

# Northeast Denver Recreation Centers and Policies

## Health Impact Assessment



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### **HIA Research Team**

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## Executive Summary

World Health Organization's (WHO) research has found that underlying causes of health inequities include disparities in education, income, built environment, regional economic stability, and social and community context (family structure, social connectedness of neighbors, discrimination and racism), among others. Health status is partly determined by the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness (World Health Organization, 2012). Community environmental factors play an important role. These include neighborhood pollution and the built environment itself—access to parks and recreation centers, good public transportation, and job opportunities.

The Stapleton Foundation has identified health inequities in Northeast Denver specifically the neighborhoods of Montbello, Greater Park Hill, Northeast (NE) Park Hill and East Montclair. The Stapleton Foundation received a grant, funded by the Centers for Disease Control and Prevention (CDC), in spring 2015 to increase physical activity in Northeast Denver particularly among the African American population. The study area for this HIA has significant health issues, except in the Stapleton neighborhood. The Stapleton foundation has focused their work in these neighborhoods and with this funding is addressing physical activity, through better access at recreation centers and better transportation options, access to health care and other services, as well as optimizing social engagement.

Terms
<i>Partnership Agreement. Joint Use Agreement. Shared Use Agreement.</i>
<i>Community Use - A cooperative venture between parties with a common goal that combine complementary resources and establish a mutual direction or complete a mutually beneficial project.</i>

A tiered system for Denver Recreation Centers has resulted in most amenities being centered on “regional” centers, with fewer amenities and programs available at the local and far fewer at the neighborhood level. Unfortunately, the local and neighborhood centers are located largely in high-risk, low-income neighborhoods and have the fewest amenities and services. For example, Martin Luther King Jr. and Hiawatha Davis recreation centers have little to no organized activities such as fitness classes but could if provided by outside groups. This is in comparison to a regional center such as Central Park in east Stapleton, which has more than 18 different classes offered. Even the regional center in Montbello, a low-income neighborhood, has far fewer classes, types of classes offered, and operating hours. Existing policy, however, creates substantial bureaucratic and financial barriers for outside groups who may wish to supplement recreation center offerings with other classes and organized activities. Establishing and adopting a partnership policy with the recreation centers can reduce those barriers, but it requires a sustainable and consistent yet flexible policy.

The purpose of this health impact assessment (HIA) is to gain a better understanding of: 1) the needs and perceptions of recreation center users and potential users, NE Denver recreation center staff and those who offer fitness and health classes by conducting interviews; 2) allocation of resources at recreation centers that can cause barriers to physical activity in these neighborhoods; and 3) partnership agreements as an effective strategy to help address some of these barriers.

The HIA provides information and recommendations about partnership agreements specific to the recreation centers, and reducing barriers to outside groups willing to offer more healthy activity programs, specifically to disadvantaged populations such as African Americans. The HIA also addresses current recreation center policies. The goals of this HIA are supported by Strategy #14 from the CDC Community Guide, which states that recreational facilities should be open to the public to increase opportunities for physical activity. While the Recreation Centers are technically “open to the public,” those located in low-income neighborhoods have limited or no programming for physical activity. Current policies create significant barriers preventing qualified fitness and health groups and organizations who are willing to provide this programming from offering programs at the Denver recreation centers. The information obtained from the HIA will be important in documenting public interest in increasing access to physical activity opportunities and will provide evidence of the impact of current policies on healthy activity options.

At the city level there are also strategies in the Denver Comprehensive Plan (2000) that indicate the city’s desire to identify opportunities for partnership agreements. Denver Comprehensive Plan 2000, Objective 14, urges the city to “promote interagency cooperation to encourage shared facilities for community use.” Strategies 14-A and B further this objective: “identify opportunities for shared use of facilities and initiate shared-use agreements” and “encourage developing communities to create shared community spaces that will serve the needs of and be accessible to a variety of organizations and groups.”

In the past, fitness instructors and health organizations offered classes at Denver’s recreation centers. Later policies changed to have all classes be coordinated by the centralized Core Fitness Team at the central office that serves all 27 recreation centers. Currently, the Denver Parks and Recreation (DPR) fitness classes are taught by instructors who are City employees. These employees are screened and trained by the City and have all the required certifications. The recreation center staff stated in interviews that they like the current centralized Core Fitness program model. They feel that it “provides consistency across classes and recreation centers”. Currently, there are some informal partnership agreements that are in place such as *be well*, Cancer Fit and karate. There is not an adopted partnership policy in place to allow and guide more structured and consistent agreements and allow for more opportunities for physical activity in the disadvantaged neighborhoods. Denver is now in the process of developing such a policy to bring clarity and consistency to the process, yet from the surveys a flexible policy agreement is needed so that the different needs, challenges and preferences at the different recreation centers can be met.

## Health Impact Assessment Background

An HIA is a process or tool to assess the impacts of policies, planning projects, and programs on population health. It informs decision-makers about the potential impacts of proposals and offers recommendations to optimize beneficial effects and minimize adverse consequences.

The HIA was commissioned by the Stapleton Foundation as part of a CDC grant to increase physical activity and support this effort with empirical research, conduct interviews to articulate and refine ideas, and add new recommendations to be considered for the partnership's policy and other recreation center policies.

The Stapleton Foundation contracted with EnviroHealth Consulting, Inc. to conduct a rapid HIA (HIA conducted in about four months or less) answering three main questions, how are Denver's recreation centers meeting the needs of residents, particularly those near NE Park Hill and Montbello neighborhoods? What recreation center policies are in place that limit physical activity? What are the elements of a partnership agreement and how could such an agreement enhance the physical activity levels at recreation centers?

The scope of work for this HIA is as follows:

- **Collect** health and demographic data as well as survey data from community members, recreation center directors and staff and outside fitness professionals. Conduct a literature review regarding African Americans and physical activity.
- **Synthesize** information and data obtained from supportive evidence-based research.
- **Analyze** current conditions at recreation centers, survey data and the use and types of partnership agreements.
- **Recommend** changes to current DPR recreation center policies and the use of partnership agreement based on surveys, other partnership agreements and data specific to the study area.

EnviroHealth Consulting began the HIA in May 2015 and took approximately four and half months to complete. The research team followed the North American HIA Practice Standards (Bhatia et al., 2014) to develop each HIA stage. EnviroHealth conducted a thorough review of the study area and regional data, literature on physical activity specifically among African Americans, completed three different surveys with numerous interviews, and consulted with an array of experts and stakeholders.

### Key Health Findings

African Americans are disproportionately affected by diabetes, most forms of cancer, cardiovascular disease, hypertension, strokes, and obesity relative to other ethnic groups. These diseases, however, are positively affected by regular participation in physical activity. Despite the known benefits, a large portion of the general population remains sedentary. Among African Americans, 38.9% do not meet the Centers for Disease Control and Prevention and American College of Sports Medicine's physical activity recommendations and 24.8% are completely sedentary (Bopp et al., 2013). The study area neighborhoods had the highest incidents of cardiovascular disease and residents are between 40-60% obese. Children living in poverty is also an indicator of poor health outcomes. It is important to note that, with the exception of Stapleton, poverty is especially pronounced in the study area and markedly higher than the city of Denver as a whole.

## What Influences Physical Activity

The demographic, psychosocial, and environmental influences on physical activity participation for African Americans have not been extensively studied. It is clear, however, that gender differences exist and thus gender-tailored interventions are needed (Bopp et al., 2006). Means of improving physical activity rates among African American communities include:

1. Improve self-efficacy (belief in one's ability to succeed in specific activities) and enjoyment of physical activity (psychological);
2. Improve a person's social support and build a social environment whether at a church or recreation center (sociocultural); and
3. Create accessible activities at churches and recreation centers (environmental).

Other influencers to more physical activity among African Americans are the following: greater knowledge about exercise; family and peer support; sidewalks and lighter traffic; greater perceived benefits; fewer perceived barriers like transportation, lack of opportunities in the area, expense and safety; daily physical activity routine; and family and peer support to list a few (Bopp et al., 2006).

Unfortunately there has not been much research on partnership agreements and physical activity levels. Fortunately the U.S. National Physical Activity Plan for the United States, a comprehensive set of policies, programs and initiatives to increase physical activity in all segments of the American population, states that there is some evidence that partnership agreements do increase opportunities for physical activity.

## Key Recommendations

- Recreation centers also should be wellness centers. A majority of community members and recreation center staff felt that additional services would be beneficial to the community such as health screenings for blood pressure, weight management and diabetes care, as well as offer classes on wellness, diet/nutrition, the benefits of exercising and healthy cooking.
- Based on the HIA interviews, there is overall support for partnership agreements mostly when outside organizations offer "something of benefit to members not currently offered by the City". Recreation center staff would support more access to fitness classes that are not currently offered (subject to space availability), creating variety, and reducing the financial impact to the centers. This supports Denver Comprehensive Plan 2000, Objective 14, Strategy A, "identify opportunities for shared use of facilities and initiate shared-use agreements." Also Strategy 14-B, "encourage developing communities to create shared community spaces that will serve the needs of and be accessible to a variety of organizations and groups."



- Leverage the power of social media. DPR needs to work closely with and contribute to Stapleton Foundation's efforts to develop and implement a social media/education campaign. The campaign cuts across many social issues such as exercise and transportation but much more advertising is needed to increase awareness about the amenities, programming and services at the recreation centers.
- Create a partnership agreement task force to ensure coordination and ongoing communication among DPR, local agencies, fitness and health professionals, community groups, and other stakeholders and include representatives from public health agencies, civil rights groups, urban planning agencies, local elected and appointed officials, park and recreation agencies, local school boards, academic researchers, non-profit organizations, and community-based organizations.

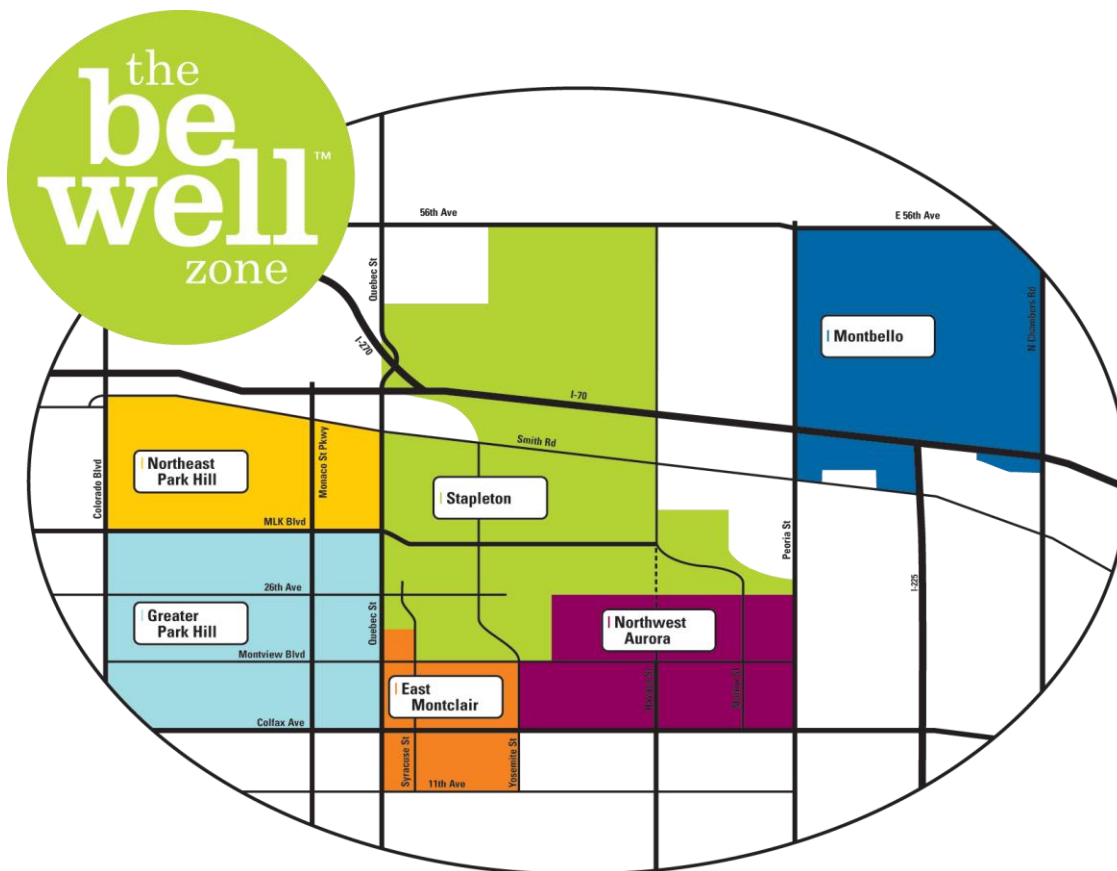
Some of the responsibilities of the task force could be to:

- Increase community and other stakeholder engagement;
  - study and propose new partnerships and projects;
  - enhance coordination with other agencies and organizations across the region;
  - Promote benefits and amenities at recreation centers;
  - Work through barriers and issues of partnership agreements such as liability, maintenance, vandalism, scheduling, and costs and operations;
  - Promote access and use at centers;
  - promote and educate about the services and programming at centers;
  - Consider more simplified center pricing; and
  - Assist with developing the language of the partnership agreement most useful for all stakeholders (i.e. Austin, TX and Portland, OR).
- There should be an equitable distribution of physical activity support. Some of the neighborhoods within the study area have a lower socioeconomic and health status yet have less access to health and fitness opportunities at the recreation centers. For this reason, some recreation centers such as MLK and Hiawatha Davis need more fitness classes and other programming to improve mental and physical health. Since there are also significant transportation issues in these neighborhoods, with more people without cars and more seniors, it can be challenging for residents to get to other recreation centers for classes and other programming so having opportunities nearby is essential.
  - Since each recreation center is in a neighborhood with different demographics and cultural norms, consider establishing guidelines that allow some flexibility at each center to decide which partnerships would work best in that neighborhood. A systemized set of policies, procedures, and processes is helpful to ensure transparency and consistency but still allow flexibility for neighborhood differences.

## 1.0 About the Study Area

The study area follows the boundaries of the Stapleton Foundation *be well* zone, excluding Northwest Aurora (See Figure 1). The mission of *be well* is to effect programs, policies and practices to create health equality and access for all people. Data was gathered based on the census tracts for the Denver neighborhoods of Montbello, Northeast Park Hill, Stapleton, Greater Park Hill and East Montclair (See Chapter 2 for census tract numbers). The community survey focused on Northeast Park Hill where the Martin Luther King Jr. and Hiawatha Davis Recreation Centers are located, and Montbello. A few additional responses came from Greater Park Hill and Stapleton.

**Figure 1.** Stapleton Foundation *be well* zone.



Source: Stapleton Foundation

## 1.1 Overview of Health Inequity

In the 1840's, Sir Edwin Chadwick was one of the first to study how disease is directly related to one's living conditions. He and others saw a strong need for public health and social reform and the importance of improving sanitary conditions and public health (Jackson, 2007). Today, we look at health disparities as differences in health status, access to care, and quality of care among groups that differ by race, ethnicity, sexual orientation, gender identity, physical ability, place of residence, socioeconomic status, or other factors that make groups vulnerable (World Health Organization, 2012).

### **Social Determinants of Health (SDOH)**

Good health depends on more than medical care. It is affected by where we live, the education we receive, the work we do, the wages we earn and by our opportunities to make decisions that improve our own and our family's health. –Colorado Trust, 2015

World Health Organization's (WHO) research has found that underlying causes of health inequities include disparities in education, income, built environment, regional economic stability, and social and community context (family structure, social connectedness of neighbors, discrimination and racism), among others. Health status is partly determined by the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness (World Health Organization, 2012). Community environmental factors play an important role. These include neighborhood pollution and the built environment itself—access to parks and recreation centers, good public transportation, and job opportunities. A recent report from the U.S. Academy of Sciences states that residential segregation continues to be a problem for people of color living in low-income communities, and despite a general feeling that the United States is in a “postracial” period, institutional racism and racial discrimination still exist. Their negative effects on health outcomes are well documented (Institute of Medicine, 2012).

Health equity is about achieving the highest level of health for all people by eliminating social or economic obstacles to health, equalizing the conditions for health for all groups, especially for those who have experienced socioeconomic disadvantage or historical injustices. Health equity concerns those differences in population health that can be traced to unequal economic and social conditions and are systemic and avoidable – and thus inherently unjust (Kincheloe et al., 2013).

## 1.2 Health Inequity in Colorado

In Colorado, health disparities persist most notably among the poor, people with limited English proficiency, communities of color, and sexual minorities (i.e. the LGBT community) (Kincheloe et al., 2013). Each of these health indicators will be examined for the study area neighborhoods in Chapter 2. As an overview of the State of Colorado, the indicators of poverty and race/ethnicity are discussed and related to health inequity.

By reviewing the table below, higher incomes are associated with reported better overall health. Ninety-four percent of Colorado adults with incomes at or above 400 percent of the federal poverty level (FPL) report

having good to excellent health, compared with 92 percent of those between 200 and 399 percent of poverty, and only 78 percent of adults living below 200 percent of poverty.

Regarding race and ethnicity, ninety-one percent of Whites and Asians in Colorado report having good to excellent health. This number drops to 85 percent among American Indians/Alaska Natives, 83 percent for African American/Blacks and only 76 percent for Hispanic/Latinos (See Table 1).

**Table 1:** Colorado adults who report good to excellent health by poverty income levels and race/ethnicity.

Federal Poverty Level	Percent
0 - 199% FPL (\$22,350 family of four)	78%*
200 - 399% FPL (\$44,700 family of four)	92%
400% + FPL (\$89,400 family of four)	94%
Race/Ethnicity	Percent Good Health
Hispanic/Latino	76%*
African American/Black	83%*
American Indian/Alaska Native	85%*
Asian/Pacific Islander	91%*
White	91%

\* Differences are statistically significant at the 95 percent confidence level. Source: The 2009 and 2010 Colorado Behavioral Risk Factor Surveillance System. Source: Taking Neighborhood Health to Heart 2009-2011.

Unfortunately, poverty is on the rise in Colorado. City Observatory mapped the poverty rate going back to 1970 in major U.S. cities -- including the Denver metro area. Their research reveals that the number of poor neighborhoods is growing. In particular, quality of life is worse, crime is higher, public services are weaker, and economic opportunity less available in concentrated poverty neighborhoods.

Looking at the Denver metro area specifically, in 1970 there were 16 high-poverty census tracts; in 2010, there were 48. The number of people in poverty has more than tripled, though population overall has grown as well. The Denver-Aurora-Lakewood metro area shows the number of suburban poor doubled from 2000 to 2008-2012 (Minor, 2014).

