2013

Peterborough Parks and Recreation Inventory

AUTHORS:
Kim N. Gordon
Meghan Healy
Shawn Queenan
Kevin Spillane
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The objective of this project was to perform a full inventory of Peterborough’s park and recreation facilities, and to research their current and future uses. Municipal park inventories are used to evaluate how parks should be managed, utilized and assessed. Such an inventory should include the municipality’s current recreational offerings and identify potential shortcomings within the park system, such as location, access, and connections between parks. Data were gathered from a survey of resident’s opinions, interviews of recreation directors of surrounding communities, Geographic Information Systems analysis, and the use of a national recreation database. We ran statistical tests of the survey data and found different levels of park use based on income levels, location of residence, and family size. By combining these results with the other data, we determined the current alignment of recreational facilities near downtown and the needs of most citizens.

Key words: Recreation, Parks, Inventory, Demographics, Master Plan
“…one constant in this changing world has been our continuing need for parks and quiet places—our need for places of beauty at which we may renew our strength; and our need for places of history where we may draw inspiration from our heritage....”

- George B. Hartzog, Jr.
  Director of the National Park Service
Municipal parks afford our nation’s citizens the opportunity to rest their minds, explore and exercise. The goal of Parks and Recreation Departments across the country is to instill a healthy spirit within our youth that will continue into their adulthood. If they have children of their own this might foster a connection to their community that is long lasting and encourages them to continue to support local recreation initiatives.

Park inventories have been used to evaluate how parks should be managed, utilized, and assessed. The inventory can be designed to present a clear visualization of what the town has to offer recreationally. It can also be used to show what flaws may exist within the park system, such as placement of parks or access between parks. An inventory can also be utilized as a template for anticipating future budgetary needs.

The National Parks and Recreation Association assists municipalities with 35,000 or fewer residents in inventorying their department facilities and amenities through its PRORAGIS programming. The program provides GIS (Geographic Information System) mapping which supports the display of GIS data and to catalog the municipality’s recreational amenities and trails. It also provides reports, plans and personal assistance with pressing issues (NRPA 2013). NPRA also supplies municipalities with comparison analysis, census data, and the ability to create graphic maps to keep them well-informed of demographic changes, trends and challenges (NRPA 2013).

The task given to us for this report was to perform a full inventory of Peterborough’s New Hampshire’s recreation and park facilities and to research their current and future uses. From there we were to determine if the current alignment of facilities near downtown is
meeting the needs of all citizens, or if the department should expand into satellite locations throughout the town. Our team’s goal was to produce an objective assessment of the current facilities. Through an extensive study of the town’s demographics, resident’s opinions and the geography of the town, we will project whether the current facilities meet Peterborough’s long term master plan goals.

The Town of Peterborough laid out their guidelines and specific goals into preserving open spaces within their community in their 2003 master plan:

“A new model of close-to-town traditional neighborhoods rather than disconnected, suburban models will help to control the cost of services and maintain the attractiveness of the Town. The reuse and adaptation for housing of existing historical buildings and outbuildings, where feasible, is preferred over new construction. Alternate forms of transportation, such as walking and bikes (through the expansion of the Common Pathway), increase social connectivity, health, wellbeing…” (Town of Peterborough Master Plan 2003)

The purpose of this report is to assist the Town of Peterborough with the task of inventorying the facilities of the Parks and Recreation department. An inventory can be utilized by the town for community needs assessment, for strategic short term planning and for evaluating future needs. A statistical survey was conducted to provide a benchmark of community needs and attitudes in our analysis. Comparisons of neighboring communities and an assessment of current facilities are included in this study. Recommendations made by the current Park and Recreations director were also included in the process of the evaluation. The
assessments include analysis of individual parks and facilities based on a simple number scale.

Figure 1: Marshall-Thomas Recreational Area / Cummingham Pond.

The Town of Peterborough, located in south central New Hampshire, has an active and well maintained Recreation and Parks department, servicing several baseball fields, a swimming pool, tennis and basketball courts, soccer/lacrosse fields, skate park, several satellite parks, walking and hiking trails and a beautiful town beach (Figure 1). These facilities are distributed throughout the town, with a concentration near the town center (Appendix 1).

Peterborough’s Parks and Recreation Department began in 1914 with the generous donation of 50-acres that became Adams Park. The Town established an advisory committee that evolved almost fifty years later into the Parks and Recreation Department. The second director, Roland “Beaver” Jutras succeeded his predecessor, Russell Bardwell in 1972 and retired in 2002. Under the leadership of the current director, Jeff King, the town has
implemented several essential changes. The swimming pool built in 1936 has recently received a much needed upgrade with a new filtration system and equipment, a separate wading area for small children, and a slide and tented areas for shade. King also oversaw the procurement and remodeling project of the historical armory (Figure 2). This space is now dedicated to the planned Peterborough Community Center, which includes a large gymnasium, kitchen/dining facilities, and office space. Plans for the remodeling project were designed by architect Richard M. Monahon, Jr. and the town is still seeking donations for the project.

![Figure 2: Blueprints for renovations taking place at the Peterborough Community Center.](image)

The new community center embodies the town master plan vision of adapting a historical building and keeping facilities near the town center. The National Guard armory was donated to the town, but has not been included in the town’s budget.

Over the past 31 years, the department has established a solid tradition of reliability and strong community involvement. The current department director, Jeff King, was successful in
achieving the set guidelines spelled out in the 2003 Master Plan, and has focused on opportunities to keep the community’s youth active. He has also focused on making the town attractive. The attractiveness is designed not only to appeal to potential investors, but for retaining its youth for many generations.

The Parks and Recreation Department has a reputation of staying current with the latest trends among young children. The recent renovations of Adams Park include entertaining playground structures while the skate park also provides fun opportunities. The department’s goal is to maintain this approach by including the latest crazes for the baby boomer generation (persons born between 1946 and 1964), such as Yoga, Zumba, water aerobics and low cardiovascular exercise opportunities. The anticipated Community Center renovations (Figure 2) and recently refurbished swimming pool have the potential to meet these needs. Peterborough appears to be headed in the right direction as a center for recreation and community involvement.

In the past few years, Peterborough’s town officials have sensed a shift in the demographics of the town, with the majority of the residents falling into the category of baby boomers and fewer children being born (Figure 3). Key indicators of this shift have been the school system experiencing lower student enrollment and more houses consistently purchased by baby boomers, rather than those with small children. This shift in demographics has given rise to concerns regarding the recreational department’s offerings. The parks and recreation department is one of many resources that can be used to encourage young professionals with children to plant their roots within the community. Recreation programs can create a
longstanding sense of community and volunteerism.

Figure 3: Town Demographics for Peterborough, NH from 2010 Census Data

Town demographics play a role in the shaping of a park system. In 2010 Peterborough had 6,284 residents with 2,956 housing units spread over 36 square miles (Figure 3). This averages to just slightly over 2 individuals per household. The median age of 46.6 is above the state’s average of 41.1, and the annual median income is $68,469, which is double the state’s average of $32,357. The poverty level is considerably low at 3.9%, compared with that of New Hampshire (8%) and the United States (14.3%).

The town of Peterborough shares a high school with eight nearby towns: Antrim, Bennington, Dublin, Francestown, Greenfield, Hancock, Sharon, and Temple. It is predicted that in the next five years the high school population will drop by half. Some of the reasons for
this change include a lack of affordable housing for younger families. A sign of this may be the growing number of retirement communities throughout the town. With age demographics changing in the town, recreation needs to shift with the ever changing needs and priorities of the residents. A major challenge for the town is to match its recreational facilities and offerings with the needs and wants of the town’s residents. This research will look at the changes in demographics based on census data along with a survey distributed from this research team.

