlier tasks, JMTE will identify and make recommendations related to shared parking. Working with the Town, JMTE will explore special event parking options (such as valet parking), employee parking, and public/private partnerships to develop parking solutions that will meet the needs of the many downtown users.

Demand-Side Solutions: The JMTE team will work with the Town and stakeholders to determine the types of solutions that may reduce the overall number of stakeholders in need of a downtown parking spot (demand-mitigation). The overall goal is to encourage a shift from single-occupant vehicle (SOV) trips to non-SOV modes (e.g. transit), or shifting auto trips

out of peak periods. Some of the strategies JMTE may bring up for discussion include:

Pricing: While Carrboro does not charge for parking, JMTE will examine pricing solutions that encourage appropriate parking turnover times for different parking assets if data indicates a pricing matrix is needed.

Alternative parking programs: JMTE will also assess strategies to encourage more employees, visitors and residents to access Downtown Carrboro alternative means of transportation, such as carpooling, walking, biking, and/or transit.

Build More Solutions: The Town of Carrboro has consistently evaluated its parking needs and it has implemented a variety of parking management strategies to improve downtown parking conditions. It may be that improving efficiency through existing assets may no longer adequately meet Carrboro's growing parking demand. Therefore, JMTE will also evaluate "build more" parking supply solutions, which may include:

Potential sites: Identification and evaluation of potential parking sites, both surface and structured.

Remote parking: Identification and evaluation of remote parking locations, park-and-ride lots, and other opportunities near the study area that could potentially become parking assets.

Advanced Parking Solutions: New parking technology, such as pay stations, occupancy signs and cell phone enabled occupancy and payment information is readily available. The JMTE Team will provide an overview of advance technology systems that may meet Carrboro's needs in the near and long term.

Financing Solutions: None of the recommended solutions--whether they address supply, demand, or construction—will improve Downtown's parking crunch if a solution's cost exceeds its benefits. Therefore, JMTE will offer broad financing solutions for recommended solutions. The financing options JMTE may match with solutions include: Town of Carrboro general fund, bonding and debt, tax increment financing, parking benefits districts, changes to Carrboro's Fee-in-Lieu of parking policy, public enterprises, and public-private partnerships.

A build more solution

DELIVERABLES

- A set of supply and demand side parking solutions
- A set of build more parking solutions
- An overview of available advance technology that may work for the Town of Carrboro
- Broad financing solutions for recommended solutions

3.3 Land Use Ordinance Parking Requirement Review

The Town of Carrboro's Land Use Ordinance, first adopted in 1980 and augmented with many amendments through the years, outlines land use regulations for the Town. Our team's work will focus on parking standards found in Article XVIII – Parking. Building from our existing conditions review in Task 2.6, we will analyze how parking regulations mesh with Carrboro's desired condition as described in a variety of town plans such as the *Carrboro Vision 2020 (2000)* and *Downtown Carrboro: New Vision (2001)*. Much of the ordinance review and corresponding recommendations will occur in conjunction with items 3.1 and 3.2 described above. That work will lead to a table of recommendations that are specific to the Land Use Ordinance.

Our work in this task will also include a thorough analysis of Carrboro's Payment of Fee in Lieu of Providing Parking Spaces. Our analysis will look to examples from other towns, investigate current research and best-practices, provide an overview of the benefits of and concerns about in-lieu fees, analyze the existing fee-in-lieu policy and usage, and provide recommendations on fee and structuring options.

DELIVERABLES

- Table of recommendations specific to the Land Use Ordinance
- Payment of Fee in Lieu of Providing Parking Spaces analysis and recommendations

3.5 Walkablity Micro-Audit

Every person who parks becomes a pedestrian when they exit their car or park their bike, and with many destinations within a five-minute walk from each other, it is important to ensure that pedestrian connection between parking downtown destinations are accessible and safe. JMTE will evaluate pedestrian connections between destinations and parking locations through a Walkablity Micro-audit, which will be used to identify barriers to walking such as lack of street lighting, incomplete or inadequate sidewalk networks, or lengthy intersection crossings.

Our team has completed many pedestrian oriented projects that have include walkability assessments; we have found that walkability audits and assessments can serve a variety of purposes beyond the technical assessment. We will employ creative and interactive techniques to communicate walkability concepts. For example, we may time the walk speed of different users to illustrate cases in which a parking location is reasonable to a destination for an able bodied person, but too far someone on crutches or a parent walking with a toddler. At a minimum, we will involve Town staff and key stakeholders in the audit but we can also explore the option of promoting the audit as another public participation touch point.

We will evaluate cross walks during the walkability audit

DELIVERABLES

- Route planning, mapping, and materials for the walk-audit
- Team led walk-audit

3.6 Park-and-Ride Analysis

A way to manage congestion and competition for parking is to increase vehicle occupancy or increase mode share; a park-and-ride lot is one means of accomplishing this goal. While determining the need for park-and-ride lots is primarily a regional discussion, JMTE will work with the Town of Carrboro to determine the town's role in and ability to establish additional park-and-ride lots. To determine the need, we will work with the Town of Carrboro to obtain ridership and regional commuting data from Chapel Hill Transit, DCHC MPO, GoTransit, and other organizations. Additionally, the public participation survey will contain questions designed to determine interest in park-and-ride services. If data and community preference indicates a need for additional park-and-ride lots, JMTE will provide broad recommendations such as suggested size (e.g. small, medium, or large with a range of suggested parking spaces), needed elements and services (e.g. bus shelter, long-term bike parking), and approximate siting locations.

DELIVERABLES

- Regional transit ridership analysis
- Broad recommendations for park-and-ride lots in the Town of Carrboro

3.7 Bike Parking Recommendations

Our team has a thorough understanding of bike parking needs and options; most of our team members commute by bicycle. We understand the anxiety of parking our bikes on rickety, uncovered bike racks when there is a 60% chance of an afternoon thundershower. Our team will provide an assessment of and recommendations for bike parking in the downtown area. At a minimum, our team will identify the areas in which bike parking may be enhanced. We'll base these recommendations on data gathered in the formal data collection process, field observations, such as pinpointing where bikes are locked to sign posts and trees (indicating the need for additional parking), public input, and data collected from previous studies. We will examine and make recommendations to enhance the connection between long-term and covered bike parking and the needs of park-and-ride lot users. We will also evaluate existing bicycle parking standards to determine if these standards will be adequate under future parking demand scenarios identified in item 3.1.

If requested, we can also provide an assessment of and recommendations related to:

- Visibility (how easily can cyclists spot bike racks)

- Security (lighting, surveillance, how well racks are anchored, etc)
- Clearance (room for cyclists to maneuver, prevent conflicts with pedestrians and cars, avoid blocking entrances)
- Amenities (proximity to washrooms and public bathrooms)
- Rack selection (what types of racks are most appropriate, how to maximize space, how to protect the bike)
- Spacing and siting standards (accessibility, room to properly lock, staggering)
- Parking sign standards

Uncovered bike parking

DELIVERABLES

- Bike parking assessment and recommendations

Optional Services

Review Current Wayfinding System: Existing parking reports indicate that signage for parking and pedestrian/bicyclist wayfinding is inadequate. If requested by the Town of Carrboro, JMTE is equipped to provide a strengths and deficiencies analysis of existing signage, followed by recommendations that result in an easy-to-understand wayfinding system for drivers, bicyclists, and pedestrians.

Public Electric Vehicle Charging Station (EVCS) Assessment: Brian Taylor, with Chipley Consulting conducts public electric vehicle charging assessments. The assessment would identify factors affecting EVCS use and would provide Carrboro with information and recommendation to increase electric vehicle charging station use.

4. Presentations

With assistance from the Town of Carrboro, the JMTE Team will schedule two meetings with Carrboro's Board of Alderman and one joint meeting with the Town's advisory boards. The Board of Alderman meetings will include presentations that update the board on Plan progress. The joint meeting of advisory boards will include a plan presentation and will occur after the Team has a draft plan that is ready for review. It is important to note that the Alderman and advisory board members will be encouraged to participate in broader public participation activities throughout the process.

Presenting to a community group

DELIVERABLES

- Coordination for and facilitation of meetings
- Slideshow presentations for each meeting (2 Board of Alderman meetings, 1 joint meeting of advisory boards)

5. Plan Development

JMTE will deliver to the Town of Carrboro a comprehensive and well-organized final Plan that documents the items listed in the RFP. At a minimum, Carrboro's Parking Plan will include documentation pertaining to:

- public outreach, data collection, and analysis;
- parking access issues and opportunities, and recommendations to inform future parking strategies;
- Town values, goals and objectives relating to parking, and
- the benefits and challenges of requiring parking, the effect of excessive parking requirements, and the role of local government to provide parking.

JMTE uses a Working Paper approach, in which sections of the plan are presented in two Working Papers to town staff and other stakeholders for their review as tasks are completed.

Working Paper #1 consists of:

- Plan goals and objectives
- Public input summary (to date)
- Data Collection, Existing Conditions, and Analysis
- Plan, policy and program review
- Preliminary project recommendations

Working Paper #2 consists of:

- Project recommendations
- Policy and Program recommendations
- Funding/implementation recommendations

We then create the full Parking Plan by combining the two working papers into a single document. The working paper approach creates a consistent dialogue between the consultant team, the Town, and other stakeholders to ensure a final product that meets or exceeds expectations.

DELIVERABLES

- Working Paper #1

- Working Paper #2
- Final Document

6. Project Management (Staff Meetings, Coordination, and Contract Management)

Internal Team / Staff Kickoff: At the start of the project, JMTE will organize a kickoff meeting with Town staff to clarify the goals of the Parking Plan and agree upon a final scope. The agenda items we will cover in this meeting include:

- a review of Parking Plan objectives
- confirmation of the exact streets and lots to include in the study
- a review of and revisions to the Scope of Services
- refinement of the plan for public and stakeholder involvement
- confirmation of the communication protocol with staff and media
- establishment of a meeting and presentation schedule

We will also work with the Town to develop a list of needed items such as previous plans, data layers, policy documents, etc.

Project Communication and Coordination: JMTE will develop and maintain an overall project schedule that will include bi-weekly conference calls or in-person meetings to check in on plan progress, address issues, and plan for upcoming tasks. JMTE and its partners will be available to occasional, unplanned, phone and email conversations, and we will provide email summaries and a list of action items after each call/meeting. JMTE and its partners will provide in-person check-ins with Town staff when we are in Carrboro for fieldwork.

DELIVERABLES

- Final Scope of Services
- Communication Protocol
- Ongoing communication materials

7. Project References

Mr. Ryan Sherby
Executive Director
Southwestern Commission
125 Bonnie Lane'
Sylva, NC 28779,
(828) 586-1962
ryan@regiona.org

Ms. Summer Woodard
Town Manager
Town of Franklin
P.O. Box 1479
Franklin, NC 28744
(828) 524-2516
swoodard@franklinnc.com

Don Kostelec, AICP
Principal
Kostelec Planning
PO Box 16796
Asheville, NC 28816
(828) 989-5811
don@kostelecplanning.com

Attachments

Resumes

Project Sheets

Cost Proposal Sheet

Kristy Carter, AICP
Transportation Planner
J.M. Teague Engineering & Planning
525 N. Main Street | Waynesville, NC 28786
Phone: 828.456.8383 | Cell: 828.776.7374
kristy.carter@jmteagueengineering.com

Kristy Carter, JMTE's Transportation Planner, has worked in North Carolina's communities since 1997, specifically on planning projects and economic development projects for ten years.

Kristy has a keen understanding of the connection between land use and transportation decisions that she developed through her long-range planning and transportation project management experience in her previous role with the Appalachian Regional Commission. At JMTE, Kristy leads the planning and policy aspects of the firm's local government planning and bicycle and pedestrian projects.

Her projects range from small town land use plans to regional multi-county planning projects; managing over 30 large planning and training projects. She was project manager for the Clay County Comprehensive Plan and the Cherokee County Future Land Use Plan, both of which were the foundation for each county's Comprehensive Transportation Plan. Kristy's areas of expertise include: Local Government Planning, Land Use Analysis, Long Range Planning, Multi-Modal Planning, Economic Development, Downtown Development, Geographic Information Systems (GIS), Project Management, Community Involvement & Facilitation, and Riding Bicycles.

Kristy is a member of the City of Asheville's Planning and Zoning Commission, the City's Multi-Modal Transportation Commission, and she is a former member of the City's Board of Adjustment. She is also active in the area's cycling community.

Kristy has a Master's in Public Affairs and a BS in Recreational Therapy from Western Carolina University. She is a member of Western North Carolina Chapter of Women in Transportation (WTS) and she is a 2011-2013 William C. Friday Fellow of the Wildacres Leadership Initiative.

J.M. TEAGUE
Engineering & Planning

Relevant Projects

Forest City Comprehensive Pedestrian Plan, Forest City, NC

Black Mountain Comprehensive Bicycle Plan, Black Mountain, NC

Rutherford College and Valdese Comprehensive Pedestrian Plan, Towns of Rutherford College and Valdese, NC

NC 9 Corridor Study, Town of Lake Lure, NC

Blue Ridge Bicycle Plan, Land of Sky Regional Council, Asheville, NC

Opt-In Regional Vision Project Manager, Southwestern Commission, Sylva, NC

Town of Laurel Park Comprehensive Plan, Laurel Park, NC

Town of Franklin Comprehensive Bicycle and Pedestrian Plan, Franklin, NC

Reuben Moore, PE

Transportation Engineering Specialist
J.M. Teague Engineering & Planning
525 N. Main Street | Waynesville, NC 28786
Phone: 828.456.8383 | Cell: 828.506.5457
reuben.moore@jmteagueengineering.com

Reuben joined JMTE in April 2014 after three decades of work for NC-DOT in Division 14. While at DOT he passionately advocated for Complete Streets policy and design guidelines. He supervised the design and installation of pedestrian signals and crossings at Western Carolina University and in Sylva, all on NC 107, and pedestrian refuge islands on US 129 in Robbinsville. He secured funding for and designed the bicycle lanes and signage on NC 107 from Sylva to Western Carolina University. Mr. Moore improved traffic safety on the state highway system of North Carolina for over 26 years during his career with NCDOT in Traffic and Operations Engineering. At JMTE, Reuben is working on a variety of safety analyses as well as incorporating pedestrian and bicyclist design elements into projects.

Reuben has read thousands of individual crash reports, looking into causal factors, plotting collision diagrams, and devising crash remediation measures. He has worked on several NCDOT research projects, including evaluation of Best Practices for bicycle-safe rumble strip applications. His specialty areas include:

- Analysis of special user needs and accommodations: bicyclists, pedestrians, motorcyclists, transit riders;
- Traffic Signal Operation Analysis and accommodation of non-traditional speed profiles;
- Transportation Planning;
- Complete Streets and Context Sensitivity; and
- MUTCD Compliance.

Reuben has a Bachelor's degree in Civil Engineering from Virginia Tech with an emphasis in Traffic and Transportation and is a licensed engineer in North Carolina. He is a long-time Affiliate of the North Carolina Section of the Institute of Transportation Engineers, and currently serves as an Affiliate Director with NCSITE.

J.M. TEAGUE
Engineering & Planning

Relevant Projects

Pedestrian crossing design, NC 107 & US 23, Sylva, NC

Sidewalk design, WCU to Forest Hills, Cullowhee, NC

Pedestrian crossings with refuge islands on NC 107 at WCU, Cullowhee, NC

Pedestrian refuge islands on US 129 in Robbinsville, NC

Bicycle lanes on NC 107 from Sylva, to WCU and East Laporte, Jackson County, NC

Safe Routes to School: Franklin, Murphy, Hayesville, Brevard, Fletcher, and Saluda NC

Town of Forest City Compr ehensive Pedestrian Plan, Forest City, NC

Towns of Rutherford College & Valdese Comprehensive Pedestrian Plan, Rutherford College & Valdese, NC

Town of Black Mountain Comprehensive Bicycle Plan, Black Mountain, NC

SEALY CHIPLEY

Public
Involvement

Sealy Chipley, Principal of Chipley Consulting provides planning and public involvement services on a wide range of projects across Western North Carolina. Ms. Chipley specializes in developing targeted public and stakeholder involvement strategies that enhance community engagement in the planning process. Prior to starting her business, she worked at Land of Sky Regional Council, providing public outreach, plan development, and facilitation services to the regional GroWNC initiative and to the French Broad River MPO.

EXPERIENCE

5 Years

EDUCATION

BS in Economics, Environmental Management & Policy; Minor in Spanish
University of North Carolina at Asheville

REPRESENTATIVE PROJECT EXPERIENCE

Black Mountain Bicycle Plan: Leading the public involvement efforts to collect input on needed bicycle amenities and complete streets components.

Rutherford College and Valdese Pedestrian Plan: Organizing community outreach to garner effective input for a pedestrian plan with a goal to connect the two communities.

Forest City Pedestrian Plan: Managed a multi-pronged public involvement process to collect input on pedestrian planning priorities in the Town of Forest City.

Laurel Park Comprehensive Plan: Managing public engagement in a comprehensive plan for the town of Laurel Park. Outreach includes soliciting input at special events in the Town, traditional public meetings, and one-on-one stakeholder meetings.

Cullowhee Community Vision: Partnered with Kostelec Planning to develop a community vision to guide future growth in Cullowhee, providing meeting facilitation, public involvement and outreach support.

Village of Forest Hills Charrette: Led a process to engage residents and stakeholders in a design charrette to identify preferences for future development.

Union County Parks and Recreation Master Plan: Provided general meeting facilitation for public meetings to collect input on park and recreation priorities for the master plan. Developed and implemented online and phone surveys.

Community and Stakeholder Engagement for I-26 Connector: Planning and facilitating public and stakeholder meetings for NCDOT to solicit input on design alternatives for the proposed I-26 Connector project in Asheville.

GroWNC Regional Plan: Supported the development of an innovative public involvement initiative to collect meaningful input on growth and development priorities from a diverse range of communities and stakeholders across the Asheville metropolitan area. Managed survey input from thousands of residents in the region.

BRIAN TAYLOR, AICP

Planning, Public Involvement

Brian Taylor has six years of planning experience with local governments in Western North Carolina. His work has focused on developing and implementing plans and projects related to active transportation, land use, and economic development. Through this work he has developed a thorough understanding of the challenges and opportunities facing WNC communities today. Mr. Taylor is adept at collecting meaningful community and stakeholder input that enhances planning decisions and supports implementation. Prior to joining Chipley, he worked as a Regional Planner with Land-of-Sky Regional Council.

EXPERIENCE

6 Years

EDUCATION

BA in International Studies, University of North Carolina at Chapel Hill
MS in City & Regional Planning, University of North Carolina at Chapel Hill

REPRESENTATIVE PROJECT EXPERIENCE

Black Mountain Bicycle Plan: Created both visitor and community surveys to gather input on needed improvements to bicycling in the town. Developed an online interactive map called WikiMaps, in which residents and stakeholders provide input on safety hazards, routes, and destinations related to bicycling.

Forest City Pedestrian Plan: Led the implementation and analysis of a community survey to collect input on walkability barriers and priorities in the Town of Forest City.

Rutherford College and Valdese Pedestrian Plan: Developed and implemented an online interactive map that allows residents to provide place-specific input for walking improvements in the two towns. Developing and managing the public input survey to garner further input related to walkability.

Community and Stakeholder Engagement for I-26 Connector: Planned and facilitated public and stakeholder meetings for NCDOT to solicit input on design alternatives for the proposed I-26 Connector project in Asheville.

Black Mountain Comprehensive Plan Update: Managed all stages of the Comprehensive Plan Update, including a robust public and stakeholder engagement process that supported the identification of local issues and opportunities, the development of strategies, and the review of plan recommendations; Engagement techniques included a multi-pronged public input survey distributed to every household and business in Town, ten public meetings, and numerous stakeholder interviews with community organizations and local leaders.

Union County Parks and Recreation Master Plan: Leading the development and implementation of phone and online surveys of County residents to inform parks and recreation priorities in the master plan.

J.B. CULPEPPER, AICP

TC-2, LLC

Education

Master of Urban & Regional Planning
Virginia Tech
Blacksburg, VA

Bachelor of Arts in Urban Affairs
Virginia Tech
Blacksburg, VA

Professional History

Consulting Planner
TC-2, LLC
2014-present

Town of Chapel Hill, NC
Planning Director
2005-2014

Town of Chapel Hill, NC
Development Coordinator
1989-2005

Town of Chapel Hill, NC
Planner
1985-1989

Guilford County, NC
Planner
1982-1985

Professional Associations

American Institute of Certified Planners

American Planning Association

UNC School of Government,
Municipal and County Government
Alumni Association

NC Chapter, Fulbright Asocition

Jennie Bob "J.B." Culpepper is an independent consulting planner, recently retired from her role as Planning Director for the Town of Chapel Hill. J.B. came to work for the Town's Planning Department in 1985. Part of a team working to review and process development applications, she quickly became the go-to person for residents, stakeholders, and developers interested in being involved with the Town's growth management process. In 1989, she took on the role of Development Coordinator, and in 2005 took over the reins of the department - - becoming the Town's fourth Planning Director in a period spanning 50 years.

