The Path to Active Living

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The Historic Somerville Powderhouse

Source: William Smith
This report highlights the Somerville Community Path in Somerville, Massachusetts as it fits into the greater context of Active Living in the United States. There is currently a nationwide obesity epidemic and many organizations and local governments have taken a proactive approach to engage their citizens in healthy lifestyle choices. The report also discusses the national health epidemic, how government can support local initiatives, and design principles that can help foster healthy living. Case studies from around the world are used to provide examples of what is working. Coupled with these national themes is information highlighting what Somerville is doing, how it is being accomplished, and who is driving the research and implementation, as well as challenges the community faces. Somerville has shown that it takes the efforts of local government, community groups and citizens working together to create a context for collaboration that opens the door to community based participatory planning. Many important lessons can be learned from Somerville and applied to cities around the country.
Somerville, Massachusetts is situated two miles north of Boston. The Somerville Community Path, a walking corridor that is three quarters of a mile long and runs from Cedar Street into Davis Square, is used daily by hundreds of pedestrians, bikers, runners, dog walkers and commuters. How did this path come to the city, and what about Somerville in particular supported its construction? The right combination of need, ability, and political will were in place to make it happen. The purpose of this report is to put a face to the Somerville Community Path and show the uses of, and need for, this addition to the community. It is hoped that lessons can be taken from national statistics, literature and case studies to illustrate how Somerville has been successful and what it can improve on as it moves forward with plans to enhance active living in the city.

Source: www.activelivingbydesign.org

“We ought to plan the ideal of our city with an eye to four considerations. The first, as being the most
Somerville, Massachusetts is undergoing a major transition in terms of healthy lifestyles and healthy eating. Schools and communities are changing the way they live and making different choices regarding their health. Through the Shape Up Somerville Program and grant money from the Robert Wood Johnson Foundation, Somerville is showing promising results in the battle against obesity and inactivity. But why is there success in Somerville? Why did Somerville even take on this goal? How did the political and social climate of the city allow this to happen? These questions frame community-wide reform efforts.

Somerville is a diverse community with many needs. Researchers found that 44% of children in Somerville, grades 3 through 5, were overweight, well above the national average of 30% (Wall Street Journal, 2007). Dr. Christina Economos from the Tufts Friedman School of Nutrition created an approach to address these issues. Her study started in the schools and continued on to shape and change policy. Rather than recommend that children go on a diet, Dr. Economos advised integrating healthy eating education into curriculum as well as changing the options offered in school cafeterias and local restaurants (Wall Street Journal, 2007). These suggestions were implemented with the help of Somerville Mayor, Joseph Curtatone, who took an aggressive approach to changing the mindset of Somerville’s citizens, schools, and businesses.

Pushing Somerville further along its path to active living is the Robert Wood Johnson Foundation. Its mission is to improve the health and health care of all Americans (Robert Wood Johnson Foundation, 2007). Since the 1950’s, “the Robert Wood Johnson Foundation has been in the business of seeking transformative social change” to implement in communities around the United States (Lavizzo-Mourey, 2007). In 2003, Somerville (along with 24 other cities in the United States) won an Active Living by Design grant for this purpose.

Somerville has a history of community group collaboration. Multiple organizations became involved in an effort to tackle a variety of health and lifestyle issues. At the national scale, both preventative and reac-
tionary measures are important in combating obesity. The goal of this report is to understand Somerville in the national context of the challenges to active living. Improvements in physical design and government support contribute to Active Living. Case studies illustrate how active living programs have been implemented elsewhere, as well as challenges faced along the way. Somerville represents a city that has successfully demonstrated many of the principles discussed and as a result has been able to foster the active living movement in its communities.

Somerville Demographics
Healthy Living Somerville

*(An excerpt from Active Living by Design’s Shape up Somerville website)*

Somerville is a small city (4.1 square miles) with high population density (18,453 residents per square mile) and many civic coalitions (more than 40 such groups). Somerville also has staggering obesity statistics. For example, the percent of overweight fourth graders is twice the national average and four times higher than Massachusetts’ estimates. A 2002 study found that 49 percent of men and 38 percent of women in Somerville are overweight or obese. More than 50 languages are spoken in Somerville, which is divided into two distinct areas: the wealthy west, where many professionals moved following the development of the Davis Square subway in 1986, and the east, which retains a largely low-income immigrant character with recent arrivals from Central and South America, South Asia, Africa, and the Caribbean.

*man. Other forms of transport grow daily more nightmarish. Only the bicycle remains pure in heart. “ Iris Mur-
With the increase of fast food restaurants, processed foods, video and computer game usage, and availability and access to cars, children and adults are eating more unhealthy foods and exercising less (Lavizzo-Mourey, 2006). Walking to school is a way children can get exercise, but studies have shown that only 10% of children actually do (Lavizzo-Mourey, 2006).

In the last 20 years, the obesity rate among children has doubled. Children are at high risk – especially those living in urban neighborhoods – for obesity and other diseases, such as diabetes, high blood pressure, heart disease, and even stroke (Priority Populations and Physical Activity, 2008). In the last 20 years, the obesity rate among children has doubled (Priority Populations and Physical Activity, 2008). Trends show that while obesity rates have increased in all areas of the country, Southern and Midwestern states have the highest rates (U.S. Obesity Trends, 2007). In 2003, 19 percent of children ages six to eleven were overweight; 17 percent of teens were overweight; and perhaps, most alarming, 14 percent of children ages two to five were overweight (Prevalence of Overweight Among Children and Adolescents, 2007).

