

















INFORMAL PATHWAYS IN CHAPEL HILL







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TABLE OF CONTENTS

04 Introduction

What are informal pathways?
Why are they important?
What does this report cover?
Where are informal pathways located?

11 Methodology

Pathway identification Selecting key pathways Pedestrian counts

- 12 Pathway Inventory
- 26 Analysis of Key Pathways
 Robertson Lane
 Wallace Parking Deck
 Varsity Alley
- **32** Funding

How much do these changes cost? Funding sources

INTRODUCTION

What are informal pathways?

Automobiles, because of their size, are generally confined to traveling only along officially-designated roadways. Pedestrians, however, are not faced with the same constraints. Without a vehicle, pedestrians are far more mobile than either drivers or bicyclists. The Town of Chapel Hill provides sidewalks along major roadways, but pedestrians do not always use these formal pathways.

Informal pathways are any pedestrian routes that deviate from Town-maintained roads and sidewalks. They can occur through parking lots, between buildings, through buildings, and in parks. You may remember a worn path running diagonally across an empty lot. Or you may have cut through a building on a particularly cold day. Frequently, they arise as a natural outcome of "desire lines" - that is, the shortest path between popular origins and destinations. They are not created by any formal entity. Instead, they arise from a public desire for shorter walking paths.

In downtown Chapel Hill, Franklin and Rosemary Streets provide strong East-West thoroughfares, but there are few roads that create North-South corridors. Because of the limited number of intersections, residents and visitors use a number of shortcuts to travel to their favorite downtown destinations. Because many of these pathways are not maintained by the Town, they vary on a wide range of characteristics such as frequency of use, lighting (and perceived safety), width, and landscaping.

An informal pathway is any pedestrian short-cut that does not travel along a road-side sidewalk.

Why are they important?

Travel Time

By creating shorter paths between the origins and destinations people want to reach, informal pathways can significantly reduce travel time (see page 10 for statistics). These shortcuts could even make it faster to walk than to drive.

Traffic Congestion

When destinations are close, many people are more likely to walk instead of drive. This means fewer cars on the road and a smaller demand for downtown parking spaces.

Environmental Benefits

In addition to the air quality benefits achieved by reducing automobile trips, informal pathways provide areas for downtown landscaping. Plantings can have small but cumulative effects on local air quality and storm water runoff.

Economic Benefits

Economic impacts are realized when people have greater accessibility to local businesses. Pedestrians are more likely than drivers to "window shop" and enter an interesting store.

Vibrancy

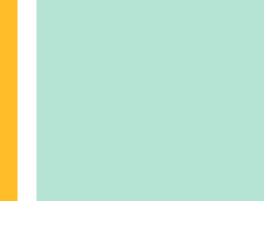
Encouraging pedestrians makes downtown areas more active throughout both day and night. Being surrounded by more pedestrians also makes it safer to walk, as opportunistic crime goes down when there are more eyes on the street.

Social Gatherings

These pathways, when they are large enough, can become areas for public meeting spaces. Benches or small, sidewalk cafes can help encourage informal meetings.







What does this report cover?

The purpose of this report is to provide an inventory of existing informal pathways in downtown Chapel Hill and to provide suggestions on how they might be improved. To achieve that goal, this report begins by discussing connections with the currently ongoing Downtown Master Planning process, which seeks to generate a vision of what residents believe downtown Chapel Hill should be like in the future.

To facilitate the analysis of informal pathways, seven key features have been identified, and are introduced (along with associated icons) on page 7. These factors are used throughout the report to identify strengths and weaknesses of each pathway.

Pages 9-24 contain the full inventory of all thirteen existing informal pathways. The inventory begins with an overview map, which shows the relationship of these paths to the formal street network. The methodology used to identify and evaluate informal pathways is followed by a one-page summary on each path.

An in-depth study of three select pathways is included on pages 26-31. This section investigates Robertson Lane, Amber Alley, and Varsity Alley. It provides an analysis of strengths and weaknesses, recommends changes, and presents an example of what the pathway might look like if these recommendations are implemented. These pages also contain brief case studies on how other towns have improved their informal pathways.

The final section provides estimates of how much some of these improvements would cost and funding sources that have successfully been used by other municipalities to improve pedestrian facilities.







PROJECT OVERVIEW

Downtown Imagined

Beginning in the summer of 2013, the Town of Chapel Hill and the Chapel Hill Downtown Partnership began soliciting visions for what the future of downtown should look like in a process called Rosemary Imagined. The process was later expanded, taking on the name Downtown Imagined. Drawing on the six themes established in the Chapel Hill 2020 comprehensive plan, *Downtown Vision and Implementation Plan* provides twenty-two visions and ideas for the future of downtown Chapel Hill. One of these visions is increased connectivity for pedestrians, bicyclists, and drivers. To implement this vision, the Town and Downtown Partnership aim to improve the formal and informal connections between downtown and surrounding areas.

At the time of this writing, the Town has entered the analysis phase of the downtown master plan. This phase involves gathering information about current conditions in Chapel Hill. The findings from the analysis phase will then be merged with the community vision document to complete the downtown master plan. This report on informal pathways adds to the analysis portion of the downtown master plan process by providing information about existing informal pathways and identifying potential areas for improvement. This study supports multiple visions established in the *Downtown Imagined: Community Visions* document that address Social, Environmental, and Traffic issues, as discussed below.

Project connections

Social

The Community Visions document identifies multiple visions of a vibrant and enjoyable downtown. Pathways facilitate commerce because pedestrians increase activity along the street and have the freedom to enter stores at will. An active street life with outdoor seating and public art is facilitated by pedestrian activity. The document also calls for downtown to be a strong cultural and arts center. In turn, pedestrian activity is supported by the proposed Downtown Design District that fosters human-scale buildings and a unified character for downtown.

