

New Castle
Community Wellness Initiative



Community Wellness Assessment Report
and
Wellness Action Plan

Delaware Greenways

August 2011

TABLE OF CONTENTS

Acknowledgements.....	3
I. Introduction:	4
The City of New Castle Community Wellness Initiative.....	4
Project Background and Purpose.....	4
Process and Timeline	5
Community Profile	6
II. Assessment	13
Timeline and Methods	13
Summary of Findings.....	14
Assessment by sector.....	14
Follow-up Assessments and Monitoring.....	41
III. New Castle Wellness Action Plan.....	43
Plan Purpose and Structure	43
Mission, Vision, and Guiding Principles	44
Wellness Plan	44
Moving the Plan Forward.....	60
IV. A Model for Community Wellness in Delaware.....	61
Lessons Learned.....	62
Appendices.....	63
Appendix A. List of Initiative Partners.....	64
Appendix B. General Population Survey Questionnaire	66
Appendix C: CHANGE Tool Sector Summaries	73

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Many other individuals contributed to this effort by completing surveys, answering questions, and participating in other ways; this document is a product of community collaboration.

¹ See Appendix A for list of initiative partners and contact information.

I. INTRODUCTION:

THE CITY OF NEW CASTLE COMMUNITY WELLNESS INITIATIVE

PROJECT BACKGROUND AND PURPOSE

The City of New Castle Community Wellness Initiative began in late 2010 with the goal of improving the health of community members by making it easier to live a healthy lifestyle. Delaware Greenways, with approval from the City of New Castle, took the lead as the managing body of the Initiative. The Wellness Leadership Team was formed, comprising representatives of community organizations, businesses, and residents, to begin this community-driven effort to counteract major public health concerns related to unhealthy weight, tobacco use, and chronic disease. Rather than emphasize the more traditional individual-centered approach to health intervention, the Initiative aims to affect change at the community level.

Smoking, high-blood pressure, and overweight-obesity, are key factors in the top most preventable causes of death in the United States.² Studies and research show that people in the U.S. are living shorter lives of lower quality due to the effects of smoking and overweight-obesity. While smoking is at its lowest rate (17.8% in 2008) among Delaware adults since 1982, when such data began being collected, obesity statewide has risen steadily. Data show that the number of obese adults in Delaware doubled between 1990 and 2008 (a trend occurring nationwide). While smoking rates are trending in the right direction, more can be done to ensure additional death and disease is prevented. On the other hand, *something must be done* to ensure that the dire prediction—that the generation of children growing up today will be the first in the history of the U.S. to live shorter, less healthy lives—does not come true.

Overweight and obesity is linked to serious health risks, including chronic and fatal diseases such as diabetes, heart disease, stroke, and some cancers; two contributing factors to overweight are poor nutrition and physical inactivity. Recommended approaches for achieving and maintaining a healthy weight are seemingly simple: engage in moderate activity at least two and one-half hours a week, and eat a diet primarily comprising fruits, vegetables, lean protein, and whole grains, but low in fat, cholesterol, and added sugars. However, putting these recommendations into practice is more complex.

The Institute of Medicine asserts that, “it is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.” There are many factors that influence the development of an individual’s lifestyle behaviors, from interpersonal relationships, to his/her work environment, to community characteristics. Reducing overweight/obesity across the lifespan will require community-level, municipal-wide support of healthy behaviors through policy, environmental, and systems changes.

²Danaei G, Ding EL, Mozaffarian D, Taylor B, Rehm J, et al. 2009 The Preventable Causes of Death in the United States: Comparative Risk Assessment of Dietary, Lifestyle, and Metabolic Risk Factors. PLoS Med 6(4): Accessed on May 2, 2011, from: <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000058>

The drivers to change exist within local municipalities, organizations and the everyday places in society – even those for which public health is not the primary mission.

The New Castle Community Wellness Initiative is based on the premise that improving individual and community health will require community-wide commitment and changes.

PROCESS AND TIMELINE

The New Castle Community Wellness Initiative is a multi-sector community effort to identify opportunities and impediments to achieving a healthy lifestyle, and to address those issues through developing and implementing a plan of action. Figure 1 illustrates the timeline of the Wellness Initiative and its key components.

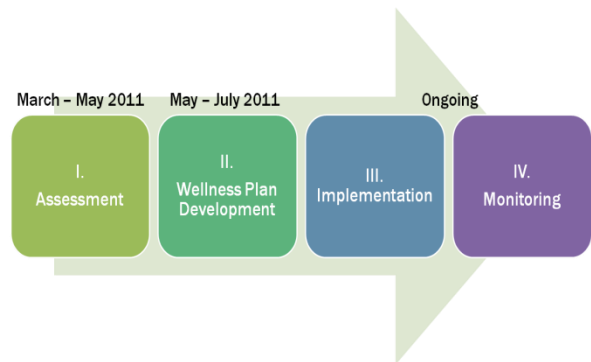


Figure 1: New Castle Community Wellness Initiative Timeline

Phase I began in March 2011, with assessment of opportunities and impediments within different sectors of the community, including the Community-at-Large, schools, work sites, community institutions and organizations, and health care sites. The assessments focused on discovering existing policies³, environmental conditions⁴, and systems⁵ within the community. (Details of the assessment are given in section II of this report.)

Upon completing the assessments in May 2011, Delaware Greenways began developing a draft Wellness Action Plan. Findings from the assessments provided the basis for developing the Wellness Action Plan goals, objectives, and action steps which are intended to be used to guide further efforts in the New Castle community to enable people to live healthier lives.

Implementation of the plan’s recommendations began even while the plan was still being drafted. Most significant of those actions was the re-birth of the Penn Farm, a community driven and community serving farm that will offer a variety of health and wellness resources (explained in

³ Policies: includes laws, rules, protocols, and procedures designed to guide or influence behavior; policies can be either legislative or organizational in nature, such as a clean indoor air law, or office policy requiring all vending machine foods be healthy.

⁴ Environmental conditions (Environmental change): can be physical, social, or economic in nature and influence people’s practices and behaviors. Examples include the availability of smoking cessation services to employees (physical), overall positive attitudes and community support toward no-smoking policies (social), and high prices for unhealthy food choices (economic).

⁵ Systems: all elements of an organization, institution, or system in the entirety of its functioning, and may include both policies and environmental conditions. An example of a system is the school district or county parks and recreation system.

further detail in section III). Amidst the many positive actions already in progress, the plan presents the community's complete list of goals and recommended steps to be taken toward achieving the wellness goals of the community.

Finally, a system of monitoring should be set and adhered to. A general monitoring approach is given in section III alongside the action plan; a more detailed monitoring program should be created to ensure a comprehensive process. When monitoring is done correctly it provides an abundance of information that helps perpetuate success. Monitoring progress with the wellness action plan will inform which components are effective and thereby ensure effort is placed in areas of greatest need and potential impact.

COMMUNITY PROFILE

The roughly defined area to which this Wellness Initiative pertains is, approximately, the area bounded by Route 295 to the north, Route 13/40 to the west, the Delaware River to the east, and the southern municipal boundary (see Figure 2). The study area covers approximately nine square miles and has a population of approximately 8,000.⁶



Figure 2: Map of the New Castle Community Wellness Study Area

⁶ Census 2000.

The incorporated city of New Castle (outlined in red) is located in the southeastern portion of the study area and covers approximately three square miles along the Delaware River. The Wellness Initiative emphasizes the incorporated city⁷, highlighted in Figure 3 below, which is home to roughly 5,000 people.⁸

⁷ At the time of writing this document, the Initiative has had minimal involvement from the community beyond the municipal boundary; however, the wider study area provides a much more natural physical/geographically whole and connected community rather than the political boundaries that distinguish the city from the unincorporated surrounding area. With the physical attributes and infrastructure of the community a significant component of this Community Wellness Initiative, it is important to use a congruous area of study and focus. It is also important to keep in mind that other boundaries, including school district and municipal, define some of the limits of the reach of this initiative. For example, policy change that the city implements is limited to the areas within its boundaries, therefore for the same effect in the rest of the study area, similar policy would need to be put in place by the county, or other governing body that addresses a particular issue.

⁸ Census 2010



Figure 3: The incorporated City of New Castle received emphasis in the assessment and plan making phases of the Wellness Initiative

Land Use and Physical Geography

New Castle, established in the late 1600's, is well-known and loved for its historic character including its brick sidewalks, the town square and park, and colonial architecture. While the town was established on a grid pattern and the walkable/bikeable, mixed-use downtown, with pedestrian oriented building fronts remains the hallmark of New Castle, modern suburban style development typical of the 1950's is also part of the city design. The landscape emanating from the historic center features a number of industrial parks, strip mall developments, and single family residential neighborhoods with density averaging about 4-8 units per acre. The historic center is connected to these developments by the major arterial roadway, Route 9, which runs roughly parallel to the Delaware River. Two other main arterial roads that run through the community are Route 273, which runs west out of the historic center of New Castle, and Route 141, which branches off from Route 273 to the northwest. The contrasting development patterns in New Castle are a juxtaposition of a bikeable, walkable community and an auto-dominant community all within the city bounds. Figures 4 and 5 show these contrasting areas of the community.



Figure 4 (left) shows a typical street in walkable, historic New Castle; Figure 5 (right) shows Route 9, in contrast, which is clearly favors auto use over non-motorized transportation

Development patterns of the city and study area have been dictated in great part due to the natural geography of the landscape. The low-lying, flat land is interspersed with marshland, inlets, and canals, which serve to define the boundaries of many neighborhoods and influence the alignment of roads, trails, and other travel routes and recreational areas.

While known for its riverfront Battery Park, the City of New Castle contains six other municipal parks (Dobbinsville, Susi, Van Dyke, Bull Hill, Penn Valley, and Buttonwood). The wider study area contains an additional seven parks as well as numerous other designated open spaces. Parks and open space are important to wellness; they provide space for active and passive recreational activity, and can be used for both formal and informal non-motorized linkages between destinations.

Demographics:

Contrasts between the incorporated city of New Castle and the wider study area are not limited to physical geography. The demographic characteristics of the incorporated city of New Castle differ from the greater study area. Therefore, the demographics of the incorporated city, as well as for the 19720 zip code, are summarized in Table 1 below. Note that the 19720 area code covers the entire study area and extends north to Wilmington and south to Delaware City; however, it provides the best available representation of the unincorporated part of the study area.

Table 1: Demographic Data comparisons for City of New Castle, 19720 zip code, Delaware, and U.S.

	City of New Castle		19720 zip	Delaware	U.S.
	Estimate	Percent	Estimate/Percent	Percent	Percent
Total population	4,989		55,539		
Median age (years)	43.8	(X)	34.6	37.8	36.5
Under 5 years	136	2.7	6.9%	6.7	6.90
18 years and over	4,207	84.3	73.9%	76.2	75.40
65 years and over	754	15.1	10.5%	13.8	12.60
Population 25 years and over	3,748		36,430		
High school graduate or higher	(X)	85.4	78.4%	86.5	84.6
Bachelor's degree or higher	(X)	25.2	16.3%	27.5	27.5
White	3,387	67.9	63.6%	72.5	74.50
Black or African American	1,469	29.4	29.6%	20.5	12.40
American Indian & Alaska Native	6	0.1	0.2%	0.3	0.80
Asian	14	0.3	1.7%	2.9	4.40
Native Hawaiian & Other Pacific Islander	0	0	0	0	0.10
Some other race	25	0.5	3.1%	2.1	5.60
Two or more races	88	1.8	1.8%	1.7	2.20
Hispanic or Latino (of any race)	25	0.5	7.3%	6.7	15.10
Median Household Income	\$57,500	--	\$46,669	\$57,618	\$51,425

Sources:

Data for incorporated City of New Castle: U.S. Census Bureau, 2005-2009 American Community Survey

Data for 1972 zip code: U.S. Census Bureau, 2000 Census

Identifying the nuances in the community characteristics can have important implications for identifying and addressing community health concerns. As indicated in the demographics statistics in Table 1, the City of New Castle is significantly different from the wider community study area in the following ways:

- City of New Castle has a significantly lower proportion of children under the age of five
- City of New Castle residents have higher educational attainment
- City of New Castle has a significantly lower percentage of Hispanic/Latino residents (0.5%) compared to the proportion of Hispanic/Latino residents in the surrounding community (7.3%)
- Residents outside of incorporated New Castle have lower household incomes; the 19720 zip code (which includes the full study area) had the highest foreclosure rates in Delaware during 2010.⁹

⁹ Delaware State Housing Authority. 2011. Accessed 25 May 2011 at: http://www.deforeclosurehelp.org/media/2010_mort_complaints.pdf

The contrasts are even more distinct when comparing characteristics of the residents of the historic center of New Castle to the wider study area. The population of the former is, on average, older and of a higher socioeconomic status.

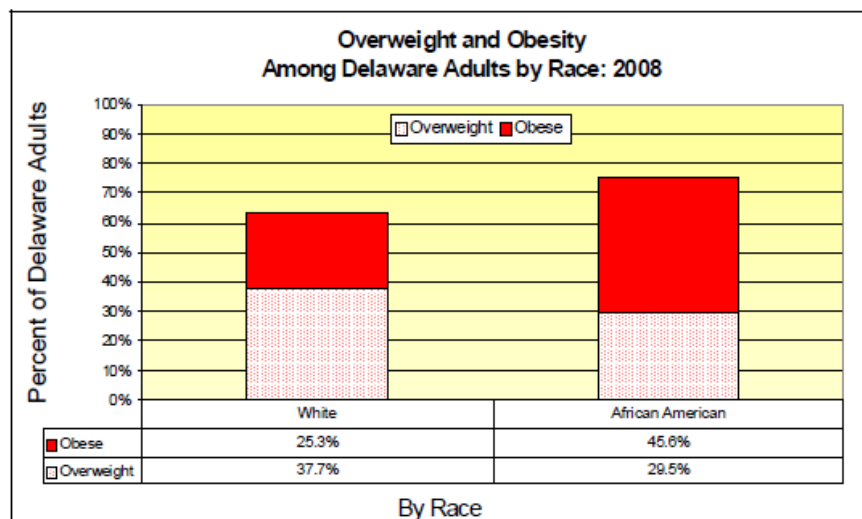
These variations in demographics are important to take into consideration for creating a Wellness Initiative that reaches all community members and has lasting positive effects. Health problems are not evenly distributed among the population. Delaware’s Behavior Risk Factor Survey Report and other studies show that certain populations are unevenly affected by various health problems and engage in certain health impacting activities unequally. The Center for Disease Control and Prevention published the *CDC Health Disparities and Inequalities Report—United States, 2011*, which provides detailed information about health disparities among population groups and should be referenced to further develop specific implementation methods of the Wellness Action Plan presented in section III.

Smoking and Tobacco Use Disparities

In Delaware only 8.7 percent (CI = 6.7-10.7 percent) of college graduates smoke cigarettes, compared with 26.3 percent (CI = 22.4-30.2 percent) of adults with a high school diploma.¹⁰ Similarly, an adult with a lower household income is more likely to smoke cigarettes than an adult with higher household income.

Obesity and Overweight Disparities

Obesity and overweight trends are similar, where approximately 32 percent (CI=23.0-41.4 percent) of adults with less than a high school education are obese, compared with 21.9 percent (CI=19.0-24.8 percent) of adults with college degrees; low-income adults have about a 34 percent (CI=26.8-41.4 percent) prevalence of



Source: Delaware Health and Social Services, Division of Public Health, Behavioral Risk Factor Survey (BRFS), 2008.

¹⁰ Delaware Behavioral Risk Factor Survey 2007-2008. Delaware Department of Health and Social Services Division of Public Health. Accessed 15 April, 2011 at: <http://dhss.delaware.gov/dph/dpc/brfsurveys.html>

obesity, compared with 23.3 percent (CI=19.8-26.8 percent) of adults with incomes over \$75,000 a year.¹¹

Nutrition and Physical Activity

The strongest disparities in meeting daily recommended fruits and vegetable servings, per the US Department of Health and Human Services standards, were along educational level lines. Only 14 percent of Delaware adults with less than a high school education are estimated to get the daily recommended servings per day, while nearly 26.7 percent of college graduates met the guidelines.¹²

While roughly half of Delaware adults get the Center for Disease Control and Prevention's recommended levels of "moderate" or "vigorous" physical activity, the types of activity vary among subpopulations. Men are significantly more likely to engage in vigorous physical activity than women (17.7 percent compared to 9.7 percent, respectively). A similar breakdown occurs when comparing people of higher income levels to lower income levels; 7.9 percent (CI=3.4-12.4 percent) of adults with incomes between \$15,000-25,000 reported vigorous activity, compared to 17.5 percent (CI=12.8-22.2 percent) of people earning between \$50,000 and \$75,000 per year.¹³

Additional community characteristics are described in the following section on community assessments.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

II. ASSESSMENT

TIMELINE AND METHODS

The baseline community assessment began in late March 2011 — approximately one month after the Wellness Leadership Team first met. The project timeline, dictated in great part by the project funding availability and guidelines, allowed the Wellness Team to complete the assessment and develop a draft action plan by late June 2011. Consequently, the months of April and May were spent conducting assessments while the month of June was used to process results and develop the Wellness Action Plan.

