

Collaborative Initiatives to Address Health in Parks and Recreation

A Case Study in Liberty, Missouri



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Executive Summary

Over the past decade the obesity issue in America has received increased attention. With this attention have come numerous federal, state, and local initiatives, programs, campaigns, and grants to address the issue. Public parks and recreation agencies have not always been the core agent sought to address the issue in spite that they are a key purveyor of services to citizens seeking an active lifestyle.

National health agencies, the medical profession, various professional organizations, and public school systems have repeatedly focused efforts to contain and reverse the rising rates of obesity. Yet, several decades later, few solutions, evidence based programs, or interventions have turned the crisis around. Obesity is a multifaceted issue that requires collaborative efforts of government, disciplines (e.g., education, public health), merchants, and all citizens. The cost to each citizen in the form of health care, lost worker productivity, and quality of life is astronomical.

Public park and recreation agencies have a vital role to play in addressing the obesity health issue. These agencies have operated for over 50 years using the same model. The necessity to modernize planning, service delivery, and system analytics is evident and required. New collaborative initiatives such as the Liberty Community Health Action Team (LCHAT) in Liberty, MO provide a model for community collaboration. The Liberty Parks and Recreation Department, working with GP RED and other stakeholders, has served as a catalyst in securing funding, assembling the coalition of agency representatives, and forging ahead with policy, practice, and planning initiatives aimed at addressing change in practice, policy, and structure. Clay County Public Health Center, has been the primary agent in the formative process of creating, sustaining, and securing funding for LCHAT operations. Liberty, MO is a sentinel community seeking to improve citizen health and well-being by creating an evidence based model of community collaboration.



Obesity and Its Impact on Public Health

Obesity is a serious, growing epidemic that cuts across all categories of race, ethnicity, family income, and locale. Obesity rates have tripled in the past 30 years. For the first time in history, American children may face a shorter expected lifespan than their parents. According to the Robert Wood Johnson Foundation, the U.S. spends between \$147-\$200 billion every year to treat obesity-related conditions, with childhood health care costs rapidly increasing that number.¹ Researchers have estimated that 17% of children and adolescents ages 2-9 years are obese, and that 32% are overweight. These statistics translate to more than 12 million children and adolescents who are obese, and more than 23 million youth who are overweight.^{2,3} Lost worker productivity, absenteeism, and increased government health care costs are evident as youth enter the workforce.^{4,5}

Creating and Sustaining a Healthy Community: Vision, Structure, and Outcomes

The most vital issues facing local and county governments address the health and well-being of citizens. The healthy community of the future is not something that evolves without careful planning, defined goals, and measurable outcomes. Although the health and well-being of its citizens should be paramount, many municipalities appear unable or disinterested in creating and sustaining healthy communities. Often overlooked, however, are the issues that lead to a population that is acutely overweight.

Deemed one of developed nations most insidious issues, government agencies (at all levels) are currently paying health care bills that are unnecessary and avoidable. These bills are the result of a population that is overweight, obese, or morbidly obese. The primary question remains, “Who is responsible for the behavior that leads to intractable health conditions and eventually chronic illness, disability, and premature death?” Some individuals would say the *person*. Others refer to the *system*. The blame should be attributed to numerous factors. For decades, the U.S. government has conducted research, funded interventions, and advanced policies that offer pathways to *healthy people* and *healthy communities*.⁶ Yet, the battle against overweight and obesity is not being won.⁷

Public park and recreation agencies are a vital conduit for deconstructing *idleness*, eradicating *sitting disease*, and actively engaging citizens in campaigns that improve

human capacity. Agencies, however, must be cautious not to fall prey to offering a plethora of activities that result in children, youth, and adults leaving or being discounted if changes do not occur. Further, staff in these agencies must understand the power of *habits* cultivated early in life that remain throughout life. Finally, public park and recreation staff must understand the difference between customer/participant experiences viewed as a *transaction* versus a genuine personable *interaction*.



Combating Obesity: The Liberty Model

Under the leadership of Missouri’s Liberty Parks and Recreation Department (LPRD), and the Clay County Public Health Center (CCPHC), a coalition of community partners was assembled as part of a facilitated project with **GP RED’s Healthy Communities Research Group**. LPRD was a *Beta Site* for the **Surveillance and Management Toolkit™** in Year One of a three-year project starting in 2013.