Environmental

The Community Visions document also calls for a downtown that promotes environmental sustainability. The community hopes to attract a market and park to the Rosemary/Columbia lot and develop a linear park along Mitchell Lane that incorporates a green market and cafe pavilions. These public gathering places and pedestrian activity are mutually supportive; pedestrians provide the activity necessary for the vibrancy of public gathering spaces. The pedestrian pathways envisioned in this park also offer an opportunity for linear landscaping and beautification projects.

Traffic

Traffic congestion and parking are addressed in multiple community visions. Making pedestrian travel safer, faster, and more aesthetically pleasing can encourage residents to walk, rather than drive, for short trips. The informal pathways addressed in this report offer prime locations for addressing the visions related to traffic management and addressing infrastructure gaps, such as lighting needs. Providing transportation options, like better pedestrian connections, will ensure that all residents and visitors have a positive experience in Chapel Hill's downtown.

KEY FEATURES



Wayfinding

Knowing where you are is comforting. Wayfinding usually takes the form of signs that provide orientation or directions but also includes easily-identifiable gateway signs. They are especially helpful for visitors and can also make people feel more confident and safe, especially on informal pathways that are not included on maps or in written directions.



Lighting

Being able to see your surroundings at night affords pedestrians a much greater sense of security. Pathways between tall buildings can be dark and uncomfortable, especially at night. While formal sidewalks frequently have some lighting from streetlights, these sources do not often reach informal pathways.



Landscaping

In addition to environmental benefits, landscaping improves the aesthetic quality of downtown. Walking past greenery is more comfortable than walking between two bare brick buildings, and it can increase the attractiveness of informal pathways.



Awnings

Pedestrians are sensitive to weather, and awnings can provide shelter from both the sun and rain. If installed correctly, they increase the visual appeal of buildings and can be used to indicate the location of specific businesses or destinations. Their inclusion in informal pathways can make these routes more appealing. Awnings that are too large can block out natural light.



Public Art

Public art comes in a multitude of forms, and many of downtown Chapel Hill's existing informal pathways already have murals or other art fixtures. In addition to making a pathway more aesthetically interesting, murals can welcome and engage pedestrians.



Pedestrian Facilities

While many of the informal pathways at the heart of downtown are already paved, a few on the of downtown are simply worn dirt paths. Providing sidewalks and dedicated pedestrian space gives pedestrians more legitimacy. Most importantly, providing sidewalks, crosswalks, and marked routes increases accessibility for people with disabilities.



Businesses

Businesses and pedestrians have a complimentary relationship. The presence of a business along or near a pathway provides a destination that encourages people to use these routes. In addition, outdoor seating can make a pathway seem more active and inviting.

Where are informal pathways located?



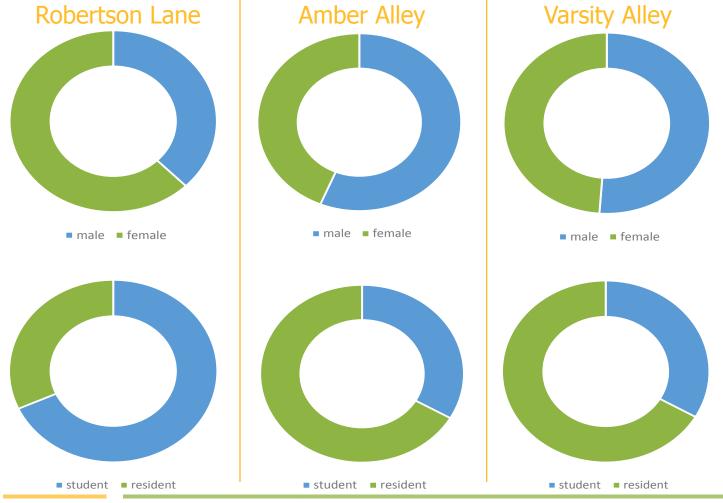
Formal pathways between UNC and Downtown

2,872 Feet of formal pathways

Informal pathways between UNC and Downtown

6,698 Feet of informal pathways

PEDESTRIAN COUNTS









METHODOLOGY

Pathway identification

The study area for this inventory is bounded by Hillsborough St./ Raleigh Rd. on the East, Merritt Mill Rd. on the West, Rosemary St. to the North, and UNC's campus to the South. Any informal pathway that a pedestrian could feasibly take from Rosemary Street to either Franklin Street or UNC's campus without walking through a building was recorded.

This initial inventory, completed through a walking tour was conducted by the project team in September, 2014. When an informal pathway was identified, it was mapped with a handheld GPS unit and the following characteristics were qualitatively evaluated:

- ADA accessibility
- Lighting
- Landscaping
- Neighboring establishments
- Pavement condition

These findings are reported in the pathway inventory section on pages 12-24.

Selecting key pathways

nce this initial inventory was completed, the project team met with town and the Downtown Partnership staff to select three pathways for further, in-depth study. The criteria for selecting study pathways were:

- a. As informed by local, colloquial knowledge, the pathways should be highly traveled.
- b. Pathways should be in need of some improvement

c. Pathways should relate to the Downtown Imagined vision of connecting Downtown Chapel Hill with the UNC-CH campus.

Using these criteria, the three pathways selected were Robertson Lane, the Wallace Parking Deck, and the Varsity Theater Alley. While this selection seems to prioritize East Franklin, this is indicative of the significant role Columbia St. plays in pedestrian movement.

The largest informal pathway from West Franklin, the parking lot of the University Square Shopping Center, is currently under construction, and many of the other pathways in the Western half of the study area are already inviting and wellmaintained. More information about these three pathways can be found in the in-depth analysis section on pages 26-31.