J.B. Culpepper's impact on the form, character, and preservation of Chapel Hill has been extensive. She managed the Town's Development Review process for 25 years, playing key roles in both the drafting and administration of regulations. She managed work on innovative planning approaches such as creation of Neighborhood Conservation Districts and Inclusionary Housing requirements. She helped adjust rules on issues such as parking strategies, tree protection, stream preservation, and urban design. She played key roles in the planning and oversight of major development projects. She helped foster and maintain collaborative intergovernmental relationships with neighboring communities, resulting in productive inter-jurisdictional linkages. She has been a frequent speaker in venues sponsored by the UNC School of Government, the UNC Department of City and Regional Planning, and the NC and SC Chapters of the American Planning Association, sharing Chapel Hill's approaches to maintaining and enhancing community character and, most recently, addressing aging in community issues.

Project Experience/Services

- **Growth Management and Neighborhood Plans |** Chapel Hill, NC
  Including land use, housing, transportation, environmental protection, neighborhood preservation, and growth management elements.
- **Comprehensive Plan |** Chapel Hill, NC
- **Small Area Plans/Transportation Plans |** Chapel Hill, NC
- **Neighborhood Conservation Districts |** Chapel Hill, NC
- **Intergovernmental Agreements |** Orange County, NC
- **City and County Development Regulations/Expert Testimony**
- **Public Engagement and Group Facilitation**

jbculpepper@mindspring.com
September, 2015

Keith Ripperton

Senior Operations Manager (Carolinas)

Quality Counts, LLC

EXPERIENCE

Total experience: 3 years

Mr. Ripperton has worked with Quality Counts Carolina office since 2012. Since his arrival, Mr. Ripperton has taken an active role in managing all manner of projects for both public and private clientele. He has experience not only with the collection of video-based bicycle, pedestrian and turning movement counts but also with more intricate studies such as pedestrian corridor crossing information, compliance data, spot speed studies (both radar and lidar) among others.

QUALIFICATIONS

Mr. Ripperton has managed all manner of projects from bicycle, pedestrian, turning movement and ADT counts, to Bluetooth, Wavetronix Radar, and O-D License plate matching studies. Mr. Ripperton is the main point of contact for all QC project work in both North and South Carolina. He has worked closely with NCDOT, SCDOT, many cities, towns, MPOs and private consultants to assess specific project needs and come up with creative solutions to complex data collection needs.

PROFESSIONAL AFFILIATIONS

North Carolina ITE – Member

South Carolina ITE - Member

EDUCATION

Business Administration, 2003

Elon University, Elon, NC

PROJECT EXPERIENCE

City of Raleigh Bicycle/Pedestrian Counts. Working with the City of Raleigh in 2013 and 2015 Mr. Ripperton oversaw work associated with the collection of bicycle, pedestrian and truck data. All data was collected simultaneously over a three four-day periods at 70 midblock and intersection locations and delivered to the City in GIS-compatible databases. Raleigh, NC.

City of Durham/DCHC MPO Data Collection. Beginning in 2014 Mr. Ripperton has managed the data collection efforts of the City of Durham the DCHC MPO. Data collection primarily takes place in the spring and fall seasons and in 2014 211 ADT counts, 489 TMC counts and 840 bicycle/pedestrian counts at intersections and midblock locations. 2015 data collection consists 148 ADT counts, 8 TMC counts and 12 bicycle/pedestrian counts at intersections and midblock locations of Durham area, NC.

North Carolina DOT On Call Data Collection. Mr. Ripperton helps manage the on-call contract to collect video segments, TMCs, AADT, travel time, speed, pedestrian corridor crossing and other studies throughout the state of North Carolina's 14 regional divisions. QC provides NCDOT with roadway tube counts and dozens of turning movement counts annually. Various Locations, NC

I-485 Managed Lanes. In 2013 Mr. Ripperton managed a project used to determine the effectiveness of adding toll lanes to I-485. The project involved the collection of 16-hour turning movement counts, volume/classification counts and origin-destination study data along the I-485 corridor in Charlotte, NC.

NCHRP Charlotte Bike/Ped Study. Mr. Ripperton, working through Kittleson & Associates, oversaw a project that involved the collection of over 50 different sites around the city of Charlotte to collect pedestrians and bikes in order to improve the signal crossings and safety. Charlotte, NC

I-40 Expansion Project. Collecting data for Kimley-Horn & Associates, Mr. Ripperton helped to collect 16-hour turning movement counts along highway interchange ramps along I-40 & I-440 spanning from Hillsborough, NC to Benson, NC.

James Brennan

Operations Support Manager

Quality Counts, LLC – Tigard, OR

EXPERIENCE

Total experience: 3 years

James Brennan began conducting manual turn movement counts and performing quality control on QC data in 2011. From there his responsibilities expanded in 2012, as he joined the Operations Support team, where his knowledge of analytics was extremely valuable. In 2014 Mr. Brennan became Operations Support Manager; and he has been instrumental in guiding and training this dedicated group which specializes in data processing, deliverable creation, and meeting special data requirements. The Operations Support group assists QC Operations Managers in preparing estimates and scheduling projects, and oversees permitting. The group also processes a majority of QC's tube counts, produces QC's GIS deliverables, and has conducted final reviews for hundreds of QC projects during the two years Brennan has managed the group.

TECHNICAL DEVELOPMENT

Mr. Brennan has been instrumental in creating cost-analysis protocols allowing QC to streamline operational efficiency. Mr. Brennan has also developed automation techniques to streamline the production and statistical evaluation of tube counts for quality control. Brennan also has experience producing transportation data deliverables with geospatial dimensions in GIS formats.

EDUCATION

Ph.D. Economics, UC San Diego

B.A Economics, Cornell University

PROJECT EXPERIENCE

Oregon State University Parking Study – 2015

Designed data collection forms and parking count database for study area of 900+ block faces. Conducted quality control and created GIS project including extensive metadata for the entire project and parking utilization heat maps. **Contact**: *Rebecca Houghtaling, AICP, Senior Planner, Oregon State University, Rebecca.houghtaling@oregonstate.edu, 541.737.0456*

Downtown Corvallis Parking Study – 2015

Designed data collection forms and parking count database for study area of 300+ block faces and 7 public parking lots. Conducted quality control and created GIS project including extensive metadata for the entire project. **Contact**: *Sara Johnson, Senior Planner, City of Corvallis, Sarah.Johnson@CorvallisOregon.gov, 541.766.6574*

Raliegh, NC Bike/Pedestrian Counts – 2015

Managed team responsible for creating detailed project maps including GPS located embedded video screenshots of all count locations. Also collaboratively oversaw the team responsible for creation of all GIS compatible count deliverables for 100+ locations. **Contact**: *Jason Myers, Transportation Planner, City of Raleigh, Jason.myers@raleighnc.gov, 919.996.2166*

City of Durham, NC Annual Data Collection – 2014-2015

QC has conducted approximately 200 turning movement counts, 300 pedestrian and bike counts, and 200 tube counts as part of the Annual Data Collection for the City of Durham. Brennan manages the team responsible for processing all tube data collected and has developed QC's deliverables production for the entire project. **Contact**: *Kosok Chae, Ph.D., Department of Transportation, City of Durham,* Kosok.Chae@durhamnc.gov, 919.560.4366

Old Town Alexandria Parking Study – 2014

Helped plan and organize data collection for a large parking study (8,000+ spaces) in Alexandria, VA. Responsibilities included project cost estimation, route planning, and GPS dashboard camera testing. Brennan also contributed to the data entry and deliverables creation and the video reduction strategy. **Contact**: *Vivek Hariharan, Transportation Engineer, STV Group, vivek.hariharan@stvinc.com, 410.298.2794*

Dan Franz

Director of Operations
Quality Counts, LLC

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

EXPERIENCE

Mr. Franz is the Director of Operations for Quality Counts LLC overseeing the execution of all data collection services nationally and abroad. Working with Quality Counts for over seven years, Mr. Franz has supervised numerous contracts including aggregate annual tube counts of more than 2,200 locations. In addition, he directly manages specialized projects where new approaches and dynamic methods are utilized. Mr. Franz joined the team as a field technician before a successful tenure as Operations Manager of the San Francisco Bay Area office. Mr. Franz's success in the Bay Area made him a perfect candidate to oversee operations nationally. He returned home to Portland, OR, and currently oversees QC's Portland office in addition to supervising nationwide operations.

EDUCATION

B.A. Business
Cascade College
Portland, OR

CONTACT

916.730.2478
dfranz@qualitycounts.net

PROJECT EXPERIENCE:

Washington County, OR - County-Wide Annual Tube Count Program:
Collected over 250 locations of Classification, Speed, and Volume tube counts annually working with Washington County, OR. QC is servicing this contract for the sixth year. Mr. Franz's responsibilities have ranged from conducting field work to directly managing the project to providing general oversight & equipment coordination. **Contact:** *Miguel Guzman, miguel_guzman@co.washington.or.us, 503.846.7916*

San Luis Obispo COG - Model Improvement Plan:
As a sub-consultant for Fehr and Peers, managed and completed 72hr machine class counts at 101 locations, and Wavetronix radar volume counts at 4 freeway locations throughout San Luis Obispo County during the summer of 2011. QC completed a follow up to this study Jan 2012. **Contact:** *Ian Barnes, Fehr and Peers, I.Barnes@fehrandpeers.com, 925.930.7100*

City of Pleasanton City-wide Turning Movement Count Project: Mr. Franz successfully managed the collection of 174 Turn movement counts during the spring of 2010 for the City of Pleasanton. In February of 2012 he again managed the collection of 268 turn movement counts for the City. **Contact:** Joshua Pack, *925.931.5667*

Traffix San Ramon Valley School District Congestion Management Study:
Quality Counts and Mr. Franz teamed with TJKM Consulting to manage the collection of 76 Turn Movement Counts and 133 ADT Tube counts around many schools and their surrounding communities throughout the San Ramon Valley Unified School District during fall of 2011. **Contact:** Andrew Kluter, *3875 Hopyard Road, Pleasanton, CA 925.463.0611*

NCHRP 17-56: Development of Crash modification Factors for Uncontrolled Pedestrian Crossing Treatments
Managed the collection of pedestrian crossing counts from video footage at more than 850 locations throughout the U.S. for NCHRP research project 17-56. Locations filmed included those with a variety of treatments such as raised median islands, or pedestrian hybrid beacons, and untreated or "comparison" locations. Contact: *Charles V. Zegeer, Director, Pedestrian and Bicycle Information Center, Associate Director for Engineering and Planning, UNC Highway Safety Research Center, zegeer@hsrc.unc.edu, 919.962.7801*

Oregon State University Parking Study
Managed the collection of parking inventory and supply/demand data for 14 hours on each of 2 consecutive days on over 900 block faces surrounding the OSU campus in Corvallis, OR. **Contact:** *Rebecca Houghtaling, AICP, Senior Planner, Oregon State University, Rebecca.houghtaling@oregonstate.edu, 541.737.0456*

Corvallis, Albany, Lebanon Model (CALM) Update 2013
Managed the collection of 330 48-hour volume counts for Oregon Department of Transportation's CALM update. All counts were collected in spring of 2013. **Contact:** *Don Crownover, P.E., TSM Unit Team Leaderdon.r.crownover@odot.state.or.us, 503.986.4132*

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

Claudia Sibila, CMI Spanish

2614 Wyntercrest Lane ◆ Durham, North Carolina 27513 ◆ (919) 215-3685 ◆ claudiasibila@gmail.com

Objective

Obtain provide Spanish/English translation and interpreter services to schools, law office, medication services, and medical offices. Provide mediation and conflict resolution services for Spanish/English.

Profile

Motivated, personable business professional with a law degree from Venezuela with three years experience as a lawyer in Venezula and over ten's managing law offices in the United States.

Flexible and versatile – able to maintain a sense of humor under pressure. Poised and competent with demonstrated ability to easily transcend cultural differences. Thrive in deadline-driven environments. Excellent team-building skills.

Language expert who understands the importance of confidentiality, and ethical practice. Understands that the subject matter can be quite sensitive in some cases and therefore adhere to all confidentiality protocols while being objective and professional at all times.

Skills Summary

- Report Preparation
- Employee Screening
- Written Correspondence
- Translation
- Training Development
- Interpretation
- Scheduling
- Event Planning
- Training
- Mediation
- Conflict Resolution
- Employee Coaching
- Professional Presentations

Professional Experience

SPANISH – ENGLISH INTERPRETER/TRANSLATOR

- Certified Medical Interpreter with the National Board of Certification for Medical Interpreters
- Successfully completed North Carolina Court Interpreter Orientation, Written Examination, Court Interpreter Skill Building Workshop current level B North Carolina Court Interpreter.
- Experience medical interpreter - proficiency of medical terminology and experience with a wide range of medical environments, including but not limited to general practice, medical specialties, emergency department, operating rooms, psychiatric units, and delivery. Communicate medical concepts to patients to facilitate understanding.
- Experience clinical trials and research interpreter and translator.
- Experience working with a variety of business disciplines and staff including but not limited to financial counselors, social workers, Psychologist, Psychiatrist, school teachers, nurses, doctors, surgeons, lawyers, risk managers, human resource managers, business managers, and researchers.
- Experience with educational IEP's for special needs students including learning and behavioral disabilities
- Experience legal interpreter in divorce, traffic, and worker's compensation.
- Experience translating Legal and medical documents from English to Spanish and vice-a-versa - highly-skilled language interpreter expert in translating documents, manuals, surveys, presentations, e-mails, etc.
- Experience interpreting for speakers - professional language translator with impeccable language skills ranging from small group meetings to large conferences with over 50 in attendance.
- Experience evaluating, training, and testing prospective employees for Spanish/English language qualifications/certification.

MEDIATION: LEGAL/EMPLOYEE RELATION DISPUTES

- Experience employee/employer relations dispute and wrongful termination
- Experience coaching employees to present appeals to human resources.

TRAINING: PRESENTATIONS/CLASSROOM/INDIVIDUAL

- Train first and second year medical students
- Develop and present employee development classroom training
- Deliver language and cultural competency training to hospital employees and medical students.
- Design and deliver a series of classes for interpreters, medical students and hospital staff. .

- Trained interpreters on medical concepts and terminology.

Employment History

SPANISH/ENGLISH CONSULTANT. – Chapel Hill North Carolina
Interpreter/Translator/Language Coach, 2002 to Present

Responsibilities included: Provide interpretation and translation of verbal and written material from English to Spanish and vice-a-versa. Clients include multiple clinical trial, research projects, physicians, professors, and private individuals. Current clients include The Law Offices of Manual Costa, ESQ, various UNC research departments, Wake County School District, and Pacific Interpreters. Experience interpreting for social security hearings, family court, mental health assessments, crisis counseling, family counseling, mental health educational classes, business meetings, and employee training. Translations include educational IEPS, legal documents, medical research documens and survey's.

NORTH CAROLINA VENEZUELAN CULTURAL ASSOCIATION. – Chapel Hill, North Carolina
Vice President, 2004 to Present

Responsibilities included: Attract, develop, coach, and retain high performance board members, empowering them to elevate their level of responsibility, span of control, and performance. Work with members to develop systems to ensure consistent, high-quality cultural events. Provide leadership in the development of inter-team communication and cohesiveness, sustaining culture and supporting board members during organizational growth.

UNIVERSITY OF NORTH CAROLINA HOSPITALS. – Chapel Hill. North Carolina
Interpreter/Translator/Lead Interpreter, 2002 to December 2012

Responsibilities included: Provide accurate interpretation and translation of verbal
and written material from English to Spanish and vice versa.
Develop and Implement trainings for Interpreters.
Conduct employee interviews, and performance evaluations.
Recommend improvements based on best practices and policies, prepare written reports.

Additional Duties included: working with Employee Relations to mediate disputes and resolve employee conflicts. Participate in the employee appeal process. Translate legal documents for Risk Management.

THE LAW OFFICES OF MANUAL COSTA, ESQ – Chapel Hill, North Carolina
Officer Manager/Legal Assistant, 1999 to 2002

Responsibilities included: day-to-day operation of all administrative, secretarial and Paralegal functions of a solo-attorney law office, specializing in criminal, worker's compensation, personal injury and property damage, and traffic litigation. Conduct legal research and draft documents for court cases.

Responsibilities included: day-to-day operation of all administrative, secretarial and Paralegal functions of a solo-attorney law office, specializing in criminal, worker's compensation, personal injury and property damage, and traffic litigation. Conduct legal research and draft documents for court cases.

THE LAW OFFICES OF JORGE SIBILA, ESQ – Miami, Florida
Officer Manager/Legal Assistant, 1985 to 1999

Responsibilities included: day-to-day operation of all administrative, secretarial and Paralegal functions of a solo-attorney law office, specializing in criminal, family, personal injury and property damage, landlord-tenant law and civil litigation.

HERNANDEZ BERNAL & ASSOCIATES – Caracas, Venezuela
Attorney at Law, 1982 to 1985

Responsibilities included: Practice focused on litigation, trust and estate property management, real estate transactions, and business management. Manage heavy caseload, responsible for handling all mortgage foreclosure proceedings.

Education

UNIVERSIDAD CATOLICA ANDRES BELLO – Caracas, Venezuela
Attorney at Law Degree, 1982
Licensed to practice law in Venezuela

Professional Training

COURT PROGRAM AND MANAGEMENT SERVICES - Raleigh, North Carolina
Court Interpreter Orientation and Training, 2012

CROSS CULTURAL HEALTH CARE PROGRAM – Santa Rosa, California
Bridging the Gap Training the Trainer, 2007

DUKE MEDICAL CENTER – Durham, North Carolina
Bridging the Gap Training, 2006

CAROLINA DISPUTE SETTLEMENT SERVICES – Durham, North Carolina
Mediation Training/Arbitration Training, 2006

GREENSBORO AHEC – Greensboro, North Carolina
Ethics and Cultural Competency, 2005

UNC HOSPITAL – Chapel Hill, North Carolina
Emerging Leaders, 2004

WAKE COUNTY AHEC – Raleigh, North Carolina
Training for Health and Human Services Setting, Level I, II, & III, 2004

LEGAL SKILL BUILDING WORKSHOP – Orlando, Florida
DECEMBER 2012

Asheville Board of Alcoholic Control (ABC) Parking & Access

Client:

Asheville Board of Alcoholic Control

JMTE Services:

- Communication with Town, County and State officials
- Crash Analysis
- Plan Design and Implementation
- Project Management
- Permit Procurement

Location:

Asheville, NC

J.M. Teague Engineering & Planning (JMTE) analyzed the site and surrounding study area to inventory the parking lot infrastructure and gather information such as: parking lot geometry and existing pavement striping & markings. A conceptual parking lot redesign drawing was provided to reflect the desires of the Asheville ABC Board.

To ensure ordinance compliance, research was conducted into the City of Asheville's Development and Design Standards. JMTE also contacted the necessary North Carolina Department of Transportation and City of Asheville officials for required permitting, applied for and received all necessary permits, and procured local contractors to implement new parking lot as well as sealing and striping services.

From project start to finish, JMTE ensured excellent communication with Asheville ABC board, provided design drafts, cost estimates, and timely completion, all within the specified budget.

J.M. TEAGUE
ENGINEERING & PLANNING

525 North Main Street
Waynesville, NC 28786

Phone: (828) 456-8383
Fax: (828) 456-8797

Asheville Board of Alcoholic Control (ABC) Parking & Access

Client:

Asheville Board of Alcoholic Control

JMTE Services:

- Communication with Town, County and State officials
- Crash Analysis
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J.M. TEAGUE
ENGINEERING & PLANNING

525 North Main Street
Waynesville, NC 28786

Phone: (828) 456-8383
Fax: (828) 456-8797

Celebrate the Season Parking Plan

Client:

Old Santee Canal Park

JMTE Services:

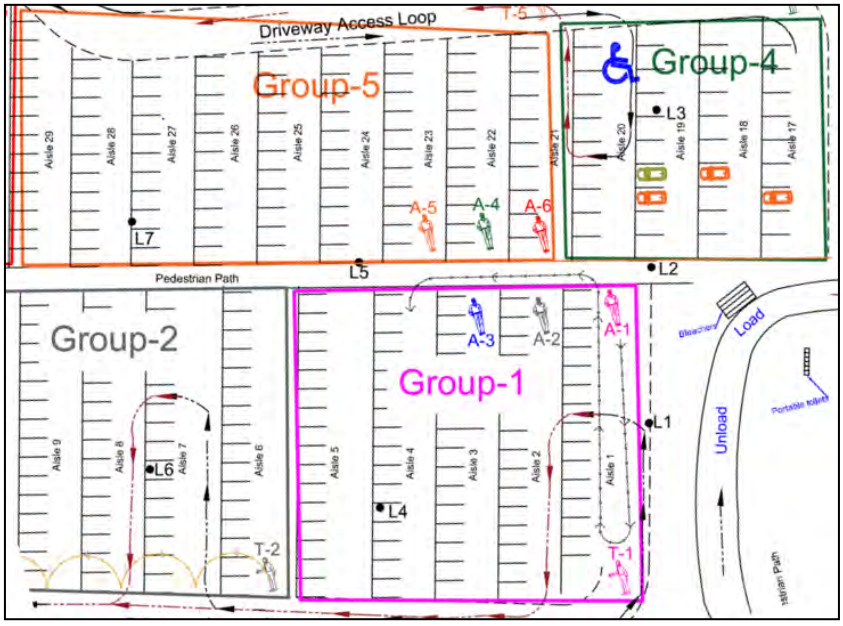
- Parking Lot Design
- Signs and Markings
- Parking Attendant Location
- Procedures for Attendants
- Traffic Flow
- Ingress and Egress Points
- Lighting Locations
- Instruction Pamphlets
- Engineering Report

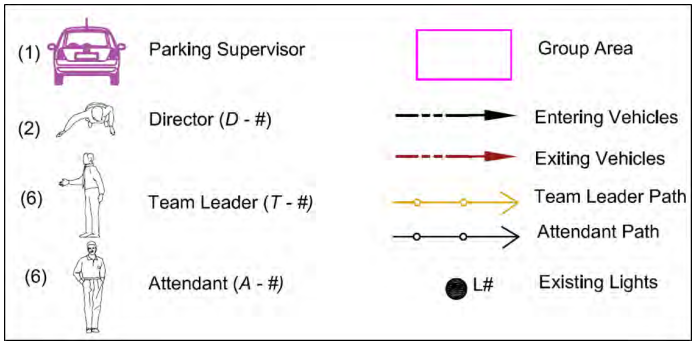
Location:

Moncks Corner, SC

J.M. Teague Engineering & Planning created a special event parking plan for Santee Cooper's "Celebrate the Season" in Moncks Corner, South Carolina. This December festival attracts visitors with light displays, hayrides, singing and performances. The work involved creating safe pedestrian walkways with ingress and egress from the parking area, protecting a dedicated hayride area, designating specific crossing points, and making assignment cards describing individual duties for the parking attendants.

