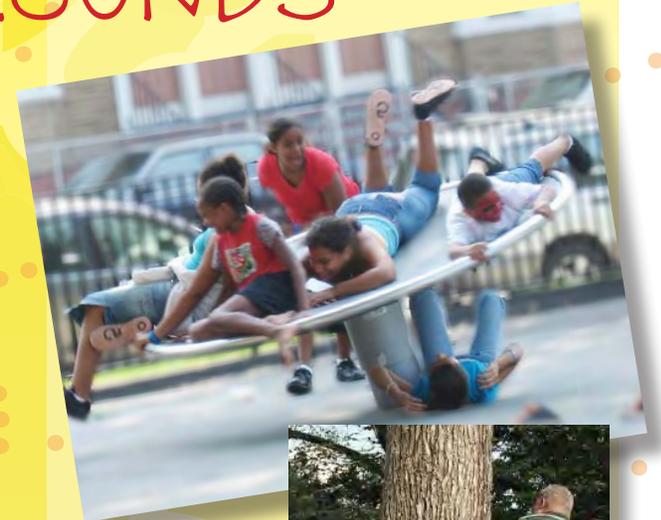


City of Cambridge

HEALTHY PARKS & PLAYGROUNDS

Task Force Report



Fall 2009





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## ***INTRODUCTION: Task Force Charge and Mission***

The Healthy Parks and Playgrounds Task Force was created to explore the role of parks and playgrounds in the health, learning, and overall development of children, and the ways in which they support strong families and communities. The Task Force was charged with creating recommendations for new and innovative approaches to the design and operation of future public parks and playgrounds in Cambridge, the goal of which will be to provide facilities that better serve the diverse physical, developmental, and social needs of all users, regardless of age or ability.

In the course of its work, the Task Force discussed the meaning of play and the specific ways in which it helps children develop their bodies and minds. The Task Force also examined what qualities of play environments are desired to provide meaningful play opportunities for children. With consideration to the resources currently offered within Cambridge, the Task Force developed a set of recommendations to guide future planning, design, operation, maintenance and administration of the city's system of parks and playgrounds.

The Task Force relied on the knowledge and expertise of its members, whose collective experience covers a wide variety of fields related to play, health, child development, education, park design, maintenance and operation, community planning, and recreational programming. Visiting experts also provided guidance in key areas, and a review of books, journal articles, and news stories provided additional background on these issues as they have been discussed locally, elsewhere in the nation and around the world.

The work of the Healthy Parks and Playgrounds Task Force is intended to harmonize with the work of other city officials, staff and special working groups that have focused on children's health, education or open space in the city. With regard to open space, this effort complements the work of the Green Ribbon Open Space Committee (2000), and with regard to children's health and development, it responds to the ongoing work of the Healthy Children Task Force.



## ***What is play and why is it healthy?***

Play is a natural part of life that begins in infancy and continues throughout childhood, adolescence and adulthood. While the term “play” might suggest activities that are enjoyable but unimportant, there is an increasing awareness – reflected in contemporary scientific research as well as popular discourse – that play is a critical part of healthy human development. Similar to proper nutrition and adequate sleep, play is believed to have many health benefits, from physical fitness to cognitive development to emotional well-being. While play is often thought of as a children’s pursuit, it continues to be important for people of all ages.

The Task Force began its work by discussing what play means, and how it contributes to the health, development and well-being of community members. This question is important because it helps to explain why play, in the context of urban parks and playgrounds, is a public good that deserves attention in the same way as education and community health. The following is a summary of the defining “healthy” characteristics of play, as determined by the Task Force based on the members’ own expertise as well as ongoing national and international discussions on the meaning and importance of play.

### **Play is an integral part of human nature**

Play does not happen for a specific purpose, but for its own sake. It happens anywhere and everywhere, at any time. It is enjoyed by people of all ages, from babies to toddlers to children to teenagers to adults to seniors. Children have a particularly strong appetite for play. They do not need to be told to play, or how to play, though they can often benefit from instruction or supervision by a knowledgeable, responsible adult. Some researchers believe that children are naturally programmed to need play, because it helps to prepare their bodies and minds for survival in the world. Young children have engaged in play throughout history, whether or not facilities for play have been available. Teenagers and adults may sometimes need more structured activities to motivate them to play, but the desire to engage in playful activity is apparent throughout the span of one’s life. It is the Task Force’s belief that active play is and should be an essential part of a healthy lifestyle.