Pedestrian counts

nedestrian counts were conducted for the three study pathways. These counts allow for an investigation of how many people use these pathways, when, and who they are. Pathways primarily serving parents pushing strollers may require different solutions than those used by UNC students on the way to class. Higher usage during the day could indicate that safety and lighting are significant concerns, limiting nighttime usage.

To gather a broad range of activities, four one-hour counts were conducted at each study pathway. These count times were: Monday morning (9:30-10:30 AM), Thursday evening (4:30-5:30 PM), Saturday afternoon (1:00-2:00 PM), and Saturday night (10:00-11:00

PM). While every effort was made to count only on comparable days, pedestrian traffic is notoriously volatile, changing day-to-day due to factors like weather and special events. Therefore, while the counts presented provide for helpful comparison, longer and more frequent counts will be necessary to draw more definitive conclusions.

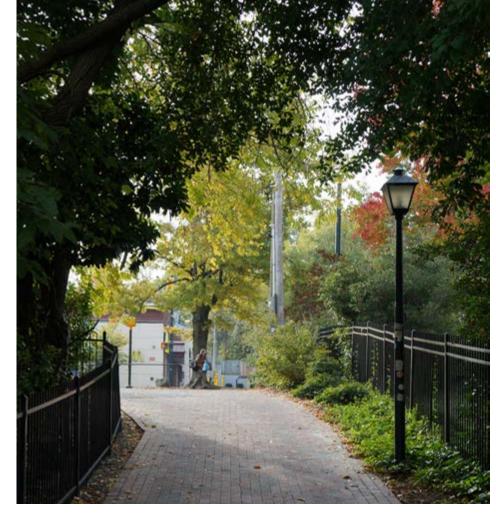
PATHWAY INVENTORY

UNC Parking Lot

The UNC Parking Lot pathway is located towards the west end of downtown Chapel Hill. The pathway is located between a gated private greenspace, Shortbread Lofts, and Chapel Hill Cleaners, a local cleaning and alterations business.

The pathway is surrounded by several entertainment venues, offices, local shops, restaurants, and residential complexes. The pathway serves as a direct connection between the Northside Neighborhood, Shortbread Lofts, Rosemary Village, the UNC parking lot, Franklin Street, and the campus of UNC-Chapel Hill.

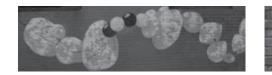
The UNC Parking Lot pathway is very well designed with mature landscaping, brick pavers, and an ample amount of pedestrian lighting. Although no wayfinding signs exist along the path, pedestrians have a clear view of both Franklin and Rosemary Streets.



Proposed Changes









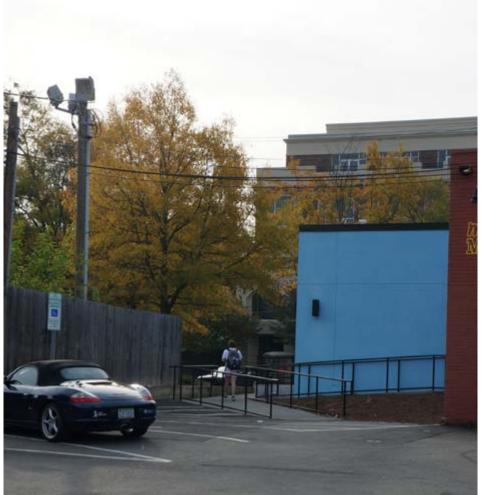


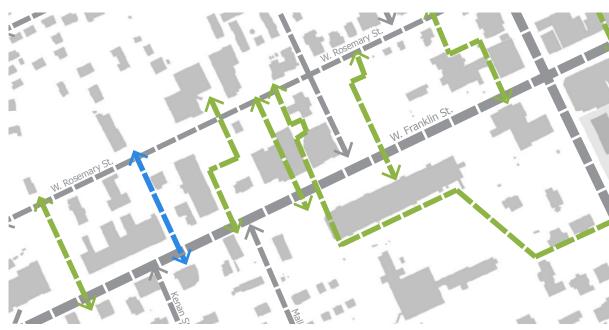
Kenan Street

ocated on the opposite end of Shortbread Lofts, the Kenan Street pathway passes between Mellow Mushroom and Cholanad Indian Restaurant.

Like the UNC Parking Lot pathway, Kenan Street Pathway is surrounded by several shops, offices, restaurants, and residential complexes. It serves as a vital connection between Rosemary Street and downtown Chapel Hill for residents living along West Rosemary Street and in the Northside Neighborhood.

The pathway consists of two parking lots, serving both Mellow Mushroom and Cholanad. The pathway is void of mature landscaping and lacks a defined path for pedestrians. Although lighted from nearby restaurants, the pathway does not include any pedestrian lights.

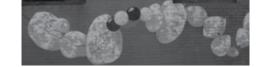




Proposed Changes



Landscaping







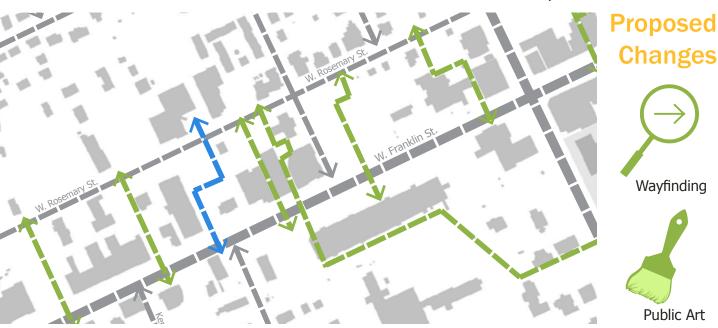
306 Center



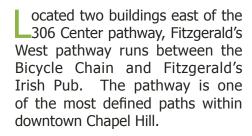
The 306 Center Pathway is located in the west end of downtown Chapel Hill between the 306 shopping center and Noodles & Co. restaurant. The pathway weaves through two parking lots connected by an elevated concrete walkway.