King also raised the concern about the accessibility of the current park services to all residents. Many of the sidewalks leading to current parks and recreational facilities are not easy to navigate on foot or by bike due to areas of high traffic volumes or lack of sidewalks or trails. Walking to the parks also becomes difficult for residents that live far from the town’s center.

One suggestion presented to our team was the master plan’s consideration for a new sports field utilizing the town’s 16-acres of ‘soon-to-be-retired’ wastewater lagoons (Town of Peterborough Master Plan. 2011). Its location on the north end of town makes it convenient to several of the schools and the Riverview Apartment complex (Figure 4). Building a sport facility at this location could facilitate several of the northeast community needs and could alleviate traffic congestion near the elementary school.
Figure 4: Map of the Town of Peterborough’s parks and recreational facilities. Star represents potential facility location.
Outdoor Recreation

Outdoor Recreation is an applied field of study that focuses on how people spend their leisure time outside. The rapid gains in economic prosperity, transportation, and leisure time that emerged post World War II caused the outdoor recreation field to grow rapidly. In more recent years, challenges such as environmental degradation, crowds, pollution gave professionals and the public sector even more for study (Manning 1999).

Early social scientists were traditionally not concerned with leisure and recreation. Research in outdoor recreation started with an ecological orientation because most of the outdoor recreation managers were professionally trained in fields such as wildlife biology or forestry. In 1958, the president appointed the Outdoor Recreation Resources Review Commission (ORRPC) to assess the status of outdoor recreation in the United States. Its summary report, *Outdoor Recreation for America*, was published in 1962 along with twenty-nine special studies on an array of related topics. In the 1960s and early 1970s the discipline of outdoor recreation grew from its broad influences such as sociology, economics, psychology, geography, and a general multidisciplinary approach to the field (Manning 1999).

Manning and Wang (1998) concluded that most parks lacked basic visitor-related information including socioeconomic characteristics, residence, and satisfaction. Park managers have determined that quality of parks is the main area for which the public should be surveyed. The concept of quality is often contained in the goals and policies governing most outdoor recreation areas and is an underlying
objective of most outdoor recreation research. Drogin et al. (1990) claims: “Satisfaction has often been identified as the principal product of the recreation experience and the major goal of recreation resource management.” The best way to achieve this goal is through improved communication between visitors and managers. The measurement of satisfaction has proved to be more complex than anticipated. Two major issues seen with this dilemma are that: 1) general or overall measures of satisfaction may be too broad to be useful to either managers or researchers and 2) that satisfaction is a relative concept that is subject to substantial interpretation. Whisman and Hollenhorst (1998) created the graphic below which shows how situational variables and subjective evaluations lead to overall satisfaction.

![Diagram showing situational variables and subjective evaluations leading to overall satisfaction](image)

**Figure 5: Whisman and Hollenhorst satisfaction variables**

Another issue with determining satisfaction concerns the methodological aspects of measuring it. In many cases, multiple-item measures of satisfaction have been found to be more useful in retrieving quality data than general single-item measures. Still, to this day, no standardized measures have been developed (Manning 1999). Despite this research has led to new approaches to studying satisfaction and defining quality in outdoor recreation. It is now believed by many outdoor recreation researchers that from the standpoint of an individual quality and satisfaction involve the conditions of research settings
and the characteristics of the participants. Therefore, research and management must give attention to these two factors when conducting research.

**Public Space In Relation to Public Health**

A person’s well-being directly correlates to their access to safe and enjoyable public places and recreational opportunities. Carmona, Magelhaes, and Hammond (2007) found that many citizens of the U.S. and other countries feel dissatisfaction in the public spaces available to them. The authors were interested in what causes this dissatisfaction and what can be done to better the situation. Public space can positively influence the economy, human health, and the environment. Having access to the public spaces that provide outdoor recreation opportunities can be linked directly to personal life satisfaction. Those who participate in recreation appear notably happier (California Resources Agency, 2005). A study commissioned in 2000 showed that “Nine out of ten outdoor recreation participants express satisfaction with their personal health and fitness, while the six out of ten who don’t participate are unsatisfied with their personal health and fitness” (American Recreation Coalition, 2000).

When recreational professionals aim to address the potential health benefits of public spaces, they must closely examine the factors that facilitate and constrain physical activity in these spaces. The World Health Organization (WHO) states that, “With obesity on the rise and the issues of wellness and health care moving to the forefront of our priorities, open spaces provide activity areas that encourage fitness and release from our stressful lives.” Wilham (2009) states that access, aesthetics, conditions, availability to amenities such as toilets and drinking water, park size and safety are among attributes that are positively related to the use of these spaces for physical activity. Constraints may include transportation, access fees, or personal safety within the park.

The North Carolina Senior Games (NCSG) program promotes participation of aging adults in recreational activities within the community. Casper et al. (2012) examined the effectiveness of the
NCSG program by comparing the health of participants to data provided by the Behavioral Risk Factor Surveillance System on the overall health of citizens. The BRFSS is the world’s largest on-going telephone health survey conducted by the Centers for Disease Control and Prevention. The study revealed that the health of the recreation participants was significantly higher, especially among those over 65. The study also concluded that the participants as well as their doctors significantly agreed that recreational involvement is important for health reasons.

**Public Space Attraction**

Wilhem (2009) compared an urban park and a rural park with differing attributes. Park users were surveyed to determine site attributes that support and impede physical exercise. It was determined that paths and site beauty were among the most important attributes for promoting physical activity. The respondents disagreed on the importance of other attributes such as cleanliness of facilities, parking, and amenities such as drinking fountains and lighting. Koniak, Sheffer, and Noy-Meir (2011) examined the amenities that park users prefer in public spaces. Their survey results revealed that natural features such as trees, flowers, animals and archaeology rated as important among respondents. Urban park users stressed the importance of such amenities while rural park users did not. Lack of time and family obligations also emerged as constraints to physical activity for both users of urban and state parks (Wilhem 2009).

Wilhem (2009) suggests that attributes of recreational sites are determined by the type of facility (recreation, dog park, playground, etc.). Recreational managers should help promote and manage parks as places for physical activity, and consider tailoring some of the parks physical attributes to meet the needs of the town. The best tool for accessing a parks recreational opportunities is known as the Recreational Opportunity Spectrum (ROS). Founded in 1962 by the Outdoor Recreation Resources Review Commission it proposes a six fold classification system for recreational areas ranging from highly
visited areas to extensive primitive areas. The ROS continuum characterizes recreation opportunities in terms of setting, activity, and experience. The spectrum contains six classes; primitive, semi-primitive non-motorized, semi-primitive motorized, rustic, concentrated, and modern urbanized. (Brown, Driver, McConnell, 1978)

There are a number of attributes that can encourage the use of parks. A park must have a level of comfort and attractiveness that makes people feel welcome and safe. Parks should promote friendliness, diversity, and interaction (Project for Public Space 2000). It has been demonstrated that people desire public spaces and strive to live in close proximity to them. Lovell and Paullette (2006) studied 115 urban parks in the US and demonstrated that property values within eight hundred feet of a park were positively affected by the park’s location. This illustrates that people are willing to pay more for homes within close proximity to a public park.

**Public Input**

An important method for large-scale planning efforts is integrating public input into the research process, and exploring the varied perceptions of townspeople. Popovicova and Greg (2010) utilized a number of different approaches to gather public input. Their study evaluates approaches to gathering public input for the future development of a recreational reservoir. To solicit public input, the authors administered surveys through the mail, the local newspaper, and internet resources such as Facebook and MySpace. The public planning commission also organized a public meeting where the attendees filled out a written questionnaire. The information collected through Popovicova and Greg’s (2010) surveys is vital in assessing how people feel about the current parks and recreation facilities within their town. The respondent rate for the mail survey was 15% out of the 1,500 residents. It was believed that the lack of follow up mailing likely hurt this response rate.