### 1.3 Overview of Partnership Agreements

Organizations increasingly recognize that providing access to existing recreational facilities is one of the most promising strategies for building more opportunities for physical activity. Partnership agreements are a cooperative venture between parties with a common goal that combine complementary resources and establish a mutual direction or complete a mutually beneficial project (Badalamenti et al., 2013). An ever-increasing number of public recreation facility projects include some form of partnership with other communities, public entities, and nonprofits and for-profit organizations. In an era of budget shortfalls, maximizing access to existing facilities – rather than developing new ones – can be an efficient and economical use of public resources.

Most of the literature on the outcomes of partnerships pertains to schools. The National Physical Activity Plan for the United States, a comprehensive set of policies, programs and initiatives to increase physical activity in all segments of the American population, suggests there is some evidence that partnership agreements increase opportunities for physical activity.

ConservationTools.org states that partnership agreements make sense for a variety of reasons and for a variety of purposes, but there are three major benefits or reasons it is pursued:

- Interdependence or mutual interests – a variety of issues and needs transcend boundaries, impacting a region as a whole, whether they are economic, social, environmental or physical in nature. As well, a community member may live in one municipality, work in a second and exercise in a third.
- Effectiveness of more than one organization sharing services - services can be more effective when groups work together. Region-wide recreation programs are an effective way to provide services to citizens. Citizens may be interested in a wide variety of recreation programs. However, a municipality offering an extensive schedule of programs on its own may not have enough citizens interested to support even one program, much less the whole list of activities. If municipalities join efforts, the opposite can happen (i.e. there are enough citizens interested in participating in a variety of planned programs).
- Efficiency or economy of scale - the ability of organizations to combine their buying power, their administrative capabilities and resources to obtain a better return of services and goods for communities (Rupert et al., 2015).



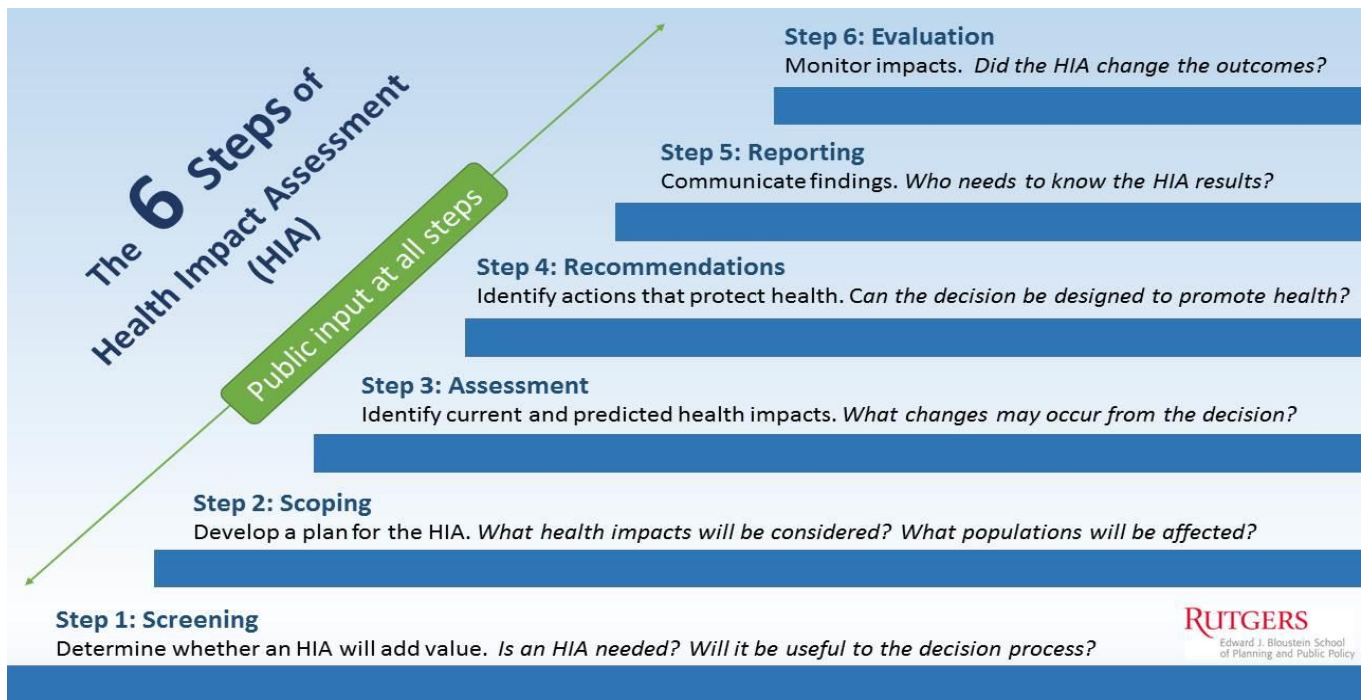
Digital Image. 9 Sept. 2015. 123rf.com

## 1.4 Overview of Health Impact Assessments

A rapid (about 4 months or less) HIA is a process or tool to assess the impacts of policies, planning projects and programs on population health. It guides decision-makers in considering the possible health impacts, and in some cases, financial considerations of proposals. HIAs recommend actions to minimize adverse consequences and optimize beneficial effects.

When policy-makers, urban planners, community organizations, and advocacy groups participate in and have data from a HIA, decisions are better informed. Decision makers have the opportunity to provide better outcomes for communities. –Health Impact Project

**Figure 2.** Six Steps of a Health Impact Assessment



Source: <http://togethernorthjersey.com/?p=21317>

The scope of work of this HIA is to:

- **Collect** health and demographic data as well as survey data from community members, recreation center directors and fitness professionals. Conduct a literature review regarding African Americans and physical activity.
- **Analyze** current conditions at recreation centers and the use and types of partnership agreements.
- **Synthesize** data obtained from supportive evidence-based research.
- **Recommend** options about recreation centers and partnership agreements based on data and research to increase physical activity in the study area.

This rapid HIA began in May 2015 and took approximately four months to complete. The research team followed the North American HIA Practice Standards Version 2.2 to develop each stage of this HIA (see Figure 2). An HIA involves six key stages: screening, scoping, assessment, recommendations, reporting, and monitoring and evaluation. A comprehensive literature review was conducted and extensive data was collected. The process also required extensive interviews and involvement of a wide array of experts and stakeholders including community members.

A key future step in the HIA process is to monitor the implementation of the recommendations presented in the HIA. Monitoring of decisions made in the project is needed to determine whether and which HIA recommendations were adopted, the reason for implementing the recommendations or not, and finally, whether the recommendations that were implemented made a difference. An important first step would be to monitor participation rates and health outcomes for one-, three- and five years after there is a policy change in the study area.

The Stapleton Foundation has demonstrated many proven and progressive sustainable policies and design concepts which focus on health and well-being of residents, particularly those who are disadvantaged. The HIA supports this work by listening to community members and other stakeholders to learn about their perceptions and combining that with health data and literature research to make educated recommendations in order to have more accessible and culturally specific programming at recreation centers that supports physical activity and healthy lifestyles for all.

## 2.0 Literature Review

This section of the HIA report provides a literature review of the study area and includes literature reviews completed by others, which is an essential part of evidence gathering. The role of a literature review is to ‘explore the field of work’ to facilitate an understanding of the topic area under review and provide a historical context (Ridley, 2010). For clarity, in this HIA the literature review identifies evidence-based data specific to the African American population regarding exercise. Two literature reviews are initially shared that cover those published articles between 1985 and 2015. Whitt-Glover et al. (2009) performed a systematic review of interventions to increase physical activity and physical fitness in African-Americans and published a paper. Their literature review covered 1985 to 2006.

The Whitt-Glover et al. (2009) report concluded that while many approaches to increasing physical activity among African-Americans have been attempted, most studies have not adequately addressed the major factors that may influence the adoption and maintenance of a regular physical activity program. There is rich and consistent literature on factors that influence physical activity levels among African-Americans that are potentially directly modifiable (i.e., behaviors) or addressable (e.g., environmental factors that can be mitigated) with theoretically based counseling programs. These factors relate directly to important theoretical concepts such as self-efficacy (belief in one’s ability to succeed in specific activities), normative expectations, and outcome expectancies. There was a noticeable lack of studies designed to address, or even account for, barriers or potential facilitators to physical activity among African-Americans. The limited number of studies with long-term follow-up suggests that, while various physical activity interventions might increase activity levels in short-term controlled circumstances, there is no evidence that these changes are sustainable. Most studies did not include long-term post-intervention evaluation, making it difficult to assess the effect of the interventions on physical activity maintenance.

This HIA offers recommendations on interventions and possible study design, and so it is important to note that in the Whitt-Glover et al. (2009) report they found several common factors that influence effective interventions designed to increase physical activity among African Americans. They include: assessment of physical activity using an objective measure, provision of specific goals for physical activity for study participants, and inclusion of structured physical activity programs. They also found that multiple behavior-targeted interventions are acceptable and are perhaps preferable given increasing disease and cost burdens. Targeting multiple behaviors like smoking, diet, exercise is beneficial.

PubMed and Jstor were used to conduct searches of published articles between 2006 and 2015 specific to African Americans and physical fitness, and interventions for increasing physical activity in the African American community. This literature review (2006-2015) finds very little progress in the study of African Americans and physical activity and supports the limitations discussed above by Whitt-Glover. It is important to note that several studies including *Exploring the Relationship of Religiosity, Religious Support, and Social*



*Support Among African American Women in a Physical Activity Intervention Program*, found gender specific exercise programs an important factor in participation, and also found that social support and church involvement helped encourage physical fitness. See Appendix 1 for specific reports. This correlates with the HIA community survey finding that a buddy program or ambassador programs would be helpful.

## 2.1 Data Limitations

This HIA provides baseline health data for the study area collected from a variety of sources that are outlined in Chapter 2. In most cases, data is presented at the national, state and census tract levels. However, very little individual-level data is available, which would provide information on physical activity patterns and impacts on health allowing for a precise focus on the African American portion of the community. Additionally, there have been changes to the physical boundaries of the census tracts between 2006 and the present. Given the data limitations, this report strives to present the most up-to-date information and to be clear and accurate.

Data was collected for the areas in the *be well* Zone except for NW Aurora since this project is focused only on NW Denver. Census tract level data was collected for Greater Park Hill 41.03, 41.04, 4201, 42.02; Northeast Park Hill 41.02; Stapleton 41.06 and 41.07 (older data is 41.05); and Montclair 44.03. Montbello has several census tracts including 83.04, 83.05, 83.06, 83.12, 83.86, and 83.87. A complete table of the data can be requested at the Stapleton Foundation.

## 2.2 Choosing Health Indicators

This section of the HIA brings together a range of demographic data for the study area, primarily using the American Community Survey 2013, older data from Taking Neighborhood Health to Heart study, Behavior Risk Factor Surveillance System (BRFSS), Colorado Department of Public Health and Environment, and the 2014 Health Assessment of Denver by *Be Healthy Denver*. This will provide a snapshot of the demographics of the population groups, including those who are most vulnerable.

In Colorado, health disparities persist most notably among the poor, people with limited English proficiency, communities of color, and sexual minorities (LGBT individuals).

Health priorities are set by various agencies and organizations in Colorado and give a window into the health concerns of Colorado. Although each of the reports described below measure the data differently and uses different geographic boundaries, still the information is very valuable. The health and social care priorities set by the Colorado Department of Public Health and Environment include the *Colorado's 10 Winnable Battles*; clean air, clean water, injury prevention, mental health and substance abuse, obesity, oral health, infectious disease prevention, safe food, tobacco, and unintended pregnancy. In 2014, *Be Healthy Denver* analyzed health priorities and health concerns in communities and identified three underlying themes: equity, prevention, and importance of place.

In order to select the most relevant indicators for the study area, indicators used by various groups that conduct studies on healthy communities were examined. Next the availability of current data was looked at. The focus was narrowed to income, people with limited English proficiency, race/ethnicity and sexual minorities, and specific at risk populations including seniors and children. Self-reporting of health status is also a key indicator and is included for neighborhoods where the information is available. A table of data with many other indicators is available at the Stapleton Foundation.

## 2.3 Health Indicators by Neighborhood

Table 2 shows each indicator and the extent of health disparities within the study area. The health indicators are discussed in detail following the table. This data is reported at the census tract level.

**Table 2. Health Indicators by Neighborhood**

Neighborhood	Living below poverty 2013*	Poverty Percent Change from 2006-2010	Limited English (No one age 14 and over speaks English only or speaks English "very well" )	Non US Citizen	Race majority (AA- African American, W-White, H-Hispanic/Latino/a)	Sexual Minority (LGBT Individuals) estimate*
NE Park Hill	32.9%	-22.9%	5.0%	10.5%	AA 50.0%	1,234
Greater Park Hill	9.5%	-44.9%	0.8%	3.4%	W 67.5%	2,716
Stapleton	4.0%	-35.3%	.75%	4.1%	W 79.9%	1,426
East Montclair	27.3%	-2.5%	3.8%	10.9%	W 67.3%	279
Montbello	22.6%	n/a	9.9%	15.3%	H 70.0%	4,719
Denver	19.1%	7.3%	5.7%	11.5%	W 53.5%	40,010
Colorado	13.2%	8.2%	3.3%	6.5%	W 84.0%	767,899

\*The most widely accepted statistic is that 1 in every 10 individuals is LGBT; however some research estimates 1 in 20. This is based on 1 in every 15. (Johnson)

Source: American Community Survey 2006, 2010 and 2013.

### Income, Education & Race/Ethnicity

Socioeconomic status has a significant influence on health, and race/ethnicity is linked with income (Institute of Medicine, 2012). On average, 19.26 percent of the entire study area is living below poverty as compared to 19.1 percent for the City of Denver and 13.4 percent for the State of Colorado. It is interesting to note that five of the census tracts showed a decrease in poverty, which on the surface seems good; however, this is also an indicator of a rapidly gentrifying neighborhood which forces people with lower incomes to leave the community. All of the census tracts in Montbello had increases in poverty, with one tract, 83.86, posting a 114.55 percent increase.

Table 3 shows that in Colorado, Whites and Asian/Pacific Islanders have the highest median household incomes at \$62,287 and \$57,630 respectively, and are the most likely to have a college degree at 31 percent. It is not surprising they are also the groups most likely to report good to excellent health (Table 5).

Hispanic/Latinos are the least likely to graduate from high school, 32 percent, or college, 7 percent, and have the lowest household income at \$38,450. They are the group least likely to report good to excellent health. African American/Blacks and American Indian/Alaska Natives fall in the middle on all three indicators, with similar household incomes, \$38,530 and \$38,031 respectively, and similar college graduation rates, 13 and 12 percent.

**Table 3.** Median household income and highest level of education completed, by race/ethnicity, Colorado, 2006-2010.

Race/ethnicity	Median annual household income (pre tax)	Less than high school	High school diploma or GED	Vocational training	Four-year college degree or higher
White	\$62,287	25%	38%	6%	31%
Hispanic/Latino	\$38,450*	58%*	32%*	3%*	7%*
African American/Black	\$38,530*	40%*	41%*	6%	13%*
Asian/Pacific Islander	\$57,630*	32%*	33%*	4%*	31%
American Indian/Alaska Native	\$38,031*	33%*	48%*	7%	12%*

Source: 2006-2010 American Community Survey and The Colorado Health Institute analysis of 2008-2010 American Community Survey. \* Differences are statistically significant at the 95 percent confidence level.

### Sexual Minorities

Over the past few decades, clinicians, public health researchers, and officials have become increasingly aware that lesbian, gay, bisexual, and transgender (LGBT) persons constitute sexual and gender minorities who have unique health care needs (Dean et al., 2004). However, we have just recently begun to count the LGBT population as a subset of population in government surveys. To increase understanding of LGBT population groups and their health-related needs, it is critical that population-based surveys and social behavioral research studies continue to expand and improve the measurement of sexual and gender minority identity and behavior. Given this, it is not surprising that clinicians and public health researchers are only now learning about the range of health disparities and unique clinical issues affecting LGBT people. Existing research, although limited, points to a higher prevalence of certain conditions among LGBT patients that merit attention. Many issues disproportionately affect sexual and gender minorities, such as substance abuse, obesity, and tobacco use. Among the most significant areas of clinical concern for LGBT patients are mental health disorders, particularly diagnoses of depression and anxiety (Dean et al., 2004). Given this, further study is recommended to assess how the Denver Recreation Centers can provide better services to address the needs of LGBT community in order to reduce the health outcomes from which they are disproportionately affected.

## Limited English Proficiency (LEP) and Non-US Citizen Status

Inadequate communication between patients with limited English proficiency (LEP) and providers can be associated with lower access to health care. Study results show that there is a significant difference in ability to access health care and screenings for persons with LEP. Those persons with LEP also perceived poorer patient-physician interaction compared to those persons who primarily speak English (Smith, 2010). Non-US Citizens similarly have lower access to health care. The average of LEP homes in the entire study area is 4.1%, just over the state level of 3.3%. Montbello ranks highest at 9.9%, and only Stapleton and Greater Park Hill rank below the state level. Montbello also ranks highest, at 15.3%, well over the state level of 6.5% of non-US citizens. Given this, communications from recreation centers must be offered in several languages, especially Spanish. Recreation Center should offer fitness classes that are taught in both Spanish and English. Culturally relevant classes should also be offered.

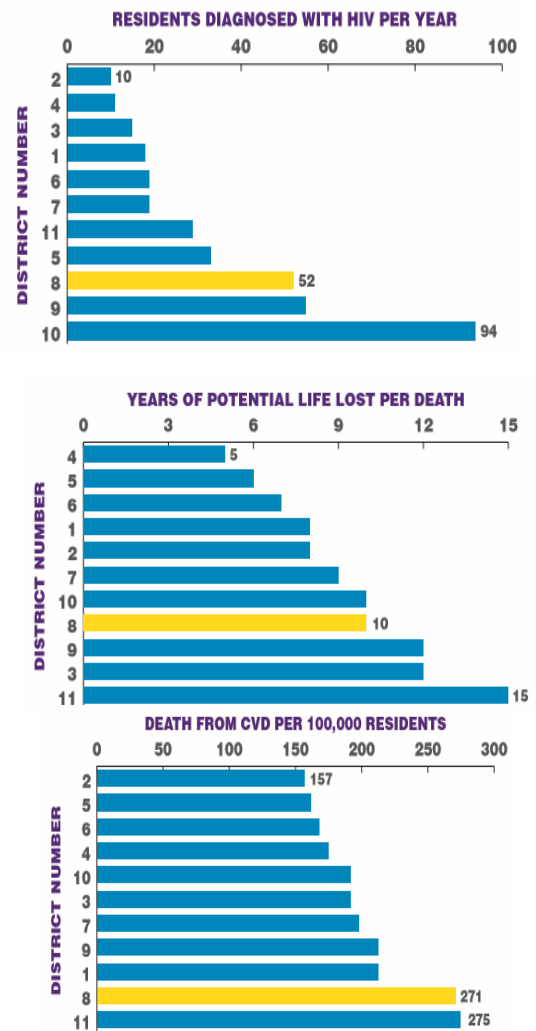
## 2.4 Health Indicators by District

### HIV, Years of Life Lost, and Cardiovascular Disease (CVD)

*Be Healthy Denver* reports health outcomes at a district level. The study area is covered in the District 8 and District 11 reports, and the disparity is clear. On average from 2006 and 2010, District 11 had 29 people diagnosed with HIV infections per 100,000 residents each year, ranking 7<sup>th</sup> of 11 council districts. District 8 had 52 people diagnosed with HIV infections per 100,000 residents each year, ranking 9<sup>th</sup> of 11 council districts.