The pathway is surrounded by several apartment complexes, shops, restaurants, and offices. The Warehouse apartment complex and the Chapel Hill Downtown Partnership offices are located directly north of the path on West Rosemary St.

The pathway consists of two parking lots, with one serving as a municipal lot for Chapel Hill and the other is a private lot for local businesses. A set of concrete stairs and a small pedestrian walkway are used to navigate the large elevation change that occurs along the pathway from Rosemary to Franklin Street.

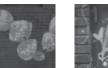


Fitzgerald's West



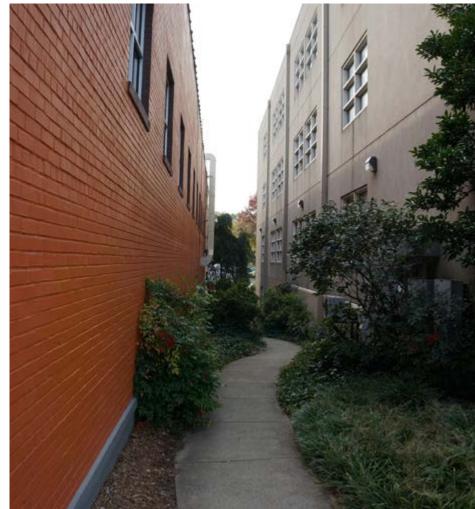
The pathway is located within close proximity to the Warehouse apartment complex on West Rosemary Street as well as Granville Towers along West Franklin Street.

Fitzgerald's West includes mature landscaping, pedestrian lighting, and trash receptacles as well as a winding pedestrian pathway. Unlike the 306 pathway, this pathway includes a sloped pathway to address the elevation change from West Rosemary to Franklin Street. The pathway is well-maintained and well lighted throughout, although the mature landscaping can serve as a visual barrier.





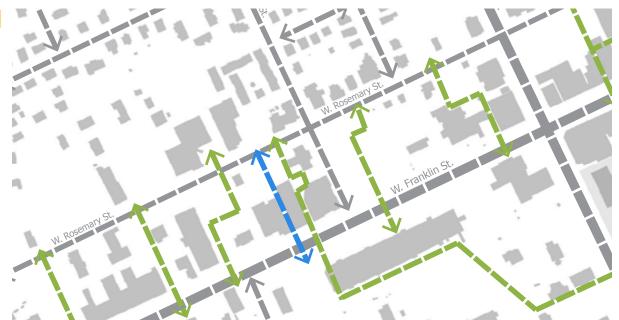


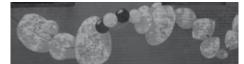


Proposed **Changes**



Landscaping Maintenance





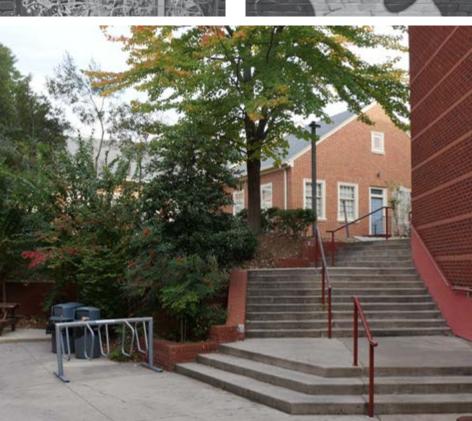
Fitzgerald's East

 □itzgerald's East pathway is located between the eastern side of Fitzgerald's Irish Pub and the Aveda Institute of Chapel Hill. Unlike other pathways, this pathway connects three streets: West Rosemary, Church, and West Franklin Street.

The pathway is anchored by Pantana Bob's and the Chapel Hill Downtown Partnership on West Rosemary Street and Granville Towers on West Franklin Street.

The pedestrian pathway shares space with an outdoor patio owned by Fitzgerald's Irish Pub. The pathway also includes mature landscaping, waste receptacles, pedestrian lighting, bicycle racks and a staircase with handrails. Although well defined, this pathway is less used than others. The pathway does not include wayfinding and visibility is very limited.

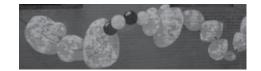




Proposed Changes











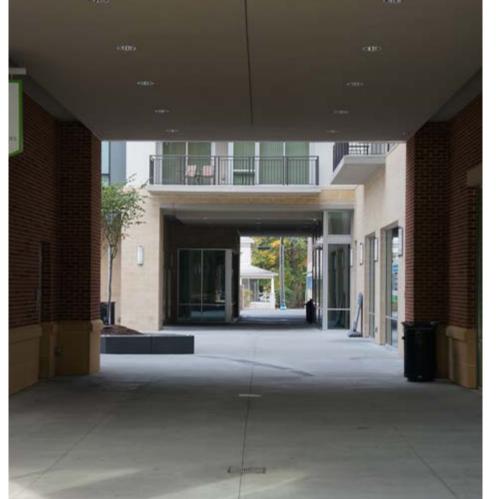
140 W. Franklin

The pathway located at 140 West Franklin runs directly through the mixed-use development, also called 140 West Franklin.

140 West Franklin pathway connects pedestrians to various retail shops, offices, restaurants, and residential complexes along Franklin and Rosemary Streets.

The pathway is well lighted and visible from both streets. Several planting beds and ornamental trees are visible from the path, although not located directly on it. The pathway also includes several retail store fronts, some of which are leased while others remain vacant.

Although the pathway provides several amenities for pedestrians, it is not used as much as other pedestrian pathways located along West Rosemary Street.