The Centers for Disease Control and Prevention (CDC) recommend that children and adolescents participate in at least 60 minutes of moderate physical activity each day (Center for Disease Control and Prevention, 2008). As lifestyles become more sedentary, this goal is becoming more difficult to achieve.

There are multiple explanations for children’s levels of inactivity, including a decrease in funding for physical activity at schools coupled with an increase in high-fat foods being served in many school cafeterias (Lavizzo-Mourey, 2006). Currently, 62 percent of children ages nine to thirteen years old do not participate in any organized physical activity outside of school (Center for Disease Control and Prevention, 2008). Few children have the opportunity for exercise unless it is incorporated into their everyday routine.

Meanwhile, exercise patterns among older adults are inconsistent. Surveys indicate
Before the Red Line came to Somerville’s Davis Square and long before the Somerville Community Path was planned and built, the Mass Department of Transportation was considering expanding its highway system throughout the Boston metro area. Plans for this, in the works since the 1948 Master Highway Plan, included a large new construction project extending Route 2 through Somerville (as an elevated highway in the area of what is now the Community Path) in order to meet what was to be known as I-695, or the “inner beltway.” I-695 would have crossed the Charles River near the Boston University Bridge, cut through Central and Inman Squares in Cambridge, and met the planned Route 2 extension in Union Square, Somerville “very likely obliterating much of that square” (xefer.com, 2002). This Route 2 extension would have split Somerville down the middle, further dividing a city already bisected by Route 93 and rail lines.

Vigorous community opposition to this plan led then Governor Francis Sargent to sign a moratorium on highway construction within Route 128, the highway that encircles the Boston metro area (Development History & Historic Preservation). The opponents of the plan, consisting of local officials and community groups, were angered by the large land takings that would have been required for this plan to go forward – an estimated 7000 residents would have been displaced! (according to Lowell K. Bridwell, the chairman of the Federal Highway Administration) In the words of Somerville resident Brian McKeller, “with that decision so much of this potential was set in motion.”

A few years after defeating the inner beltway plan, Somerville community groups once again launched a successful campaign, this time to bring one of the new Red Line subway stations to Davis Square. These community groups set the groundwork for a very different, more pedestrian friendly Somerville. If there had been a large elevated highway instead of a Community Path, Somerville would have been a more fractured, unsafe and less walkable area than it is today.
that adult exercise levels are at either end of the exercise spectrum – that is, very active or very inactive; few are in the middle. It is recommended that older adults participate in at least 30 minutes of moderate to rigorous activity most days of the week to help maintain a healthy lifestyle (Priority Populations and Physical Activity, 2008). Walking is often cited as one of the best ways for older adults to be physically active and may help older adults retain better physical functioning (Priority Populations and Physical Activity, 2008).

Studies have shown that there are higher rates of obesity among African- and Mexican-Americans (Priority Populations and Physical Activity, 2008) than other populations. Diabetes rates are five times greater in Latino and American-Indian communities than in other populations. Lastly, black and Latino children are less likely to engage in physical activity than white children (Priority Populations and Physical Activity, 2008). In urban areas, where many populations of color live, there is less green space than in rural areas. As mentioned above, children in urban public schools may be affected by financial cuts to physical education or after school sports programs (Lavizzo-Mourey, 2006).

An Australian study examined variables that may contribute to obesity and found that poor access to sidewalks and perceived lack of access to paths correlate positively with being overweight (Giles-Corty et al., 2003). The authors state that “poor access to a supportive physical environment that encourages physical activity may contribute to overweight and obesity” (Giles-Corty et al, 2003). Despite some of the limitations of this study, including a modest response...
rate and the homogeneity of the study area, this research demonstrates that this issue is international and raises the issue of economic cost of obesity in Australia, England and the United States. In England alone, “the estimated financial cost is 0.5 billion pounds sterling a year in treatment costs to the National Health Service and 2 billion pounds a year to the economy” (Giles-Corty et al., 2003). That is almost 4 billion in US dollars! Thus, when considering health care costs and work lost to sick days, it can be a good investment for communities to take steps toward increasing physical activity.

Somerville is not immune from the health crisis faced by the rest of the country. As mentioned previously, the number of overweight children in Somerville is 14% above the national average (Wall Street Journal, 2007). In terms of race, over 30% of both black and Latino children in Somerville are overweight (Institute for Community Health, 2007). According to studies done by the Institute for Community Health in Cambridge, who have been monitoring health and active living in Somerville, 42% of adults are either overweight or obese (2002). This paints a bleak picture for children growing up with weight problems; their statistics almost mirror those of adults. It is clear that Somerville is not aberrant from the rest of country in terms of the risks that target populations face, thus making Somerville an optimal place to implement active living strategies.

Somerville District-Wide Weight Status by Race 2007

Source: Institute for Community Health

*but he can’t walk anywhere! The world has become inaccessible because we drive there.*” Ivan Illich, Whole
Many environmental barriers impede people’s efforts to achieve a desirable amount of physical activity. This places responsibility on policy makers and planners to ensure that there is opportunity for exercise in public spaces, schools, and communities. Designing a built environment that encourages physical activity is a crucial strategy for cities and towns to create opportunities for people to be active. This might include building or improving recreation areas and commuter paths or simply making safety improvements to their streets. The built environment including schools, residential areas, business districts, parks, and transportation systems, can be better designed to promote active living (Edwards & Tsouros, 2006). Changes to these environments can also promote social activity and cleaner transport. For example, a safe park can serve as a place for adults to walk and socialize, children to play, and dog owners to gather. By creating walking corridors or safe bike paths, there is less reliance on pollution emitting transportation, simultaneously reducing auto emissions and motor vehicle congestion while improving options for physical activity.