A key indicator of overall health is premature death or death before the age of 75, shown in the second graph below. District 8 ranks 8<sup>th</sup> of eleven districts, and District 11 residents ranks number one of eleven districts at death 10 years before the age 75 and 15 years before the age 75 respectively.

The two districts had the highest incidents of cardiovascular disease with District 8 having 271 deaths due to heart attacks and strokes per 100,000 residents, and District 11 having 275 deaths due to heart attacks and strokes per 100,000 residents. Over 60% of people in District 11 are overweight or obese and in District 8 between 40-60% are obese.



## 2.5 Costs of Health Inequities

Health issues come with a significant cost to the state, the community and to the individual. For example, the study area ranks highest of all districts for cardiovascular disease (CVD). CVD cost Colorado \$4.4 billion in 2010 and is projected to cost \$8.2 billion by 2020. Direct costs for CVD include expenditures for office based visits, hospital visits. Communities pay indirect costs associated with reduced ability/inability to work, reduced productivity, and others. People with CVD incur higher medical expenditures, \$121,200 over 20 years. For those needing surgery or procedures and ongoing care, the cost can be more than \$4.8 million over a lifetime (Centers for Disease Control, 2015).

## 2.6 Health Indicators by Special Population

### At Risk Populations - Seniors

Groups that face special barriers to getting enough physical activity are seniors, children and people with disabilities. Seniors over the age of 65 and children under the age of 18 are the two groups of most concern. As they age, senior citizens have increasing access issues to needed health care, social and physical activity and healthy food choices. Increasing mobility is key to providing these resources, especially for those who can no longer drive.

Park Hill has the highest concentrations of seniors at 13.5%. This number is considerably higher than that of the City of Denver as a whole (at just over 10% of its population). NE Park Hill is just about average at 11.2% and the other neighborhoods are considerably below average. This indicates that issues for seniors in Park Hill, and NE Park Hill, where seniors are likely aging-in-place, is of special concern.

**Table 4. Special Populations**

	NE Park Hill	Park Hill	Stapleton	E Montclair	Montbello
Total Population	8,230	18,112	14,992	4,186	31,559
% Kids under 19	29.4%	24.3%	27.4%	23.8%	40.5%
% Seniors (65+)	11.2%	13.5%	4.4%	9.5%	5.93%
% Disabled	12.7%	7.6%	5.95%	14.6%	7.38%

Source: American Community Survey 2013

### At Risk Populations - Children

Children are a concern because of the special nutritional and exercise needs of growing bodies. It is important to teach children healthy habits early as those tend to become lifelong habits. In terms of the percentage of

children under 18, Montbello stands out with an average of 40.5%. The other neighborhoods have similar percentages, all between 24 and 29%.

The number of Children living in poverty is an indicator of poor health outcomes, and it is important to note that with the exception of Stapleton, poverty is especially pronounced in the study area. Table 4 shows NE Park Hill at 32.9% and Montclair with 27.3% and Montbello with 22.6% poverty. These numbers are markedly higher than the city of Denver overall where approximately 26% of children live in poverty and the statewide average is 15.4%.

## 2.7 Self-Report of Health Status

Self-reporting of health status is a very powerful assessment tool and is highly valid in predicting a person’s quality of health. It hints at an overall assessment of all an individual’s physical and mental health conditions rather than one or two specific health indicators. Self-report of health status information is not gathered regularly, and the most recent data was collected as a part of the 2006-2008 Taking Neighborhood Health to Heart (TNH2H) community-based participatory research study. Respondents (n=950) from five neighborhoods in Denver and Aurora were asked to rate their health status on a scale from “poor” to “excellent.”

Table 5 shows the Park Hill neighborhoods had the highest percentage of respondents who stated their health was “poor.” Stapleton reported a much higher level of health than the rest of these neighborhoods.

**Table 5. TNH2H Study area adults self-reported health**

Area	Self-report health as excellent	Self-report health as poor	Self-report health majority
NE Park Hill	6%	6%	Good 35%
Greater Park Hill	4%	2%	Very good 43%
Stapleton	38%	0%	Very good 46%
East Montclair	15%	n/a	Very good 39%
Montbello*	n/a	n/a	n/a

\* Montbello was not included in this study

Source: Taking Neighborhood Health to Heart

## 2.8 Household Budgets and Exercise Barriers

### Housing and Transportation Index

The Housing and Transportation Index (H&T) is a fairly new way of looking at household budgets and trade-offs that are made when housing and transportation costs rise faster than income, placing a burden on already stretched budgets. This index adds the costs of travel to daily destinations to the traditional components of

housing costs — rent or mortgage payments and utilities — to compute a combined cost that better reflects the full costs associated with selecting one’s housing unit, and its location, over another (Hickey et al., 2012).

Research has shown that many households allocate a disproportionate amount of funds toward basic necessities. For the typical moderate-income homeowner carrying a mortgage in the Northeast Park Hill area, combined housing and transportation expenses consume an average of 72 percent of income. The trade-off affects health because it leaves no discretionary income in the budget for items such as fees for exercising at recreation centers, personal exercise equipment or traveling long distances to other recreational amenities. Table 6 shows a conceptual budget for a family in Northeast Park Hill where the H&T is 49 percent of income, the family will incur additional debt of approximately \$413.33 without including exercise as part of the budget. Table 7 shows the relative costs of housing and transportation in the Denver Metro area. Areas of dark blue have the highest values.

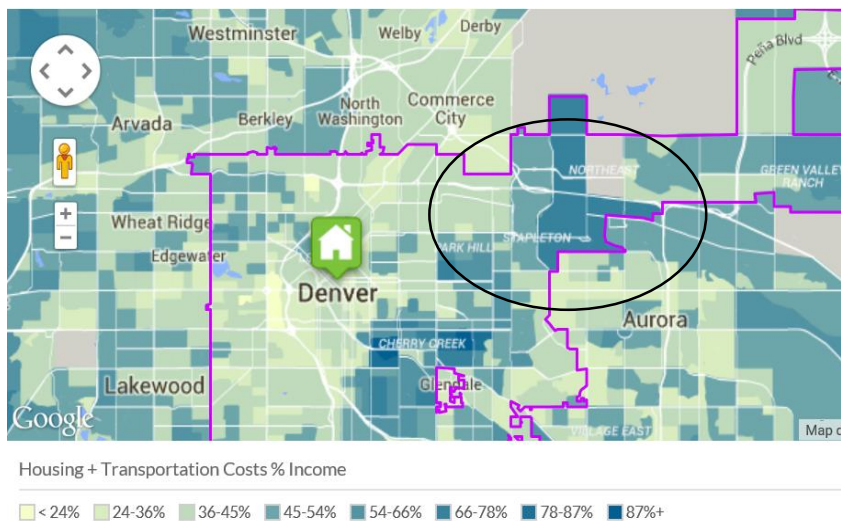
**Table 6. Household Budget for Moderate Income Family of Two Parents and One Teenager renting in the Northeast Park Hill area.**

Annual Income	\$40,000 (pre-tax) \$33,548.00 after taxes
Monthly Income (a)	\$3,333.33
Expenses:	
Housing	\$967.00 per month (29% of income)
Transportation	\$666.66 per month (20% of income)
Food (b)	\$640
Health Care Premium and Out of Pocket(c)	\$238 + \$74 = 312 (employer based)
Miscellaneous Necessities (d)	\$368
Other Taxes	\$187
Monthly Income Pre Debt	\$192.67
Credit Card Debt (avg American family has \$7281) (e)	\$606 per month
Monthly Income Less expenses and debt	-\$413.33

(a) Includes the child tax credit. Married filing jointly in Colorado. 10% fed tax rate. 4.63% state tax rate (b) Food excludes take-out and restaurant meals. (c) Health care includes copayments and the portion of insurance premiums not covered by a worker’s employer. (d) Includes other essential items, including clothing, shoes, paper products, nonprescription medicines, cleaning products, household items, personal hygiene items, and landline telephone service. (e) This is just credit card debt and does not include other debts like student loans.

Sources: Data on taxes provided by Federal Tax Calculator for Colorado. Food, health care, and miscellaneous expenses provided by National Center for Children in Poverty Basic Needs Calculator. Housing, transportation, and income data derived from cross tabulations of the 2006-2010 American Community Survey and application of the Housing + Transportation (H+T®) Affordability Index by the Center for Neighborhood Technology and Center for Housing Policy. Debt rate is from Federal Reserve Statistics.

**Table 7. Housing and Transportation Costs for Study Area**



Area	H&T costs of avg. income by neighborhood
NE Park Hill	49%
Greater Park Hill	48%
Stapleton	60%
East Montclair	38%
Montbello	n/a

Source: Housing + Transportation (H+T<sup>®</sup>) Affordability Index by the Center for Neighborhood Technology and Center for Housing Policy.

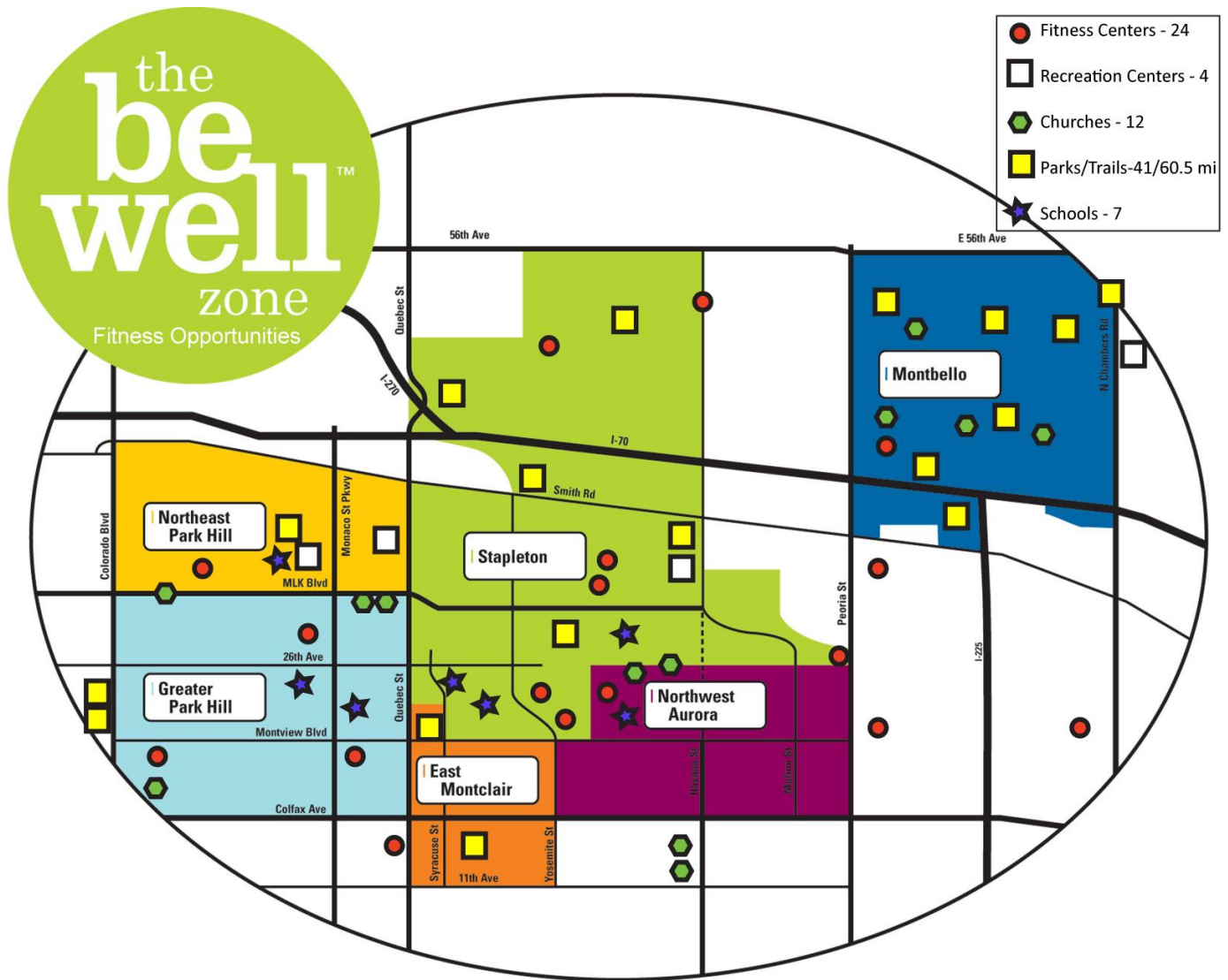
## 2.9 Cost Analysis of Fitness and Physical Activity Centers in Study Area

The recreation centers in the study area include those mostly in Northeast Denver such as MLK, Hiawatha Davis, Central Park, Glenarm, Montbello, Green Valley Ranch, and Montclair in officially in Southeast Denver but is nearby so it is also part of the study area. More details about each of the centers such as the membership level are in Table 9.

The HIA community survey and online comments on Yelp (See Appendix 2) show neighbors perceive the price at Denver recreation centers as too expensive and that it is cheaper to exercise in other fitness centers. To analyze cost as a barrier to exercising, the map below illustrates the opportunities for physical activity in the study area. In addition to the four Denver Recreation Centers, there are at least 24 fitness centers within 5 miles of Stapleton. There are 41 parks and 60.5 miles of trails. There are also seven schools in the area with playgrounds some of which have ball fields and basketball courts as well. Twelve churches are in the area and some offer fitness classes.



Figure 2. Fitness Opportunities in the be well Zone.



Source: Prepared by Karen Bauer, MURP

Table 8 shows a cost comparison of fitness opportunities in the area. Since certain discounts are offered at both the recreation centers and the private fitness centers, this table is only an estimate. Some health insurances will offer a discount or even cover the entire cost of the membership. Some insurance plans offer “Silver Sneakers” which is a senior fitness program wherein someone can join a gym or fitness club at little to no cost to them.

The least expensive DPR membership for an adult is \$190 (\$15.83 month) and the most expensive DPR membership is \$369 (\$30.75 month). Drop in rates start at \$5 per visit. Planet Fitness is 11 miles away from Stapleton, but is very affordable at \$10 a month, offering the best pricing. At the non-discounted price, the perception that DPR memberships are more expensive does not hold true. In order to attract more people to Denver recreation centers, this perception needs to be addressed by bringing more awareness through education via social media and other means.

**Table 8. Cost Comparison: Denver Recreation Centers and other Fitness Centers**

Location	Price per month (no discount)	Drop In
Parks and Trails	Free	Free
Planet Fitness	\$10	n/a
Denver Rec Center	\$15.83 /\$30.75	\$5
Curves	\$43	n/a
24 Hr Fitness	\$48	n/a
Endorphin	\$59	\$20
Anschutz Health & Wellness	\$82	n/a
CrossFit Stapleton	\$150	\$20

Source: Data is from each of the websites.

**Figure 3. Denver Recreation Center Pricing** (Source: Denvergov.org)

MEMBERSHIP LEVEL	Age Group	Base Price	Annual Membership		Month-to-Month Membership		Visit Passes		
			Individual Save 10%	Add'l Member Save 50%	Individual	Add'l Member Save 50%	30-Visit	15-Visit	Single
<b>REGIONAL LEVEL</b> ACCESS 27 CENTERS ▪ 16 OUTDOOR POOLS  OPEN 7 DAYS/WEEK AND MOST HOLIDAYS! MORE EQUIPMENT. MORE FITNESS CLASSES.	25-64 yrs	\$369	\$332.10	\$184.50	\$30.75	\$15.38	\$126	\$76	\$6
	19-24 yrs	\$270	\$243	\$135	\$22.50	\$11.25	\$105	\$63.75	\$5
	65+ yrs	\$119	\$107.10	\$59.50	\$9.92	\$4.96	\$84	\$51	\$4
	2-18 yrs	\$50	\$45	\$25	\$4.17	\$2.08	\$42	\$25.50	\$2
<b>LOCAL LEVEL</b> ACCESS 20 CENTERS ▪ 16 OUTDOOR POOLS  \$2 TO VISIT REGIONAL CENTER	25-64 yrs	\$249	\$224.10	\$124.50	\$20.75	\$10.38	\$115.50	\$70	\$5.50
	19-24 yrs	\$180	\$162	\$90	\$15	\$7.50	\$84	\$51	\$4
	65+ yrs	\$99	\$89.10	\$49.50	\$8.25	\$4.13	\$63	\$38.25	\$3
	2-18 yrs	\$42	\$37.80	\$21	\$3.50	\$1.75	\$31.50	\$19	\$1.50
<b>NEIGHBORHOOD LEVEL</b> ACCESS 9 CENTERS ▪ 16 OUTDOOR POOLS  \$2 TO VISIT LOCAL CENTER \$4 TO VISIT REGIONAL CENTER	25-64 yrs	\$190	\$171	\$95	\$15.83	\$7.92	\$105	\$64	\$5
	19-24 yrs	\$135	\$121.50	\$67.50	\$11.25	\$5.63	\$63	\$38.25	\$3
	65+ yrs	\$85	\$76.50	\$42.50	\$7.08	\$3.54	\$42	\$25.50	\$2
	2-18 yrs	\$35	\$31.50	\$17.50	\$2.92	\$1.46	\$21	\$12.75	\$1

SILVERSNEAKERS CARDS ACCEPTED AT ALL LOCATIONS. FINANCIAL ASSISTANCE AVAILABLE TO THOSE WHO QUALIFY. DISCOUNTS AND INCLUSION SERVICES FOR PERSONS WITH DISABILITIES.

## 2.10 Disparities Between Recreation Centers

The different surveys revealed the perception that classes are limited at MLK, Hiawatha Davis and Glenarm Recreation Centers and that the facilities are not as appealing as other facilities. One respondent commented she can afford to go to MLK, but would rather go to Central Park because they have new, clean facilities, free wi-fi, and a beautiful view of the mountains. Comments on Yelp illustrate that there is a similar perception. While Central Park, Montbello and Stapleton recreation centers received 4 out of 5 stars, Green Valley, Glenarm and Hiawatha only received 3 out of 5 stars.

Table 9 illustrates the disparities in the hours and number of classes at the Centers. Figure 4 shows the differences in amenities.