Proposed **Changes**



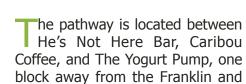
Business Support







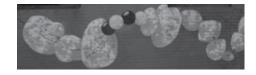




Columbia Street intersection.

The pathway is anchored by a private parking lot owned by Investors Title on West Rosemary Street and several retail shops and restaurants, as well as the First Baptist Church, on West Franklin Street. It is important to note a portion of this pathway traverses across private property owned by He's Not Here Bar. Pedestrians using the pathway may encounter a locked gate on either side of the private property.

The pathway includes a well-defined path from West Franklin Street to the private property. Pedestrians then walk through private property to West Rosemary. There is little lighting and landscaping.



The Varsity Alley

The Varsity Alley is located between Chapel Hill Sportswear and The Varsity Theatre, one block East of the Franklin and Columbia Street intersection. The alley serves as a major connection for both Chapel Hill residents and UNC-Chapel Hill students.

The alley is located along the busiest section of Franklin Street within the downtown area and provides easy access to several retail shops, offices, restaurants, and residential areas. The alley serves as a major connection between the parking deck on East Rosemary Street, downtown Chapel Hill, and the campus of UNC-Chapel Hill.

The alley is well defined with brick pavers and concrete paths. The alley is well lighted and includes several murals, but also includes several overgrown landscape areas.





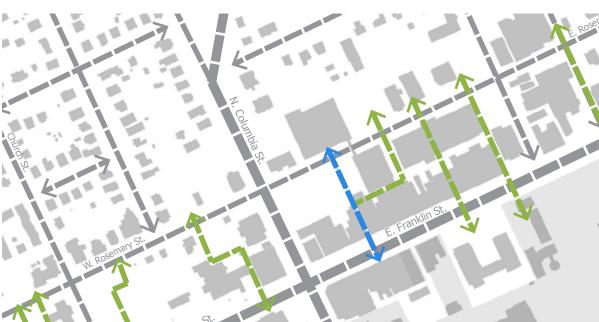


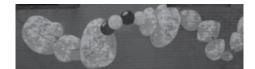










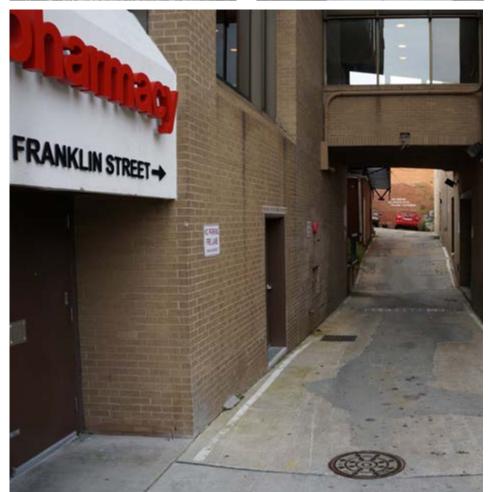


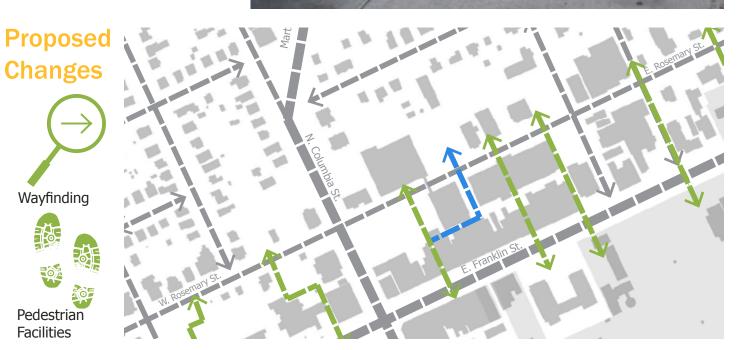
Wallace Deck West

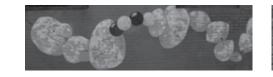
The Wallace Deck West pathway is located between the Wallace Parking Deck and NationsBank Plaza, occupied by CVS. The pathway does not lead to East Franklin street, but rather leads pedestrians to the Varsity Alley, which is one block west of the parking deck.

The Wallace Deck West pathway does not provide direct access to retail shops, restaurants, offices, and entertainment venues downtown. The pathway begins on East Rosemary Street, where pedestrians are then guided by a misleading wayfinding sign pointing towards East Franklin Street.

The pathway serves as a vehicular alley and includes very few pedestrian amenities. There are few defined pedestrian paths. The pathway is not well lighted and does not include mature landscaping.







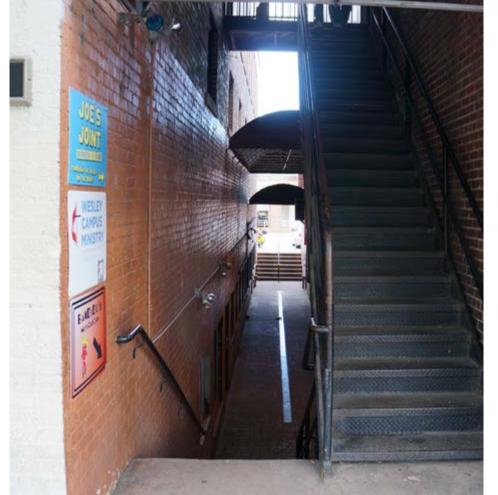


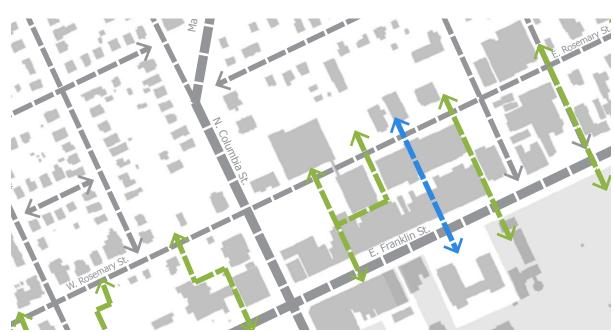


Amber Alley

↑ mber Alley is centrally located Halong East Franklin Street in downtown Chapel Hill. The alley serves as a direct connection for residents, students, and visitors walking between residential areas located south of East Rosemary Street, Wallace Parking Deck, East Franklin Street, and the campus of UNC-Chapel Hill. Bandido's restaurant and Joe's Hamburger Joint are located along the alley. Several other restaurants, retail shops, entertainment venues, and offices are located within close proximity.