Urban sprawl is also a factor in increased obesity rates. When jobs move out of the inner city, people depend more heavily on cars. This means more parking spaces are needed for commuters and roads become more crowded, making it less safe to walk or bike. Research has shown a direct correlation between urban sprawl and the increase in obesity rates (Edwards & Tsouros, 2006). The increased

Earth Review ☼ “Today people wouldn’t even see it as the same sort of neighborhood if it didn’t have the pathway
need to drive to work leads to fewer occasions to walk. Additionally, developing safe bike-ways, walk-ways, and public green spaces is not a priority on many major city government agendas. When one study reviewed city budgets, it found that significantly less money has been spent on the infrastructure for active transit than on traditional vehicle-oriented transit options (Edwards & Tsouros, 2006).

City governments can play a leading role in facilitating active living. This can be done through campaigns and programs or alterations and additions to the physical environment. Possible programs include: healthy eating programs, physical education in schools, community exercise classes and other programs to raise awareness about active living. Physical changes can be proposed and supported by city planners. Parking areas can be moved underground or converted into on-street parking to slow down traffic flow (Edwards & Tsouros, 2006). This creates more room for green space and makes streets safer. Vacant lots can also be developed into parks or green spaces. Additionally, cities and towns can construct parks that provide some of the same activities found in a gym. Lastly, municipal works departments can make sure that all structures are well lit, clean, safe and easily accessible.

In Somerville, the context for institutionalizing active living design and program implementation was driven forward by Mayor Joseph Curtatone. He took an active role in installing healthy eating programs in schools and made the fight against obesity a top priority (Wall Street Journal, 2007). The atmosphere is one of support and encouragement for active living.
gels whisper to a man when he goes for a walk.”  Raymond Inmon ☼ “Cycle tracks will abound in Utopia.”  H.G.

A Note on the Green Line Extension

Boston’s subway and light rail system, run by the MBTA (Massachusetts Bay Transportation Authority) will be extended from the current end of the “Green Line” at Lechmere station into Somerville and Medford over the next several years. This Green Line Extension will run along tracks that are currently used by a commuter rail. This route is the one the future proposed path would follow, taking the form of an elevated walk and bike-way as it connects Somerville to Boston with transit or pedestrian transportation options. Originally the path was planned to be built earlier, but when the Green Line extension was proposed the two plans were linked and work on the new path was pushed back to the MBTA timeline.

Dr. Mike Coffey talks to residents about “calories of daily living.”
Source: www.shapeupsomerville.org

phere and political agenda that Curtatone set opened the door for other key players to take action. Individuals, such as Dr. Michael Coffey of Somerville, also took an active role in promoting active living and educating the community on ways to change their lifestyles to improve their health. In addition, the city government supported policy changes in schools to allow for more time for physical activity, healthier food in school cafeterias, and increased health information in the curriculum (Shape Up Somerville, 2007).
**Design Principles for Active Living**

Literature on the connection between active living and the built environment often refers to the infrequency of specific research into what makes an area a “good place” that “promotes good health” and is “pedestrian friendly” (Frumkin, 2003). Neighborhoods often describe themselves as such based on intuition rather than empirical evidence. Most of the research mentions that creating a safe space is a key element in attracting users and thus supporting physical activity. However, the ideal space is often difficult to define well.

Active Living encompasses far more than just the creation of parks and paths, but their presence in a neighborhood still has a significant effect on physical activity, as long as the areas are safe and well designed. Design to improve park safety is compatible with common elements of good design: it meets the needs of its users, it is diverse and interesting, it connects people with place, and it provides people with a positive image and experience.

Good design emphasizes the following qualities: legibility, visibility, lighting, signage, diverse uses and access or connectivity (Coates et al., 2002).

Legibility is the degree to which a space is understandable, or the ease with which its component parts can be recognized and organized into a coherent pattern (Lynch, 1960). Visibility refers to clear lines of sight that enhance park users' feelings of comfort and security and increase likelihood of usage.

The single most requested physical design modification to improve safety is lighting (Coates et al., 2002), which also increases

*Wells ☽ “I have two doctors, my left leg and my right.” George Macauley Trevelyan ☽ “Above all, do not lose
legibility at night, making areas more usable. Signage is also an important as the element that conveys information and advertises the presence of a park. It increases public awareness, which can encourage more people to use it more frequently.

The most successful park spaces offer some degree of diversity in their physical features, activities and users. Access and connectivity enable users to navigate the park, as well as link together destinations of interest, such as housing, worksites, schools, community services and other places with high population density. This is referred to as “physical permeability” (Bentley et al., 1985).

The development of a park or walking path is an element of a planning principle known as “Smart Growth.” Smart Growth is a movement within the planning discipline that attempts to curb the negative effects of sprawl by focusing development into existing urban areas. This results in high density, mixed use, pedestrian friendly, transit oriented neighborhoods (Pack 2006). The National Association of Counties defines it further:

[A] series of strategies and initiatives designed to help communities plan for and accommodate growth in ways that help secure their economic prosperity and environmental safety, while preserving the unique aspects of their communities that make them special places to live, work and raise a family. (National Association of Counties et al., 2001)

These planning principles foster sustainable development in towns and cities, while reducing sprawl and generating a higher quality of life for its citizens. Smart Growth supports the creation of walkable communities in order to ensure that the links between home and work are accessible in a variety of ways, and to provide citizens with better air quality and less traffic congestion.