Looking at the charts we can see that if one can only afford the local level membership, they are limited to using the recreation centers that have the least number of fitness classes and amenities. Even among the two “regional” level facilities in the study area there is quite a contrast in the number of classes and the hours the center is open. Central Park in wealthier Stapleton has more classes and more hours than its counterpart in Montbello, a low-income community.

**Table 9.** Denver Recreation Centers Programming Comparison (Source: Denvergov.org)

Recreation Center in Study Area	Level	Number of Classes	Type of Classes	Hours Open
Hiawatha Davis	Local	3	Cardio Fit, Silver Sneakers Classic, Girls Volleyball	M-Th 7am-8pm Fri. 7am-7pm Sat. 9am-4pm
Martin Luther King Jr. (MLK)	Neighborhood	0 fitness	Variety of aquatic classes	M-F 9-11am; M-F 1pm-7pm Sat. 9am-1pm
Central Park	Regional	18	Silver Sneakers Classic, Silver Sneakers Cardio Fit, Yoga, Zumba, Essentrics, Hot Hula, Barr Fit, Power Step, Power Sculpt, Pilates	M-Th 5:30am-9pm Fri. 5:30a-8pm Sat. Sun 8am-5pm
Montbello	Regional	4	Silver Sneakers Cardio Fit, Silver Sneakers Classic, Zumba, Girls Volleyball	M-Th 6am-9pm Fri. 6am-4pm Sat. 9am-4pm Sun. 10am-4pm
Glenarm	Local	3	Aerobics, Power Sculpt, Yoga	Mon & Wed 10am-8pm Tue & Th 6am-8pm Fri. 10am-7pm Sat. 9:30am-3:30pm
Montclair	Regional	9	Pickle ball, tai chi, essentials, Pilates, power sculpt, yoga, yoga 2, Irish Step Dance, Girls Volleyball, Silver Sneakers	M-Thu 6am-9pm Fri. 6am-9pm Sat. 9am-4pm; Sun. 9am-4pm
Green Valley Ranch	Local	8	Silver Sneakers Cardio Fit, Silver Sneakers Classics, Silver Sneakers Yoga, Core Training, Power Sculpt, Zumba, Karate, Girls Volleyball	M-F 6am-8pm Sat. 10am-4pm

Figure 4. Denver Recreation Center Amenities

DENVER RECREATION CENTERS												
Area	Level	Center	Address	Phone	Gymnasium	Boxing Studio	Indoor Pool	Racquetball Court	SilverSneakers® Fitness Classes	Therapy Pool and Sauna	Weight /Cardio	Wi-Fi
Northwest	R	Scheitler	5031 W 46th Ave	(720) 865-0640	■		■		■		■	
	L	Ashland	2475 W Dunkeld Pl	(720) 865-0510	■		■				■	
	L	Twentieth Street	1011 20th St	(720) 865-0520	■	■	■				■	
	N	Aztlan	4435 Navajo St	(303) 458-4899	■						■	
	N	Highland Senior	2880 Osceola St	(720) 865-0600					■			
	N	Stapleton	5090 Broadway	(303) 295-4482	■						■	
Northeast	R	Central Park	9651 E MLK Blvd	(720) 865-0750	■		■		■		■	■
	R	Montbello	15555 E 53rd Ave	(720) 865-0580	■		■		■		■	
	L	Hiawatha Davis	3334 Holly St	(720) 865-0590	■		■		■		■	
	L	Glenarm	2800 Glenarm Pl	(720) 865-3380	■		■	■			■	
	L	Green Valley Ranch	4890 Argonne Wy	(303) 375-3857	■				■		■	
	N	MLK Jr.	3880 Newport St	(720) 865-0530	■		■	■		■	■	
	N	St. Charles	3777 Lafayette St	(303) 295-4462	■ ■						■	
	N	Swansea	2650 E 49th Ave	(720) 865-0540	■						■	
Southeast	R	Montclair	729 Ulster Wy	(720) 865-0560	■		■		■		■	■
	R	Washington Park	701 S Franklin St	(720) 865-3400	■		■		■		■	■
	L	Cook Park	7100 Cherry Creek Dr S	(720) 865-0610	■				■		■	
	L	Eisenhower	4300 E Dartmouth Ave	(720) 865-0730	■				■		■	
	L	Harvard Gulch	550 E Iliff Ave	(720) 865-0905	■				■		■	■
	L	La Familia	65 S Elati St	(303) 698-4995	■		■		■		■	
	N	Platt Park Senior	1500 S Grant St	(720) 865-0630					■			
Southwest	R	Athmar	2680 W Mexico Ave	(303) 937-4600	■		■		■		■	
	R	Rude	2855 W Holden Pl	(720) 865-0570	■		■				■	■
	L	Harvey Park	2120 S Tennyson Wy	(720) 865-0550	■						■	
	L	Southwest	9200 W Saratoga Pl	(720) 865-0670	■						■	
	N	Barnum	360 Hooker St	(303) 937-4659	■				■		■	
	N	La Alma	1325 W 11th Ave	(303) 572-4790	■				■		■	

## 2.11 Summary

Generally speaking, all the neighborhoods, with the exception of Stapleton, have significant health issues and the health disparities are quite evident such as poverty and cardiovascular disease. Denver’s Community Strategies Guide, strategy #14 states that ensuring that existing recreational facilities are open to the public is one way to increase opportunities for physical activity. While the recreation centers are technically “open to the public,” this study notes that those located in the low-income neighborhoods of the study area, with significant health issues, have limited or no programming for physical activity.

## 3.0 African Americans and Health

African Americans are disproportionately affected by diabetes, most forms of cancer, cardiovascular disease, hypertension, strokes, and obesity relative to other ethnic groups. These diseases, however, are positively affected by regular physical activity participation. Despite the known benefits, a large portion of the general population remains sedentary. Among African Americans, 38.9% do not meet the Centers for Disease Control and Prevention (CDC) and American College of Sports Medicine recommendations for weekly exercise and 24.8% are completely sedentary (Bopp et al., 2013). CDC's recommendation for physical activity is 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity (i.e., brisk walking) every week and muscle-strengthening activities on 2 or more days a week that work all major muscle groups (e.g. legs, abdomen, shoulders, etc.) <http://www.cdc.gov/physicalactivity/basics/glossary/index.htm#muscle-strength>. Understanding what influences participation is essential for designing interventions.

**Figure 5.** 10 Leading Causes of Death for African Americans

10 Leading Causes of Death for African Americans	
(Causes of Death from 2010)	
<b>1. Heart Disease</b> Facts Prevention	<b>6. Nephritis, Nephrotic Syndrome, &amp; Nephrosis</b> (Kidney Diseases) Chronic Kidney Disease Fact Sheets Protecting Kidney Health Fact Sheet 
<b>2. Cancer</b> Health Disparities in Cancer CDC Feature, Health Disparities in Cancer Reducing Health Disparities in Cancer	<b>7. Chronic Lower Respiratory Disease</b> Data & Statistics
<b>3. Stroke</b> Facts Prevention	<b>8. Homicide</b> WISQARS Data & Statistics Youth Violence Prevention 
<b>4. Diabetes</b> Prevention Fact Sheets	<b>9. Septicemia</b> Preventing Healthcare-associated Infections
<b>5. Unintentional Injuries</b> WISQARS Data & Statistics	<b>10. Alzheimer's Disease</b> Healthy Aging Data & Statistics
Source: National Vital Statistics Reports, Vol. 62, No. 6, December 20, 2013, Table 1, Page 31. 	

Source: Centers for Disease Control and Prevention (2013)

### 3.1 African Americans and Exercise

#### Influencers to Physical Activity

As stated earlier, the demographic, psychosocial, and environmental influences of physical activity participation for African Americans have not been extensively studied. It is clear, however, that gender differences exist and thus gender-tailored interventions are needed (Bopp et al., 2006). Means of improving physical activity participation rates include:

1. Psychological – improve self-efficacy and enjoyment of physical activity.
2. Sociocultural – improve social support and building on social environment of the church or recreation center.
3. Environmental – create accessible activities at churches and recreation centers (Bopp et al., 2006).

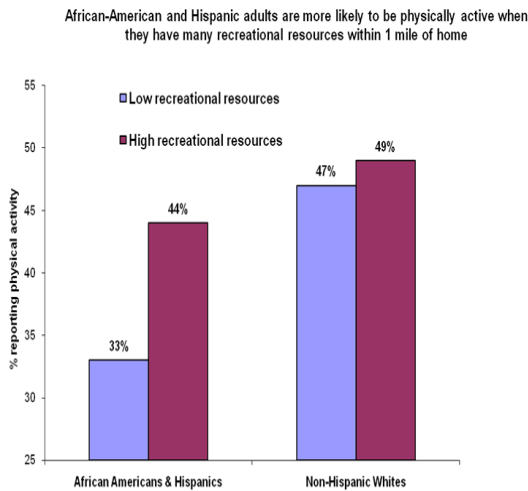
**Table 10.** *Influencers to Physical Activity by African American Men & Women*

African American Men	African American Women
Positive Influencers	
Age – younger are more active	Higher education
Higher income	Income
Higher education	Having a doctor discuss physical activity
Normal weight status	Greater exercise knowledge
Having a doctor discuss physical activity	Greater perceived benefits
Social Support/buddy system from male peers***	Fewer perceived barriers like transportation, lack of opportunities in the area, expense and safety**
Proximity – within 5 miles ****	Proximity – within 5 miles ^^ and convenience+
Incorporating church/faith#	Being married or having a partner#
	Seeing other exercise in the neighborhood#
	Sidewalks and lighter traffic#
	Daily physical activity routine+
	Family and peer support+
	Incorporating church/faith#
Negative Influencers	
Low perception about neighborhood opportunities *	Large family size/child care issues/ competing responsibilities at home+
Cost <sup>-</sup>	Low perception about neighborhood opportunities*
Fatigue <sup>=</sup>	Weather conditions and daylight <sup>+</sup>
	No person to exercise with <sup>+</sup>
	Lack of motivation, fatigue <sup>+</sup>
	Unsafe neighborhood <sup>+</sup>
	Worried about their hair <sup>++</sup>
	Perception of healthy weight/appearance <sup>##</sup>
	Cost <sup>-</sup>
	Fatigue <sup>=</sup>

Sources: Bopp et al., (2006). \*\*\*Griffith et al., (2013). \*\*Duke J., PhD et al., (2003). \*Duncan et al. (2002). ^^Moore et al., (2008). #Ainsworth et al (2003).

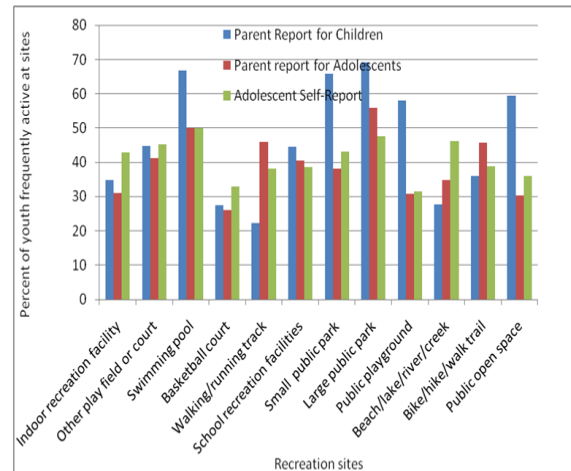
+Nies et al., (2002). ++Seaman (2012). #Seale et al., 2013. ## Barnes, A. 2013. =TNH2H (2008).

Data collected from 2,723 adults living in New York, Baltimore, and North Carolina showed adults were 28% more likely to participate in recreational activities if there were more recreational resources within five miles of their homes. The relationship between physical activity and proximity to recreational resources was significantly greater among African Americans and Hispanics.



Moore LV, Diez Roux AV, et al. Availability of recreational resources in minority and low socioeconomic status areas. *American Journal of Preventive Medicine* 2008; 34(1):16-22. <http://hdl.handle.net/2027.42/57999>.

Survey data from 87 parents of children and 124 matched pairs of parents and adolescents in three US cities found playgrounds are among the places where children are the most physically active.



Grow HM, Saelens BE, Kerr J, Durant NH, Norman GJ, Sallis JF. Where are youth active? Roles of proximity, active transport, and built environment. *Medicine and science in sports and exercise* 2008;40:2071-9.

### Gender Differences – Men

*Men on the Move* is a pilot study to increase African American men’s levels of physical activity by improving access to age and ability-appropriate, male-focused physical activity opportunities and facilitating access to social support from male peers. The study found having a peer motivates men to be more active, offers positive challenges and facilitates continuance of sustaining physical activity (Griffith, 2013). This finding supports the HIA survey findings that having a supportive workout buddy at the recreation center can help motivate and increase physical activity in men and women.

### Gender Differences – Women

In a study specific to woman, engaging in sufficient activity was related to attaining higher educational levels, being married or with a partner; being in excellent or very good health, having greater self-efficacy, seeing people exercise in the neighborhood, having more favorable ratings of women who exercise (social issues score), having lower social role strain, and reporting the presence of sidewalks or lighter traffic in the neighborhood. (Ainsworth et al., 2003).

In a study by Nies et al. (2002), African American women age 35–50 were recruited to participate in focus groups. The women were asked what supported or were barriers to great physical activity. Several facilitators of physical activity were noted including: having a daily physical activity routine, practical and convenient opportunities for activities, personal safety, child care, weight loss, stress reduction, knowledge and commitment, enjoyment, pets, family and peer support, home and work facilities, and daylight and weather conditions. Barriers to physical activity were lack of child care, no person to exercise with, competing responsibilities, lack of space in the home, inability to use exercise facilities at work, lack of motivation, fatigue, and unsafe neighborhood.

A recent study by Seaman (2012) found that two out of five African-American women avoid exercising because they're worried about their hair. This study surveyed approximately 100 African-American women who visited a dermatology clinic at Wake Forest University in October 2007. Seaman found that 50 percent of their subjects reported exercising less than 75 minutes a week, and more than 25 percent said they did not exercise at all. The subjects were asked if hair played a role in their workout habits, about a third said they exercised less than they would like to because of their hair, and half of the women said they had thought about changing their hair to make exercise more convenient (Seaman, 2012). These results were further supported in the HIA survey findings when women were asked about possibly adding a hair salon at recreation centers, the majority responded this would help to support more physical activity. Focus groups or interviews are needed to better understand and address how this issue could be improved at recreation centers.



Digital Image. 9 Sept. 2015. 123rf.com

### **Cultural Influences**

A healthy appearance can mean different things for individuals from differing cultural groups. (Barnes, 2012). Barnes study discovered that some of the women intentionally gained back weight because they felt they looked too skinny.

83% of African Americans self-report belonging to a particular religious group, with 53% attending church weekly. Research has shown that because religion is so infiltrated throughout this population, the use of faith to promote long-term health changes produces significant outcomes. Incorporating walks of faith or prayer, scripture and praising God with singing and dancing is another effective tool to encourage healthy physical activity (Seale et al., 2013).



## 4.0 Survey Methodology

In order to gain more specific data from community leaders and members, EnviroHealth Consulting conducted a series of interviews of those who live and/or exercise in the NE Park Hill, Montbello, Greater Park Hill and Stapleton neighborhoods. The goal of the interviews was to better understand the perceptions, preferences and barriers to using Denver Parks and Recreation (DPR) recreation centers, and to understand why people use or do not use the centers. A second survey was conducted of staff at six out of seven recreation centers in the area, and a third survey was of private fitness instructors. Staff at Denver Health and the Stapleton Foundation reviewed the survey. All survey respondents were informed of the purpose of the survey and the confidentiality terms, and were given the opportunity to ask questions and the option not to participate or to stop their participation at any point. No incentives were provided for participation in any of the surveys.

### Community Survey

EnviroHealth Consulting developed a questionnaire that included questions about Denver recreation centers such as the level and types of exercise offered, barriers to participating at the Centers, and preferences and perceptions about services and programming at the recreation centers. A few of the questions are:

Do you currently exercise at one of the Denver Recreation Centers? If yes, why? At which center(s); If no, why?

What do you do at the recreation center?

What would you like to see added at the recreation centers, if anything?

Do you exercise at another gym other than the Denver recreation centers? Why?

If the recreation center offered health services (e.g. blood pressure, weight management, diabetes care) would you use them?

The community interviews were conducted in August and September of 2015. A convenience sample of 20 English-speaking adults participated in the survey. Interviewees were known community leaders who provided names of other community members to interview (snowball effect) and a few who were block captains for the Stapleton Foundation who lived in NE Park Hill or Montbello neighborhoods. The majority of the surveys were completed over the phone; the remaining were completed in person and a very few via email. To pilot-test the community questionnaire, EnviroHealth Consulting conducted two interviews in early August. EnviroHealth made changes to the questionnaire to improve instruction and readability and to ensure that the wording was readable near an eighth-grade level. The survey was incorporated into a proprietary survey system, Survey Gizmo, to allow for consolidation of data and easier analysis.

## 4.1 Community Survey Results

### Age, Sex, households, Race, and Education Level

About 55 percent of the twenty adult participants were 65 and older and almost 45 percent were between the ages of 30-64. As such, respondents were older on average which does somewhat reflect the above average senior age population of NE Park hill and Greater Park Hill neighborhoods. The majority were females (84.2 percent) who participated compared to males (15.8 percent). Households were primarily adults living alone (50 percent). Couples with no children comprised 15 percent and couples with children comprised 15 percent. The remaining participants reported some other living arrangement. Overall, survey respondents were primarily Black/African American (70 percent) and next being White/Non-Hispanic (20 percent), multiracial (5 percent) and the remaining preferred not to answer (5 percent) (See table 11). Respondents were generally well educated, with over 75 percent having an associate degree or higher and the majority having some college (35 percent).

### Income

Although a quarter of respondents stated that they preferred not to answer the question about their income, the survey noted a large range of incomes. About 40 percent of respondents said their income level was between \$16,000 and \$35,000 annually, although a quarter stated they preferred not to answer. Twenty percent stated they make between \$35,001 and \$75,000, 10 percent said they made less than the poverty level for Colorado (\$16,000), and only five percent said they made between \$75,000 to over \$100,000 annually.

### Mobility to and use of Recreation Centers

For those respondents who did exercise at a recreation center, about 85 percent stated they drive to the recreation centers with only 15 percent reporting walking to the center. Slightly over sixty-eight percent (68.8 percent) of the respondents exercise at MLK with 62.5 percent at Hiawatha Davis, 37.5 percent at Central Park, 25 percent at Montbello, 6.7 at Stapleton. A few wrote that they go to Glenarm and/or Green Valley.