*Scientists who study play, in animals and humans alike, are developing a consensus view that play is something more than a way for restless kids to work off steam; more than a way for chubby kids to burn off calories; more than a frivolous luxury. Play, in their view, is a central part of neurological growth and development – one important way that children build complex, skilled, responsive, socially adept and cognitively flexible brains.(1)*





*Play is a major interactive process through which children learn about themselves, their environment, the other people in that environment, and the interrelationships among all of these. Play is intrinsic, self-selected, active, mind involving, and a focus for personal powers. It is intriguing and captivating and frequently involves practice of needed mental and/or physical skills. Play engages and fulfills the player. Authentic play involves choice on the part of the player and can be self-perpetuating. Play takes a variety of forms. Some of these are exploratory, functional, constructive, symbolic, and games with rules.(2)*

### **Play is free, often unstructured and can be messy**

One of the aspects of play that makes it hard to define is that it can take so many different forms. For young children in particular, play can be completely devoid of any rules. It could be a game of chase, followed by digging a hole, followed by climbing a hill and rolling down, followed by a make-believe conversation taking place in a small playhouse, with the purpose of the play constantly being altered and redefined by the children playing. Even as children get older and begin to play more well-defined games and sports, there are elements of improvisation and imagination included within a standard framework of rules. It is this improvisational, participatory quality that distinguishes free play from more structured activities or types of entertainment that rely on a passive audience.

### **Play is fun and makes people happy**

Play is enjoyable to children and adults alike, which is important in itself. Simply being happy contributes to emotional health and well-being, and people who learn to be happy as a child are likely to have a healthier emotional outlook throughout their lives. In this regard it is important for children to learn to play at a young age, but also to keep providing children and adults with opportunities to play as they get older.

### **Play is a self-directed learning process**

Play is fun, but not mindless. It is a process that involves active thinking and self-directed learning, in which players make their own rules, learn independently, apply their knowledge, test their own ideas and follow them through to their conclusions. Many researchers, educators, and child development specialists believe that when children engage in play, they are developing complex cognitive and problem-solving skills. The benefit of play as a learning process is that the "curriculum" is defined by the player, through imagination and experimentation and sometimes through collaboration with other players. The enjoyment of play can also be a major contributor to its learning value, because thinking that is enjoyable may also be more memorable.

### **Play is exploratory, creative and imaginative**

Play is a process that involves thinking beyond the limitations of what currently exists. Play involves building new things, not only in the physical world, but in the world of storytelling and make-believe – for instance, building a small hill out of sand and calling it a mountain. Play is also about being curious and exploring the unknown, trying out new ideas in new ways. Developing and practicing these types of creative skills is important to cognitive development and to achievement in life, especially because innovation is such a driving force in the world. Many successful artists, writers, inventors, entrepreneurs and other professionals view play as an important part of their work, and some contend that one way to make us more competitive in the world of technology and innovation is to make us better at play.

### **Play is experimental, challenging and sometimes risky**

Part of what makes play engaging is challenge. Play might involve climbing a little higher on a tree than before, building a slightly bigger sand castle, or learning new tricks on a skateboard. These pursuits may come with a sense of uncertainty or even danger, and because there is a real risk of failure, there is a real feeling of achievement when the goal is met. The process of thinking up new challenges and pursuing them is an important way of learning about the world while developing physical, cognitive, and emotional abilities, and helps to build confidence and self-esteem. This sense of challenge and achievement is also what keeps play engaging over time, because players can continually pursue new challenges as their abilities improve and as their interests change.

Conversely, play provides an opportunity to be curious and to make mistakes with relative safety. Learning the consequences of failure can be as important as learning how to succeed, because failure provides an understanding of real-life limitations and how to overcome them. Play should not be risk-proof, but the consequences of failure should be manageable, depending on the physical and emotional maturity of the person playing.

