





Examining the Impact of Trail User Patterns on the Mary Black Foundation Trail and Wadsworth Trail

Spartanburg, South Carolina

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Executive Summary

Overweight and obesity rates in the US over the past decade continue to increase as the levels of physical activity among youth and adults have declined. The built environment is often considered a foundation for health and wellness affecting decisions related to many health outcomes including inactivity and obesity. Recreational trails have been identified from the Centers for Disease Control and Prevention and the Institute of Medicine as examples of built environmental supports associated with promoting regular physical activity.

Public health professionals have recognized the importance of ecological approaches to promote behavior change. Ecological approaches extend beyond frequently used behavior change strategies targeting individuals to address additional influences such as public policy and physical environments¹⁻⁴. One such example is the creation of a greenway trail¹⁻⁴.

Community designs offering access to recreational facilities and open space, like trails, promote active living and contribute to local economies. Individuals residing in walkable communities are more active than those who do not live in walkable communities and are more likely to meet

current activity recommendations. The Mary Black Foundation, located in Spartanburg County, South Carolina adopted active living as one of its two grant making priority areas in 2003. This decision has led to substantial investments in projects that increase opportunities for and support of physical activity such as the Mary Black (MB) Foundation Trail and the Wadsworth Trail.

The MBF Trail and the Wadsworth Trail were designed to intervene on the risky behaviors linked to inactivity and obesity and offer additional recreation and transportation options, while promoting economic development.

To successfully measure the contextual elements impacting trail user patterns on the MBF Trail and the Wadsworth Trail, three modes of evaluation were utilized:

- Systematic observation utilizing momentary time sampling techniques (e.g., direct observation)
- Intercept surveys on the MBF Trail and Wadsworth Trail
- Focus groups of users and non-users of both trails.

The overall purposes of the initial evaluations were to:

- (a) Determine whether key target populations in Spartanburg are utilizing these trails to increase their physical activity.
- (b) Obtain data on which to base future community infrastructure investments on the MBF Trail and Wadsworth Trail to promote health, recreation and alternative transportation, and economic activity.

The overall purposes of the secondary evaluations were to:

(a) Identify trail user patterns changed as a result of the significant community investments (i.e., interventions to promote trail use) by Partners for Activity Living and the Mary Black Foundation on these two trails.

<u>This report</u> sought to develop a trail user profile for both trails by identifying user patterns as a result of programmatic and infrastructure changes on these trails pre/post intervention.

The data collected is cross-sectional thus causal inferences cannot be identified; however a user profile for both the initial and secondary evaluations can assist Spartanburg City and County to better understand the determinants and barriers to trail use for the MBF Trail and Wadsworth Trail.



Courtesy of Laura Henthorn

MBF Trail Key Findings:

- A 163% increase in trail users post intervention for the MBF Trail was observed.
- A slightly greater percentage of females post-intervention (50.6%) observed on the MBF Trail compared to males.
- The majority of access points on the MBF Trail observed significant non-White users pre/post intervention.
- The majority of trail users are White adults.
- The most widely used access point for the MBF Trail pre/post intervention was the YMCA.
- The St. Andrews and St. Andrews/Forrest access points observed a greater percentage of seniors in comparison to census data for Spartanburg County.
- MBF Trail survey respondents reported being most aware of the implementation of the Dog Park (11.3%), followed by the Pet Waste Cleanup Stations (10.9%), Mile Marker Posts (10.6%) and the Water Fountain (10.3%). All four of these changes are related to the built environment.
- Respondents were less aware of activities/events on the MBF Trail
- MBF Trail users preferred to use the trail during the warmer and dryer spring and summer however fall was the most popular season for the Wadsworth Trail after summer.
- Twelve adults participated in the two focus groups for the MBF Trail.
 - The average age was 51 with a range from 24 years of age to 75 years of age.
 - The household income of the participants ranged from \$20,000 to \$80,000 or more and 85% of participants were married.
 - o All 13 participants (100%) resided within one-mile of the MBF Trail.

Wadsworth Trail Key Findings

- A 16% increase in trail users post intervention for the Wadsworth Trail was observed.
- The vast majority of Wadsworth Trail users were adults pre/post intervention.
- A significant percentage increase in older adults were observed post intervention on the Wadsworth Trail.
- Few non-White trail users were observed pre/post on the Wadsworth Trail.
- Wadsworth Trail users preferred to use the trail during the warmer and dryer spring and summer however fall was the most popular season for the Wadsworth Trail after summer.
- An increase in the percentage of Wadsworth Trail users engaging in vigorous physical activity increased post intervention. Furthermore, the intensity of physical activity observed on the Wadsworth Trail is atypical considering that the most common form of activity in the US is walking.
- Thirteen adults participated in the two focus groups.
 - All thirteen participants were White, and 10 participants (77%) held a college degree.
 - The remaining three focus group participants (23%) attended college from 1 to 3 years. Four (31%) participants were employed for wages, two (15%) participants were homemakers and four (31%) were identified as retired.
 - The household income of the participants ranged from \$10,000 to \$80,000 or more and 50% of participants were married.
 Approximately 92% of participants resided within one-mile of the trail

1 Introduction

The Mary Black Foundation, located in Spartanburg County, South Carolina adopted active living as one of its two grant making priority areas in 2003. This decision has led to substantial investments in projects that increase opportunities for and support of physical activity. One such investment resulted in a 2-mile urban rail/trail conversion project completed in the spring of 2006 costing more than 1 million dollars, which is the only urban rail/trail segment within the county referred to as the Mary Black (MB) Trail. This segment serves as a key connector between the downtown business district and more rural parts of the county. In addition, the segment runs between two historic residential neighborhoods with vastly differing SES and demographic characteristics.

Dr. Julian Reed from the Department of Health Sciences at Furman University and Dr. Steve Hooker from the Prevention Research Center at the University South Carolina developed a trail user profile to quantify the impact of the MBF Trail from 2006-2009¹⁻⁴.

For the purposes of this report, this initial evaluation of the MBF Trail will be referred to as the pre intervention evaluation. The pre intervention evaluation results of the MBF Trail from 2006-2009 indicated the following:



Courtesy of the MB Foundation

- 1. On average, 60 persons use the trail each day; mostly person's age 20-59 years.
- 2. Users travel an average of 3 miles to access the trail and do so by driving.
- 3. Users perceive the trail as safe, well-maintained, and aesthetically pleasing.
- 4. Users typically walk on the trail for recreation or exercise and do so for 45 min 2 hr.
- 5. Users view the trail as a very positive community asset and like its design.

Despite these findings, additional results revealed:

- 1. Limited use by children, teens and older adults.
- 2. Limited use by employees of businesses located adjacent to the trail.
- 3. Limited use by residents living near the trail, especially African Americans.
- 4. Seasonal and time of day variations in use of the trail.
- 5. Lack of awareness of the trail by many community members.
- 6. Unsubstantiated, yet perceived safety concerns by many community members.
- 7. Concerns by businesses that vandalism has increased since the trail opened.
- 8. The need for certain capital improvements to enhance use and safety of the trail.

The MBF Trail continues to provide increased access to the community for physical activity, particularly those who work and live nearby. This is certainly indicated by the estimated 24,753 annual uses of the trail from 2006-2009. However, in comparison to the use of trails in other US communities, this amount of use was 50-100% less than expected.

Therefore, without an organized set of outreach activities (which has been largely absent since the trail's opening), the potential use of the trail will not be fully realized.

For this reason, Partners for Active Living (PAL) proposed a collaborative community process to establish, implement, and evaluate several outreach activities to substantially increase use of the MBF Trail. Lessons learned from the prior evaluation were integrated to help create messages, communication channels, products, special events, programs, and built environmental changes to increase awareness of the trail, attract persons to the trail, facilitate sustained use of the trail, and better position the trail as a recognized and cherished community asset.

In addition to the MBF Trail, the Mary Black Foundation assisted with the development of the Wadsworth Trail, also located in Spartanburg. The Wadsworth Trail is a 3.1 mile paved trail that connects eight neighborhoods and the Westside Club on the Westside of Spartanburg. The trail is 'three-pronged' with ending points on Willis Road at Magnolia Park Estate, the intersection between Copperline Drive and Willis Road, and at the end of Caldwell Drive at Rock Springs. The Wadsworth Trail was made possible through a public-private partnership between the Westside Neighborhood Association (WNA) and Spartanburg County.

Thanks to a grant from the Mary Black Foundation, PAL partnered with the WNA to increase physical activity and promoting the Wadsworth Trail as a safe place to run, walk, bike, or take your pet. The Wadsworth Trail was initially evaluated pre intervention in 2010. Following the implementation of the varying interventions was revaluated in 2012/2013.

Partners for Active Living utilized a population-based approach grounded in the theoretical framework of Social Ecological Models²⁻⁴ to prevent chronic disease and improve the health of all Spartanburg residents. To promote healthy behaviors PAL funds evidence-based interventions with a coalition of local partners that focus on changing the policies and environments in their communities to shape the ability of residents to engage in healthy behaviors. Changing community environments and policies related to these behaviors⁵ can perhaps change unhealthy social norms and reduce the acceptability of them. Through opportunities for physical activity in Spartanburg, PAL aims to increase the number of residents engaging in healthy behaviors to reduce chronic disease morbidity and mortality in the county while improving quality of life.

1.1 Overview of Interventions for MBF Trail and Wadsworth Trail to Increase Trail Use
The MBF Trail and the Wadsworth Trail were designed to intervene on the risky behaviors

linked to inactivity and obesity and offer additional recreation and transportation options, while promoting economic development. To successfully measure the contextual elements impacting trail user patterns on the MBF Trail and the Wadsworth Trail, three modes of evaluation were utilized:

- (1) Systematic observation utilizing momentary time sampling techniques (e.g., direct observation);
- (2) Intercept surveys on the MBF Trail and Wadsworth Trail:
- (3) Focus groups of users and non-users of both trails.

The overall purpose of the initial evaluation of the MBF Trail from 2006-2009 (15 quarterly pre intervention evaluations) and secondary evaluation post intervention of the MBF Trail (4 quarterly post intervention evaluations in 2012/2013) and Wadsworth Trail (4 quarterly pre intervention in 2010/2011 and 4 post intervention quarterly evaluations in 2012/2013) was to:

- (a) Determine whether key target populations in Spartanburg are utilizing these trails to increase their physical activity;
- (b) Obtain data on which to base future community infrastructure investments on the MBF Trail and Wadsworth Trail to promote

health, recreation and alternative transportation, and economic activity.

The secondary evaluation period postintervention for the MBF Trail and Wadsworth Trail was from 2010 through 2013. The 3-year post intervention methodology was designed to increase the use of the MBF Trail and Wadsworth Trail in the City of Spartanburg and County, respectively. Both of these trails have been significant community investments by the Mary Black Foundation and PAL.

In concert with lessons learned from trail user evaluations and community feedback, and efforts of an Advisory Committee (one for each trail), targeted community education, tailored programs, and physical environmental improvements were implemented to increase use of the trails and individuals by age, gender, and race/ethnicity, especially those who live and/or work in close proximity to these trails.

1.2 Post Intervention
Activities/Implementation for the MBF Trail
and Wadsworth Trail
The post intervention activities were founded
on four elements, these elements included:

1. The involvement of several key community stakeholders which will foster buy-in and

- collaboration from organizations, agencies and individuals who can provide additional resources to leverage those obtained through this application in support of activities and, particularly, identified capital/physical improvements.
- 2. The utilization of an evidence-based recommendations to promote physical activity in the community, creating or improving access to places for physical activity combined with outreach. This strategy, which includes creating walking trails, has been shown to result in a 25% increase in the percent of persons who exercise at least 3 times per week. If appropriately adapted, this intervention approach is applicable to diverse groups such as youth, older adults, women, and African Americans.
- 3. Findings and lessons learned from formal evaluations of the trails provide a wealth of exceptional data for appropriately adapting messages, communication channels, programs, events, products, and capital improvements to enhance use of the trails by persons across the age spectrum, of diverse race/ethnicity, and with differing reasons to use the trails (e.g., exercise vs. transportation vs. recreation).
- 4. Continued evaluation of trail use, planned assessment of the Advisory Committees' efforts, and targeted community input will

provide real time feedback to the Advisory Committees substantiating the sustained implementation or further adaptation of activities to increase the likelihood of achieving the project's goals.

The following interventions for the MBF Trail were administered (2010-2013): MBF Trail - convened Advisory Committee; initiated community education; prioritized

- Tails on the Trail
- Walk/Ride on Trail
- Pet Waste Cleanup Stations
- Trail Cleanup Day
- Creation of Friends of the RT Advisory Committee
- MB RT Advisory Committee mtgs.
- Creation of RT logo
- RT Marketing Mailing
- Creation of RT merchandise
- Pine St Elementary Walk to School Day
- Pine St Elementary Walking and Wheeling Wednesdays
- Walk and Ride to the Farmer's Market
- Walk with Santa
- Heart Health Walk for Women
- Mile Marker posts
- Newsletter Boxes
- Water Fountain

programs to implement; install way finding signs, conducted evaluation.

MBF Trail - continued community education; implemented tailored programs (see below for specific activities, events and built environmental interventions); facilitated policy changes and capital improvements.

- Sunday Streets
- Business Social
- Bicycle checkouts on RT
- Turkey Day 8K
- Hair of the Dog
- Irecycle Half Marathon
- Lunchtime Bike Ride (Fridays)
- Twas the Scavenger Hunt Before Christmas
- RT 5K
- Spartanbark Halloween Pet Parade
- Walk at Lunch
- Women's Only Ride
- Trains on the Trail Launch & ongoing event
- Way finding Signs
- Walking Fitness on the Trail
- Dog Park
- Rail Trail Guide
- Friends of the Rail Trail Donor Group

The following interventions for the Wadsworth were administered (2010-2013):

Initiated community education; identify and implement tailored programs (see below for specific tailored program interventions); facilitate policy changes and capital improvements; conduct baseline evaluation; convened Advisory Committee; assisted in soliciting funding to complete the connection to West View Elementary School.

- Tails on the Wadsworth Trail
- Walk/Ride on Wadsworth Trail
- Walk to School Day
- Pet Waste Cleanup Stations
- Trail Cleanup Day
- Wadsworth Trail Guide
- Walk to Whoville

2012/2013: Both Trails - continued community education, implementation of tailored programs, facilitation of policy changes and capital improvements, and evaluation; engage Advisory Committees in process to foster maintenance of programs and any additional desired capital improvements; evaluation of intervention program effectiveness, focus groups of users and non-users, disseminate findings to community and professional audiences.