The survey data may be viewed as limited based on the low response rate. “Published studies in
recreation management with low response rates are scarce as most research investigations employ on-site surveys or a combination of on-site and mail surveys” (Popovicova 2010, 109). A follow-up mailing or non-respondent checks can be beneficial when soliciting public input. “Incorporating public input, although challenging in the amount of time it requires of planning officials, has been shown to increase the chances of a plan’s success, as well as helping government agencies and businesses gain credibility and garner support for management decisions” (Popovicova 2010, 98).

Public input is also beneficial to recreation management plans. These plans vary between towns due to differences in population size, budgets and differences in their recreational needs. A town’s recreation management plan is often the result of a collaborative effort between many departments as well as the public. In the city of Keene, New Hampshire, the Parks and Planning departments worked with consulting groups to complete a report in May of 2012. Information used for the Active and Passive Recreation Management Plan included demographic information, local trends, statistically-valid survey results with community engagement, and benchmarking information on park acreage, staffing, facilities and budgeting (Keene 2012).

A study was also conducted at Acadia National Park in Maine to acquire public input from the community residents who live near the park. The study consisted of administering a mail survey to a ten percent systematic random sample of resident property owners on the island. The survey used a 5 point likert scale to gauge the resident’s satisfaction with Acadia National Park. The study, yielding 542 completed surveys received a response rate of eighty-seven percent. The authors concluded that residents felt that the park had both positive and negative aspects. Only two questions resulted in “no effect”. One thing that stood out in this study was the resident’s discontent with the negative effect that the park has on private land values. The authors state that, “Study findings also can contribute to formulation of indicators and standards of quality to help guide park management.”(Manning 2009 93).
**Master Planning**

Developing and maintaining an up-to-date Master Plan is statutory for any town that has a zoning ordinance (Peterborough 2003). The main distinction between a Master Plan and a zoning ordinance is that zoning is law and master plans are simply advisory. The Master Plans’ main purpose is to serve as a guide for the development in the town and is updated at no normal set period of time. Whereas a zoning ordinance can be changed annually, but only after a public hearing is held and the town votes the changes in. A Master Plan, while having no legal standing, can allow for a zoning ordinance to be challenged. Since the Master Plans and zoning ordinances can be closely tied together it is necessary for the vision of the Master Plan to be constant with zoning provisions, and vice versa (Peterborough 2003).

A master plan creates as a guideline for future development and assists with forecasting budget expenses. When creating a master plan for a community’s recreation department it is essential that community-wide consensus is gathered. The feedback gathered should be used to explore what currently works for the community as a whole and what direction the population would like to pursue for the future.

Master Plans should have a predominant theme such as business growth, industrial transition or protection of a town’s natural resources and the preservation of open space. These themes help to guide a town’s awareness of the need to develop a sound policy on which future development would be based. For the Town of Peterborough, NH the process of completing the latest version in 2003, started when a Steering Committee was established in June of 2002 to manage the process. By the fall of that year five steering committees were established, each overseeing singular issues of Economic Vitality, Open Space, Population & Housing, Traffic & Transportation, and Water Resources.
The Open Space sections of municipal Master Plans in New Hampshire can be unique because in 2003 New Hampshire was the most rapidly growing state in the Northeast. Town halls all across the state voted for over $30 million in land conservation spending. This was called the ‘green infrastructure’ movement and it focused on both present and future needs. Such needs included water quality, water supply, rural and scenic roads, trails accessible to all neighborhoods, access for fishing and hunting, forestry and agricultural resources, and habitats for wildlife. ‘Green Infrastructure’ is deliberately planned and managed system of open space that ensures care for the natural ecological processes (Peterborough 2003).

The best ways to implement this goal of the “Green Infrastructure’ movement throughout the parks include: active transportation access, open space acquisition, and stewardship of natural resources. Individual parks often have site-specific master plans so that each park can be tailored to help address needs and issues in their neighborhoods (Keene 2012). At the same time, it is important to look at the big picture. For example, the importance of having a trail connection between parks can play a part in elevating the use of the entire park system. The need to implement these goals must include people of all ages and abilities, especially the handicapped. The Americans with Disabilities Act (ADA) Title II requires that State and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities (e.g. public education, employment, transportation, recreation, health care, social services, courts, voting, and town meetings) (US Department of Justice). The World Health Organization (2011) estimated that there are more than 650 million individuals with disabilities globally, and in 2012 the US Census Bureau 56.7 million Americans have a disability (in a broad definition of the word).

To implement cost recovery Keene NH recommended using comprehensive service assessment which is a third-party evaluation of your organization’s service quality, processes, and programs. This
can help to eliminate duplication of services and enhance resource efficiency along with offering more enhanced programs in the parks (City of Keene 2012). A town’s recreation assessment should not only guide the provision of the Master Plan but conserve and protect the most natural features of the town. Popular attractions to parks include camping, boating, horseback riding, swimming, hiking, mountain biking, snowmobiling, cross country skiing, fishing, etc. These need to be noted so that when citizens of a town want to perform one or more of these activities they can know which parks allow for such activates (Milford 2012). A complete list of activities offered throughout the year, including their location, is important for the community to get involved. Such activities are posted in public places, printed in town newsletters, and made available online.

Master plans should also include demographics such as the current populations, forecasted population, age, and income. Projected population numbers show if the focus ought to be on the younger generations or what the town can offer the older population, depending on the town. A study of two suburban communities with older populations found that amenities most appreciated by adults over the age of 60 are educational opportunities followed by fitness and social activities (Miller and Kobayshi, 2009).

Community parks department across the country are facing the challenge of attracting people of all ages while meeting the needs of their youth. Coe (2009) defined the underlying dilemma that all communities face with luring people away from their “…electronic umbilical cords…” to participate in community activities. America’s baby boomers have become the largest segment of the population utilizing parks and recreation facilities. Nontraditional recreational opportunities such as scuba diving, bike trails, dancing, rope courses, dog courses, festivals, ultimate frisbee or adventure programs are being incorporated to attract new participants other than the baby boomers. Recreational facilities tend to be used seasonally, and do not always address the need for winter activities in cold-climate regions.
Indoor pools and walking paths, dance studios or yoga facilities are popular with senior citizens.

Volunteers manage the majority of parks and recreation facilities (Coe 2009). The National Recreation and Park Association (NRPA) facilitate training and certification programs for coaches, and volunteers. Safety is a major subject that plays a significant role within the design process of Master Plan’s Open Space sections. Safety should include handicap accessibility, routine maintenance (NRPA requires daily inspections), adequate parking and certified managers and/or volunteers. Accurate accounts of accidents should be kept and routinely addressed.

Recreational planners should be involved in a variety of city planning decisions. Evenson (2009) claims that “providing opportunities for physical activity can be a mutual goal shared by park and recreation professionals, land use and transportation planners, public health practitioners, and other stakeholders” (Evenson 2009 132). Recreational professionals are essential in the creation of pedestrian plans because of their knowledge about effective uses of public facilities. Evenson states that recreational professionals “can help ensure that parks are included in land-use analyses of current and planned facilities.” (Evenson 2009 134).