*According to [researcher Laura] Berk, one reason make-believe is such a powerful tool for building self-discipline is because during make-believe, children engage in what's called private speech: They talk to themselves about what they are going to do and how they are going to do it.*

*Unfortunately, the more structured the play, the more children's private speech declines. Essentially, because children's play is so focused on lessons and leagues, and because kids' toys increasingly inhibit imaginative play, kids aren't getting a chance to practice policing themselves. When they have that opportunity, says Berk, the results are clear: Self-regulation improves.(3)*





*Play is the primary mode by which [children] learn about their bodies and movement capabilities. They become more curious and active as they engage in new experiences such as climbing, jumping, running and throwing.*

*Through play, young children develop fundamental movement stability, locomotor and manipulative abilities. These fundamental movements are refined as children mature and as they practice the movements.(6)*

### **Play is physical**

The type of play being discussed by the Task Force, as distinct from board games or video games, is play that involves the whole body as well as the mind. The combination of physical with mental activity makes play particularly beneficial to health and development. On a basic level, physical activity improves circulation and reduces stress, which health and education specialists believe can improve mental abilities such as attentiveness and concentration. Physical activity also results in caloric expenditure and promotes physical fitness, which is particularly important given the concern about the number of individuals in the United States, especially children, who are considered overweight and obese. Obesity can have serious consequences for physical health, and may have effects on academic performance as well, as studies conducted both nationwide and in Cambridge have shown a correlation between achievement in physical fitness tests and achievement on standardized academic tests.

For young children, physical play is especially important as a way to learn and develop coordination, balance and motor skills. During play, children move in a variety of different ways, and this variety of movement types is important to motor development in early and middle childhood. The multi-speed, multidirectional movements that are part of play also help to train the vestibular system, or the fluid-filled inner ear canals that provide information to the brain about balance and coordination. Vestibular development can affect not just balance but hand-eye coordination, posture, and the ability to focus. In the Cambridge school system, physical play is incorporated into occupational therapy for children with reading, writing, and other learning-related disabilities.

Contemporary research by some cognitive scientists shows a connection between thinking and movement, suggesting that regions of the brain that control movements are also actively involved in other types of thinking, such as communication (4). In the world of education, researchers and advocates are finding that incorporating physical activity into the school day is helpful to ensuring that students retain and comprehend the material they are learning in the classroom (5).

### **Play is learning about the outside world**

While play can occur indoors, there are unique benefits to the type of outdoor play that occurs in parks and open spaces. Along with the learning, creativity and challenge offered by all kinds of play, outdoor play offers the opportunity to explore natural and built environments, to make physical contact with plants, soils, sand, water and all different kinds of materials, to learn about how different objects and materials interact, and to manipulate the environment by moving objects and building new ones. Children and adults also gain health benefits from fresh air, sunshine, and greenery, which have been shown to have positive effects on mood as well as on cognitive abilities such as memory and attention. Some advocates have begun to use the term “nature-deficit disorder” to describe the negative emotional impacts on children who do not spend enough time outdoors (7).

### **Play can be solitary or social**

When people play by themselves, it can be an opportunity to explore personal ideas and challenges free from the interference or judgment of others. When people play together, as is typically the case for children using public parks, it can be an opportunity to learn and develop a different set of skills, including sharing, communication, cooperation, competition and trust. By developing these skills within an environment that is safe and enjoyable, people can gain a stronger sense of the importance of friendship, create long-lasting memories that shape their future outlook on social interaction and behavior, and build a stronger understanding of community. The sense of community becomes stronger when one considers that public playgrounds have a diverse, intergenerational set of users, including children, parents and caregivers, neighbors and other community members, all interacting with each other as they supervise, encourage, and participate in play. When children grow up, they retain associations with the places and ways in which they play, which can shape how they participate within the community and how they participate in play with their own children. Advocates promote the idea of “lifelong play,” which argues that people do not become removed from play as they get older, but assume different roles in the play process throughout their entire lives.