A variety of qualitative assessment methods were used to establish the baseline conditions and knowledge presented in this report; the Community Health Assessment and Group Evaluation (CHANGE) developed by the U.S. Center for Disease Control and Prevention provided the structure for the process and the CHANGE assessment questions were used for assessment of sites in all five sectors of the community.¹⁴ The CHANGE tool defines the five sectors as:

- **Community-at-large:** includes community-wide efforts that impact the social and built environments, such as food access, walkability or bikeability, tobacco-free policies and personal safety
- **Community Institution/Organization:** includes entities that provide a broad range of human services and access to facilities, such as childcare settings, faith-based organizations, senior centers, clubs, etc.
- **Health Care:** includes places people go to receive preventative care/treatment or emergency health care services (e.g. hospitals, doctors' offices, and community clinics)
- **Schools:** includes primary and secondary learning institutions
- **Work Sites:** includes places of employment, including private offices, restaurants, retail establishments, and government offices

Assessment methods, including in-the-field observation and documentation, interviews, and surveys, were used to gather information. (The methods are detailed further in the context of the subject sector, in subsequent sections.) While the information collected for the community assessments is not statistically sound, care was taken to ensure consistency between numerical survey responses. Written explanation was requested of survey respondents to help clarify responses and provide detail to further ensure consistency and reasoning. Assessment data were handled by only the project manager.

The products of the Wellness Initiative assessment process presented in the following pages provide a qualitative snapshot of many wellness-related characteristics. The information is important for developing a wellness plan for the community as it reveals the assets and challenges in the community and will provide a baseline for comparison of future efforts and progress. Project funding and scope did not allow for quantitative data collection and analysis of wellness-related

¹⁴ The complete CHANGE tool guide and materials are available at:
<http://www.cdc.gov/healthycommunitiesprogram/tools/change.htm>

variables; however, it is advisable to gather such data in future assessments, if possible. Additionally, because those engaged in the initiative and assessments were largely concentrated in or near the historic center of New Castle, future effort should be placed on engaging and assessing sites and areas of the community that were not engaged during this first round of assessments.

SUMMARY OF FINDINGS

At the kick-off meeting of the Wellness Initiative the approximately 20 attendees, which included Wellness Leadership Team members and community residents, generated a preliminary list of “greatest health concerns” for the community. The list included the top state and national public health concerns, such as obesity and diabetes. The list also identified many concerns specific to the area, which were confirmed by the wellness assessments. These real and perceived challenges to a healthy lifestyle in the New Castle community are identified in the list below and elaborated in subsequent paragraphs.

New Castle Community’s Healthy Lifestyle Challenges:

- Health needs of aging population
- Environmental quality (air and water)
- Lack of healthy food options near schools
- Feelings of being unsafe (e.g. due to crime, traffic)
- Auto-oriented culture and communities
- Tobacco access and sales
- Lack of affordable, healthy food sources
- Limited ability to get physical activity in inclement weather
- Lack of awareness, interest, understanding of health issues
- Low motivation
- High cost/perceived high cost of healthy options
- Access to and regular use of health care and regular preventative measures

ASSESSMENT BY SECTOR

Community-at-large

Assessing the community-at-large involved looking at the existing policies, environment, and systems in place in the city of New Castle as well as surveying the general population regarding health-related habits, perspectives, and knowledge. Although the areas outside of the municipal boundaries of New Castle are part of the community study area, assessment of County policies was limited due to the scope of this study; however, future review and integration with the findings herein is recommended.

The following table summarizes the specific methods used to assess the community-at-large sector:

ISSUE OF INTEREST	GEOGRAPHIC AREA OF FOCUS	ASSESSMENT METHOD(S)
Infrastructure and environments for active lifestyles	<ul style="list-style-type: none"> • General assessment of land use and transportation infrastructure in full study area • Detailed assessment in historic New Castle, along Route 9 north of historic New Castle, and along Route 273 and South Street 	<ul style="list-style-type: none"> • Walkability and Bikeability Assessment (includes technical analysis, qualitative, and in-the-field) • Informal interviews with stakeholders • Survey of general population (see Appendix B)
Community member habits, knowledge, perspectives, and preferences	<ul style="list-style-type: none"> • Convenience surveys resulted in feedback primarily from residents of historic New Castle 	<ul style="list-style-type: none"> • Survey of general population (see Appendix B) • Informal interviews and feedback forms
Wellness-related policies	<ul style="list-style-type: none"> • Emphasis on City of New Castle 	<ul style="list-style-type: none"> • Interview/Survey of City Administrator • Review of Comprehensive Plan and government ordinances
Smoking (emphasis on city parks)	<ul style="list-style-type: none"> • Primarily focused within the City of New Castle 	<ul style="list-style-type: none"> • Visual assessment of parks • Informal interviews • Survey of general population

Findings

Generally, the assessment results suggest that the community-at-large (and the City, specifically) does well setting policies and creating environments that promote physical activity and being a leader in the area of wellness. The assessment results contain a substantially more information regarding resources and perspectives related to active lifestyles (parks, trails, etc.) than other wellness issue areas; the community-at-large does not address nutrition, tobacco, and chronic disease management issues at the same level as physical activity and leadership (see Appendix C for numerical results of CHANGE tool survey). This is in large part due to the fact that the City has the most control over local land use and infrastructure relative to nutrition, tobacco, and chronic disease management. These later categories of wellness issues are not conventionally held in the purview of local government responsibility. Consequently, those categories also represent room for greatest creativity for plan making and action.

Likely explanations (as perceived by the City and the Wellness Leadership Team) for why the city is less strong in the nutrition, tobacco, and chronic disease management issue areas are:

- The city is relatively small and must meet the most pressing demands (provide the services that are expected of the city by constituents) such as waste removal, zoning and development guidelines, maintenance of public space (including parks) prior to spending resources on other issues that are not traditionally expected of municipalities (e.g. promoting health check-ups or better nutrition);
- Constituents do not want the local government to interfere with these types of issues that some might see as personal choices; and
- The City (and broader community system) may not be considering the ways that it could have an impact on these issues within reasonable bounds of the policies and infrastructure that residents accept and expect from local government.

It is most likely a combination of these reasons and possibly others. Whether the city and community as a whole chooses to take action to target these other issues that are not as strong is a dialogue that should begin to take place. Although the City can speculate that constituents will not accept action to address these other health issues there may be acceptance among the general populace. Moreover, there are likely some factors which influence wellness that the city and community level organizations do already have influence over; with additional attention and innovation, changes to those factors might be enough to lead to improved conditions for chronic disease management, tobacco use, and nutrition.

The following paragraphs summarize the findings for the community-at-large sector specific to infrastructure and environments for active lifestyles; community member habits; knowledge, perspectives, and preferences; wellness-related policies; and smoking (emphasis on city parks).

Infrastructure and environments for active lifestyles

One of the prioritized issues for the Wellness Initiative was to examine the extent that community members are able or encouraged to walk/bicycle/jog. The assessment examined factors that enable, incentivize, or impede active lifestyles, which serve as indicators of peoples' ability and likelihood to get exercise, and in turn reduce his/her susceptibility to death due to overweight/obesity—a highly preventable cause. The walkability and bikeability assessment examined the conditions of infrastructure and community design through both quantitative computer-based and qualitative field-based work to determine the conditions and methods that impact the choice to walk, jog, bicycle, or engage in any other form of physical activity for transportation or recreation.

Field-based assessment focused on two significant travel routes in the community: Route 9 between the Buttonwood neighborhood and the historic center of New Castle and parts of Route 273, Delaware Street, South Street, and other links to the historic center from the north and west (see Figure 5). The technical analysis involved using Geographic Information System (GIS) technology to analyze land use patterns and pedestrian/bicycle linkages on community-level scales (i.e. distances of approximately half-mile or greater versus a few blocks). Existing policy and

planning documents were also reviewed for their influence, and community interviews and surveys supplemented the walkability and bikeability assessment findings¹⁵.

The walkability and bikeability of New Castle, when considered at the broad, community scale, is the product of land use patterns and transportation infrastructure. State and local policy decisions and the decisions of individual property owners are ultimately what shape the land use patterns and transportation infrastructure.



Figure 5: Map of walkability and bikeability assessment areas

With regard to state policy, the state has little direct influence of land use, but does manage transportation infrastructure through the Delaware Department of Transportation (DelDOT). Traditionally, DelDOT's work has focused almost exclusively on accommodating automobile travel, but now places growing emphasis on accommodating other modes of travel, including bicycling and walking. The Governor's Executive Order Number 6 (2009) establishes a complete streets policy to

¹⁵ (The full Walkability and Bikeability Assessment Report can be obtained from the Delaware Greenways website or by request to Delaware Greenways or the City of New Castle.)

be followed by DelDOT. The policy is aimed to create a better balance of transportation infrastructure between automobiles and non-motorized transportation and is resulting in more sidewalks, crosswalks, and bicycle and pedestrian infrastructure in transportation projects. The Complete Streets policy is already beginning to have a positive impact on the New Castle community. In order to maximize the positive effects on community health, the Wellness Action Team should make an effort to promote coordination between DelDOT, county, and municipal agencies in planning and development.

As with state level policy and implementation, local land use policy and development needs to also focus on coordination in order to fully realize opportunities for promoting active lifestyles. Cooperation between New Castle County and the City of New Castle on land use decisions and longer-term planning is important to creating the effective policies and, ultimately, the land uses and landscapes that will encourage physical activity and healthy lifestyles. Figure 6 shows the current land use and transportation patterns in the study area.

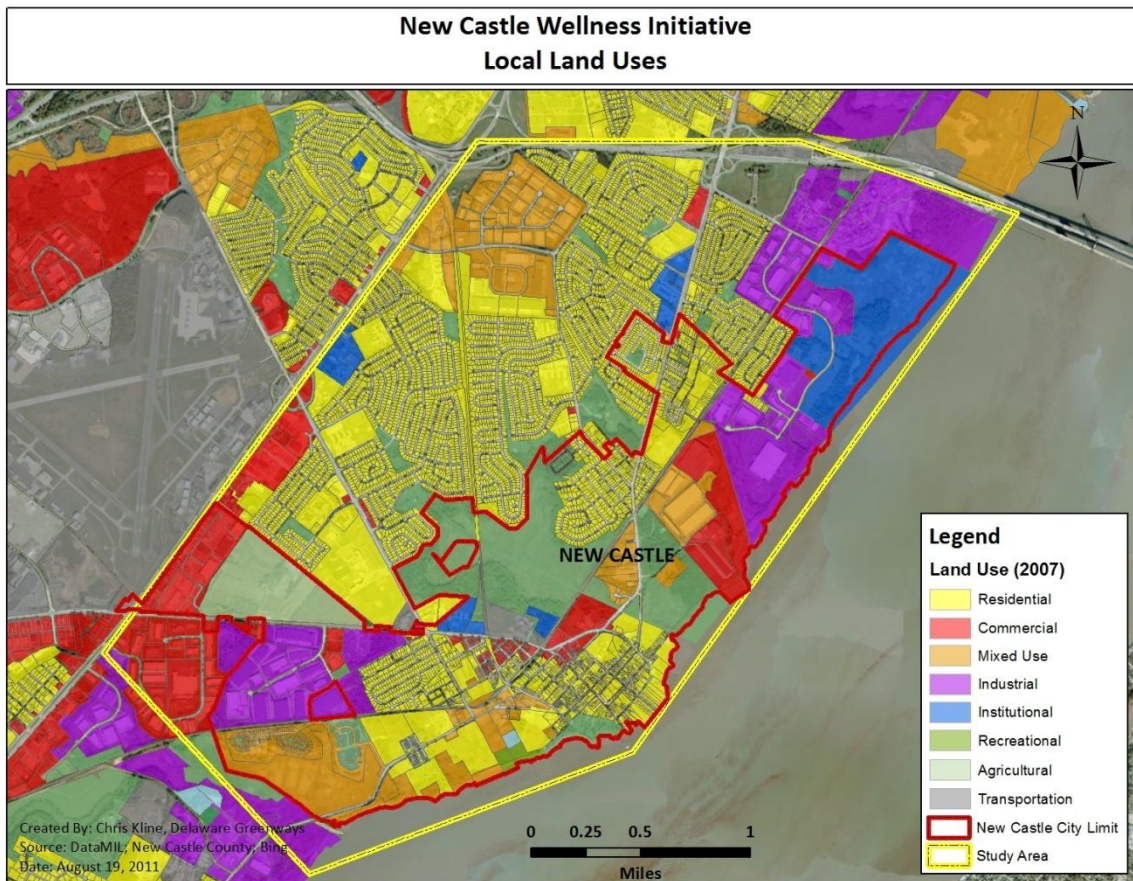


Figure 6: Land use and transportation patterns in the New Castle community

Two general observations can be made by reviewing past and existing community planning documents and looking at the larger picture of the land use/transportation system through geographic information software (GIS):

- Overall, land use patterns in the City of New Castle and the wider study area present very dispersed trip origins and destinations, which make many utilitarian trips too long or dangerous to be completed without a car. For example, a person living in one of the residential neighborhoods north of the city would likely have to travel over a half mile and along a busy road in order to get to a grocery store. An effort should be made to ensure that important destinations and services, such as grocery stores and pharmacies, are accessible to residents by multiple transportation modes. Mixed use development is one tool that can help accomplish this.
- The City of New Castle boasts a good amount of sidewalk infrastructure and several nice trail facilities; however, these paths are not always connected or well-advertised. Connections into and out of the popular historic center of the City of New Castle are few, limiting access by any active modes of transportation. As the city moves forward with pedestrian and bicycle improvements the ultimate goal should be a logically-connected system of bicycle and pedestrian facilities that are easily accessed by residents as well as visitors.

The Walkability/Bikeability assessment focused on the areas around Route 273/Heritage Trail and Route 9 north of New Castle (As shown in Figure 5). The general findings and recommendations for these areas include:

- Additional bicycle and pedestrian infrastructure (striped lanes and sidewalks) is needed in both areas in order to provide uninterrupted connections between roads, trails, and key destinations.
- Crosswalks should be installed at signalized intersections along Route 9 (none currently exist) and at important intersections along Route 273.
- Bus stops should provide better signage and improved amenities to increase visibility, access, and use.
- Links to historic New Castle and parks/trails should be communicated to pedestrians/bicyclists through wayfinding signs.
- The walkability and bikeability assessment provided preliminary insight into the needs and opportunities for enabling young people to walk and bicycle around the community, especially to and from school. Further study focusing on safe routes to school should be conducted to help prioritize any future infrastructure improvements and spending.
- More detailed assessment should also be done to learn more about the needs and habits of local workers and determine any opportunities for improving walking/bicycling to and from work.

Examination of existing planning documents and research into projects recently proposed or under development informed Figure 7. The map shows the pedestrian/bicycle network that currently exists and/or has been envisioned for the future, and the status of each segment. Overall, the New Castle area has a number of great multi-use trails; however, connecting more people to the trails and extending the trails to create a comprehensive, connected network is the next step to be taken toward encouraging and enabling more people to get active.