The plan maximized the use of the space available for parking while separating three modes of travel to the degree possible. A highlight of the plan is the minimization of backing: motorists pull forward to park and pull forward to exit.





J.M. TEAGUE
ENGINEERING & PLANNING

525 North Main Street
Waynesville, NC 28786

Phone: (828) 456-8383
Fax: (828) 456-8797

Town of Franklin Downtown Parking Study

CLIENT:

Town of Franklin

JMTE SERVICES:

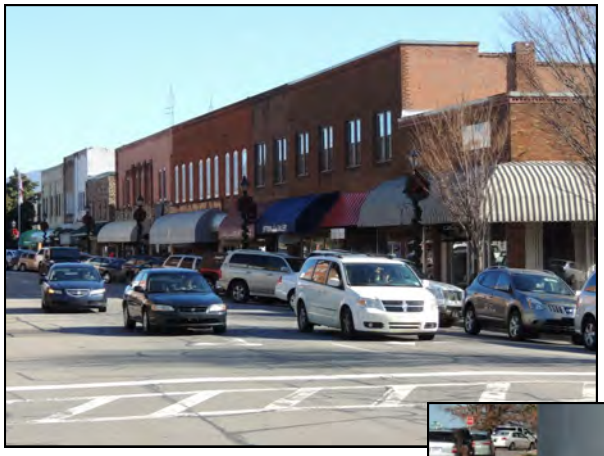
- Design Analysis
- Professional Consulting
- Pedestrian Safety
- Bike Network Connectivity
- Handicapped Accessibility

LOCATION:

Franklin, NC

J.M. Teague Engineering & Planning analyzed and made recommendations concerning the town's on-street parking along Main Street. This area included most of Historic Downtown Franklin containing a dense collection of shops, restaurants, parks, and offices. The area captured a large amount of pedestrian activity.

While the study largely focuses on parking along Main Street, other factors were also examined in order to best suit the context and help the residents and businesses that make this Downtown area a place to do business, relax, or shop.



J.M. TEAGUE
ENGINEERING & PLANNING

525 North Main Street
Waynesville, NC 28786

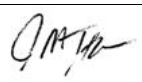
Phone: (828) 456-8383
Fax: (828) 456-8797

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:	J.M. Teague Engineering & Planning
Contact Person:	Kristy Carter, AICP
Phone #:	828.456.8383 – office; 828.446.4347 – cell
Authorized Signee:	
Print Name:	J. Mark Teague, PE, CPM
Print Title:	Owner & Principal Engineer

#	DESCRIPTION	COST
1	Public participation	$16,540
2	Data collection	$24,595
3	Analysis	$15,675
4	Presentations	$3,800
5	Plan development	$3,325
6	Project management	$3,420
	Total	**$67,355**

Proposal

Parking Study

RFP #540-2016-1

Submitted to:

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.*

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

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

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Parking Study

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

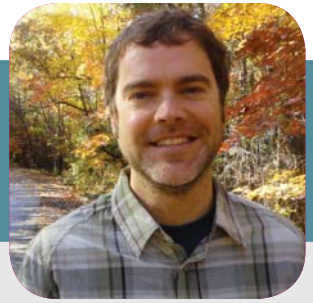
EDUCATION
- Master of Arts, Geography and Urban Planning, East Tennessee State University, 1995
- Bachelor of Science, Psychology, East Tennessee State University, 1991

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

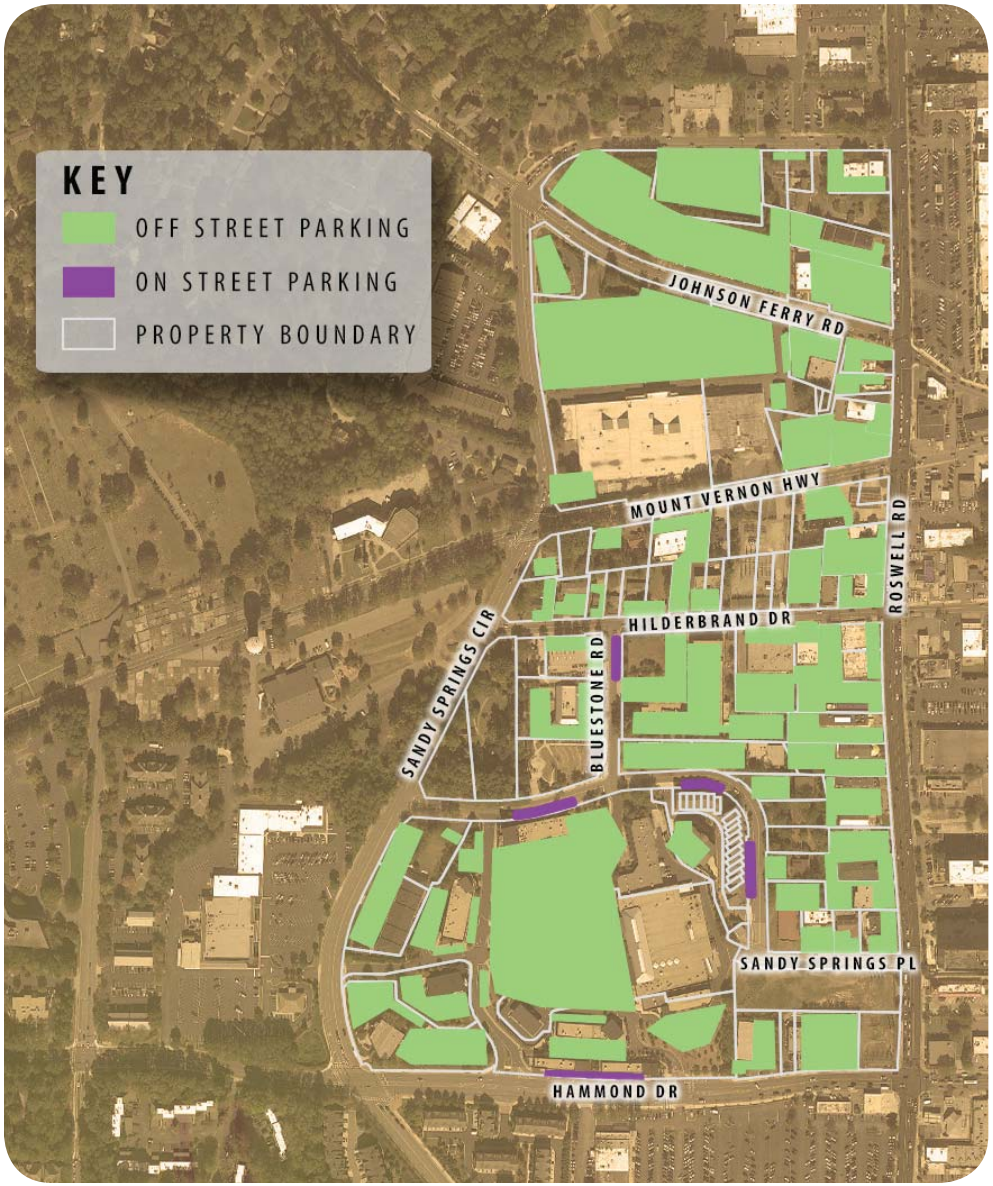
Kimley-Horn completed a parking study for the City Center area to help the City of Sandy Springs realize a renaissance by setting a platform by which redevelopment can be initiated. The study helped to position the area to support construction of the catalyst project (a municipal complex) while also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



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

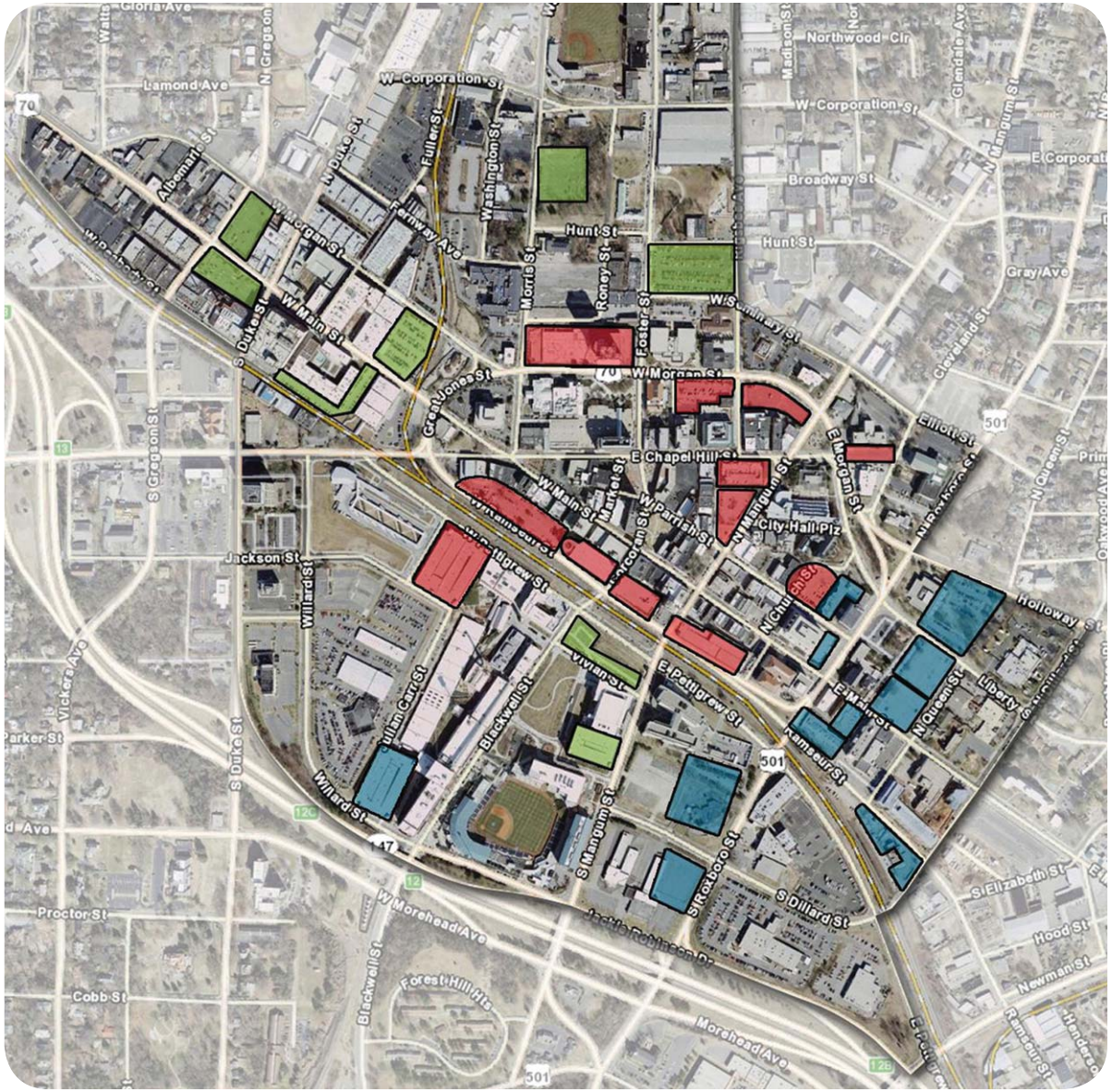
Kimley-Horn helped the City of Durham evaluate existing parking operations and the potential need for additional parking structures to accommodate growth in the downtown study area. Recent developments and redevelopments in Downtown Durham have positioned the City for significant growth. At present, 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

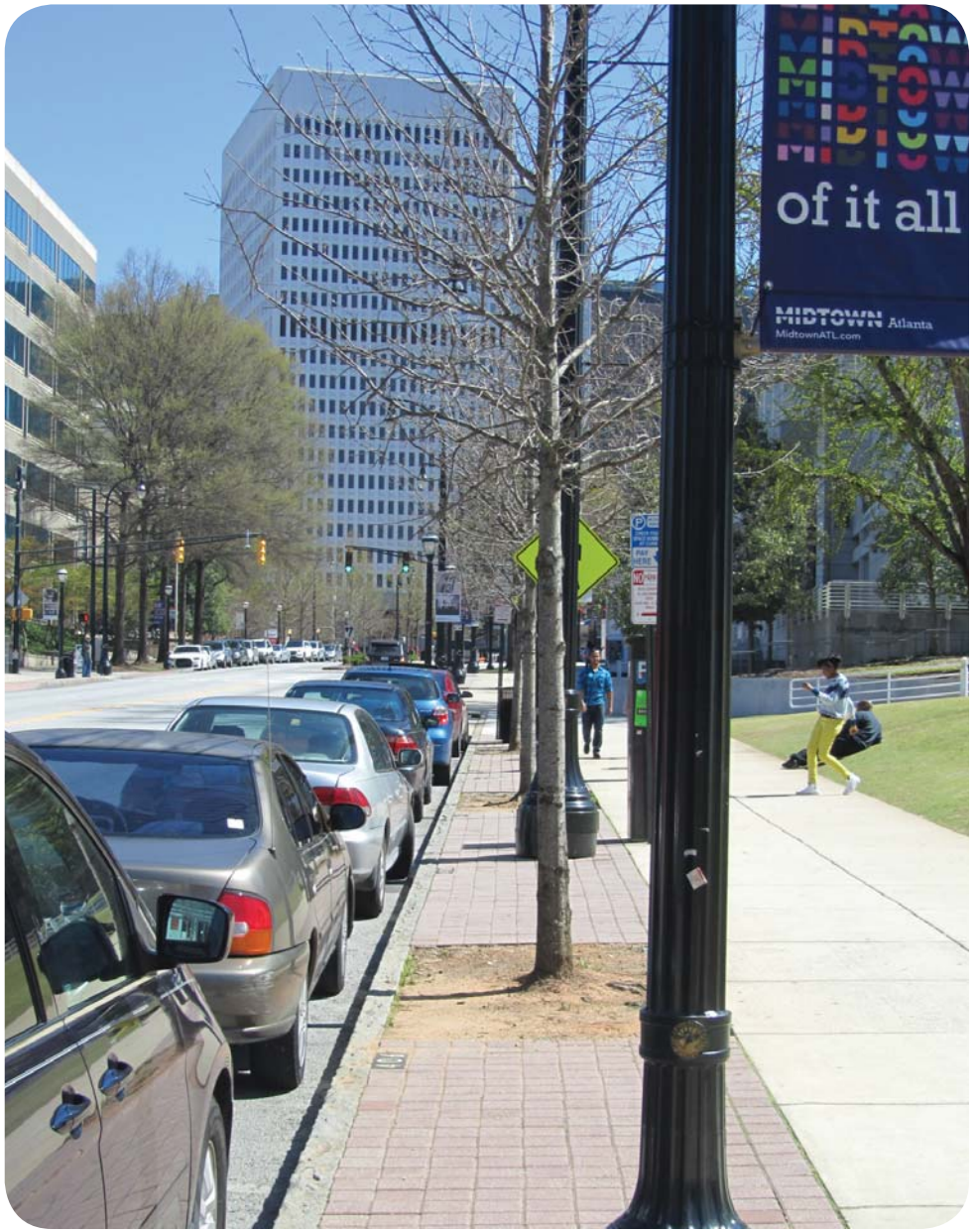
ATLANTA, GA

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:

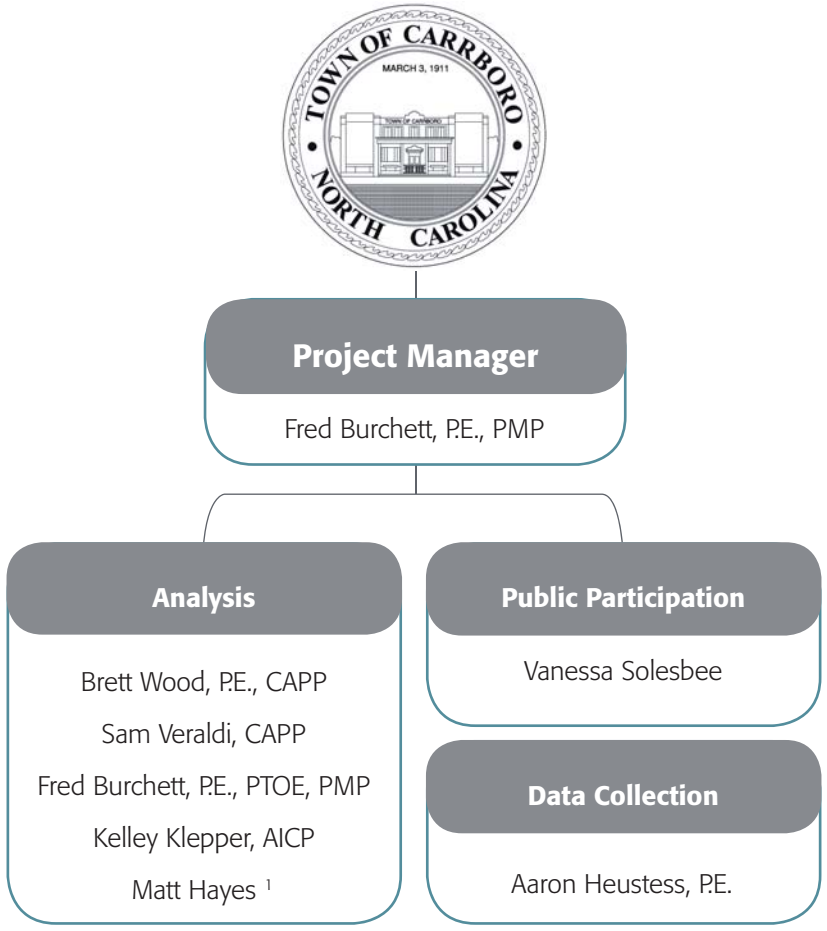
- Diversify revenue stream to maintain ethnic and economic diversity
- Protect historic neighborhoods and maintain Carrboro's unique identity
- Improve walkability and public transportation
- Encourage development that is compact, dense, and appeals to diverse lifestyles and incomes
- Enhance and sustain 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**.

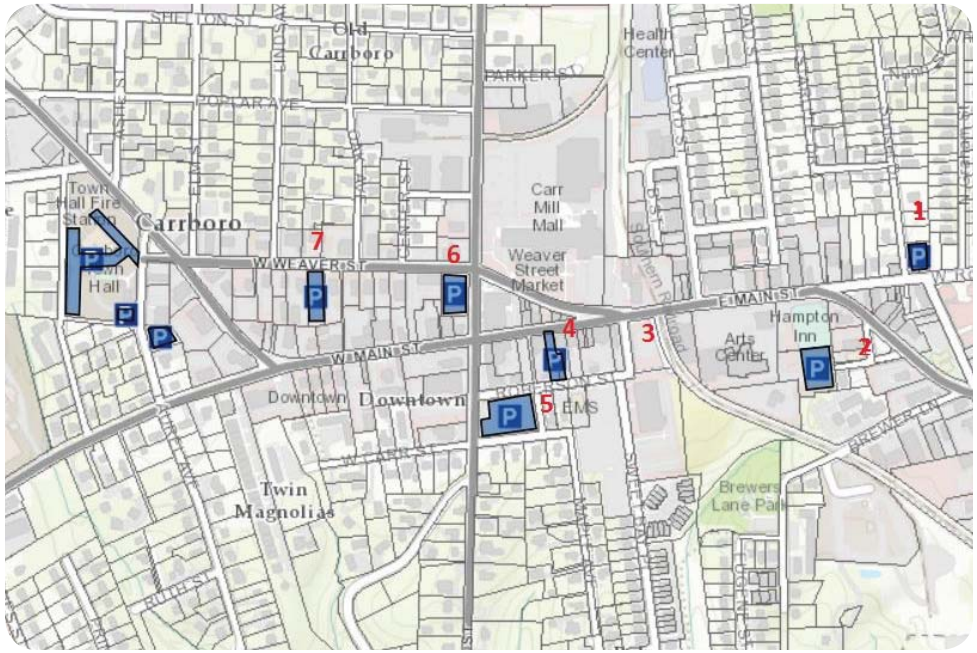
Kimley-Horn will summarize the parking information collected and present the data graphically for meetings with stakeholders and for final reporting. We will coordinate with the Town to obtain its existing GIS map. All mapping developed by Kimley-Horn for the project will be prepared using GIS, allowing 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.