1. New Practice - no one entity has ownership for increasing awareness of the existence of the MBF Trail, developing activities to attract additional users to the trail, or positioning the trail as a valuable community asset. MBF Trail advisory committee was developed to address these issues.

The committee was comprised of representatives from PAL, Spartanburg Childhood Obesity Task Force, law enforcement, city government, media, neighborhood associations, and business owners, the Mary Black Foundation, Spartanburg Chamber of Commerce, YMCA, Pine Street Elementary School, Hub City Farmers Market, and Coalition for Active Youth, SPATS and other interested citizens.

A loosely formed Wadsworth Trail Advisory Committee was formalized and expanded to include similar representatives from equivalent County agencies, West View Elementary School, Westside Club and areaspecific entities. These committees were the driving force to determine which activities should be implemented, disseminate information to various sectors of the community, and help leverage resources to support activities and capital improvements.

2. New Programs/Practices/Policies - with input from the Advisory Committees, PAL

facilitated the implementation of a variety of

programmatic activities to increase awareness and use of the trail. Such programs engaged businesses located adjacent to the MBF Trail to 1) increase use of the trail by employees of these business, and 2) increase interaction between these businesses and other users of the trail. Suggestions from discussion groups held as part of the prior MBF Trail preintervention evaluation process indicated that nearby businesses are willing to be involved with such endeavors. Some ideas included designating the area as the Rail Trail Business District to build a distinct commercial identity, a walking competition among nearby businesses, and businesses providing incentives to users of the trail. Whether such an approach is amenable to the Wadsworth Trail remains to be determined.

Other programmatic activities included special events for kids, families, and older adults to introduce them to the trails and more sustained practices (e.g., peer-led walking groups) to promote regular use of the trails.

Opportunities also exist to work with Westview Elementary School (Wadsworth Trail) to expand upon past successful Walk to School Day activities to implement formal year-round Safe Routes to School (SRTS) programs and for Pine Street Elementary School (MBF Trail) to expand its current SRTS initiatives.

An additional strategy that was addressed was law enforcement presence on the MBF Trail. Officers on bicycles currently patrol this trail periodically; however, their presence was thought to be increased during specific times of the day and week to improve the perception of the trail as safe, especially for kids, women and older adults. The inclusion of law enforcement representatives on the Advisory Committee allowed for constructive considerations for adaptations to the bike officers' schedules and other roles they can play in helping to achieve the project's goals (e.g., being "eyes on the trail" for input on needed capital improvements).

3. Built Environment Changes – the initial evaluation from 2006-2009 had several recommendations for capital improvements along the MBF Trail. These recommendations included repairing fences, clearing brush, and adding water fountains, emergency call boxes, benches, and a park/playground for kids.

One component of built environmental change was the placement of way finding signs that provided a critical and visible link between nearby neighborhoods and businesses to the MBF Trail. The strategic placement of such signs not only raised awareness of the existence of the MBF Trail, but provided designated preferred routes to and from the trail for employees and neighborhood

residents. These preferred routes were printed on maps that were widely distributed to employees and residents, thereby enhancing the overall outreach strategy.

The goal was to create the perception that the MBF Trail is easily accessible and for use by everyone, not just for a few select persons from a particular neighborhood. A similar approach was utilized for the Wadsworth Trail.

Many of the intervention activities emphasized the importance of interacting with the community to not simply increase awareness of the MBF Trail and Wadsworth Trail, but to facilitate the regular use of the trail for active transportation, physical activity and/or recreation. All of the proposed elements working in synergy are designed to increase the confidence of employees working nearby, residents in adjacent neighborhoods, and others to utilize the trails often.

A strong predictor of physical activity is self-efficacy, or confidence in being active under a variety of circumstances. The project's activities influenced this predictor by delivering messages, images, events, programs, and a built environment to create a favorable impression of both the MBF Trail and Wadsworth Trail upon several sectors of the community, thereby elevating individual

and collective confidence in using the trails for a variety of purposes.

An additional aspect of the post intervention activities on both trails was to engage select persons to help implement certain project components. For example, a cadre of trained walking group leaders will have the opportunity to enhance their organizational and leadership skills. Those involved in the project will also become more informed advocates for activities pertaining to the trails, as well as for active living initiatives in general.

The specific services included:

- 1. Direct Prevention: Programmatic initiatives
- 2. Awareness: Marketing campaigns and community education
- 3. Capacity Building: Advisory Committees, Friends of Rail Trail Donor Group and Rail Trail Business Association

1.3 The Benefits of Trails

Physical inactivity is a significant public health concern. Currently, the majority (51%) of Americans do not meet national physical activity recommendations. Successful efforts to promote participation in regular physical activity are needed as physical inactivity has been linked to a variety of health problems including cardiovascular disease, diabetes, cancer, excess weight, and mental health

problems, such as anxiety and depression⁵⁻⁶.

Public health professionals have recognized the importance of ecological approaches to promote behavior change. Ecological approaches extend beyond frequently used behavior change strategies targeting individuals to address additional influences such as public policy and physical environments⁷⁻⁹. One such example is the creation of greenway trails¹⁰⁻¹³.

The Rails to Trails Conservancy specifically cites a multitude of benefits for developing greenway trails, focusing primarily on the health benefits of rail/trail conversions by creating no-cost recreation physical activity opportunities¹⁴. Unfortunately, studying trailuser behaviors on these types of facilities is difficult due to the lack of objective measures in specific ecological contexts¹. Furthermore, the quality of existing data on urban greenway trails remains poor^{1, 9-10}. The vast majority of trail-user data has been collected using subjective measures, such as surveys and questionnaires, because they are easy to administer. However, surveys and questionnaires are limited to respondents' memories and perceptions. These methodologies create measurement problems because the physical activity of trail users is inconsistent with objective measures in terms of frequency, duration, intensity, and mode¹.

The Centers for Disease Control and Prevention (CDC) Task Force on Community Preventive Services recommended that efforts aimed at promoting walking and bicycling should include access to trails to encourage physical activity¹⁴, and identified trails as integral infrastructure for physical activity¹⁴⁻²². Community infrastructure is often considered a foundation for health and wellness and affects decisions related to health outcomes. Trails are examples of infrastructure associated with regular physical activity participation¹⁵⁻²².

The Task Force on Community Preventive Services recommends that the creation of trails be paired with efforts to promote the trail to increase awareness and use of the trail for physical activity¹⁴. Those promoting the trail might consider highlighting some of the trail features preferred by trail users in this study and previous studies¹ such as the trail's convenient location, beauty, and design. In regards to barriers to trail use, trail users frequently mentioned being too old, too busy, not interested, and having physical limitations. Those managing and promoting trails might consider providing environmental supports²³⁻²⁵ to enable older adults and those with physical limitations to use trails, such as smooth trail surfaces for wheelchairs, and benches and shaded areas for resting.

In 2008, Reed and colleagues²² examined the activity behaviors in 25 parks in Greenville County and found that trails were the most frequently used amenity. Sixty-percent of adult males and 81% of adult females observed in all 25 parks were observed on trails. The development of and increased access to trails, has been frequently advocated by researchers and policy makers alike to promote regular physical activity^{16-21, 23}. Librett and colleagues²⁴ examined the physical activity levels among trail users in the US and found that individuals who reported using trails at least once a week were twice as likely to meet physical activity recommendations as individuals who reported rarely or never using trails.

1.3.1 Sedentary Behavior: A National Problem

Participation in regular physical activity is a preventive behavior, reducing the risks of chronic disease (including diabetes) and increasing quality, and perhaps length of life²⁵. Less than 50% of American adults meet current activity recommendations²⁶. Therefore, it should not come as a surprise that so many children are overweight and inactive. Physical activity declines precipitously once children enter adolescence²⁷⁻²⁹. Females of all ages are less active than males of the same age.

1.3.2 Recommendations for Physical Activity by Age Group
According to the 2008 Physical Activity Guidelines for Americans²⁶, the following updated guidelines are recommended for youth, adults and seniors:

6	· · · · · · · · · · · · · · · · · · ·	
Recommend	ded Guidelines for Youth, Adults and Seniors	
Adults	 Should participate in at least 150 minutes (2 hours and 30 minutes) of moderate-intensity activity per week, or 75 minutes (1 hour and 15 minutes) of vigorous-intensity physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity. Additional health benefits possible through greater amounts of physical activity (i.e., 300 minutes (5 hours) of moderate-intensity per week, or 150 minutes of vigorous-intensity aerobic physical activity per week, or an equivalent combination of moderate- and vigorous-intensity activity). 	Moderate intensity activities that raise the heart rate, including brisk walking (3-4 mph) gardening, climbing stairs, housework. Should be performed in bouts of at least 10 minutes, and preferably, it should be spread throughout the week. Can be accumulated from leisure, occupational, or transportation.
Older Adults	Adult guidelines apply, unless health conditions prevent older adults from performing 150 minutes a week	
Auuits	older adults from performing 150 minutes a week.	
	Should be as physically active as their abilities and health conditions allow.	
Children &		Important to analyze as
Adolescents	Should participate in 1 hour or more of at least moderate- intensity activity every day.	• Important to encourage
Adolescents	intensity activity every day.	physical activities that are age
	At least three times a week, some of these activities	appropriate, enjoyable, and offer
	should be vigorous-intensity, and help to enhance and maintain	variety.
	muscular strength, flexibility, and bone health.	

Meeting activity recommendations links physical activity to the strongest health benefits. Since the majority of the US population is inactive and susceptible to greater health risks, the greatest potential for reducing the public's risk is by promoting those who are sedentary to become moderately active, rather than promoting more activity among those already active²⁸⁻²⁹. According to recent reports, increasing physical activity to

recommended levels would prevent approximately 150,000 deaths from cardiovascular disease, over 20,000 deaths from cancer, and 20,000 deaths from diabetes each year³⁰.

The most impactful way to ensure that all individuals have daily physical activity opportunities is to implement the US National Activity Plan released in 2010. The Plan's

vision is that one day, all Americans will be physically active and will live, work, and play in environments facilitating regular physical activity³¹.

The Plan is a comprehensive set of policies, programs, and initiatives designed to increase physical activity in all segments of the population. The Plan seeks to create a national culture that supports physically active lifestyles that will improve health, prevent disease and disability, and enhance quality of life of all Americans in all age groups³¹.

1.3.3 Health in South Carolina: Adults and Youth

Approximately 43% of South Carolina middle school youth recently reported three or more hours of sedentary time per school day from television alone. Furthermore, twice as many African American middle school students (62.4%) reported three or more hours of sedentary time per school day from television alone as white middle school students (30.6%)³². The MBF Trail and Wadsworth Trail can provide opportunities for recreation and transportation activity to limit the negative consequences of daily sedentary behaviors exhibited by South Carolina youth.

Approximately, 76% of African American adults in South Carolina are overweight and/or obese³² compared to 64% of White adults⁵⁸.

Approximately 49% of African American adults are insufficiently active and 24% report no physical activity participation³².

Findings from the South Carolina Obesity Burden Report³² disseminated in 2011 found that 30% of all South Carolina high school students were either overweight or obese, with males (32.3%) more likely to be overweight or obese than females (26.8%). Although 16.3% of all high school students were considered overweight, the percent of female students who were overweight (18.4%) was greater than the percent of male students who were overweight (14.3%).

There were differences by race/ethnicity for both overweight and obese. Though 16.3% of all SC high school students were considered overweight, the percent of African American high school students who were overweight (23.4%)³³⁻³⁴ was greater than the percent of overweight among their White counterparts (12.6%). This disparity increases when considering high school students who are obese. While 13.3% of all high school students are considered obese, the percent of African American students who were obese (17.6%) was also greater than the percent of overweight among their White counterparts (9.9%)³².

South Carolina is one of the nation's leaders in the percentage of children (50%) who do not participate in afterschool team sports or lessons³³ and 83% of high school students currently do not attend daily physical education when in school. Furthermore, 65% of high school students currently do not attend physical education classes in an average week. The CDC's State Indicator Report on Physical Activity for 2010³³⁻³⁴ found that only 20% of high school students are physically active.

1.3.4 Health in Spartanburg: Adults and Youth Approximately 48% of adults in Spartanburg County do not participate in moderate-intensity physical activity as defined by current activity guidelines³⁵. Furthermore In 2008 the Spartanburg County Childhood Obesity Task Force³⁶ was created to address the issue of obesity and inactivity. Findings from this effort in 2012 revealed that:

- 27.6% of 1st Graders were obese or overweight;
- 33.8% of 3rd Graders were obese or overweight; and
- 41.3% of 5th Graders were obese or overweight³⁶.

First Lady, Michelle Obama launched in early 2010 the Let's Move Initiative to reduce

childhood obesity. Let's Move was followed by the White House's Task Force on Childhood Obesity action plan to fight against childhood obesity. With approximately 25 million American children overweight or obese²⁸⁻²⁹ and few youth meeting the daily physical activity recommendations, substantial progress is this area is greatly needed. Participating in regular physical activity, a widely accepted preventive behavior, not only contributes to overall health of but can also reduce the prevalence of overweight and obese youth.

Clearly, the findings from the Obesity Taskforce³⁶ illustrate that childhood obesity is a problem in Spartanburg County, and community stakeholders within the community should and need to become aware and engaged of these findings to reverse these trends.

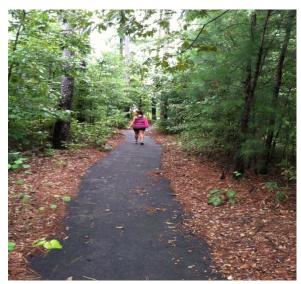
2 Evaluation Methods Pre/Post Intervention and Usage Characteristics of the MBF Trail and Wadsworth Trail

A systematic multi-year evaluation process was initiated to monitor users of the MBF Trail and Wadsworth trail to:

- a) Inform community leaders of overall use by varying demographics (i.e., gender, age and ethnicity, and type of physical activity behavior observed);
- b) Compare demographic profile of users to the demography of Spartanburg County;
- c) Identify contextual elements impacting use and physical activity behavior;
- d) Inform future program and policy strategies to increase use of these two trails.

The evaluation process was designed to obtain objective quantifiable information recreation and active transportation usage characteristics (including demographics and physical activity intensity levels) of trail users. Within this research field, examining the multitude of user

behaviors continues to be difficult due to the lack of objective measures of activity intensity in specific ecological contexts. Therefore, to successfully measure the contextual elements impacting user patterns, objective methodologies in concert with survey methods were utilized.