**Table 11: Demographic Characteristics. Total (n=20)**

<b>Race</b>	
Black or African-American	70%
White, non-Hispanic	20%
American Indian/Alaska Native	0%
Asian	0%
Native Hawaiian/Other Pacific Islander	0%
Multiracial	5%
Prefer not to answer	5%
Other	0%
<b>Gender</b>	
Female	84.2%
Male	15.8%

<b>Rent or Own</b>	
Own	70%
Rent	30%
Other	0%
<b>Self-Report Health Status Last 12 Months</b>	
Excellent	20%
Very Good	30%
Good	35%
Fair	15%
Poor	0%
<b>Self-Report Activity Level</b>	
Very active	50%
Active	15%
Somewhat active	35%
Not active	0%

### Health Status

Eighty-five percent of respondents rated their health within the last 12 months as good, very good, or excellent with only 15 percent rating their health as only fair. Similarly with these high health ratings, fifty percent of respondents rated themselves as “very active”, fifteen percent selected “active”, 35 percent stating “somewhat active” and no one chose “not active”.

### Exercise

Respondents stated that, on average, they exercise in some form or another nearly four days a week and generally all year long with the majority stating they tend to exercise indoors due to poor weather. A few stated they do not go out to exercise if it is cold or snowy outside. One respondent stated that on those snowy days she watches an exercise television channel “walk a mile in the house”. The majority exercise at recreation centers Monday-Friday with Monday-Wednesday getting the highest participation rate for each day (75 percent) and the least being Sunday at 25 percent. Mornings (9-11am) were reported as being the favorite time to exercise (60 percent) evenings from 8-11pm (10 percent) were the least favorite.

About fifty-five percent of respondents currently exercise at one of the Denver recreation centers with a third (30 percent) having had a membership in the past but do not have one now; and 15 percent did not have a membership.

### Reasons for and against exercising at recreation centers

When asked why they exercise at one of the Denver recreation centers there were many responses related to,

- Convenience
- Cleanliness
- Improving health
- Enjoying the classes
- Reasonable pricing

The following are comments shared by the respondents in support of the recreation center.

“Centrally located to my residence.”

“I like the MLK heated pool.”

“I had back problems so go to MLK to improve my health and specifically my back.”

“MLK has a hot therapy pool, dry sauna, pool & racquetball court.”

“The Central Park Rec Center is clean, comfortable, and reasonably priced.”

“Classes are good.”

“it’s convenient.”

“Necessary for seniors and others for good health.”

“It’s a 5 min walk from my house, very convenient.”

“It’s a nice center and the membership is a reasonable price.”

“MLK doesn’t have fitness classes so I have to go to another rec center but it’s less convenient so sometimes I don’t go much.”



There are fewer reasons offered why people do not exercise at one of the Denver recreation centers such as being too expensive, memberships are confusing, not enough fitness classes, and preferring to exercise at home. Comments include, “I choose the exercise at home, or walk outside because of transportation and costs”. “Not sure what the pricing is, it was confusing to me.” “I belong to [a private] gym”. “Too expensive and not enough high intensity type fitness classes.”

### **Number and types of classes and other programming**

The majority of respondents reported attending the fitness classes (66.7 percent), or using the therapy pool (60 percent) (although this is not a surprise since this type of pool is only at MLK and that center had the most respondents). Other facilities that got high use included the regular pool (46.7 percent), and the weight room (33 percent). Slightly over 13 percent like yoga and about the same use the track; a smaller number of respondents play racquetball and adaptive exercise. Water aerobics and Tai Chi and Silver Sneakers were very popular with the older adults. Some comments received from the survey included: “Used to have jewelry making and pottery classes at MLK” and “once you get people in the door for an activity then hopefully they will exercise.” “Hiawatha used to have computers for members to use.” “Many seniors don't have computers at home.” “Need classes on computers.” “Seniors used to be able to sit and play cards and checkers for socializing.” Five people mentioned that they wish that the recreation center could be used more for community events, “for many years we used to hold a very large pot luck community dinner but we are not allowed to anymore.”

## **What should be added at the recreation center**

There were many comments about specific amenities that respondents wanted at their particular gym such as indoor track, saunas, cooking classes, larger stretching and strengthen areas, tennis courts and racquetball courts.

Having more exercise classes such as more cardio type classes, high intensity fitness classes that incorporate weights, and dance classes was mentioned repeatedly. Examples of these comments included: “Very few fitness classes at MLK, need more classes.” “Would love *Be well* classes at Montbello. I would get others to go to both the fitness classes and cooking matters class.”

A few statements were made by different respondents about the need to “do a better job advertising classes and events” at the recreation centers. Also a few people reported that there are few opportunities and/or it costs extra to get trained on the exercise equipment: “[if I had] someone to explain or show me the exercise equipment, then I might use it.

Being connected with others is very important for mental health. Many survey respondents really enjoy the organized classes in order to gain support from others and to socialize: “I like the dance classes ....and being able to visit with friends.” “It’s a social activity going to the recreation center.”

Having a workout buddy is also important. Research shows that people who exercise with a buddy maintain exercise longer and enjoy it more than if they exercise alone. About 59 percent of survey respondents selected having a workout buddy as very important or somewhat important to increasing exercise. One survey response indicated that “help from the recreation center to set up a work out partner would be great.”

## **Services and Amenities**

The survey also asked about health services and amenities that could be provided at the recreation centers. Seventy percent stated that they would use health services if they were offered; the other 30 percent said that they didn’t know. Services that respondents were most interested in include blood pressure checks, weight monitoring, diabetes care, health assessments and cooking classes.

Respondents also ranked the level of importance of amenities at recreation centers. Lockers, showers, free parking and cleanliness of the facility were rated the highest as “very important.” Easy check-in (swipe card) was also highly rated. The least important amenities noted by participants were free Wi-Fi (although considering the higher number of older respondents, it is not surprising that this one was the least important)) and having towels. There was only one additional comment, “the snacks at MLK have a lot of sugar-not healthy in the machines.”

Interestingly, when asked if they have a gym membership or drop in to exercise other than at a Denver recreation center, such as 24 hour fitness, yoga studio or Anschutz health, fifty percent said “yes” and fifty

percent said “no.” Respondents specifically mentioned places such as, “Denver Public School”, “Curves”, “sometimes will drop in to a class or to use weights at a 24 fitness.”

When asked if the recreation membership was expensive, close to 60 percent of respondents stated yes and 42.1 percent said no. Although, it should be noted that a majority of respondents received a discount from health insurance (Kaiser, United Healthcare) or a senior discount (Silver Sneakers).

For those who do not have a membership at a recreation center, the main issues were that the recreation centers do not offer the exercise classes or have the equipment that they need (27.3 percent), money (27.3 percent), don’t know how to use the equipment (18.2 percent), health concerns (18.2 percent), transportation issue (18.2 percent), too crowded (18.2 percent) and two people wrote in that they need a partner/buddy to exercise with. A number of people mentioned that they go to churches for exercise classes such as "dancing for Your Heart" which are free or some go to seniors centers such as Zion. One stated that she has transportation issues because she doesn’t have a car so she “walks outside or dance[s] in my house.” Another stated that, “there are many more exercise classes available each day at my [private] gym”

## 4.2 Recreation Center Staff Survey Results

### **Participants in the survey**

Directors and staff from six out of seven of the recreation centers in the area participated in the survey. All participants were aware of the Stapleton Foundation and the *be well* initiative. Many respondents had attended meetings with the Stapleton Foundation and a few of the recreation centers have *be well* programming.

### **Staffing and programming**

Staffing at the recreation centers ranges from 5 to 15 with an average of 10 staff per center.

MLK: 15

Hiwatha: 14

Montclair: 6

Central Park: 8

Green Valley Ranch (GVR): 5

Glenarm: 12

Most of the recreation centers use volunteers and/or interns; only one site did not have either. Each center has an average of three volunteers. The volunteers primarily help with the sports programs serving in assistant coaching roles. In addition, the centers also have teenagers who work at the centers in the summer through the Summer Youth Employment Program.

A majority of the recreation centers offer programming and fitness classes although currently there are no fitness classes available at MLK. All of the centers have aquatic programs which can include aqua aerobics,

deepwater, arthritis, aqua yoga, aqua zumba, water walking, lap swim, and adult swim. Most of the centers offer fitness classes including yoga, aerobics, zumba, body sculpt, pilates, eccentrics, bungee fitness, tai chi, step cardio, and core training.

All classes are coordinated by the Core Fitness Team at the central office. The exceptions are special classes that are not offered by Core Fitness such as karate, boxing and dance. The recreation center staff does not have the authority to create and develop a class and do not hire the instructors. This is all done through the centralized Core Fitness Program office that serves the 27 Denver recreation centers. DPR maintains all information and data for the recreation centers at the central office and can generate relevant reports for each of the centers.

Four out of six of the centers have the Silver Sneaker program for active seniors. Several of the centers have additional programming offered by outside groups that include karate, Cancer Fit and Be well. If a fitness class is not well attended then it can be dropped. Two sites had classes cancelled because there were not enough participants. In one case it was because a popular instructor left.

The DPR fitness classes are taught by instructors who are City employees. These employees are screened and trained by the City and have all the required certifications. The core fitness programs are developed, funded and staffed through the Core Fitness Program Office. The instructors teach classes at multiple recreation centers across the City. The recreation center supervisors and staff like the current centralized Core Fitness program model. They feel that it “provides consistency across classes and recreation centers”. They also state that “instructors are screened, trained, certified and consistent” and with the “core fitness team there is coverage so if an instructor is sick, on vacation, or maternity leave, then other instructors can cover and the class does not have to be cancelled.” The recreation center supervisors and staff “do not have to provide the human resource function and interview, screen, and train the instructors.” As a result, “they are able to offer a large variety of classes.” In addition, the Core Fitness Program model allows them to provide “more classes with less cancellations.”

### **Participation and membership**

Participation rates at the recreation centers have increased over the last year and, indeed, over the past five years. This increase has to do with “changing demographics and population increase” and also with “a greater awareness of fitness and wellness.” The majority of the centers have also experienced an increase in membership. The membership increase has been in the 10-15% range with one center experiencing a 20% increase.

The cost per month for fitness classes and other programming comes from a central budget with Core Fitness Programs. Community members can purchase an annual or monthly membership and the price varies from a regional, local or neighborhood center. Membership includes all classes for the core programs. People can buy a day pass for \$5.50-\$6.00 and participate in classes. Annual memberships for members range from \$223-\$249 per year and monthly rates can run approximately \$21. Prices for seniors and children are lower. Most people choose to purchase a membership but the centers do get a few walks in’s each day. In terms of

questions and information regarding insurance reimbursement, center staff indicated that they do not proactively discuss with perspective members about checking with their insurance provider or employer to see if they offer reimbursement. They indicated that most members whose insurance provider or employer would reimburse them let staff know and they ask for a print out of their activity to submit. United Health Care is one such provider who has a program with Denver that members can utilize for fitness reimbursement. Center supervisors and staff do not actively let seniors know about Silver Sneakers.

### **Those with Memberships**

In terms of gender participation at the centers, more women use the fitness classes and cardio equipment than men. More men use the weight room and gym for basketball than women. There are more women during the day in the cardio room and some classes and more men in the evening in the weight room and basketball gym. One center indicated that their mix was about 50/50 men and women. One site indicated that overall, “more women used the center than men”. The majority age range of members and participants at the centers is age 19-54 category (Hiawatha Davis, Central Park, GVR, Montclair and Glenarm) with the exception of Martin Luther King (MLK) where 80% of members are 55+. The age range with the least participation was 12 and under.

The average number of days that recreation center members use the facilities is four days per week which matched responses in the community survey. The most popular forms of exercise at the centers are: Cardio, pool, weight room, classes (mostly cardio, pool, and weight room). The primary make up of members at the recreation centers varies across the study area and breaks down to:

*MLK:* African American 60-70%.

*Hiawatha-Davis:* Changing demographics from traditionally African American to more White. African American 55%, White 35%, Hispanic or others 15%.

*Montclair:* Muslim 20%, African American 35%, White 30%, 5-10% Hispanic /other.

*Central Park:* White 75%, African American 15-20% Hispanic or other 5-10%.

*Green Valley Ranch:* African American 80-85%, White 10%-15%, other 5%

*Glenarm:* Used to be more African American. White 60%, African American 30%, Hispanic 10%.

### **Exercise**

The survey reveals that many of the recreation center staff are generally happy with the fitness classes and other programming they offer. A few centers were not as pleased with the current fitness class/programming. Most said so because they only offer a minimal number of classes and they would be interested in offering more group fitness classes. Interviews with center staff reveals that many of the centers are experiencing maximum capacity in most classes. Most centers are maxed out in terms of space and capacity so it would be hard to add classes.

### **Children**

All of the recreation centers are able to accept PLAY financial assistance and report that members do apply for PLAY. While they do not have the specific numbers on PLAY they report that most applicants who apply are



accepted. Of those who do not get accepted, it is because they did not complete all of the paperwork or have all the required documentation.

On average, the number of youth using My Denver Card varies depending on the center. The interviewees did not have all of the information but the numbers ranged from 120 per month on the low end, to another at 1,600 per months in the mid-level range to several centers that had summer month averages in the 4,000 to 5,000 range for June and July, dropping to 3,300 in August after school started.

### **Barriers**

The barriers that potentially exist for community members to join a recreation center are generally centered on: awareness, transportation, accessibility, mobility, lack of marketing, and busy schedules. Recreation center staff also indicated that for some people working out at a gym is “not part of a person’s culture or lifestyle” and that for some people it involves “a lack of knowledge about relating health to your body.” In one case a staff member indicated that safety perceptions about the neighborhood may have been a hindrance to participation at their center and some people did not seem to know where their nearest center is located. The interviewee indicated that this perception is changing. According to recreation center staff, the biggest barrier to offering more classes and programming is space. The majority of centers are at capacity with some reporting that they are “close to being maxed out”.

In terms of allowing outside organization to offer fitness classes and other programming, the biggest challenge is the limited amount of space and the capacity to permit more classes. The other issue that several interviewees mentioned was that outside groups cannot offer classes and programming that compete directly with the fitness classes offered by the recreation centers.

### **Partnership Agreement**

The types of classes and programming that could be offered if a program agreement was in place depends in large part on space, capacity and the location of recreation centers. Currently, the centers have partnership agreements with Denver Public Schools, *Be well*, Silver Sneakers, Cancer Fit, Boy Scouts (1 site). In addition, three sites have karate classes facilitated by an outside provider under a rental agreement; a couple of sites have dance, and one site has boxing and AARP drive classes.

Recreation Center staff mentioned that it could be good to offer social, cultural programming and activities like arts programs, book clubs, dance, health and wellness classes, nutrition/diet and cooking classes. But capacity is still an issue with several centers having a DPS program for the local schools to use the centers gym for volleyball, basketball and physical education classes.

In order for an outside organization to offer fitness classes and other programming at the recreation centers they would need to have a partner or rental agreement with the City. DPR is currently developing a new partnership agreement. They are reviewing all formal and informal rental agreements and partnership agreements for each of the 27 recreation centers. They hired Christina Adams to review all partnership and

rental agreements and they are developing new standards and guidelines for processes and partnerships and rental agreements. Interviews with center staff indicated that outside groups would have to meet all standards for certification, staffing, insurance, equipment and show the need/demand for the program. Also, they could not compete directly with classes currently offered by the Core Fitness Team.

Interviews with center staff indicate that 'ideal partnerships' would be in the area of Health and Wellness classes that focus on diet, nutrition, healthy eating, aging issues, financial planning, *be well*, and Cancer Fit.

Each of the recreation centers have partnered at one time or another with outside organizations on a range of classes and programming. At one time, before the centralized Core Fitness Program model was established, the partnering involved informal arrangements to formal programming and was different at every recreation center.

Interviews with staff indicated that in general the rating for outside programming is good. They indicated that the *be well*, Cancer Fit and Silver Sneakers programs have been well received. In some cases the rating is lower because the class sometimes is not as robust or consistent. Cancer Fit has a 5 star rating out of 5. DPS has a 4 star rating and is pretty straight forward with the school P.E. classes using the gym. Some of the challenges that face partnership agreements involve consistency, clarity and uniformity. According to staff, the biggest challenge with partnership agreements would be space/capacity, scheduling, coordination, and time to formalize an agreement.

The pros of a partnership agreement with outside organizations are "outside resources providing something of benefit to members not currently offered by the City." "They would allow more access to fitness classes not offered (subject to space availability), create variety, and lessen the financial impact to the recreation center".

The cons are space availability, capacity, and outside partners that would provide classes or programming that would compete against the City's own classes. The cons are "coordinating with outside groups who are not employees and potentially having issues with communication, consistency, and level of quality."

In interviews with recreation center staff they indicated that the most advantageous partnerships would be with non-profits who are offering classes and programming, that do not compete with programs offered by the centers, at no extra charge to members.

## **Services**

In terms of offering additional services at the recreation centers, recreation center staff indicated that health screening, know your numbers, foot clinic, diet/nutrition, AARP driving classes, and cooking classes are additional services they thought would be beneficial. One center did not think it could provide those types of classes because they are not part of their core programming.

Other services that recreation centers could offer that were mentioned by staff include a shuttle bus, and child care. Currently, only one regional center has child care. One center indicated that they would like to see another bus line added because the stop at Quebec is too far for those using public transportation. A regional center staff person thought a farmers market could be interesting and generate community support.

## 4.3 Fitness and Health Professionals Survey Results

### Questionnaire

Four surveys of fitness professionals were conducted in September 2015. They are summarized below. Information from discussions with fitness instructors at a Stapleton Foundation stakeholder meeting in June 2015 is also included. A few of the questions that were asked in the questionnaire include, what type of classes or services can your business or organization offer to recreation centers? What are the biggest barriers or issues to providing classes or health services at a recreation center? What type of classes/programming could you offer if a partnership agreement was in place? Have you participated in a formal partnership agreement(s) at any recreation centers?

### Partnership Agreements

Fitness professionals are very interested in working with DPR to provide programming and developing a partnership agreement that is mutually beneficial for everyone. They want to be able to provide services at the Denver Recreation Centers, but the process needs to be consistent, convenient and easy.

All of the fitness professionals that were surveyed have experience with partnership agreements. They can bring a lot of experience not only by teaching classes, but also because they already have a base of students that follow them, and have the necessary certifications and insurance. These fitness professionals are already engaged with the community and can offer culturally relevant, gender and age specific classes in both Spanish and English. Some of the instructors have experience teaching at local schools and churches, and have also developed fitness programs at a national level for organization such as the Center for African American Health.

All have worked with DPR in the past. One respondent commented that in the past they could only use the DPR facilities in non-operational hours. One respondent said DPR policies make it difficult to work together. Respondents said that you have to become an employee of DPR to teach classes and this is a barrier because the recreation center does not pay what fitness instructors are worth. Currently, the pay scale for instructors is \$14-18/hour, much less than the going market rate for fitness instructors (\$25-50/hour). Therefore, there is little incentive for instructors to teach at Denver recreation centers.