It is recommended by the National Recreation and Park Association, that master plans should include as priorities the preservation of open spaces and the protection of the community’s historic resources. (NRPA 1997-2013) To encourage saving on the additional expenses of land acquisitions, it is recommended that towns consider utilizing restored landfills, land along sewer lines, abandoned railroad corridors and floodplains (Coe 2009). Private support and donation of lands to communities has a long history in the US, where parks have been established with both financial donation and private lands including lands and funds donated by the Rockefellers in the early 1900s, most notably in Acadia National Park in Maine (Fortwangler 2007).
When creating a recreation inventory it is important to learn the perspectives of town officials and assess their thoughts and aspirations. To gather this information, a series of interviews with Recreation Directors was conducted in Peterborough, Jaffrey, Rindge, and Keene, New Hampshire. Hinsdale, Swanzey and Winchester were considered to be interviewed because of relative size, but none had a Parks and Recreation Department (Figure 6). Our goal was to gain an overall understanding of what it is like to operate a municipal recreation department. Each interview was semi-structured, meaning we had set interview questions but let the subjects add their own insights without interruptions.

Each director was interviewed in person and was asked a similar set of questions. They were asked how often a park inventory is conducted and when the last time one was performed. They were also asked if they have observed any change in demographics of their town and if so, has this caused them to reevaluate their parks system. Each was also asked to gauge the importance of transportation access to their parks and the importance of community feedback from citizens. Addressing the same set of questions with each individual provides consistency. The questions allow the interview to stay on task and not stray away too far from the subjects of interest.
Figure 6: 2010 Population of the Monadnock Region

Three Parks and Recreation directors from neighboring towns were interviewed during this process: Walt Pryor from Jaffrey, NH, Craig Fraley from Rindge, NH and Andy Bohannon from Keene, NH. Each interview was extremely helpful in providing information on the management of Parks and Recreation departments and the challenges each of them faces. Whether it is politics, finances or participation, each town has its own unique issues. The interview information proved to be extremely helpful when making a comparative analysis of amenities, population projections, median household incomes and taxes. Each director had contrasting views that shed light on the dynamics of each individual town.

**Jaffrey**

Walt Pryor is the Director for Jaffrey’s Parks and Recreation. To his knowledge, Jaffrey has never had a park inventory similar to what Peterborough is attempting through the effort described here. Pryor has only two part-time maintenance crew members besides his full-time
administrative assistant. He does not see demographics as a major component to the parks system though he believes it plays a role in community development. Jaffrey does not have the ‘manpower or hours’ to devote to new programs. The parks and rec department is potentially willing to work with citizens to develop programs of interest to the community, however citizen involvement is essential to make something happen. Jaffrey has a community that is intertwined with the adjacent town of Rindge as they share the same services they offer. The two towns work in a concerted effort to complement each other’s strengths through sporting league events.

Pryor’s twenty years with Jaffrey has allowed him to witness a crossover from one generation to another. Children with whom he has worked with have come back to community events as volunteers and leaders. Pryor believes this is evidence that the department’s push for community involvement is successful. People who are involved have the ability to see their actions taking effect in the community, which encourages even more community involvement.

Rindge

Rindge’s Recreation Director, Craig Fraley, is the only full-time rec employee for the town. With a budget of just over $100,000 per year, he feels that he is at a disadvantage compared to Peterborough’s $400,000+ annual budget. The population numbers are comparable with each town having over 6,000 residents. Yet, compared to Peterborough’s growing population of baby boomers, Fraley has seen a steady increase in the youth populations which contrast with Peterborough (Figure 9). We analyzed the US Census information to explore these differences. Both towns have seen a steady increase in overall
population, with a decline in the number of children (Figure 7 and 8).

Another stark contrast is age distributions between the ages of 0-17 years old within Rindge, which has seen a larger increase compared to Peterborough (Figure 10). When reviewing the US Census data it is very clear that Peterborough has a considerable number of retired individuals (Figure 8). This only reaffirms their belief that the retirement community numbers are strengthening.

The town of Rindge conducts a recreational inventory every two years as part of the Planning Board’s master plan. However, Fraley noted that the extent of the inventory is simply a one-page bulleted list and not an extensive guideline or assessment. Fraley relies greatly on the seven board members of his Advisory Recreation Committee as well as surveys given to participants at the end of each program season.

![Population Comparison between Peterborough & Rindge](Data Source OEP)
Figure 8: Age Comparison 0-17 between Peterborough & Rindge (Data Source OEP).

Figure 9: Age Comparison 18-64 between Peterborough & Rindge (Data Source OEP).
Figure 10: Age Comparison of 65 & older between Peterborough & Rindge (Data Source OEP).

Keene

Andy Bohannon of Keene provided a different take on recreational management and the creation of a recreation inventory. Due to a large amount of money in Keene’s Capital Improvements program, Bohannon was able to hire an outside private company to comprise a report entitled “Active and Passive Recreation Management Plan: Shaping the future of the Parks & Recreation System 2013-2023. This company, Green Play LLC distributed surveys to the local residents, asking them to assess the parks. They used the survey results to create a criteria algorithm that ranked individual parks from a scale of 1 (base essentials met) to 3 (modern facilities). Green Play LLC also compared Keene’s Parks and Recreation Department to communities of equal or similar populations, budget, and revenue.

An apparent difference between the Keene and Jaffrey Recreation departments is the staff availability to head projects. Pryor believes it is more important to have the staff lead new projects while Bohannon sees it to be more beneficial to listen to the community through a
variety of mediums including social media, town meetings, and surveys. These community outreach sources can be used to develop projects within the department using the staff available to ‘stay ahead of the community’. Bohannon also believes that Keene has an advantage over other towns because local businesses are very willing to contribute funds and help sponsor different projects in the town.

Both Bohannon and Pryor agreed on one thing overwhelmingly: access to parks is a key to having a good parks system in place. Both Jaffrey and Keene have extensive walking, jogging, and bike trails. The ability to connect town residents to parks is crucial. To have a system of trails that makes it easy to get to and travel from one section of town to another is a key competent to encouraging residents to use existing facilities.
Methodology

As previously stated, the town of Peterborough wants to create a recreational inventory using PRORAGIS. PRORAGIS is a national recreation and parks database. It provides park and recreation professionals with a source of critical data that can assist in effective management and planning of their resources and facilities. The system also provides agencies the ability to store and manage their GIS mapping data. PRORAGIS can also be used to compare agencies from across the county. We completed a PRORAGIS inventory report for Peterborough, New Hampshire as part of this project. The number, type, size, and the condition of each facility was recorded and included in the inventory. Other factors such as town population, total operating budget, total expenses and revenues were also included in the report. We also compiled breakdowns of each recreational facility and the uses they offer (Appendix 4).

Results

PRORAGIS provides the unique ability to give a town Parks and Recreation department the chance to benchmark or see how it compares to towns of equal size. There is no formal definition of ‘town’ or ‘city’ and each community is allowed to choose what to categorize itself as. Of the over 450 communities that have taken part in PRORAGIS, only 11% consider themselves as a ‘town’ like Peterborough. The two most popular responses are ‘city’ and ‘county’, with 98.84% in the United States of America (all other being from Canada). The data
entered about Peterborough will allow a comparison to the median and lower, and upper quartiles of any variable. For instance Peterborough is just over 38 square miles in size, the lower quartile of towns in PRORAGIS is 12 square miles; median is 31 square miles, and the upper quartile being 110 square miles; shows that Peterborough is right around the middle of the pack in town size.

In terms of population, Peterborough fall below the lower quartile bound of 20,634 with only 6,284 residents. Some of the information gained from PRORAGIS we had gleaned from other segments of this report, such as that the increase in population of only 1.1% from 2000-2010 is lower than even the lower quartile bound in the PRORAGIS database of 1.70%. Peterborough’s population per square mile was low at 165 compared to the 590 that was the lower quartile. In other categories things were broken down by the percentage that answered yes or not to questions such as ‘does your department provide recreation programming and services’.