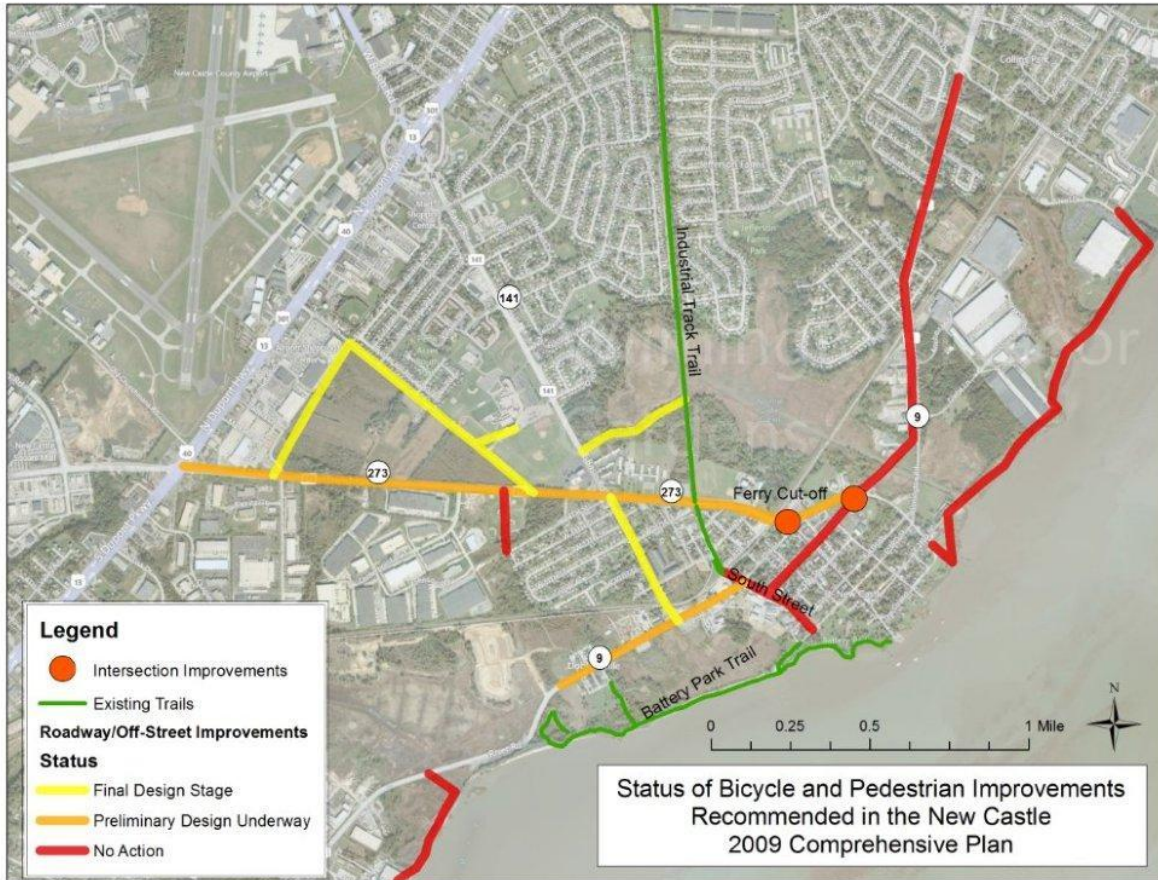


Figure 7: Bicycle and pedestrian friendly routes (existing, envisioned, and under development)

Residents completed surveys and provided the following comments regarding the strengths and weaknesses of community infrastructure for active living:

Strengths:

- The Wilmington to New Castle multi-use trail is a great asset and will become even more valuable for active recreation and transportation once fully completed.
- Battery Park is a popular recreational area for most residents, whether or not it is the nearest recreational facility to their residence.

Weaknesses:

- Almost all of the younger survey respondents (i.e. people under 50) said or implied that time was the biggest barrier to healthy practices (especially exercise and healthy eating)
- Lack of resources, access to resources, or awareness of resources for indoor recreation. Multiple survey respondents indicated that their fitness routines are impacted by reduced exercise when the weather is poor.
- Of survey respondents who indicated that they exercise primarily for health/physical fitness/to lose weight, many from this subgroup also indicated that they would be more likely to walk, jog, bicycle, etc. if:
 - there were more walking trails
 - there was sufficient lighting
 - he/she felt safer (from crime/auto traffic)
 - he/she had a map
- There are no safe and direct bicycle/pedestrian links between historic New Castle and neighborhoods/destinations nearer to Route 295 along Route 9.
- Accessibility of regularly visited destinations by non-motorized transportation is limited. Survey respondents and interviewees from the community indicated that they would be more likely to bike/walk if there were better routes to get themselves to a number of key community destinations, including schools, the pharmacy, and banks.
- Poor condition of some community parks. While responses from survey participants indicate that the overall condition of the parks is adequate in the eyes of most, the following issues were identified as concerns:
 - In Susi Park the City sign explaining rules of use has been pushed so it tilts greatly and the park name sign is partially obscured by the plant in front of it.
 - Litter in parks is a problem, regardless of the presence of trash cans.
 - Graffiti and vandalism appear to be a primary reason that the parks do not look or feel inviting.
 - There is a covered picnic pavilion in Susi Park, but no table and the one bench that faces the playground equipment area is falling apart and has only 1 back support and 1 seat support left. The pavilion's roof is dilapidated.
 - Loitering and undesirable behavior keep people from using some parks.

Community member habits, health, knowledge, perspectives, and preferences

There is little data available on the health or habits of people which is not aggregated at the county level. While county level statistics are not particularly valuable to identifying the nuances important to developing a community wellness plan, the county statistics can help to identify any anomalies in the local population relative to conditions at larger geographic levels, such as the state and country. County level smoking data shows that approximately 15 percent of adult population of New Castle County are smokers, while the other two other counties in the state have higher rates¹⁶. The low

¹⁶ Delaware Health and Human Services Division of Public Health. *Behavioral Risks in Delaware 2007-2008*. Accessed 4 June 2011 at: www.dhss.delaware.gov/dph/dpc/brfsurveys.html

smoking rates in New Castle County are likely mimicked in the New Castle community. This may be an indicator that generally, anti-smoking efforts should not be the strongest focus of the Wellness Initiative. However, while on average smoking is likely to be a relatively small health threat for the New Castle community, specific subpopulations show higher tendencies for smoking, such as those who have lower educational attainment and lower incomes. These details should be used to inform specific and targeted actions developed in the community wellness action plan.

One health issue that has been studied at the community level is cancer. A 2010 report by the Delaware Department of Health and Social Services identified cancer clusters within the state.¹⁷ Census blocks 159 and 160, shown in Figure 8 within the New Castle community study area, had elevated cancer rates. The report acknowledges that such incidences can be due to chance, but may also be the result of poorer access to healthcare, grouping of unhealthy lifestyle behaviors (e.g. smoking), or environmental/occupational exposure.

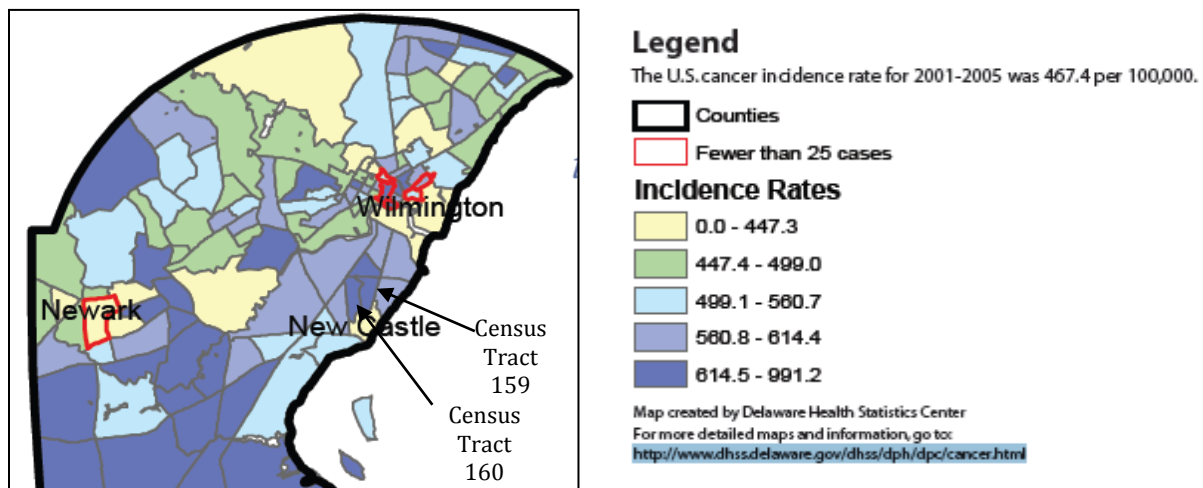


Figure 8: Cancer clusters in the New Castle Community

Additional nuances in the community population—whether directly health related or not—should be an ongoing consideration for the Wellness Initiative. More information and more detail will likely lead to more effective health promoting strategies.

To supplement the small amount of statistical data available about the local population, qualitative analysis was conducted. Convenience surveys and interviews have provided the most descriptive sources of information about community member habits, health, knowledge, perspectives, and preferences. The information collected provides insight into the opportunities, challenges, and needs the local population perceives and faces. The following list summarizes the key information gleaned from the qualitative assessment of the local community members (see Appendix B for complete survey results):

¹⁷ Analysis of Census Tracts with 2002-06 Elevated All-Site Cancer Rates – August 25, 2010 Delaware Division of Public Health. Accessed 27 July 2011 at: <http://www.dhss.delaware.gov/dhss/dph/dpc/files/2010octanalysis.pdf>

- Almost all of the respondents under 50 years old (approximately 17 percent of respondents) indicated that time is the biggest barrier to healthy practices (particularly exercise and healthy eating).
- Multiple respondents indicated that there is no safe way to travel from the northern part of the city to the historic district (emphasizing that Route 9 is not safe).

- Over 80 percent of respondents indicated they have a good or very good understanding of nutrition, physical activity, and importance of maintaining a healthy weight. Of those that reported not having adequate knowledge of the aforementioned issues, more respondents felt they had more to learn with regard to

Table 2: Residents' Sources of Wellness/Health Information

Sources of Information	Actual	Percent
TV / Radio /the Media	99	63
School	18	11
Product packaging/labeling/advertisements	49	31
Family / Friends	77	49
Workplace	31	20
Doctor's Office / Health Clinic	90	57
Personal wellness coach (e.g. physical trainer, nutritionist,..)	17	11
Web	3	2
Reading	4	3
*Multiple responses were allowed		

exercise rather than nutrition. Table 2 shows where residents report getting their information on health. Table 3 highlights health related topics that should be included in any informational materials distributed as part of the Wellness Initiative.

Table 3: Health Topics of Interest to the New Castle Community

Do you feel that you would like to know more about: (check all that apply)	Actual	Percent
Bicycling and walking routes in the community?	101	64
Bicycling and walking routes to school?	38	24
Bicycling and walking safety?	75	48
Nutrition / healthy food choices / healthy cooking?	86	55
Local exercise programs and resources?	101	64
Preventing chronic disease and other health problems?	85	54
Other*--water quality	1	1
Other*--memory loss	1	1
Other*--lung disease	1	1
Other*--vegetarian alternatives	1	1

*write-in responses

- 83 percent of respondents indicated that they walk/jog/bicycle, of which over 60 percent do so at least three times per week on average. Approximately 25 percent of those that walk/jog/bike do so as a form of transportation. Increasing opportunities to exercise as part of a required daily task, such as making a trip to the pharmacy or grocery store is one way to address the reported problem of lack of time for exercise. Of course, motivation, incentives, and commitment are also important factors in this situation.
- Survey respondents who indicated that they do not walk/jog/bike, still responded to the survey question: what is your primary reason to walk/jog/bike?" The most common response from that subgroup was: "for physical fitness/stay healthy/lose weight", which indicates that people know what they should be doing, even if they do not do it.
- Respondents cited the following (in order of response frequency) as reasons that would increase the likelihood of walking/jogging/bicycling:
 1. Increased number of off-road trails
 2. Make places for walking/bicycling safer (with regard to auto danger and crime)
 3. Improve lighting
 4. Improve routes to grocery/convenience store
 5. Improve designation/markings of bicycle routes
 6. Improve wayfinding signage and provide maps
 7. Improve routes to pharmacy
 8. Improve routes to library
 9. Improve routes to my bank
 10. Improve routes to my work place

Other reasons included: improvements to vegetation, improvements to animal control, and better access to other regular destinations, such as school.

- 91 percent of respondents indicated concern about maintaining a healthy weight, while only 54 percent reported getting the recommended levels of weekly exercise and 45 percent getting recommended levels of fruits and vegetables. Table 4 shows that community members believe that they would eat healthier if healthier foods were more readily available and more competitively priced/marketed.

Table 4: Nutrition related habits in the New Castle community

<i>I would be more likely to eat healthy foods if...</i>	Actual*	Percent**
...there were more healthy choices in my neighborhood or within a mile of my home.	54	34
...there were in-store promotions to buy fresh produce.	49	31
...there was a local farmers market.	52	33
...there were nearby restaurants that featured healthy food and beverage choices.	51	32
...there were nearby restaurants that featured healthy portion size.	49	31

Other...I was better educated on nutrition	1	1
Other...My significant other ate healthier	1	1
Other...I wasn't so lazy	1	1

* Respondents were asked to check all that apply

** Percentage is out of the total number of survey respondents

Wellness-related Policies—State, County, and Local

Local level policies were emphasized for this assessment; however, there are a handful of state and/or county policies that factor into the Community Wellness Initiative, which should be mentioned.

State Policies:

- Statewide indoor smoking ban that prevents smoking in all indoor public places and work places, though excludes certain fraternal benefit societies, volunteer fire companies, etc. (per Title 16, Chapter 29 of Delaware Code).
- The Delaware Code Title 11, Chapter 5 restricts sales and placement of tobacco vending to establishments that do not admit persons under the age of 18; in all other places tobacco products must be under the control of a cashier/employee. Per this code, cigarettes also may not be distributed in packs of less than 20.
- Delaware has a statewide tobacco quitline that is advertised throughout the state (1-800-QUIT-NOW).
- Delaware Department of Education regulation 877 regulates that all school property are tobacco-free 24/7 and bans any tobacco advertising and/or promotions at school events and in school publications.
- The State of Delaware code (Vol. 71 Del. Laws, Chapter 10) entitles a mother to breastfeed her child in any location of a place of public accommodation wherein the mother is otherwise permitted.
- Executive Order Number 6 (2009) for Complete Streets Policy (summarized on page 16).

County Policies:

There are few county level policies that influence wellness in the New Castle community that can clearly be identified as either explicitly favorable or unfavorable toward community health. The New Castle County code repeatedly cites the purpose of rules and regulations are to protect health, safety, welfare, etc. of residents; yet the complex unified development code, in which land use development rules are defined, is likely to have both positive and negative effects on public health. For example, the development code’s prescription of segregated, non-walkable land uses and development styles can hinder public health by reducing physical activity while also preventing development in hazardous areas, such as a floodplain. All levels of government policy are important to identifying opportunities and challenges to health of the New Castle community. Reviewing

county policies in detail was beyond the scope of this analysis; however, as the Wellness Initiative progresses county policy as relates to implementation of Wellness Action Plan steps should be examined and addressed.

City Policies:

Finally, it is the municipal policies that are most influential and applicable to the current efforts of the New Castle Community Wellness Initiative because it is the incorporated city and its residents that have shown the strongest commitment to community wellness. Furthermore, the city and its residents have jurisdictional control over implementing new policies at the local level; policies which are significantly more likely to be passed at the lower levels of government prior to being accepted at the county or state levels. Key policies of the municipal government, which clearly impact community wellness, have been identified below according to whether the expected impact is positive or negative toward wellness:

Table 5: City of New Castle Policies and Conditions with Community-Wide Impact on Wellness

POSITIVE EFFECTS	NEGATIVE EFFECTS
Comprehensive Plan Update 2009: Encourages mixed-use, pedestrian-friendly development, zoning, and specific redevelopment areas*	Comprehensive Plan Update 2009: Does not address health related issues beyond physical activity and recommendations that peripherally address air and water quality issues
Comprehensive Plan Update 2009: Recommends open space acquisition	New developments do not have to have sidewalks per municipal code; although the state may implement sidewalks and other improvements through DelDOT’s Complete Streets Policy The City requires redevelopment to replace sidewalk and maintain existing condition
Comprehensive Plan Update 2009: Recommendation to relocate aerial utilities underground (will reduce obstacles for peds/bicyclists)	Bicycling infrastructure does not currently receive the same level of attention/support in the City code as sidewalks and pedestrian infrastructure
Comprehensive Plan Update 2009: Numerous recommendations for improving bike/pedestrian facilities and amenities	City does not offer any indoor recreational facilities; no public, indoor recreational facilities identified in the study area
Comprehensive Plan Update 2009: Recommends design guidelines and urban form that promote sense of place and pedestrian scale and appeal	Street calming strategies are recommended in the 2009 Comprehensive Plan Update, but have not yet been acted on
City offers a low cost summer youth recreation	The City/Battery Park Commission has

program

permitted unhealthy food vendors to operate at the entrance of the battery park trail near the pier

The City, Colonial School District, and the Trustees of the New Castle Common operate and maintain parks, recreation areas, and open spaces across the city

Connecting locally grown food to local restaurants has been an idea raised in the community (e.g. the Historic New Castle Alliance), but to date, there is not any known direct action

Comprehensive Plan Update 2009: Recommends expanding recreational facilities

Aside from the local emergency medical service provided by the Goodwill Fire Company and County EMS, the community does not have any community-wide chronic disease management program

The City has been supportive of making fresh foods available in the community, for example, by permitting a farmer to have a mobile stand in the town square and advertising it in the city newsletter

Bicycling and pedestrian infrastructure do not receives low priority relative to other services with regard to the city budget and financing

In August 2011 the City passed an ordinance for no-smoking in city parks

To date, the City has not been involved in advocacy for wellness issues in higher levels of government.