A few respondents noted that when people come to their classes that are taught at the recreation center they have to become a member in order to participate. This deters followers of these fitness professionals from coming to classes at the centers and becomes a significant deterrent from teaching at a recreation center in the first place. Although one stated getting new memberships is how the model is going to work to be a benefit for DPR. DPR gets 15 new memberships by having a private fitness instructor teaching a class and bringing their followers. And the instructors charge a \$2-3 fee a class and with a large class the instructors can be paid appropriately. Other barriers include scheduling issues to find a workable time slot, coordination with recreation staff and the time commitment to formalize the partnerships.

One fitness trainer mentioned that it would be good to provide more of a holistic approach to fitness at the recreation center that also addresses healthy eating and lifestyle as well. Another felt that under the current structure DPR changed the focus from a neighborhood center serving the community to a center that increases the revenue stream. Also someone stated that classes that are newly scheduled often take a while to become well attended but the current approach does not give a class the time it needs to develop and gets cancelled. An overall negative impact of the new tiered system (regional/local/neighborhood) is that the smaller centers are often located in lower income communities and offer virtually nothing in physical activity programming. Also, the fitness professionals want to collaboratively work together with DPR and not feel like they work for them. One person suggested that partnership can be “a mutually beneficial relationship to both organizations.”

## 5.0 Partnership Agreements Defined

GreenPlay LLC defines partnership as a cooperative venture between two or more parties with a common goal, who combine complementary resources and establish a mutual direction or complete a mutually beneficial project (Badalamenti et al., 2013). Partners can be non-profit organizations, community-based groups, other governments, individuals, or private businesses. Economic circumstances, particularly important during periods of economic recovery, make partnerships an important tool for local governments to increase the quality or quantity of programs or services provided to the community. The International City/County Management Association (ICMA) says the use of third parties to provide certain activities is likely to become increasingly more prevalent in the future.

Partnerships can be categorized in a variety of ways depending on the overall mission, community needs, and operational goals. There are a number of ways to write partnership agreements including binding and non-binding agreements as described below. See Appendix 3 for a list and definitions of partnership types.

**Legally Binding Contracts**—Binding contracts, such as cooperative agreements, are enforceable, binding documents, which provide mutual assurance that both parties uphold their respective commitments. For example, a partnership with a third party that will provide a significant capital investment to improve a soccer field in return for priority usage for a period of time may be formalized with a contract because the terms of this partnership involve an exchange of money.

**Non-Binding Contracts**—A non-binding agreement, such as an MOU as used by DPR, provides a basis for partnership operations and a method to document general expectations and partnership parameters. A non-binding contract may be sufficient if a partner provides a service that does not require an exchange of money but does require a need for space at a DPR facility for neighborhood meetings.

**Other Collaborative Mechanisms**—Sponsorships and co-sponsorships are utilized when another organization desires to produce or host an event such as a concert or festival in a DPR park space. As part of this arrangement, DPR agrees to provide support for the event due to a connection between DPR goals and the organizer's goals. DPR's support can be provided through assisting the third party with program delivery, fee reduction, an in-kind contribution, or promotional assistance for the event.

Source: Department of Parks and Recreation Administration Performance Audit.

## 5.1 Relationship Between Partnership Agreements and Health

Safety in the built environment, both indoors and outdoors, is a large factor in deciding whether and where people are physically active. Because we are more likely to be physically active when we are outside, outdoor safety is important. However, a lack of safety outdoors can be a significant challenge in lower-income neighborhoods. In addition, substantial research supports the belief that young people who do not have safe places for participating in positive activities during after-school hours are more likely to engage in potentially dangerous activities such as drug use, risky sexual behaviors, and gang involvement, thus perpetuating the cycle of crime. One study in Boston found that playgrounds in neighborhoods with higher poverty rates and higher percentages of African-Americans were less safe than those in other neighborhoods, not only with regard to having well-designed and maintained equipment but also with regard to security from crime (Cradock, 2005).

Safety concerns are reflected in obesity statistics: one recent study found that children whose parents perceived their neighborhoods as especially unsafe were four times as likely to be obese than children living in neighborhoods perceived as safe (Lumeng, 2006).

Table 11 suggests that the study area is compatible with these findings. Crime, poverty and obesity rates are highest in the four neighborhoods that surround Stapleton, while Stapleton has the lowest crime, poverty and obesity rates.

Access to safe recreational facilities is one critical element to increasing physical activity and therefore public health. Cost, communication about resources, availability of fitness classes, and accessibility are other factors that community members stated as barriers in the HIA survey to using recreation centers. As described below, a partnership agreement can be used to maximize community assets by partnering with others to offer low-cost fitness classes, social activities and other programs such as healthy cooking classes.

**Table 12. 2015 Neighborhood Crime Data**

Neighborhood	Crime Density per square mile	Offenses Jan-Aug 2015	Living below Poverty	Adults age 21+ Obesity
NE Park Hill	193.04	643	29.9%	40%-59%
North Park Hill	213.52	319	11.8%	20%-39%
Stapleton	156.41	1405	3.95%	<20%
Montclair	294.47	298	27.3%	20%-29%
Montbello	258	1306	22.63%	40%-59%
Wellshire (lowest for comparison)	80.7	75		

Source: Denver Police Department. Accessed 8/21/15

Source: Colorado BMI Registry 2009-2013. These data were supplied by the Colorado BMI Surveillance Project, which specifically disclaims responsibility for any analyses, interpretations, or conclusions drawn from these data.

## 5.2 Denver Parks & Recreation Current Partnership Practices

In May 2014, the Auditor's Office, Audit Services Division issued a report on the Department of Parks and Recreation (DPR) partnership practices. The audit found that DPR's partnerships assist the Department in accomplishing its mission. However, DPR does not have an adopted partnership policy in place. A policy should define the concepts of partner and partnerships, establish when a partnership should be used, outline the appropriate use of a partnership, and how a partnership should be formalized. In addition, the audit found that DPR's current partnership approach does not include a dedicated individual or group to administer and oversee partnerships (Gallagher et al., 2014).

In June 2015, in keeping with professional auditing standards and the Audit Services Division's policy, they followed up with DPR to determine if the recommendations made in the 2014 report were implemented. They found three of the six recommendations made were adequately implemented (Gallagher et al., 2015). More recently another recommendation was implemented by hiring an individual to administer and oversee partnerships including the development of a new partnership agreement policy.

In July 2015, the Stapleton Foundation contracted ChangeLab Solutions, a nonprofit organization that provides legal information on matters relating to public health, to draft a framework for DPR's partnership policy in order to mitigate any remaining issues in the DPR partnership practices. They examined the Auditor's report and identified language from six other cities to draft a framework that is shared below. Those highlighted in the framework were Austin, Seattle, San Clemente, Los Angeles and Portland, and included sample language from their partnership policies.

At a Stapleton Foundation Recreation Stakeholder meeting in June 2015, Denver fitness instructors, staff from Denver recreation centers, health professionals and others deliberated on the language of partnership agreements from the six cities highlighted above that seemed the most appropriate for Denver in terms of culture and demographics. Both Portland and Austin's seemed to be initially more appealing because of the simplicity and rose to the top by those in attendance but more meetings and/or focus groups are needed to identify the most relevant and useful language for the partnership policy. This chapter is intended to be a consolidation of information to be considered for use in the Denver Partnership policy. Sample language from the executive summary of the Draft Framework by ChangeLab Solutions is below.

## 5.3 Sample Language of Selected Partnership Agreements

1) **Austin:** The purpose of this policy is to actively recruit and provide a process for prospective partners to form public-private agreements in order to carry out projects and activities that are in alignment with Department plans and strategic priorities.

**Los Angeles:** The Department's mission and vision is to provide services and opportunities for the benefit and betterment of the residents of the City of Los Angeles. In certain instances, the Department is unable to

provide such services and opportunities due to a lack of available staff, facilities, or funds. It is during these situations that it would be to the advantage of the community that an outside individual, entity, or organization be brought in to provide these desired services. Generally, these services and opportunities are provided on land owned by or under the control of the Department. Therefore, it is imperative that the partnership helps to satisfy or achieve the Department’s mission and vision.

2) **Seattle:** “Partner” is defined as an individual, organization, or group that, through a written agreement, provides a benefit to Seattle Parks and Recreation or Seattle’s citizens and in exchange gets some benefit from Seattle Parks and Recreation. These may include for profit or non-profit agencies and individuals noted below:

- Individuals who can provide services, money, or time.
- Businesses or corporations who provide money, time, people, and other goods or services.
- Social service or community partners, people, or services.
- Non-profit partnership similar to social service or community partners.
- Volunteer/neighborhoods partnerships—park sponsored volunteer opportunities and “Friends of” groups who provide volunteer time, money, and other resources.

**San Clemente:** The Applicant must meet the following minimum requirements and criteria for any partnership:

- Be currently registered and active as a not-for-profit community organization under Section 501(c)(3) or (c)(4) of the Internal Revenue Code.
- Not be the subject of any pending investigation by any government or administrative agency.
- Carry appropriate commercial and liability insurance.
- Have an open enrollment policy regardless of skill level.
- Provide scholarships for those in financial need.
- Have a “no discrimination” and “no alcohol” policy.

**Austin:** Partnerships include arrangements whereby a private partner operates and maintains an existing park or facility, builds and operates a park or facility, or builds and operates a park or facility that has a complete or partial Department purpose.

**Seattle:** Partnership is a working relationship with another organization that has compatible values and goals and which results in mutual benefits. The partnership may be formed around a single activity or event or it may be long-term and multi-faceted.

**Los Angeles:** The partnership must show a clear community benefit or address an identified Department need or priority. The benefit must be non-exclusive and be open to most of, if not the entire, community.

3) **Seattle:** Seattle Parks and Recreation recognizes that developing mutually beneficial partnerships with individuals, nonprofit organizations, private entities, public agencies, and community groups is a viable and appropriate way to increase the variety and quality of parks and recreation programs available to the citizens of Seattle, as well make physical improvements to parks and facilities. Seattle Parks and Recreation will consider partnership ideas and proposals as they are brought forward and will actively pursue partnerships as



deemed appropriate. It is important to evaluate these partnerships on an ongoing basis to assess effectiveness in supporting the department's core mission, achievement of desired outcomes, and provision of public benefits. All Parks staff will take the initiative in seeking new potential partnerships.

**San Clemente:** It is the desire of the City of San Clemente to encourage and promote various water sports on a year-round basis within the city limits, and to make the best and most efficient use of the City's amenities, pools, and facilities. Partnering with select outside organizations/associations for aquatics programs allows service to a larger portion of the community than only City provided programs. The City wishes to promote such partnerships by providing reduced rental rates, pool allocation priorities, and limited support services, which may include site preparation and maintenance, periodic pool improvements as needed, and limited administrative/clerical support.

4) This section is specifically tailored to the needs of each community or agency.

5) **Portland:** This Request for Expressions of Interest requires individuals and organizations to submit a brief expression of interest to propose revenue generating activities or investments that have an appropriate convergence with the Department's programs and objectives. Please use the online form to submit an expression of interest.

Expressions of Interest will be received and reviewed on a rolling basis throughout the year. Following the evaluation of the expression of interest, PPR has three options: approval of the proposal and enter negotiations; request additional information from the proposers; or reject the proposal.

**Austin:** In most cases a full proposal will be submitted after the expression of interest. While the Department recommends that an expression of interest be the starting point a full proposal can be submitted as a starting point.

6) **Austin:** The review team will conduct proposal review according to established criteria. Key criteria include:

- i. Does the proposed project clearly designate the roles and responsibilities/risks and rewards of each partner?
- ii. What are the anticipated short and long-term costs to the Department in resources, including workload and CIP or operating and maintenance budget impacts?
- iii. Does the proposed project include a level of quality consistent with standards established by the Department for projects of a similar nature?
- iv. Does the proposed project address the public's interests with regard to access, affordability, customer service, hours of operation, variety of programming, and diversity of staff?
- v. What is the level of support and/or likelihood of support for the partnership from the community and proposed users of the service or project proposed?
- vi. Are the level of entitlements and rights of the private partner supported by economic value consistent with such partner's contribution to the partnership in resources and risks?

- vii. Can the output of the service be measured and valued in a manner that allows the Department to easily determine compliance with the purpose of the partnership?
- viii. Does the Department have the availability to effectively oversee the partnership, including design and construction of the project, and on-going activities of the partnership?

7) This section is specifically tailored to the needs of each community or agency.

8) Green-Play: The City is committed to upholding its responsibilities to Partners from the initiation through the continuation of a partnership. Evaluation will be an integral component of all Partnerships. The agreements should outline who is responsible for evaluation and what types of measures will be used, and should detail what will occur should the evaluations reveal Partners are not meeting their Partnership obligations.

## 5.4 Limitations and Barriers to Use

Several barriers exist to partnership agreements. The most common are liability, maintenance, vandalism, crime and other safety issues, scheduling and lack of staffing, and costs and operations. In addition, Change Lab adds ongoing coordination, communication, and cooperation among partners who have little or no history of working together. Partnerships are not simple to implement, and they must be thoughtfully crafted. It requires a lot of thought, work, and cooperation, and it can take some effort to reach agreement on the range of issues involved. Successful partnerships will take time to define the resources being governed and clearly articulate each partner’s roles and responsibilities.

Joint use agreements are not a simple undertaking: the scope and terms must be planned carefully, and garnering support from decision-makers at various levels is key. (ChangeLab)

Partnership agreements can address the perceived barriers to sharing recreational facilities and programs. Local policy-makers and decision-makers should consider the following issues to address barriers to shared use that are adapted from ChangeLab Solutions:

1. Liability: Decision-makers should become familiar with liability protections that apply specifically to partnering with organizations that provide classes and programs at their facilities. Liability laws may protect recreation centers by some form of governmental immunity. Partnership agreements can help to reduce liability risk and associated costs through sharing responsibility for potential liability and liability insurance costs. Insurance, indemnity agreements, and risk management practices are all tools that partners can use to allocate and manage these risks and costs. Schools often use partnership agreements and can provide examples for recreation centers. One example is the report, *Liability Risks for After-Hours Use of Public School Property to Reduce Obesity: Colorado*.

2. Maintenance: Decision-makers can address maintenance costs and responsibilities through partnership agreements as well. They can help partner(s) establish mutually agreed responsibility for facility maintenance and repair. Responsibilities include determining 1) the amount of maintenance that will be required if facilities are shared outside of regular hours; 2) if staff from the partnering organization will be responsible for maintenance; and 3) how maintenance costs will be shared. The sharing of maintenance costs may be partly based on the amount of time that a facility is used by each party. Written procedures can be employed to help address maintenance concerns and to discourage the misuse of facilities.

3. Vandalism, Crime and Other Safety Issues: Decision-makers should consider traditional proactive safety and crime prevention measures such as security cameras, warnings, emergency telephones and security personnel, as necessary, to deter criminal behavior. Furthermore, partnerships with community organizations may instill a sense of ownership among members of the community resulting in a greater responsibility for the care and protection of a shared resource. Joint use agreements can be used to address, where necessary, maintenance and repair issues for potential vandalism or other misuse.

4. Scheduling: Partnerships should consider priority of use, hours of availability and conditions of use. Agreements establish the priorities for each party in the use of shared facilities. Decision-makers may wish to develop a master plan that provides direction for priority of use. In addition, hours of availability and conditions of use should be clearly stated.

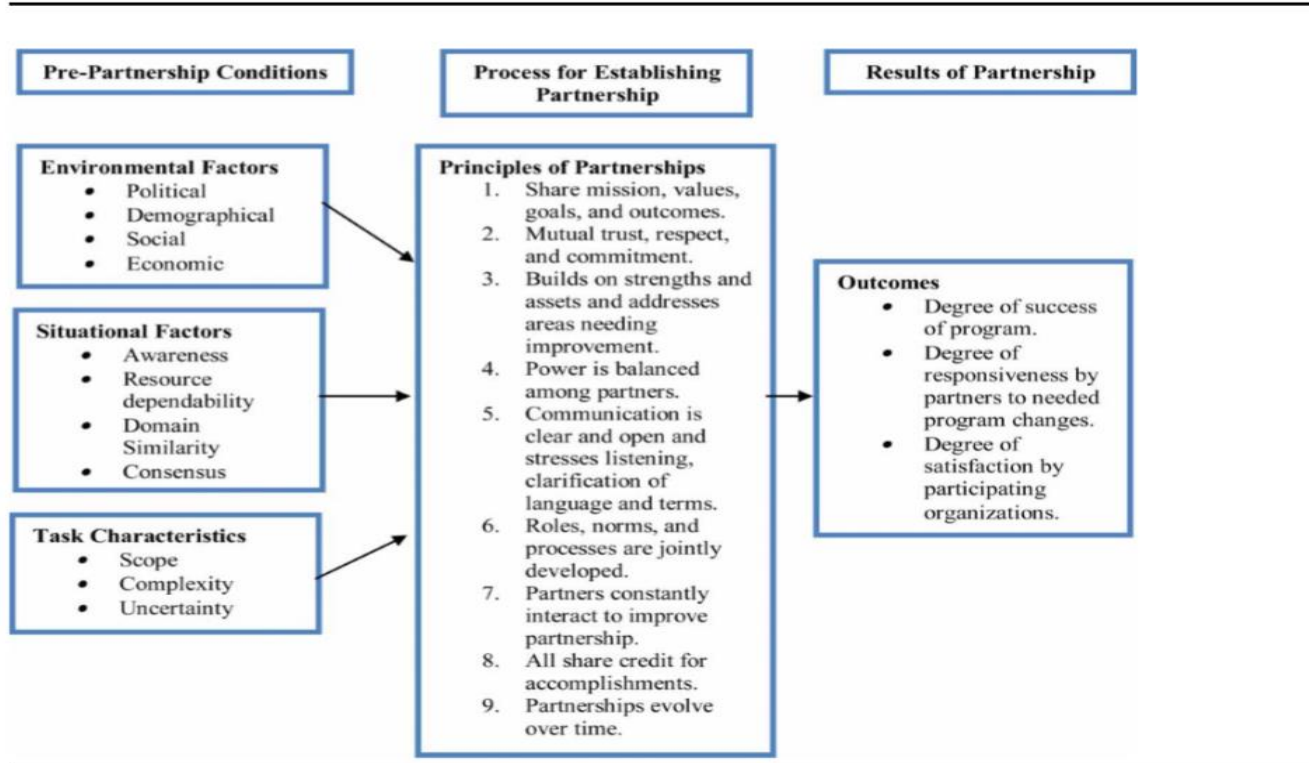
5. Costs and Operations: Decision-makers should carefully consider issues relevant to costs and operations when sharing facilities for the purpose of recreation and physical activity. Costs of equipment and supplies, water, electricity, maintenance, and staffing can all be shared. Partnership agreements often include a cost assessment that helps both partners better understand and address the costs associated with sharing facilities. In addition to costs, partner groups can share staff and resources, such as custodial and maintenance staff. An agreement can address compensation for overtime work, such as securing and inspecting the facilities. Additionally, union contracts and terms of employment for union employees, where relevant, should be addressed by the agreement.