Somerville, whether consciously or not, has followed these Smart Growth principles in its development of the Community Path. The immediate area around Davis Square has become a safer, more walkable community for its residents and commuters, increasing the region’s quality of life while retaining its unique neighborhood character.

The presence of this walking and biking space brings with it the benefits of Smart
Growth, such as “lower transportation costs, greater social interaction, improved personal and environmental health, and expanded consumer choice” (www.smartgrowth.org). However, although the goal of Smart Growth is to create a safer, more walkable, revitalized neighborhood with an eclectic collection of stores and shops intermixed with homes and businesses, there may be unintended negative effects in the process including gentrification, lack of affordable housing and an influx of chain retail stores driving out local business (Leinberger, 2008). The drawbacks of Smart Growth will be discussed further in the critiques section.

“We must revitalize our neighborhoods – and sometimes, as at Assembly Square and Brick-bottom, we must recreate them from the ground up. For that revitalization to occur, we must have better transit to link businesses to their customers, and residents to their jobs, without choking our roadways with vehicle traffic.”

Mayor of Somerville, Joseph Curtatone
Inaugural Address 2008
The Robert Wood Johnson Foundation initiated the Active Living by Design (ALbD) grant program as part of its ongoing efforts to reverse increasing levels of physical inactivity and their negative health effects in the population. According to its website, active living is: “A way of life that integrates physical activity into daily routines” (Active Living by Design, 2008). In 2003, twenty-five cities across the United States received a grant in an effort to “establish innovative approaches to increase physical activity through communities, public policies and communication strategies.” In 2007, the Robert Wood

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**Source:** William Smith

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*it.*  Soren Kierkegaard ☯  “The civilized man has built a coach, but has lost the use of his feet.”  Ralph Waldo
Johnson Foundation provided an evaluation grant to Somerville, Massachusetts and Columbia, Missouri to carry out an in-depth evaluation of their Active Living by Design work.

Cities across the United States are benefiting as well from the Active Living by Design grant through a variety of programs. For example, in Albuquerque, New Mexico, a Safe Routes to School team found that many children were being driven short distances to school, so they established safer walking paths for children that were uninterrupted by driveways and main roads. The city government worked on ways to make Albuquerque a pedestrian friendly city by creating safe spaces for children and adults to walk, increasing the amount of physical activity in their day. Because this community is predominantly Latino, programming is done in both English and Spanish (Albuquerque Alliance for Active Living, 2006). In Buffalo, NY, the Active Living by Design grant was used to rebuild sidewalks and public spaces for walking and biking. Programming and healthy lifestyle alliances were also created. Remarkably, during the planning process, three Buffalo cultural groups with a history of confrontation, came together with common goals for their city and assisted in the implementation process (Healthy Communities Initiative, 2006). In Colombia, Missouri, the Active Living by Design grant was mobilized by school children who wanted to have a place to exercise. They asked the City Council for safe biking and walking paths and helped create the Passport to Fitness program. The Passport book included workout tips, places to work out, and a calendar to log activities. The children also created a Bike, Walk, and Wheel program that implemented a variety of activities, including a group that wrote catchy songs in order to get people excited about exercising (Bike, Walk and Wheel, 2006).

The Active Living by Design grant has been used to support a variety of different projects in Somerville. There are many major players in the community that have been involved with the grant. Groundwork Somerville has created a Safe Routes to School program to encourage children to walk to school in a safe area. It has also worked for the creation and maintenance of...
the Somerville Community Path, as well as supporting its proposed extension. The Massachusetts Alliance of Portuguese Speakers benefits from the grant as well and aims its work at the large Brazilian community in Somerville. Activities include a farmers’ market in Union Square, dance classes, and the Healthy Minds Healthy Bodies program, designed to educate Portuguese speakers on healthy eating choices. Other uses of the grant money include adding playgrounds in school yards and distributing a Safe Routes to School map to sustain their student walking program (Active Living by Design, 2008). In the future, it is hoped that with more grant money, Somerville will be able to extend its existing Community Path along an old rail bed through East Somerville into Boston, serving a population that does not currently have access to the path.

“That’s one of the dynamics in Somerville, that this partnership has made people more aware and made a more political desire to make it happen so that’s really a key thing.”

Steve Winslow
Senior Planner, Somerville

“Americans.” Reubin Askew, former Governor of Florida  “A dog is one of the remaining reasons why some peo-
Hundreds of communities around the world have experienced varying levels of success in creating trails and walkable parks that have a positive effect on active living for their residents. Several cities have successfully encouraged active living through making improvements to the built environment and Somerville may be able to learn from their experiences. Successful projects range from the Capital Crescent Trail in Washington D.C., a heavy commuter path with up to 500 users per hour, to the Weir Gulch Trail in Denver, Co, a path whose primary users are elementary age children.

A Japanese study found that senior citizens living in walkable neighborhoods experienced increased longevity, regardless of factors such as age, gender, marital status, and socioeconomic status. (Takano et al., 2002). These researchers point out how important the planning and development of such trails can be for a community’s health, especially in densely populated areas. Somerville, as the densest city in New England with almost 19,000 residents per square mile (City of Somerville website, 2008) could greatly benefit from such a path. With an extension of the path into an underserved section of Somerville, more residents in this densely populated city would have the opportunity to increase their daily physical activity and thereby improve their health.