The diversity of the Liberty Community Health Action Team (LCHAT) was an example of trans-agency collaboration as well as of strong collaborative efforts between public health and parks and recreation. Although the LCHAT effort took time to coalesce, it emerged as a vital factor associated with progress. Central to the sustainability of any *healthy community* effort is a collaborative that works toward a shared set of goals and outcomes. The LCHAT organization is a model for agencies to follow. It reflects the strong bond that emerged between local agencies. Of particular note was the engagement of a regional food chain that supported their dietitians as members focused on youth nutrition. CCPHC was a catalytic agent in this process. Its

resources and planning responsibilities went beyond the City of Liberty, providing leadership, resources, grant funds, full support of their professional staff, and expertise in public health research.

Liberty was also the first *Beta* site to administer the GP RED *Youth Activity and Nutrition Survey (YANS)*. The instrument was used in the last two years of the project. The 2014-15 report⁸ provided insight into the challenges of 10-14 year-old youth seeking to attain or maintain a healthy weight. The findings were based on a middle school survey of 2,502 students from three local middle schools.

Several key findings were derived from the YANS testing in the Liberty middle schools. First, it appeared that the weekday hours of 3:00-6:00 pm were the most vulnerable time period for sedentary and poor nutritional behaviors. Second, youth (10-14 years) appeared to have stronger abiding friendships when engaged in youth sport activities. Yet, the downside was that a high percentage of youth dropped out of sports, or were not selected for a variety of reasons (e.g., skill level, financial costs, transportation). As youth exited sport-centered activities, their circle of friends was clearly reduced. Many reasons may exist for dropping out or being overlooked, but it appeared that a relationship existed between inactivity and obesity in middle school youth.

Other indicators were considered. Liberty used data from a detailed GRASP[®] component-based assessment of its *assets*⁹ and *affordances*¹⁰, developed by Design Concepts and GreenPlay, to address several issues. Liberty's study identified issues related to access to programs, service sites, trails, and other specialty venues such as swimming facilities, libraries, and trails. In addition, the LPRD revised its master plan to address accessibility to local assets. Like most municipalities, Liberty had to plan around major highways and large areas where big box stores were located, and sought to find safe routes to play.

Another critical element of the Liberty model was the strong connection between CCPHC and the LPRD. Two individuals (Gary Zaborac, Director, CCPHC, and Janet Bartnik, Director, LPRD) dedicated their time, staff resources, and assets to guide formation of the LCHAT and sustain its efforts over the years. Their shared vision of the youth obesity issue served as a catalyst for action. Each engaged in civic organizations, had links to local businesses and health care agencies, and persistently engaged others in joining the campaign.

Liberty and Other *Beta* Site Findings

Since 2010 through *Beta* testing, in other communities as well as through this Liberty project, GP RED has become aware of 10 factors essential to starting and sustaining a healthy community campaign.

- 1. Setting course** - Each *Beta* site case addressed an established need. Needs may be evident from an analysis of the cost of obesity. They may emerge from businesses seeking workers who are capable of vigorous work, or are not susceptible to lifestyle related chronic illnesses. Knowing what the community desires to achieve by engaging in a process to collectively plan and change the current way of life can serve to bring various sectors of a community together. Liberty LPRD and CCPHC collectively conducted citizen surveys to chronicle the health concerns of the adult population. Setting course requires a plan built by, and adopted by all citizens regardless of age, gender, wealth, or position.
- 2. Assembling a core team** - In each community, *key players* can be identified from government, business and industry, health care, elementary and secondary schools, law enforcement, social services, and non-profit organizations. Through the Liberty experience were found several agencies essential to the initial planning effort. These agencies may vary by community size and governance statutes but often include: public health, municipal or county service providers (e.g., parks and recreation), public schools (i.e., elementary and secondary), medical care, food and nutrition purveyors, social services and law enforcement, youth focused organizations, and religious organizations. Our recommendation is to engage key community representatives from the onset. Add others as needed to address goals and declared outcomes (e.g., merchants, big box stores, major malls, civic organizations).
- 3. Mission, vision, and clear outcomes** - Creating the mission, vision, priorities, and process of the healthy community initiative should be formalized in a document agreed upon by the initial group. In the Liberty *Beta* site process, the agreed document took several months. It remains a work in progress, yet the commitment to making Liberty a *healthy community* has never waned. For example, Liberty has created a website (www.lchat.org) which serves as a repository for information on the committee and its work.