Courtesy of Laura Henthorn

3 Direct Observation of the MBF Trail and Wadsworth Trail Pre/Post Intervention

The System for Observing Play and Recreation in Communities (SOPARC)³⁷ was the instrument used to objectively assess MBF Trail and Wadsworth Trail user demographics and physical activity behaviors. Several studies have used SOPARC in the US16, 23 to measure physical activity in open environments such as trails. Validity of SOPARC physical activity codes has been established through heart rate monitoring. Provided measures of persistent behaviors (i.e., physical activity) are taken at frequent intervals, momentary time sampling (i.e., specific time episodes throughout the day e.g., 7:30am, 12:00pm, 3:30pm, 5:00pm) techniques have been shown to be valid and reliable³⁷. SOPARC was selected to measure trails because: 1) it is a valid and reliable tool³⁷; and 2) it will assist in obtaining useful information on MBF Trail and Wadsworth Trail users.

Open spaces have been identified in the literature as important to promoting participation in regular physical activity³⁸⁻³⁹. Documenting the varying types of physical activity in open spaces, like the MBF Trail and Wadsworth Trail, and preference of differing demographics provides invaluable information to establish priorities for infrastructure^{19, 41}.

3.1 Observer Preparations for Direct Observation on the MBF Trail and Wadsworth Trail

Prior to beginning the direct observation evaluations, undergraduate college students were trained as MBF Trail and Wadsworth Trail observers. The MBF Trail and Wadsworth Trail observers prepared materials that included: synchronized wristwatch, clipboard, sufficient SOPARC recording forms, and pencils/pens. The observers arrived at the MBF Trail and Wadsworth Trail site at least 10 minutes prior to the official start of data collection. They reviewed the sequence for observing all trail access areas, which are places where individuals could enter and exit the MBF Trail and Wadsworth Trail.

3.2 Direct Observation Procedures for the MBF Trail and Wadsworth Trail Inter-rater reliability of all trained trail observers was assessed prior to participating in the present evaluation of the MBF Trail and Wadsworth Trail. Each observer was assessed using 30 pictures of diverse individuals performing a variety of physical activities. Each observer identified the gender, age, and race/ethnicity of the individual, plus the physical activity behavior and intensity. Observers were required to have an inter-rater reliability score of 90% or greater before field observations began.

Visual scans were made at each target area. During each scan, the physical level of each user was coded as Sedentary (i.e., lying down, sitting, or standing), Walking, or Vigorous activity (i.e., running, rollerblading or bicycling). Scans were made for gender, age, and ethnicity groupings. Simultaneous entries were made for time of day and temperature. Quarterly (i.e., seasonal) observations of trail users were made 4x/day (7:30am, 12:00pm, 3:30pm, 5:00pm) for 4 days (Tuesday, Thursday, Saturday and Sunday). Summary frequency counts described the number of participants by gender, activity mode and level, estimated age and ethnicity groupings.

- 3.3 Direct Observation Results for the MBF Trail and Wadsworth Trail Pre/Post Intervention
- 3.3.1 Overview of Overall Trail Finding Totals

During the 15 quarterly pre-intervention observation periods from 2006-2009, 7,140 users were observed on the MBF Trail. Adjusting for seasonality, approximately 24,820 users (based on daily observation estimates) would have been observed on the MBF Trail for pre intervention years from 2006-2009. During the 4 quarterly post-intervention observation periods for 2012/2013, 2,869 users were observed on the MBF Trail. Adjusting for seasonality,

approximately 65,449 (based on daily observation estimates) would have been observed per post intervention for 2012/2013, resulting in a 163% increase in trail users post intervention for the MBF Trail.

For the 4 quarterly pre-intervention observation periods on the Wadsworth Trail for 2010/2011, 290 users were observed. Adjusting for seasonality, approximately 6,615 users (based on daily observation estimates) would have been observed on the Wadsworth Trail per pre intervention for 2010/2011. During the 4 quarterly postintervention observation periods for 2012/2013. 336 users were observed on the Wadsworth Trail. Adjusting for seasonality, approximately 7,665 (based on daily observation estimates) would have been observed per post intervention for 2012/2013, resulting in a 16% increase in trail users post intervention for the Wadsworth Trail.

PLEASE NOTE THAT PRE-INTERVENTION FREQUENCIES FOR THE MBF TRAIL INCLUDE 15 QUARTERLY OBSERVATION PERIODS COMPARED TO ONLY 4 QUARTERLY POST-INTERVENTION OBSERVATION PERIODS. THEREFORE, PERCENTAGES SHOULD BE USED FOR COMPARISON PURPOSES, NOT FREQUENCIES.

3.3.2 MBF Trail and Wadsworth Trail Use by Gender

MBF Trail

Although the numbers of males and females in Spartanburg County are relatively the same based on census information, ⁴² a slightly larger number of males pre-intervention (52.7% vs. 47.3%) were observed using the MBF Trail. Perhaps the MBF Trail was not as appealing to women. Regardless of the reason(s), fewer females observed using the MBF Trail is not consistent with previous findings examining trail use¹. For example, Brownson and

colleagues⁸ found that women were more likely than men to report using trails for physical activity and recreation.

However, post-intervention the percentages were more comparable with Spartanburg County Census estimates with a slightly greater percentage of females post-intervention (50.6%) observed on the MBF Trail. The frequency and percent of trail users by gender per access point for the MBF Trail pre/post intervention are listed in Table 1, Figure 1 and Figure 2.

Table 1: Frequency and Percent of Trail Users by Gender per Access Point for the MBF Trail Pre/Post Intervention

Mary Black Trail,		Fer	male	•	Male Total Access							
Gender	Pre		Po	ost	Р	re	Po	ost	P	re	P	ost
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Henry	645	48.90%	206	50.00%	674	51.10%	206	50.00%	1319	18.50%	412	14.40%
YMCA	591	45.50%	386	54.00%	707	54.50%	329	46.00%	1298	18.20%	715	24.90%
St. Andrews	646	46.00%	333	51.60%	759	54.00%	312	48.40%	1405	19.70%	645	22.50%
St. Andrews/Forrest	664	51.00%	245	49.20%	637	49.00%	253	50.80%	1301	18.20%	498	17.40%
Forrest	572	45.40%	232	47.90%	689	54.60%	252	52.10%	1261	17.70%	484	16.90%
Country Club	256	46.00%	50	43.50%	300	54.00%	65	56.50%	556	7.80%	115	4.00%
Total	3374	47.30%	1452	50.60%	3766	52.70%	1417	49.40%	7140	100.00%	2869	100.00%

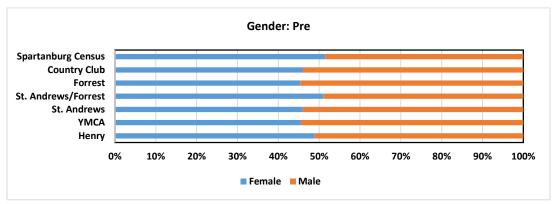


Figure 1: Percent of MBF Trail Users by Gender Pre Intervention by Access Point

One plausible reason for the minor gender disparity post-intervention on the MBF Trail could be the type and number of post intervention activities offered on the MBF Trail. More structured activities on the MBF Trail (i.e., walking/running/biking groups) might have been more appealing to women and this, perhaps, contributed to more

females observed post-intervention.

Additionally, evaluation of the post intervention findings per access point on the MBF Trail reveal the YMCA and St.

Andrews access points observed the greatest percentage increase in female users and most consistent with Spartanburg census data.

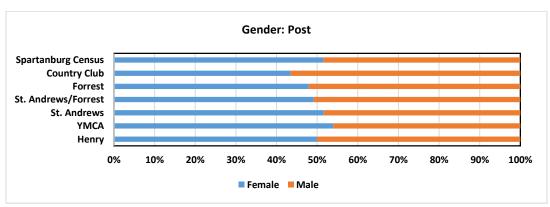


Figure 2: Percent of MBF Trail Users by Gender Post Intervention by Access Point

Wadsworth Trail

Considering the Wadsworth Trail was not used at the same rate as the MBF Trail, percentage comparisons are not nearly as robust, therefore providing limitations for all pre/post analysis of findings for the Wadsworth Trail in this report. However, pre/post intervention quarterly observations were performed for the same number of quarters such that both frequency and percentage comparisons for the Wadsworth Trail are appropriate. Additionally, since the frequency of users was not significant using

multiple access points, all Wadsworth Trail users were aggregated to the Caldwell/Rockspring access point to enable meaningful pre/post comparisons. Although there was an increase in users observed on the Wadsworth Trail post-intervention the gender disparity pre/post was nominal and thus no meaningful findings were observed. The frequency and percent of trail users by gender per access point for the Wadsworth Trail pre/post intervention are listed in Table 2, Figure 3 and Figure 4.

Table 2: Frequency and Percent of Trail Users by Gender per Access Point for the Wadsworth Trail Pre/Post Intervention

	Madeurenth Tuell		Fer	nale			M	ale			Total A	cessed Post			
	Wadsworth Trail, Gender	Pr	е	Po	st	Pi	re	Po	ost	P	re	Р	ost		
		Number	%	Number	%										
	Caldwell/Rockspring	150	50.70%	164	48.40%	146	49.30%	175	51.60%	296	100.00%	339	100.00%		

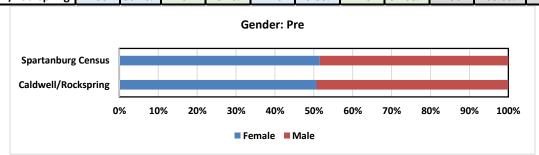


Figure 3: Percent of Trail Users by Gender for the Wadsworth Trail Pre Intervention by Access Point

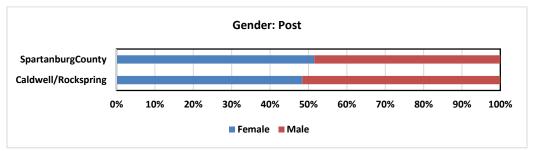


Figure 4: Percent of Trail Users by Gender for the Wadsworth Trail Post Intervention by Access Point

3.3.3 MBF Trail and Wadsworth Trail Use by Age

Fewer percentages of children and teenagers were observed using the MBF Trail post-intervention. Those children that were observed were nearly always accompanied

by an adult. During the pre-intervention observations there was a lack of ageappropriate physical activity facilities on or near the trail. Therefore, it is not surprising that fewer children and teens were observed.

Table 3: Frequency and Percent of Trail Users by Age per Access Point for the MBF Trail Pre/Post Intervention

		Child	+Teen			Ac	lult			Sei	nior			To	tal	
Mary Black Trail, Age	Pre		Po	ost	P	re	Po	ost	P	re	Po	ost	P	re	P	ost
	Number	%	Number	%												
Henry	148	11.20%	51	12.40%	988	74.80%	316	76.70%	184	13.90%	45	10.90%	1320	18.50%	412	14.40%
YMCA	185	14.30%	91	12.70%	879	67.80%	525	73.40%	233	18.00%	99	13.80%	1297	18.20%	715	24.90%
St. Andrews	235	16.70%	55	8.50%	935	66.50%	486	75.30%	235	16.70%	104	16.10%	1405	19.70%	645	22.50%
St. Andrews/Forrest	170	13.10%	47	9.40%	885	68.00%	374	75.10%	246	18.90%	77	15.50%	1301	18.20%	498	17.40%
Forrest	158	12.50%	56	11.60%	869	68.90%	372	76.90%	234	18.60%	56	11.60%	1261	17.70%	484	16.90%
Country Club	65	11.70%	18	15.70%	390	70.10%	84	73.00%	101	18.20%	13	11.30%	556	7.80%	115	4.00%
Total	961	13.50%	318	11.10%	4946	69.30%	2157	75.20%	1233	17.30%	394	13.70%	7140	100.00%	2869	100.00%

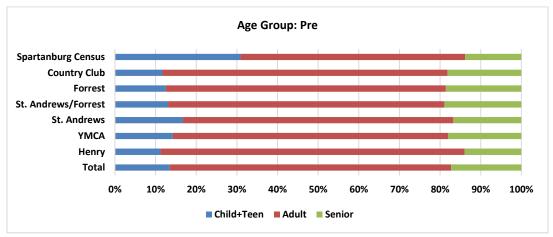


Figure 5: Percent of Trail Users by Age per Access Point for the MBF Trail Pre Intervention

It is well documented that a significant percentage of American youth do not participate in enough physical activity to receive health benefits²⁷⁻²⁹ contributing to an unprecedented epidemic of childhood obesity that is currently plaguing the US²⁷⁻²⁹. Of children age five to ten who are overweight, 61% have one or more cardiovascular disease risk factors, and 27% have two or more²⁸. The percentage of young people six to 19 years old who are overweight or obese has more than doubled in past 20 years³⁰. Current data suggests that more than 33% of adolescents, which equates to about 25 million youth are overweight or obese²⁹⁻³⁰.

Having accessible, convenient and environmentally stimulating places to participate in physical activity and other recreational activities such as trail use can impact youth physical activity patterns and perhaps reverse current obesity trends¹⁻³. Examples include improving access to facilities through collaboration with local health, recreation, and parks departments, along with the development of interventions to promote regular activity¹⁻³. Identifying the varying places youth choose to engage in physical activity is necessary to better understand factors impacting their decisions to use a particular facility^{1-2, 14}.

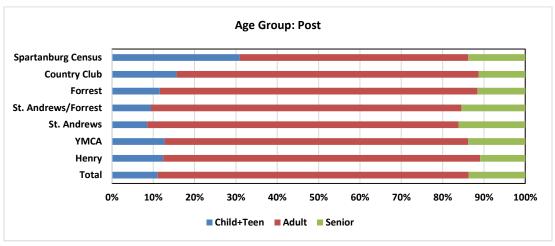


Figure 6: Percent of Trail Users by Age per Access Point for the MBF Trail Post Intervention

However, post-intervention multiple built environmental changes have taken place to support youth physical activity such as a skate park and playground added adjacent to the segment; therefore it was surprising to observe a percentage decrease (13.50% vs. 11.10%) in children and teens observed from pre to post intervention. Furthermore, the census estimates for children and teen residing in Spartanburg County are significantly greater than the percentage of children and teens observed on the MBF

Trail. Regardless of access points, fewer children and teens were observed on the MBF Trail in comparison to census data. On a positive note, the St. Andrews and St. Andrews/Forrest access points observed a greater percentage of seniors in comparison to census data for Spartanburg County. The frequency and percent of trail users by age per access point on the MBF Trail pre/post intervention are listed in Table 3, Figure 5 and Figure 6.