An Indiana Trails Study found that over 70 percent of users surveyed on six different trails in the state claimed that they were getting more exercise because of the presence of a trail (Indiana Trails Study, 2001). User counts were performed on both the Somerville and the Indiana trails. In Somerville, researchers counted users manually at select times during the week. The Indiana Trails used infrared devices which counted...
users constantly over several months in order to measure usage. The infrared trail counters are not infallible, however; undergraduates performing simultaneous user counts reported that the devices systematically underreported by 15 percent. The fact that these errors were systematic and measurable means these errors can be factored into the final tally.

The Indiana researchers also spoke with residents living along the trail about their feelings toward the presence of the trail. The majority of responses indicated that the trail had either a positive impact or no impact at all on their quality of life and property values (Indiana Trails Study, 2001). It was noted that in general they found the trail to be a better neighbor than they had thought it would be.

Somerville can learn from recommendations made in Indiana that encourage trail managers to reach out to the public in order to encourage mixed use of the trail. They also suggest a focus on commuters and tourists in addition to local physical fitness activities (Indiana Trails Study, 2001). While the Somerville path has high commuting traffic, once the trail extension is complete, ancillary financial benefits may result from attracting tourists and other visitors to the area to use the trail. This could be supported with a name branding and promotion program to increase public awareness. A local example is the Minuteman Bikeway which is connected to the Somerville Path, but is generally better known due to its historic nature and links to multiple towns in the region.

At least one study evaluated physical activity levels before and after the creation of a neighborhood walking path in North Carolina and found no statistical difference between those activity levels for the residents (Evenson et al., 2004). This may have resulted from any number of various causes.

Source: www.pathfriends.org

ride.” John F. Kennedy ☼ “I represent what is left of a vanishing race, and that is the pedestrian.... That I am still
The researchers reported that most participants were in “excellent, very good, or good general health” and that already “the prevalence of underweight participants was low” (Evenson et al., 2004) before the walking path was installed. At 116.5 people per square mile, the North Carolina neighborhood is a much less dense area than Somerville. Finally, the environment that in which the trail was built already consisted of a good network of safe sidewalks and trails (Evenson et al., 2004).

Sustainable South Bronx, an organization in New York, has been a significant force in New York City’s effort to plan the South Bronx Greenway Project, a community led plan for a bicycle and pedestrian greenway along the South Bronx waterfront. Once developed, this path will provide open space, waterfront access, and opportunities for mixed use economic development in a currently underserved section of the city. Though still in the planning phase, this project has garnered significant attention and funding (almost $30 million has been raised so far). (www.ssbx.org, 2008)
its inception in 2001 to advance the environmental and economic revitalization of the South Bronx. SSB’s strength lies in its focus on citizen participation. Under director and founder Dr. Majora Carter, SSB has involved residents in training for a green jobs program, protesting against further dumping and waste treatment facilities and championing the creation of the South Bronx Greenway in an effort to improve air quality and create more open space in the neighborhood.

Though located in cities hundreds of miles apart, Somerville and South Bronx share many similarities in regard to the development of their pathway systems. Both paths have been a result of community led, grass roots movements that have grown in a time of political support. As Dr. Carter stated, "poor communities of color are just as deserving of clean air, clean water and open space as wealthier ones" (Newsweek, 2006). Somerville and its mayor share Sustainable South Bronx’s vision of creating a more equitable, connected community that is healthier for all. The current walkway in Somerville runs through a more affluent area of the city, but the future section will serve a multi-ethnic and lower socioeconomic demographic. With the possible construction of walking parks in both areas comes an opportunity for both communities to generate local green-collar jobs, creating practical skills that city residents will still benefit from after the path has long been completed.

These studies indicate that healthy and active communities are the result of a combination of factors that promote and encourage physical activity. These factors include urban design, land use patterns, transportation systems, and community outreach. This underlines the importance of not merely building a trail but ensuring its success through both community involvement and smart design elements. This is consistent with the Robert Wood Johnson Foundation’s strategy of support through grants to changes in the built environment and changes in policy.

"Any town that doesn't have sidewalks doesn't love its children." Margaret Mead ☉ “Americans are in the habit
SMART GROWTH

Smart Growth principles, in theory, are “supposed to promise less sprawl, less traffic congestion, cleaner air, fewer wasted tax dollars, better access to transportation and housing options, and revitalized neighborhoods” (Kalinosky 2002). Improvements in the physical environment can bring about a change in the economy of an area. When economically disadvantaged or “blighted” areas are renovated or improved, it is likely that there will be a turnover in the population. The term “gentrification” refers to the replacement of old residents with new residents that can afford to live in a new and improved area (Leinberger, 2008). This trend occurs in many cities where real estate rates are increasing and the upper class is moving in, forcing the working class out, further away from the city core (Leinberger, 2008).

As mentioned above, these facets of Smart Growth may have some drawbacks. Critics of the movement believe that it has the distinct possibility to leave “many lower-income residents wondering what’s in it for them” (Kalinosky 2002). Gentrification is not a completely negative effect as it does generate a higher tax base and initially integrates neighborhoods with a socioeconomic mix of residents. However, those lower-income families may gradually be driven out by rising property values if there are no protections in place to limit this loss, such as affordable housing laws (Leinberger, 2008). Finally, residents and local business owners generally resent the intrusion into their unique communities by what may be perceived as bland, cookie-cutter national chains (Leinberger, 2008). Again, this comes with positives and negatives as these chains may bring diverse goods and services that could otherwise require longer
car trips for residents to access. Though Smart Growth brings with it many perceived benefits, it is important for planners to consider the negative effects that may also accompany the neighborhood revitalization process.