Peterborough offers a similar number of programs, facilities and opportunities of like-size communities and does so at a lower operating budget. For nine years the department has finished the fiscal year under budget. The department has a total capital budget of $462,957 with nearly 10% being paid to department’s employees and services, 25% going to operations, and 21% going towards the departments programs. PRORAGIS lists the total operating budgets, salaries, number of employees, program budgets, and all other budgets based on categories Peterborough comes in below the lower quartile bound. ($100,000) but below the median $620,292. In every category based on operating budgets, salaries, number of employees,
program budgets, and all other budget based categories Peterborough comes below in the lower quartile. Peterborough was missing nearly no facilities that like-sized towns had responded over 50% to having other than a gym that 60.22% of departments offered and a volleyball court that 77.43% of departments offered.
Methodology

A survey was designed to gather information regarding the frequency of use of each recreational facility in Peterborough, transportation methods to and from the parks, and satisfaction levels of the facilities (Appendix 4). Residents were also asked basic demographic questions such as age, their residential location, gender, and family size. The survey format included closed response questions such as yes, no, agree or disagree, and Likert scale ratings. The goal of the survey was to obtain data which could be statistically tested and analyzed. A Likert scale rating gives respondents a set number of options from which to choose. In this case, the Likert ratings were used to determine survey takers’ opinions regarding their overall satisfaction with the parks and frequency of use. The answer was comprised of 6 choices from strongly agree to strongly disagree. These were later converted to numerical values between 1-6 for statistical analysis. The survey concluded with an open ended question in which participants were asked to list any additional recreational opportunities that they would like the town to provide.

The questions included in the survey allowed us to test the effect of gender, age, residential location, and family size on respondent’s answers. Only residents of the town of Peterborough were asked to participate in the survey, because funding for these recreational facilities comes from property tax revenue. Part-time residents and renters were not excluded.
from taking the survey, as they are still residents that pay property taxes indirectly and may also use the recreational facilities. The surveys were created in early October and distributed over the following weeks (Table 1).

**Survey Distribution Dates and Locations**

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Time</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peterborough Elementary School</td>
<td>12-Oct-13</td>
<td>10am-12pm</td>
<td>28</td>
</tr>
<tr>
<td>Shaws Grocery Store</td>
<td>12-Oct-13</td>
<td>12:30pm- 3pm</td>
<td>60</td>
</tr>
<tr>
<td>Riverview Apartments</td>
<td>6-Nov-13</td>
<td>5pm-7:30pm</td>
<td>30</td>
</tr>
</tbody>
</table>

*Table 1. Location, time and number of surveys distributed.*

On October 12\textsuperscript{th} surveys were administered to residents attending youth soccer games at Peterborough Elementary School and to residents shopping at Shaws, a local grocery store. On this day, there were a number of youth soccer games taking place at Peterborough Elementary School. This allowed for a survey sample primarily from respondents with children, and from those that use the recreation facilities at least during the fall soccer season. We approached individuals, identified ourselves and the goals of our survey. Potential respondents were first asked if they were residents of Peterborough. If the individual replied yes, they were asked if they would be interested in filling out a quick survey regarding the Peterborough recreational facilities. Non-residents were not asked to fill out the survey.

A number of surveys were administered to shoppers at the local Shaws grocery store at 135 Dublin Road. The reason for using this location was to collect a representative sample of residents in order to best judge attitudes about the town’s recreation facilities. Sixty surveys
were collected here. This location offered a good representation of the town’s residents. There are many age and income groups that may shop there as it is the only chain grocery store for 20 miles. This allowed us to capture a broad range of recreational interests. For example, some survey respondents may not have children and may have different opinions about the town’s recreational opportunities than those with children.

Surveys were administered at the Riverview Apartment Complex across from Conval High School in Peterborough. We went door to door asking individuals if they would be interested in partaking in a quick survey. This neighborhood was chosen because its location can make it difficult for children to travel safely to the town’s recreational facilities on their own. It is located on US Route 202 which has a relatively high volume of traffic and is located two miles from Adams Park and Playground. It is expected that people living in this area visit the parks less frequently due to their inaccessibility. It is expected that the survey results administered at the Peterborough Elementary School and Shaws locations will reveal respondents who are primarily satisfied with the parks. Because of the Riverview Apartments’ remote location from the town’s recreational facilities, we anticipate it is more likely that those residents are not satisfied with the recreational opportunities offered in the town of Peterborough.

The survey instrument used to collect data at the soccer fields and the Shaws grocery store differed slightly from the survey instrument distributed in the Riverview apartment communities (Appendix 3). First, the question asking the respondent to locate where they live on the map (Question 5 in Section C) was removed. This created additional space at the bottom
of the page to encourage feedback from respondents about additional recreational opportunities they would like the town to provide. Another minor change was the rephrasing of question A2 to “What stops you from visiting the parks more often/ at all”. This question was intended to provide insight about what prevents people from using the parks such as distance, quality and their feeling of safety.
**Methodology**

A total of 118 surveys were distributed and collected from residents. The results had an uneven gender distribution with 79 females and 39 males (Table 2). In contrast, we found a fairly even age distribution across all the locations (Table 3).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Shaws Supermarket And Peterborough Elementary School</th>
<th>Riverview Apartment Complex</th>
<th>Total Surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>55</td>
<td>24</td>
<td>79</td>
</tr>
<tr>
<td>Males</td>
<td>33</td>
<td>6</td>
<td>39</td>
</tr>
</tbody>
</table>

*Table 2: Gender distribution between locations.*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Shaws’ Supermarket And Peterborough Elementary School</th>
<th>Riverview Apartment Complex</th>
<th>Total Surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>20-29</td>
<td>6</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>30-39</td>
<td>19</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>40-49</td>
<td>28</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>50-59</td>
<td>15</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>60-69</td>
<td>15</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>70 or older</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
</tbody>
</table>

*Table 3: Age distribution among surveys.*

Survey results from the Riverside Apartment Complex were analyzed to see where individuals typically travel from when visiting a park or open space (Figure 11). The analysis
showed that of the thirty respondents, ninety percent of them come from home when they visit a recreational location. Seven percent travel from work while the last three percent are coming from school. Results from the elementary school and Shaw’s were similar to the Riverview results. A majority of respondents are traveling from home when visiting a park or open space (Figure 12).

We also analyzed approximately how long a normal journey to a park or open space takes (Figure 13). Fifty seven percent of respondents have a travel time of ten minutes or less. Of the thirty respondents, twenty three percent have a commute time between eleven and twenty minutes while only seven percent are between twenty and thirty minutes. Thirteen percent have a commute of thirty minutes or more. Surveys distributed at the soccer fields and at Shaws also provided similar results when comparing the travel times to those of the respondents at the Riverview apartment complex (Figure 14). Many of the residents have a commute of ten minutes or less.
Figure 13: Length of Riverview respondent’s commute to a recreational location

Figure 14: Length of Shaws and Peterborough Elementary School respondent’s commute to a recreational location
Once the surveys were collected, the information was transcribed into Microsoft Excel. Comparisons, descriptive statistics, as well as significance and correlation tests were conducted using the Statistical Package for the Social Sciences (SPSS) computer software.

**Frequency of Use**

The first thing we wanted to examine was the correlation between frequencies of facility use and whether or not there were children living at home. To test this we used the null hypothesis there is no significant difference in the frequency of facility use between people with children and people without children. We then ran an independent samples test in SPSS.