*“Play takes many forms. It may be best defined from within as a spontaneous human expression that relies on imagination and a sense of freedom,” [Elizabeth] Goodenough says. “Players invent alternative contexts for conversation, visualization, movement, and interaction with real objects. They discover release and engagement, stimulation, and peace. Although play can arise anywhere, even in a cement cell, children are naturally beckoned by the living world to enjoy perception and the sensations of being alive.” (8)*



*Undirected play allows children to learn how to work in groups, to share, to negotiate, to resolve conflicts, and to learn self-advocacy skills.(9)*



## **Goals for “Healthy Parks and Playgrounds” in Cambridge**

Because play is an important contributor to the health, development, and well-being of children and adults, it is important that all people have opportunities to play in their daily lives. While play does occur within the private realm, such as in homes, backyards, child care centers or recreational centers, public parks and playgrounds are important shared environments that provide play opportunities to everyone, every day. Public parks and playgrounds also provide opportunities to explore a wider range of landscapes and to meet and interact with a variety of people. Because public parks are a vital component of the play experience, they should be planned and designed with qualities that support the health benefits of play.

Open spaces in Cambridge have changed significantly in past decades. Park spaces are greener and more attractive with more trees, lawns and plantings than were commonly seen in the past. Play equipment and materials meet higher standards for quality, safety and accessibility than ever before. Security has been improved with lighting and emergency phones. Water play features are more widely available and work more reliably than they did in the past. There is more comfortable seating for adults to supervise child play in public parks. Currently, playground design is driven largely by considerations of safety, security, and accessibility for people with disabilities.

While it is critical that playgrounds meet modern standards for safety and accessibility, it is also vital that they support imagination, creativity, challenge and exploration. In some ways, meeting these standards will require innovative thinking about the way playgrounds are developed, operated and maintained. On the other hand, meeting these standards can also benefit from a “back to basics” approach that considers what play was like when it depended less on commercially manufactured play equipment and more on environments, objects and materials found in the everyday world.

The following goals are intended to guide future thinking about the qualities that parks, playgrounds and other play areas in Cambridge should have, so that they offer ample opportunities for safe, inclusive and healthy play.





*If there's no challenge, no pain of failure, [Mary Rivkin, a professor of education at the University of Maryland] argues, there's no learning – and less enjoyment. Indeed, according to [Roger Hart, director of the Children's Environments Research Group at the Graduate Center of the City University of New York], one problem with trying to child-proof playgrounds is that children, trying to make the safer playground equipment interesting, come up with unforeseen and often more dangerous ways of using it.(10)*

**1. Parks and playgrounds should be integrated play environments, not just collections of play features in an enclosed area**

Part of the nature of play is that it does not require spaces designed specifically for it. In fact, the places that many people most strongly associate with play tend to be settings like the woods and vacant urban lots – places that have more of a free, untamed character. Therefore the concept of a playground should not be limited to a fenced area with a collection of specialized, manufactured play structures and equipment. It should also include natural settings such as wooded areas, hills or grassy open fields. It could include flat, paved surfaces for riding bikes or bouncing balls, or could include sloped surfaces, rough terrain and large rocks to climb. It could include different kinds of artificial and natural materials to provide different visual and tactile experiences. It could have large, fixed play structures or a variety of fixed and movable parts. It could include unique artistic, musical, and other sense-stimulating elements along with elements that are purely functional and movement-based. Even features not specifically intended for active play, such as walkways and furniture, should be considered part of an environment that contributes to free play.

**2. Play environments should balance the need for a reasonable level of safety with the need for challenge, adventure and risk-taking**

For everyone, and especially for children, play involves testing physical and cognitive abilities. A play environment should provide a reasonable level of safety, but should also be an environment within which people are encouraged to challenge their own abilities. It should not be entirely free of risk, because without some risk children would be unable to realistically understand their limitations. Playground safety standards are based on reasonable expectations for preventing accidents and injuries. As playgrounds increasingly become more enclosed and contain only soft materials, a “playpen” mentality can result, giving some parents and caregivers a false sense that the play area and everything enclosed within it is risk-proof.

### 3. Play environments should support curiosity, creativity and imagination

A play environment is more than just a physical space, but a setting that can take on many characteristics based on the imaginations of the people playing. Good play environments should include a variety of forms, fixed objects and terrains that can allow players to invent their own make-believe play settings. For example, a play structure could become a castle or a treehouse, a pathway could be a river or a racecourse. Play environments can also include loose materials such as blocks and sand for creating new play environments, or a set of “props” that could be used in performances or make-believe play. Artistic or musical features that playground users can manipulate or change interactively can also add to the creative and whimsical qualities of a play environment.