**OTHER CHALLENGES**

In the case of Somerville, which is seeing an increase in walkability and healthy living in the area around Davis Square, the danger lies in ensuring that these improvements are resulting from design changes and not demographic changes. It is a changing city and many improvements are being made to make it a more desirable and healthy place to live. Mayor Curtatone promised to create an ambitious parks program dedicated to the revitalization and expansion of community public space (Inaugural Address, 2008). This is a major challenge considering Somerville only has 3% of land for public use (New York Times, 2007). Mayor Curtatone wants to bring neighborhoods together as well as "better link[s] to businesses [and] their customers, and residents to their jobs, without choking [the] roadways with vehicle traffic" (Inaugural Address, 2008). This means the creation of public transit options including buses and subways, as well as enhanced walking paths.

The Community Path in Somerville behind Davis Square has a variety of uses, including exercising, commuting, and recreation. Residents have testified that the Community Path fosters neighborhood socialization as well as a safe place to exercise. Somerville has a very diverse demographic group both racially and economically and it is up to the city government to "meet their share of affordable housing for their region, and need to link housing issues to those of transportation, jobs, open space, schools, retail, and services" (Kalinosky, 2002). The properties bordering the Community Path are recognized as desirable places to live. This attracts more people to Somerville, but also drives up the property values. According to Steve Winslow, an advocate for the Community Path and city official, "one of the things I’ve seen with Somerville, which has been building

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*a city upon a hill. The eyes of all people are upon us." John Winthrop, *A Model of Christian Clarity* ○ “As a na-
for maybe 20 years, is that property values are higher in Somerville because it’s made this commitment [to active living improvements]. Buying into active living principles improves the quality of life in the community and that helps drive up property values” (Winslow, 2 April, 2008). It is possible that with the future extension of the Community Path, gentrification may occur and perhaps eliminate some of Somerville’s diversity by forcing people out.

---

**Average Sale Price of Single Family Home**

**Somerville, 2000-2005**

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>$0</td>
<td>$50,000</td>
<td>$100,000</td>
<td>$150,000</td>
<td>$200,000</td>
<td>$250,000</td>
</tr>
</tbody>
</table>

Source: Somerville Housing Needs Assessment, 2005
When examining how to promote active living, policy makers and planners need to think beyond the built environment and look at total community involvement. There are multiple key players that can get involved and help eliminate separation between fields of thought in bringing a community together against the current health epidemic. The work of Somerville’s many organizations in regards to supporting Active Living and the Community Path exemplifies not only a successful implementation process, but also relies on community based participatory planning to involve the voices of its citizens. For example, Dr. Michael Coffey disseminates the medical information to raise awareness of the problem. The Shape Up Somerville Taskforce creates the Safe Routes to School program that offers solutions for kinds to integrate active living into their lives. Somerville food services are crucial in implementing a switch to healthy foods in school cafeterias. Many of these efforts have been bolstered by the Mayor’s office. The list of key players goes on to reach out to all of Somerville’s diverse populations to implement some form of active living policy. Indeed many lessons can be learned from Somerville and implemented in other cities around the world due to the diversity of issues the Active Living by Design grant tackles. With the Green Line extension planned through East Somerville, and the corresponding planned path extension, soon many more Somerville residents may be on the path to Active Living. Somerville clearly has the context for collaboration set in place and it is only a matter of time before future goals can be accomplished.

Source: Diana Mastrocola

“Don’t let people drive you crazy when you know it’s in walking distance.” Author Unknown  ☼ “Just Do It” Nike


“Everywhere is walking distance if you have the time.” Steven Wright.

Sustainable Development: A Comparative Study of Municipalities in the Seoul Metropolitan Region”. Seoul National University, Korea.


Winslow, Steve. Senior Planner, City of Somerville. Interview. 2 April 2008.
cluded to stay out until sundown, for going out, I found, was really going in." John Muir.
The presence of the path as well as the proximity to the Davis Square T station may be associated with a lower percentage of people commuting by automobile along the current path. The darker red sections in East Somerville indicate the need for greater access to alternative transportation.
Studies have shown that people of color are at a higher risk of becoming overweight or obese (Priority Populations and Physical Activity, 2008). The presence of the walking path in East Somerville may provide a new outlet for physical activity for residents.
The construction of the path is in line with principles of Smart Growth. Critics warn that smart growth development may drive up property values, thus gradually forcing out lower income people if there are no protections in place to limit this loss, such as affordable housing laws (Leinberger, 2008).
According to the 2000 Census Blocks, the population of Somerville is 83,846. The pink area shows blocks within about ¼ mile of the walking path, with a total population of 9,090, or 10.84% of the population. The purple area shows blocks along the future path, with a total of 10,910 people, or 13.01% of the population. Once the future path is completed, the entire path will serve 23.85% of Somerville’s population.
ON THE PATH SURVEY

Somerville Community Path Survey

This survey will take less than 5 minutes. You can stop at any time and may leave questions blank if you choose. Thank You ~ Tufts Graduate Research Team

<table>
<thead>
<tr>
<th>Gender (Please Circle):</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Range (Please Circle):</td>
<td>0-9</td>
<td>10-19</td>
</tr>
</tbody>
</table>