*See p. 66 of Comprehensive Plan Update 2009 for details

Smoking (emphasis on City Parks)

Smoking is at its lowest levels on record in the state. Nonetheless, the issue remains important, because one person smoking can impact a host of non-smokers via second-hand smoke and because of the higher occurrence of smoking among certain populations.

A targeted assessment of smoking in city parks was conducted in April and May 2011. (See Figure 9 showing location of parks.) Volunteers from the Wellness Leadership Team assisted Delaware Greenways in visiting all seven city managed parks to do a visual survey and count of cigarettes and smokers in parks. The presence of cigarette butts, packaging, and related material was the most reliable indicator of the location and frequency of smoking. Information about the occurrence of smoking in parks was also gleaned from conversation with park patrons. (The Baseline Smoking Assessment report is available on the City's website and Delaware Greenways' website, and provides more specific details about smoking in each park.)



Figure 9: Parks subject to new No-Smoking policy

Findings from the baseline assessment suggest that smoking in/around the playgrounds and parks occurs with variable frequency among the parks. Bull Hill Park, Battery Park, and Dobbinsville Park had the most evidence of smoking in and within 25 feet of the playground areas. However, there were very few people actually observed smoking in the parks during observation, which occurred mostly on days with fair to nice weather. Observation supports the reports by park patrons and residents living adjacent to parks that smoking does occur, though less than a majority of the time. Based on the location of cigarette butts and cartons, smoking occurs more frequently near the roadside of the parks and at park benches and tables.

In an effort to protect its citizens and particularly young people, who are often more susceptible to the damaging effects of second-hand smoke, the City of New Castle passed a no-smoking in parks policy in August 2011. The policy makes smoking in and within 25 feet of playgrounds and basketball courts illegal and punishable. This is a significant step in setting a good example for young people and making a statement that the city supports healthy lifestyles.

Summary of Strengths and Weaknesses for the Community-At-Large

The interviews, surveys, field-analysis, and other assessment research turned up a number of strengths that already exist in the community. The strengths are predominantly programs and infrastructure and include: existence of trail, pedestrian and bicycle routes (especially relative to other areas in the state); community parks located in/near most residential development; programs and support through community centers, which target certain populations (including the New Castle Senior Center and the William Penn High School Wellness Center); pedestrian-friendly layout and design of the historic center of the city. The strengths in the community are also expanding beyond the areas in which the community has historically been strong to include community leadership and health-oriented policies, such as the no-smoking in parks policy.

Despite the strengths there remain great challenges which generally include: inaccessibility of healthier options in food, transportation, and recreation; low awareness among community members of available resources; and less than optimal levels of concerted effort among sectors within the community and between the different levels of government to address wellness.

It is important for the community-at-large to continue to maintain and promote the recreational and non-motorized transportation infrastructure, but also important to strengthen and increase positive effects on areas of health beyond physical activity. The City of New Castle should continue its lead on inspiring and promoting wellness and expand its reach, explore its potential for setting health-oriented goals and precedents, and inspiring action within itself as an entity and among the rest of the community. The Wellness Action Plan (see section III) summarizes specific actions that the City could get involved in; generally, the City should explore what wellness issues and related policies citizens believe the City should support, consider feasible policies, and engage the mayor and the rest of the governing body and city staff in taking the lead in wellness.

Schools

The community is served by the Colonial Public School District and contains nine of the fourteen schools in the district with roughly 5,000 students. Four private or charter schools also operate in the greater New Castle area including one charter high school. Figure 10 shows the location of the schools and public school attendance zones in the study area.

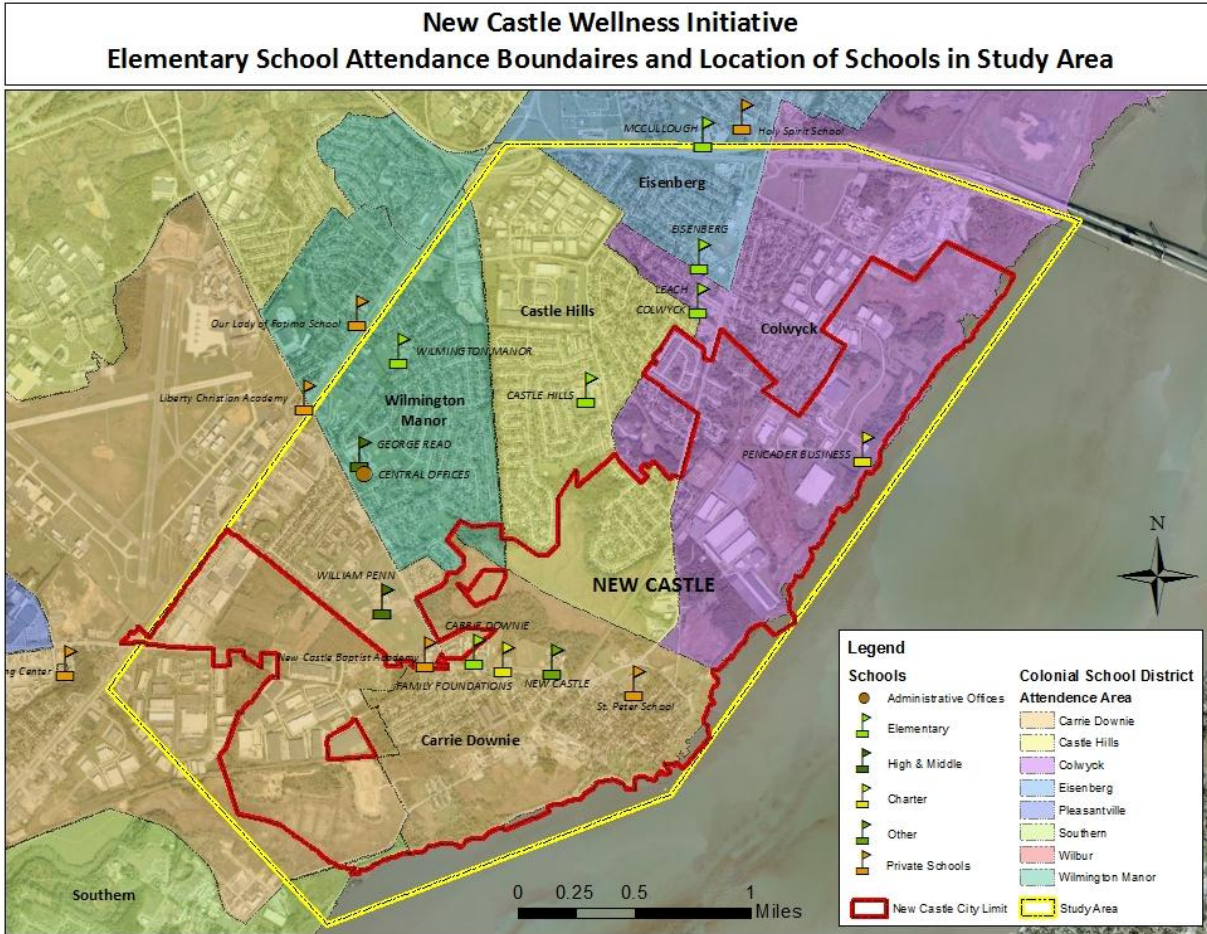


Figure 10: Schools and public school attendance zones in the New Castle community

A total of ten schools were assessed using the CHANGE tool survey questions¹⁸. All nine public schools and one private school participated. Overall, schools appear to be leading the way for most of the assessment categories (physical activity, nutrition, tobacco use, chronic disease, and leadership). According to the CHANGE tool scoring system, which helps determine how effective each site is at addressing the categories, the schools are doing particularly well in the areas of physical activity and nutrition. (See Appendix C for the individual site assessment rankings.) All schools have greatest room for improvement in the area of chronic disease and tobacco use, according to the assessment tool. Below is a list of the most significant findings of the assessment, separated by category:

Physical Activity

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> Zumba classes offered once per week for 	<ul style="list-style-type: none"> Some schools have expressed interest in

¹⁸ See Appendix C for CHANGE tool results summary by sector.

<p>high school students through the Wellness Center</p> <ul style="list-style-type: none"> • All schools have physical activity policies that follow suggested guidelines by the Center for Disease Control and Prevention and are by-and-large effectively following the policies • Some of the public schools have had special programs on bicycle use and safety 	<p>walk or bike to school initiatives, but few have formally developed or implemented one</p>
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Nutrition

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • CampFRESH is an extra-curricular program geared toward youth to promote healthy eating and active living (currently offered to New Castle area students; conducted in Wilmington) • High School students have access to dietician at the William Penn High School Wellness Center • All schools report that they are meeting the USDA school meal nutrition standards • All schools regulate access to sugar-sweetened beverages and other unhealthy foods • The Colonial School District has received grant funding to offer healthy snacks in the lower grade levels • Schools are promoting healthy eating through multiple channels, including in the classroom, in the cafeteria and through communication to parents 	<ul style="list-style-type: none"> • Teachers and parents occasionally offer food as reward and bring in non-nutritious snacks for special events/activities • Healthy food options not promoted or marketed in the private school • After school programs have more difficulty regulating healthy food options, especially in the private school • No schools currently have a school garden program • Despite policy, survey responses indicate that in reality mealtimes may not always be of a sufficient duration

Tobacco Use

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • Tobacco use prevention, education, and cessation services offered through the William Penn High School Wellness Center to all high school students 	<ul style="list-style-type: none"> • Schools below high school level indicated that they do not offer smoking cessation resources (however, the likelihood of younger people smoking is small and may

	not merit attention until later ages)
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Chronic Disease

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • The William Penn High School Wellness Center collects health information about the students using the center, which offers an opportunity to track progress • Stress and relaxation group offered to high school students at the Wellness Center • All schools are effectively meeting special dietary needs 	<ul style="list-style-type: none"> • Limited or no chronic disease management education offered in school to students with chronic diseases • CPR and other response training is not broadly available to students • Education about chronic disease and emergency response, such as identifying signs of a heart attack, are minimal

Leadership

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> • Provision of health services and health information to all high school students through the William Penn High Wellness Center • The Colonial School District has written wellness policy guidelines that address nutrition, physical activity, and monitoring effectiveness of implementation • All schools indicate that they engage families in the development of school wellness related plans • Public schools engage teachers and staff in health related training 	<ul style="list-style-type: none"> • Training and continuing education opportunities related to wellness are not widely offered to teachers and staff • Fundraising activities are not regulated by policy to adhere to certain health promoting principles • To date, there has been minimal involvement of schools in advocacy for health issues or participation in community health coalitions • No schools have a specific health promotion budget • Few schools have any sort of school health oriented working groups of parents, teachers, administrators, or students, who plan and help implement health activities in the building

In general, the greatest challenge identified through the assessment of schools is ensuring implementation and enforcement of policies both at school, and more importantly, in the home. Interestingly, public schools had stronger policies, but had trouble enforcing them, while private schools had indirect or weaker policies for most issues, but attained environmental conditions higher than required by the policies (generally the same level of attainment as public schools).

In the public schools for example, all schools had strict policies for requiring physical education and limiting consumption and access to unhealthy foods. However, survey results showed lower scores across the board for the actual environmental conditions achieved despite the strict policies. Follow-up conversation regarding this point confirmed the difficulty with enforcement: most teachers and staff of schools abide with school or district policy; however, occasional lapses do occur. Most commonly nutrition policies are those which are most commonly not followed. For example, in both the public and private schools, using food for rewards and allowing unhealthy food in the classroom were the most common policy violation, though still relatively rare.

Follow-up discussion with staff and teachers indicate that while in school students learn healthy habits, once they leave it is up to their parents and guardians to continue to encourage and monitor healthy habits. Clearly, healthy habits are not taught, demonstrated, or monitored in many homes.

Whether or not the weaknesses identified in the school sector should be addressed in school, in the home, or both, is an issue that faces the community. Based on assessment results, the private schools are less formally engaged in promoting health awareness in the school, as they generally view it as the responsibility of the parent/guardian. Responsibilities that have traditionally been assumed by the parent/guardian may or may not be getting addressed adequately. Many parents have let up on educating and monitoring their children with regard to healthy habits. The question of who should be providing what resources with regard to wellness is unresolved and will likely vary based on with whom you talk. However, it is likely that all would agree someone should be ensuring that our children are healthy.

Community Institutions and Organizations

The community institutions and organizations sector “includes entities within the community that provide a broad range of human services and access to facilities,” such as childcare centers, faith-based organizations, senior centers, clubs, universities, etc., according to the CHANGE guide book. These institutions and organizations are located throughout the study area and are heavily concentrated in/around historic New Castle. The following is a list of some of the larger/well-known institutions and organizations in the study area:

Wilmington University: A small, private, primarily undergraduate level university located along the northwest edge of the study area (was not included in the assessment; however, involvement in the Wellness Initiative should be explored)

Goodwill Fire Company: The local volunteer fire company, which services the local community with fire and emergency service and also serves as a social center; located adjacent to Battery Park in historic New Castle.

New Castle Senior Center: Daytime activity center targeting adults over 50 years that also opens its facility to use by other community groups or for private rental; located on the southwest side of Battery Park in historic New Castle.

New Castle Library: A county-run library open 6 days a week, with standard library facilities, plus public meeting and event space; located in historic New Castle.

A total of nine community institutions and organizations in the study area took the CHANGE tool assessment survey. Of the nine, two are daycares, three are churches, and two are volunteer/charitable clubs; the remainder are the senior center and library. As a whole, the group scored low across all of the wellness issue areas relative to the other sectors. None of the organizations surveyed are driven by wellness centered missions, although two allude to wellness, and few have formal health oriented policies or infrastructure in place. The highest scoring organizations were the daycares and the senior center.

Of the five issue areas, the organizations had the highest rankings for the issue areas of tobacco and physical activity. These higher scores mimic the scoring trends among all of the sectors and are mostly due to the stronger policies and systems in place at the municipal and state government levels. For example, because of the location of a number of these organizations within the historic center of New Castle, many scored high with regard to physical activity promoting environments simply because of the fact that they are located in an area with good sidewalk and park infrastructure. We found the following strengths with regard to wellness promotion among these organizations:

- The New Castle Library provides public meeting space for any community group, which is used by groups promoting wellness, including yoga instruction.
- The New Castle library schedules wellness focused speakers for public events periodically.
- Community members reported that there have been community gardens at various points in time around the community, but have had mixed results. It is believed that at least one community garden exists currently in Dobbinsville.
- The Lions Club has occasional speakers on chronic disease and wellness topics and also is willing to contribute money to such efforts (charitable mission open to promoting any positive community building activity).
- The Lions club also offers health screenings on occasion.
- Goodwill Fire company has all employees trained as Emergency Medical Technicians
- Goodwill Fire company has on-site recreational facilities and shower/changing room facilities for its members.
- Churches generally acknowledge a role in wellness of their members and especially young people; a potpourri of actions, opportunities, and events are offered through the churches.
- Some of the churches have gym facilities and offer classes.
- Caanan Baptist Church scored high in most areas, and may be a good model for other organizations. They allude to health in a number of policies and seem to place strong emphasis on the health of all members, young and old. They have a health promotion committee and budget with many policies and programs in place or planned.

- The daycare centers have strong nutrition and physical activity guidelines and systems in place.
- The Senior Center has an onsite medical clinic for its patrons.
- Senior Center offers exercise classes and other activities.

The youth-serving organizations scored strongest of all the organizations with regard to nutrition policies and environments. This is likely due in part to the requirements for healthy foods in order to qualify for government food programs (cited by both daycares as a program they participate in).

Lowest scores of all organizations were for chronic disease management issues and leadership. Although no organizations had any strong, explicit policies toward chronic disease management or leadership, a number of the organizations do promote the issues in practice. These lower scores likely reflect the size of the organizations and community, in part; it can be challenging to address health issues when the organization is not directly aiming to address health issues and has limited resources to even promote its core mission, let alone health issues. Nonetheless, collaboration among these smaller organizations to expand their ability to address wellness issues is recommended.