*“The importance of this type of play is simply that this is how children learn,” says David Elkind, author of The Power of Play. “When children engage in spontaneous play in areas that are open, it nourishes creativity and imagination.”(12)*

### 4. Play environments should stimulate physical activity with many different types and combinations of movements

Movement in a variety of ways is crucial to developing strength, fitness, posture, balance, coordination, visual-motor integration, and safety awareness. There are movements that promote stability, such as bending, twisting, swinging, rolling, dodging, and balancing. There are movements that promote locomotor abilities, such walking, running, jumping, and climbing. There are movements that promote manipulative abilities, such as throwing, catching, and trapping (11). Moving the body in a variety of different ways, at low and high intensities, in multiple directions and with varied positioning of the body helps to develop the vestibular system, which improves balance, coordination and even cognitive abilities, especially in early childhood. So play environments should include different kinds of movement-oriented features, including paths and open spaces for walking, running, and crawling, off-the-ground elements for balancing, gripping, climbing and hanging upside-down, various types of swings, spinning features, slides, and loose or movable objects to push, pull, twist, carry or sometimes throw and catch. Movement could also incorporate cause-and-effect elements, such as a crank that causes a wheel to spin or a foot-pedal that starts a water spout. People of different ages and with different levels of physical ability will require different types of movement.



*The reasons toddlers spin, swing and race as if the world is their own private amusement park boil down to the fact that at this stage of development, both their bodies and their brains demand stimulation to develop. In this case, the input is physical, mental, sensory and what’s called vestibular stimulation – spurring the body’s balance center in the inner ear.(13)*



**5. A diverse range of play environments should be provided across the city to serve a full range of age groups and interests**

Playground users are of all different ages and have a wide variety of interests, and the park system should reflect that diversity. Parks should not all be alike, and their designs should respond to the needs of their intended user groups. Very young children may require smaller-scale elements that allow for simpler movements such as crawling, learning to walk, and manipulating objects. Slightly older children may need opportunities to swing, climb, or balance. More mature school-age children and teenagers may require play that is more challenging physically and intellectually, and some may require play that is more competitive and more social. Adults should also have a role in the play environment, as child caregivers, active participants, neighbors or passers-by. Differences in interests, abilities, and tastes may result in some play environments that have more climbing elements, some that have more natural elements, some that have more movement opportunities, and some that have more open space for free play. Overall, the park system should provide a range of these types of opportunities across the system, allowing each space to develop its own identity and providing users with access to environments that meet their specific needs.

**6. Play environments should be community places**

Because of the social and intergenerational nature of play, play environments have the potential to be not just settings for active recreation but places where relationships and communities can form. People of all ages can identify with a play space, whether it is a place that they frequently visit, or a place with a particular type of character or a unique feature that has special meaning to the people who use it. A sense of community builds around a group of people identifying with a play space. The benefits of community should be strengthened by including features that encourage socializing, such as tables and sitting areas for children and adults, play features that encourage simultaneous use by multiple people, and community news boards. Community can also be strengthened by supporting activities and special events that encourage people to come together.

### 7. Meaningful play opportunities should be available to children of all levels of ability

Meeting the requirements of the federal Americans with Disabilities Act and Section 504 of the state Rehabilitation Act of 1973 is a primary and essential consideration in the design of new public playgrounds. However, simply providing access does not necessarily ensure that children with special needs will have truly meaningful opportunities for play. A variety of play elements and environments should be provided that are inviting, challenging, and stimulating to people with different types of physical disabilities, as well as visual, hearing, or other sensory disabilities, mental or behavioral disabilities, and health issues that limit the types of activities a person can participate in. Examples might include ball play courts designed for wheelchairs, playgrounds with special musical, tactile or other sensory features for the blind, and movement-based features with different intensities to challenge children with different levels of coordination and sensitivity to movement.

### 8. Play opportunities should be provided during all seasons of the year and all weather conditions

Play occurs year-round and play environments should be available to people year-round, including times when it rains or snows. Some outdoor spaces might take on a new playful character during the winter, such as a hill or other sloped terrain that becomes a sledding area. Some play environments, such as a play structure with a roof, could become a refuge during the rain. Another approach might be to have a fully covered or indoor play environment that can be used when the weather does not reasonably allow for outdoor play. Currently there are several sites in the city that provide space for indoor recreation and sports, but few indoor locations that support free, unstructured play like the type found in an outdoor playground.