1) In the last 30 days, how often have you used the community path?
   a. Less than once a week
   b. 1 – 2 days per week
   c. 3 – 4 days per week
   d. 5 – 6 days per week
   e. Once a day
   f. More than once a day

2) How close do you live to the path?
   a. 0 - 5 minute walk
   b. 5 - 10 minute walk
   c. 10 - 15 minute walk
   d. More than a 15 minute walk
   e. I need to take a car/bus/subway

3) What is your primary reason for using the path? (please circle one)
   a. Commuting to work/school
   b. Recreation
   c. Health
   d. Transportation (ie: errands)
   e. Other ______________________

4) What impact does the path have on your life? (please write your answer)
MEMORANDUM OF UNDERSTANDING

BETWEEN
TUFTS UNIVERSITY FIELD PROJECTS TEAM NO. 4
AND
INSTITUTE FOR COMMUNITY HEALTH

I. Introduction

Project number: ICH Team #4
Project title: Assessing the Physical Environment for Active Living
Client: Institute for Community Health

This Memorandum of Understanding (the “MOU”) summarizes the scope of work, work product(s) and deliverables, timeline, work processes and methods, and lines of authority, supervision and communication relating to the Field Project identified above (the “Project”), as agreed to between (i) the UEP graduate students enrolled in the Field Projects and Planning course (UEP-255) (the “Course”) offered by the Tufts University Department of Urban and Environmental Policy and Planning (“UEP”) who are identified in Paragraph II(1) below (the “Field Projects Team”); (ii) the Institute for Community Health, further identified in Paragraph II(2) below (the “Client”); and (iii) UEP, as represented by a Tufts faculty member directly involved in teaching the Course during the spring 2008 semester.

II. Specific Provisions

1. The Field Projects Team working on the Project consists of the following individuals:

   1. Susy Jones _______ email address: 
   2. Diana Mastrocola _______ email address: 
   3. William Smith _______ email address: 
   4. Nella Young _______ email address: 

(2) The Client’s contact information is as follows:

Client name: Institute for Community Health
Key contact/supervisor: Julia McDonald, MS, MPH
Email address: [redacted]
Telephone number: [redacted]
FAX number: [redacted]
Address: 163 Gore Street, Cambridge, MA
Web site: www.icommunityhealth.org

(3) The goals of the Project are:

The central goal of this project is to produce a multi-media presentation as part of the environmental observation component of ICH’s ALbD evaluation. The multi-media presentation will visually present data from the evaluation, featuring photographs and community voices, thereby giving a “face” to the community path. The presentation will be succinct and compelling – an engaging way to disseminate the ALbD grant outcomes to the Robert Wood Johnson Foundation, the Somerville community, and beyond. The team will also produce a written report to accompany the visual presentation. The overall goal is to further our knowledge about the relationship between the built environment and physical activity patterns.

(4) The methods and processes through which the Field Projects Team intends to achieve these goals:

The field projects team will work with ICH to gather and analyze evaluation data, which may include population-based surveys, stakeholder interviews and surveys, walkability checklists, and pedestrian counts. The team will work with ICH to determine which data to present, and then integrate this data into their final visual presentation and written report.

The final product will incorporate some or all of the following strategies: contextualizing the community path in the past, present, and future by gathering historical data, observing current uses of the path, and exploring the path’s future extension; providing an overview of the evaluation process; presenting data from surveys, interviews, and GIS maps.

Using a digital camera provided by ICH, the team will gather visual and audio data of the path. The team will take photographs and/or short video clips along
the existing and proposed extension of the community path. The team also hopes to record interviews with pedestrians and other members of the community using a sound recorder, and use these clips in the final product.

In addition, the team will collaborate with a Tufts student who is conducting a GIS project for the evaluation, possibly integrating GIS maps of the area into the final presentation. Team members will also attend meeting(s) with the Active Living by Design Subcommittee to gain a full picture of the work and people involved in the grant project.

(5) The work products and deliverables of the Project are:

The main expectation from ICH is that our team develops “a creative and insightful approach to collecting, analyzing and reporting ALbD environmental observation data.” To this end, there will be two parts to the final product of this Field Project.

The first part will be a written report, which will serve as an accompaniment to the multi-media presentation. ICH and the Field Projects team will continue to discuss the function of this written report as the project develops. The report may include: further analysis of the data collected as well as additional research on the connection between physical activity and the built environment.

The second, and more important part, will be the multi-media presentation which could include some combination of the following media: still photography, short video clips and sound recordings as well as graphical depictions of the data gathered to tell the story of the past, present and future of the Somerville Community Path.

(6) The anticipated Project timeline is:

See attached timeline.

(7) The lines of authority, supervision and communication between the Client and the Field Projects Team are:

Susy Jones on the Field Projects team will serve as the primary contact for communications with ICH. She will respond to and forward emails and telephone calls/messages as needed. Julia McDonald, Research Associate, will serve as the primary contact at ICH. All inquiries regarding the project will be
directed to Julia, who is directly advising the field project team. Guy Koppe, Research Associate, is also supervising the project and will serve as a secondary contact. Virginia Chomitz, Principal Investigator, oversees the ALBD evaluation project, and can be reached for inquiries and in the absence of Julia McDonald and Guy Koppe.

(8) The understanding with regard to payment/reimbursement by the client to the Field Projects Team of any Project-related expenses is:

The client will provide the use of a digital camera and batteries, as well as basic office supplies. No other project expenses will be reimbursed by the client.