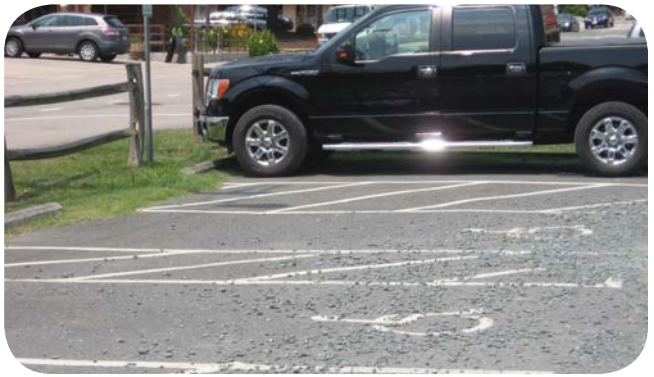
For enhanced accuracy and efficiency, Kimley-Horn proposes to use a vehicle equipped with License Plate Reader (LPR) technology to collect parking occupancy data. We will use the vehicle equipped with LPR and drive the designated parking areas in the study area. Kimley-Horn has used LPR on a number of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

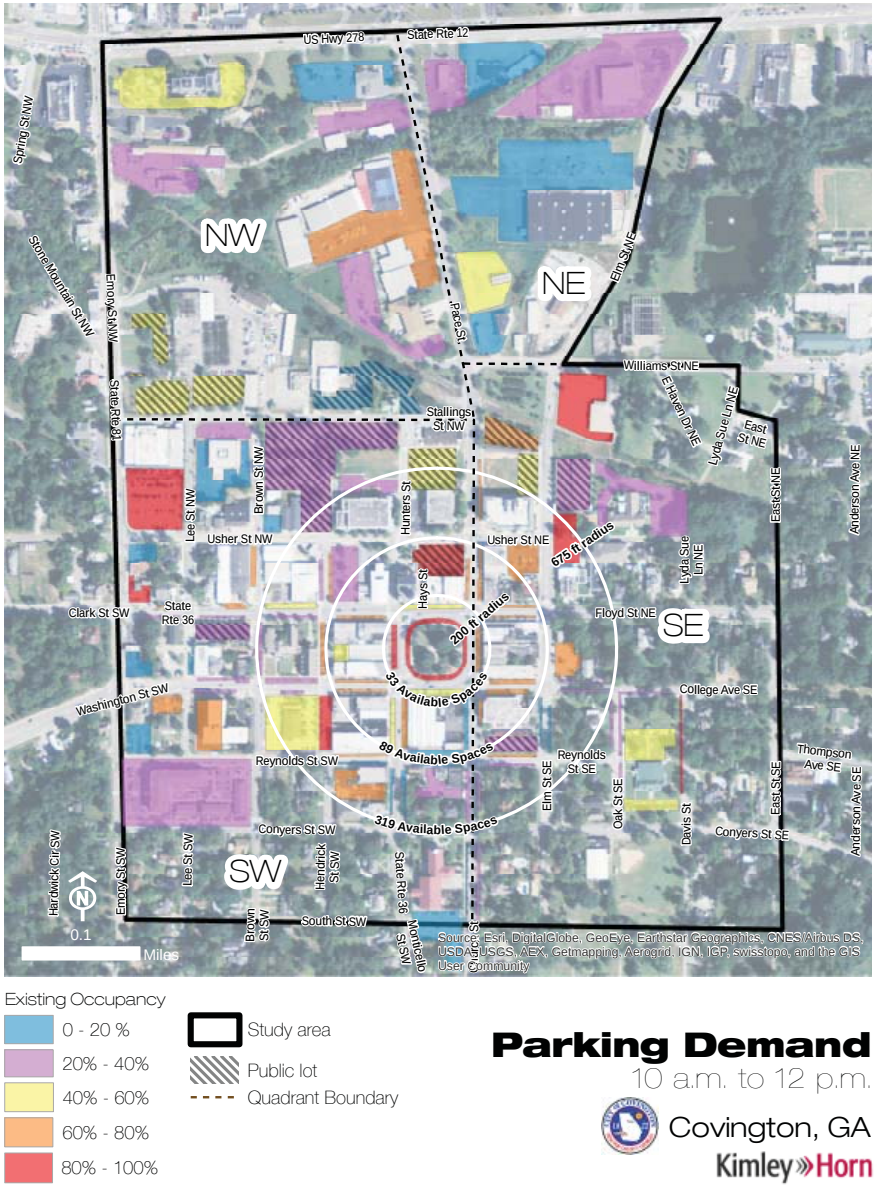
As noted in Task 2.3, the use of LPR technology will allow us to use the photographic inventory of vehicles and license plates to calculate parking space turnover at any location where data has been collected. An example of turnover calculations and parking duration from a recently completed study in 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
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Assistant City Manager
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480 355 6070

Adam Fischer
City of Greensboro
Director of Transportation
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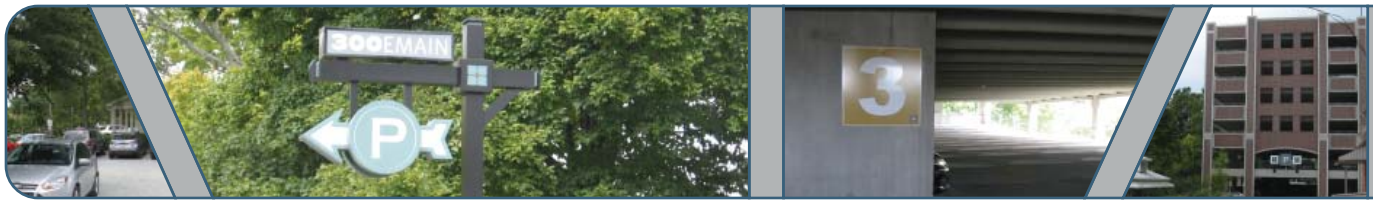


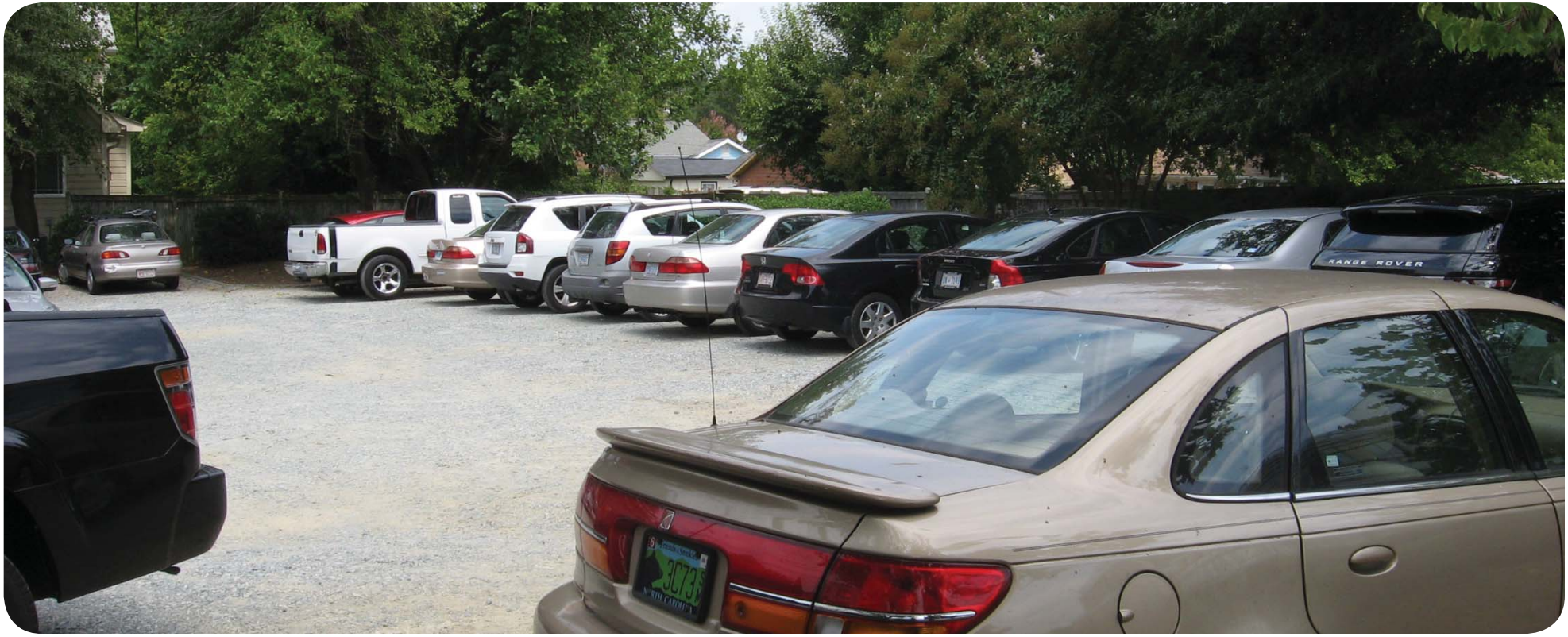
Subconsultants

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.



Town of Carrboro Planning Department

September 10, 2015

Parking Study for the Town of Carrboro, NC

Table of Contents

1 Cover Letter

www.vhb.com

September 10, 2015

Ref: RFP #540-2016-01

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

Re: Parking Study for the Town of Carrboro Request for Proposals

Dear Ms. Watterson:

VHB Engineering, NC, P.C. (VHB) is pleased to provide our response to the Town of Carrboro's Request for Proposals (RFP) for providing consulting services relating to the development of a Parking Study for the Town. VHB's Raleigh office specializes in the type of transportation planning services required by the Town. We have completed several projects in Carrboro, including a traffic study at East Main Street and a Road Diet, Pavement Marking, and Traffic Circulation Study for West Main Street and the adjacent Oak-Poplar neighborhood. In addition, our team's transportation specialists are well versed in the completion of parking plans, having just completed the Town of Wilson's parking plan and currently finalizing work on the City of Concord's parking plan.

I will serve as Principal-in-Charge for this project and will provide support to our Project Manager, Mr. **Timothy Tresohlavy, AICP, GISP**. Timothy is an experienced project planner, with parking study, bicycle and pedestrian planning, long-range and comprehensive transportation planning, campus master planning, and GIS/modeling experience. Timothy served as Project Manager for the downtown Wilson parking study and is currently leading efforts for the Concord parking study. As Principal-in-Charge, I will make sure that Timothy and the project team have the resources necessary to successfully complete Carrboro's parking study, drawing upon my recent experience supporting Timothy on the Wilson and Concord parking plans.

VHB is a corporation without DBE status, and the firm and its owners are not involved in any activity that may constitute a conflict of interest in pursuing this assignment, or in executing work for the Town of Carrboro. VHB also acknowledges receipt of the substantial question answers.

We are confident that our experience and knowledge can make an important contribution toward improving the parking and mobility in the Town of Carrboro. Please do not hesitate to contact me at **919.334.5616** or **billmartin@vhb.com**, or Timothy at **919.741.5506** or **ttresohlavy@vhb.com**, if you need additional information or have any questions.

Sincerely,

William A. Martin, Jr., PE
Principal

Engineers | Scientists | Planners | Designers

4000 WestChase Boulevard
Suite 530
Raleigh, North Carolina 27607
P 919.829.0328
F 919.829.0329

2 Firm Experience, Knowledge, Familiarity, and Past Performance with Desired Services

Firm Experience, Knowledge, Familiarity, and Past Performance with the Desired Services

Project Understanding

The Town of Carrboro has made significant investments to improve transit, bicycle, and pedestrian modes of travel within downtown. The current parking system balances these modes of travel for the mixture of civic and private business uses and complements the public's diverse culture.

Parking supply constraints are unique to every downtown, and Carrboro is no exception. There are limited opportunities for on-street parking along Main Street and Weaver Street. Due to this, Carrboro's vehicular storage is relegated to the areas behind restaurants, shops, and offices, leaving the front side available for biking and walking – a beneficial development trend for both the Town and its merchants.

Forecasting future parking demand is a planning effort that should be continually analyzed and updated. The most recent future parking demand estimation for Carrboro, completed in 2008, recommended that improvements to pedestrian amenities, such as sidewalk connections and street lighting, would have the greatest return on investment regarding future parking demand reduction. This study found that Tuesday evenings represented the period of greatest parking demand, and that the 300 block of East Main Street represented the location with the highest estimated future parking demand. The most significant finding was that the central business

district of Carrboro experiences a high vehicle turnover rate (only 20% of vehicles were found to be parked for greater than the posted 2-hour limit) for public parking lots.

Current perspectives on downtown parking focus on active parking management, which requires the regular collection of peak parking occupancy data in combination with minor adjustments to either price, time limits, enforcement efforts, or supply to maintain a targeted 85% occupancy rate in proximate and periphery lots. This approach requires vision, personnel, and support from not only merchants, but Town officials. One of the keys to successful active parking management is offering multiple travel options to the diverse groups of citizens looking to visit downtown. These groups include employees, store owners, customers, tourists, and residents. Each group should be offered multiple options for parking, walking, bicycling, or riding transit and allowed the freedom of choice with tradeoffs. Falling short of this goal will only perpetuate the incorrect perception that "there is no place to park downtown." Previous parking occupancy studies in Carrboro have found that, even during the busiest time of the busiest day of the week, there are plenty of places to park downtown.

VHB's approach for this parking and mobility study will be:

- to inventory the existing supply of public and private downtown parking;
- to determine the utilization of the current parking resources;
- to reach out to downtown businesses, developers, parking operators, residents, local governments, and other stakeholders in the study areas to identify their specific parking perspectives and issues;
- to estimate future parking demand generated by new land uses within downtown, based on the best available assumptions for land use and building square footages;
- to revise these assumptions based on demographic data, regional trends, and direction from the Town;
- to develop a five (5) year parking plan that balances supply and demand with available travel demand management (TDM) strategies; and
- to prepare parking management plan recommendations for the Town to provide parking management options that fit the unique and diverse culture of the Carrboro community.

Parking Study Experience

VHB has extensive experience in parking studies and the design of parking facilities. We have prepared parking plans and strategies for many university campuses, as well as municipalities, including forecasting future needs, evaluating sites and undertaking feasibility studies for parking decks and surface parking, and developing TDM measures for reducing parking demand. A key goal of any parking study is to ensure that parking and its management is not only well engineered, but also supports the client's economic and environmental goals, such as downtown revitalization or campus growth. We also assist architects and engineers in the design of facilities, including layout and circulation, access for cars and pedestrians, street improvements, park-and-ride, and preparing traffic impact studies. The following section provides project descriptions of similar studies to the Town of Carrboro Parking Study.

Relevant Experience

Road Diet, Pavement Marking, and Traffic Circulation Study

Carrboro, North Carolina

Client
Durham-Chapel Hill-Carrboro MPO

VHB completed a two-part project under an on-call contract. The West Main Street Road Diet and Pavement Marking Study examined the feasibility of a road diet application on a section of West Main Street in Carrboro, while the Oak-Poplar Neighborhood Traffic Circulation Study was a transportation study for the adjacent Oak-Poplar neighborhood. The road diet study consisted of traffic and level of service assessment; feasibility, need, and impact analysis; and a draft pavement marking plan for the proposed road diet treatment. The neighborhood traffic circulation study identified existing and projected multimodal transportation concerns in the adjacent Oak-Poplar neighborhood, including any impacts from the road diet.

The two studies were jointly conducted and involved multiple public meetings, including a neighborhood walk with residents to identify specific concerns and issues. The road diet pavement marking concept was presented to the North Carolina Department of Transportation (NCDOT) for implementation. The neighborhood traffic study identified a number of issues for more in-depth study to improve mobility and access for the Oak-Poplar neighborhood.

Shelton Station Traffic Impact Analysis

Carrboro, North Carolina

Client
Belmont Sayre, LLC

VHB completed a traffic impact analysis for a proposed mixed-use development located at 500 North Greensboro Street in Carrboro. VHB calculated the traffic associated with the 114 mid-rise apartment units and 12,000 square feet of neighborhood retail space and assessed impacts along the adjacent roadway network. Roadway and multimodal improvements were recommended for the new development.

300 East Main Street Traffic Study

Carrboro, North Carolina

Client
Main Street Properties

VHB performed a traffic study for a 400,000 square foot redevelopment project in downtown Carrboro. The mixed-use project consisted of office, residential, retail, and an art museum. VHB determined traffic and parking reductions as a result of the mixed-use nature of the development and its proximity to transit and walkable downtown destinations. Anticipated trips generated by the site were distributed to the surrounding street system, and VHB recommended geometric, signalization, and pedestrian safety measures in conjunction with the new development. VHB also prepared innovative signal phasing for the site's primary driveway, including railroad preemption and signal design plans.

Downtown Wilson Parking Analysis

Wilson, North Carolina

Client
City of Wilson, North Carolina

VHB led a study to assess the parking capacity in downtown Wilson, North Carolina. In order to determine if there is sufficient capacity in the existing parking supply to convert some public parking to residential parking associated with a planned development, VHB conducted an inventory of parking supply and demand within the nine block study area. The field inventory conducted counted the total and occupied number of on- and off-street parking spaces by lot/location for six categories of use. VHB analyzed minimum vacancy rates by block and for the entire study area to determine if there is sufficient excess capacity to convert 18 to 54 public spaces into residential spaces. VHB documented the data, methodology, and recommendations in a technical memorandum, which was submitted to the City of Wilson.

In a follow-up study, VHB expanded the study area to include 35 total city blocks. Through interviews with municipal and private business stakeholders, the project team performed an analysis of the existing operational management and recommended improvements to the City's parking system. We incorporated future development projects into a parking demand model to test the future parking supply against the expected parking demand in 2020. VHB used this scenario analysis to inform the overall strategic parking plan and report for the client. The project team also reviewed and made recommendations for changes to the City's parking lease agreement for private developments.

Parking Management Study

Concord, North Carolina

Client
City of Concord, North Carolina

VHB assisted members of the City of Concord, Cabarrus County, and the Concord Downtown Development Corporation in quantifying existing supply and forecasting future demand for an 18-block study area. The existing conditions analysis has found the County Court schedule has the greatest impact on weekday parking demand, with peak parking demand occurring on Mondays between 10 and 11 am. The study further observed that on-street parking occupancy regularly exceeded 90% for nearly all of the two-hour time restricted parking areas. VHB also examined the feasibility of expanding sidewalk widths for restaurant dining opportunities and parklet opportunities, while mitigating on-street parking losses and minimizing impacts to traffic operations.

Recommendations to the City include varying low-cost, quick-win strategies to more evenly distribute peak parking demand across all parking facilities through programmatic improvements addressing education, encouragement, and enforcement efforts. These recommendations are aimed at delaying the need for much longer-term recommendations, specifically the potential for Public-Private Partnership construction of a parking garage on one of three County parking lots.

Parking by Lot Code, Class, and Occupancy

			Lot Type 1		Parking by Class							Occupancy 10:30 AM		Occupancy 1:30 PM	
Lot Code	Lot Name	Spaces	Lot	Street	Reg	Emp	Visit	Rent	Rsv	HC	LZ	Vehicles	% Occu	Vehicles	% Occu
AD	Alamance Dental Associates	10	10				10					9	90%	6	60%
AS	Amtrak Train Station	101	101				95			6		43	43%	37	37%
AT	AT & T	24	24			20					4	13	54%	11	46%
BC	Burlington Co-op	12	12		11					1		4	33%	5	42%
FC	First Christian United Church	109	109				99		2	8		1	1%	2	2%
FD	Burlington Fire Dept	37	37				29		2	1	5	16	43%	15	41%
FM1	Front St. United Methodist Church	21	21				21					7	33%	7	33%
FM2	Front St. United Methodist Church	75	75				75					16	21%	22	29%
FR	Front St.	71		71	65					1	5	51	72%	53	75%
FS	First State Bank	36	36				34			2		14	39%	15	42%
GS	Goodwill Shopping Center	56	56				54			2		20	36%	14	25%
LC1	Lab Corp.	35	35			27	3			2	3	34	97%	30	86%
LC2	Lab Corp.	28	28			28						23	82%	27	96%
LC3	Lab Corp.	113	113			109			3	1		94	83%	104	92%
LC4	Lab Corp.	294	294			291				3		137	47%	151	51%
LC5	Lab Corp.	59	59			51				8		58	98%	59	100%

Downtown Parking Study

Burlington, North Carolina

Client
City of Burlington, North Carolina

VHB was part of the team for the Burlington Downtown Parking Study. VHB performed a field inventory of 3,200 parking spaces within 109 unique parking lots spanning a 31 block area of downtown Burlington. The team verified parking spaces by type and performed AM/PM occupancy counts to quantify peak parking demand. VHB also conducted an hourly parking turnover analysis (between 8 am and 5 pm) along a specified five block on-street parking area with one-hour and two-hour parking restrictions. VHB staff met with city officials, private employers, the Burlington Downtown Corporation, and the general public to discuss the scope of study, collect stakeholder observations, and solicit opinions on alternative management strategies for parking operations.

VHB's project deliverables included a series of GIS maps displaying the parking space inventory, occupancy, and availability of parking for each block and lot. The field-verified data were used to construct a GIS geodatabase that quantified parking supply and demand before exporting into spreadsheets and report tables.

The results of the occupancy study indicated much higher availability than perceived for a majority of the downtown area. On-street parking occupancy, however, specifically within the center of downtown, was found to be very high as a result of vehicles 'shuffling' between spaces every two hours to avoid parking citations within these restricted areas. This phenomenon was confirmed by the turnover analysis, observing the same vehicle within adjacent parking spaces (or returning to the same space) multiple times between 8 am and 5 pm.