The alley is well defined and provides shelter from the sun and inclement weather for pedestrians. The alley is also well lighted at night, but is not highly visible due to its depressed location. The alley does not include landscaping or waste receptacles and has limited wayfinding signs.

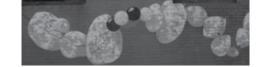




Changes Lighting

Proposed

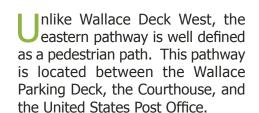






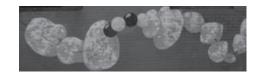


Wallace Deck East



The pathway serves as a vital connection between East Rosemary and East Franklin Street for residents living behind East Rosemary Street, visitors parking in the Wallace Deck, and students walking to and from UNC-Chapel Hill.

The pathway includes a well defined concrete path, mature landscaping, waste receptacles, and newspaper stands. The Wallace Deck East pathway does not include an abundant amount of lighting and has limited visibility.



Robertson St. Alley

The Robertson Street Alley is located just east of Downtown Chapel Hill between University Presbyterian Church and a private residential complex.

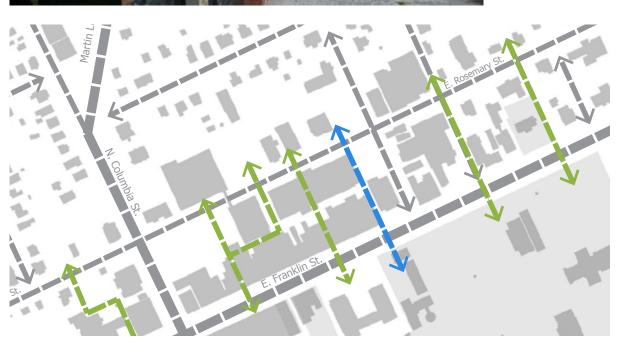
The one-way alley serves as a dropoff point for children attending day-care at University Presbyterian Church. The alley also provides direct access to the UNC-Chapel Hill campus from residential areas located behind East Rosemary Street.

Although the alley is heavily used by students, there are limited pedestrian amenities. There is no defined path to separate pedestrians from vehicular traffic, which forces pedestrians to walk in the street. Mature landscaping does exist on either side of the alley. Both entrances to the alley are also well lighted at nighttime.









Proposed Changes





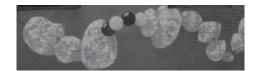
Landscaping Maintenance

Propose Changes



















UNC-CH Coates Bldg

The Coates Building pathway is located east of downtown Chapel Hill between Coates Building, which is owned by UNC-Chapel Hill, and the Lambda Chi Alpha Fraternity. The pathway is also located across East Franklin Street from the Morehead Planetarium parking lot. The pathway serves as a connection to the campus of UNC-Chapel Hill for students and residents living in neighborhoods located behind East Rosemary Street.

The Coates Building pathway includes very few pedestrian amenities. Pedestrians using the path are subject to trespassing on private property along East Rosemary Street. The private parking lot connects pedestrians via an unlocked chain-link gate to a parking lot entrance for the Coates Building, which leads directly to East Franklin Street.



Proposed Changes







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ROBERTSON LANE

Current Conditions

The Robertson Lane Alley is currently used as a one-way vehicular street. The alley is used as the main drop-off point for the University Presbyterian Church day-care center. The alley also provides several parking spots near East Rosemary Street. The parking spots are used by day-care staff workers and residents living in the apartment building on the east side of the lane.

As mentioned earlier, the alley provides very few pedestrian amenities. The alley does not include sidewalks, which means pedestrians heading from East Rosemary to East Franklin Street and vice versa must walk in the street. There are also no crosswalks to connect pedestrians using Robertson Lane to the campus of UNC-Chapel Hill on the opposite side of East Franklin Street or the residential areas behind East Rosemary Street. The closest crosswalks lie one block east at the intersection of Henderson and East Franklin Streets and one block west at the corner of Pickard Lane and East Franklin Street.

While the alley includes several landscaped areas with large mature trees and well maintained shrubs, pedestrian lighting exists only at the entrance and exit of the alley, resulting in a dimly lighted interior space. Because the alley is mainly used by residents and students, no wayfinding signs have been installed.





E. Franklin St.

Network Analysis

The Robertson Lane Alley is located just east of Downtown Chapel Hill, one block east of Henderson Street between University Presbyterian Church and a private residential complex. The alley is located directly across from the Morehead Planetarium parking lot and is adjacent to McCorkle Place, which is located on the campus of UNC-Chapel Hill.

There are three bus stops located within walking distance of Robertson Lane Alley. Several Chapel Hill Transit routes stop one block west of the alley at the intersection of Henderson and Franklin Street. Two Triangle Transit routes stop one block east of the alley. The Robertson Express stops across the street in the planetarium parking lot.









Below is a list of recommendations for the Robertson Lane Alley:



Although the alley is highly visible, wayfinding signs should be added to the East Rosemary and Franklin Street.



Additional lighting should be included within the interior of the pathway. It is recommended that solar-powered LED lights be imbedded in the pathway. This would limit the amount of light visible from residential units located across the alley from the church.