III. Additional Representations and Understandings

A. The Field Projects Team is undertaking the Course and the Project for academic credit and therefore compensation (other than reimbursement of Project-related expenses) may not be provided to team members.

B. The project is a component of the Urban and Environmental Policy and Planning Masters degree at Tufts University. The final deliverable work product for the client will also be shared with the Tufts Urban and Environmental Policy and Planning community, including students and faculty members. There is the possibility for web publication as well as the release to outside foundations for future funding opportunities. It is expected that any information involving confidentiality will be protected according the HIPAA regulations and the Tufts University Institutional Review Board. Any controversial issues regarding information dissemination will be resolved promptly with the Field Projects Team, its instructor, and the Institute for Community Health. The project will be monitored by a Tufts University professor and their teaching assistant.

C. The final report, both written and visual, is available for review by the Institute for Community Health during the drafting phase and before the final presentation. This includes, but is not limited to, any data collection, story board/visual outline, written report/material, and notes. After the termination of the Field Projects course and the dissemination of the information to the Institute for Community Health, the client has the right to use, reproduce, and alter the material however they see appropriate. For any use of the material, it is expected that citations will be used acknowledging the work of the Tufts Field Projects team.
D. The Tufts Field Project team is required to submit a project proposal to the Tufts Institutional Review Board (IRB) in order to insure proper ethical standards are being met in the methodology and research aspect of the project. It is understood that the Institute for Community Health has completed their own IRB, which may require a modification to the protocol that was previously approved by the IRB through the Cambridge Health Alliance and ICH; this will be submitted to the Tufts’ IRB along with a detailed supplement added by the Field Projects Team. It will be reviewed in a timely manner and will not hinder the completion of the project in any way.

IV. Signatures

For, Institute for Community Health
By: Julia McDonald
Date: 3/4, 2008

Representative of the Field Projects Team
By: Nella Young
Date: 3/4, 2008

Tufts UEP Faculty Representative
By: Rusty Russell
Date: 3/10, 2008
Re: IRB Study # 0802026  
Title: Field Projects #4: Institute for Community Health  
PI: Diana Mastrocola  
Co-Investigator(s): Nella Young  
IRB Review Date: 3/24/2008

April 7, 2000

Dear Diana,

The Institutional Review Board (IRB) has reviewed the requested revisions to the above referenced study.

This protocol now meets the requirements set forth by the IRB and is hereby approved. Approval is valid for a period of one year from the original IRB Review Date and expires on 3/23/2009.

Enclosed you will find stamped consent forms and other study materials that show the date through which these materials are valid. Only these stamped consent forms and materials may be utilized for conducting your study.

Any changes to the protocol, consent forms or study materials must be submitted to the Office of the IRB for approval by completing the Request for Protocol Modification form. In addition, all Adverse Events and Unanticipated Problems must be reported to the Office of the IRB promptly, and by utilizing the appropriate reporting forms.

Investigators are required to submit a Request for Continuing Review or a Request for Study Closure six weeks prior to the expiration date of the protocol.

Please know that the PI is responsible for all information contained in both this letter and on the Investigator Responsibilities Sheet. If anything is unclear or if you have any questions, please contact the IRB office at (617) 627-3417.

Sincerely,

Yvonne Wakeford, Ph.D.  
IRB Administrator
CONSENT FORM

Tufts University, Urban & Environmental Policy & Planning
97 Talbot Avenue, Medford, MA 02155
ichfieldproject@gmail.com

Institute for Community Health
163 Gore Street, Cambridge, MA 02141
www.icommunityhealth.org

PROJECT INFORMATION: This is a collaborative project between Tufts University graduate students and the Institute for Community Health (ICH), a local organization that works with community members and Massachusetts health care systems to improve the health of Cambridge, Somerville, and surrounding towns.

The student team will produce a multi-media presentation about active living in Somerville. The presentation will feature photographs, quotes, and voice/video recording of Somerville residents. The team will also produce a written report to accompany the visual presentation. The final result will be released for viewing by outside foundations, community groups and web publication as well as Tufts students and professors and ICH staff.

Any confidential information will be protected. You can choose to withdraw from participation at any time. The project is monitored by a Tufts University professor.

If you have questions, contact the graduate student team at ichfieldproject@gmail.com.

ADULT (Please check the box to indicate your answer.)

1) I am 18 years of age or older and (check one) ☐ CONSENT or ☐ DO NOT CONSENT to the release of photographs, sound recording or video to Tufts University and ICH.

2) My first and last name may be used to identify photos (check one). ☐ YES ☐ NO

3) My first and last name may be used to identify quotations or recording. ☐ YES ☐ NO

COMMENTS:

FIRST NAME (print): ___________________________ LAST NAME (print): ___________________________

Signature: ___________________________ Date: ___________________________

MINOR (Please check the box to indicate your answer.)

1) I am the minor’s parent or guardian and I (check one) ☐ CONSENT or ☐ DO NOT CONSENT to the release of photographs, sound recording or video to Tufts University and ICH.

2) The minor’s first and last name may be used to identify photos (check one). ☐ YES ☐ NO

3) The minor’s first and last name may be used to identify quotations or recording ☐ YES ☐ NO

COMMENTS:

NAME OF MINOR: ___________________________ NAME OF GUARDIAN: ___________________________

Guardian Signature: ___________________________ Date: ___________________________

APPROVED EXPIRES
MAR 2 4 2008 MAR 2 3 2009

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