Wadsworth Trail

The vast majority of Wadsworth Trail users were adults pre/post intervention. However it is important to note that a significant percentage increase in older adults were observed post intervention. A slight percentage increase in children and teens

observed on the Wadsworth Trail were also found post intervention. The frequency and percent of trail users by age per access point on the Wadsworth Trail pre/post intervention are listed below in Table 4, Figure 7 and Figure 8.

Table 4: Frequency and Percent of Trail Users by Age per Access Point for the Wadsworth Trail Pre/Post Intervention

Madawath Trail		Child	+Teen	•		Ad	ult			Ser	nior			To	tal	Post		
Wadsworth Trail,	Pre		Po	ost	Pi	re	Po	ost	F	Pre	P	ost	P	re	P	ost		
Age	Number	%	Number	%														
Caldwell/Rockspring	40	13.80%	54	15.90%	219	75.50%	224	66.10%	31	10.70%	61	18.00%	290	100.00%	339	100.00%		

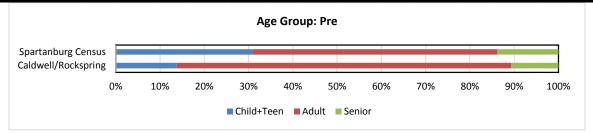


Figure 7: Percent of Trail Users by Age per Access Point for the Wadsworth Trail Pre Intervention

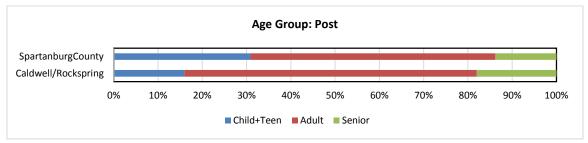


Figure 8: Percent of Trail Users by Age per Access Point for the Wadsworth Trail Post Intervention

3.3.4 MBF Trail and Wadsworth Trail Use by Ethnicity

Eyler and colleagues revealed that among ethnic groups, Whites were more likely to be classified as regular walkers (36.1%) compared with African American (31.5%) and other ethnicities (29.9%). Interestingly, the relative prevalence of walking in parks

and trails is higher among African Americans and other ethnic groups when compared with regular and occasional white walkers⁴⁰. Results from pre-intervention findings for the MBF Trail are consistent with previous findings in this area of study.

Table 5: Frequency and Percent of Trail Users by Ethnicity per Access Point for the MBF Trail Pre/Post Intervention

Many Diagla Tugʻil		W	hite			Non-	White			Total A	ccessed	
Mary Black Trail, Ethnicity	Pre		Po	ost	P	re	Po	ost	P	re	Р	ost
	Number	%	Number	%								
Henry	911	69.10%	293	71.10%	407	30.90%	119	28.90%	1318	18.50%	412	14.40%
YMCA	913	70.30%	522	73.00%	385	29.70%	193	27.00%	1298	18.20%	715	24.90%
St. Andrews	968	68.90%	446	69.10%	436	31.10%	199	30.90%	1404	19.70%	645	22.50%
St. Andrews/Forrest	918	70.60%	345	69.30%	383	29.40%	153	30.70%	1301	18.20%	498	17.40%
Forrest	884	70.10%	363	75.00%	377	29.90%	121	25.00%	1261	17.70%	484	16.90%
Country Club	388	69.80%	79	68.70%	168	30.20%	36	31.30%	556	7.80%	115	4.00%
Total	4982	69.80%	2048	71.40%	2156	30.20%	821	28.60%	7138	100.00%	2869	100.00%

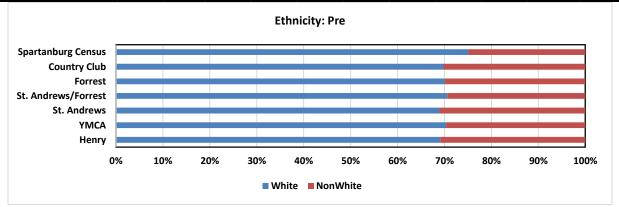


Figure 9: Percent of Trail Users by Ethnicity per Access Point for the MBF Trail Pre Intervention

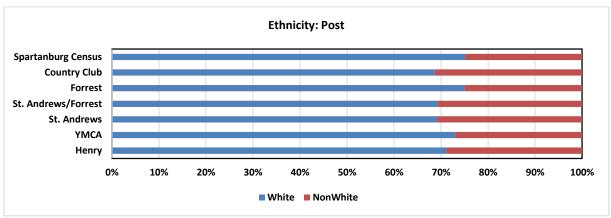


Figure 10: Percent of Trail Users by Ethnicity per Access Point for the MBF Trail Post Intervention

However, current census estimates for Spartanburg County indicate that 25% of county residents are non-White. Pre/post intervention results reveal a greater percentage of non-White trail users compared to county census estimates. Although a slight percentage decrease was observed among non-White trail users on the MB post-intervention this percentage was greater than Spartanburg census estimates for 2012. Furthermore, the majority of access points on the MBF Trail observed significant non-White users pre/post intervention. The frequency and percent of trail users by ethnicity per access point on the MBF Trail pre/post intervention are

listed in Table 5, Figure 9 and Figure 10. Wadsworth Trail

Few non-White trail users were observed pre/post on the Wadsworth Trail. There are a variety of reasons contributing to these findings. Lack of awareness of recreational facilities like trails are frequently cited barriers to physical activity among non-White minorities¹⁷. A study examining the geographic and social distribution of physical activity facilities revealed that lower SES and high non-White minority street block groups of adolescents had reduced access to facilities and were associated with a decrease in physical activity and increased overweight⁴³.

Table 6: Frequency and Percent of Trail Users by Ethnicity per Access Point for the Wadsworth Trail Pre/Post Intervention

Madeusenth Treil		W	hite	,		Non-	White			Total A	ccessed	
Wadsworth Trail,	Pr	·e	Po	st	P	re	Po	st	P	re	P	ost
Ethnicity	Number	%	Number	%								
Caldwell/Rockspring	257	88.30%	297	88.40%	34	11.70%	39	11.60%	291	100.00%	336	100.00%

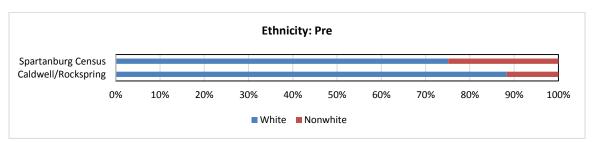


Figure 11: Percent of Trail Users by Ethnicity per Access Point for the Wadsworth Trail Pre Intervention

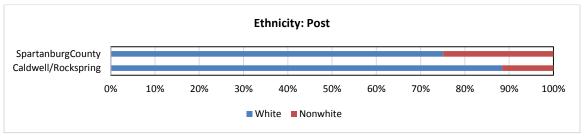


Figure 12: Percent of Trail Users by Ethnicity per Access Point for the Wadsworth Trail Post Intervention

Wilson and colleagues 44 examined environmental variables (i.e., perceptions of access for physical activity) impacting the physical activity patterns of individuals residing in low and high SES areas and found that the low (vs. high) SES group reported lower perceptions of access to

public recreation facilities. 44 It may be that persons residing in low SES areas near the Wadsworth Trail perceive a lack of safety and it is difficult to access. Awareness and perception of access among residents living near the Wadsworth Trail, especially of non-White and low SES residents, should be

explored to determine if countermeasures need to be implemented to increase use of the segment by these groups.

Clearly barriers exist to minority usage of the Wadsworth Trail. SES is a composite measure of an individual's resources and prestige within a community⁴⁵. Resources include both material goods (e.g., owning a home) and assets (e.g., savings), whereas prestige refers to an individual's status within a social hierarchy and is typically determined by the classification of education and profession according to the esteem placed on each by society. In nearly every disease category, adults of lower SES experience higher rates of morbidity and mortality than adults of higher SES^{43, 46-47}. Similar findings have been documented in samples of children and adolescents when relationships between family SES and health are examined. In addition, there is often a correlation between low SES and minority communities.

Thus, the individuals residing in low SES areas near the Wadsworth Trail may perceive a lack of access and/or found it to be more difficult to access the trail and therefore used the Wadsworth Trail less than individuals residing in or near higher SES areas along the trail. Assuming that

conclusions from prior studies hold true on the Wadsworth Trail, a perception of a lack of access among minorities in low SES communities may be a barrier contributing to decreased usage by minorities on the Wadsworth Trail. The frequency and percent of trail users by ethnicity per access point on the Wadsworth Trail pre/post intervention are listed in Table 6, Figure 11 and Figure 12.

3.3.5 MBF Trail and Wadsworth Trail Use by Activity Intensity MBF Trail

Activity intensity has been linked to a variety of health outcomes with more intense activities providing greater health benefits. Walking was more popular among females compared to males on the MBF Trail. Although most Americans are not regularly active, walking is the most common form of activity⁴⁰. Eyler and colleagues⁴⁰ examined the epidemiology of walking in the US using the US Physical Activity Study and found that approximately 34% of the American population reports that they are regular walkers and 46% are occasional walkers. The frequency and percent of trail users by activity intensity per access point on the MBF Trail pre/post intervention are listed in Table 7, Figure 13 and Figure 14.

Table 7: Frequency and Percent of Trail Users by Activity Intensity per Access Point for the MBF Trail Pre/Post Intervention

Manus Dia da Tuati		Sede	entary			Wal	king			Vigo	rous			Total A	ccessed	
Mary Black Trail, Activity Level	Pr	e	Po	st	P	re	Po	ost	P	re	P	ost	P	re	P	ost
Activity Level	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Henry	72	5.50%	12	2.90%	831	63.00%	224	54.40%	417	31.60%	176	42.70%	1320	18.50%	412	14.40%
YMCA	37	2.90%	23	3.20%	725	55.90%	423	59.20%	536	41.30%	269	37.60%	1298	18.20%	715	24.90%
St. Andrews	34	2.40%	12	1.90%	810	57.70%	385	59.70%	561	39.90%	248	38.40%	1405	19.70%	645	22.50%
St. Andrews/Forrest	28	2.20%	15	3.00%	804	61.80%	278	55.80%	469	36.00%	205	41.20%	1301	18.20%	498	17.40%
Forrest	34	2.70%	12	2.50%	760	60.30%	261	53.90%	466	37.00%	211	43.60%	1260	17.60%	484	16.90%
Country Club	25	4.50%	4	3.50%	314	56.50%	71	61.70%	217	39.00%	40	34.80%	556	7.80%	115	4.00%
Total	230	3.20%	78	2.70%	4244	59.40%	1642	57.20%	2666	37.30%	1149	40.00%	7140	100.00%	2869	100.00%

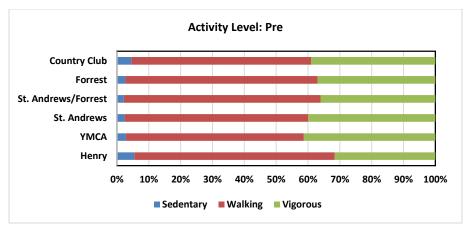


Figure 13: Percent of Trail Users by Activity Intensity per Access Point for the MBF Trail Pre Intervention

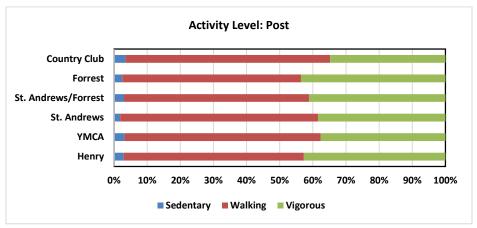


Figure 14: Percent of Trail Users by Activity Intensity per Access Point for the MBF Trail Post Intervention

Wadsworth Trail

Identifying the physical activity patterns (e.g., walking, vigorous intensity) of individuals in 'open' environments such as recreational greenway trails provides investigators with specific objective data to develop user profiles that can perhaps eventually lead to effective physical activity interventions. An increase in the percentage of Wadsworth Trail users engaging in vigorous physical activity increased post

intervention. Furthermore, the intensity of physical activity observed on the Wadsworth Trail is atypical considering that the most common form of activity in the US is walking⁴⁰.

The frequency and percent of trail users by activity intensity per access point on the Wadsworth Trail pre/post intervention are listed in Table 8, Figure 15 and Figure 16.

Table 8: Frequency and Percent of Trail Users by Activity Intensity per Access Point for the MBF Trail Pre/Post Intervention

Wadsworth Trail,	Sedentary				Walking				Vigo	rous			Total A	ccessed		
'	Pi	re	Po	st	Pi	re	Po	st	Pi	re	Po	st	Pi	re	Po	st
Activity Level	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Caldwell/Rockspring	2	0.7%	3	0.9%	171	58.0%	181	53.4%	122	41.4%	155	45.7%	295	100.0%	339	100.0%

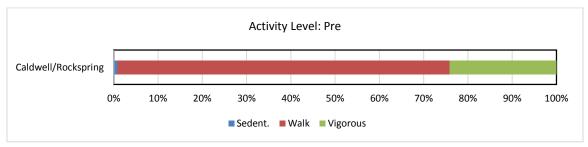


Figure 15: Percent of Trail Users by Activity Intensity per Access Point for the Wadsworth Trail Pre Intervention

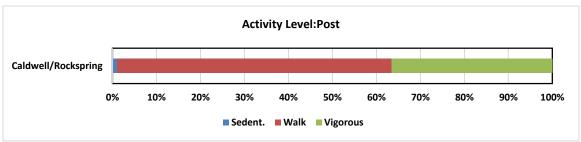


Figure 16: Percent of Trail Users by Activity Intensity per Access Point for the Wadsworth Trail Post Intervention

3.3.6 MBF Trail and Wadsworth Trail Use by Time of Day

MBF Trail

Four time periods were examined: Morning (7:30am - 9am), Noon (12pm - 1:30pm), Afternoon (3:00 pm - 4:30pm) and Evening (5:00 pm - 6:30pm). The Evening observation (5pm - 6:30pm) time period had more traffic than the other three observation

time periods, for females and males alike. Broomhall⁴⁸ concluded from a literature review that numerous observable factors, like perceived safety could influence use of open space as well. The frequency and percent of trail users by time of day per access point on the MBF Trail pre/post intervention are listed in Table 9, Figure 17 and Figure 18.