4. Documentation of community (or service area) assets and affordances - In the early stages of development, the organizing group, or public parks and recreation agency, must identify and document the specific assets (physical and natural) that exist in the community. This undertaking is typically done as part of a master plan, but we recommend that it be completed early in the planning process to ensure facts about what assets exist, their condition, and proximity to each local elementary and middle school. These assets would include all open space, developed parks or trails, waterways, and lakes. It is also necessary to prepare an inventory of all *affordances* (e.g., programs, lessons, camps, leagues, health screening, and outdoor experiences) that are offered by the park and recreation agency as well as other youth focused organizations. The end product is a catalog of assets and affordances that can be used for determining the level of service (LOS) in the service area. These data are critical factors in the planning and monitoring process.

5. Reaching consensus on mission, vision, goals, opportunities and threats - An early order of business is to determine where the campaign is headed. Carefully considering the time frame that people expect to be able to document changes in behavior, utility, and accessibility of assets and programs is important. Defining and agreeing on selected goals is essential from the inception of the campaign. A detailed process has been used by GP RED that guides the community effort in an orderly, outcome driven process: <http://www.gpred.org/initiatives/healthy-communities-research-group/>

6. Documenting the status of the obesity - To establish that an *obesity* issue exists in the service area, a number of child and youth survey instruments are available. The primary purpose of a survey is to secure information directly from students about their nutritional habits, physical activity levels, and friendship patterns as well as their measured age, gender, height, and weight. While the YANS instrument provides the local planning organization with primary source data, other sources of data may be obtained from local or county departments of public health.

7. Determining the status of existing policies and practices - In each of GP RED's *Beta* sites, the public park and recreation agency collected and examined current public policies that impact an active lifestyle. In many cases, GP RED found clear and compelling issues with *walkability*. Liberty has some primary roadways that dissect the city. Getting across the street to access a park and recreation complex was deemed not just unsafe, but a *major* safety issue. Another important issue discovered in the *Beta* test sites was the use of signage and its negative or punitive nature. A clear need existed to increase positive policies and practices that, in turn, increased the retention of customers.¹¹

8. Interaction with representative community groups - One of the key features of the LCHAT was its ability to seek input from youth (via Liberty Schools), parents, and randomly selected citizens. In preparing for a long term community campaign to address obesity issues, there should be regular input from sectors of the population who can: a) share their needs, b) offer recommendations for meeting these needs, and c) engage themselves as sentinel advocates for neighborhood support. One example of getting interaction was the convening of focus groups. Another entailed creating advisory panels. These approaches can be done in person at neighborhood locations, online, and at other regular intervals.



9. Using data to make decisions - In an age of sophisticated search engines and *big* data, there appears to be a paucity of application in public parks and recreation agencies. Beyond registration software programs, little evidence was found in the use of readily available marketing and customer software. Public agencies appear to be behind in knowing their customer base, experiences, patterns, and purchasing behaviors. Understanding this information is crucial in retention of customers across the lifespan. National data^{12, 13} suggested that a high percentage of children and youth ages 8-17 years dropped out of organized sports for a variety of reasons such as injury, “not fun,” grades, and coaching issues. Yet, the majority of public park and recreation agencies are built and sustained by organized leagues, tournaments, and skill-based events. There also appears to be a lack of skills in experience metrics and systems analytics. These fields of practice are not just important, they are essential to exceptional companies, organizations, and public services.¹⁴