Despite lackluster assessment results, it is reasonable to assume that the purpose of community institutions is ultimately aiming to improve quality of life. Therefore, given the nature of organizations in this sector, it is expected that they would be willing to engage in at least some aspects of community health promotion. Interestingly, among the diverse group of institutions assessed, although none did great overall, each had an area of expertise. With these organizations coming together, they can offer a full spectrum of resources. With some education, support, and collective effort, the community institutions and organizations of the New Castle area could and should be a group that helps spearhead this community wellness initiative. With some collaboration, such as working together to conduct a wellness fair for the community and providing information and resources to the community these organizations could collectively have a significant impact. Specific opportunities for engaging the community institutions and organizations are presented in the Wellness Action Plan. In order to move the effort forward, especially among the community organizations, it would be helpful to have strong participation from some of the larger organizations, such as the Historic New Castle Alliance, the Library, and the New Castle Senior Center. Delaware Greenways also has an important role to serve in promoting health in the community.

Some opportunities for improvement that could be taken on by the community institutions and organizations sector include:

- Increasing signage and awareness of resources in the community (e.g. non-motorized transportation options, parks and trails resources, nutrition facts and resources)
- Improving food options at social functions and more than offering a healthy option, take the opportunity to educate people and promote the healthy option
- Increase bicycle and pedestrian infrastructure and resources, including bicycle racks at all destinations and maps, bus schedules, and information available and advertised.

Work Sites

Work sites were not restricted to businesses for the purposes of this study; any sites that have employees (government, non-profit, etc., and including self-employed, single person operations) were included. There are hundreds of work sites within the New Castle community that vary drastically in size, industry, and type of work. One notable characteristic about work sites in the community, which had implications for the assessment, is that many are small and employ fewer than 20 persons. A high proportion of the small businesses, especially those with fewer than 5 employees are located in the historic part of New Castle. Outside of historic New Castle are the larger businesses, many of which are located in business/industrial parks. There are approximately five business/industrial parks in the study area. According to the U.S. Census Bureau¹⁹, there are approximately 15,200 jobs in the study area. Figure 11, below, shows that the jobs are concentrated along the Route 13 corridor, in historic New Castle, and the industrial parks between Route 9 and the Delaware River.

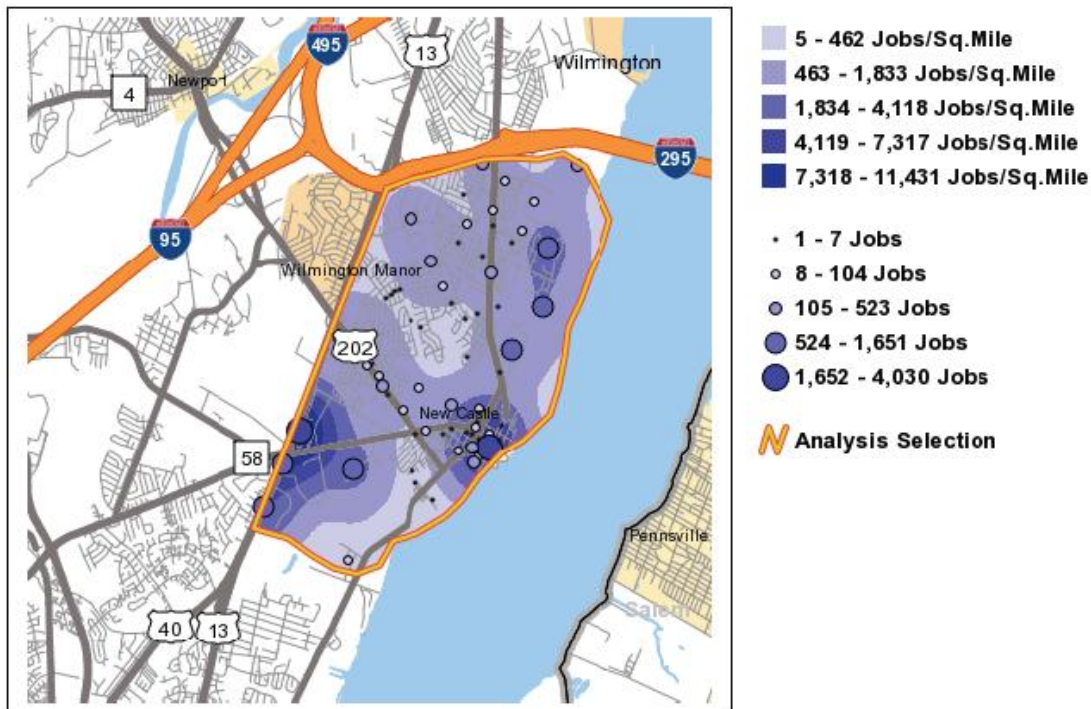


Figure 11: Concentration of jobs in the study area (Source: U.S. Census Bureau, On the Map application)

¹⁹ U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2009).

Table 6, shows the flow of workers in the study area. The area is an employment center with almost double the number workers coming into the area to work than number of residents that are employed and live in the study area. The number of residents (11 percent, or 900 persons) that live and work in the study area is of particular interest. These are people that have a higher likelihood to be able to walk or bike to work.

Table 6: Inflow/Outflow Job Counts, 2009

	Count	Share (%)
Employed in the Study Area	15,253	100.0
Employed in the Study Area, but living outside	14,353	94.1
Employed and Living in the Study Area	900	5.9
Living in the Study Area	8,156	100.0
Living in the Study Area, but employed outside	7,256	89.0
Living and Employed in the Study Area	900	11.0

Source: US Census, LEHD On The Map

The characteristics of those jobs in the study area filled by people also living in the study area are shown in Table 7 below. The data indicate those that both live and work in the study area tend to be in the middle age range (30 to 54 years) and have higher paying jobs. Approximately 46% of workers that live and work in the study area work in the service industries and approximately 40% work in "Trade, Transportation, and Utilities" classified jobs.

Table 7: Characteristics of jobs* filled by those living in the study area

	2009		2008		2007	
	Count	Share (%)	Count	Share (%)	Count	Share (%)
Internal Jobs Filled by Residents	900	100.0	938	100.0	897	100.0
Workers Aged 29 or younger	202	22.4	243	25.9	232	25.9
Workers Aged 30 to 54	507	56.3	488	52.0	483	53.8
Workers Aged 55 or older	191	21.2	207	22.1	182	20.3
Workers Earning \$1,250 per month or less	194	21.6	232	24.7	212	23.6
Workers Earning \$1,251 to \$3,333 per month	406	45.1	413	44.0	402	44.8
Workers Earning More than \$3,333 per month	300	33.3	293	31.2	283	31.5
Workers in the "Goods Producing" Industry Class	117	13.0	156	16.6	145	16.2
Workers in the "Trade, Transportation, and Utilities" Industry Class	367	40.8	397	42.3	354	39.5
Workers in the "All Other Services" Industry Class	416	46.2	385	41.0	398	44.4

*Primary jobs, as defined by the U.S. Census Bureau

Compared to the other sectors of the community that were assessed, the business sector was least willing to engage (particularly large companies in the nearby business parks). Attempts were made

to reach the larger employers, including emails, phone calls, and site visits; however, very few responded. The condensed project timeline is likely one factor that presented a challenge for engaging local businesses.

Another shortcoming of the assessment process in the work site sector was the inapplicability of many of the CHANGE tool assessment questions to small work sites, which make up a large proportion of sites in the community and are the majority that responded to the survey.

Eight work sites in the community completed the assessment survey, out of approximately 20 that were actively pursued (i.e. contacted more than once). Of the eight participating work sites, only two had greater than 20 employees and neither of those sites had more than 20 full time employees. None of the worksites have direct business interests in the health sector.

The assessment/survey form addressed the five standard CHANGE issue areas, generally examining the following:

Physical Activity:

- Does the work site allow employees the time to be active during the day?
- Does the work site incentivize or actively encourage physical activity?
- Does the work site provide the equipment/facilities for workers to be active?

Nutrition:

- Does the work site ensure access to healthy food/meals?
- Does the work site present nutritional information for consumers to make healthy choices?
- Does the work site actively promote/incentivize healthy food?

Tobacco:

- Is tobacco use permitted (includes smoking and other forms) indoors/outdoors?
- Are tobacco products easily accessible (e.g. physical placement, pricing)?
- Are tobacco products promoted or actively discouraged?

Chronic Disease Management:

- Does the work site facilitate access to preventative care, management services, etc.?
- Does the work site attempt to educate its workers?
- Is the work site prepared for emergencies?

Leadership:

- Does the work site engage in wellness related public policy/community events/partnerships?
- Does the work site address wellness in its operational guidelines and ethic?
- Does the work site promote wellness leadership among its employees?

The assessment results gave the following information about wellness issues in the worksite sector (These findings apply to smaller worksites in the historic center and not to larger employers or employers outside of the city, due to the characteristics of those employers participating):

Worksites/employers have minimal involvement in ensuring or promoting employee wellness. If physical activity happens to be a part of the job type, that is great, but of the worksites where jobs were primarily sedentary, only one made any substantial effort to promote physical activity among employees. Another site with jobs requiring moderate activity offers an incentivized employee walking program.

While most sites offer health care to full time employees, many do not employ fulltime workers and, therefore do not offer health benefits. For people who do not have full time work, obtaining health benefits becomes challenging.

The majority of worksites did decent with respect to limiting unhealthy food options and offering healthy options. In part, scores were good because most worksites do not have food offerings on site. Of sites that do have food onsite, most reported offering healthy and less than healthy choices, and few reported promoting healthy choices.

Specific strengths and weaknesses identified in the worksite sector are listed below.

Strengths:

- Happy Harry's participates in a visiting nurse program and refers employees to it.
- Happy Harry's provides access to employees for free/low cost health appraisal and wellness checks.
- For eligible employees, many have health benefits that cover tobacco cessation and other health concerns.
- All work sites make bringing your own lunch possible through kitchen facilities
- All work sites offer free drinking water.
- Survey respondents indicate that safety of areas for exercise in proximity to their sites is not a particular concern.
- Some employers offer flexible work arrangements to allow for appointments and physical activity; the majority have standard work schedule policies: 30 minute lunch and two 15 minute breaks.
- At least half of the work sites participate and/or sponsor employee participation in volunteer activities that involve physical activity and/or wellness.
- Majority of work sites have strong policies on no smoking in work vehicles or on work property (both indoors and outdoors), above and beyond the state law for no smoking indoors.
- Generally, work sites have mediocre attempts to address emergency response training. Roughly half of work sites have plans and/or people trained in emergency response.
- A variety of wellness issues are brought up by organization decision makers, but many have not yet taken action or implemented, for example, arranging for employees to get subsidized gym memberships.

- The City of New Castle promotes physical exams through employee contracts and occasionally have offered flu shots and safety/emergency training programs, but not on a regular basis.
- One of the sites incentivizes participation in safety training by offering gift cards to attendees.
- The very smallest work sites (e.g. employee owned and operated) reported that they are conscious of health and run their day-to-day business accordingly. Essentially, this means that those who run their own businesses are making sure that they are health conscious with themselves and generally encourage others, including patrons/clients and any other employees (e.g. with inviting them to walk around New Castle, offering healthy foods/snacks, etc.).
- Many work sites do not provide ashtrays for employees/patrons to use (potentially dissuading smoking)
- One site does have bus schedules readily available (the site happens to be a visitor center for the public, too).
- Police department has health screenings and physical training as part of the employment requirements.

Weaknesses:

- Few, if any of the work sites provide direct financial support for wellness.
- Few, if any of the work sites have available changing facilities to use after physical activity (police and fire stations are the exception).
- Few, if any of the work sites promote non-motorized transportation (e.g. incentives, bus schedules, maps, promotion).
- Few of the work sites have bicycle parking on site or in immediate vicinity.
- Few of the worksites encourage and engage in regular work breaks to promote rest/stretching/physical activity.
- Some employers are open to considering offering flexible schedules for exercise or other wellness activities to schedule into the day, but do not explicitly “advertise” or promote.
- Vending machines are not in place at most sites, but most of those that have vending machines or offer food do not consciously make an effort to offer healthy choices or make sure that there is a good variety of healthy and not-so-healthy options.
- Only one worksite promotes an anti-tobacco referral system.
- Outside of the new Wellness Initiative, none of the sites have ongoing participation in health related advocacy, activism, or leadership.
- Few of the sites in the historic district are built/designed with shower facilities. Arranging for a shared facility might be worth pursuing.

(Summary results of the CHANGE assessment tool numerical rankings are available in Appendix C.)

In summary, it appears that the work sites in the community need to take a first step in bringing attention to health issues at the organization level and among employees overall. This could be as simple as bringing up employee health as an agenda item at staff meetings on occasion and talking

about small things that can be done inexpensively to benefit the employees and the organization. It also appears that some employers do not acknowledge the importance of employee health to the strength of their organization, which must be overcome if any changes are to be made within the worksite sector. Although there is a strong view that health is a personal choice which is beyond the bounds of employer's responsibility, if work site leaders can at least acknowledge the importance of their employees' health, there is a greater likelihood that the employee will also take more interest in his/her own health. Well defined worksite policies toward health are an optimal standard, but short of that, even employers with an evident personal commitment to wellness is likely to have positive effects. The worksites that participated in this assessment have taken a step by simply participating in the Wellness Initiative assessment process.

Health Care

The New Castle area does not contain any large hospitals, medical centers or clinics; however, within the study area there are at least eight small clinics, specialty treatment centers, and doctor's offices. There are also two health care sites that offer services at reduced costs to special target populations: the William Penn High School Wellness Center and the New Castle Senior Center Clinic.

There is not a significant number of entities in the health care sector located in or serving the local community. Based on observation, the health-care facilities serve populations well beyond the city of New Castle as well as outside of the study area.

The strengths of the healthcare sites assessed include:

- Role in leadership and being progressive on health care issues (however a number of sites approached chose not to participate, which indicates less true commitment to community wide health)
- Chronic disease management, especially strong in comparison to other sectors
- Nutrition

As one would expect, the health care sites participating in the assessment are strong in all areas relative to the other sectors of the community; this is especially true when you look at the demographic of the populations that the health care sites aim to serve (e.g. youth at the High School Wellness Center). Given that health ought to be the main focus of the health care sites, one might expect stronger scores in areas of physical activity, tobacco cessation, and, leadership. There is always room for improvement; however, the health care sector has the greatest room for improvements among these three issue areas.

FOLLOW-UP ASSESSMENTS AND MONITORING

The assessments conducted for this report were neither scientific, nor comprehensive. They provide valuable information that give direction toward where there are community needs and

opportunities, but the assessment findings do not paint a complete picture of the conditions in the community. Further research and analysis of the study area is recommended on an ongoing basis. As leaders and managers of the Initiative begin implementing components of the plan, it should be viewed as a document that is shaped and reshaped as new information is discovered, creating a better understanding of conditions, needs, and opportunities.

The assessment phase captured a strong mix of sites in the historic center of New Castle; however, conducting additional assessments of key sites that were missed in the initial assessments and sites outside of the historic center of town is advisable to develop a clearer and more balanced picture of the New Castle community. In particular, effort should be placed on assessing and engaging the local business community.

It is important to include a clear and well-planned monitoring component as the Wellness Initiative proceeds with further development and implementation of the Community Wellness Action Plan. The CHANGE guide strongly encourages the monitoring process to, at a minimum, maintain the assessment methods used from one year to the next for consistency. A monitoring program and guidelines is recommended in the Wellness Action Plan.

III. NEW CASTLE WELLNESS ACTION PLAN

PLAN PURPOSE AND STRUCTURE

The purpose of the New Castle Community Wellness Action Plan is to build on the findings from the assessment work conducted by the Wellness Leadership Team and create a framework to inspire and guide the community toward healthy change. The CHANGE assessment focused on understanding nutrition, physical activity, chronic disease, and tobacco-use and exposure issues, although true health requires attention to additional aspects, such as mental health. A decision was made with input from the Wellness Action Team that the Plan should focus on healthy eating, physical activity, and reduced use and exposure to tobacco, thereby addressing the top three preventable causes of death in the United States. The Plan is structured around these three issue areas, plus a fourth category aimed at increasing knowledge, understanding, and leadership in the area of wellness.

The plan is devised on a five to ten year time horizon, and structured with a set of objectives/action steps listed under each goal. Each objective is designed to provide a measurable outcome to pursue, and listed with each objective are the following details which define how each objective can be pursued:

- Possible funding source(s);
- Proposed lead organization(s);
- Approximate time period of accomplishment; and
- Prioritization of steps

The following additional principles are recommendations, which come from the Coalition for Healthier Cities and Communities and are based on dialogues among healthy communities achieving success in similar community wellness activities.