<table>
<thead>
<tr>
<th>Children</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency No</td>
<td>25</td>
<td>1.84727</td>
<td>.586651</td>
<td>.117330</td>
</tr>
<tr>
<td>Yes</td>
<td>63</td>
<td>2.38961</td>
<td>.751330</td>
<td>.094659</td>
</tr>
</tbody>
</table>

<p>| Levene's Test for Equality of Variances |</p>
<table>
<thead>
<tr>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
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</thead>
<tbody>
<tr>
<td>Frequency Equal variances assumed</td>
<td>1.437</td>
<td>.234</td>
<td>-3.235</td>
<td>86</td>
<td>.002</td>
<td>-.542338</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-3.598</td>
<td>.001</td>
<td>56.194</td>
<td>.542338</td>
<td>.150754</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 15: Park’s frequency of use by residents with children versus residents without.*

The test returned a significance value of .002, because this value was less than .05 we
were able to reject the null hypothesis. This means that people with children are using the parks at a significantly higher rate than those without children. This information can be useful in regards to the changing demographics in Peterborough. Although the population is aging, the people with children living at home are the ones utilizing the parks most often.

**SATISFACTION**

In the survey given to residents at Peterborough Elementary School and Shaws supermarket we asked how satisfied the respondents are with the parks or open spaces they visit most often. We also asked which zone the residents lived in. The number of respondents per zone varied from three (zone six) to forty-two (zone one). Eighty-eight surveys were given in the first round of surveying but only eighty-seven responded to this question (Figure 16).

![Figure 16: Original Survey Respondents by Zone. Number of Respondents, Percentage of Respondents to overall total.](image_url)
The question was scored in a Likert scale with the very satisfied answer being given a score of one, and very dissatisfied given a score of four, no one answered ‘Do not know’ or ‘Do not wish to comment’. Our goal was to analyze satisfaction levels amongst each zone. We wanted to see if any zone was significantly more or less satisfied then the others.

**Descriptive**

How satisfied are you with the parks or open spaces that you visit most often?

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>42</td>
<td>1.60</td>
<td>.734</td>
<td>.113</td>
<td>1.37</td>
<td>1.82</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>1.18</td>
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<td>.122</td>
<td>.91</td>
<td>1.45</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>1.67</td>
<td>.492</td>
<td>.142</td>
<td>1.35</td>
<td>1.98</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>1.85</td>
<td>.899</td>
<td>.249</td>
<td>1.30</td>
<td>2.39</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>1.57</td>
<td>.535</td>
<td>.202</td>
<td>1.08</td>
<td>2.07</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>1.33</td>
<td>.577</td>
<td>.333</td>
<td>-.10</td>
<td>2.77</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>88</td>
<td>1.58</td>
<td>.690</td>
<td>.074</td>
<td>1.43</td>
<td>1.73</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figure 17: Satisfaction between zones.*

The means of the likert scale range from 1.18 in zone two to 1.85 in zone four. This shows that most respondents fall between very satisfied and satisfied with the parks or open spaces that they visit most often. To confirm this we used the null hypothesis that satisfaction among Peterborough residents does not vary between zones of residence. A one way ANOVA test was then run to examine if there was a significant variance between the zones.

*Figure 18: One-way ANOVA for satisfaction between zones*
The significance value is in the combined grouping of .291, causing us to fail to reject our null hypothesis. The residents of Peterborough are all similarly satisfied with the parks and open spaces provided to them, regardless of location.

**Riverview Apartments**

The feedback from surveys gathered at the Riverview Apartments was run through separate tests on their own to examine how these residents feel in comparison to the residents surveyed at Peterborough Elementary School and Shaws. Our goal was to see if Riverview residents had more or less difficulty accessing parks than the rest of the survey takers. We used the null hypothesis that that there is no significant difference between the Riverview resident’s accessibility to the town’s parks and the rest of the surveyed residents in Peterborough.

**Group Statistics**

<table>
<thead>
<tr>
<th></th>
<th>VAR00002</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riverview</td>
<td>30</td>
<td>2.7657</td>
<td>1.35655</td>
<td>.24767</td>
<td></td>
</tr>
<tr>
<td>Shaws/PES</td>
<td>85</td>
<td>1.9294</td>
<td>.92309</td>
<td>.10012</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 19: Independent Sample Test Riverview Respondent versus Shaws-PES respondents.*

**Independent Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances</td>
<td>9.664</td>
<td>.002</td>
</tr>
<tr>
<td>Equal variances not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td>3.134</td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We used an independent samples test which returned a significant value of .003, therefore we were able to reject our null hypothesis. The residents living in Riverview apartments feel they have significantly lower accessibility to parks and open spaces than the residents surveyed at Shaws and Peterborough Elementary School.
The major factors that we addressed in this report were: a park inventory and assessment; surveying town residents in regards to Peterborough’s recreational facilities; statistical tests of utilization of, and satisfaction with parks; recommendations of the town’s recreational facilities in response to changing demographics, and a comparison to like-sized towns in the PRORAGIS database. These gathered data were empirical, mapped, and analyzed using statistical and spatial methods. The thoroughness and attention to detail of the Peterborough Parks and Recreation Department made access to information regarding the facilities and their uses readily available. Conducting the surveys at the three chosen locations (Peterborough Elementary School, Shaws Grocery store, and Riverview Apartment Complex) proved to be extremely fruitful and gave us valuable feedback on the tasks that we set out to achieve.

The Park Inventory and Assessment proved to be one of the simpler tasks, thanks due to Peterborough’s Parks and Recreation Director Jeff King. He took time out of his busy schedule to give us a tour of the community and described in great detail the features of each park. This included bathrooms, adequate handicap accessibility, lighting, parking and accessibility to trails. He also outlined the duties each park and field is meant to provide, and the capability of each to serve the needs of residents. Each of these facilities is listed with it corresponding amenities in the accompanying inventory.

Surveying Peterborough residents gave us statistical data and valuable verbal and written responses. Unfortunately many of the specific concerns of residents do not show up within our test
results, since they were not considered in the creation of the survey. The most commonly expressed feedback was displeasure with the fee residents must pay to use the pool, the length of the season (some thought it should be open longer), and the need for more walking trails connecting the park system.

After the survey results were entered into Excel and SPSS, statistically relevant tests were run. Much of the data we gathered and ran in SPSS shows an overwhelming majority of people were satisfied with the facilities and opportunities offered by the town, regardless of a number of factors such as if children lived in their home, the zone they lived in, age or gender. When distributing the surveys within the Riverview Apartment complex, many individuals expressed how difficult it is to visit the parks due to lack of transportation or insufficient funds. However when analyzing these data, many respondents expressed that they visited many of the parks a few times a week and they were satisfied with the parks department. This makes us believe our data gathered at this location may be skewed by the contradictory feedback we received.

Jeff King had voiced concerns that the town is experiencing a large and growing population of retirement age residents and is concerned that they may not be equipped for the change in demographics over the next few years. Currently Peterborough has one person at or above retirement age for every resident 18 years or younger. It is our assessment that it is essential for the town to capitalize on the active older generation through current trends such as Zumba, and hiking clubs and continue to maintain the handicap accessible features that are provided at the parks. This will allow older residents an equal opportunity to enjoy the facilities in town.

The younger population is offered all the amenities of a large town through the joining of neighboring communities to provide recreational programs such as soccer and baseball. The joining of
rec departments provides the youth population with increased competitiveness and a variety of experiences. They have a wide variety of engaging activities and ability to enjoy numerous programs that many communities in the region do not offer. Adult leagues that take place at the facility also offer recreational opportunities for meet a middle group of the population (18-65).

The use of PRORAGIS confirmed the belief that the Parks and Recreation department in Peterborough is above standard. In benchmarking against like-sized towns in population, land area, and budget it was evident through PRORAGIS that not only did Peterborough offer all the programs and amenities of larger towns, but they do so at a lower cost than most communities.