## 5.5 Elements for Developing a Partnership Agreement

Polivka (1995) developed the below model to guide the development of partnership agreements that considers pre-partnership conditions, the processes for establishing relationships among the organization, and results.

**Table 13. Community Interagency Collaboration**

**Table 1. Community Interagency Collaboration.**



Source: Polivka (1995, p. 111); Foss et. al. (2003, p. 73).

Specific elements of partnership agreements are listed in Table 14. These were compiled from a number of sources listed on the bottom of the table.

**Table 14. Elements of Partnership Agreements**

Policy Elements	Policy Specifics
Obtain Approval from Governing Entities and establish communication protocol.	Governing entity of the city, county, or town should first approve the concept of developing a partnership agreement. Identify the employees responsible for developing the agreement for each entity. To ensure effective communication between the parties during the term of the agreement, identify the employees from each agency who will be responsible for (a) communicating to the other party about the agreement and (b) who will be responsible for making decisions regarding the agreement. Establish a process for resolving disagreements regarding any aspect of the agreement.
Definition of a Partner/Partnership	Definition may include the following details, among others: - Allowable duration of partnerships. The greater the financial contribution, the longer the agreement will need to be to ensure that the value of the investment can be recouped. Partnership agreements that have a significant financial commitment (greater than \$1 million) will usually have a length of time of at least 10 years to as long as 20 years or more. (Ballard)

	<ul style="list-style-type: none"> <li>- Fundamental purpose of partnerships</li> <li>- Activities associated with partnerships</li> </ul>
Eligible Partners	<p>List of eligible partners may include:</p> <ul style="list-style-type: none"> <li>- Individuals.</li> <li>- Private sector entities</li> <li>- Non-profit organizations</li> <li>- Volunteer groups</li> </ul> <p>- Make a list of elected officials, youth sports association volunteers, municipal staff, community leaders, park board members and others.</p>
Role of City Attorney’s Office and Risk Management	<p>Describe circumstances or stages of partnership development that require attorney review or involvement. Clarify liability issues. •Determine the types and amounts of insurance to require, consistent with legal and risk management requirements. Determine the types of documentation to exchange or require. •Allocate liability risk. Determine whether or what type of indemnification to require. •Ensure the agreement is consistent with existing state and local law and regulations, permitting procedures (or amend permitting procedures if necessary), and fee procedures or structure (or amend if necessary).</p>
Identify Community Needs. Identify the problems.	<p>Assessing the needs of the community to focus the scope of the agreement.</p>
Inventory Properties	<p>Identify properties that best serve unmet needs (by location, facility type, or other factor), and assess their suitability for shared use. Both parties should inspect proposed facilities together to establish an understanding of and document the baseline conditions of the properties and facilities.</p>
Identify and Reach Agreement on Issues Involving Use	<p>The parties need to agree on operational and management issues like priority of uses, scheduling, access and security, materials and equipment, supervision, custodial services toilet facilities, parking, maintenance, inspection and notification of damage, restitution and repair.</p>
Identify and Resolve Employment Issues	<p>Consult with legal counsel to resolve any employment-related issues, such as amending labor agreements or determining whether the entities may use volunteers to carry out some of these duties.</p>
Agree upon Cost Analysis and Allocation	<p>The parties need to calculate the costs of the agreement and how to allocate those costs equitably. Determine which components of costs to measure, the methodology to use to determine costs, and how to allocate costs and fees.</p>
Determine Term of Agreement, Methods of Evaluation, and Renewal and gather data from Potential Partners	<p>Specify minimum information required from all potential partners for DPR’s review and consideration:</p> <ul style="list-style-type: none"> <li>- Description of partner</li> <li>- Qualifications and experience</li> <li>- Financial status and plan for partnership</li> <li>- Proof of non-profit status (as applicable)</li> </ul> <p>Determine the duration of the agreement, and the bases for cancelling or terminating the agreement before the term ends. Also determine what data to collect during the agreement, the</p>

	nature and timing of its evaluation, and the process and conditions for renewing the agreement.
Documentation of Partnerships	<p>Include an explanation of:</p> <ul style="list-style-type: none"> <li>- Types of contracts allowable (e.g., MOU, cooperative agreement) and conditions for the use of each</li> <li>- Partnership characteristics that require legally binding, enforceable contracts (e.g., transfer of funds between partners, capital investment, etc.)</li> <li>- Required provisions for contracts (e.g., responsibilities of each partner, method of dispute resolution)</li> <li>- Contract templates available for staff use</li> </ul>
Identify Training Needs and Develop a Training Plan	Determine whether agency personnel need training to carry out the agreement, including instruction on any new procedures required by the agreement or any new duties assigned to employees. Determine who is responsible for conducting training, and identify employees who need to undergo training.
Develop Ancillary Documents	Develop exhibits to the agreement, as necessary: <ul style="list-style-type: none"> <li>▪List of properties subject to the agreement</li> <li>▪Inventory of the conditions</li> <li>▪Hours of use</li> <li>▪Operating rules</li> <li>▪Insurance documentation</li> <li>▪Third-party user forms</li> </ul>
Receive Formal Approval	Ensure the governing entities formally approve the agreement.
Monitoring Partner Performance	<p>Specify preferred methods of performance monitoring, such and select a mechanism for identifying problems.</p> <ul style="list-style-type: none"> <li>- Announced visits, unannounced visits, and periodic review of partner performance and financial information, among others.</li> <li>- Identify staff positions responsible for administrative monitoring. Identify staff positions responsible for performance monitoring. Document steps to address partner non-compliance. Measure the benefits each partner obtains regarding: 1. Media Exposure 2. Image Exposure. 3. Financial. 4. Sales. 5. Quality of Customer Satisfaction</li> </ul>

Adapted from Department of Parks and Recreation Administration Performance Audit. May 2014. Gallagher et al.

ChangeLab Solutions Checklist for Developing A Joint Use Agreement (JUA). 2012.

Younger, L. Partnerships 101 - Project for Public Spaces. Retrieved August 12, 2015, from <http://www.pps.org/reference/youngerptrns/>

## 5.6 Summary

This section provides important details and examples that can be used and discussed when forming the partnership agreement such as examples of specific language to consider in the agreement, limitations and barriers that can exist when using a partnership agreement, a collaborative model to guide the development of the partnership agreement, and lastly, detailed steps and elements to ensure a successful partnership agreement.

## 6.0 Recommendations

These recommendations were predominantly developed from the survey findings and the research outlined in Chapters 2, 3 and 5. These suggestions focus on both potential changes to current recreation center policies and taking an active role in informing the Denver partnership agreement policy, which is in its initial stages of development.

- Recreation centers also should be wellness centers. A majority of community members and recreation center staff felt that additional services would be beneficial to the community such as health screenings for blood pressure, weight management and diabetes care, as well as offer classes on wellness, diet/nutrition, the benefits of exercising and healthy cooking.
- There should be an equitable distribution of physical activity support. Some of the neighborhoods within the study area have a lower socioeconomic and health status yet have less access to health and fitness opportunities at the recreation centers. For this reason, some recreation centers such as MLK and Hiawatha Davis need more fitness classes and other programming to improve mental and physical health. Since there are also significant transportation issues in these neighborhoods, with more people without cars and more seniors, it can be challenging for residents to get to other recreation centers for classes and other programming so having opportunities nearby is essential.
- Recreational centers could offer ancillary support to encourage more exercise and healthy habits. Survey results suggests that recreation centers could include ideas such as shuttle buses, accessibility, farmers markets, and child care. Currently, only one regional center has child care but there is a need for more. One center indicated that they would like to see another bus line added because the Quebec bus stop is too far to the center for those trying to use public transportation. Staff from a regional center thought a farmers market could generate community support.
- Ensure safety and security at the recreation centers. Particularly at Hiawatha Davis, use Crime Prevention Through Environmental Design (CPTED) principles and other tactics i.e. increasing police presence, adequate lighting around the centers and surveillance, improve property conditions (graffiti, trash, etc.), and emergency call boxes in the parking lots. Centers should also offer classes on personal safety/self-defense for all ages.
- Recreation centers should be more of a community center. To build a sense of place and community, recreation centers should be more like a community center, offering space for activities such as

community dinners and dances throughout the year. This supports Objective 13 within the Denver Comprehensive Plan (2000), 13-C: *Find innovative ways to reflect and celebrate community cultures and character in recreation programs and special events.*

- Recreation centers could support professional development and career advancement. Particularly in low-income neighborhoods, recreation centers should have computers for members to use, and offer classes to support improving their computer skills.
- Recreation centers could play an active role in strengthening social cohesion. Areas for community members to sit and play cards provides opportunities for socializing and beneficial mental health. However, this social aspect also increases fitness levels. As one person said “once you get people in the door for an activity then hopefully they will also exercise.” Empirical research supports the notion that for African Americans, the social aspect is critical for increasing exercise and use of recreation facilities.
- Recreation centers can support health and wellness through creation of a buddy system. Significant research and the HIA surveys suggest that working with a buddy increases the commitment to and enjoyment of exercise. DPR would do well to support individuals in finding a workout partner by developing and facilitating a partner/buddy process.
- Reduce confusion that can deter membership. Consider simplifying the pricing of memberships. Perception is that prices are too high and too complicated. Streamline membership fees including reviewing the complicated tiered system of regional, neighborhood and local level memberships. A community member may live in one community, work in a second and shop in a third. Make recreation center memberships transferrable so that they can exercise on their lunch break in one center (even if regional center), and use their “home center” on the weekends (local).
- Create more awareness among current and potential members about opportunities provided by insurers and employers for discounts on recreation center use and memberships that includes promoting the Silver Sneakers program among seniors especially those in low-income neighborhoods (memberships can be completely covered).
- Empower community members through active engagement. Engage the community more in the decision-making process and use a number of available tools that can assist with better understanding some of the challenging policy issues at recreation centers. For example, the Center for Urban Pedagogy (CUP), uses the power of design and art to increase meaningful civic engagement that demystifies policy and planning issues such as perceived cost, injustice, safety, and inadequate physical activity opportunities, to list a few. See the Center for Urban Pedagogy for examples at <http://welcometocup.org/>.
- Leverage the power of social media. DPR needs to work closely with and contribute to Stapleton Foundation’s efforts to develop and implement a social media/education campaign. The campaign cuts



across many social issues such as exercise and transportation but more advertising is needed to increase awareness about the amenities, programming and services at the recreation centers.

- Develop educational programs to encourage regular fitness habits. Educate center members about exercises that they can do from home (especially for women), particular during the colder months, to ensure physical activity all year long. Educate more about what fitness trainers at the centers can do for members and provide more training at the beginning of memberships and on an as needed basis on the safe use of weight-lifting and other equipment to increase their use, particularly among women.
- Develop an outreach program in communities. DPR can promote the recreation centers by teaching and educating about the benefits of exercise and amenities at the centers out in the community and particularly those events near and well-attended by the African American community. This can include festivals/events, neighborhood meetings, youth programs, churches, libraries, and schools.
- Nutritional offerings should support health and wellness goals. Offer healthy snacks and water and remove high fructose drinks in the snack and drink machines.
- Communications from recreation centers should be offered in several languages, especially Spanish. Recreation centers should offer fitness classes that are taught in both Spanish and English.
- Ensure there are classes that are culturally, age and gender specific at the recreation center because the research supports that cultural, age, and gender specific exercise programs can be an important factor in participation.

### **Partnership Policy**

There is overall support by respondents for partnership agreements mostly when outside organizations or instructors provide additional resources and “something of benefit to members not currently offered by the City.” The recreation center staff support more access to fitness classes that are not currently offered (subject to space availability), creating variety, and lessening the financial impact to the recreation center. This supports Denver Comprehensive Plan 2000, Objective 14, Strategy 14-A, Identify opportunities for shared use of facilities and initiate shared-use agreements. Also Strategy 14-B, Encourage developing communities to create shared community spaces that will serve the needs of and be accessible to a variety of organizations and groups.

- When entering into a partnership agreement, provide a short training to ensure good coordination, communication, and consistent quality programming. Many survey respondents agree that the partnership agreement needs to ensure adequate training to reduce confusion, frustration and unreliable programming.
- Offer both for-profit and non-profit organizations and businesses the opportunity to teach classes, particularly at those centers that offer very few or no classes. For those centers that have many classes

at capacity and have less space, consider having at least the non-profit organizations that focus on offering classes and other programming outside of what is already offered at the Centers.

- Since each recreation center is in a neighborhood with different demographics and cultural norms, consider establishing guidelines that allow some flexibility at each center to decide which partnerships would work best in that neighborhood. A systemized set of policies, procedures, and processes is helpful to ensure transparency and consistency but still allow flexibility for neighborhood differences.
- Create a partnership agreement task force to ensure coordination and ongoing communication among DPR, local agencies, fitness and health professionals, community groups, and other stakeholders and include representatives from public health agencies, civil rights groups, urban planning agencies, local elected and appointed officials, park and recreation agencies, local school boards, academic researchers, non-profit organizations, and community-based organizations.

Some of the responsibilities of the task force could be to:

- Increase community and other stakeholder engagement;
- study and propose new partnerships and projects;
- enhance coordination with other agencies and organizations across the region;
- Promote benefits and amenities at recreation centers;
- Work through barriers and issues of partnership agreements such as liability, maintenance, vandalism, scheduling, and costs and operations;
- Promote access and use at centers;
- promote and educate about the services and programming at centers;
- Consider more simplified center pricing; and
- Assist with developing the language of the partnership agreement most useful for all stakeholders (i.e. Austin, TX and Portland, OR).

## **Studies**

- A comprehensive study of all DPS facilities including parks and recreation centers should be considered to determine best use of funds. The city could be spending a lot of money to maintain marginal parks and other facilities that people are not interested in or do not use much. That money can be used for programming at existing recreation facilities. One potential tool to conduct the study is the Recreation Facility Audit Tool (REFAT) <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4082954/>.
- Enhance and build on the HIA and conduct a larger study capturing additional residents to more fully understand who does and does not use the recreation facilities and why.

## 6.1 Monitoring and Evaluation

The final steps of an HIA are monitoring and evaluation. Monitoring is a systematic review that observes and checks the progress or quality of the recommendations over a period of time. This section focuses on which individuals, firms, agencies, or organizations should follow up on the recommendations to support and ensure their implementation.

A systematic evaluation assists with determining the worth or significance of the HIA in influencing and making changes at recreation centers and the partnership policy. An evaluation should be conducted that could include determining whether the HIA met the goals of the North American HIA Practice Standards (Bhatia et al., 2014), whether the recommendations were adopted into the partnership agreement and policies at the recreation centers, whether the City Council adopted the partnership policy. In the long-term, it would address whether residents of NE Park Hill and Montbello and others are using the recreation centers more often (i.e. fitness classes) and are more pleased with their health.

The final recommendations are intended to serve as a foundation for responding to the public health issues and concerns identified through the HIA process. The recommendations should be considered by firms, agencies, and organizations that have a role in meeting the needs of the NE Park hill, Greater Park hill and Montbello residents and other disadvantaged residents in adjacent neighborhoods.

The HIA was distributed to the staff at the Stapleton Foundation for review. It will also be shared with Denver Health, the Recreation Stakeholder committee and others. The HIA report will be included with the other policy documentation when it is submitted for approval to the City Council. The HIA was commissioned by the Stapleton Foundation as part of a CDC grant to increase physical activity and supports this with research, conducting interviews to refine current ideas, and to add new recommendations to be considered for the partnership policy and other recreation center policies.

A number of institutions, agencies, and organizations, such as the Denver Health, University of Colorado Denver, School of Architecture and Planning, Platt College School of Nursing, can assist with monitoring and implementation of the recommendations and potentially serve as a resource to address the HIA recommendations. Many organizations in Colorado and Denver, such as Center for African American Health and other non-profit organizations and the many fitness professionals along with the recreation stakeholder committee members can also assist with support and implementation.

An important step in evaluating the HIA and the health of the study area residents will be to work with the Platt College and Colorado School of Public Health faculty and students to conduct an initial baseline health assessment. The evaluation can focus on those residents who have a membership and/or participate at the MLK and Montbello recreation centers to monitor health measures periodically, every two to three years initially and then every five years. Evaluation could include measuring blood pressure, blood glucose, weight, mental health and other health measures. Residents can be interviewed to assess their level of physical activity, mental health and well-being. With proper implementation and monitoring the goal of this project is to measure increased physical activity and overall wellness in the northeast Denver neighborhoods, particular among the African American population.

## References

2014 Health of Denver Report Community Health Assessment. (2015). Retrieved August 11, 2015, from [http://denvergov.org/Portals/746/documents/2014 CHA/Full Report- FINAL.pdf](http://denvergov.org/Portals/746/documents/2014_CHA/Full_Report-_FINAL.pdf)

Ainsworth, B. E., Wilcox, S., Thompson, W. W., Richter, D. L., & Henderson, K. A. (2003). Personal, social, and physical environmental correlates of physical activity in African-American women in South Carolina. *American journal of preventive medicine*, 25(3), 23-29.

American Household Credit Card Debt Statistics: 2015 - NerdWallet. (n.d.). Retrieved August 31, 2015, from <https://www.nerdwallet.com/blog/credit-card-data/average-credit-card-debt-household/>

Badalamenti, K. (2013). Resources, Allocations and Priorities Plan (RAPP) For Denver Parks and Recreation. Retrieved August 31, 2015 from [https://www.denvergov.org/portals/747/documents/policy/denver\\_rapp.report.pdf](https://www.denvergov.org/portals/747/documents/policy/denver_rapp.report.pdf).

Baker, T. Masud, H. (2010). Liability Risks for After-Hours Use of Public School Property to Reduce Obesity: A 50-State Survey. *Journal of Public Health*. 80(10):508-13. Retrieved September 13, 2015, from [http://www.researchgate.net/publication/46272410\\_Liability\\_Risks\\_for\\_AfterHours\\_Use\\_of\\_Public\\_School\\_Property\\_to\\_Reduce\\_Obesity\\_A\\_50State\\_Survey](http://www.researchgate.net/publication/46272410_Liability_Risks_for_AfterHours_Use_of_Public_School_Property_to_Reduce_Obesity_A_50State_Survey).

Ballard, K. (2000, July). Planners Must Carefully Choose Joint-Venture Partners.

Barnes, A. (2012, May 30). African-American women can lose weight, keep it off. Retrieved August 19, 2015, from <https://www.bcm.edu/news/obesity/african-american-women-lose-weight>.

Basic Needs Budget Calculator. (n.d.). Retrieved August 31, 2015, from <http://www.nccp.org/tools/frs/budget.php>.