Table 9: Frequency and Percent of Trail Users by Time of Day per Access Point for the MBF Trail Pre/Post Intervention

Mary Black Trail,		Mor	ming			No	on			Afte	rnoon			Eve	ning			Total A	ccessed	
' '	Pr	e	Po	st	Pr	е	Po	st	Pi	re	Po	ost	Pi	re	Po	st	Pi	re	Po	ost
Time	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%								
Henry	298	22.7%	142	34.5%	280	21.3%	91	22.1%	317	75.7%	92	105.7%	419	31.9%	87	21.1%	1314	18.5%	412	14.4%
YMCA	319	24.8%	200	28.0%	244	19.0%	164	22.9%	309	74.5%	153	77.3%	415	32.2%	198	27.7%	1287	18.1%	715	24.9%
St. Andrews	373	26.7%	191	29.6%	269	19.3%	146	22.6%	333	78.9%	153	98.7%	422	30.2%	155	24.0%	1397	19.7%	645	22.5%
St. Andrews/Forrest	343	26.5%	162	32.5%	262	20.3%	90	18.1%	324	89.3%	114	86.4%	363	28.1%	132	26.5%	1292	18.2%	498	17.4%
Forrest	332	26.5%	128	26.4%	221	17.6%	126	26.0%	352	100.9%	112	94.9%	349	27.8%	118	24.4%	1254	17.7%	484	16.9%
Country Club	163	29.5%	46	40.0%	109	19.7%	28	24.3%	126	81.3%	11	36.7%	155	28.0%	30	26.1%	553	7.8%	115	4.0%
Total	1828	25.8%	869	30.3%	1385	19.5%	645	22.5%	1761	82.9%	635	88.2%	2123	29.9%	720	25.1%	7097	100.0%	2869	100.0%

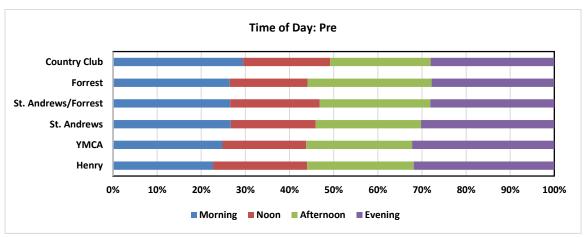


Figure 17: Percent of Trail Users by Time of Day per Access Point for the MBF Trail Pre Intervention

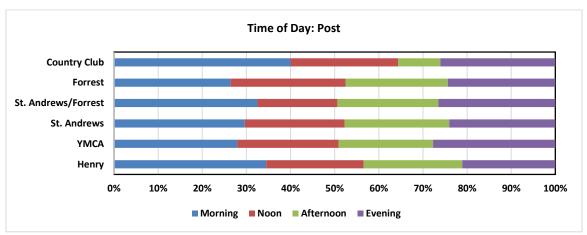


Figure 18: Percent of Trail Users by Time of Day per Access Point for the MBF Trail Post Intervention

Wadsworth Trail

Previous studies suggest that perceptions of safety during evening hours may have influenced one's decision to use the MBF Trail and Wadsworth Trail. However, it should be noted, MBF Trail and Wadsworth Trail intercept survey respondents reported

that the safety and security along the trail to be 'excellent' & 'good'. The frequency and percent of trail users by time of day per access point on the Wadsworth Trail pre/post intervention are listed in Table 10, Figure 19 and Figure 20.

Table 10: Frequency and Percent of Trail Users by Time of Day per Access Point for the Wadsworth Trail Pre/Post Intervention

Wadsworth Trail,		Moi	rning			No	on			After	noon			Eve	ning			Total A	ccessed	
'	Pi	re	Po	st	Pi	e	Po	st	Pi	e	Po	ost	Pr	re	Po	st	Pi	re	Po	ost
Time	Number	%	Number	%																
Caldwell/Rockspring	117	39.5%	138	42.2%	45	15.2%	65	19.9%	63	21.3%	68	20.8%	71	24.0%	56	17.1%	296	100.0%	327	100.0%

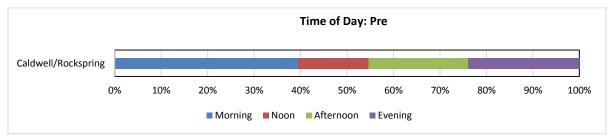


Figure 19: Percent of Trail Users by Time of Day per Access Point for the Wadsworth Trail Pre Intervention

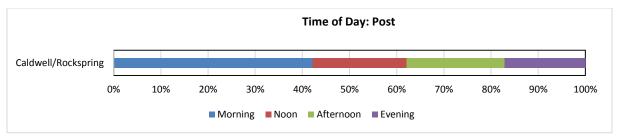


Figure 20: Percent of Trail Users by Time of Day per Access Point for the Wadsworth Trail Post Intervention

3.3.7 MBF Trail and Wadsworth Trail Use by Temperature

Contextual elements, such as ambient temperature, impact physical activity⁴⁹. The limited studies available suggest physical activity levels do vary with seasonality and the impact of poor and extreme weather has

been identified as a barrier to activity among various populations⁵⁰⁻⁵¹. Studies that attempt to identify usage barriers for trails and/or physical activity should, therefore, recognize and account for these contextual variables to better gauge usage⁵⁰.

maaswon	n i i un i i	C/I OSt IIII	rveniion					
Tomn		Mary	Black			Wads	worth	
Temp	Pre	% Pre	Post	% Post	Pre	% Pre	Post	% Post
0	47	0.7	0	0.0	0	0.0	0	0.0
<40	185	2.6	58	2.0	0	0.0	6	1.8
40-50	551	7.7	100	3.5	26	8.8	28	8.3
51-60	967	13.5	374	13.0	16	5.4	30	8.8
61-70	1662	23.3	963	33.6	36	12.2	128	37.8
71-80	2072	29.0	835	29.1	151	51.0	73	21.5
81-90	1313	18.4	450	15.7	20	6.8	74	21.8
91-100	232	3.2	89	3.1	43	14.5	0	0.0

0.0

0.0

100.0

0

0

2869

Table 11: Frequency and Percent of Trail Users by Temperature for the MBF Trail and Wadsworth Trail Pre/Post Intervention

The greatest percentages of trail users were observed when the temperatures were between 61-80 degrees pre/post intervention for both the MBF Trail and the Wadsworth Trail. Matthews and colleagues⁵² found that 6% of the variance in physical activity levels over 12 months was explained by temperature effects. Older adults' physical activity behavior may be especially influenced by temperature because of reductions in thermal tolerance with age,

59

56

7144

0.8

0.8

100.0

100-110

Total

unknown

which may be largely due to chronic diseases and a sedentary lifestyle rather than age itself⁵². In addition, older adults have specifically reported extreme temperatures as barriers to engaging in regular physical activity⁵². The frequency and percent of trail users by temperature on the MBF Trail and Wadsworth Trail pre/post intervention are listed in Table 11, Figure 21 and Figure 22.

0

339

0.0

0.0

100.0

0.0

1.4

100.0

0

296

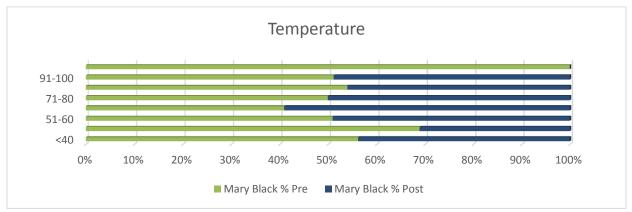


Figure 21: Percent of Trail Users by Temperature for the MBF Trail Pre/Post Intervention

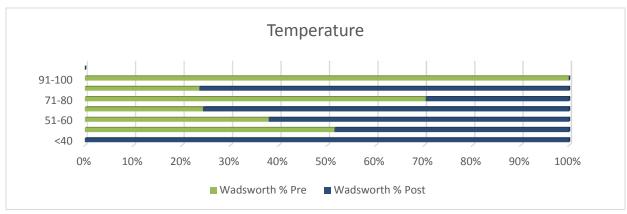


Figure 22: Percent of Trail Users by Temperature for the Wadsworth Trail Pre/Post Intervention

3.3.8 MBF Trail Use and Wadsworth Trail Use by Seasonality

Researchers have called for additional studies examining associations between physical activity behavior and natural elements, such as seasonality⁵³⁻⁵⁷. Despite easy access provided by greenway trails like

the MBF Trail and Wadsworth Trail for outdoor physical activity, individuals have a variety of potential barriers to being physically active in the outdoor environment. One of the barriers to overcome is weather, including both hot and cold temperature extremes, precipitation, wind, and humidity. Researchers recently found that inclement weather is associated

with lower rates of physical activity.

Table 12: Frequency and Percent of Trail Users by Seasonality for the MBF Trail and Wadsworth Trail Pre/Post Intervention

Coocor		Mary	Black		Wadsworth					
Season	Pre	% Pre	Post	% Post	Pre	% Pre	Post	% Post		
Fall	1448	20.3	410	14.3	90	30.4	94	27.7		
Winter	1774	24.8	945	32.9	63	21.3	60	17.7		
Spring	2192	30.7	1001	34.9	30	10.1	108	31.9		
Summer	1730	24.2	513	17.9	113	38.2	77	22.7		
Total	7144	100.0	2869	100.0	296	100.0	339	100.0		

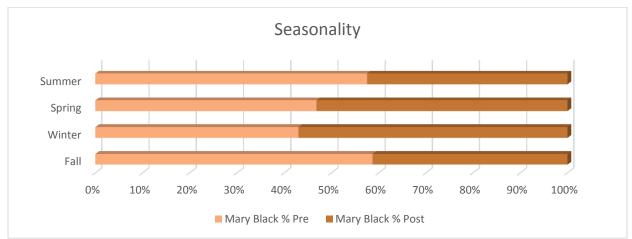


Figure 23: Percent of Trail Users by Seasonality for the MBF Trail Pre/Post Intervention

A study by Lindsey and colleagues²⁰ investigated weather and time-related variables to determine their correlation to neighborhood trail use. Results from their analysis indicate that temperature and precipitation impact neighborhood trail use.

Specifically, Lindsey et al.²⁰ found that trail traffic increased 3.2% for every one degree Fahrenheit increase in temperature above the annual average and decreased by 40% for every inch of rain above the annual average. Similarly, MBF Trail and Wadsworth Trail users preferred to use the trail during the

warmer and dryer spring and summer however fall was the most popular season for the Wadsworth Trail after summer. The frequency and percent of trail users by seasonality on the MBF Trail and Wadsworth Trail pre/post intervention are listed in Table 12, Figure 23 and Figure 24.

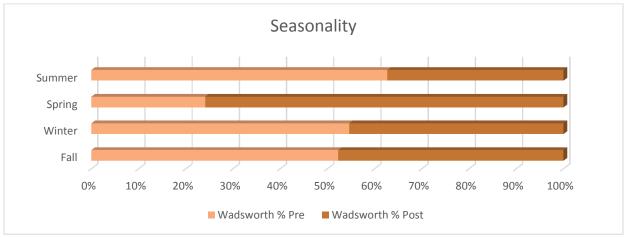


Figure 24: Percent of Trail Users by Seasonality for the Wadsworth Trail Pre/Post Intervention

4 MBF Trail and Wadsworth Trail Intercept Survey Results

A brief (5 to 10 minutes) valid and reliable survey¹² comprised of 15-17 interviewer administered questions was used to assess users' perceptions of the MBF Trail and Wadsworth Trail. No identifiable information of the respondent was solicited and Internal Review Board (IRB) procedures protecting human subject confidentiality were strictly followed. The survey was designed to provide practitioners, researchers, along with Spartanburg County and City officials, the ability to collect objective information on a variety of users. The survey included questions related to patterns of MBF Trail and Wadsworth Trail use (both recreation and transportation). Specific items concerning the length of time using the MBF Trail and Wadsworth Trail, time spent on the MBF Trail and Wadsworth Trail, origin (e.g., home or work) when accessing the MBF Trail and Wadsworth Trail. distance and time from home and work to the MBF Trail and Wadsworth Trail, mode of transportation to the MBF Trail and Wadsworth Trail and the usual reason for using the MBF Trail and Wadsworth Trail (e.g., recreational physical activity or transit) were included. Five separate questions were asked for recreational and transportation activity. Four additional questions focused on whether the respondent visited the MBF Trail and Wadsworth Trail alone or with someone else (e.g., friend, family and/or

pet), perceptions of MBF Trail and Wadsworth Trail maintenance and safety, and perceived impacts of MBF Trail and Wadsworth Trail use on respondent physical activity. The survey also included demographic items such as: age, gender, ethnicity, and highest educational level attained.

An additional body of scientific research demonstrates that factors such as safety, visual quality, knowing neighbors, seeing many other people walking and cycling, and presence of amenities (e.g., water fountains, benches, trees) are strongly associated with more people being more active more often. Interestingly, some of these features were discovered as important during the prior evaluation process. Thus, the project activities in this application will also address these attributes to remove barriers to using the trail.

PLEASE NOTE THAT PRE-INTERVENTION FREQUENCIES FOR THE MBF TRAIL INTERCEPT SURVEYS INCLUDE 15 QUARTERLY OBSERVATION PERIODS COMPARED TO ONLY 4 QUARTERLY POST-INTERVENTION OBSERVATION PERIODS. THEREFORE, PERCENTAGES SHOULD BE USED FOR COMPARISON PURPOSES, NOT FREQUENCIES.