10. Messaging and marketing to elicit continuous awareness - In Liberty, the LCHAT effort focused on understanding the health status of citizens through several means. In collaboration with the CCPHC, citizen surveys were used to determine the level and type of lifestyle-related chronic illnesses in the community. These data are being used to make informed decisions regarding health promotion and prevention messages. The LCHAT collaborative effort was built on the premise that no one agency can battle this issue. It requires a community of partners who shape the mission, vision, and expected outcomes. Awareness is not just posters, websites, or special days; it is a myriad of persistent messaging, marketing, and goal attainment. Eradicating habits that lead to preventable health conditions, reducing health care costs, and improving citizen health capacities are the goals.^{15, 16, 17}

Liberty, Missouri: Strategies Toward a Healthy Community

This research brief highlights the work completed in Liberty as part of the Surveillance and Management Toolkit™ as the community recently concluded their three-year *Beta* testing process. Five key strategies were used in this process of healthy community planning.

Strategy 1. Forming and Sustaining the Action Team

Among the most critical elements in organizing the healthy community structure are elements associated with forming and sustaining an entity. The Liberty model is a good example of steadfast and long-term efforts of two community leaders (i.e., Janet Bartnik, LPRD, and Gary Zaborac, CCPHC) who served as catalytic agents in recruiting community partners. The staff of both agencies were also instrumental in accomplishing specific tasks. Among the key members were staff from public health, public park and recreation agencies, public schools (especially the middle schools), youth serving agencies, social service agencies, health care (especially primary care providers), municipal planning, and private sector food markets.

Strategy 2. Narrowing the Focus

Public park and recreation agencies have a significant number of youth who are engaged in their services. More specifically, the ages of 10-14 years (a five-year period) appear to be a cohort that are the most vulnerable to obesity and early onset lifestyle-related diseases. These young people are in the habit forming stages of life and are seeking independence from parental control. Further, young people are essential customers of the near future and over their life course. Why focus on this cohort? They are influenced by parents, school systems, medical professionals, and other adult leaders. In addition, they are central to lifestyle changes necessary to reverse the obesity pandemic this nation faces.

Strategy 3. Policies and Practices: A Gap to Consider Closing

At the center of community leadership activities are policies, practices, and regulations that govern almost every facet of daily life. In the U.S.'s litigious society, communities continue to create laws, policies, and regulations aimed at controlling behavior, preventing dangerous situations, avoiding law suits, and mitigating financial loss. These efforts have typically been placed in a negative or punitive context. For example, a plethora of laws restrict access to venues, buildings, and areas during certain hours. These laws are accompanied by signs and agreements that require the patron or guest to agree to behave in a particular way, be ejected, or be forbidden to participate in services of the agency. Although these policies and practices are seen as preventive or regulatory measures, many are unnecessary, not applicable to the majority, and vary in their enforcement. Therefore, healthy communities need to focus on validating the effort patrons express to make themselves more active, healthy, and socially connected. Agencies should employ positive policies and practices that validate behavior expected in a healthy and civil society.

Strategy 4. Data Collection and Use: Retooling in the Experience Era

Due to computerized registration systems, information is growing, but observations indicated that little data is collected from each guest or user in a public system. Amazon, Yahoo, eBay, and thousands of commercial entities thrive off the data generated from their websites and/or transactions. This practice of mining data from patrons is not just an option but a critical business practice. Disney is a leader in creating and mining data that shapes their experience industry. It maintains the highest return rate of any amusement or entertainment business in the world. Community efforts in Liberty were carefully re-examined and revamped. If agencies are interested in cultivating a brand loyal customer, then they need to change current approaches. Current efforts are often aimed at developing elite athletes. Instead, the LCHAT mission was focused to develop human capacity to live a healthy and socially connected lifestyle. The challenge is to rethink how participants construct experiences that are attractive, age related, enjoyable, and collectively contributing to each individual's well-being. Knowing and owning available data is imperative today to be relevant in the experience era. Agencies need to plan, manage, and assess data about the myriad of experiences provided for the public.