Raleigh Livable Streets Study

City of Raleigh, North Carolina

Client
City of Raleigh, North Carolina

VHB was selected by the City of Raleigh to develop a transportation plan for the core area of downtown Raleigh. The plan recognized and supported many redevelopment and planning efforts already underway and identified immediate, near-term, and long-term actions. Recommended transportation actions included parking management strategies, modifications to the signage of downtown streets (wayfinding), and modifications to the transit routes in the area. Near-term solutions included modifications to the streetscape and improvements to the sidewalk system. Long-term actions were more capital-intensive projects that can take three to five years to plan, design, and implement. The analyses performed for this study led to subsequent studies to begin the conversion of the one-way streets in the downtown area to two-way operation.

Fayetteville Street Renaissance Phase 1

City of Raleigh, North Carolina

Client
City of Raleigh, North Carolina

VHB was part of the design team for the Fayetteville Street Renaissance, a major step in the process to revitalize the downtown area of Raleigh, North Carolina. As part of Phase 1 of the Fayetteville Street Renaissance, VHB prepared plans for the functional design of Martin Street and Hargett as two-way streets and reopening Fayetteville Street to vehicular traffic. A major component of this study was modifications to the on-street parking on Fayetteville, Martin, Hargett, Wilmington, and Salisbury Streets. In addition, VHB assessed the proposed operation of those streets and developed signal plans for 19 traffic signals affected by the changes in traffic patterns in the downtown area.

Raleigh Downtown Parking Study

Raleigh, North Carolina

Client
City of Raleigh, North Carolina

VHB was part of the team for a study that assessed Raleigh's current and future parking supply and demand and ways to manage that demand. VHB's focus in this study was on how Travel Demand Management (TDM) and transit can not only provide travel alternatives, but also reduce the need to build additional parking decks in the future. This involved assessing existing and proposed services, ridership and TDM programs, developing additional measures that the City could take, and understanding how much these could realistically contribute to meeting the future parking demand. The City is committed to a regional approach to TDM efforts, so a key factor is what the City can do to boost efforts in downtown Raleigh while retaining the regional framework.

Winston-Salem Downtown Parking Study

Winston-Salem, North Carolina

Client
Winston-Salem Downtown Partnership

VHB assisted the Winston-Salem Downtown Partnership to resolve current and future parking needs on Fourth Street - the core of downtown and a focus of regeneration efforts. The study quantified existing parking supply and demand, treating short-stay and long-stay parking separately. The study then forecasted future regeneration-led demand growth, involving the development of bespoke demand forecasts to reflect key changes and local conditions. The study found a deficit of short-stay parking in certain areas and recommended a coordinated package of solutions, including traffic engineering measures to create new spaces, management measures to make better use of existing spaces, and streetscape improvements to link demand sources to vacant spaces.

Eubanks Park & Ride Feasibility Study

Chapel Hill, North Carolina

Client
Town of Chapel Hill, North Carolina

Park-and-Ride has long been an important component of the Town of Chapel Hill's transportation system. The system is reaching its capacity, and additional facilities are needed to continue reducing auto-based traffic demand, traffic congestion, and associated environmental impacts to the community. An important component of the Park-and-Ride system is the facility location on Eubanks Road. The Eubanks Road Park-and-Ride facility currently serves Chapel Hill Transit (CHT) riders, Triangle Transit Authority (TTA) riders, and carpoolers.

The Town of Chapel Hill and Chapel Hill Transit (CHT) retained VHB to prepare a feasibility study to explore the expansion of the Eubanks Road Park-and-Ride facility. This expanded facility is intended to accommodate anticipated increased travel demand and transit ridership along the Martin Luther King, Jr. Boulevard corridor. By providing this additional capacity, the Town can help meet the region's travel needs; increase transit usage; reduce air pollution; and enhance economic development, compared to a scenario in which this form of transportation capacity is not provided. This feasibility study assesses the existing site and the possibility of expanding to the adjoining parcels, evaluates possible alternative sites, develops conceptual site layouts, and provides estimates of capital costs and operating cost for the facility.

University of North Carolina at Chapel Hill Streetscaping

Chapel Hill, North Carolina

Client
University of North Carolina at Chapel Hill

VHB developed a concept plan for the University of North Carolina at Chapel Hill to narrow South Columbia Street and add streetscape improvements. In an effort to enhance its pedestrian friendliness, yet still maintain an appropriate level of capacity on the roadway, VHB developed a concept plan to remove one travel lane and convert the area into wider sidewalks and new planting areas. VHB was a member of the design team that developed construction documents for upgrades, improved pedestrian access, and provided exclusive facilities for bicyclists and transit vehicles in the corridor. VHB developed plans for pavement marking, signage, temporary traffic control during construction, and traffic signals. VHB prepared traffic signal plans for upgrades at an existing mid-block pedestrian activated signal and for a new installation at the intersection of South Columbia Street at Medical Drive. VHB's services included coordinating the design and all permitting issues between the design team, the University, the Town of Chapel Hill, and the North Carolina Department of Transportation.

UNC-Chapel Hill Wayfinding Plan

Chapel Hill, North Carolina

Client
Cloud Gehshan Associates

VHB is part of the team developing a new wayfinding system for the University of North Carolina at Chapel Hill. VHB is leading tasks to identify the location of new signs and to develop a message schedule for all new vehicular wayfinding signs. We are also coordinating with UNC, the Town of Chapel Hill, and the North Carolina Department of Transportation to gain approval for the location, fabrication, and messages on the proposed signs.

University of North Carolina On-Call Contract

Chapel Hill, North Carolina

Client
University of North Carolina at Chapel Hill

VHB has been providing on-call services under a multi-year contract to assist the University of North Carolina at Chapel Hill (UNC) implement its Development Plan. This plan will add approximately six million SF to the main campus over a period of eight years, representing more than 50% of the new floor space identified in the campus Master Plan, which was completed in 2001. Because of traffic, land use, and environmental constraints, the Development Plan adds only 1,550 parking spaces to the main campus, compared to more than 4,500 spaces that would be needed if parking continues to be provided under pre-Development Plan ratios. Significantly, almost all of the 1,550 new spaces are allocated to the UNC hospital's patients and visitors, creating only a very small increase for employees and a net loss for students. Therefore, the Plan emphasizes alternative commuting modes.

In addition, a key component of VHB's services involves preparing and biennially updating a Traffic Impact Analysis (TIA) to be submitted to the Town of Chapel Hill to rezone the campus. VHB helps the University and Town develop guidelines for scoping the content and requirements of the TIA, including ongoing monitoring and data collection. The TIA details and quantifies the trip reduction strategies that are proposed, including local transit, regional transit, park-and-ride, remote storage parking for resident students, and bicycle/pedestrian improvements. VHB develops projections of use of these alternative modes. The analysis also provides an assessment of increased traffic and the impact on a total of 59 intersections on and near the campus (a simulation model has been developed for this purpose), and it calculates the air quality benefits of the transportation mitigation strategies.

Organizational Chart and Team Resumes

VHB's Raleigh office is home to over fifty transportation professionals available to support the Town of Carrboro. The organizational chart below outlines the specific team chosen to perform the services under this contract, and resumes for the key team members are found in the following pages. Team resumes outline each member's experience, expertise, and availability.

Town of Carrboro

Project Manager
Timothy Tresohlavy, AICP, GISP

Principal-in-Charge
Bill Martin, PE

Parking
Data Collection:
Steve Epley, PE

Analysis:
Timothy Tresohlavy, AICP, GISP

Future Models:
Timothy Tresohlavy, AICP, GISP
Maggie Maddox, EIT

Public Outreach
Kara Peach
Meg Bryson

LEP Services:
Nat Grier, PE, ENV SP

Ordinance Review
Miller Cochran
Tommy Pate, PE

Bicycle/Pedestrian
Jody Lewis, PE, ENV SP
Timothy Tresohlavy, AICP, GISP

Transit
Miller Cochran
Kara Peach

ADDITIONAL SUPPORT

Andrew Topp, PE, PTOE

Scott Himes

Chris DeWitt, AICP

Bill DeSantis, PE
Chris DeWitt, AICP
Dan Nabors, PE

Bill Martin, PE

Timothy Tresohlavy, AICP, GISP

Project Manager

Timothy will serve as Project Manager. He has been a key team member of many of VHB's parking projects and previously worked for North Carolina State University as the Parking Planner. His specialization is in the development of spreadsheet databases, visualization of spatial datasets using GIS, thematic mapping, and geodatabase construction. His experience includes campus master plans, parking studies, bike/pedestrian planning, environmental assessment projects, long-range and comprehensive transportation planning, network modeling, and traffic noise modeling.

Education

MA, Human Geography, East Carolina University, 2006

BS, Environmental Land Use Planning, SUNY College of Environmental Science & Forestry, 2003

Registrations

American Institute of Certified Planners, 2010

Certified Geographic Information System Professional, 2011

Affiliations/Memberships

American Institute of Certified Planners, North Carolina, 2010

Percent Time Available: 60%

Downtown Parking Study, Wilson, NC

For the City of Wilson, Timothy facilitated project steering committee meetings, and conducted more than 27 stakeholder interviews to synthesize local perspectives. The downtown study area included 3,400 parking spaces across a 35 block area. VHB performed a comprehensive parking space inventory, and conducted a peak period occupancy analysis to determine the existing parking demand and raw surplus of availability. Working closely with the City, Timothy forecasted future parking demand based on available land use types and square footage estimates over a 10-year time frame. Results from the parking supply and demand analysis, along with recommendations for parking management scenarios, were presented to the client and summarized in a final report document.

Downtown Parking Study, Concord, NC

As project manager, Timothy organized a four-day data collection effort of existing conditions, synthesized the findings and presented the results to the project steering committee members, downtown merchants, and members of the City Council. Working closely with City staff, Timothy projected future parking demand over a five year period and identified locations of parking demand shortfall and surplus. Preliminary recommendations have been presented to the steering committed relating to parking management strategies that will educate, encourage, and enforce the established vision and goals of active parking management with downtown Concord.

Downtown Parking Study, Burlington, NC

For the City of Burlington, Timothy performed a GIS-based parking space inventory, occupancy, and turnover analysis for 3,200 parking spaces, within 109 unique parking lots, across a 31-block study area. The Data Driven Pages extension of ArcGIS helped to automate the preparation of field inventory maps for the data collection phase. Results from the parking analysis were presented at the public kickoff meeting.

Wake Forest University, Parking Operations Plan, Winston-Salem, NC

Timothy created a five-year implementation plan for improving parking operations and establishing the University's first employee permit fee. He created a geographic-based forecast model to estimate the minimum number of permits (by type, location, and price) to sell each fall semester to remain financially solvent. Timothy also recommended bicycle, pedestrian, and transit improvements that will support the changing parking operations system.

UNC-Charlotte, Parking Operations Modeling, Charlotte, NC

Timothy created an operations-based spreadsheet database to forecast permit sales and revenue based upon incremental changes to the permitting and parking zone system. The forecast model included the financing of new park-and-ride shuttles as well as the construction of all campus Master Plan parking deck projects.

North Carolina State University, 2012 Precinct Parking Study, Raleigh, NC

Prior to joining VHB, as the NC State University Parking Planner, Timothy managed the collection of field data, analyzed, and formulated results to assess existing and planned parking facilities at North Carolina State University. Future parking demand included a five-year population growth by the University to determine proximate parking demand and supply shortfall for five campus precincts. This analysis helped to guide the department's master planning efforts for development through 2012. This keystone study provided quantitative data in support of planning efforts for three university parking structures, and potential disruptions to parking and transit daily operations due to building renovation projects.

Raleigh Bike Share Feasibility Study, Raleigh, NC

Under phase one of this project, Timothy reviewed state and local transportation plans as well as City of Raleigh development ordinances and design guidelines to identify any potential barriers to bike share station implementation. His analysis also included a permitting review matrix to better explain the permitting review authorities for each of the five unique bike share station location types. Under phase two of the project, Timothy assisted with the design of standardized, and module, bike share station layouts within AutoCAD.

East Carolina University, Campus Physical Master Plan, Greenville, NC

Timothy conducted an existing conditions assessment of the campus parking and traffic department and surrounding transportation network. Using three proposed future master plan build scenarios. He quantified future parking impacts and estimated future parking demand (2025) to inform the project team. Additional work performed included annual permit sales and revenue forecasting, citation trend analysis, peer university benchmarking of parking supply, and permit price comparison.

University of Delaware, Parking Operations Modeling, Newark, DE

Timothy created a spreadsheet database tailored to the existing conditions of the University of Delaware campus precincts and used this tool to model the financial result of operational changes to the parking and transit system over a five-year period. Timothy generated report figures and prepared meeting slides to explain the model variables, as well as the planning-level existing conditions assessment.

North Carolina State University, GIS-based Parking Inventory, Raleigh, NC

Prior to joining VHB, as the NC State University Parking Planner, Timothy constructed a complete geographically-referenced parking inventory for on-campus parking areas. This interdepartmental tool streamlined decision-making processes and departmental policy relating to parking management, annual permit allocation, proposed renovation/construction and master planning, transit service optimization, campus special event coordination, and others. The project included establishing procedures for annual parking occupancy count collection, reporting, and archiving to maintain the accuracy and applicability to other departmental sections within North Carolina State University.

Blue Ridge Road District Study, Raleigh, NC

For the City of Raleigh, Timothy compiled and synthesized existing conditions data for the project design team relating to bicycle, pedestrian, traffic, parking, and transit modes. He used ArcGIS to compile and overlay multi-jurisdictional development plans for public and private stakeholders within the study area. As the project progressed Timothy contributed to a public visioning workshop, stakeholder kickoff meeting, multiple design charrettes, and final design option presentations. He recommended improvements for connecting roadways and recreational areas, removing barriers to alternative transportation modes, and improving safety along the study corridor.

Western Carolina University, Campus Master Plan, Cullowhee, NC

As a project team planner, Timothy developed a 10-year parking supply and demand model, including various travel demand management options to balance parking demand during interim years. This work included a peer benchmarking analysis between WCU and 13 other peer universities, which involved the review of parking permit fees, transit system characteristics, and campus demographics.

Bill Martin, PE

Principal-in-Charge

Education

MS, Civil Engineering, North Carolina State University, 1978

BS, Civil Engineering, North Carolina State University, 1976

Registrations

Professional Engineer NC, 1994

Affiliations/Memberships

American Council of Engineering Companies, North Carolina, ACEC-NC Board Member

Institute of Transportation Engineers, North Carolina, NC Section President 2005

Bill will serve as Principal-in-Charge. He has over 30 years of experience in transportation planning and engineering. His relevant experience includes serving as Project Manager on the Winston-Salem Parking Study and the Downtown Cumberland County parking project, as well as the Downtown Study for Charlottesville, VA. For the Winston-Salem project, Bill personally led the meetings with stakeholders and business leaders to determine parking and traffic problems.

Percent Time Available: 40%

Downtown Parking Analysis, Wilson, NC

Project Manager for this initial study of parking capacity in downtown Wilson, North Carolina. An inventory of parking was conducted to determine the supply and demand for parking within a nine block study area with the purpose of identifying surplus parking supply that could be dedicated for a proposed residential project in the downtown. The data, methodology, and recommendations were documented in a technical memorandum submitted to the City of Wilson.

Downtown Parking Plan, Wilson, NC

Principal-in-Charge for this follow-on study of parking capacity in downtown Wilson, North Carolina. The downtown study area included 3,400 parking spaces across a 35 block area. VHB performed a peak period occupancy analysis to determine existing parking demand and raw surplus of availability. Working closely with the City, VHB forecasted future parking demand based on available land use types and square footage estimates over a 10-year time frame. Results from the parking supply and demand analysis, along with recommendations for parking management scenarios, were presented to the client and summarized in a final report document.

Downtown Parking Study, Burlington, NC

Principal-in-Charge for this study of the downtown parking in Burlington, NC.

Downtown Parking Study, Charlottesville, VA

Project Manager for study that analyzed occupancy survey data to understand the extent of the problem. Advised on management options to encourage commuters into off-street lots and liberate on-street spaces for customers and visitors. Also developed recommendations to make the designation of individual spaces more consistent and comprehensible than today's piecemeal arrangements.

Downtown Parking Master Plan, Raleigh, NC

As Project Manager, provided transit and TDM expertise for this study. Advised on whether (and how) these can mitigate commuter parking demand; included review of experience from other cities.

Downtown Parking Study, Winston-Salem, NC

Project Manager for the analysis of short and long term parking demands in the CBD of Winston-Salem. Made recommendations for changing the parking utilization in the area.

Downtown Parking Study, Fayetteville, NC

Project Director for the development of a parking plan for the CBD of Fayetteville, NC. Tasks included the estimation of demand for future parking, the size of required parking structures, and the analysis of alternative sites.

Fayetteville Street Renaissance Project, Raleigh, NC

Project Manager for the traffic and parking tasks of the overall project that restored Fayetteville Street in Raleigh from a pedestrian mall to an urban street. Project involved signal design plans, pavement

marking plans, signing plans, and revised parking for on-street parking. A major task was to convert two streets, Martin and Hargett Streets, from one-way to two-way operations.

Raleigh Livable Streets Transportation Plan, Raleigh, NC

As Project Manager developed a plan that addressed traffic flows, parking, transit, pedestrian, and wayfinding within the central business district. A major recommendation of the plan was to convert most of the east-west streets in the downtown from one-way to two-way operations.

Downtown Parking Study, Charlottesville, VA

Project manager for study that analyzed occupancy survey data to understand the extent of the problem. Advised on management options to encourage commuters into off-street lots and liberate on-street spaces for customers and visitors. Also developed recommendations to make the designation of individual spaces more consistent and comprehensible than today's piecemeal arrangements.

North Carolina State University, Traffic Analysis Study, Raleigh, NC

Project manager for traffic analysis study of parking deck expansion, and helped performed plan transit stop locations and configurations.

Transit Technology Feasibility Study, Raleigh, NC

As Project Manager, leading this study designed to explore a variety of different transit technologies and corridors where their use may be feasible in the City of Raleigh. This process will involve identification of base conditions, development of alternatives, and evaluation of the alternatives.

Triangle Transit Regional Transit Program, NC

Responsible for planning services as part of multidisciplinary team undertaking a major study for Triangle Transit to develop three rail projects for the 3-county Research Triangle region, North Carolina.

South Corridor Transitway Major Investment Study, Charlotte, NC

As Project Manager, evaluated the impacts of various combinations of land use and transit technologies (light rail, busway, DMU) in the South Boulevard corridor.

Transit Corridor Modeling, Charlotte, NC

As Project Manager, Mr. Martin provided travel demand forecasts and performance measure analysis for fixed-guideway transit alignment/technology/land-use alternatives.

Steve Epley, PE

Parking: Data Collection Task Manager

Education

BS, Civil Engineering, University of North Carolina at Charlotte, 1998

Registrations

Professional Engineer NC, 2008

Steve has diverse experience in traffic engineering and transportation planning. His experience includes transportation design and planning projects involving vehicle, pedestrian, and bicycle issues, as well as roadway analysis and recommendations. Steve is proficient in the use of software tools including Synchro/SimTraffic, Highway Capacity Software (HCS), ITE Trip Generation, Sidra Intersection, PetraPro, TraxPro, Microstation/Geopak, Autoturn, Eagle Point, Norsonic, and Engineering Manuals including AASHTO, HCS, and MUTCD.

Percent Time Available: 40%

BASF Parking Analysis, Durham, NC

Steve was the Project Engineer for a parking analysis study at the BASF Durham location. Project conducted a parking analysis for 393,000 square feet of office/lab/storage space and 70,000 square feet of greenhouse space. Analysis included collecting the current parking demand at the existing plant and determining the future demand after expansion. Traffic analysis included collecting number of on-site parking spaces and two 48-hour tube volumes counts.

UNC-Chapel Hill, Craige Deck Expansion, Traffic Impact Analysis, Chapel Hill, NC

Steve was the Data Collection Engineer on a multidisciplinary team for the University of North Carolina (UNC) at Chapel Hill Craige Deck Expansion project. Project included the coordination and collection for one 16-hour turning movement count and ten 2-hour peak hour counts (am, noon, pm) at the University. Project proposed to expand Craige Deck by the addition of three new parking levels and 900 new parking spaces.

UNC-Chapel Hill, Hospital at Hillsborough, Hillsborough, NC

Steve was the Project Engineer for a Trip Generation Analysis and Traffic Impact Analysis for the University of North Carolina (UNC) at Chapel Hill Hospital at Hillsborough, a new development consisting of a 600,000-square-foot hospital, an 180,000-square-foot medical office building, and a 30,000-square-foot central utilities plant. Project required analyzing potential impacts and recommending traffic mitigations projected by the new project at the site driveways under Existing and Future conditions. Project also included internal traffic analysis and concept roadway drawings for the driveway intersections and internal roadways.

Town of Cary On-Call Data Collection Services

Task Manager for an agreement with the Town of Cary to conduct on-call data collection services.

North Carolina State Fairground Traffic Impact Study, Raleigh, NC

Project engineer responsible for analyzing traffic operations for vehicle, pedestrian, and bicycle modes during non-State Fair events. It included traffic counts, turning movement, pedestrian facility/operations, bicycle facility/operations, parking, event growth, crash, and future development analysis.

NCDOT, On-Call Statewide Traffic Count Program, North Carolina

Steve is serving as the Project Engineer for the collection of turning movement counts and roadway tube counts on as-needed basis for the NCDOT. Responsibilities include scheduling traffic counters, organization of count data, sketching intersections in CAD, and writing report summaries. Counts have included vehicle turning movement (2 peak hour, 8-hour, 12-hour, 13-hour and 16-hour), vehicle classification turning movement (12-hr and 13-hour), pedestrian movement (2 peak hour, 12-hour and 16-hour), and tube volume/classification movement (24-hour, 48-hour, and 5 day) counts. Some counts have involved multiple counters (1, 2, 3, and 4 person intersection teams) and/or simultaneous intersection counting (226 Turning Movement Counts, 318 Tube Counts, 3 Pedestrian Counts, and 15 Specialized Counts).