Courtesy of Mary Black Foundation

Table 13: Frequency and Percent of Most Frequently Cited INTERCEPT Survey Response(s) Pre/Post Intervention for the MBF TRAIL

Num.	13: Frequency and Percent of Management of Management of Management (1) Survey Question	Gender	Most Frequently	Frequency (%)#	Most Frequently Cited	Frequency (%)
			Cited Response(s)	Pre	Response(s) Post	Post
			Pre		1 ()	
1	Identify the physical activity	Female	Walking	218(87.6%)	Walking	116(75.8%)
	respondent is doing.	Male	Walking	151(71.0%)	Walking	77(66.4%)
1a	Identify who the person is on	Female	With others	161(64.7%)	With others	74(47.7%)
	the trail with.	Male	Alone	115(54.2%)	Alone	77(66.4%)
2	Identify gender	Female	NA	249(54%)	NA	155(57%)
		Male	NA	212(46%)	NA	116(43%)
3	When was the first time you	Female	4 to 6 months ago	54(21.6%)	More than 3 to 4 years	51(33.0%)
	used this trail?	Male	4 to 6 months ago	47(22.1%)	ago	32(27.6%)
					12 to 16 months ago	
4	Where are you usually	Female	Home	193(77.2%)	Home	128(82.6%)
	coming from when you use this trail?	Male	Home	140(65.7%)	Home	98(84.5%)
4a	How much time does it	Female	Less than 15 minutes	179(71.6%)	Less than 15 minutes	108(69.7%)
	usually take to get to this trail from your home?	Male	Less than 15 minutes	133(62.4%)	Less than 15 minutes	86(74.1%)
4b	How much time does it	Female	Less than 15 minutes	48(19.2%)	Less than 15 minutes	20(12.9%)
	usually take to get to this trail from your work?	Male	Less than 15 minutes	53(24.9%)	Less than 15 minutes	10(8.6%)
5	How do you usually get to	Female	Car or other vehicle	197(78.8%)	Car or other vehicle	108(69.7%)
	this trail?	Male	Car or other vehicle	146(68.5%)	Car or other vehicle	54(63.3%)
6	What is your usual reason for	Female	Exercise or do	239(95.6%)	Exercise or do	147(94.8%)
	using this trail?		recreational physical		recreational physical	
			activity		activity	
		Male	Exercise or do	196(92.0%)	Exercise or do	108(93.1%)
			recreational physical		recreational physical	
			activity		activity	
6a	During the past 7 days	Female	One day	88(35.2%)	One day	39(25.2%)
	(including today), how many days have you used this trail	Male	One day	75(35.0%)	One day	27(23.3%)

	for exercise or recreational purposes?					
6b	What exactly do you usually do when you are on this trail for exercise or recreational purposes?	Female Male	Walk Walk	205(82.0%) 127(59.6%)	Walk Walk	101(65.2%) 60(51.7%)
6с	How much time do you usually spend on the trail per visit when you use it for exercise or recreational purposes?	Female Male	Between 45-59 min. Between 45-59 min.	100(40.0%) 86(40.4%)	Between 1-2 hours Between 1-2 hours	66(42.6%) 46(39.7%)
6d	During the past 7 days (including today), how many days have you used this trail for transportation purposes (to get somewhere)?	Female Male	See Table 16	See Table 16	See Table 16	See Table 16
6e	What activity do you usually do when you are on this trail for transportation purposes?	Female Male	See Table 16	See Table 16	See Table 16	See Table 16
6f	How much time do you usually spend on the trail per visit when you use it for transportation purposes?	Female Male	See Table 16	See Table 16	See Table 16	See Table 16
7	Who are you usually with when you use this trail?	Female Male	Family & Friends Family & Friends	134(53.6%) 80(37.8%)	Family & Friends Nobody/by myself	88(50.3%) 59(50.9%)
8	In your opinion, the maintenance of the trail is EXCELLENT, GOOD, FAIR or POOR?	Female Male	EXCEL&GOOD EXCEL&GOOD	234(93.6%) 196(92.0%)	EXCEL&GOOD EXCEL&GOOD	149(96.1%) 107(92.3%)
9	In your opinion, the safety and security along the trail is EXCELLENT, GOOD, FAIR or POOR?	Female Male	EXCEL&GOOD EXCEL&GOOD	186(74.4%) 170(79.8%)	EXCEL&GOOD EXCEL&GOOD	138(89.0%) 104(89.7%)

10	How did you find out about	Female	Word of mouth	71(28.4%)	Word of mouth	28(47.1%)
	this trail?	Male	Word of mouth	60(28.2%)	Word of mouth	44(37.9%)
11	What do you like most about	Female	Location/Conven.	16(6.4%)	Location/Conven.	36(23.2%)
	this trail?	Male	Location/Conven.	21(9.9%)	Free Place to Exercise	27(23.3%)
12	What is your age?	Female	Age 35 and older	202(81.4%)	Age 35 and older	127(81.6%)
		Male	Age 35 and older	179(83.8%)	Age 35 and older	197(86.7%)
13	Are you Hispanic or Latino?	Female	No	244(97.6%)	No	153(98.7%)
		Male	No	205(96.2%)	No	113(97.4%)
14	What is your race?	Female	White*	179(71.6%)	White*	114(73.5%)
		Male	White*	161(75.6%)	White*	86(74.1%)
15	What is the highest grade in	Female	College graduate	93(37.2%)	College graduate	66(42.6%)
	school you have completed?	Male	College graduate	78(36.6%)	College graduate	43(37.1%)
16	See page 45 below.	NA	NA	NA	NA	NA

^{*} Denotes consistency with direct observation findings, where applicable.

[#] The percentage listed for frequency refers to the percentage of respondents of a specific gender that provided the corresponding answer. For example, 87.6% of all females observed on the trail (question 1) were walking when asked to complete the survey pre intervention.



Courtesy of the Mary Black Foundation

Results from the CDC's Neighborhood Safety and Prevalence of Physical Activity Report⁵⁸ found that 12,750 males and females over the age of 18 showed that perceptions of unsafe neighborhoods were associated with the inactivity patterns of respondents. Recent findings from a study examining the relationships between perceived environmental characteristics and physical activity found that for women the perceptions of active neighbors, lighting, safety and neighbor trustworthiness were associated with leisure time physical activity participation⁵⁹. Fortunately, perceptions of safety and security were perceived to be 'excellent/good' on the MBF Trail. Location/convenience were primary reasons respondents provided for using the trail.

Question 16 of the MB Intercept Survey asked respondents if they were aware of specific events, changes, activities (i.e., interventions) over the past two years. Respondents' perceptions of awareness for these events, changes, activities are listed below. Respondents reported being most aware of the implementation of the Dog Park (11.3%), followed by the Pet Waste Cleanup Stations (10.9%), Mile Marker Posts (10.6%) and the Water Fountain (10.3%). All four of these changes are related to the built environment. Respondents were less aware of activities/events on the MBF Trail.

Question 16 of MB Intercept Survey: Were you aware of the following <u>events</u>, <u>changes</u>, <u>activities</u> and/or on the MBF Trail over the past two years?

Frequency (N) and Percentage (%) Events, Changes, Activities on the MBF	N, %
Trail	
1. Tails on the Trail	66, 3.7%
2. Walk/Ride on Trail	74, 4.2%
3. Pet Waste Cleanup Stations	192, 10.9%
4. Trail Cleanup Day	50, 2.9%
5. Creation of Friends of the MBF Trail Advisory Committee	27, 1.5%
6. MB RT Advisory Committee meetings	23, 1.3%
7. Creation of RT logo	29, 1.6%
8. RT Marketing Mailing	12, 0.6%
9. Creation of MBF Trail merchandise	18, 1.0%
10. Pine St Elementary Walk to School Day	58, 3.3%
11. Pine St Elementary Walking and Wheeling Wednesdays	38, 2.2%
12. Walk and Ride to the Farmer's Market	11, 0.6%
13. Walk with Santa	2, 0.1%
14. Heart Health Walk for Women	16, 0.9%
15. Mile Marker Posts	187, 10.6%
16. Newsletter Boxes	153, 8.7%
17. Water Fountain	181, 10.3%
18. Sunday Streets	10, 0.5%
19. Business Social	8, 0.4%
20. Bicycle checkouts on MBF Trail	122, 6.9%
21. Turkey Day 8K	20, 1.1%
22. Hair of the Dog	42, 2.4%
23. Irecycle Half Marathon	39, 2.2%
24. Lunchtime Bike Ride	17, 0.9%
25. Twas the Scavenger Hunt Before Christmas	6, 0.3%

26. MBF Trail 5K	29, 1.6%
27. Spartanbark Halloween Pet Parade	13, 0.7%
28. Walk at Lunch	31, 1.7%
29. Women's Only Ride	2, 0.1%
30. Trains on the Trail Launch	28, 1.5%
31. Way finding Signs	27, 1.5%
32. Walking Fitness on the Trail	32, 1.3%
33. Dog Park	198, 11.3%



Courtesy of the Mary Black Foundation

PLEASE NOTE THAT PRE-INTERVENTION FREQUENCIES FOR THE MBF TRAIL INCLUDE 15 QUARTERLY OBSERVATION PERIODS COMPARED TO ONLY 4 QUARTERLY POST-INTERVENTION OBSERVATION PERIODS. THEREFORE, PERCENTAGES ONLY BE USED FOR COMPARISON PURPOSES, NOT FREQUENCIES.

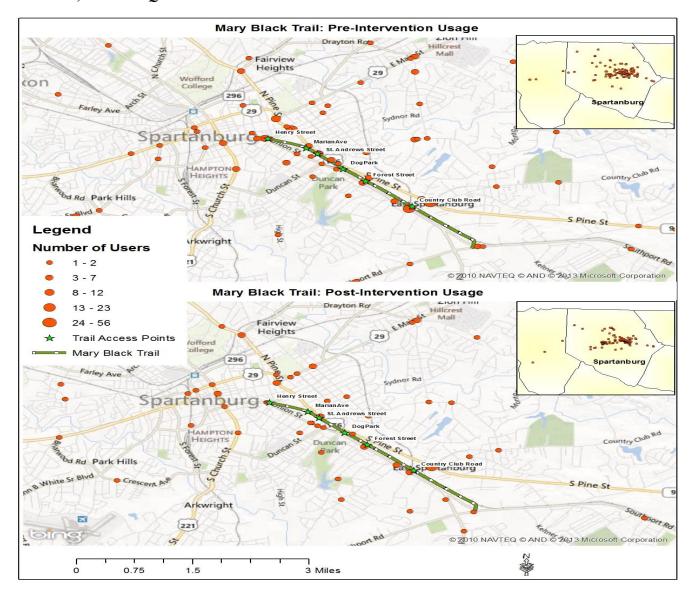


Figure 25: Distances Pre/Post Access Points and Trail User Residences for the MBF Trail

Table 14: Frequency and Percent of Most Frequently Cited INTERCEPT Survey Response(s) Pre/Post Intervention for the WADSWORTH TRAIL

Num.	Survey Question	Gender	Most Frequently	Frequency (%)#	Most Frequently Cited	Frequency
			Cited Response(s)	Pre	Response(s) Post	(%)#
			Pre			Post
1	Identify the physical activity	Female	Walking	12(92.3%)	Walking	43(79.6%)
	respondent is doing.	Male	Walking	7(77.8%)	Walking	26(66.7%)
1a	Identify who the person is on	Female	Alone	8(61.5%)	Alone	24(44.4%)
	the trail with.	Male	Alone	6(66.7%)	Alone	28(71.8%)
2	Identify gender	Female	NA	13(59%)	NA	54(58%)
		Male	NA	9(41%)	NA	39(42%)
3	When was the first time you	Female	More than a year ago	9(69.2%)	More than 3 to 4 years ago	28(51.9%)
	used this trail?	Male	More than a year ago	7(77.8%)	More than 3 to 4 years ago	17(92.3%)
4	Where are you usually	Female	Home	13(100%)	Home	52(96.3%)
	coming from when you use	Male	Home	6(66.7%)	Home	36(84.5%)
	this trail?					
4a	How much time does it	Female	Less than 15 minutes	12(92.3%)	Less than 15 minutes	51(94.4%)
	usually take to get to this	Male	Less than 15 minutes	7(77.8%)	Less than 15 minutes	37(94.9%)
	trail from your home?					
4b	How much time does it	Female	NA	0(0.0%)	Between 15-29 minutes	1(1.9%)
	usually take to get to this	Male	Less than 15 minutes	1(11.1%)	Less than 15 minutes	2(5.1%)
	trail from your work?					
5	How do you usually get to	Female	Walking	9(69.2%)	Walking	42(77.8%)
	this trail?	Male	Walking	6(66.7%)	Walking	27(69.2%)
6	What is your usual reason for	Female	Exercise or do	12(92.3%)	Exercise or do	51(94.4%)
	using this trail?		recreational physical		recreational physical	
			activity		activity	
		Male	Exercise or do	9(100%)	Exercise or do	38(97.4%)
			recreational physical		recreational physical	
			activity		activity	
6a	During the past 7 days	Female	Three days	4(30.8%)	Three days	12(22.2%)
	(including today), how many	Male	Seven days	4(44.4%)	Four days	27(17.9%)

	days have you used this trail for exercise or recreational purposes?					
6b	What exactly do you usually do when you are on this trail for exercise or recreational purposes?	Female Male	Walk Walk	11(84.6%) 5(55.6%)	Walk Walk	41(75.9%) 23(59.0%)
6c	How much time do you usually spend on the trail per visit when you use it for exercise or recreational purposes?	Female Male	Between 45-59 min. Between 30-44 min.	5(38.5%) 4(44.4%)	Between 30-44 min. Between 30-44 min.	19(35.2%) 23(59.0%)
6d	During the past 7 days (including today), how many days have you used this trail for transportation purposes (to get somewhere)?	Female Male	NA	NA	NA	NA
6e	What activity do you usually do when you are on this trail for transportation purposes?	Female Male	NA	NA	NA	NA
6f	How much time do you usually spend on the trail per visit when you use it for transportation purposes?	Female Male	NA	NA	NA	NA
7	Who are you usually with when you use this trail?	Female Male	Nobody/by myself Nobody/by myself	6(46.2%) 4(44.4%)	Nobody/by myself Nobody/by myself	22(40.7%) 25(64.1%)
8	In your opinion, the maintenance of the trail is EXCELLENT, GOOD, FAIR or POOR?	Female Male	EXCEL&GOOD EXCEL&GOOD	13(100%) 9(100%)	EXCEL&GOOD EXCEL&GOOD	53(98.2%) 38(97.4%)
9	In your opinion, the safety and security along the trail is EXCELLENT, GOOD,	Female Male	EXCEL&GOOD EXCEL&GOOD	12(92.3%) 7(77.7%)	EXCEL&GOOD EXCEL&GOOD	44(81.4%) 36(92.3%)

	FAIR or POOR?					
10	How did you find out about	Female	Driving past	5(38.5%)	Driving past	24(44.4%)
	this trail?	Male	Driving past	5(55.6%)	Driving past	19(48.7%)
11	What do you like most about	Female	Location/Conven.	1(7.7%)	Location/Conven.	26(48.1%)
	this trail?	Male	Location/Conven.	2(22.2%)	Location/Conven.	13(33.3%)
12	What is your age?	Female	Age 35 and older	10(77.1%)	Age 35 and older	46(90.6%)
		Male	Age 35 and older	7(77.8%)	Age 35 and older	35(89.7%)
13	Are you Hispanic or Latino?	Female	No	12 (92.3%)	No	53(98.7%)
		Male	No	9(100%)	No	36(92.3%)
14	What is your race?	Female	White*	10(83.3%)	White*	51(96.2%)
		Male	White*	8(88.9%)	White*	34(94.4%)
15	What is the highest grade in	Female	College graduate	4(30.8%)	College graduate	24(44.4%)
	school you have completed?	Male	College graduate	4(44.4%)	College graduate	11(28.2%)
16	Did you receive The	Total	NA	NA	Yes	35(37.7%)
	Wadsworth Trail Flyer				No	58(62.4%)
	(show them the flyer) in the					
	mail?					
17	Were you aware of the trail	Total	NA	NA	Yes	78(83.9%)
	head sign for the Wadsworth				No	15(16.1%)
	Trail?					
18	Question 18 of Wadsworth	See page	NA	NA	NA	NA
	Intercept Survey: Were you	51 below.				
	aware of the following					
	activities (i.e., changes) on					
	the Wadsworth Trail					

^{*} Denotes consistency with direct observation findings, where applicable.