Strategy 5. Reformation of Community Offerings

The types of offerings that are made available to citizens, especially youth, were examined carefully in Liberty. For the most part, too many activity options were consequential (win-lose) in nature. These offerings were built on the premise that there will be winners and losers. The underlying premise of consequential sport is to identify children at an early age for elite sport status. Children as young as 5-7 years are often scouted for elite sport teams. Although competition is an important facet of American culture, it should not be the only option. Many youths are not selected for teams because of their skill level, the cost of equipment and travel, parental unavailability to transport their child, and travel requirements to a venue for practice. Reformation of offerings requires the following: a) creating and actively promoting activity options that are non-consequential (i.e., play for enjoyment), b) establishing a tracking and registration system that offers options to those not selected for elite sports, and c) creating an array of alternative options (e.g., generated from youth and their parents/guardians) that are aimed at discovering, learning, adjusting, and constructing lifetime leisure pursuits.

Conclusions

Although Liberty has been a proactive and involved *Beta* site, its quest to reduce childhood and youth obesity remains a work in progress. The LCHAT organization provides a structure and defined purpose that addresses the obesity issue. There is no cookbook to solving the obesity issues. Public park and recreation agencies must establish the vital link with public health agencies. Recent efforts by Clay County Public Health to secure grants on Chronic Disease Primary Prevention (CDPP) to work with LCHAT is evidence of the benefits LCHAT can reap as a partner. Funding a Wellness Coordinator has been helpful in building the coalition and data repository. Alongside the CDPP grant, CCPHC was awarded a "Stock Healthy, Shop Healthy" grant. This grant focuses on helping local mom and pop convenience stores to offer healthier options. What has been learned from Liberty is that a partnership between public parks and recreation, public health, public schools, health care, and food stores is not a convenience but an imperative. The work continues.

References

1. Retrieved from <http://stateofobesity.org/files/stateofobesity2016.pdf>
2. Ogden, C. L., Carroll, M. D., Fryar, C. D., & Flegal, K. (2015). Prevalence of obesity among adults and youth: United States, 2011–2014. NCHS Data Brief No.219.
3. Cawley, J. & Meyerhoefer, C. (2012). The medical care costs of obesity: An instrumental variables approach. *Journal of Health Economics*, 31(1), 219-230.

4. Cawley, J., Rizzo, J. A., & Haas, K. (2007). Occupation-specific absenteeism: Costs associated with obesity and morbid obesity. *Journal of Occupational and Environmental Medicine*, 49(12), 1317-24.
5. Gates, D., Succop, P., Brehm, B., et al. (2008). Obesity and presenteeism: The impact of body mass index on workplace productivity. *Journal of Occupational and Environmental Medicine*, 50(1), 39-45.
6. Retrieved from <http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/overview/index.htm>
7. Retrieved from www.stateofobesity.org
8. Compton, D., Kim, K., Jordan, D. & Penbrooke, T (2015). *GP RED Youth Activity and Nutrition Survey (YANS). Initial analysis & findings report*. GP RED: Louisville, CO.
9. Assets are categorized as either “natural” (land, water, trees, etc.) or “built” (buildings, structures, pools, etc.)
10. Affordances are defined as those programmatic offerings of the public agency offered to customers such as programs, classes, leagues, events, etc.
11. Compton, D. (2015). *Positive policies: Concept, context and process*. GP RED: Louisville, CO.
12. Woods, R. (2016). *Social issues in sport (3rd Edition)*. Champaign, IL: Human Kinetics.
13. Retrieved from http://www.espn.com/espn/story/_/id/9469252/hidden-demographics-youth-sports-espn-magazine
14. Hsieh, Y. & Yuan, S. (2010). Using systems analytics to analyze customer experience design. *International Journal of Service Science, Management, Engineering and Technology*. 1(3), 84-99.
15. Lederer, A. M., King, M. H., Sovinski, D., & Kim, N. (2015). The impact of family rules on children’s eating habits, sedentary behaviors, and weight status. *Childhood Obesity*, 11(4), 421-429.
16. Dabrh, A. M. A., Gorty, A., Jenkins, S. M., Murad, M. H., & Hensrud, D. D. (2016). Health habits of employees in a large medical center: Time trends and impact of a worksite wellness facility. *Scientific Reports*, 6.
17. Wethington, H., Pan, L., & Sherry, B. (2013). The association of screen time, television in the bedroom, and obesity among school-aged youth: 2007 National Survey of Children’s Health. *Journal of School Health*, 83(8), 573-581.

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