An established pedestrian pathway should be added to the Robertson Lane Alley. The pathway does not have to be elevated, but should be distinguished from the road by using different paving materials.



Small planters should be installed along one side of the alley. Planters should include annuals, perennials, and evergreen shrubs.

Case Study

In 2012, Designer Daan Roosegaarde, together with Heijmans Infrastructure Group, developed new technology for an interactive and sustainable road called a "smart highway." Projects incorporate light that adapts to the natural and created environment through the use of glowing lines and paint. Smart highways provide an alternative to traditional lighting for vehicular streets, pedestrian sidewalks, and bicycle pathways.

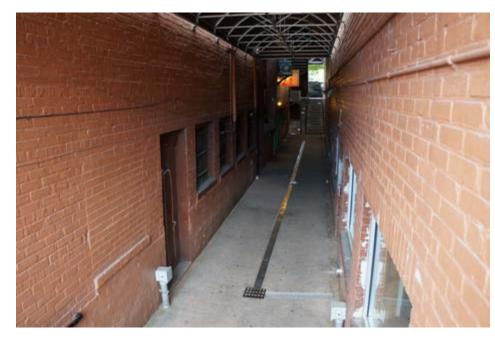
The Van Gogh bicycle path in Eindhoven, Netherlands is the second smart highway to be constructed. The pathway incorporates the use of light through thousands of solar-powered LED lights to created a safe, well lighted atmosphere.

For more information, see https://www.studioroosegaarde.net/project/van-gogh-bicycle-path/.



Eindhoven, The Netherlands

AMBER ALLEY



Current Conditions

Amber Alley serves as a vital pathway for pedestrians walking between East Rosemary Street, Downtown Chapel Hill, and UNC-Chapel Hill. The alley begins on the rooftop of the Wallace Parking Deck along East Rosemary Street and then intersects a vehicular alley, which runs parallel to East Franklin Street. The pathway then requires pedestrians to descend down a staircase before emerging onto East Franklin street.

Although the alley is well used by residents, students and visitors, the pathway loses its form between the parking deck and the backside of the commercial building strip. The

pathway becomes less defined amid intersecting the vehicular alley, which also includes several parking spaces. The portion of the alley that is depressed between two buildings includes several awnings that, while protecting pedestrians from inclement weather, greatly reduce the amount of natural light within the space.

The alley is void of landscaping, wayfinding signs, and lacks public art, which has a strong presence in other alleyways downtown. The alley also includes several vacant retail spaces. The change in elevation, along with low levels of natural light and vacant store fronts creates a sense of abandonment and increases pedestrians' sense of insecurity while walking through the space.

Network Analysis

mber Alley is located along East Franklin Street in one of the busiest and most vibrant areas of Downtown Chapel Hill. The alley is situated between North Columbia Street and Henderson Street and is located directly across from the University United Methodist Church on East Franklin Street and The Daily Tar Heel building on East Rosemary Street. The alley serves as a major connector for residents, students, and visitors traveling to and from campus and downtown.

One bus stop is located in front of the alley on East Franklin Street. The bus stop serves as a major transit stop for both the Chapel Hill Transit System as well as Triangle Transit. Six bus routes for Chapel Hill Transit and two routes associated with Triangle Transit use the bus stop.



Contract of the second







Recommendations

Below is a list of recommendations for Amber Alley:



Signs should be added at the top of the staircases located at both ends of the alley.



String lights are recommended to replace the bright flood lights. These lights will help support an emerging outdoor space for businesses.



Small planters should be installed along one side of the alley. Planters should include annuals, perennials, and evergreen shrubs.



In order to increase the amount of natural light, the current awnings should be removed.



A mural should be added on one or both sides of the alley in order to add to the overall art theme present in downtown Chapel Hill.



The current pathway should be refurbished or replaced in damaged areas. Pervious pavers are recommended for the alley due to its low elevation.



The vacant retail and restaurant space should be renovated and used as an incubator space for new start ups and small local businesses until the property is leased.



Old Firehouse Alley, Fort Collins, CO

Case Study

In 2004, Fort Collins, Colorado, identified alleyways as an opportunity to improve pedestrian access. In collaboration with a local engagement organization, UniverCity Connections and Colorado State University, the city worked to establish a physical link between downtown and the university.

By 2011, three alley renovations were completed. They incorporate landscaping, pedestrian-scale lighting, patterned paving, and stormwater management improvements. Benches were crafted from locally-sourced boulders. Sixty granite pavers were engraved with the winning drawings from local school children. Already, private investment, including a beer garden patio, has followed these infrastructure improvements. For more information, see http://www.downtownfortcollins.org/alleys.html.

THE VARSITY ALLEY

Current Conditions

The Varsity Alley is one of the most used pedestrian pathways in downtown Chapel Hill. The pathway begins within a municipal parking lot along East Rosemary Street and follows a defined pedestrian path between to buildings before emerging onto East Franklin Street.

The alley includes a defined pedestrian pathway constructed of a mix of red clay brick pavers and concrete. The pathway receives a large amount of natural light during the day and, due to the presence of a large flood light along one side of pathway, is also somewhat lighted at night. The alley also includes two large murals on both building



facades, which ties into an overall theme found in several places downtown. Although no wayfinding signs are present, the Varsity Alley is highly visible from both East Rosemary and East Franklin Street.

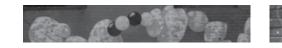
The alley does include several defined landscaped areas, most of which have not been maintained and are overgrown. The pathway also includes a large flood light that creates too much lighting and can potentially have a negative effect on the surrounding natural environment. The Varsity Alley is a unique and identifiable pathway; with some improvements, it could become a welcoming gateway into the downtown area.