Bopp, M., Wilcox, S., Laken, M., Butler, K., Carter, R. E., McClorin, L., & Yancey, A. (2006). Factors associated with physical activity among African-American men and women. *American journal of preventive medicine*, 30(4), 340-346.

Campbella, M. T. (2011). Further Data on Misclassification: A Reply to Cheng and Powell. *American Sociological Review*, 76, 356-364.

Centers for Disease Control and Prevention. "Behavioral and Social Approaches to Increase Physical Activity: Social Support Interventions in Community Settings," *The Community Guide*, <http://www.thecommunityguide.org/pa/behavioral-social/community.html>.

Centers for Disease Control and Prevention. Chronic Disease Cost Calculator. (2015). Retrieved September 15, 2015. <http://www.cdc.gov/chronicdisease/calculator/index.html>.

Duke, J., Huhman, M., & Heitzler, C. (2003). Physical activity levels among children aged 9-13 years-United States, 2002 (Reprinted from MMWR, vol 52, pg 785-788, 2003). *JAMA-JOURNAL OF THE AMERICAN MEDICAL*

ASSOCIATION, 290(10), 1308-1309. Retrieved August 31, 2015 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5233a1.htm>.

Chadwick, E. (2015, May 4). In Wikipedia, The Free Encyclopedia. Retrieved 17:04, September 13, 2015, from [https://en.wikipedia.org/w/index.php?title=Edwin\\_Chadwick&oldid=660785731](https://en.wikipedia.org/w/index.php?title=Edwin_Chadwick&oldid=660785731).

ChangeLab Solutions. Playing Smart Maximizing the Potential of School and Community Property Through Joint Use Agreements. Retrieved August 11, 2015, from [http://changelabsolutions.org/sites/default/files/Playing\\_Smart-National\\_Joint\\_Use\\_Toolkit\\_Updated\\_20120517\\_0.pdf](http://changelabsolutions.org/sites/default/files/Playing_Smart-National_Joint_Use_Toolkit_Updated_20120517_0.pdf)

Checklist for Developing a Joint Use Agreement (JUA). (2012). Retrieved August 12, 2015, from [http://activetransportationpolicy.org/sites/default/files/Checklist for Developing a Joint Use Agreement - ChangeLab Solutions\\_0.pdf](http://activetransportationpolicy.org/sites/default/files/Checklist for Developing a Joint Use Agreement - ChangeLab Solutions_0.pdf).

Colorado BMI Surveillance System Maps and Data Tables. (2013). The Colorado Health Foundation and Kaiser Permanente Colorado Community Benefit. Retrieved July 23, 2015 from secure download from [LeeAnn.M.Rohm@kp.org](mailto:LeeAnn.M.Rohm@kp.org).

Cradock, A. L., Kawachi, I., Colditz, G. A., Hannon, C., Melly, S. J., Wiecha, J. L., & Gortmaker, S. L. (2005). Playground safety and access in Boston neighborhoods. *American journal of preventive medicine*, 28(4), 357-363.

Dean L. (2004). Lesbian, gay, bisexual, and transgender health: findings and concerns. *J Gay Lesbian Med Assoc.* 4:102–151.

Duncan, S. C., Duncan, T. E., Strycker, L. A., & Chaumeton, N. R. (2002). Neighborhood physical activity opportunity: a multilevel contextual model. *Research Quarterly for Exercise and Sport*, 73(4), 457-463.

The Federal Tax Calculator 2015/2016 | Online Tax calculator. (n.d.). Retrieved August 31, 2015, from <http://www.taxformcalculator.com/>

Gallagher, D. (2014). Department of Parks and Recreation Administration Performance Audit. [https://www.denvergov.org/Portals/741/documents/Audits%202014/Dept\\_Parks\\_%26\\_Rec\\_Administration\\_Audit\\_Report\\_05-15-14.pdf](https://www.denvergov.org/Portals/741/documents/Audits%202014/Dept_Parks_%26_Rec_Administration_Audit_Report_05-15-14.pdf).

Gallagher, D. (2015). Department of Parks and Recreation Administration Performance Audit Follow-Up Report.

Griffith, D. M., Allen, J. O., Johnson-Lawrence, V., & Langford, A. (2013). Men on the Move: A Pilot Program to Increase Physical Activity Among African American Men. *Health Education & Behavior*, 41(2), 164-172.

Grow, HM., Saelens BE., Kerr J., Durant NH., Norman GJ., Sallis JF. (2008). Where are youth active? Roles of proximity, active transport, and built environment. *Medicine and science in sports and exercise*, 40:2071-9.

Hickey, R., Lubell, J., Haas, P., & Morse, S. (2012). Losing ground: The struggle of moderate-income households to afford the rising costs of housing and transportation. Retrieved August 25, 2015, from [http://www.cnt.org/sites/default/files/publications/CNT\\_LosingGround.pdf](http://www.cnt.org/sites/default/files/publications/CNT_LosingGround.pdf).

How Healthy is your County? | County Health Rankings. Retrieved August 27, 2015, from <http://www.countyhealthrankings.org/>

Institute of Medicine. (2012). How Far Have We Come in Reducing Health Disparities?: Progress Since 2000: Workshop Summary. Institute of Medicine of the National Academies. Washington, D.C.: National Academies Press.

Jackson, R. J. (2003). The impact of the built environment on health: an emerging field. *American Journal of Public Health, 93*(9), 1382-1384.

Johnson, R. Gay Population Statistics in the United States. Retrieved August 13, 2015, from <http://gaylife.about.com/od/comingout/a/population.htm>

Kincheloe, J. (n.d.). Health Disparities the 2013 Report. Exploring Health Equity in Colorado's 10 Winnable Battles. Retrieved September 13, 2015, from [https://www.colorado.gov/pacific/sites/default/files/OHE\\_Health-Disparities-The-2013-Report.pdf](https://www.colorado.gov/pacific/sites/default/files/OHE_Health-Disparities-The-2013-Report.pdf).

Kressin, N. C. (2003). *American Journal of Public Health, 93* (10).

Lehman, R. (2006). Perspectives: Partnerships provide mutual benefits, *Parks & Recreation, 41*(4), 1–84.

Lumeng, J. C., Appugliese, D., Cabral, H. J., Bradley, R. H., & Zuckerman, B. (2006). Neighborhood safety and overweight status in children. *Archives of Pediatrics & Adolescent Medicine, 160*(1), 25-31.

McKenna, S., Iwasaki, P., & Main, D. (2011). Key Informants and Community Members in Community-Based Participatory Research: One Is Not Like the Other. *Progress in Community Health Partnerships: Research, Education, and Action, Vol 5.4*(Winter 2011), 387-397.

Minor, N. (2014, August 4). Colorado Springs, Denver see big increase in suburban poor. Retrieved September 13, 2015, from <http://www.cpr.org/news/story/colorado-springs-denver-see-big-increase-suburban-poor#sthash.apzIZxkY.dpuf>.

Moore, L. V., Roux, A. V. D., Evenson, K. R., McGinn, A. P., & Brines, S. J. (2008). Availability of recreational resources in minority and low socioeconomic status areas. *American journal of preventive medicine, 34*(1), 16-22.

Rupert, F. (2015). Multi-Municipal Partnerships for Recreation & Parks. Retrieved August 17, 2015 from [Conservationtools.org](http://conservationtools.org/guides/90-multi-municipal-partnerships-for-recreation-parks) and the Pennsylvania Land Trust Association. <http://conservationtools.org/guides/90-multi-municipal-partnerships-for-recreation-parks>.

Nies, M., Vollman, M., & Cook, T. (2002). African American Women's Experiences with Physical Activity in their Daily Lives. *Public Health Nursing Public Health Nurs*, 23-36. Retrieved August 17, 2015, from <http://onlinelibrary.wiley.com/doi/10.1046/j.1525-1446.1999.00023.x/abstract>.

Promoting Physical Activity through the Shared Use of School & Community Recreational Resources. (2012, April 1). Retrieved August 11, 2015, from [www.activelivingresearch.org](http://www.activelivingresearch.org).

Ridley, D. 2010. The Literature Review.

Seale, J. P., Fifield, J., Davis-Smith, Y. M., Satterfield, R., Thomas, J. G., Cole, B., ... & Boltri, J. M. (2013). Developing culturally congruent weight maintenance programs for African American church members. *Ethnicity & health*, 18(2), 152-167.

Seaman, A. (2012, December 17). Hairstyles may keep some black women from exercise. Retrieved August 19, 2015, from <http://www.reuters.com/article/2012/12/17/us-hairstyles-black-women-idUSBRE8BG15T20121217>.

Smith, D. (2010). Health Care Disparities for Persons with Limited English Proficiency: Relationships from the 2006 Medical Expenditure Panel Survey (MEPS). *Journal of Health Disparities Research and Practice*, 3(3), 57-67. Retrieved September 15, 2015, from <http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1043&context=jhdrp>.

Taking Neighborhood Health to Heart. (2008). Retrieved September 14, 2015.

U.S. National Physical Activity Plan. Retrieved August 12, 2015, from <http://www.physicalactivityplan.org/>.

Wollenburg, J., Rasul, A., Mowatt, J., Craig, M., Ross & Renneisen, M. (2013) Components of partnership agreements in municipal parks and recreation, *Managing Leisure*, DOI:10.1080/13606719.2013.752212.

Whitt-Glover, M. C., & Kumanyika, S. K. (2009). Systematic review of interventions to increase physical activity and physical fitness in African-Americans. *American Journal of Health Promotion*, 23(6), S33-S56.

World Health Organization. (2012). Social determinants of health. Retrieved August 28, 2012, from World Health Organization: [http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/).

Younger, L. Partnerships 101 - Project for Public Spaces. Retrieved August 12, 2015, from <http://www.pps.org/reference/youngerptnrs/>.

# Appendices

## Appendix 1. Literature Review

Pubmed Search - A search of African American physical fitness resulted in 273 results. The table below includes literature about increasing physical activity and excludes literature regarding specific health topics (BMI, diabetes).

Source	Outcome
<u>Neighborhood Attributes Associated With the Social Environment</u> , 2015	Specific to built environment
<u>Community Trial of a Faith-Based Lifestyle Intervention to Prevent Diabetes Among African-Americans</u> , 2015	Our faith-based adaptation of the DPP led to a significant reduction in weight overall and in FPG among pre-diabetes participants.
<u>Randomized Clinical Trial of the Women's Lifestyle Physical Activity Program for African-American Women: 24- and 48-Week Outcomes</u> , 2015	Group meetings are a powerful intervention for increasing PA and preventing weight gain and may not need to be supplemented with telephone calls, which add costs and complexity.
<u>A randomized pilot study of a community-based weight loss intervention for African-American women: Rationale and study design of Doing Me! Sisters Standing Together for a Healthy Mind and Body</u> , 2015	No access to report
<u>Baton Rouge Healthy Eating and Lifestyle Program (BR-HELP): A Pilot Health Promotion Program</u> .	Fifty-one African-American adults were randomized into two groups: lifestyle intervention or financial counseling, and 73% completed the program. At the end of 12 months, weight for all participants was maintained from baseline to completion with no significant differences between the groups.
<u>Racial Differences in Weight Loss Among Adults in a Behavioral Weight Loss Intervention: Role of Diet and Physical Activity</u> .	Whites lost more weight (3.10 kg) than African-American adults. Although there were no differences in dietary intake, Whites had higher levels of objective PA and fitness.
<u>Exploring the Relationship of Religiosity, Religious Support, and Social Support Among African American Women in a Physical Activity Intervention Program</u> .	Results from a physical activity intervention research project (N = 465) found that total religious support and social support were significantly negatively correlated with total religiosity, while total general social support was significantly positively correlated with total religious support.
<u>Development of an innovative process evaluation approach for the Families Improving Together (FIT) for weight loss trial in African American adolescents</u> .	Data collection included an observational rating tool, attendance records, and a validated psychosocial measure. Nothing to report.
<u>Factors related to physical activity and recommended intervention strategies as told by midlife and older African American men</u> .	Most often cited barriers to PA included time constraints, lack of social support, low motivation, poor access, and factors related to chronic conditions and aging. Although men preferred traditional forms of sports and exercise when younger, they learned to adapt the intensity and duration as they aged, and walking was viewed as an acceptable alternative. Recommended strategies for a community-based PA program were building social support, camaraderie, and accountability among men through healthy/friendly competition and social interaction, using accessible community facilities, and including education about men's and aging-related health issues.
<u>Predictors of retention of African American women in a walking program</u> .	Women affiliated with our comprehensive network, which provides ongoing cancer awareness, screening, and prevention programs to reduce cancer health disparities, were more likely to accomplish the first major milestone of the program.

JStor Search - A search of African American physical fitness interventions resulted in over 6,000 results. The table below includes the most relevant literature about increasing physical activity and excludes literature regarding specific health topics (BMI, diabetes).



Source	Outcome
<u>Environmental Barriers and Facilitators of Physical Activity among Urban African-American Youth</u>	Built environment n/a
<u>African American Women, Body Composition, and Physical Activity</u>	Doesn't address intervention
<u>Effectiveness of Interventions to Promote Physical Activity in Children and Adolescents: Systematic Review of Controlled Trials</u>	Doesn't break out African Americans
<u>The Afrocentric Paradigm in Health-Related Physical Activity</u>	Waiting for doc
<u>Womanism, Spirituality, and Self-Health Management Behaviors of African American Older Women</u>	Waiting for doc
<u>"Race, Equity, Health Policy, and the African American Community"</u>	Book
<u>A Social Ecological Approach of Community Efforts to Promote Physical Activity and Weight Management</u>	Doesn't break out African Americans.
<u>Religiosity, Self-Efficacy for Exercise, and African American Women</u>	This exploratory pilot study assessed the psychometric properties and relevance of selected study instruments and relationships among the study variables in African American women recruited through a rural church.

## Appendix 2. Yelp Comments about Recreation Centers

LOCATION	
Central City – 16 reviews. 4 stars	For \$45 per month, we have access not only to the Central Park Recreation Center with its fitness center; exercise classes; full gymnasium; two pools, including a lazy river and waterslide; and daycare option for parents ...Denver recreation system provides free membership to children ages 2 to 18.
	The annual membership here is a really good deal. And spouses get 50 percent off their membership. My only complaint is that I feel like there's never a good time to get onto the basketball courts...
	I do take advantage of their \$6 drop in fees.
	The membership is a bit pricey but they do discount it on cyber Monday.
	You can't beat \$6 drop in rates, but otherwise membership fees are as much or more than many comparable facilities in Denver.
	All I can say is good riddance Montclair. I guess I now know where all of Montclair's budget has gone. Must be to fund the incredible facility that is Central Park.
	A 24-hour fitness membership costs less, has more of everything and the lap pool is always open. I honestly don't see how they think anyone will stick around for the new membership fees.
Hiawatha – 3 Yelp reviews 3.5 stars	This rec center has way more to offer than I take advantage of.
	The bad - 1) it's getting increasingly expensive (in fact 24hr memberships are now cheaper and have so much more to offer!), 2) being a city facility it has many many closures throughout the year, 3) the place always feels dirty and unkempt (the locker rooms are especially disgusting - dirty, smelly, broken lockers, metal mirrors, etc.), and 4) it's not the safest place to leave your belongings while you work out - fellow gym users have told me of wallets, ipods, keys, cars, money, etc. being stolen from lockers and gym bags.
	Some years ago it got a massive makeover and name change (Skyland) now it is a very nice 40,000 ft facility.
Glenarm – 11 reviews. 3.5 stars	The weight room is okay, but really crowded every time I've been there (around 3-5 in the afternoon). The last time I went, the showers were closed, the gym floor was torn up, the locker room smelled, and the cardio room was going to be shut for a few days because of new equipment. Also, they don't open until 10 am Monday, Wednesday, Friday.
	Walking in you get the feeling the staff is upset you ruined their day by using their rec center.
	Washington Park should not be the only city gym with decent equipment and hours. How about a little social equity here?
	It was unclear which of the staff in the pool area were certified lifeguards. Staff inattentive.
Green Valley Ranch - 5 reviews. 3 stars	Just an average gym. Good price for those who just want to lift weights and use cardio. Don't feel the front desk is competent at all
	Front desk is hit or miss when it comes to friendliness. I wish it had: pool, indoor track, steam room/sauna. Hours aren't great, wish it'd open earlier and close later, and be open on Sunday!
MLK – 2 reviews. 4.5 stars	a truly great neighborhood resource
	They have a small gym and weight room and could use a upgrade like Montbello and Hiawatha Davis got
Montbello – 1 review. 4 stars	Montbello rec is the largest of the DPR rec. centers and one of the nicest
Stapleton-1 review. 4 stars	After School snack program for youth 2-17.

Source: Yelp

## Appendix 3. Partnership Types Defined

Partnership	Definition
<b>Austin, Texas – Department of Parks and Recreation</b>	
Design-Build-Donate	Provides access to a private partner to land for a park and recreation purpose. The design and construction of the facility is fully or partially funded by the private partner.
Design-Build-Operate	Provides access to a private partner to land for the design, construction, and operation of a facility. Partner maintains and operates facility under a lease.
Maintenance and/or Improvement	Private partner agrees to maintain and/or upgrade a specified city-owned field, playground, or facility.
Operations and Maintenance	Private partner operates and maintains a specified city-owned facility.
<b>Institute of Internal Auditors Research Foundation</b>	
Marketing	Co-branding
<b>Project for Public Spaces</b>	
Event	Festivals and community-wide special events.
Inter-Agency	Joint efforts between one or more government agencies.
Public Education	Contract to manage school arts and physical education program, before/after school program, and equal build out of gym and/or classroom space at school for equal use by each entity.
<b>Railroad Park Foundation/PROS Consulting</b>	
Public/Not-for-Profit	A public and a not-for-profit entity work together on the development, sharing, and/or operating of facilities and programs.
Public/Private	Public entities, businesses, private groups, or individuals who desire to make a profit wishes to develop a facility or to provide a service.
Public/Public	Two public entities working together on the development, sharing, and/or operating of facilities and programs.
<b>Seattle, Washington – Department of Parks and Recreation</b>	
Business/ Corporate	Provides donations of money, time, people, and other resources.
Contractual	Provides programs and services via written bilateral contracts.
Individual	An individual who can provide donations of money, labor, or time.
Non-Profit	Similar to contractual partners but strictly non-profits.
Social/Community Organizations	Provide services through volunteers for social and community programs.
Volunteer/Neighborhood	Park sponsored volunteer opportunities and "Friends of" groups who provide volunteer labor, money, and other resources.
<b>State of California – Department of Parks and Recreation</b>	
Concession	Provides concession services.
Donor	Parties that donate funds for a specific purpose(s).

Adapted from Department of Parks and Recreation Administration Performance Audit. May 2014. Gallagher et al.