*Since children develop physically, socially, intellectually and emotionally through play, it is important they all engage in play regardless of cultural or social background and physical or mental capacity.(14)*





### ***Objectives and Recommendations for Future Improvements***

Achieving the goals for “Healthy Parks and Playgrounds” in Cambridge will be a long-term process. Cambridge’s system of parks and open space is large and varied, with incremental improvements being made over long periods of time as new parks are created, existing parks are renovated or redesigned, operational and programmatic capabilities evolve, and usage patterns change based on the needs and desires of the community. The Healthy Parks and Playgrounds goals should be considered whenever such incremental changes occur.

It will also be necessary to consider Healthy Parks and Playgrounds at a citywide level. Because variation in play environments is an important goal, the same approach should not be used in every individual park or playground project. Providing a range of different play environments within the system at large should be an important consideration over time.

The following objectives and recommendations are meant to guide the ongoing work of open space planning in the city, with the desired long-term result being an open space system that engages children and adults of all ages in free, healthy play.

**OBJECTIVE 1: Increase variety in parks and playgrounds to serve different needs**



The quality, safety, accessibility and inclusiveness of playgrounds have improved significantly over the years. The play spaces that have resulted, however, have begun to have a standard, artificial, uniform look and function. Playgrounds tend to include more manufactured materials such as brushed steel, soft plastic and rubber and fewer natural materials such as wood, stone, sand and living plant materials. Playground surfaces are generally flat and smooth, lacking slope or variable terrain. In the interest of safety, fewer playgrounds contain elements that allow intense movement such as spinning or swinging in different directions. Playgrounds also lack the types of loose, movable materials that children could play with creatively and imaginatively. While there is some variation in the size and character of play equipment, most playgrounds adopt a “one size fits all” approach that does not consider the need for escalating levels of challenge for children of different ages and ability levels. The character of a modern playground is typically that of a climbing structure and other fixed elements contained within a fenced and gated area. In some ways, this defies children’s natural inclination towards play that is free, exploratory and boundless.



Improving the system of parks and playgrounds to meet the goals of healthy play will involve increasing the variety of play environments available. Each park should have its own unique play features and aesthetic style, reflecting its particular setting, surrounding neighborhood character and collection of users. No single park is going to meet the play needs of everyone, but there should be various types of parks serving a diverse range of age groups and interests distributed throughout the city. Planning for a particular play space will require looking not just at that space, but across all parks at a neighborhood or citywide level.

Improving the quality of parks and playgrounds will also require a degree of innovation, and the willingness to try out new ideas that can broaden the opportunities for play and include more people in the process. These may include new types of swings, round-a-bouts or other play features that have not been seen before in Cambridge. In some cases, improvements may involve re-thinking what a playground is, such as creating a landscape with only natural features instead of a formal play structure.

RECOMMENDATIONS:

- **Incorporate the goals of healthy parks and playgrounds into all new City-directed playground development or redevelopment projects.** City park design and maintenance staff, as well as outside consultants hired for the design of city parks, should evaluate their work based on how it addresses the Healthy Parks and Playgrounds goals. Discussion of healthy play should also be a part of the public review process for new playground projects.
- **Consider the specific needs of different age groups in planning and designing parks and playgrounds, such as teenagers, pre-teens, infants and young toddlers.** Different play spaces throughout the city should be tailored to serve the needs of these specific groups.
- **Consider people with special needs and work to meet these different needs when conducting system-wide open space planning.** Special needs may include a range of disabilities or other physical, mental, development or health-related limitations. The variety of different play environments provided should include a variety of different activities so that across the system, there are play opportunities that are both inclusive and meaningful to children of all levels of ability.
- **Incorporate new and unique environments into the open space system that promote the benefits of play.** These might include “adventure playgrounds” that promote exploration and creativity, as well as art-themed parks, science-themed parks, nature playgrounds, wintertime playscapes and indoor/all-weather play spaces. If needed, pair grant funding or other outside resources (see Objective 6) with new types of play environments to provide for additional staffing, programming or operational expenses.
- **Develop a “Design of Healthy Parks and Playgrounds” guidebook to guide consultants hired to design public parks for the City or private developers creating publicly-accessible playgrounds.** City staff should make available a resource that will help disseminate the goals of healthy play throughout the landscape design community doing business in and around Cambridge.