Maggie Maddox, EIT

Parking: Future Model

Maggie specializes in transportation systems engineering and transportation planning. She has a unique combination of work experiences, education, and research that have focused at various times on traffic engineering, pavement design, transit planning, transportation planning, transportation engineering, travel demand modeling, and transit mapping. She is currently working towards both her PE license and AICP certification.

Percent Time Available: 40%

Education

MCRP, Planning, Georgia Institute of Technology, 2013

MS, Civil Engineering, Georgia Institute of Technology, 2013

BS, Civil Engineering, Villanova University, 2011

Registrations

Engineer in Training PA, 2011

Affiliations/Memberships

WTS International, Georgia, Programs Committee, 2014

American Planning Association, Georgia

MARTA Clifton Corridor EIS, GA

Mrs. Maddox has provided supporting traffic analysis for the project study area to identify existing intersection LOS and model anticipated traffic impacts of light rail along this corridor. This has included working with VISSIM outputs, GIS mapping and spatial analysis, as well as participation in public meetings to answer questions of local residents.

MARTA Engineering Report, Clayton County, GA

Mrs. Maddox worked to compile the engineering report, an exhibit to the proposed contract for MARTA to provide services into Clayton County. This entailed working with MARTA directly as well as a team of consultants for bus and rail design, an implementation timeline, ridership modeling, and cost estimation. Mrs. Maddox performed GIS mapping services and patronage estimates using the ARC Regional Travel Demand Model.

Transit Feasibility Study, Clayton County, GA

Mrs. Maddox performed the demographic analysis and transit propensity assessment of Clayton County to determine the feasibility of transit services in the county. Additionally, Mrs. Maddox assisted with ridership forecasts for the planned system, performed GIS mapping services, and participated in public meetings and workshops throughout the course of the project.

GRTA Comprehensive Operations Analysis, GA

Mrs. Maddox prepared and organized the ridecheck for GRTA's entire commuter bus system. She was responsible for over 100 temporary employees who were assigned a bus route to count passengers, record departure/arrival times, and collect surveys from riders. Mrs. Maddox developed an in-house mobile application to facilitate the ridecheck data collection so that the data could be easily post-processed. She also worked to plan and facilitate focus groups to address transit connectivity issues in major employment destinations in the Greater Atlanta area.

Orange County Thoroughfare Plan

Mrs. Maddox is the GIS analyst for this project and has utilized GIS modeling to calculate various performance measures for specific corridors throughout Orange County.

Regional Planning Commission of Greater Birmingham Transportation, Management, and Operations Plan, Birmingham, AL

Mrs. Maddox performed extensive spatial analysis through GIS, interviews with major stakeholders, a survey of minor stakeholders, analysis of the previous RTP, and best practices review.

Atlanta Regional Commission On-Call Services, GA

Mrs. Maddox served as a GIS analyst for various task orders from ARC. This included analysis of regional freight corridors and network designations. She also contributed to an analysis of transit project delivery within the region.

Kara Peach

Public Outreach Task Manager/Transit

Education

MA, Psychology of Sport and Physical Activity, University of Iowa, 2008

BS, Psychology, Indiana University, 2006

Affiliations/Memberships

Institute of Transportation Engineers, North Carolina Section, 2014

Kara is a Transportation Planner in VHB's Raleigh office. She has experience in a variety of transportation planning projects including master plans, long- and short-range transportation plans, and Title VI analyses. For these projects, she has provided data collection and technical analysis, technical writing, and extensive public engagement. With a background in public health, Kara specializes in integrating transportation and health.

Percent Time Available: 50%

City of Raleigh, Wooten Meadow Park Master Plan, Raleigh, NC

For the City of Raleigh Parks, Recreation and Cultural Resources Department, Kara is leading the community outreach for the Wooten Meadow Park Master Plan. The process includes interviews with stakeholders and adjacent homeowners, small group facilitation, development of outreach materials such as surveys and social media, and planning public meetings. The information collected through the ongoing community engagement process will be considered and integrated into the final Master Plan for the future redevelopment of the City Park.

FHWA/APA, Transportation and Health Tool

Prior to joining VHB, Kara worked on the project to develop a web-based tool to strengthen the connection between transportation and public health sectors. The target audience of the tool is transportation decision-makers at the state and regional levels. As Health and Transportation Planner, her responsibilities included the facilitation of an expert panel in the selection of evaluation criteria for selecting indicators and conducted and wrote a literature review of the 14 selected indicators for inclusion of the first iteration of the tool.

Capital Area Transit/Triangle Transit, Title VI Fare Equity Analysis, North Carolina

Prior to joining VHB, for the Title VI Fare Equity Analysis, Kara assisted in the analysis of proposed fare increases for Capital Area Transit (CAT) and Triangle Transit. This project included the development of new disproportionate and disparate impacts to Title VI populations for transit operators, a full analysis of potential impacts associated with the proposed fare increases, and proposed mitigation strategies to off-set the potential impacts. In addition, Kara led a comprehensive community outreach program, including transit stop canvassing and the development of rider surveys and informational handouts.

Capital Area Transit, Service Equity Analysis, Raleigh, NC

Prior to joining VHB, for Capital Area Transit (CAT), Kara conducted an analysis of proposed service changes to transit routes. Responsibilities as Transportation Planner included an analysis of demographics and potential disparate or disproportionate impacts of proposed route changes. Kara was the leader writer for the analysis.

North Carolina Strategic Highway Safety Plan (SHSP) Update

For the North Carolina Department of Transportation (NCDOT), Kara worked on a Strategic Highway Safety Plan that defined the state's overarching safety objectives, emphasis areas, and priorities, as well as metrics for tracking progress in improving safety by reducing the crashes that result in fatalities and serious injuries. The plan was developed by NCDOT in collaboration with safety partners across North Carolina. As Technical Writer, her responsibilities included facilitating in the compilation and finalization of the final draft and the development of final presentation materials.

Meg Bryson

Public Outreach

Education

BS, Fashion and Textile Management, North Carolina State University, 2015

Meg is a marketing assistant in VHB's Raleigh office. She has provided graphics assistance, as well as technical writing and review for a variety of projects, and has participated in public outreach efforts.

Percent Time Available: 50%

Downtown Parking Study, Wilson, NC

For the City of Wilson, Meg participated in stakeholder interviews to synthesize local perspectives. The downtown study area included 3,400 parking spaces across a 35 block area. VHB performed a comprehensive parking space inventory, and conducted a peak period occupancy analysis to determine the existing parking demand and raw surplus of availability.

Downtown Parking Study, Concord, NC

Meg assisted with data entry for this study to determine the existing parking utilization for downtown Concord. She also provided technical writing and review for the project.

North Carolina Strategic Highway Safety Plan (SHSP) Update

For the North Carolina Department of Transportation (NCDOT), Meg worked on a Strategic Highway Safety Plan that defined the state's overarching safety objectives, emphasis areas, and priorities, as well as metrics for tracking progress in improving safety by reducing the crashes that result in fatalities and serious injuries. The plan was developed by NCDOT in collaboration with safety partners across North Carolina. Her responsibilities included technical writing and review, facilitating the compilation and finalization of the final draft, and the development of final presentation materials.

Nat Grier, PE, ENV SP

Public Outreach: LEP Services Task Manager

Education

MS, Transportation, Massachusetts Institute of Technology, 2002

BS, Civil Engineering, Massachusetts Institute of Technology, 2000

Registrations

Professional Engineer NC, 2005

Professional Engineer MD, 2008

Professional Engineer VA, 2015

Professional Engineer IL, 2015

Envision™ Sustainability Professional, 2014

Affiliations/Memberships

Institute of Transportation Engineers

Transportation Research Board, TDM Committee, Friend of the Committee

Nat has extensive experience in a broad set of disciplines within the field of transportation. He specializes in campus transportation planning and has worked on campuses across the country. In addition to transit, bike and pedestrian planning, his multimodal work includes TOD, scenario analysis and small area planning. Nat has a strong background in the development of TDM plans as well as parking analysis and financial planning. He supports the sports design practice through his understanding of event and venue transportation planning. In addition to campus planning, Nat has experience with a wide array of public sector transportation planning projects including transit studies, CTP, LRTP development and traffic forecasting, as well as air quality modeling and emissions estimates.

Percent Time Available: 30%

West Franklin Street Redevelopment, Chapel Hill, NC

As Project Planner, Nat provided overall assistance and guidance for the redevelopment of a large mixed-use parcel in downtown Chapel Hill. The project is affiliated with the University, so it included a balance of objectives of the private developer, foundation, and University, all subject to the Town's vision for the development. Primary tasks included advising on shared parking requirements and survey instruments to identify current travel patterns.

Moravian College, Master Plan, Bethlehem, PA

Nat was Project Leader for the transportation aspects of the Campus Master Plan. The Plan includes a strong focus on connecting the three physically disparate campuses. The Plan also addresses parking needs at the University for both the short- and long-term, as many lots are expected to close or shift in response to campus building projects over the course of the Plan.

UNC-Chapel Hill, Craige Deck Expansion Transportation Facility Permit Application, Durham, NC

As Project Manager, Nat performed intersection and parking lot air quality modeling for the transportation facility permit application for the proposed parking garage expansion at the University of North Carolina at Chapel Hill. This work included the use of MOBILE6, PAL, and CAL3QHC modeling software.

University of Chicago, Parking and Traffic Demand Management Plan, Chicago, IL

Nat is Project Manager, overseeing the development of the plan to identify existing parking and travel needs on the campus and develop a ten-year plan to meet existing and future travel needs of the University and medical center populations. While the University is blessed with proximate connections to heavy rail and commuter rail, the weather, neighborhood concerns, and other local conditions currently constrain the travel choices of many of its employees and students. The plan includes a comprehensive analysis of the existing parking and shuttle systems and the adjacent street network. Working in concert with senior leadership at the University, the plan will identify measures to promote the use of non-auto travel while ensuring continued choice and mobility for all members of the campus community, paying particular attention to the needs of the medical center patients and visitors. As part of the final plan, an implementation schedule, including costs and key next steps, will be developed.

Washington State University, Master Plan, Pullman, WA

As Project Planner, Nat assisted on a wide range of tasks to support the transportation elements of the Master Plan. Work included input on a new road system and proposed shuttle system to support the campus expansion. Nat oversaw public participation efforts, including the development of a survey. A large focus included the evaluation of the current parking system and projections for future demands and potential means of providing sufficient supply.

Miller Cochran

Ordinance Review and Transit Task Manager

Education

MS, Transportation, University of North Carolina at Chapel Hill, 2010

BA, Political Science, Carleton College, 2004

Miller's focus is transportation planning with a particular emphasis on transit, transportation modeling, and the connections between transportation and land use. He brings a cross-disciplinary approach to transportation issues and seeks creative solutions to complex problems using rigorous technical analysis. He is motivated by a desire to improve communities and neighborhoods, enhance quality of life, and design high-quality transportation systems.

Percent Time Available: 50%

Parking Study, Burlington, NC

For the City of Burlington, Miller assisted with a parking inventory study of both private and public spaces in downtown Burlington. This involved correcting available space counts and determining parking utilization throughout the designated count day.

Transit Technology Feasibility Study, Raleigh, NC

As Project Planner, Miller will assist with this study designed to explore a variety of different transit technologies and corridors where their use may be feasible in the City of Raleigh. This process will involve identification of base conditions, development of alternatives, and evaluation of the alternatives. The evaluation will produce the potential service model for the corridors and downtown Raleigh including feasibility analysis; modal assignment by corridor; service and design standards; service and capital investment priorities; economic development opportunities; conceptual design; and cost estimates.

UNC-Chapel Hill, Park-and-Ride Study, Chapel Hill, NC

Miller was Project Planner for a study to assess the suitability of two sites for park-and-ride facilities to serve the University of North Carolina at Chapel Hill (UNC-CH). Because parking on the main campus is very limited, the University relies on park-and-ride for main campus commuters. As part of due diligence for the potential purchase of a property along a key access corridor to the campus, the University requested that VHB analyze the feasibility of both surface and parking structures on the two sites. Tasks included assessing existing transit service in the area, determining potential transit needs to the park-and ride lot, and forecasting the costs associated with expanded transit service.

Community Plan, Cary, NC

As Project Planner, Miller is assisting in developing the transportation element of the Cary Community Plan, a major update of the Town's comprehensive plan. The transportation element will be the update to the Town's Comprehensive Transportation Plan and will integrate seamlessly with the land use components of the Community Plan. It will address future transportation needs, including roadways, transit, bicycles and pedestrians, and will look at how the Town's transportation system and choices affect development of the Town's land, economy, infrastructure and environment. Miller assisted project team in implementing a comprehensive community and stakeholder outreach program to receive input from as many community members as possible over the course of the project. These public outreach efforts included a Summit for the Future that was the most well-attended public meeting in Cary history.

Wake Forest University, Area Bicycle, Pedestrian, and Transit Study, Winston-Salem, NC

As Project Planner, Miller will be part of a team analyzing bicycle, pedestrian, and transit options in and around the Wake Forest campus. The primary role will be in analyzing transit options in the area and transportation demand management (TDM) programs available to residents and workers at the University. Miller is part of a team conducting a 5 day charette on campus to better understand the needs of University faculty, staff, and students.

Tommy Pate, PE

Ordinance Review

Education

BS, Civil Engineering, North Carolina State University, 2005

Registrations

Professional Engineer NC, 2010

Affiliations/Memberships

Institute of Transportation Engineers

Tommy has been working in the transportation planning and engineering field for a decade, primarily responsible for performing capacity analysis for arterials, freeways, rural roads, signal systems, and isolated intersections, as well as preparing traffic signal plans, functional designs and preliminary roadway plans. Prior to joining VHB, he worked at the North Carolina Department of Transportation (NCDOT) in Congestion Management.

Percent Time Available: 40%

NCDOT Ordinance Review – Divisions 5 and 8, NC

For the North Carolina Department of Transportation (NCDOT), Tommy was Engineer for reviewing ordinances that were recommended for repeal by other contractors. The NCDOT's Traffic Engineering Accident Analysis System (TEAAS) and field visits were required to determine if the ordinance should be repealed, or re-written. Over 300 ordinances were reviewed across seven counties including Chatham, Franklin, Montgomery, Person, Richmond, Wake and Warren.

Downtown Parking Study, Burlington, NC

Tommy was Engineer for collecting detailed parking space inventory information, as well as vehicle accumulation and duration study for both private and public parking lots and on-street parking in order to determine the existing parking utilization.

Downtown Parking Study, Wilson, NC

Tommy was Engineer for collecting detailed parking space inventory information, as well as vehicle accumulation and duration study for both private and public parking lots and on-street parking in order to determine the existing parking utilization.

Shelton Station, Carrboro, NC

Tommy was Engineer for analyzing and recommending mitigations for a mixed-use development consisting of 114 mid-rise apartments and 12,000 square feet of neighborhood retail space.

Greensboro Coliseum Traffic and Parking Study, Greensboro, NC

Tommy was Engineer for observing traffic conditions at the Greensboro Coliseum during the first round (Friday) of the NCAA Men's Basketball Tournament (2012). Recommendations were made in order to mitigate deficiencies observed and anticipated needs in the future.

University Of North Carolina, Development Plan 2013 TIA, Chapel Hill, NC

Tommy was Engineer for analyzing 60 intersection across the University of North Carolina's Chapel Hill campus and recommending future mitigations in order to accommodate the University's future parking projections according to the University's Updated Master Plan.

Carolina Inn Master Plan, Chapel Hill, NC

Tommy was Engineer for reviewing a parking facility expansion, including site access and circulation, for the existing and proposed parking facility layouts at the Carolina Inn.

UNC-Chapel Hill, Carolina North, North-South Access Road and Greenway, Chapel Hill, NC

For the University of North Carolina (UNC) at Chapel Hill, Tommy was Roadway Design Engineer for the creation of MicroStation drawings of both the vertical and horizontal roadway alignments (existing and proposed) for a proposed road connecting Homestead Road to Municipal Drive in Chapel Hill. Cross-section cuts were taken at locations along the proposed roadway in order to determine the impacts of the proposed roadway. Additionally, drainage areas from two wetlands were determined and culverts with concrete headwalls were proposed.

Jody Lewis, PE, ENV SP

Bicycle/Pedestrian Task Manager

Jody has an extensive background in regional and metropolitan transportation planning, traffic operations, functional design, traffic impact analysis and data analysis. His extensive experience includes preparing traffic control plans, pedestrian management plans, and traffic signal plans and performing complex traffic flow, capacity, and planning analyses for arterials, freeways, rural roadways, signal systems, and isolated intersections. He has led projects providing traffic signal designs, traffic control plans, pedestrian management plans, pavement marking and signing plans, traffic impact studies, and corridor studies for public and private clients.

Education

BS, Civil Engineering (Transportation), North Carolina State University, 1993

Registrations

Professional Engineer (Civil Engineering) NC, 2002

Professional Engineer (Civil Engineering) VA, 1999

Envision™ Sustainability Professional (Sustainability) , 2013

Affiliations/Memberships

Institute of Transportation Engineers, North Carolina

Institute of Transportation Engineers

Percent Time Available: 50%

Oak-Poplar Traffic Study and Main Street Road Diet, Carrboro, NC

For the Town of Carrboro, as Project Manager, Jody led a study of traffic patterns in the Oak-Poplar neighborhood and prepared plans to remove vehicular travel lanes on West Main Street in Carrboro. The study included meeting with neighborhood residents; identifying street and intersection improvements to address the traffic circulation and safety concerns of the neighbors; and preparing conceptual pavement marking plans to reduce vehicular travel lanes and add bicycle lanes on West Main Street adjacent to the neighborhood.

Bicycle Pavement Marking Study, Raleigh, NC

For the City of Raleigh, as Project Manager, Jody is leading a project to select and design bicycle pavement markings for over 50 miles of streets in the City of Raleigh. Project tasks include public involvement, field data collection, assessment of streets and identification of recommended bicycle marking treatments, design of the recommended bicycle markings, and preparation of construction costs and contract documents. The types of treatments to be considered include sharrow markings and exclusive bicycle lanes.

UNC-Chapel Hill, Cobb-Joyner Parking Deck and Northeast Chiller Plant, Chapel Hill, NC

VHB was a member of the team to design a parking deck and water chiller plant on the University of North Carolina at Chapel Hill (UNC-CH) campus. As Project Manager, Jody provided traffic analyses, traffic control plans, pavement marking plans, and traffic signal plans in support of the project. Traffic control plans were developed for the construction of an electrical ductbank and chilled water lines on University, Town, and North Carolina Department of Transportation (NCDOT) roadways. Temporary and final signal upgrades plans were also developed to accommodate the utility construction and to provide improved traffic operations after the parking deck is opened for operation. Pavement marking plans were provided for the final upgrade of the roadways affected by the utility construction. Assistance was also provided throughout construction to provide the necessary coordination between contractors, the Town of Chapel Hill, and NCDOT.

UNC-Chapel Hill, Traffic Signal Designs and Timing Plans, Chapel Hill, NC

As Project Manager and Principal-in-Charge, Jody led VHB staff in the preparation of 25 traffic signal plans for 15 intersections on the campus of UNC-CH. Traffic signal plans have been prepared to design three new traffic signals, to incorporate upgrades to existing traffic signals, and in many cases to temporarily modify the traffic signal operations during the construction of utilities in the intersections. Typical signal upgrades have included new signal phasing, controller equipment upgrades, addition of pedestrian and bicycle amenities (new crosswalks with signals and pushbuttons, bicycle detection loops, etc.), and the provision of decorative poles and mast-arms.

UNC-Chapel Hill, Craige Parking Deck Expansion, Chapel Hill, NC

Jody is leading much of the firm's participation on a project to design the expansion of the Craige Parking Deck on the UNC-CH campus. The intent of the project is to add approximately 950 new parking spaces by expanding the deck vertically. Jody has led traffic capacity analyses and the development of traffic control and pedestrian management plans. In addition, air quality permit analyses are being performed by the firm for the purposes of submitting the appropriate air quality permit applications with the North Carolina Department of Air Quality.

Andrew Topp, PE, PTOE

Parking

Education

MS, Civil Engineering, North Carolina State University, 2004

BS, Civil Engineering, Virginia Polytechnic Institute and State, 1999

Registrations

Professional Engineer NC, 2003

Professional Engineer VA, 2014

Professional Engineer AR, 2013

Professional Traffic Operations Engineer, 2007

Affiliations/Memberships

Institute of Transportation Engineers

Institute of Transportation Engineers, North Carolina

Andrew has diversified traffic engineering and transportation planning experience that includes traffic capacity analyses, corridor planning, spot safety studies, highway noise studies, traffic impact analyses, traffic simulation modeling, forecasting, roadway functional designs, and campus transportation plans including planning of pedestrian, bicycle, transit and parking accommodations. His traffic engineering experience includes conducting various types of traffic analyses for arterial corridors, freeways, and intersections, as well as developing recommendations for improvements to enhance traffic flow. His campus and transportation planning experience involves developing context sensitive solutions that balance the needs of pedestrians, bicyclists and motorists.