[#] The percentage listed for frequency refers to the percentage of respondents of a specific gender that provided the corresponding answer. For example, 77.8% of all females observed on the trail (question 1) were walking when asked to complete the survey pre intervention.

The majority (62%) of Wadsworth Trail respondents did not receive a flyer about the Wadsworth Trail. However, approximately 84% of respondents were aware of Wadsworth Trail Head sign. Below are the

findings for Question 18 of the Intercept Survey for the Wadsworth Trail examining the awareness of specific activities/changes for the Wadsworth Trail.

Question 18 of Wadsworth Intercept Survey: Were you aware of the following activities (i.e., changes) on the Wadsworth Trail?

Frequency (N) and Percentage (%) Activities on the Wadsworth Trail	N, %
1. Tails on the Wadsworth Trail	29, 12.8%
2. Walk/Ride on Wadsworth Trail	37, 16.3%
3. Walk to School Day	47, 20.7%
4. Pet Waste Cleanup Stations	54, 23.8%
5. Trail Cleanup Day	59, 26.0%

The greatest awareness of the activities/changes on the Wadsworth Trail was the Trail Cleanup Day (26.0%) and Pest Waste Cleanup Stations (23.8%).

4.1 Proximity to Residence and MBF Trail and Wadsworth Trail Pre and Post Proximity to exercise facilities is an environmental support identified as a possible determinant and barrier for physical activity¹⁻⁷. Troped and colleagues¹³ examined factors impacting trail use and determined that travel distance to access the trail plays a significant role and should be considered when building a trail. To better understand the relationship between proximity from the MBF Trail and Wadsworth Trail to place of residence, MBF Trail and Wadsworth Trail users were asked to indicate the proximity of their residence to their preferred MBF Trail and Wadsworth Trail access point (see Figure 26 & 27). Members of the research team identified themselves to each potential respondent and

discussed the purpose of the research and how the data would be used. Respondents were asked their age, to ensure all respondents were 18 years or older. Respondents were also asked to identify their gender and ethnicity.

Each respondent was asked for the nearest two cross-streets of their primary residence. GPS coordinates pertaining to the residence of each respondent were registered to a common datum, converted into a spatial map, and imported into ArcView GIS to be used as a base for examining proximal relationships and determining a mileage distance from place of residence to their preferred MBF Trail and Wadsworth Trail access point (See Figures 26 & 27). The average distance from place of residence and preferred access point on the MBF Trail and Wadsworth Trail are listed in Table 15 below.

Table 15: Average Distance from Place of Residence and Preferred MBF Trail and Wadsworth Trail Access Point for Pre and Post

Question		Trail	Distance (Miles)
What are the nearest	Pre	MB	3.78
two cross streets to your		Wadsworth	0.57
residence, city and zip code?			

Post	MB	4.71
	Wadsworth	0.87

The average distance from place of residence and preferred MBF Trail and Wadsworth Trail access point increased. These findings suggest that awareness of MBF Trail and Wadsworth Trail has increased. The increased distances among

users of both trails could also be explained by users perceiving the MBF Trail and Wadsworth Trail as a destination along with providing a free, accessible option for exercise, recreation and transportation.



Courtesy of the Mary Black Foundation

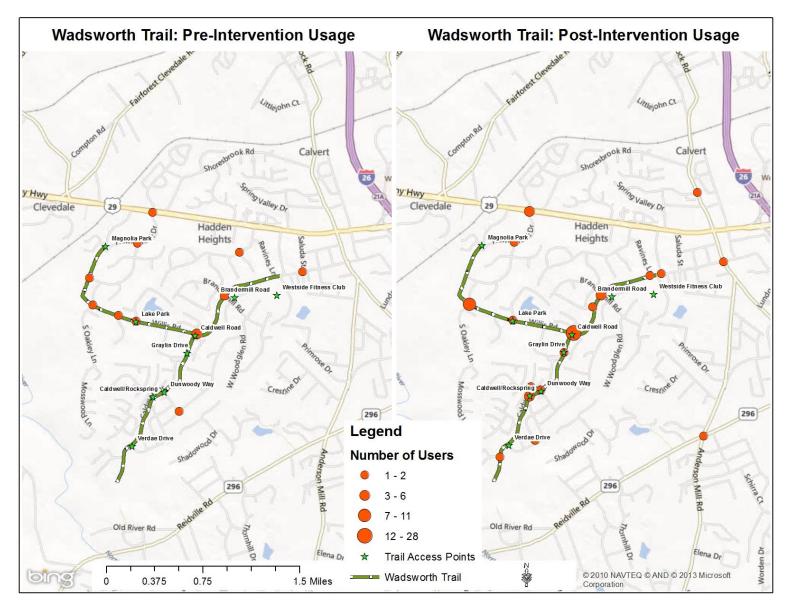


Figure 26: Distances for Pre/Post Access Points and Trail User Residences for the Wadsworth Trail

5 MBF Trail Active Transportation Findings

5.1 Active Transportation Using Trails/Greenways

Although a limited number of studies have examined impact of trail creation on active transportation (i.e., walking and bicycling for transportation purposes) and corresponding links to health outcomes, findings demonstrate the importance of continued monitoring of this behavior. The potential to reduce the incidence of obesity and cardiovascular disease risk factors, as well as contribute to overall physical activity levels⁶⁰⁻⁶³ from active transport could be significant.

The Theory of Planned Behavior is the common framework used to examine the influences on travel behaviors 60-64. Despite the health benefits of regular physical activity, only 6% of trips are completed by foot or bicycle in the US and these trips have recently decreased⁶³. National trends demonstrate that 31% of trips 1 mile or less are made by bicycling or walking and only 4% of all trips between 1 and 3 miles are done by walking or biking. According to the National Household Travel Survey, increasing the share of walking or biking trips between 1 and 3 miles from 4% to 10% would avoid 21 billion miles of driving per year⁶⁵.

5.1.1 Safe Routes to School

The Safe Routes to School (SRTS) program is designed to encourage active and safe transportation for children to school. It was launched in 2005 by the Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for *Users* ⁶⁶. To qualify for SRTS funds these programs must have used at least 70% but no more than 90% of the funds on infrastructure-related projects, which may include sidewalk improvements, trafficcalming measures, bicycle lanes, and bike racks⁶⁷. Non-infrastructure related projects may include student and parent education, public awareness campaigns, and traffic enforcement⁶⁷⁻⁶⁸.

Walking to school may only contribute to a portion of the recommended levels of daily physical activity needed for optimal health, but those children who walk participate in significantly more activity than those who do not ⁶⁹⁻⁷⁰. According to some researchers this is enough activity to "fend" off excess weight gain ⁷¹. Considering the elementary school (Pine Street Elementary School) abutting the MBF Trail has a SRTS program in place further validates the need to continue to promote the success of this program a tactic to increase physical activity levels among youth through pedestrian and bicycle activity.

Table 16: Frequency and Percent of MBF Trail Transportation Users (includes all respondents that indicated they use the trail for some type of transportation) for Pre/Post Intervention

Question Number	Survey Question	Survey Response	Freq.(%) (Pre)	Freq.(%) [#] (Post)
6	What is your usual reason for using this trail?	To travel somewhere (e.g., to store, commute to work or school) Both for recreation and transportation purposes	12(5.4%) 12(4.1%)	0(0.0%)
6d	During the past 7	0	36(15.7%)	2(1.3%)

	days (including	1 Day	9(3.7%)	5(4.0%)
	today), how many	2 Days	2(0.9%)	3(1.5%)
	days have you used	3 Days	4(1.9%)	1(0.9%)
	this trail for	4 Days	2(0.8%)	0(0.0%)
	transportation	5 Days	6(2.8%)	1(0.6%)
	purposes (to get	6 Days	0(0.0%	0(0.0%)
	somewhere)?	7 Days	1(0.5%)	2(1.5%)
	ŕ	No response	0(0.0%)	0(0.0%)
6e	What activity do you	Walk	15(6.6%)	5(3.2%)
	usually do when you	Bicycle	12(5.3%)	8(6.6%)
	are on this trail for	NA	20(8.6%)	0 (0.0%)
	transportation	Jog or Run	0(0.0%)	1(0.6%)
	purposes?		, ,	
6f	How much time do	Less than 15 minutes	11(4.8%)	5(4.9%)
01	you usually spend on	Between 15 to 29 minutes	5(2.1%)	3(2.3%)
	the trail per visit	Between 30 to 44 minutes	5(2.3%)	5(3.6%)
	when you use it for	Between 45 to 59 minutes	3(1.3%)	0(0.0%)
	transportation	Between 1 to 2 hours	4(1.7%)	0(0.0%)
	purposes?	Detricon I to 2 nours	.(1.7,0)	3(0.070)

The percentage listed for frequency in question 6 for the MBF Trail refers to the percentage of all respondents to this question (that is, of all respondents to the survey (PRE), 4.1% used the MBF Trail both recreation and transportation). For questions 6d-6f, the percentage represents the percentage of the 24 individuals (PRE) use the trail for some sort of transportation purpose.

Apparent from the data in Table 16, a limited number of users of the MBF Trail, use the trail for active transportation. The Transportation Research Board/Institute of Medicine concluded that there is substantial evidence supporting how trail creation can promote active transportation⁶⁴.

Spartanburg County's development of trails, such as the MBF Trail and Wadsworth Trail, can and does promote daily bouts of "life style" activity to meet current activity

recommendations and positively affecting transportation trends in the communities where such trails are located. For approximately \$50 million, the price of a single mile of four-lane urban highway, hundreds of miles of bicycle and pedestrian infrastructure can be built⁶⁴. However it should be noted (see Focus Group data) that many MB focus participants cited a variety of barriers preventing active transportation on the MBF Trail, primarily a lack of connectivity to the downtown business hub.

<u>6 MBF Trail and Wadsworth Trail</u> <u>Focus Group Findings</u>

Focus group participants were recruited by Home Owners Associations and through email outreach by the Spartanburg County Recreation District and PAL. Requirements for participation were that the individual must be a user or a non-user of either the MBF Trail or the Wadsworth Trail. Two focus groups for MBF Trail users and/or non-users were administered at the Downtown Library in Downtown Spartanburg. One focus group of MBF Trail Advisory Board Members was administered in the Downtown Library as well. Two focus groups for users and/or non-users of the Wadsworth Trail were administered at a public library near the Wadsworth Trail. Participants were informed that refreshments would be provided and they would receive \$20 incentive upon completion of the focus group. Each focus group was approximately 60 minutes in duration.

The focus groups were audio-taped and participant responses were manually recorded by two individuals. Once typed, the incomplete or illegible notes were corrected. The handwritten notes were reviewed by each question, and a coding theme was created for each question within the study

guide. The notes were then coded with other codes added if needed. The moderator coded the final notes and wrote the summary of findings. Richard Kruger's Analyzing and Recording Focus Group Results⁷² was used to develop the themes from the coded notes and findings.

6.1 Participant Description for MBF Trail Users

Prior to beginning the focus group in each participant completed a brief survey. Twelve adults participated in the two focus groups (4 males; 9 females). Nine participants were White, three identified themselves as black, one did not answer, and 9 participants (75%) held a college degree. The remaining three focus group participants (25%) attended college from 1 to 3 years. The average age was 51 with a range from 24 years of age to 75 years of age. Five (42%) participants were employed for wages, two (17%) participants were self-employed and the remaining five (42%) were identified as retired. The household income of the participants ranged from \$20,000 to \$80,000 or more and 85% of participants were married. All 13 participants (100%) resided within one-mile of the MBF Trail.

6.2 Focus Group Questions and Selected Responses for MBF Trail

1. <u>If someone asked you to describe the MBF Trail what would you say?</u>

- o Paved trail
- Convenient for people in area
- Flat
- o Relatively straight (can be good or bad)
- Crowded after work hours or on the weekends
- Communal
- o Intersected with 4-5 streets
- o Relatively safe (but do have to cross streets)
- People don't know etiquette bells, or "to your left"
- Easy walking trail
- People of all different types out there doing different exercise
- Used for transportation

2. Since all of you participating in this focus group have been identified as users and non-users of the MBF Trail what are the current deficiencies of the trail that may prevent you from using the trail?

- o Garbage trucks along trail- smell
- o Issues of safety
- o People not cleaning up after dogs
- o Bathroom that is not a port- a- potty

- More businesses
- Not feeling wide enough- congestion hedges come over
- Having a "destination" along the trail would make it more of an attraction
- o Connecting it to downtown would be a positive
- Lack of awareness of the trail
- Wouldn't feel safe without lighting at night (or emergency lights)

3. <u>In your opinion can/does the MBF Trail positively or negatively impact the Spartanburg community?</u>

- Economically
 - o It COULD be but currently is not
 - Contributed to one participants relocation: seeing a trail- active, community
 - If there would be a focus on developing that corridor, then maybe more opportunities like off the SRT (Greenville's Swamp Rabbit Trail).
 - Selling point for families
 - o *nothing negatively right now*

Health

- Positive: in ways that people are exercising that may not have been before- especially for cost reasons
- o Flatness of the course
- When people see people walkinggravitate towards that- stimulus control model
- See the same faces all the time- BUT also see new faces there continuously
- Social Interaction:
 - o People smile, wave, talk
 - Socializing
 - Somewhat like a coffee shop- see familiar places- same concept as the gym
- Nothing NEGATIVE on Social interaction, health, diversity
- Diversity
 - o Gender

- Ages, weight, race
- Variety Level/Type (fitness)
- o It's free so anyone can use it
- o Older people, young kids
- You see EVERYBODY see many people from the community

4. <u>Are you aware of programs on the MBF Trail? How did you hear about the program?</u>

Park Pet Parade: More no's then yes

• Facebook, Humane Society, PAL

Bark at the Park - 9 yes 2 no

• Newspaper, PAL Facebook, word of mouth, signage at dog park as it was being built

Rail Trail 5k run: 8 yes 4 no

• Spartanburg running club, marking on the trail, newspaper

Free Fitness Classes: 3 yes 8 no

• Signs on the trail, PAL newsletter

Christmas Themed Scavenger Hunt 3 yes, 8 no

• Friends who have small children, signage, email Trains on the Trail opening – mostly no

5. <u>If property adjacent to the MBF Trail becomes</u> <u>available, what would you like to see? Brochure</u> boxes, do you check them?