*When a park is properly designed, it can improve the function of the brain within minutes. As the Berman study demonstrates, just looking at a natural scene can lead to higher scores on tests of attention and memory. While people have searched high and low for ways to improve cognitive performance, from doping themselves with Red Bull to redesigning the layout of offices, it appears that few of these treatments are as effective as simply taking a walk in a natural place.(15)*





*Most parents can retrieve memories of their own play as young children. This is a rich source that can be transformed into expanding a parent's repertoire about play, and children love to hear about their parents' favorite activities and toys.(16)*

## **OBJECTIVE 2: Promote a broader public understanding of play**

Community members are a significant part of the design, maintenance and operation of public playgrounds. Successfully achieving the goals of promoting healthy play throughout Cambridge will require the involvement and support of the community at large.

Park design can be challenging because it typically relies on engaging with a select group of immediate neighbors and users of a particular park, and often it is difficult to communicate how citywide goals influence planning and design decisions. In many cases, park users want to have the same type of park features found in other parts of the city, which can inhibit creativity and variety in playground design citywide. However, park users can also be advocates if they are engaged in discussions of what healthy play means and how it can be better incorporated into new parks. The general public should have a greater awareness of the need to take a citywide view when planning for parks and play environments, and should be active partners in developing and promoting new ideas for healthy play.

### **RECOMMENDATIONS:**

- **Produce informational and promotional resources about healthy play, such as brochures and web materials, for widespread distribution to the public.** These materials can be incorporated into open space planning processes and other ongoing planning work undertaken in Cambridge, and can be distributed at community events and through community organizations.
- **Conduct outreach and stimulate discussion on healthy play by visiting appropriate community groups and/or holding special events.** Outreach could include presentations, slide shows, discussions, video screenings, community events in parks, or other initiatives.
- **Consider temporary “healthy play” installations.** This could be a small outdoor space or possibly an indoor gallery exhibit that would help to showcase the goals of healthy play and demonstrate some of the innovative play ideas that could be incorporated into parks and playgrounds.

### **OBJECTIVE 3: Support education through outdoor play**

Because of its role in children’s overall health and development, play is a valuable component of children’s education. Since free, physical play can be beneficial to thinking and learning, recess is increasingly seen by educators, advocates and child development specialists to be an important part of the learning process. Physical education, while more structured than recess, also involves elements of active play. Both recess and physical education programs make use of outdoor spaces that could benefit from the same types of design considerations and features that would improve free play in parks throughout the city. However, school parks and playgrounds may also benefit from specialized design features that are tailored to specific curricular needs.

Outdoor educational programs are already included in the public school system in Cambridge as well as out-of-school educational activities. An example is CitySprouts, an outdoor gardening program that teaches students about food, agriculture, and ecology. Another is the Maynard Ecology Center, an indoor space that serves as a base for outdoor scientific fieldwork at Fresh Pond. Curricular programs in science, the arts, and other subjects could make similar use of outdoor play spaces, as could early education programs and after-school programs. In Boston, the non-profit Boston Schoolyard Initiative is implementing a pilot program to develop “outdoor classrooms.” These spaces include seats and tables, graphic designs, natural materials, and objects that can be incorporated into classroom instruction, and teaching kits are developed to facilitate outdoor lessons in science and other subjects. School playgrounds could also support the physical, occupational and language therapy programs that are based in some schools.

Improving school parks and playgrounds to support healthy play as well as curricular and out-of-school learning will require further thought and discussion with educators, School Department staff and out-of-school program staff to determine how outdoor spaces can be used to serve existing learning needs, and to determine how new types of play environments might help to open new possibilities for educational programs.