Percent Time Available: 30%

300 East Main Street Traffic Impact Analysis, Carrboro, NC

Andrew was Project Manager for estimating the impacts of a 360,000-square-foot mixed-use development, which included phasing analysis, study of unconventional striping options along Main Street, application of transit/traffic demand management (TDM) capture rates, effects of multiple approved developments, and simulation presentations to the North Carolina Department of Transportation Congestion Management/Division and City staff.

Lowes Home Improvement Parking Study, Chesapeake, VA

Andrew was Project Manager for conducting a parking study for an existing Lowes Home Improvement store in Chesapeake. The study estimated the maximum parking demand and was submitted to the City to allow for a reduction in the number of spaces on site.

Cary Parkway and High House Road Intersection Improvements, Cary, NC

Andrew was Project Manager for the development of seven unique intersection alternatives, such as traditional widening, quadrant roadways, bowtie, and roundabouts. The second phase of the project included a detailed study of the three options preferred by Town Council. Conceptual design drawings, construction costs estimates, and detailed operational analyses including VISSIM animations were developed for these three options.

Cherry Lane Corridor Study, Alamance County, NC

Andrew was Project Engineer for the corridor study of Cherry Lane. His duties include traffic capacity analysis, safety analysis, environmental screening, and developing improvement alternatives, including implementation of a new interchange.

Hargett Street and Johnson Blvd, Jacksonville Road Diet, Jacksonville, NC

Andrew was Project Manager for final pavement marking and signing plans to convert a 6-lane facility to a 5-lane with bike lanes on Johnson Street and add bikes lanes to Hargett Street when the roads were resurfaced.

NCDOT, On-Call Statewide Traffic Count Program, North Carolina

Andrew was Project Manager for an on-call data collection project, which has been ongoing for the North Carolina Department of Transportation (NCDOT) since 2007. He has been responsible for scheduling traffic counters, downloading and condensing count data, sketching intersection in CAD, and writing report summaries. He has successfully conducted over 200 intersection turning movement and over 200 volume classification tube counts across the state.

Scott Himes, PhD

Public Outreach

Education

PhD, Civil Engineering, Pennsylvania State University, 2013

MS, Civil Engineering, Pennsylvania State University, 2007

BS, Civil Engineering, Pennsylvania State University, 2006

Affiliations/Memberships

Transportation Research Board, AFB10 - Geometric Design, Young Member, 2010

Transportation Research Board, AHB65 - Operational Effects of Geometrics, Friend, 2007

Scott is a Transportation Analyst with experience in safety research. As a safety researcher, he specializes in data collection, data analysis, safety evaluations, and crash data analysis. His expertise includes collection and analysis of data related to geometric design, operations, and highway safety. As an instructor, he has educated emerging professionals in transportation design, traffic design, Highway Safety Manual methodologies, and Highway Capacity Manual based field data collection methods.

Percent Time Available: 20%

Strategic Highway Research Program 2 S-07B: In-Vehicle Driving Behavior Field Study

Prior to joining VHB, served as a Research Assistant, supporting the installation and maintenance of data collection equipment in approximately 100 participant-owned vehicles. Also performed evaluations of the recruited participants upon entering the study.

FHWA, Development of Crash Modification Factors (DCMF) Project

For the Federal Highway Administration (FHWA), Scott is serving as a Research Engineer for developing crash modification factors for edgeline rumble stripes, red-light indicator lights, and intersection collision warning systems. Responsibilities include contacting states to coordinate data collection, identifying appropriate treatment and reference sites, and performing safety evaluations of countermeasures using a variety of statistical methods.

FHWA, Informational Report on Methods to Achieve Safe Speeds on Rural and Suburban Roadways

Prior to joining VHB, Scott collected and evaluated speed and encroachment data at sites that were treated with high-friction roadway surfaces for a project sponsored by the Federal Highway Administration (FHWA). Operating speed data were used to examine the margin of safety for friction supply and friction demand for high-friction surface treatment applications.

NCHRP 03-106: Traffic Control Device Guidelines for Curves

For the National Cooperative Highway Research Program, serving as a research engineer, the Scott identified potential improvements to the MUTCD guidelines for the application of traffic control devices on curves. His responsibilities included leading a multistate data collection effort of horizontal alignment, traffic signs, and crash history; developing safety performance functions; and estimating the effects of curve related traffic control devices on crash frequency and severity.

NCHRP 07-21: Asset Management Guidance for Traffic Control Devices, Barriers, and Lighting

For the National Cooperative Highway Research Program, Scott worked on a project to develop asset management guidance for selected categories of traffic and safety assets that are owned and maintained by an agency. Responsibilities included documenting issues related to the maintenance and management of assets; developing draft guidance for each of the assets; and completing case studies for best practices in asset management.

FHWA, Roadway Safety Data and Analysis Toolbox

Scott is serving as a technical expert for a Federal Highway Administration (FHWA) project to plan and design a web-based Roadway Safety Data and Analysis Toolbox. Responsibilities include identifying capabilities of existing tools, identifying safety data analysis needs, and developing a series of new tools that will reside in the toolbox.

Chris DeWitt, AICP

Ordinance Review/Bicycle/Pedestrian

Chris is a Senior Planner in VHB's Williamsburg, Virginia, office. His diverse work experience ranges from planning and design of bicycle and pedestrian facilities to public involvement and grant funding. He has worked with a variety of regional, state, and federal agencies, including the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, and the Virginia Department of Transportation. His local government experience adds a unique dimension to the VHB team. He is a member of the American Institute of Certified Planners and the American Planning Association.

Education

BS, City Planning, University of Virginia School of Architecture, 1991

Registrations

American Institute of Certified Planners, 1999

Affiliations/Memberships

American Planning Association

League of American Bicyclists

Rails-to-Trails Foundation

Association of Pedestrian and Bicycle Professionals

Percent Time Available: 10%

Duck Comprehensive Pedestrian Plan, Duck, NC

Chris is the Project Manager for the development of a Comprehensive Pedestrian Plan to support the pedestrian-first mobility goals included in the Town's recently adopted 2022 Vision. In addition to supporting multimodal, complete streets, and green community goals, the Pedestrian Plan will comply with the North Carolina Department of Transportation (NCDOT) Bicycle and Pedestrian Planning Grant Initiative, which is providing funding for the project. The plan will address infrastructure needs, policy recommendations, and outreach and education programs. The planning process included Steering Committee deliberations as well as public meetings, all of which were facilitated by Chris.

James City County Parks and Recreation Master Plan, James City County, VA

Chris assisted with the development of a Master Plan for "signature parks" in James City County (JCC) with three major components: Chickahominy Riverfront Park, Jamestown Beach Campground, and Jamestown Yacht Basin. He facilitated the public involvement process and contributed to concept planning throughout the duration of this project.

James Madison University, Bicycle/Pedestrian Master Plan, Harrisonburg, VA

Chris is serving as the Project Manager to prepare a bicycle/pedestrian master plan for the James Madison University (JMU) campus to help the university realize the maximum potential benefits of an interconnected multi-modal transportation system. The plan will address connections within the JMU campus and also connections to the City of Harrisonburg. The master plan will result in a phased system of improvements along with an implementation plan and recommendations for funding.

Maple Park Master Plan, Currituck County, NC

Chris was Project Manager for an effort to provide conceptual design for relocation and expansion of Maple Park. The project involved coordination of the planning process with existing adjacent facilities as well as ongoing adjacent engineering projects. Chris facilitated a public charrette meeting to help reach consensus on a preferred alternative. After the Master Plan was complete, the County prepared to proceed into design.

Belmont to Ferry Farm Trail, Stafford County, VA

Chris was Project Manager for this Transportation Equity Act for the 21st Century (TEA-21)-funded Enhancement Project to develop two trail sections for bicycles and pedestrians that traversed sensitive archaeological and riparian areas, linking the historic Belmont Estate to George Washington's boyhood home at Ferry Farm. Both sites were located on the Rappahannock River in Stafford County, and the trails generally follow the river's floodplain. Key issues included public involvement, stakeholder and property owner coordination, consensus building, conceptual plan development, environmental constraints, and regulatory agency and Virginia Department of Transportation (VDOT) coordination. Phase One, which included sidewalk and streetscape improvements in the historic village of Falmouth, has been constructed.

Bill DeSantis, PE

Bicycle/Pedestrian

Education

BS, Civil Engineering, Northeastern University, 1976

Registrations

Professional Engineer RI, 1983

Licensed Construction Supervisor MA, 1990

League Cycling Instructor, 2004

National Mountain Bike Patrol Certified Instructor

Affiliations/Memberships

East Coast Greenway Alliance, Member

League of American Bicyclists, Member Instructor, 2006

National Committee on Uniform Traffic Control Devices, Bicycle Technical Committee, Technical Member, 2009

Association of Pedestrian and Bicycle Professionals

National Mountain Bike Patrol, Patrol Instructor, 2010

Institute of Transportation Engineers, New England, 2012

Highly experienced in bikeway and roadway design, Bill has overall technical responsibility for safety improvement projects ranging from local bicycle and pedestrian trails to large limited access highways. His involvement includes responsibility for conceptual and final design of geometric realignments, drainage improvements, and earthwork calculations, as well as for the preparation of right-of-way plans and plats, cost estimates, and contract drawings. He is also the corporate leader of VHB's Bicycle/Pedestrian and Transportation Enhancement practice. As technical advisor on numerous bicycle/pedestrian and enhancement projects in the eastern United States, he has an active role in the planning, design and construction of bicycle facilities in eleven states. Bill is a technical member of the NCUTCD Bicycle Technical Committee, a member of the League of American Bicyclists, a League Cycling Instructor, a National Mountain Bike Patrol Instructor, a member of the Blackstone River Bikeway Patrol, and a bicycle commuter.

Percent Time Available: 10%

James Madison University, Bike / Pedestrian Master Plan, Harrisonburg, VA

Bill is preparing a bike/ped master plan for the James Madison University (JMU) campus to help JMU realize the maximum potential benefits of an interconnected system within JMU campus connections.

Mattapoisett Multi-Use Bicycle Path, Mattapoisett, MA

For the town of Mattapoisett, on Buzzards Bay in southeastern Massachusetts, Bill was Project Manager for the final design and construction of a 4.7-mile multi-use bicycle trail on a former railroad bed. The majority of the bicycle path is an off-road paved bicycle path (Class I) on former railroad bed, with an adjacent equestrian trail. Portions of the railroad right-of-way serve as a sewer line corridor, which required careful design. The project was phased due to permitting issues regarding building a bike path along a barrier beach, crossing a salt marsh, and coordinating the design with a YMCA camp. This project, which was part of the Southeast Regional Planning & Economic Development District regional bike master plan, aimed at promoting safer bicycle travel as well as access to several town facilities and links to adjacent paths. Construction was completed in fall 2008.

NPS, Integrated Bicycle Plan Feasibility Study, Cape Cod National Seashore, Province Lands, MA

Bill assisted in studying the feasibility of an integrated bicycle plan for the Cape Cod National Seashore for the National Park Service (NPS). His work included evaluating, estimating, and prioritizing potential facility improvements and connectivity to Cape Cod National Seashore attractions, adjacent town and bicycle facilities, including links to 15 towns on Cape Cod extending from regional transit hubs and bicycle trailheads and facilities at Brewster and Orleans north along Cape Cod to Provincetown.

Providence Bike Network On-Road Bicycle Plan, Providence, RI

Bill was Project Manager for the development of an on-road plan that connects the regional bicycle facilities that enter Providence, including the East Bay Bike Path, the Harbor View Trail, the Washington Secondary Corridor, the Northwest Bike Trail, and the Blackstone River Bikeway. The 56-mile on-road system facilitates inter-neighborhood connections and provides a downtown hub for bicycle travel. Bill oversaw preliminary and final designs for each roadway and projected cost estimates to implement the highest level of on-road bicycle accommodation possible within the scope of the proposed improvements. To accomplish this, he analyzed traffic volume and crash data to guide selection of appropriate bicycle treatments and developed a strategy to implement and fund the on-street bicycle system.

Dan Nabors, PE

Bicycle/Pedestrian

Dan is a Senior Transportation Engineer and is VHB's lead for field safety reviews. With diversified transportation engineering experience that encompasses traffic operations, roadway design, downtown revitalization projects, and safety, he has worked on projects focusing on engineering and planning studies to integrate pedestrians, bicyclists, vehicles and transit. Dan's projects have ranged from creating downtown revitalization plans to conducting pedestrian and bicycle safety studies aimed at improving facilities at specific locations. He has supported FHWA's pedestrian and bicycle safety program for close to a decade.

Education

MS, Civil Engineering, Kansas State University, 1998

BS, Civil Engineering, Virginia Polytechnic Institute and State University, 1989

Registrations

Professional Engineer (Civil Engineering) VA, 2004

Affiliations/Memberships

Institute of Transportation Engineers

Association of Pedestrian and Bicycle Officials

Percent Time Available: 10%

Duck Road Safety Audit and Comprehensive Pedestrian Plan, Duck, NC

For the Town of Duck, Dan led a pedestrian and bicycle study that involved various stakeholders throughout the community to assess the issues and needs. He also presented results to community and key public officials, and many of those improvements have been implemented. He is currently developing a Comprehensive Pedestrian Plan. As part of the data collection phase of the project, VHB developed a public input survey, which the Town used in an on line survey tool to receive over 600 responses. He developed a data collection plan to define pedestrian and bicycle demand and behaviors by age category. The plan will address infrastructure needs, policy recommendations, and outreach and education programs.

FHWA, On-Call Safety Technical Support

Dan is Co-Principal Investigator (PI) for a contract that provides engineering support, outreach and communications support, and training support to FHWA's Office of Safety. As the contract PI, he is responsible for the overall technical direction and quality control of task orders that

FHWA, Safety Circuit Rider Programs Best Practices Guide Development

Dan was Principal Investigator (PI) for a Federal Highway Administration's (FHWA) study to provide state departments of transportation and Local Technical Assistance Program/Tribal Technical Assistance Program centers with an easy-to-use resource for implementing or enhancing a Safety Circuit Rider (SCR) program. He investigated common characteristics of existing SCR programs, information on the typical duties and services provided by SCR programs, lessons learned by existing programs, and evidence of the effectiveness of SCR programs through conferences, webinars, and other communication methods.

FHWA, Pedestrian and Bicycle Safety Program

Dan served as Project Manager and Lead Safety Researcher, providing on-site technical support to the Federal Highway Administration's (FHWA) Office of Safety Pedestrian and Bicycle Safety Program. He reviewed and critiqued pedestrian-related technical reports and provided technical assistance to agencies with pedestrian safety problems. Dan provided technical assistance on a deployment and evaluation of over 26 different pedestrian/bicycle countermeasures in three major cities in the United States (Las Vegas, San Francisco, and Miami). He assisted in the development of data collection plans to evaluate both driver and pedestrian behaviors at study locations and identified various countermeasures for deployment ranging from automatic detection of pedestrians using video systems to pedestrian knockdown signs. He also coordinated the development of BIKESAFE, the first bicycle safety expert system software. Dan conducted training and numerous pedestrian and bicycle RSAs in over a dozen states, many of which were focused on transit in schools in CA, FL, AZ, NM, WV, and AL. Training included courses covering pedestrian planning, design, and safety. Topics covered during the course include roundabouts, road diets, and other specialized treatments. Working with cities on integrating complete streets concepts. As consultant manager for FHWA's Pedestrian Focus City and State Program, he helped organize and conduct a peer exchange for all member states.

3 Project Approach

3

Project Approach

Project Management Strategy

VHB has the in-house capabilities to provide all the required services to prepare a parking study for the Town of Carrboro. Our project team consists of of transportation planners and engineers with expertise in parking, bicycle and pedestrian improvements, transit operations, and community involvement.

The VHB Team will be led by staff from the Raleigh (NC) office, with support from Providence (RI), Tysons Corner (VA), and Williamsburg (VA) offices. VHB views its staff as urban problem solvers, and this approach aligns very well with the multimodal approach outlined by the Town's RFP. We understand that this is not simply a parking study, because balancing future parking supply and demand is directly related to travel demand management (TDM) strategies for all modes of transportation.

VHB's local knowledge and experience will be an invaluable asset on this project; our office has over 15 years of project experience (while operating previously as M/A/B Transportation) with the Town of Carrboro, Town of Chapel Hill, and the University of North Carolina at Chapel Hill.

Staff Roles

Bill Martin, PE, will serve as Principal-in-Charge for this project, bringing more than 35 years of transportation engineering and project experience. **Timothy Tresohlavy, AICP, GISP,** will serve as the Project Manager for VHB, handling the day-to-day coordination with Town Staff and organizing VHB's team. Timothy's parking planning experience dates back to 2006, when he served as the Parking Planner with the NC State University Transportation Department in Raleigh (NC).

Bill and Timothy have worked collaboratively on numerous transportation planning projects since 2008, including downtown parking studies for Raleigh, Burlington, Wilson, and Concord in North Carolina. Bill will provide technical oversight, while Timothy provides expertise in planning, outreach, and visualization of data.

Steve Epley, PE, will serve as the coordinator of field data collection inventories. Steve has 17 years of engineering experience collecting traffic, parking, bicycle, and pedestrian count data and synthesizing the results using a combination of software. Steve currently serves a similar role for the biannual traffic impact analysis (TIA) performed for the UNC-CH campus, as well as numerous other TIA projects for individual building or parking garage developments on campus.

Jody Lewis, PE, is a professional engineer and project manager with 22 years of experience. Jody has previous work experience with the Town of Carrboro on the Main Street road diet project, which added bicycle lane pavement markings and intersection improvements. Jody also has extensive work experience with the Town of Chapel Hill and UNC-CH on several development and transportation projects.

Dan Nabors, PE, is a well-rounded transportation engineer with 23 years of experience, with specialization experience in pedestrian improvements. Dan has authored numerous reports and guidance for FHWA's pedestrian and bicycle safety programs and roadway safety audits, in collaboration with Bill DeSantis.

Bill DeSantis, PE, serving as VHB's Corporate Bicycle Practice leader, brings 39 years of bicycle engineering experience to the VHB Team. Bill is an experienced bicycle commuter and a certified League Cycling Instructor (LCI), among several other notable accomplishments. Bill will contribute directly to any bicycle components and recommendations.

Scott Himes, PhD is a transportation analyst and PhD in the field of Civil Engineering. Scott specializes in the quantitative analysis of datasets, particularly crash data for the FHWA. Scott will provide assistance designing the residential survey instrument and analyzing the results for statistical significance.

Proposed Methodology for Tasks

1. Public Participation

Subtask 1.1. Public participation strategy

Task Objective: To prepare, with the guidance of the Town staff, an outline of various methods to engage Carrboro citizens in discussions of downtown parking challenges.

Methodology: VHB will gather the unique perspectives of those who live, work, and enjoy Carrboro directly from those who experience the challenges daily. The public outreach strategies will include public meetings, social media, and a residential survey. Additional public participation strategies as recommended by the Town will be considered as potential add-on tasks, for an additional fee to be negotiated.

Meeting notices and general promotion of the event will be performed by Town staff. The public participation strategy will be used as a guide; additionally, successful strategies from previous planning efforts within Carrboro are equally valuable resources that should be considered.

Deliverables: Technical memorandum outlining strategies for involving the public in a variety of media and project events.

Subtask 1.2. Kickoff meeting/Public Forum

Task Objective: To discuss the goals and objectives of the study with interested citizens of Carrboro and gauge interest and perspectives.

Methodology: VHB will work with the Town to schedule the most appropriate time and location for an initial public meeting. The purpose of the kickoff meeting will be to establish the overall vision, goals, and objectives of this parking study; present several best management practices from the parking industry to the public; and solicit feedback on the unique challenges that the citizens have observed. VHB will compile written and verbal comments from the kickoff meeting and include these in an appendix for the final report.

VHB will coordinate with the Town to identify an appropriate venue for this meeting that will provide the necessary equipment and space.

Public feedback or recommendations that would require VHB to collect additional data or perform analysis that would be beyond the original scope of work will be identified and discussed with the Town. A determination will be made by the Town as to its added value to the project, and whether VHB should perform this additional work for an additional fee.

Deliverables: Technical memorandum documenting the general themes of discussion from public input.

Subtask 1.3. Social media and outreach

Task Objective: To reach citizens of Carrboro who may not be available to attend public meetings, and allow their perspectives to be accounted for in the planning process.

Methodology: In addition to attendance at public meetings, VHB's public outreach will utilize the Engage Carrboro tool to publicize upcoming plan milestones, solicit feedback prior to and following public meetings, and gauge citizen perspectives on potential parking strategies. VHB understands that 14% of Carrboro residents identify themselves as Hispanic or Latino according to Census data, which is four (4) percent higher than the County and State averages. An estimated 7.6% of adults have identified themselves as speaking English less than very well (LEP status). VHB will work with the Town to ensure that outreach efforts and materials are made available to these LEP individuals and anticipates the use of Spanish-language print and web materials and a public meeting interpreter.

VHB understands that not all social media feedback will be constructive, particularly when dealing with a controversial topic such as parking management. VHB will rely on the Town to review content regularly and remove any that is inappropriate, inflammatory, or not constructive to the project.

Deliverables: Summary of general themes and topics received during the project, included as public outreach initiatives within the report appendix.

Subtask 1.4. Resident/visitor parking survey

Task Objective: To collect residents' perceptions of, and attitudes towards, accessing destinations and parking in Carrboro.