It is our conclusion that although the parks are perhaps underutilized by the town’s population, it isn’t because of the quality or quantity of the parks but rather the residents using their own land for non-programmed recreation and perhaps the local state parks for outdoor recreation leaving some of the parks less used.
APPENDIX 1

Parks and facility site maps: GIS mapping of facilities.
APPENDIX 2

First survey conducted at Peterborough Elementary School.
Part A: Use of Parks and Open Spaces

1. Do you ever visit the parks or open spaces in town? [Please tick one only] Yes ☐ No ☐
   - If 'Yes' please go straight to question 4.
   - If 'No' please go straight to 2.

2. Why do you not visit any parks or open spaces? [Please tick as many as appropriate]
   - I am too busy / not enough time ☐
   - They are too far away ☐
   - Poor health ☐
   - Lack of suitable transport ☐
   - They do not interest me ☐
   - I don’t feel safe visiting parks and open spaces ☐
   - They are badly maintained ☐

3. Which parks or open spaces do you visit and how often do you visit them?
   - Skate Park [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Seasonal Ice Rink [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Pool at Adams Park [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Playground at Adams Park [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Tennis Courts at Adams Park [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Community Center [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Baseball Fields [Bishop, Pickard, Ecco Fields] [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Community Garden [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Cunningham Pond [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Sports facilities at Conval High [baseball fields, football fields, etc.] [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]
   - Peterborough Elementary School [Soccer fields, Playground area] [Never visit] [Once a year] [2 or 3 times a year] [Once or twice a month] [Once or twice a week] [Most/every day]

4. How satisfied are you with the park or open space that you visit most often? [Please tick one only]
   - Very satisfied ☐ Satisfied ☐ Dissatisfied ☐ Very dissatisfied ☐ Don’t know ☐ Do not wish to comment ☐
**Part B: The Parks and Open Spaces you visit most often**

1. **When you visit a park or open space, where do you usually travel from?**
   [Please tick only one]
   - Home [ ]
   - Work [ ]
   - School [ ]
   - Shops/Businesses [ ]

2. **How would you normally travel to a park or open space?**
   [Please tick only one]
   - On Foot [ ]
   - Bicycle [ ]
   - Car [ ]
   - Bus [ ]
   - Motorcycle [ ]
   - Taxi [ ]

3. **Approximately how long does your normal journey to a park or open space take?**
   [Please tick only one]
   - Less than 5 minutes [ ]
   - 5-10 minutes [ ]
   - 11-15 minutes [ ]
   - 16-20 minutes [ ]
   - 21-30 minutes [ ]
   - More than 30 minutes [ ]

4. **What do you normally do when you visit the park or open space?**
   [Please tick up to five main reasons for normally visiting the park or open space]
   - To relax or think [ ]
   - See birds & wildlife [ ]
   - Get some fresh air [ ]
   - Ride a bike [ ]
   - Meet friends [ ]
   - See the play area [ ]
   - To eat / drink [ ]
   - To keep fit [ ]
   - Guided walks and talks [ ]
   - For peace and quiet [ ]
   - Feed the birds / ducks [ ]
   - For a walk [ ]
   - Walk the dog [ ]
   - Enjoy entertainment [ ]
   - Enjoy the beauty of the surroundings [ ]
   - Children / Family outing [ ]
   - Picnic / barbecue [ ]
   - Attend events [ ]
   - To improve my health [ ]
   - Organised educational visit [ ]
   - Play sports or games [ ]
   - Watch sport or games [ ]

5. **We would like to know how much you agree with the following statements.**
   [Please tick one option only for each statement]
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where I live there is a park or open space within easy walking distance from my home</td>
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<tr>
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<td>Trees and open spaces can improve the appearance of the town</td>
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</table>
Part C: About You

1. Are you female or male?  [ ] Female  [ ] Male

2. Which of the following categories best describes your age? [Please tick only one]
   - [ ] Under 20
   - [ ] 20-29
   - [ ] 30-39
   - [ ] 40-45
   - [ ] 50-59
   - [ ] 60-69
   - [ ] 70 or over

3. Do you have children/grandchildren living at home?  [ ] Yes  [ ] No

4. Which zone do you live in? [Circle only one]

5. Please provide any additional recreational opportunities, if any, that you would like the town to provide? [please use the back to write your comments]
APPENDIX 3

Second survey conducted at Riverside Apartment Complex
Part A: Use of Parks and Open Spaces

1. Do you ever visit the parks or open spaces in town? [Please tick one only] Yes □ No □

2. What stops you from visiting parks more often/at all? [Please tick as many as appropriate]
   - I am too busy/not enough time
   - They are too difficult to get to
   - Poor Health
   - I don’t like parks and open spaces
   - They are badly maintained
   - They are too far away
   - Lack of suitable transport
   - They do not interest me
   - I don’t feel safe visiting parks and open spaces

3. Which parks or open spaces do you visit and how often do you visit them?
   [Please see map on page 3]
   - Skate Park
   - Seasonal Ice Rink
   - Adams Pool
   - Adams Playground
   - Tennis Courts at Adams Playground
   - Peterborough Community Center
   - Softball/Baseball Fields [Bishop, Picard, Ecco Fields]
   - Cornucopia Community Garden
   - Marshall-Thomas Recreation Area at Cunningham Pond
   - Sports facilities at ConVal High School [baseball/softball, soccer, lacrosse fields, etc.]
   - Peterborough Elementary School [Soccer fields, T-Ball fields, Playground]

4. How satisfied are you with the parks or open spaces that you visit most often? [Please tick one only]
   - Very satisfied □ Satisfied □ Dissatisfied □ Very dissatisfied □ Don’t know □ Do not wish to comment □
### Part B: The Parks and Open Spaces you visit most often

1. When you visit a park or open space, where do you usually travel from?  
   [Please tick only one]  
   - Home  
   - Work  
   - School  
   - Shops/Businesses  

2. How would you normally travel to a park or open space?  
   [Please tick only one]  
   - On Foot  
   - Bicycle  
   - Car  
   - Bus  
   - Motorcycle  
   - Taxi  

3. Approximately how long does your normal journey to a park or open space take?  
   [Please tick only one]  
   - Less than 5 minutes  
   - 5-10 minutes  
   - 11-15 minutes  
   - 16-20 minutes  
   - 21-30 minutes  
   - More than 30 minutes  

4. What do you normally do when you visit a park or open space?  
   - Play sports or games  
   - Watch sports or games  
   - Attend social gatherings/events  
   - For a walk  
   - Enjoy the environment and/or wildlife  
   - Visit the playground  
   - Maintain physical fitness (running, biking)  
   - Take a shortcut  

5. We would like to know how much you agree with the following statements.  
   [Please tick one option only for each statement]  
   - Strongly Agree  
   - Agree  
   - Neither agree nor disagree  
   - Disagree  
   - Strongly disagree  
   - Don't know  
   - Where I live there is a park or open space within easy walking distance from my home  
   - I am happy with the facilities that are available in my nearest park or open space  
   - I can easily get to other parks or open spaces that provide the facilities I need  
   - Generally, when I visit parks and open spaces I feel safe  
   - Generally, the parks and open spaces are clean and well maintained  
   - It is easy to find out about parks and open spaces and the facilities they provide  
   - Parks and open spaces can improve the appearance of the town  
   - Improving off road footpaths and cycle-ways between parks and open spaces is important  
   - Improved traffic free footpaths and cycle routes would encourage me to walk or cycle
Part C: About You

1. Are you female or male?  □ Female  □ Male

2. Which of the following categories best describes your age? [Please tick only one]
   Under 20  □  20-29  □  30-39  □  40-49  □  50-59  □  60-69  □  70 or over  □

3. Do you have children/grandchildren living at home?  □ No  □ Yes  □ How many?

4. What are the ages of your children/grandchildren?  □ 0 - 4  □ 5 - 10  □ 11 - 14  □ 15 - 17
   [please tick all that apply]