- Practicing ongoing dialogue
- Generating leadership everywhere
- Shaping its future based on a shared vision deriving from community values
- Addressing quality of life for everyone
- Building capacity using local assets and resources
- Embracing diversity
- Knowing itself through data collection, benchmarking, and measuring progress and outcomes
- Connecting people and resources
- Creating a sense of community

MISSION, VISION, AND GUIDING PRINCIPLES

The following mission, vision, and guiding principles are based on the input from the Wellness Leadership Team of community representatives and will direct the goals and recommendations laid out in the action plan.

Mission: Enhance environments to promote physical activity and healthy lifestyles in the Greater New Castle area.

Vision: The New Castle community is viewed as the healthiest, most livable community in the state of Delaware.

Guiding Principles:

- Inclusive community participation and ownership, from residents to elected officials
- Attention to safety
- Efficient use of resources and focus on sustainability
- Equal access to the entire New Castle community

WELLNESS PLAN

The following plan contains goals, objectives, and action steps which represent opportunities that should be addressed across a range of timeframes and of varying priorities. A unique characteristic of the New Castle community, in particular the incorporated city, is the familiarity amongst community members. Residents, business owners, and community leaders know each other. This familiarity was considered when developing many of the recommendations in the plan. However, it must be acknowledged that occasionally the community connectedness can serve a specific group or area and be perceived as exclusionary. It will be helpful to pay attention to ensure that participation and benefits of the Initiative are open and accessible.

The New Castle Community Wellness Strategic Plan

A 10 year plan to make living a healthy lifestyle easier in the New Castle community

Healthy Eating			
Goal HE-1: Make fresh ingredients more accessible to all community members			
Objective 1.1: Increase fresh produce availability by 25% near work sites, schools, and other key community sites			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Develop produce stand along Route 273 at the Penn Farm	Delaware Greenways, Trustees of the New Castle Common	grants, Trustees, farmers	2011-2013
Get convenience stores to offer and feature fresh, healthy snacks	Wellness Team Healthy Eating Committee	Unidentified	2013-2015
Establish farmers markets, mobile markets, produce delivery, and/or drop-off points	Wellness Team Healthy Eating Committee	Healthy Food Finance Initiative (potentially)	Begin immediately
Establish a produce share location or online exchange	Master Gardeners, Delaware Greenways, New Castle Senior Center	Unidentified	Begin immediately
Objective 1.2: Ensure that those without access to automobiles can access grocery stores and markets with approximately the same ease as convenience stores			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Install bicycle racks at all grocery stores and markets	Delaware Greenways, with Bike Delaware and local stores	retailers, or unidentified	2012-2014
Establish a "cart-share" program with fresh food retailers to lend out small carts for pedestrian customers	Wellness Team Healthy Eating Committee	retailers, or unidentified	2012-2014
identify obstacles in bike/ped infrastructure and make plans to have them fixed (refer to Walkability/Bikeability Analysis)	Delaware Greenways, City of New Castle	Department of Transportation grants, other grants	2014-2021

Establish public transit service from historic New Castle to New Castle Farmer's Market	Wellness Team Healthy Eating Committee and Wellness Team Physical Activity Committee	existing DART funding, and seek other grant funds	2012-2015
Objective 1.3: Ensure healthy foods are available at a price that is reasonable to low-income* people			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish additional markets that offer fresh produce at lower prices and/or accept WIC/EBT	Wellness Team Healthy Eating Committee	Healthy Food Financing Initiative, or unidentified	2014-2018
Enable community members to grow their own food by establishing community gardens	Wellness Team Healthy Eating Committee	unidentified	2012-2016
Provide coupons and special offers for fresh, healthy foods by developing partnerships between the retailer and other organizations (e.g. work place, school, etc.)	Wellness Team Healthy Eating Committee	Retailers, other partners	
Goal HE-2: Increase healthy choices made at local restaurants			
Objective 2.1: Get restaurants in the community to designate/advertise and offer healthy options and smaller portions			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish a local healthy restaurants group to share ideas and work together to promote health	Wellness Team Healthy Eating Committee, Historic New Castle Alliance	unidentified	begin in 2013
Have a healthy restaurants community event that features healthy options and promotes the restaurants that are "doing well"	Wellness Team Healthy Eating Committee, Historic New Castle Alliance	unidentified	begin in 2014
Objective 2.2: Feature and promote restaurants that are complying with goals of the wellness plan			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Feature local restaurants through a health-themed restaurants week	Wellness Team Healthy	unidentified	2014

	Eating Committee		
highlight health conscious restaurants in local print and online media	Wellness Team Healthy Eating Committee	unidentified	begin immediately
Sponsor a health-themed competition between local restaurants (e.g. cook-off)	Wellness Team Healthy Eating Committee	unidentified	2014
Objective 2.3: Require chain eating establishments (of an appropriate size (to be determined) to post nutrition information			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Aim to have this requirement passed at the County level by first working with the New Castle County wellness program managers and other county leadership	Wellness Team Healthy Eating Committee	unidentified	begin 2015
Explore best options for such legislation at all levels of government in the state	Wellness Team Healthy Eating Committee	unidentified	2015-2016
Develop and implement policy	Wellness Team Healthy Eating Committee	unidentified	2016-2018
Goal HE-3: Reduce consumption of unhealthy foods by making them less appealing and accessible			
Objective 3.1: Get convenience and food stores within the study area to adopt a product placement and advertising policy that, at the least, does not promote junk food more than healthy options			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Conduct inventory of convenience and food stores to identify existing conditions	Wellness Team Healthy Eating Committee	unidentified	2014
Conduct meetings with store owners/managers to discuss the issue and come up with feasible solutions	Wellness Team Healthy Eating Committee	unidentified	2015-2017
Implement chosen solutions	Individual stores with assistance from Wellness Team Healthy Eating Committee	unidentified	2017-2019
Goal HE-4: Improve eating habits of youth in the community through in-school and extra-curricular food offerings and education, with a focus on translating to habits among parents and outside of school			

Objective 4.1: Establish an initiative for nutrition and health education at schools that includes exposing students and parents to new foods, cooking methods, and wellness topics; engage 1/3 of the students and their parents.			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Set-up a working group to coordinate activities and events	Delaware Greenways, Schools	Community Transformation Grant (uncertain), School District funding	begin 2013, ongoing
Explore idea of opening a student-run café in or nearby the high school that is health-oriented and could also serve as a student hang-out	Wellness Team Healthy Eating Committee, William Penn High School	unidentified	2016
Establish a Camp FRESH site at the Penn Farm	Delaware Greenways, Christiana Health Care, and William Penn High School Wellness Center	unidentified	2015
Objective 4.2: Engage food retailers within .5 miles of area schools in adjusting product marketing aimed at children from promoting unhealthy options, to incentivizing, promoting, and making more readily available healthy choices.			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish a coupon system for students that incentivizes healthy food choices	Area Schools, PTA, Delaware Greenways	unidentified	2013-2015
Develop healthy foods promotional campaign that educates consumers about the benefits of healthy foods and targets the consumer at point of purchase (e.g. in the grocery store, at a convenience store, in a restaurant, etc.)	Wellness Team Healthy Eating Committee	unidentified	2014-2016
Offer smaller portions, healthier options for young people at reduced cost	Wellness Team Healthy Eating Committee	N/A	begin 2012
Objective 4.3: Offer cooking classes to youth and adults in the community			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Identify funding	Wellness Team Healthy	unidentified	2012

	Eating Committee		
Identify locations where classes will be offered (e.g. Penn Farm, Schools, other)	Wellness Team Healthy Eating Committee	unidentified	2012-2013
Identify teachers and establish class plan	Wellness Team Healthy Eating Committee	unidentified	2012-2013
Survey participants prior to classes	Wellness Team Healthy Eating Committee	unidentified	2013
Implement set of classes	Wellness Team Healthy Eating Committee	unidentified	2013
Evaluate success and make modifications to improve strategy	Wellness Team Healthy Eating Committee	unidentified	2013 and ongoing
Active Living			
Goal AL-1: Make active transportation (bicycling, walking, etc.) safer and more appealing to all			
Objective 1.1: Double the amount (length) of designated* bike and ped routes in the study area by 2021			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish baseline conditions through inventory that supplements 2011 Walkability and Bikeability Assessment Report	Delaware Greenways	Unidentified	2012
Incorporate bicycle boulevards into road networks to provide connectivity for non-motorized travelers	Delaware Greenways, Bike Delaware, Wellness Team Physical Activity Committee	Transportation funds (not yet secured)	As opportunity arises
Identify and paint needed bicycle and pedestrian lanes (see walkability and bikeability assessment and supplemental documents developed)	Delaware Greenways, Bike Delaware, Wellness Team Physical Activity Committee	Transportation funds (not yet secured)	Ongoing, as funds allow
Objective 1.2: Identify routes and establish/enhance them to target schools and worksites			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Build on 2011 Bikeability and Walkability Study to identify additional needed connections for active transportation between destinations	Delaware Greenways	Safe Routes to School	begin immediately

(particularly assess users and routes for schools and worksites)			
Install bike/ped infrastructure identified in the Bikeability/Walkability Study Map entitled Status of Bicycle and Pedestrian Improvements Recommended in the New Castle 2009 Comprehensive Plan	Delaware Greenways, City of New Castle	various, unidentified	begin immediately
Apply for a Safe Routes to School project to include community planning aspect and promotion; promotional activities could include the Build-a-Bike program with the Urban Bike Project and creating and distributing route maps	Delaware Greenways, Colonial School District, Wellness Team Physical Activity Committee	N/A	begin immediately
Use the 2011 New Castle Bikeability and Walkability Assessment Report to identify, prioritize, and implement crosswalk improvements and additions	Delaware Greenways, City of New Castle	unidentified	begin immediately
Objective 1.3: Establish way-finding measures for all major routes and destinations in the community			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Create, publish, and distribute maps of the New Castle area trails and parks in electronic and print media	Delaware Greenways	future phases of Municipal Wellness Leadership grant funding	2012
Develop and implement a signing plan for the study area	Delaware Greenways, City of New Castle, Historic New Castle Alliance	unidentified	begin in 2014
Objective 1.4: Establish and maintain active group of Trail Stewards to keep trails and pedestrian/bicycle routes clean and safe			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Continue to expand the Trail Stewards network established in early 2011 by Delaware Greenways	Delaware Greenways	various	ongoing
Enhance key walking/bicycling routes with appealing landscaping and other amenities	Historic New Castle Alliance Design Committee; master gardeners	unidentified	begin in 2013

Research and assess best ways for maintaining clean, trash-free parks and trails under the auspices of the Trail Stewards; one question that is being posed by a number of community members, is whether trash cans should be provided in public areas or to use a carry-in carry-out approach.	Wellness Team Physical Activity Committee	unidentified	begin in 2013
Objective 1.5: engage more residents in using the trails and parks, and taking part in activities in the community			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Review results from community survey that identify some of the reasons why residents are/are not engaging in activity, what would make them more likely to engage in activity, and conduct a follow-up survey that develops more detail on issues in the preliminary survey	Wellness Team Physical Activity Committee	unidentified	begin in 2013
Establish regular, local hike/bike/walk outings led by the Wilmington Trail Club	Wilmington Trail Club	unidentified	begin in 2012
Offer bicycle lessons for seniors	White Clay Bicycle Club and Delaware Greenways	unidentified	begin in 2014
Offer bicycle safety instruction	New Castle Senior Center, White Clay Bicycle Club, and Delaware Greenways	unidentified	begin in 2011
Objective 1.6: Improve residents' ability to walk/bike/take transit to regular destinations (e.g. pharmacy, bank, park)			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Work with the County on zoning and land use of non-municipal lands to shift toward more mixed use so that people have the option to live/work/shop/recreate "in place"	Wellness Team Physical Activity Committee, Delaware Greenways	unidentified	ongoing
Install bike racks at all locations, or within reasonable distance (central rack for multiple buildings)	Delaware Greenways, Urban Bicycle Project, Bike Delaware	retailers, or unidentified	begin immediately
Install bike part vending machines in high traffic areas	Wellness Team Physical Activity Committee	unidentified, potentially self-funding	begin 2016, or as appropriate

Conduct in-depth planning process for developing links between residential neighborhoods and key community destinations: 1)	Delaware Greenways, DelDOT, New Castle County, City of New Castle	Existing operating budgets, Unidentified	Begin 2012
Objective 1.7: Incentivize walking and biking to destinations (as a way to get people to try it)			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish a coupon/discount program with local retailers that offer special prices for people that walk/bike to the destination; coupons would be mailed to residents and also offered through local employers in the study area; work with County, Americorps VISTA, and Wilmington University to establish an intern program to coordinate and oversee the project	Delaware Greenways, New Castle County	Americorps VISTA program	begin 2014
Work with faith-based, community organizations, and non-commercial destinations to promote bicycling and walking	Wellness Team Physical Activity Committee	unidentified	begin 2013
Objective 1.8: Establish direct connections to all neighborhoods to the primary area trails, including the New Castle to Wilmington Greenway and the Penn Farm trails			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Identify possible connections using in-the-field analysis and GIS	Delaware Greenways and Wellness Team Physical Activity Committee	Transportation funds, or unidentified	begin 2012
Meet with the residents, property owners, and other stakeholders to prioritize connection routes and solicit community support	Delaware Greenways and Wellness Team Physical Activity Committee	Transportation funds, or unidentified	begin 2012
Objective 1.8: Establish a wellness oriented planning district that shows the community's commitment to wellness and active lifestyles and will encourage new development/redevelopment to also cater to bicycles and pedestrians through design and other policies			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>

Establish a working group of elected officials, Chamber of Commerce, County and City agents, and other related community organizations to research and develop a reasonable strategy	Delaware Greenways, City of New Castle	Unidentified	begin 2013
Goal AL-2: Get more residents, workers, and visitors physically active through recreation and daily activity			
Objective 2.1: Get 80% of major work sites and community organizations to implement at least one physical activity oriented policy			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish Wellness Team Committee to address this issue through outreach, information sharing, and technical support	Wellness Team, Delaware Greenways	unidentified	begin 2013
Objective 2.2: Identify/Establish at least 4 locations in the community where all are able to recreate during inclement weather			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Identify existing known or likely locations, explore feasibility, and work with sites to open their doors	Wellness Team Physical Activity Committee	unidentified	begin 2014
Establish modified fees program at existing indoor fitness facilities to enable residents of varying need and income levels the ability to access	Wellness Team Physical Activity Committee	unidentified	begin 2012
Objective 2.3: Ensure that community members and others outside the community know of the great parks and trails in New Castle			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Create, publish, and distribute maps of the New Castle area trails and parks in electronic and print media	Delaware Greenways, City of New Castle, New Castle County	unidentified	begin immediately
Objective 2.4: Make bicycles available to the community			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Get a bike rental / retailer to locate in New Castle	Wellness Team Physical Activity Committee, Historic New Castle Alliance	N/A	begin immediately
Establish bike-share/rental points around the community, including at the New Castle Senior Center, and the Penn Farm (reach out to the	Delaware Greenways, New Castle Senior Center	unidentified	begin 2012

Urban Bike Project or another bicycle facility for assistance)			
Objective 2.5: Incorporated outdoor activity with school coursework			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish lesson plans in local schools that get them onto nearby trails, parks, and the Penn Farm	Colonial School District, Tall Oaks Classical School	Schools	begin immediately
Objective 2.6: Get people of all ages into the community parks			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Make it easier to access community parks, especially Battery Park--the most popular; improve wayfinding, bike/ped infrastructure for major links between residential communities and Battery Park	City of New Castle, Historic New Castle Alliance, Delaware Greenways	Unidentified	begin 2012
Work with neighborhood groups to determine best strategies and specific steps for ensuring park facilities are maintained, safe, and inviting.	Colonial School District, Tall Oaks Classical School	Schools	begin immediately
solicit sponsors for park maintenance	Wellness Team Physical Activity Committee, City beautification committee	unidentified	Begin 2013
promote community events in the parks to maintain positive use of the facilities and to keep undesired activity at bay	Wellness Team Physical Activity Committee, City beautification committee	unidentified	Begin 2013
Coordinate park beautification committees and clean-up days	Wellness Team Physical Activity Committee, City beautification committee	unidentified	Begin 2013
*designated routes are defined as any route for a pedestrian or bicyclist that are clearly marked or created for the non-motorized user, including off-road trails, sidewalks, on-road painted bicycle lanes, and bicycle boulevards			
Reduced Exposure to Tobacco			
Goal T-1: Protect the rights of non-smokers to breathe smoke-free air			