Network Analysis

he Varsity Alley is also located along East Franklin Street in one of the busiest and most vibrant areas of Downtown Chapel Hill, situated between North Columbia Street and Henderson Street. The alley is located directly across from several retail shops and restaurants on East Franklin Street and a municipal parking lot on East Rosemary Street. The alley serves as a major connector for residents, students, and visitors traveling to and from campus and downtown.

One bus stop is located in front of the alley on East Franklin Street. The bus stop serves as a major transit stop for both the Chapel Hill Transit System as well as Triangle Transit. Ten bus routes for Chapel Hill Transit and two routes associated with Triangle Transit use the bus stop.









Recommendations

Below is a list of recommendations for Varsity Alley:



Although the alley is highly visible, wayfinding signs should be added on the East Rosemary and Franklin Street entrances.



Additional lighting should be included near East Rosemary Street. The flood light should be replaced with an LED bulb that emits less light pollution.



Small planters should be installed along one side of the alley. Planters should include annuals, perennials, and evergreen shrubs. Existing should be trimmed back.



The existing murals located on both walls of the alley should be touched up, eliminating most of the graffiti. Some graffiti adds character to the



The current pathway should be refurbished or replaced in damaged areas. Pervious pavers are recommended for the alley due to the slope of the pathway.

Case Study

↑ rt Alliance Austin has begun a program called 20ft MIDE to create temporary attractions for alleys in downtown Austin, Texas. The event, held in April, 2013, included five days of programming to draw people to urban alleyways.

For one week, Alley #111 on 9th street was transformed into a pedestrian-centered path that supported yoga classes, wi-fi, furniture made of recycled materials, yard games, a mini library, a "pop-up" cafe, and temporary vegetation. People were attracted to the alley for a public art exhibition, an open-air concert, a family play day, and a PechaKucha Night.

For more information, see http://www.artallianceaustin.org/projects/20ft_wide



Austin Art Alley

FUNDING



Wayfinding

Wayfinding generally consists of signage with brief directions to some destination(s). This could be as simple as the word "Franklin" with an arrow or a more prominent "gateway" into downtown. A small sign could cost in the magnitude of \$200-\$400, and an alley-spanning gateway would cost closer to \$5,000-\$15,000.



Lighting

Lighting fixtures range from pole-mounted fixtures to wall-mounted sconces, like the ones currently present in Varsity Alley. Pole-mounted streetlights could cost up to \$5,000, while wallmounted light fixtures would be cheaper. A study conducted in Dallas, Texas, estimates that operations and maintenance costs approximately \$100 per light per year.



Landscaping

Funding landscaping is distinct from many of these other features, because maintenance frequently outweighs the initial purchase. Street trees typically cost around \$400. Public benches range from \$200-\$1,500. Garbage and recycling containers should also be considered, ranging from \$300-\$1,300.



Awnings

The cost of awnings would likely be borne by private business owners. Costs to the Town would include costs to update any ordinances necessary to allow and encourage installation of awnings.



Public Art

The cost of public art varies greatly, depending on the size, placement, and the artist. Public art is subject to different funding streams than pedestrian infrastructure improvements. The Town already has "percent for art" and Downtown Art programs in place.



Pedestrian Facilities

Based on a study conduced by the Highway Safety Research Center, a concrete sidewalk costs an average of \$32 per linear foot. A brick sidewalk costs an average of \$60 per linear foot, while a pathway constructed with sidewalk pavers costs an average of \$80.



Businesses

The costs associated with allowing and attracting businesses to these pedestrian pathways are dependent upon the size and types of businesses the town hopes to attract. Ordinances may need to be modified to allow business entry ways along these pathways.

All cost estimates were provided by http://katana.hsrc.unc.edu/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf









Funding sources

Crowdfunding

Cities in the United Kingdom are experiencing positive outcomes through the crowdfunding of community development projects. The website Spacehive.com has been developed such that anyone can post a project that would improve public space. The project promoter sets a funding goal and an end date. People from all over the world can pledge any amount of funding for the project and are only charged if the project meets the funding goal.



The state of Georgia authorizes each county to levy an optional 1% sales tax to fund construction of parks, schools, roads, and other public facilities. Orange County voters recently approved a half-cent sales tax to benefit transit infrastructure. While it is possible voters may approve a new sales tax to benefit sidewalk improvements, such an agreement could be politically difficult.

Discretionary Grants

Between 2009 and 2014, the Federal Highway Administration issued TIGER Discretionary Grants totaling just over \$4.2 Billion. These funds are available for infrastructure projects that will have a "significant impact on the Nation, a metropolitan area or a region." Many funded projects supported pedestrian improvements, particularly those that increased pedestrian safety. While it is unclear if these grants will be offered in 2015, the Town should consider federal grants through the the 2013-2014 fiscal year. Department of Transportation.

Tax Districts

Special Assessment Districts allow municipalities to charge an additional real estate tax to property owners within a certain area to fund infrastructure improvements nearby. These taxes could be used to fund pedestrian improvements and additional lighting. These assessment districts must be approved by the majority of property owners in a district, so the town will have to assure owners that pedestrian improvements will benefit local businesses.



With the coming revitalization of Rosemary Street, development fees provide a strong potential option for improving pedestrian accessibility. Where feasible, developers should be asked to contribute some funds to improving existing informal pathways or providing inviting public thoroughfares on the ground floor like those at 140 West Franklin.

Community Development Block Grants

The Federal government distributes approximately \$3 Billion per year through the Community Development Block Grant Program. These funds must benefit low- and moderate- income persons. The primary goals of this program are to eliminate slums and blight or address community development needs that pose serious threats to health and welfare. The Town of Chapel Hill received \$406,248 in Community **Development Block Grant Funds for**