Methodology: Public opinion and travel surveys can vary widely in scope, scale, and statistical validity. In order to develop a statistically valid survey that reflects the attitudes and behavior within an acceptable level of confidence and range of error, information on the total population or universe that is being surveyed must be known, and the survey must be a random survey of members of the population. The RFP requests a survey of residents spread throughout the town, and in particular, residents who live further away from downtown and with limited access to transit. At a minimum, this would require a stratified sample of residents with a valid number of responses from locations that are near and far from downtown, and those that have access to transit and those that do not. The challenge is to first stratify the population in these categories and then to obtain a statistically valid number of responses in each category. The number of responses by category required is based on the desired level of precision and confidence for the results. The ratio of responses to the population is used to expand the survey to represent the population as a whole with an acceptable level of confidence and error.

Survey responses are typically collected through either a direct interview with the respondent (either in person or by telephone) or by the use of a self-enumerated survey form. Either of these methods can be costly and time consuming. In recent years, online survey tools such as Survey Monkey have been used to collect the data, allowing for quick analysis of the results. Again, to be statistically valid, the respondents must either be directly recruited to participate in the survey through a random selection process, or a sufficiently large number of responses must be received for each survey category—in this case, location and access to transit.

Based on the above discussion, VHB is proposing a simplified survey method that, while not statistically valid, will be designed to best attain a full cross section of the Carrboro population. VHB proposes to administer the survey through an online survey tool such as Survey Monkey, which is available in 13 languages. A link to the survey will be published on the Town of Carrboro's website, as well as in local newspapers, and will be distributed to residents through existing town mailings, such as the monthly water bill. The following steps will be taken to produce the survey results:

- Design the survey questionnaire
- Create the link to the survey on the Town's website
- Advertise the availability of the survey to residents
- Provide a period of time for survey response
- Analyze survey responses (with particular focus on resident's geographic location within Carrboro)
- Document results

VHB will develop the survey questionnaire in coordination with the Town of Carrboro. Once the survey is finalized, VHB will post the survey on the internet for responses and provide the Town with a link that can be advertised. The Town of Carrboro will put the link on the Town's website and advertise the availability of the survey in local publications. The Town will also take the lead on distributing the link through other regular mailings to the residents, such as the monthly water/utility bills. After a period of time, VHB will analyze the survey results and document in a technical memorandum.

Deliverables: Survey questionnaire and technical memorandum documenting survey results.

Subtask 1.5. Draft plan open house

Task Objective: To present initial findings and host a discussion with the public relating to existing conditions data and preliminary findings.

Methodology: After several months of data collection and analysis, VHB and the Town will host a second public meeting to present preliminary findings and recommendations for comment. This open house event will include the existing conditions assessment, estimates of future parking demand, and several preliminary strategies that would benefit the parking system while taking bicycle, pedestrian, and transit modes into account.

VHB will make a brief presentation to open the meeting, followed by an open forum discussion with citizens for the remainder of the meeting. Citizens will be presented with opportunities for comment and display board markup. VHB will provide two (2) printed draft plans (not including appendix sections) for public review and comment during the open house.

VHB will coordinate with the Town to identify an appropriate venue for this meeting.

Citizen feedback from the meeting, along with responses from the Engage Carrboro website, will allow VHB to shape preliminary recommendations into the final plan recommendation strategies.

Deliverables: Summary of general themes and topics discussed at the open house, included within the report appendix.

2. Data Collection

Subtask 2.1. Data collection strategy

Task Objective: To perform field data collection of all public and private parking lots within the defined downtown study area.

Methodology: The collection process will employ the use of GIS mapping of existing parking facilities overlaid onto aerial images. The collection sheets will include a map of parking lot locations with an identification number (code), as well as estimated number of parking spaces (by type) anticipated.

VHB will utilize existing GIS resources and construct a GeoDatabase to store the geographic shape of parking lots with corresponding lot identification numbers that join with parking inventory spreadsheets (Excel format). Each parking lot will be inventoried individually and aggregated to the Town's three (3) parking analysis zones identified by the 2008 parking study. Zone A is primarily the parking areas west of Oak Street. Zone B represents the central zone, and is further subdivided into three (3) segments. Zone C is primarily south of Main/Rosemary Street and east of the railroad tracks.

Deliverables: Data collection effort, designed by VHB, that resembles the 2008 study to allow for comparisons and analysis of trends over the previous seven (7) years.

Subtask 2.2. Parking space inventory

Task Objective: To obtain an accurate record of the existing parking supply within the downtown study area, and use this for further analysis.

Methodology: VHB will perform an audit of the existing parking space inventory, provided by the Town, indicating parking lot characteristics related to:

- Lot ownership (public, private)
- Maintenance condition (paved, gravel, striped, wheel stop)
- Time restrictions (30-min, 1-hour, 2-hour, 24-hr)
- Assumed user group (government employee, private employee, customer)
- Weekday parking spaces (unreserved, restricted, ADA, loading)
- Weekend parking spaces (unreserved, restricted, ADA, loading)

Deliverables: An updated spreadsheet database, with ability to join with GIS datasets for visualization.

Subtask 2.3. Parking utilization surveys

Task Objective: To observe and record the number of vehicles parking within the study area during a typical weekday and a typical weekend day.

Methodology: Upon completion of the parking space audit, VHB will perform four (4) peak period occupancy counts for one (1) typical weekday (assumed to be Tuesday), as well as two (2) peak period occupancy counts for one (1) typical weekend (assumed to be a Farmers Market Saturday). These days and times correspond with findings from the Town's 2008 parking study, so that direct comparisons can be made. All public and private parking lots within the downtown study area will be included in the parking utilization inventory.

- Weekday Counts: Tuesday
  - 9-11 am
  - 1-3 pm
  - 3-6 pm
  - 6-9 pm
- Weekend Counts: Saturday
  - 1-3 pm
  - 6-9 pm

VHB has previously collected parking occupancy data on non-peak weekdays and weekends and found that these additional data points offered little value to the project, its goals and objectives, and the final recommendations.

VHB will not perform vehicle (tube) counts entering or exiting public parking lots. These type of traffic counts were necessary for the Town's 2008 parking study, although equipment malfunctions rendered their data less than useful to the project.

Deliverables: An updated spreadsheet database of parking utilization during the peak period.

Subtask 2.4. Length-of-stay analysis (turnover study)

Task Objective: To observe and record the number of vehicles within public parking areas that are parked for longer than the specified 2-hour parking limit.

Methodology: All Town parking lots are posted as 2-hour time restricted parking between the hours of 7:00 am and 5:30 pm. Under current parking enforcement conditions, vehicles are legally allowed to relocate within the 2-hour time frame within any of the public lots. Symptoms of an on-street parking 'shuffle' occurring every 2-hours are not presumed to be an issue in downtown Carrboro, due to the limited number of on-street parking spaces.

VHB will collect length-of-stay data within the nine (9) Town of Carrboro public parking lots on one (1) typical weekday (assumed to be Tuesday). This analysis will occur separately from the parking occupancy field data collection and utilize a separate field crew. VHB will utilize vehicle tire chalking on an hourly cycle to identify the number of vehicles that were observed between one and 10 occasions. This methodology will yield the necessary data as outlined by the parking plan RFP, and is consistent with the Town's 2008 parking study. This approach is limited because it will not account for vehicles that re-park within the same parking lot or within other parking lots throughout the day. For this type of data analysis, vehicle license plates will need to be recorded.

Should the Town require additional information from this analysis, such as number of vehicles re-parking within multiple public parking lots, VHB can offer different data collection methods to record vehicle license plate information. This revised methodology will require additional staff personnel and equipment, and would therefore be offered for an additional fee. The value added to the project would be the identification of vehicles that park (and re-park) within multiple public parking lots throughout the day, presumably to avoid a parking citation for surpassing the 2-hour time restriction.

Deliverables: Spreadsheets and charts to display the length of stay data for vehicles parking within public parking lots.

Subtask 2.5. Loading zone utilization

Task Objective: To observe and record the number of delivery vehicles parking within the specified loading zones within the downtown study area.

Methodology: VHB will include loading zone utilization within the parking utilization data collection effort, as there are very few designated loading zones within the study area.

Deliverables: An updated spreadsheet database of parking utilization during the peak period.

3. Analysis

Subtask 3.1. Future parking demand

Task Objective: To construct a flexible spreadsheet-based model to estimate future parking demand based on multiple dynamic inputs and assumptions identified by the Town.

Methodology: VHB will rely on the Town to assemble and provide detailed descriptions of future development projects that are expected within a five (5) year period. Project descriptions shall include the physical address, owner(s), project title(s), current and expected building land use (per Article XVIII of the Carrboro Land Use Ordinance), estimated GSF of the building per floor, and other relevant information that would impact trip generation and parking demand. Relying upon these data, VHB will create a spreadsheet model that forecasts future parking demand generated by new land uses, as well as demand reduction factors related to travel demand management (TDM) best practices. Reduction factors may include expected travel mode share shifts and estimates for zero car household populations within Carrboro.

The inputs for the model will be easily updated as future assumptions and information are received, so that Town staff is able to regularly update and forecast additional development scenarios as they evolve over time.

VHB will rely on the Town to ensure that all development projects are identified, appropriately named, and located within their corresponding parking analysis zone within downtown.

Deliverables: Spreadsheet model of development projects, model input assumptions, and expected future parking demand summarized by project, and by the three (3) parking analysis zones identified by the Town's 2008 study. Potential parking spillover per zone will be approximated based on the parking supply-demand balance, however, accurately predicting human behavior regarding parking spillover options is not always possible.

Subtask 3.2. Parking supply, management, and enforcement recommendations

Task Objective: To provide various recommendations and parking management strategies based on project vision, goals, objectives, and synthesized public feedback.

Methodology: VHB will separate improvements into one of four (4) categories.

- Parking supply improvements: VHB will make recommendations based on field observations, professional judgement, public comments and discussion, and parking industry best practices. Recommendations will be planning-level improvements to existing parking lots and capacity estimates for future parking lot location(s).
- Education/Encouragement: VHB will complement physical improvement recommendations with programmatic recommendations that limit potential barriers to walking, biking, or riding transit.
- Enforcement: VHB will review the Town's current parking enforcement process, discuss procedures with enforcement officers, and provide suggestions of parking industry best

practices that would complement the project vision, goals, and objectives for parking management.

- Evaluation: VHB will review the Town's ordinance relating to land uses and parking requirements as outlined below.

VHB will provide electronic copies of all field data collection resources so that continual and regular updates to the parking inventory, utilization, and future parking model are possible.

VHB will not provide engineering-level parking lot paving and restriping plans, or traffic engineering improvements relating to entry/exit points, intersection sight distances, or other traffic and or safety improvements.

VHB will not provide direct responses to individual public comments, but rather synthesize common themes and allow perspectives to shape the final recommendations and strategies.

Deliverables: Final report sections, with appendix references for additional information.

Subtask 3.3. Land Use Ordinance parking requirement review

Task Objective: To review and make recommendations regarding the current parking requirements in Article XVIII of the Carrboro Land Use Ordinance in the context of the parking data collected in this project.

Methodology: In Section 15-291 of the land use ordinance, there are approximately 75 discrete categories of parking requirements, each linked to one of the 34 permissible land uses (and multiple sub categories of each major land use) in the Town. While the RFP states that a "comprehensive review of parking requirements" contained in the ordinance is to be conducted, it is not possible to review each individual parking requirement for the permissible land uses using the data that will be collected only for the focused downtown area that is defined in the RFP. It is possible, however, to compare the existing parking demands in the focused downtown area with the requirements contained in the ordinance, provided that a current inventory of the land uses that matches the permissible land uses as defined in the ordinance is available. This analysis must be done at an aggregate level, rather than for each individual land use type. This is due to the use of shared parking facilities in many of the downtown areas, particularly in the nine (9) public parking facilities in the downtown.

VHB will compare the observed parking supply and demands in the study area with the required parking derived from the inventory of land uses and the associated parking requirements as contained in Section 15-292 of the Town's Land Use Ordinance. Where parking

is specifically dedicated to a single land use (a bank for example), a comparison at that specific land use type is possible. Otherwise, the analysis will be done at an aggregate level for the study area. Since the study area is primarily centered on the downtown area of Carrboro, conclusions can be drawn as to the differences between parking demand in the downtown area versus non-downtown locations. Similarly, as the primary concentration of the transit service is to and within the downtown area, conclusions can also be drawn as to the impact transit has on the parking requirements.

It is interesting to note that in Section 15-297 of the ordinance, the use of joint parking spaces is accommodated. However, the joint use, as defined in the ordinance, is directed at joint use of spaces over different times of day. It is possible that joint use of a parking space could also be during the same time of day where a trip maker may park once but patronize multiple land uses by walking. This is very common in downtown business districts.

Deliverables: Technical memorandum documenting the analysis of parking requirements.

Subtask 3.4. Walkability micro-audit

Task Objective: To conduct a walkability micro-audit in the downtown and make recommendations for improving the safety, comfort, aesthetic quality, and accessibility for persons with disabilities in the vicinity of existing parking lots and parking deck.

Methodology: The term “audit” typically means a very systematic and independent methodology for evaluating either the effectiveness or the performance of the duties of organizations or facilities. In the case of a walkability audit, an audit would mean the systematic review and evaluation of the existing walk connections between origin and destinations using multiple measures of effectiveness. Many of these measures can be quantitative, such as the width of the sidewalk, linear feet of paved sidewalks, number of ADA approved accommodations, lighting, and the change in elevation (slopes or steps). Others may be qualitative, such as aesthetics and comfort. In this project, the focus will be on the common connections between the existing parking lots and deck and the destinations served.

Prior to the actual field walk of the downtown, VHB will prepare summary maps of the routes to be walked and a list of factors that will be considered in the field observation phase. Notes will be made by the participants in the field walk as related to each factor. VHB will compile the notes from the participants and summarize the results, identify problem areas, and make general recommendations as to improvements. Given the anticipated level of effort for this task, VHB will not be making a full engineering audit of the walk network in the downtown and will not be conducting an audit to evaluate if the walk network meets adopted safety guidelines, particularly where the walk routes cross existing streets.

VHB anticipates no more than five (5) individuals will participate on this field walk, to ensure the best use of time and effort.

Deliverables: Scanned copies of field notes and reference maps used during field visit, summary of recommendations with a technical memorandum containing a table of identified issues.

Subtask 3.5. Park-and-ride analysis

Task Objective: To identify potential park-and-ride markets and locations.

Methodology: Transit service in Carrboro is currently provided by Chapel Hill Transit with a total of three routes (F, CW, and J) serving downtown Carrboro each weekday and one route on Saturdays (CW). There are two park-and-ride lots located on the west side of Carrboro at Carrboro Plaza and Jones Ferry Road. While there may be some usage of these park-and-ride lots for trips going to downtown Carrboro, the primary market for these lots is the UNC campus and medical center. Potential park-and-ride locations along the existing bus routes will be explored and identified.

VHB anticipates that the market for substantial park-and-ride demand to downtown Carrboro is likely to be small, and that any potential park-and-ride locations would likely be existing parking supply that is underutilized and can be shared for park-and-ride service. VHB will identify both stand-alone and shared parking locations.

Deliverables: Technical memorandum.

Subtask 3.6. Bike parking recommendations

Task Objective: To prepare recommendations on where bike parking may need to be enhanced in the downtown.

Methodology: Perhaps one of the best methods for identifying locations where bicycle parking is needed is to observe where bicycles are currently being parked in informal locations. Much like looking at worn footpaths in unpaved areas to see where people want to walk, locations where bicycles are being chained to parking meters, trees, fences, lamp posts, benches, or any other fixed objects is a good indicator as to where more formal bike parking facilities should be placed. One problem with placing bicycle racks along the sidewalk is that this introduces both a conflict and competition for space with the pedestrians. One solution to this that many urban areas are beginning to use is the removal of an on-street parking space to create a bike corral. One such example is already in place along Weaver Street.

In this project, there will be several opportunities to identify locations where bicycles are being parked informally. The first opportunity is during the actual inventory and survey of existing parking facilities. During this task, the VHB field personnel will observe were bicycles are being parked and document these locations. The second opportunity is during the field walk of the walkability micro-audit task. The participants will be asked to observe and mark on the field maps and notes where bicycles are being parked.

Using the field observations of informal bicycle parking, VHB will identify locations for short term bicycle parking facilities. For long term bicycle parking opportunities, VHB will review the Comprehensive Bicycle Transportation Plan and the projected growth in downtown Carrboro as contained in the Town's comprehensive plans.

Deliverables: Scanned copies of field notes indicating existing bicycle parking locations, summary of recommendations for near- and long-term bicycle parking facilities.

4. Presentations

Subtask 4.1. Board of Aldermen presentations

Task Objective: To inform the Town Board of the project findings, schedule, and milestones.

Methodology: VHB will present preliminary findings to the Town Board of Aldermen prior to the draft plan open house meeting. This initial presentation will include existing conditions data, future demand estimates, and preliminary management strategies under consideration.

After further revision to the plan and recommendations following citizen feedback, VHB will make a second presentation to the Board with the final parking study findings and recommendations.

Deliverables: PowerPoint presentation relating to the project status and findings to date. VHB will make revisions to the project report as needed based on discussions with the Town Board.

Subtask 4.2. Advisory board presentation

Task Objectives: To inform and discuss potential implications of the parking plan with members of the Town's technical staff.

Methodology: VHB will work with the Town to present relevant findings of the plan to a select group of staff that are directly involved in development review and planning.

Feedback or recommendations that would require VHB to collect additional data or perform analysis that would be beyond the original scope of work will be identified and discussed with the Town. A determination will be made by the Town as to its added value to the project, and whether VHB should perform this additional work.

Deliverables: Draft parking plan to be circulated prior to the meeting, PowerPoint presentation documenting study findings. VHB will make revisions to the draft parking plan based on discussions.

5. Plan Development

Subtask 5.1. Parking Plan Report

Task Objective: To document the entire planning process, public outreach, comments, findings, and analyses within a full-color report, with appendices and summary recommendations.

Methodology: VHB will prepare a draft plan that builds upon public outreach, steering committee guidance and discussion, and data collection and analysis.

The draft plan will be circulated for review to the Town staff (steering committee), as well as be made available for public comment and review for the Board of Alderman and Advisory Board. The Town will assist VHB with compiling and synthesizing review comments to avoid conflicting requests. The review period shall not exceed two (2) weeks in order to maintain the project schedule. Review comments that would require additional data collection or analysis beyond the original scope of work will be identified and discussed with the Town.

VHB will make necessary revisions to the final plan and submit a final plan to the Town for adoption.

Deliverables: Final report with Appendix.

6. Staff Meetings/Coordination

Subtask 6.1 Bi-weekly plan update calls

Task Objective: To maintain project status and facilitate information sharing with the Town.

Methodology: VHB will host regular teleconference meetings with screen sharing capabilities to discuss project status and milestones, as well as upcoming tasks. VHB will send calendar invitations with directions to Skype for Business access to enable screen sharing.

The Town will provide a list of steering committee member invitees and email addresses to be included in these plan update calls.

Deliverables: Virtual meetings hosted by VHB, summaries of action items with collaboration from Town staff.

Subtask 6.2 General coordination and contract management

Task Objective: To maintain project progress and regular invoicing.

Methodology: VHB will maintain a revised project schedule and manage this project with guidance and meeting preparation assistance from Town staff. VHB will provide monthly invoicing with percentage of completion by task.

Deliverables: Monthly invoices.

4 Cost Proposal

4

Cost Proposal

Appendix C - Cost Proposal Sheet

Appendix C. Cost Proposal Sheet

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.

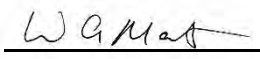
VENDOR:

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

Company Name: VHB Engineering, NC, P.C. (VHB)

Contact Person: William A. Martin, Jr., PE

Phone #: 919.334.5616

Authorized Signee: 

Print Name: William A. Martin, Jr., PE

Print Title: Principal

#	DESCRIPTION	COST
1	Public participation	$15,000
2	Data collection	$8,000
3	Analysis	$20,600
4	Presentations	$10,000
5	Plan development	$11,000
6	Staff meetings, coordination, contract management	$7,000
	Miscellaneous Printing Costs	$1,400
	Total	**$73,000**

5 Similar Project References

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Similar Project References

VHB welcomes the opportunity to demonstrate our technical excellence, responsive service, collaboration, energy, and commitment to this project, this team, and its success. Our clients are pleased to speak about the high quality of work and responsive services they have received. The following page provides a listing of references for similar projects completed by VHB.

PROJECT	REFERENCE/ADDRESS	CONTACT INFORMATION
City of Concord Parking Management Study *Concord, NC*	**Scott Adams, AICP** Senior Planner, Planning & Community Development City of Concord 66 Union St. South Concord, NC 28025	704.920.5124 adamss@concordnc.gov
City of Wilson Downtown Parking Analysis *Wilson, NC*	**Ellen Hoj, AICP, CZO** Planning and Development Services City of Wilson 112 Goldsboro Street East Wilson, NC 27894	252.206.5289 ehoj@wilsonnc.org
UNC-Chapel Hill On-Call Contract *Chapel Hill, NC*	**Anna Wu** Assistant Vice Chancelor, Facilities Operations, Planning & Construction UNC-Chapel Hill Giles F Horney Building 103 Airport Drive Campus Box 1800 Chapel Hill, NC 27599	919.962.0761 awu@fac.unc.edu

"I am grateful to have worked with your team. You [Timothy Tresohlavy] are an awesome professional who is obviously passionate about your work. Your attention to detail and patience in our political environment was much appreciated."

- Ellen Hoj
Planning and Development Services
City of Wilson


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