- Bathroom
- Fitness stations
- Picnic area not next to parking lot
- Pet supply store
- Playground
- Eateries
- Drink stands- healthy
- Garden
- Place for picnic- table and open- space
- Studio space for artists
- Small business office space
- Open area- to throw around disc etc.

• Brochure boxes

- o Have a trail map
- Perhaps should be some information in the middle
- Place where you could see what's happening around Spartanburg
- Information: focused based on the theme of the trail- community events – non profit
- Signage to promote businesses
- ** most people are aware, but they aren't checked much **

6. What do residents, including yourself need in term of programming and infrastructure that would encourage use? What would encourage neighbor's use?

Programming

- Marketing to the youngest kids- positive place to go
- Maybe money should be spent on awareness campaigns
- Using schools to encourage use
- Fitness groups
- Negative: prayer circle meeting on the trail – inconvenient for those using the trail
- More of connection with neighborhood associations find out what the neighborhoods may be interested in- to get input on the needs/wants
- Special needs communities need to address special needs- awareness – child with special needs paired with a child without special needs
- Have bike clubs

Infrastructure

- o Widening the trail
- o Longer
- o Connectivity to downtown
- Lighting
- o Safety- having police presence
- o Call boxes
- Restrooms
- Water fountain (doesn't always work)

- Playground- soft surface- includes everyone – accessible
- Nature identification- historical information – educational tid bits along the trail- making it a learning adventurethis could tie into programming having people come in and lead
- Extending it to connect more with Cedar Springs Area
- Better/safer access from across Union St to the trail.

The next question is about active transport. Active transport for this focus group is defines as walking and or cycling for transport.

7. <u>How can active transport be promoted on the MBF</u> Trail (probe what is active transport)

- Ingles will allow you to bring your bike in the store
- Bike racks (inside or outside)
- Lack of destinations may be prohibiting people for using it for active transportation
- Connecting it to places where people are going (business hub downtown)
- People using it are biking or walking- seems as though they don't have cars
- Make sure that access areas good transitions for bikes and walkers to encourage it as well as cross streets
- Day/event: go to school or work on the trail –
 people may be surprised if they tried it how
 close they really were- how much faster you get
 there
- Getting advice on the "best route"
- City needs to do a better job of bike lane marking
- Knowing if there is a bus that has bike racks knowing if bike racks are available where you are going!

8. Do you think the trail has had an impact on businesses adjacent to the trail?

- Not currently- because they may not be there- lack of awareness
- Potential for it- just not advertised or utilized the way it needs to be
- Outside seating along the trail
- People aren't necessarily used to walking AND going to a restaurant
- Would you be more likely to support or frequent a business along the trail
 - o if there were shops... then yes!
- Coffee Shop (Little River)- go to it more than if I would have to drive into it
- Parking places behind breakfast place which may have had it having an impact
- It would be MORE so if they advertised a little more and encouraged trail users to frequent their businesses
- Some places you feel more comfortable stopping if you're hot and sweaty

6.3 Participant Description for Wadsworth Trail Users
Prior to beginning the focus group in each participant
completed a brief survey. Thirteen adults participated in the
two focus groups (4 males; 9 females). All thirteen participants
were White, and 10 participants (77%) held a college degree.
The remaining three focus group participants (23%) attended
college from 1 to 3 years. Four (31%) participants were
employed for wages, two (15%) participants were homemakers
and four (31%) were identified as retired. The remaining
participants identified themselves as either out of work or

6.4 Focus Group Questions and Selected Responses Wadsworth Trail

1. If someone asked you to describe the Wadsworth Trail, what would you say?

- Peaceful
- Easily accessible
- User friendly
- Dog friendly
- Exercise
- Great path for you kids to ride bikes or to push a stroller on
- Paved trail close to the street fairly level, somewhat narrow
- Wouldn't go on at night- not well lit not just people but animals
 - Lighting: issue but can't find a way to fund it
 - Roots have come up- bumpy so when you can't see it's not safe

volunteers. The household income of the participants ranged from \$10,000 to \$80,000 or more and 50% of participants were married. Approximately 92% of participants resided within one-mile of the trail.

- Safe place to get out and walk on- ride bikes etc.
- Long enough for good run out of it
- Pavement
- However- may not be wide enough for cycling (side by side)
- Well maintained
- Encourages people to walk around the communityrather than use cars
- Safe, compared to MB- where there have been some "attacks"
- Interconnector of neighborhoods and for Westview
 - o Dirt comes out on the sidewalk
- Family oriented children and parents out together
- Dogs
 - Rental houses
 - Caldwell- stray dogs

 Golf cart – takes up the whole trail – purpose of the trail is for exercise

• Purpose:

- o Exercise
- Get from neighborhood to neighborhood for playmates
- o Walking to the Westside Club
- Transportation
- Community builder makes Westside more 'appealing'

- 2. Since all of you participating in this focus group have been identified as non-users and users of the Wadsworth trail, what are the current deficiencies of the trail (probeproblems with the trail) that prevent you from using the trail?
 - Lighting for safety- people and cards
 - Maintenance Roots coming up (Magnolia to Hawks Creek) dirt run off-erosion
 - Promotion of it presented it as "Woodridge users" that's the "Westside Club Trail" if you aren't in SES
 - Lack of awareness that it is open to EVERYONE
 - Lack of- circular Route
 - Lack of- markers- distances- routes
 - Map at Westside Club- but if you don't start at that end
 - Points of interests along the way- tagging trees, owl nesting box- educational experience
 - More programming
 - Speed of cars and the trail is close to the road lack of feeling safe – talk about possibly having signs that say your speed limit
 - Parking if you are traveling from across townmaybe Westside Club needs to make it more public about free parking
 - Nice that now you don't have to pop a curb to get from one section to another
 - Mixed opinion of whether bike racks would increase users

 Surrounding neighborhoods probably have bikes- if you're coming from a lower SES may actually increase

3. In your opinion can/does the trail positively or negatively impact your community (probe-economically, health, diversity, social interaction)?

- Attractive drive out on Willis
- Most people don't see negative issues with trail
- Suggestion: during HOA meeting- survey for nonusers – or on HOA website or newsletter
- Yes- promotes health- gives people an option to get out and walk
- Social- meet at the Westside Club- and then go for the run
- Couples, dogs, kids, families observed on trail
- Ethnic diversity- reflects the neighborhoods
- Willis Road was so bad to begin with- now Willis Road is way more kept up and maintained
- Real-estate- "close to a walking trail" seen as a positive
- Diversity- not much
 - A little from the Hispanic community (groups) social interaction
- To recap: All positive

4. What do residents, including yourself need in terms of programming and infrastructure that would encourage use on the Wadsworth Trail? What would encourage neighbors' use?

- Lightening
- Bulletin Board where people can post clubs ideas etc.- put in a central location
 - Especially geared toward familieschildren etc.
 - Map of the trail central location of one
- Running/walking clubs for adults and children
- Get children hooked on it from a young age
- However: some hesitation because in communities they don't know each other that well
- Westside Club- sponsor activities
- Bike town- kids... not cyclists
- Theme activities Easter, Halloween
- One person says that programming may not be the solution to getting users out on the trail – because of the problem of motivating to get people out on the trail
- Trail Head sign not just at the Westside at the stop sign perhaps?

5. Are you aware of programs on the trail (Walk to Whoville, Cleanup Day, Dog Walk, 5K Run, etc.)? How did you hear about the event?

- Promotion issue: Walk to Whoville- too short of notice
- Whoville- Woodridge neighborhood magazineanother through email- everyone in this group was aware of it
- Clean-up Day: all were aware
- Dog Walk: No one was aware of the dog walk
- 5k run: 2 people were aware- through PAL and through Westside Club
- Cleanup Day: yes everyone knew about it
 - Some people got flyers others saw signs on the trail
- 5 K- most people were aware
- Dog Walk
 - o Mostly no's

6. Are you aware of the box on the Trail sign at the Westside Club? What information would you like to be available there?

- About ½ and ½ yes and no
- Programs advertising, marketing should be provided
- Kids and programs- get someone to sponsor it
- Activities going on in the Spartanburg community area recreational activities promotion
- Suggestions to make it stand out more

What information would you want available?

- o Programming information
- Length of the trail especially for runners for planning purposes
- Mile markers along the way- or knowing starting and ending points how far
- Setting goals for kids- promote informationgood summer promoter- like the library does a reading program- chart with coloring it in... for parents to use – tap into elementary schools
- Adult Wellness: Start of a new year- track your runs- make it your goal to get out and walk
- Walking club: contact number- meeting place etc.

7. Are you aware of the intention to extend the trail? Do you know who to contact to be involved or donate?

- People were aware the intention to promote trailbut mostly have not on who to contact to be involved or donate
- Maybe should be through HOA again
- Aware of the intention
- Contact: 2 people were aware of who to contact
- Discussion about HOA's and having brief surveys with the meetings- or in the mail with the dues
- However many participants say that the turnout for the HOA meetings is very small

The next question is related to the economic impact of the trail.

8. Do you think the trail has had an impact on businesses close to (i.e., travel to Target, other shops) to the trail?

- Anytime Fitness will be built near Dollar Store
- Connector to Target
- Right now: don't see people going to those shops however if a connector was built – too dangerous otherwise!!!!
- Helps the Westside Club
- However: if it did extend over to the Target area: would it be used- 2 said yes with more local shopsor restaurants
- Maybe if there was something there they would walk to it
- Prior to beginning the focus group in each participant completed a brief survey. Five adults participated in this focus group (1 male; 4 females). Four participants were White, and one participant was Asian. Eighty-percent held a college degree. The remaining one focus group participant (20%) attended college from 1 to 3 years. Two (40%) participants were employed for wages, two (40%) participants were homemakers and four (31%) were identified as retired. The remaining participant identified herself as out of work. The household income of the participants ranged from \$0 to \$80,000 or more and 80% of participants were married. Approximately 80% of participants resided within one-mile of the trail.

6.6 Focus Group Questions and Selected Responses MBF Trail Advisory Board

1. If someone asked you to describe the Mary Black Trail, what would you say?

- Many types of fitness
- Many types of races
- People trying to get fit
- Popular
- Convenient
- Flat
- Central hub of activity week and weekends
- Paved
- Public
- Used at all times of the day
- All types of people- obese and really fit
- Safe

2. Since all of you participating in this focus group have been identified as users of the MBF Trail, what are the current deficiencies of the trail (probe-problems with the trail) that prevent some people perhaps from using the trail?

- Crossing-busy streets- feeling of being unsafe
- Not long enough
- More points of interest for children (playground)
- Marking trees- education integrated with nature
- Drops off along the trail steep
- Cut off from downtown
- Bathroom

3. In your opinion can/does the trail positively or negatively impact the Spartanburg Community (probe-economically, health, diversity, social interaction)?

<u>Economics – positives</u>

- YMCA
- Restaurants
- Town houses have gone in
- If it were longer- it would be more opportunity for businesses
- Economic opportunity to convert into a "destination town" like TR [Traveler's Rest, SC]
- Non- threatening way to get out and get activity
- Not enough children out on the trail
- Cross section of the city- any group you could think of
- More diverse than other trails-You've got "everybody" out there!
- Social interaction
- Positive- wide enough for groups of people to use it
- Dog park- positive

4. If property adjacent to the MBF Trail becomes available, what would you like to see?

- Apartments
- Green space
- Offices
- Outdoor gym
- Bike park
- Kids park
- Extreme sports
- Meditation garden
- Picnic tables (shelter)

5. What do residents, including yourself need in terms of programming and infrastructure that would encourage more use? What programs would you like to see continued? Are you aware of the brochure boxes, do you check them? Programming and infrastructure

- Programming- with an organization to handle it
 - Geocaching
 - People already have groups that bring to the trail
 - Maybe just market the trail to people who would bring the programming
 - o Length would be good for 5K training
 - o Data about safety
 - Harder to take ownership of it if you don't live in that area
 - Westside population may not be coming over here
 - "Near"- within quadrant to the East of the trail – work within a mile of the trail
 - o physical visibility lack of signage
 - o Sign where you come into park
 - o Really needs to connect to downtown
 - o Crosswalk

Brochure boxes

- Some people were aware (4/5)- but not really checked
- Dog park idea: message kiosk- at the ends- and posting activities instead of in a box
- o "Good for You"- connect to that initiative

The next question is about active transport. Active transport for this focus group is defined as: walking and/or cycling for transport.

<u>6. How can "active transport" be promoted on the MBF Trail</u> (probe what is active transport)?

- Bike racks
- Businesses along the trail IF direct connection
- feel that is hard to promote until it is connected to urbanized hub to where the businesses are – once this is done then go towards marketing ideas
- LENGTH! INCREASE!
- lighting however cost, and attracting the wrong group of people
- Skateboarders use it for transport
- See people carrying groceries

The next question is related to the economic impact of the trail.

7. Do you think the trail has had an impact on businesses adjacent to the trail (probe-have you used, purchased, frequented any business near the trail when on the trail; are you more likely to frequent a business that provides services (i.e., food, drink for trail users)?

- Coffee shop: eventually but not really focused on that type of business
- Needs to be better access for this to be effectivedirect connection (like BikeWorks)
- Bull Hogs BBQ- from the trail it seems hard to access b/c it is just under growth- not direct....
- Billy D's
- Don't' think the retailers have taken advantage of this yet

Final question

8. What role do you envision the committee having in the future? How involved do you intend to be?

- Worry about an Advisory Group with no-one to convene them without a volunteer –
- Economic development person
- Need government people involved
- Who takes the lead on that going forward- will it all be named the MB RT? Who takes lead on that – will it be separate groups taking control
- Advisory Group may just be for this section here
- Integration with county and city government
- If it gets bigger- do you intend to be involved
 - Participant 1: yes invested "master plan for rail-trail" – feels need for

- advisory for MB love to see it grow
- Participant 2: yes
- Participant 3: yes but also with the large
- Participant 4: more interested in the larger plan really – feels that what has been done- is quite good- at this point connections etc. are more important
- Part 5: agrees with participant 4- will be involved in larger portion

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