Objective 1.1: Establish outdoor clean air-policies in 75% of public spaces			
<i>Actions</i>		<i>Lead</i>	<i>Funding</i>
			<i>Timeframe</i>
Pass No-Smoking in Parks policy within the City of New Castle	City of New Castle	Lung Association Mini-Grant	2011-2012
Work with the County to designate county parks in the study area as smoke-free	Wellness Team	unidentified	begin 2012
Objective 1.2: Ensure enforcement of age laws for tobacco products			
<i>Actions</i>		<i>Lead</i>	<i>Funding</i>
			<i>Timeframe</i>
Establish working group to identify specific challenges and work with retailers	Wellness Team	unidentified	begin 2013
Awareness/Evaluation/Leadership			
Goal AEL-1: Engage all sectors in the community to promote key health/wellness issues and awareness			
Objective 1.1: engage at least 2 business sector representatives in the Wellness Initiative in an advisory capacity			
<i>Actions</i>		<i>Lead</i>	<i>Funding</i>
			<i>Timeframe</i>
Recruit representatives from Amazon, Zenith, TA Instruments, Home Depot	Wellness Initiative Leadership Committee	unidentified	begin immediately
Objective 1.2: engage at least 2 community institution/organization representatives in the Wellness Initiative in an advisory capacity			
<i>Actions</i>		<i>Lead</i>	<i>Funding</i>
			<i>Timeframe</i>
Recruit a representative from a faith-based organization	Wellness Initiative Leadership Committee	unidentified	begin immediately
Recruit a representative from Wilmington University	Wellness Initiative Leadership Committee	unidentified	begin immediately
Objective 1.3: document work and measure progress of the Wellness Initiative as a way to gauge achievement of our vision			
<i>Actions</i>		<i>Lead</i>	<i>Funding</i>
			<i>Timeframe</i>
convene a working group to develop communications materials that document and present the past and present wellness-oriented	Wellness Initiative Leadership Committee	unidentified	begin 2012

policies, environments, and systems			
Objective 1.4: Establish Wellness Leadership organizations in the city to serve as liaisons and health sites			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
City of New Castle establish leadership role by identifying wellness and health as objectives of policies and in the next comprehensive plan update.	City of New Castle	City operating costs (tentatively)	ongoing
Establish William Penn High Wellness Center as a site with informational offerings for the entire community	William Penn High Wellness Center	unidentified	begin 2012
Objective 1.5: Provide educational opportunities to community that target local groups/demographics, including aging adults, seniors facing dementia, youth, veterans, handicapped individuals, and low-income residents			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Engage youth in the community to lead wellness awareness and education in the community through Penn Farm partnerships	Delaware Greenways, Colonial School District	school district, Penn Farm	begin immediately
Have a Wellness Team/Wellness Initiative presence at community events that inform people of resources, educate them on health, and inspire them to live healthy lifestyles (e.g. have a tent at "Art on the Green" in September.)	Wellness Initiative Leadership Committee	unidentified	begin immediately
Goal AEL-2: Support from higher levels for wellness activities (Advocacy issue)			
Objective 2.1: Have 10 community members engaged in wellness advocacy at all times			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Get at least three sites from each sector of the community to conduct a needs/preferences survey and/or focus group in their organization to identify what students, employees, etc. feel that they need help with (and what their greatest challenge to a healthy lifestyle is) to help target Wellness Initiative action, and get organizational leadership aware of the issues that their constituents face.	Wellness Initiative Leadership Committee	unidentified	begin 2013

Conduct monthly meetings with Wellness Initiative Leadership Committee, which provides updates and maintains action on advocacy issues	Wellness Initiative Leadership Committee, Delaware Greenways, HEAL Coalition	unidentified	begin 2012
Goal AEL-3: Build community capacity to carry-out policy, environmental, and systems changes			
Objective 3.1: Establish a Wellness Planning District that covers the New Castle area defined in the Wellness Initiative Report, which will serve to solidify the commitment to the Wellness Initiative and this Wellness Action Plan and lend support to implementing the actions explained in this document; ultimately this district could help attract health-conscious retailers, businesses, and organizations to locate in the community and build the groundswell for wellness			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Gain endorsement and formal recognition of this district from local government, including the city and the county	Wellness Team, City of New Castle	undetermined	2012-2014
Develop funding for the Wellness Initiative through fundraisers, donations, etc.	Wellness Team and charitable groups, such as junior league, lions club, etc.	N/A	begin immediately, ongoing
Explore and initiate further county/city actions to enhance and promote the district	Wellness Team, City of New Castle	undetermined	2014-2016
Objective 3.2: Develop relationships/partnerships among health care providers and community leaders to facilitate active referral of patients to local resources that increase access to high quality nutritious foods, opportunities for physical activity, and tobacco use cessation			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Establish Awareness and Leadership subcommittee of Wellness Team and recruit representatives of local health care sites to keep them up to date on the resources coming out of the Wellness Initiative and ensure that through them, their patients are made aware of the resources they can use locally.	Delaware Greenways, New Castle Senior Center, William Penn Wellness Center	unidentified	begin in 2012, ongoing
Goal AEL-4: Track wellness progress so that program can adjust based on success of outcomes indicated by data, and to provide a case study and model for other communities in the state			

Objective 4.1: Develop and implement a monitoring strategy for all wellness actions taken, to gauge success of program participants and provide a snapshot of community health			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Work with the Delaware HEAL Coalition partners to build and assess the data records of individual health-related indicators (e.g. BMI) of program participants	Delaware Greenways, Wellness Team Leadership Committee	unidentified	begin 2012
Make use of and build on data already collected in the William Penn High School Wellness Center	Wellness Team Leadership Committee	unidentified	begin 2012
Goal AEL-5: Build recognition as the healthiest, most livable community in Delaware			
Objective 5.1: Promote through marketing and media coverage the community's commitment to healthy lifestyles and its resources and amenities that support and promote healthy lifestyles			
<i>Actions</i>	<i>Lead</i>	<i>Funding</i>	<i>Timeframe</i>
Target health oriented companies to locate in the area	City of New Castle, County, Historic New Castle Alliance, Chamber of Commerce	unidentified	Ongoing
Market and promote the wellness aspect when addressing developers, relocating/new businesses, etc.	City of New Castle, County, Historic New Castle Alliance, Chamber of Commerce	unidentified	Ongoing
Promote and market the wellness aspect at community events, both locally and statewide (e.g. state fair)	Wellness Team Leadership Committee, Delaware Greenways, City of New Castle, New Castle County	unidentified	Ongoing
Include the wellness aspect in marketing and media promotion opportunities in all sectors	Wellness Team Leadership Committee	unidentified	Ongoing

*low-income is defined by the State of Delaware as: household's annual income before taxes must not exceed \$21,660 if one person lives in the household; \$29,140 if two people live in the household; \$36,620 if three people live in the household; \$44,100 if four people live in the household; \$51,580 if five people live in the household; \$59,060 if six people live in the household; \$66,540 if seven people live in the household; \$74,020 if eight people live in the household; and \$81,500 if more than eight people live in the household.

MOVING THE PLAN FORWARD

The incarnation of the New Castle Community Wellness Initiative has progressed differently than many of the community-based wellness initiatives that have popped-up across the country. Similar initiatives in other communities have tended to develop through an existing informal coalition of community groups, each of which are interested in tackling one or more wellness related issues. In contrast, the New Castle Community Wellness Initiative was begun concurrent with the start of other local community wellness activities, namely the Penn Farm and the William Penn High School integrated learning partnership with the Penn Farm. The fact that the initiative and collection of people supporting the initiative are coming together differently is neither good nor bad, but this difference poses some particular opportunities and challenges.

The greatest challenge in moving the plan forward is to maintain broad community support and action. A small handful of groups are strongly engaged in the Initiative; most lack specific budgets for community engagement so maintaining regular involvement in the program will remain a challenge. An important step will be to engage community groups in a specific component to which they have a stronger vested interest and get the group's commitment from the onset. Another strategy is to develop a regular and consistent steering body for the Initiative.

As the first two phases of the Wellness Initiative wrapped up, the Wellness Leadership Team agreed that the steering body should be integrated into the advisory and management structure of the Penn Farm, so as to economize time and resources, and keep the focus and enthusiasm high through the farm activities, which are tangible and fun.

Any lapse in funding can make maintaining involvement by the community challenging. Most and perhaps all of the successful wellness initiatives across the country have a substantial and maintained funding source. Although future funding sources for the Initiative are uncertain, two leadership groups have emerged with commitments to carrying-out substantial components of the plan which will help provide an ongoing presence and structure to the Wellness Initiative: Delaware Greenways' Penn Farm and William Penn High School's integrated learning program.

The Penn Farm

In 2010, Delaware Greenways began working with the Trustees of the New Castle Common to plan for revitalization of the Tract 6 land that they were endowed through William Penn. The old Quigley farm, as it is known to many in the community, is located in the western portion of the community study area and had been a source of fresh produce for many in the community until recent years. The mission of the Penn Farm is to improve the health and wellness of Delawareans through the sale, production, and promotion of our state's finest produce and agricultural products.

Envisioned for the farm is a "community resource serving to educate, document, interpret and perpetuate the rich heritage of Penn Farm for the benefit of future generations and the betterment of the community." The farm is a collaborative effort between food producers, educators, and members of the community to provide and demonstrate the importance of healthy food and physical activity to enable healthy lifestyles.

Interaction with the general public is centered at Tract 6 Produce, where the goal is to create a healthier, more equitable food system. The creation of this farm stand and community gardens provides affordable access to fresh produce, facilitating youth leadership in health and nutrition education, and connects small farmers to urban communities. The Farm is a learning landscape where visitors can participate in sustainable agriculture, learn to prepare healthy foods, engage in physical activity, and learn about wellness.

William Penn High School Integrated Learning Program

Of the many opportunities arising from the plans for the Penn Farm, the adjacent William Penn High School was a logical partner to work with on community building especially as related to developing good habits (including health) among the community's young people. The Race to the Top federal education program grant was awarded to the Delaware Education Department, coinciding with the opening of the Penn Farm. This grant makes possible a commitment to a true, sustained development of youth oriented work-study programs that would engage students of the high school in all aspects of the farm operations. The integrated program will involve engaging students from 11 different vocational pathways offered at the high school in applying their work to the Penn Farm.

These three programs (the Penn Farm, the High School integrated learning partnership, and the Wellness Initiative) all reached the point of implementation during the summer of 2011. Momentum was building in all three and with clearly overlapping areas of interest it made sense to find a way to build the Wellness Initiative into the other two more concrete, action-oriented, widely known programs, rather than keep it as a small, separate exercise in community planning.

Having these two major community implementation programs in place is the best opportunity for the Wellness Initiative to garner and sustain interest in wellness issues and provide concrete opportunities for the community to engage in action immediately. While it is a less tried and true approach, this concurrent development of the Initiative alongside major implementation will help pique the interest of the community. Such an approach will include more intense work, making sure that the plan and structure is developed in alignment with the Penn Farm and high school programs; however, it is a great opportunity.

IV. A MODEL FOR COMMUNITY WELLNESS IN DELAWARE

In 2010, Governor Jack Markell, instituted the Executive Order 19, which established the Council on Health Promotion and Disease Prevention. This action was a demonstration by the Governor, members of the council, and many other organizations dedicated to community wellness issues, of leadership and commitment to statewide progress toward promoting healthy lifestyles and preventing lifestyle-related disease. This leading step toward curbing and reversing the trends of overweight-obesity related conditions and other chronic diseases must be followed by the steps of communities across Delaware putting the charge into practice. If not, the desired effect of healthier Delawareans will not be achieved. As one of the first communities in Delaware formulating a

community-wide wellness plan, the New Castle Community's Wellness Initiative provides a model from which other municipalities can learn.

Provided below are some preliminary lessons learned from the New Castle Community Wellness Initiative, which aim to guide others seeking to begin a similar initiative and also direct future actions taken by the New Castle community.

LESSONS LEARNED

The New Castle Wellness Initiative has come into being in a way much different than most community wellness efforts across the country. Reading about wellness efforts in other communities showed some commonalities amongst many communities, which were not the case for New Castle: most have a community leader/organization driving the effort and a number of other organizations within the community that already have strong missions/penchants for promoting health/wellness.

New Castle is a smaller community and it has not followed the traditional path to the community wellness effort. The CHANGE assessment tool seemed to be oriented toward larger communities that already have some strength and experience in wellness; the assessment ranking system was based on an approach of community willingness to focus on establishing wellness in policies and systems; it seeks to formalize health and wellness into community policies and implies that regulations and formal policies are the end goal. In New Castle there was some resistance and lack of alignment with an aim of rigid policy. There appeared to be too much of a gap between the end goal underlying the CHANGE tool assessment and what is feasible and/or desirable in the New Castle community. Nonetheless, the assessment and plan making processes brought to light this reality and prompted dialogue and thoughts on how to bring wellness to the forefront of community issues without having it be overbearing issue.

In hindsight, the assessment process would have been better suited to the New Castle community had it emphasized identifying the environmental, infrastructure, and systemic conditions while deemphasizing questions of policy – as integrating wellness into formal policy did not seem of interest to most organizations and many explained it was really beyond the purview of the mission they are charged with.

The assessment process seemed to be most helpful with identifying what organizations in the community can be relied upon and what resources they have to offer. While New Castle is a relatively small community, the biggest achievement of this process has been identifying all of the resources in the community that currently exist. The task that remains is to choreograph how resources can be made available to benefit the community as a whole and how organizations can work together to reach many more persons in the community beyond their direct constituents.

APPENDICES

APPENDIX A. LIST OF INITIATIVE PARTNERS

Agency and Contact	Mission Statement/Expertise/Resources Provided
<p>Wellness Initiative Manager: Andrea Trabelsi, Delaware Greenways 302-655-7275 atrabelsi@delawaregreenways.org</p>	<p>Delaware Greenways is a community-based organization, specializing in natural and scenic resource protection and sustainable land use to improve quality of life and promote healthy and active lifestyles. Delaware Greenways secured the grant funding to get the Wellness Initiative started, has served as the primary manager of the Initiative, and will continue to lead the Wellness Initiative through its community oriented healthy lifestyle center—the Penn Farm.</p>
<p>City of New Castle: Cathie Thomas, City Manager cthomas@newcastlecity.org</p> <p>Teel Petty, City Council Chair of Parks and Recreation</p>	<p>The City of New Castle worked with Delaware Greenways to secure the Municipal Wellness Leadership grant that funded the first phase of the Community Wellness Initiative. The City maintains representatives on the Wellness Leadership Team and is committed to taking action to enable and encourage healthier lifestyles of residents and visitors.</p>
<p>Trustees of The New Castle Common Chris Castagno, Trustee chris.castagno@gmail.com</p> <p>Greg Yacucci, Trustee dryacucci@comcast.net</p>	<p>The Trustees have a history as old as New Castle because the common land has existed as such since the days of early Dutch colonization when New Castle was Fort Casimir in 1651. Now more than 200 years later, this body of 13 Trustees oversee a nonprofit charitable organization founded by William Penn, which was incorporated in 1764 and reincorporated by assembly in 1792. The Trustees purpose is to benefit the citizens, to preserve the historical City of New Castle and the remaining lands and open space now held in trust.</p>
<p>New Castle Senior Center: Natalie Kaplan, Executive Director 302-326-4209 NKaplan@newcastleseniorcenter.com</p>	<p>The mission of the New Castle Senior Center is to serve older adults with programs to enhance their health, happiness and independence within the community. New Castle Senior Center welcomes everyone over 50 years of age regardless of race, religion, sex, ethnic origin or handicap. The Senior Center serves on the Wellness Leadership Team and also operates a small health clinic with access to a doctor for its members.</p>
<p>Colonial School District: Dr. Dorothy Linn, Superintendent dlinn@colonial.k12.de.us</p> <p>Brian Erskine, Supervisor of School Reform berskine@colonial.k12.de.us</p> <p>Paula Angelucci, Nutrition Services 302-323-2743</p>	<p>Over half of the schools in Colonial School District are located in the Wellness Initiative Study area. The School District has been engaged in promoting wellness prior to the beginning of the Wellness Initiative and is eager to be a part of the community wide effort to promote health.</p>