5. Please provide any additional recreational opportunities, if any, that you would like the town to provide? [please use the back to write your comments]
APPENDIX 4

Peterborough Parks and Recreation Inventory
Adams Park

Location: Union Street
Parking: Onsite (no overnight parking)
Hours of Operation: Open until 10:00 pm
Description: Main Recreational park facility
Amenities: 2 Wooden gazebos on cement foundations – for picnics and shade. Numerous benches line the park. The parking is well designed and accommodating for a large crowd at the park or for the playing fields across the street. There is sufficient signage for the safe passage of pedestrians to cross the street. There is a storage building that holds equipment and the mini-Zamboni for the seasonal ice skating rink. An Arts & Craft building is attached to the Bathhouse by covered corridor. This includes bathrooms, kitchen and concession stand.
Adams Playground

Location: Union Street (Adams Park)
Parking: Onsite (no overnight parking)
Hours of Operation: Open until 10 pm
Description: Built in 2005

Amenities: The playground facility has a variety of high quality playground equipment for young children: 3 bouncy toys, slides, playhouse, Sandbox, 12 swing sets, monkey bars, jungle gym, rope bridge, and tire swing. Numerous benches and a drinking fountain. With a flower garden, 20 picnic tables & pavilion. Handicap equipment and accessible. Parking. Signage indicating the park hours. The equipment has manufactured wood chips for safety and to accommodate wheel chairs. The playground is designed to accommodate 2-5 year olds in the back and 5-12 year olds in the front closest to the road.
Adams Pool

Location: Union Street (Adams Park)
Parking: Onsite (no overnight parking)
Hours of Operation: Memorial Day to Labor Day
Description: Originally built in 1936, the pool received an extensive upgrade in 2013 ($1.2 million)
Amenities: Seven lanes, with low diving board, tunnel slide, children’s pool area, splash pad (capacity up to 40 individuals) and three covered areas with numerous benches. The mechanical units (brand new filtering system), is located under the pool. The Bathhouse which includes receptionist desk, several storage facility/rooms, front desk, nurses’ office, and concession stand, male & female bath & shower rooms. Handicap accessible. Maximum occupancy is 222. Averages 175 people per day.
Adams Basketball Courts

Location: Union Street
Parking: Onsite
Hours of Operation: Open until 10
Description: One Baseball Court in Adams Park
Amenities: Lighting, benches. Will need to be upgraded in a few years.
Adams Tennis Courts

Location: Union Street (Adams Park)
Parking: Onsite (no overnight parking)
Hours of Operation: Lights out at 10 pm
Description: Fenced in 4 tennis courts.
Amenities: Several benches located inside and outside the fenced in area. Tennis shed. Lighting for night time usage. The courts were refinished in 2002. There is also a separate wall for solo practice.
Bishops Softball / Baseball Field

**Location:** Union Street

**Parking:** Shared with Recreation Department Building

**Hours of Operation:** Open until 10 pm

**Description:** Cal Ripken League Baseball Field.

**Amenities:** Is considered too small for the 185’ league regulation, fenced in, two dugouts and bleachers for both sides of field, two story Announcers booth and batting cage.
Peterborough’s Cornucopia Community Garden
Location: Elm St, (Next to Community Center)
Parking: Onsite
Hours of Operation: 9am-4pm
Description: Garden managed by the Cornucopia Project (a nonprofit organization). The garden is designed to serve as an “outdoor” learning center for community members and the local school system.
Amenities: Fenced in garden with a potting shed.
Depot Park

Location: Depot St
Parking: Open until 10 pm
Hours of Operation:
Description: Small downtown park
Amenities: Located along the river in the downtown district. Walking trail along the river with lighting at the head of the trail. Pavilion, benches and open spaces.
Ecco Softball / Baseball Field

**Location:** Union Street

**Parking:** Shared with Recreation Department Building

**Hours of Operation:** Open till 10 pm

**Description:** Large field used for the softball, soccer, and lacrosse games.

**Amenities:** Considered too small for the 185’ regulation. Fenced, with two dugouts and bleachers for both sides and lighting for night time use. Two story Announcers booth. Batting cage.
Marshall-Thomas Recreation Area at Cunningham Pond

**Location:** Cunningham Pond Road

**Parking:** Onsite

**Hours of Operation:** 11am – 8pm

**Description:** 34 Acre Pond for Residents and Guests

**Amenities:** Bathhouse with bathroom facilities, a community room, two beaches, boat launch, and sailboat or kayak rentals. No motorized boats allowed. Handicap equipment and accessible
Peterborough Community Center

**Location:** Elm St Peterborough, NH

**Parking:** Onsite

**Hours of Operation:** 9am-4pm

**Description:** Established in the old National Guard armory. This facility is maintained by the Parks & Recreation department, but is not funded by tax funds.

**Amenities:** Senior Center with kitchen facilities (needs upgrades), large assembly room, bathrooms, and Food pantry. Full size gymnasium and has a comprehensive remodeling plan. 300 person capacity.
Peterborough Elementary School

Location: High Street
Parking: Onsite
Hours of Operation: 8am-10pm
Description: Peterborough Elementary School’s outdoor sport facilities
Amenities: Soccer fields, T-ball, playground
Peterborough Recreation &
Parks Department

Location: Union Street
Parking: Approximately 20 spaces on premises
Hours of Operation: 8:00 am to 4:30 pm Monday through Friday
Description: Headquarters of Peterborough’s Parks and Recreation Department
Amenities: Department Staff offices, meeting room, and public bathrooms (with outside access)
Peterborough Recreation & Parks
Maintenance Facility
Location: Union St Peterborough, NH
Parking: Shared with Recreation Department Building
Hours of Operation: 8:30 AM - 4:30 PM Monday through Friday
Description: Storage for all parks and recreation maintenance equipment
Amenities: Large garage. Building was recently upgraded to accommodate more equipment indoors.
Picard Softball / Baseball Field

Location: Union St Peterborough, NH
Parking: Shared with Recreation Department Building
Hours of Operation:
Description: Softball Field
Amenities: Is considered too small for the 185’ regulation. Fenced, with two dugouts and bleachers for both sides and lighting for night time use.
Rotary Club Park

Rotary Wilder Park
Location: Hunt Road (Route 202) Peterborough, NH
Parking: 6 spaces
Hours of Operation: Dawn-Dusk
Description: Half acre park with fishing access.
Amenities: Tables and benches, fishing access.
Skate Park

Location: Union Street
Parking: Located at Parks and Recreation Department Building
Hours of Operation: Dust-Dawn
Description: Skate park
Amenities: Facility that gets the most usage year round. A popular activity after school for teenagers. The park was created in 2007. Tends to get vandalized often with graffiti
Seasonal Ice Rink

Location: Union St (Adams Park)
Parking: Onsite
Hours of Operation: 8am until 10pm
Description: Seasonal skating rink functional during Winter months
Amenities: Zamboni and storage building
Sports facilities at ConVal High School
Location: 184 Hancock Rd, Peterborough, NH 03458
Parking: Onsite
Hours of Operation: Dust-Dawn
Description: Regional High School Sport Facilities
Amenities: baseball, softball, soccer, lacrosse fields
Teixeira Park

Location: Union St
Parking: 8 Spaces
Hours of Operation: Dust-Dawn
Description: Leisure Park
Amenities: Walking trail, benches, and open space.
Putnam Park

Location: Grove St Peterborough, NH
Parking: Onsite
Hours of Operation: Dust-Dawn
Description: Small downtown park on Nubanusit Brook
Amenities: Walking trail, benches, and open space.
LITERATURE CITED


commission on Social Determinants of Health from the Knowledge Network on Urban Setting.


http://www.ada.gov/cguide.htm