Karen Gilbert, Operations	
William Penn High School Wellness Center: Lanae Ampersand, Program Manager LAmpersand@Christianacare.org (302) 324-5740	The center is a clinic located in William Penn High School and is run by Christiana Care. Services offered include treatment for minor injuries and acute illnesses; physicals and sports examinations; immunizations; nutrition education and weight management; individual and family counseling; health education (smoking cessation, drug and alcohol abuse, violence prevention); diagnosis and treatment of sexually transmitted diseases and assistance in finding appropriate services in their communities.
Historic New Castle Alliance: Esther Lovlie, President and Resident esther@pennsplace.net Dr. Jo Viola, Member and Resident joviola@comcast.net	The Historic New Castle Alliance is an affiliate of the Main Street America Program. The alliance is a group of business owners and town residents who are working to preserve the beauty of our historic district and create a vibrant downtown filled with thriving businesses and cultural activities.
Tall Oaks Classical School: Harold Naylor, Director of Stewardship haroldnaylor11@gmail.com 302-738-3337 Stephanie Welch, Teacher swelch@talloaksde.org	This private k-12 school is located adjacent to the Penn Farm and William Penn High School. The school is looking to engage its students in outdoor recreation and education at the Penn Farm and participate in the Wellness Initiative in other ways.
Boothurst Neighborhood: Alma Johnson, Neighborhood Leader alma.johnson@verizon.net 302-322-4512	The Boothurst Neighborhood is located in the City of New Castle at the northern border, along Route 9.
Buttonwood Neighborhood: Teel Petty, Neighborhood Leader	The Buttonwood Neighborhood is located in the City of New Castle at the northern border, along Route 9.
City of New Castle Police: Lieutenant Adam Brams Adam.Brams@CJ.State.de.us	The City of New Castle Police exists to preserve life and property and to provide a safe environment for residents of New Castle and visitors to the beautiful and historic city. By all standards, thanks in a large part to the service provided by the police department, New Castle is a safe and peaceful community in which to reside or to visit.
Bike Delaware: James Wilson, Executive Director and New Castle Resident james@bikede.org	Bike Delaware is a coalition of like-minded citizens and organizations that support bicycling as a healthy alternative to driving, advocating safe provisions within our transportation system.
New Castle Public Library: Doris Petersen, Library Specialist DPetersen@nccde.org	The New Castle Public Library is centrally located in Historic New Castle and serves the community with information resources as well as community space. Community groups are given free access to use its meeting facilities. The library also works to coordinate

	speakers and events on topics of interest to the community.
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APPENDIX B. GENERAL POPULATION SURVEY QUESTIONNAIRE

The survey was a convenience survey conducted on Election Day, outside the polling place, promoted to the community through the City newsletter and available in person and on the website, and also distributed at a few other community group meetings. 157 surveys were returned from residents of the community, of which 84 are female, 66 are male, and 7 did not answer the question. Respondents are primarily 50 years or older (78 percent) and live in the historic district (72%). Approximately 16 percent live in communities along Route 9 and the rest are from other areas within the community.

Below are the survey questions that were posed, with tallies of the responses.

	Very Good	Good	Average	Needs Improvement	Non-existent
My knowledge/understanding about healthy food and nutrition is:	76 (48%)	57 (36%)	20 (13%)	4 (3%)	
My knowledge/understanding about maintaining a healthy weight is:	74 (47%)	61 (39%)	11 (7%)	11 (7%)	
My knowledge/understanding about exercise is:	78 (50%)	59 (38%)	12 (8%)	8 (5%)	

What are your sources of Information about healthy food choices, managing weight, exercise, avoiding chronic illnesses, controlling use of harmful substances, and managing stress?

Sources of Information	Actual	Percent (%)
TV / Radio /the Media	99	63
School	18	11
Product packaging/labeling/advertisements	49	31
Family / Friends	77	49
Workplace	31	20
Doctor’s Office / Health Clinic	90	57
Personal wellness coach (e.g. physical trainer, nutritionist,..)	17	11
Web	3	2
Reading	4	3

*Multiple responses were allowed

YES NO

Are you concerned about maintaining a healthy weight for you or family members?	141 (91%)	14 (9%)
Do you get the recommended 150 minutes per week of exercise?	84 (54%)	71 (46%)
Do you eat the recommended 5 portions of fruit or vegetable a day?	69 (45%)	83 (55%)

*note: not all respondents answered every question; percentages given are out of the total number of people that answered the question.

**Do you feel that you would like to know more about:
(check all that apply)**

	ACTUAL	%**
Bicycling and walking routes in the community?	101	64
Bicycling and walking routes to school?	38	24
Bicycling and walking safety?	75	48
Nutrition / healthy food choices / healthy cooking?	86	55
Local exercise programs and resources?	101	64
Preventing chronic disease and other health problems?	85	54
Other*--water quality	1	1
Other*--memory loss	1	1
Other*--lung disease	1	1
Other*--vegetarian alternatives	1	1

*responses written in

**percentage of total survey respondents

	YES*	NO
Do you walk, jog, and/or bicycle?	128 (83%)	26

If Yes, how frequently?

	Actual	Percent*
1 time per week	15	12
2 times per week	22	17
3 times per week	27	21
4 times per week	12	9
5+ times per week	47	37

*percentage is out of those that answered the question

The following questions were asked on the second page of the survey²⁰.

What is your primary reason to walk, jog, bicycle?*	ACTUAL	Percent**
to get to a destination	30	23%
physical fitness/stay healthy	100	78%
lose weight	35	27%
training for an event	3	2%
Other (nothing written in)	3	2%
Other (walk the dog)	7	5%
Other (lower stress/enjoyment)	6	5%
Other (for work)	2	2%

*Some respondents gave more than one reason

<i>I would be more likely to walk, jog, rollerblade, skateboard, bike, etc. if...</i>	ACTUAL*	PERCENT**
...there were more walking trails.	66	52%
...the trails/sidewalks/routes went to		
my school.	11	9%
my work place.	16	13%
the bank.	24	19%
the library.	29	23%
the pharmacy	31	24%
a grocery or convenience store.	46	36%
other destination	7	5%
City of Wilmington	1	1%
Parks	5	4%
...there was sufficient lighting.	52	41%
...I had a map or the routes were more clearly marked.	33	26%
...I felt safer from auto vehicles or crime	55	43%
...there were clearly marked bicycle lanes.	45	35%
...other--if my knee would let me	1	1%
...other--if I had time	2	2%
...other--if there were more trees/vegetation along	1	1%
bike/walk routes		
...other--if everything was familiar	1	1%
...other--if the sidewalks were less lumpy	1	1%
...other--dog control	2	2%
*Respondents were asked to check all that apply		
**Percentage is out of those that responded yes to		

²⁰ Note: more than 5 respondents did not complete the second page of the survey.

walking/jogging/bicycling			
I would be more likely to eat healthy foods if...		ACTUAL*	Percent**
...there were more healthy choices in my neighborhood or within a mile of my home.		54	34%
...there were in-store promotions to buy fresh produce.		49	31%
...there was a local farmers market.		52	33%
...there were nearby restaurants that featured healthy food and beverage choices.		51	32%
...there were nearby restaurants that featured healthy portion size.		49	31%
...other	I was better educated on nutrition	1	1%
	My significant other ate healthier	1	1%
	I wasn't so lazy	1	1%

* Respondents were asked to check all that apply

** Percentage is out of the total number of survey respondents

Please name your nearest park and rate it for the following:

BATTERY PARK	Poor	Adequate	Good	Very Good
Safety	8	20	61	27
Lighting	18	23	51	18
Safe route to get there	2	16	54	47
Bicycle rack	20	25	24	45
Play equipment in good condition	3	16	33	32
Pleasant landscape	2	9	51	41
Landscape maintenance	2	17	52	37
Shade	1	17	55	33
Seating for rest	1	19	50	35
Cigarette butts w/in 20 ft. of the playground	17	10	35	10
How often do you use the park?	ACTUAL	Percent		
more than once per week	67	58%		
about 2-4 times per month	26	22%		
monthly	20	17%		
rarely/never	6	5%		

Note: respondents did not rate all areas

THE GREEN	Poor	Adequate	Good	Very Good
Safety			1	
Lighting		1		
Safe route to get there			1	
Bicycle rack				
Play equipment in good condition				
Pleasant landscape			1	

Landscape maintenance	1
Shade	1
Seating for rest	1
Cigarette butts w/in 20 ft. of the playground	
How often do you use the park?	
more than once per week	1
about 2-4 times per month	
monthly	
never	1

BULL HILL	Poor	Adequate	Good	Very Good
Safety		1	2	
Lighting		2	1	
Safe route to get there			1	2
Bicycle rack	1	2		
Play equipment in good condition		1		2
Pleasant landscape				3
Landscape maintenance		1	1	1
Shade		1	1	1
Seating for rest		1	2	
Cigarette butts w/in 20 ft. of the playground	1			1
How often do you use the park?				
more than once per week	2			
about 2-4 times per month				
monthly	1			
never				

BUTTONWOOD PARK	Poor	Adequate	Good	Very Good
Safety		1	1	1
Lighting	1	2		
Safe route to get there			2	1
Bicycle rack	1	2		
Play equipment in good condition		1	1	
Pleasant landscape	1	1		
Landscape maintenance	1	1	1	
Shade		2	1	
Seating for rest		2	1	
Cigarette butts w/in 20 ft. of the playground	1	1		

How often do you use the park?	
more than once per week	
about 2-4 times per month	2
monthly	1
never	1

SUSI PARK	Poor	Adequate	Good	Very Good
Safety			1	
Lighting			1	
Safe route to get there			1	
Bicycle rack		1		
Play equipment in good condition			1	
Pleasant landscape				
Landscape maintenance			1	
Shade			1	
Seating for rest			1	
Cigarette butts w/in 20 ft. of the playground				
How often do you use the park?				
more than once per week	1			
about 2-4 times per month				
monthly				
never				

JEFFERSON FARMS PARK	Poor	Adequate	Good	Very Good
Safety			1	
Lighting				1
Safe route to get there				
Bicycle rack			1	
Play equipment in good condition				1
Pleasant landscape			1	
Landscape maintenance			1	
Shade			1	
Seating for rest			1	
Cigarette butts w/in 20 ft. of the playground				1
How often do you use the park?				
more than once per week	1			
about 2-4 times per month				

monthly
never

APPENDIX C: CHANGE TOOL SECTOR SUMMARIES

Community-At-Large

Module	Community	
	Policy	Environment
Physical Activity	63.77%	68.12%
Nutrition	36.51%	34.38%
Tobacco Use	58.18%	60.00%
Chronic Disease Management	42.22%	26.67%
Leadership	63.64%	58.18%
Demographic Information		
Community Density - Population	5,285	
Community Density - Sq Miles	3.4	
Community Setting	urban/suburban	
Median Household Income	\$50,000 – \$74,999	
% No High School Diploma	15-19%	
% Poverty	5-9%	
% Unemployed	5-9%	

Schools

Community Health Assessment and Group Evaluation

School Summary

Sites:	1		2		3		4		5		6		7		8		9		10	
	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E
Module																				
District	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	57%	83%
Physical Activity	92%	80%	92%	72%	92%	76%	92%	76%	88%	80%	88%	72%	100%	100%	100%	60%	92%	76%	95%	95%
Nutrition	94%	88%	94%	88%	94%	88%	94%	88%	94%	88%	94%	88%	88%	80%	94%	88%	94%	88%	76%	82%
Tobacco Use	20%	20%	20%	20%	20%	20%	20%	20%	40%	40%	80%	80%	#DIV/0!	#DIV/0!	40%	40%	20%	20%	0%	0%
Chronic Disease Management	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	47%	60%	60%
Leadership	65%	62%	65%	62%	65%	62%	65%	62%	65%	62%	65%	62%	65%	62%	65%	62%	65%	62%	42%	45%
After School	100%	97%	100%	97%	100%	97%	100%	97%	100%	97%	100%	97%	100%	97%	100%	97%	100%	97%	70%	80%
Demographic Information																				
School Level	Elementary		Elementary		Elementary		Elementary		Middle		High School		Ungraded		6-12th grades		Elementary		K-12	
Type of School	Public		Public		Public		Public		Public		Public		Public		Public		Public		Private	
% Free/Reduced Price Lunch	72		69		84		64		61		54		57		83		86		N/A	
School Setting	Suburban		Suburban		Suburban		Suburban		Suburban		Suburban		Suburban		Suburban		Suburban		Suburban	
Median Household Income	25,000-34,999		25,000-34,999		25,000-34,999		25,000-34,999		25,000-34,999		35,000-49,999		25,000-34,999		25,000-34,999		25,000-34,999		Not Available	
District Level (# students)	9925		9925		9925		9925		9925		9925		9925		9925		9925		n/a	
Total of Students Served	729		557		341		474		713		1981		102		54		531		245	
Total of Schools in District	14		14		14		14		14		14		14		14		14		1	

Community Institution/Organization

Community Health Assessment and Group Evaluation

Community Institution/Organization Summary

Sites	1		2		3		4		5		6		7		8		9		
	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	
Module																			
Physical Activity	20%	68%	63%	68%	52%	60%	52%	70%	45%	58%	46%	68%	36%	68%	36%	44%	33%	58%	
Nutrition	18%	47%	86%	86%	75%	87%	66%	98%	49%	80%	29%	29%	53%	60%	45%	52%	57%	82%	
Tobacco Use	30%	50%	78%	75%	80%	100%	32%	40%	95%	95%	53%	53%	40%	63%	52%	68%	48%	88%	
Chronic Disease Management	20%	88%	43%	43%	85%	98%	30%	40%	45%	30%	50%	55%	25%	23%	50%	50%	30%	40%	
Leadership	20%	40%	26%	26%	86%	94%	26%	31%	20%	20%	20%	20%	22%	20%	54%	54%	23%	34%	
Demographic Information																			
Community Setting																			
# Individuals Served	900		90		1800		9		365		8000		31,000		40 + members		200		
Target Population	Seniors		Children		All		Children		All		All		All		Adults, Seniors		All		
Grades Served (if children/youth)	N/A		young / elementary mostly		All		preschool		All		N/A		All		N/A		All		
Community Setting	suburban		suburban		urban		suburban		suburban		urban		urban		suburban		suburban		
Median Household Income	\$50,000-74,999		\$25,000 – \$34,999		\$50,000-74,999		\$25,000 – \$34,999		\$35,000 – \$49,999		\$35,000 – \$49,999		\$35,000 – \$49,999		\$50,000-74,999		\$50,000-74,999		
Institution Type	Senior Center		Daycare		Church		Daycare		Church		Service Org.		Library		Service Org.		Church		
Sector Type	Public		Private		public		Private		public		public		public		private		private		
Profit Type	Non-profit		For-profit		non-profit		For-profit		not-for-profit		non-profit		non-profit		non-profit		non-profit		

Work Sites

Community Health Assessment and Group Evaluation Work Site Summary

Sites:	1		2		3		4		5		6		7		8	
	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E
Module																
Physical Activity	58%	55%	37%	93%	18%	36%	31%	48%	50%	52%	37%	55%	51%	42%	38%	48%
Nutrition	87%	89%	20%	88%	20%	49%	58%	68%	62%	62%	60%	84%	65%	68%	90%	87%
Tobacco Use	38%	76%	80%	100%	29%	43%	30%	58%	54%	56%	58%	69%	68%	76%	66%	77%
Chronic Disease Management	20%	20%	83%	85%	31%	35%	24%	25%	45%	44%	31%	38%	38%	40%	73%	73%
Leadership	24%	32%	80%	80%	25%	26%	22%	20%	35%	35%	25%	32%	42%	44%	60%	60%
Demographic Information																
Number of Employees	<20		<20		<20		20-99		20-99		<20		<20		<20	
Sector Type	Private		Public		Public		Private		Private		Private		Public		Private	
Profit Type	For Profit		Non-profit		Non-profit		For Profit		For Profit		For Profit		Non-profit		For Profit	
Type of Work Site	Retail / Restaurant		Govt.		Govt.		Restaurant		Retail / Pharmacy		Funeral Home		Govt.		Retail	

Health Care

Community Health Assessment and Group Evaluation

Health Care Summary

Sites	1		2		3	
	P	E	P	E	P	E
Module						
Physical Activity	73%	80%	100%	100%	80%	80%
Nutrition	85%	97%	92%	92%	89%	89%
Tobacco Use	80%	100%	100%	100%	62%	76%
Chronic Disease Management	80%	100%	89%	86%	80%	100%
Leadership	81%	100%	95%	93%	76%	76%
Demographic Information						
Number of Staff	<20		<20		<20	
Sector Type	Private		Private		Private	
Profit Type	For Profit		Non-profit		Non-profit	
Type of Health Care Org	Chiropractic / Rehab		Clinic		Medical / Physicians office	
Number of Patients	200/ month		3500/month		120/month	