RECOMMENDATIONS:

- **Improve coordination among schools, program staff and other City staff in the planning, design, maintenance and programming of open spaces near school facilities.** School playgrounds would benefit from more communication between educators and park staff. Teachers, along with occupational therapy staff and other staff that may use outdoor spaces, should be involved in the review of school playground designs.
- **Plan and design school-oriented playgrounds to benefit the curricular needs for subjects such as recess, physical education and academics.** Work with educators to determine the types of play elements and other design features that would help them make the best use of outdoor space. Consider school-oriented playgrounds as potential “Play-Learn Environments.”
- **Support outdoor educational programs associated with the academic curriculum or out-of-school learning.** An example is CitySprouts, a learning program that has specific outdoor space needs. Other “outdoor classroom” spaces might provide unique opportunities for science experiments, art projects, mathematics, writing or other subjects.

**OBJECTIVE 4: Provide citywide advising and advocacy for the Healthy Parks and Playgrounds goals**

Creating a system of public parks and playgrounds that supports the goals of healthy play, serves a wide variety of age groups and special needs, and provides a diverse collection of play environments will be a long-term effort. Ongoing feedback and advocacy at a citywide level will be important in sustaining this effort, with Cambridge residents, businesses, city officials, staff, educators, child health and development specialists, and other community members all having a role.

**RECOMMENDATION:**

- **Establish an advisory group for citywide park and playground planning.** This group would include interested and informed Cambridge residents with knowledge of play, education and child development, along with representatives from the City Manager’s office, Community Development Department, Department of Human Service Programs, Department of Public Works, School Department and Healthy Children Task Force. This group would meet to discuss and evaluate the implementation of the Healthy Parks and Playgrounds goals and objectives and to advise City staff on future planning.





#### **OBJECTIVE 5: Research and evaluate play opportunities**

Evaluation will be a necessary part of the planning process to determine how new approaches to playground planning, design and operation are accomplishing the goals of healthy play. Informal evaluation of open spaces typically occurs through observation, surveys and on-site interviews conducted by city staff to learn about how parks are used, what people like about them, and where there may be issues or problems to consider in future planning. This approach can provide useful information on an ongoing basis, as can sharing information with program providers, school staff, or other established groups that use parks on a regular basis. More formal research on the health and development benefits of new play environments may require dedicated grant funding or partnership with institutions, such as university departments or public health organizations.

#### **RECOMMENDATIONS:**

- **Conduct ongoing formal and informal assessments of parks and playgrounds.** This will help in understanding and documenting how different play elements and features are being used. This should also include input and feedback from school staff on the use of parks that are near schools.
- **Explore opportunities to involve researchers and students in studying the benefits of innovative play spaces and programs on childhood health, learning and development.** Local institutions, including Lesley University and the Harvard School of Education, may have a special interest in this topic and could become partners in the research and evaluation process.

**OBJECTIVE 6: Evaluate the resources needed for the ongoing development, maintenance and operation of parks and playgrounds**

Future improvements to the system of parks and playgrounds will require resources, not just for design and construction but for ongoing maintenance, operations and programming. As the variety of spaces, materials and equipment provided throughout the city increases, there may be a greater need for more specialized knowledge and skills to care for the system. Some of this need may be accommodated through staff training and other improvements to existing services. Outside resources may also be sought to complement the resources provided by the City.

RECOMMENDATIONS:

- **Develop and maintain a detailed inventory of materials and equipment available in public parks and playgrounds, including specifications for maintenance and replacement needs.** This would be maintained electronically and used by park maintenance and recreation staff.
- **For each new park or playground design, include a maintenance and operation plan.** This will help to clarify the amount and type of staffing, materials and other resource needs for new types of play environments that may require differing levels of specialized attention.
- **Actively seek public or private grant sources to support the design, development, maintenance or operation of parks and playgrounds.** These may include state or federal programs directed towards open space, as have been used by the City in the past, as well as private organizations that support active play or community health.
- **Explore possibilities for partnering with volunteers, businesses, educational institutions or other organizations to support the maintenance, operation or evaluation of open spaces and play.** These could include “friends of the park” groups, area business associations, or private recreational providers that could participate in ongoing upkeep, host activities or organize community events. While this might relieve some resource needs, staffing would still be needed to coordinate with outside groups.



*“We need not only new types of playgrounds but also an urban environment that makes it possible for children to participate in urban life,” [sociologist Baldo] Blinkert says.(17)*



### **OBJECTIVE 7: Plan beyond playgrounds**

Since play can occur anywhere, and generally does occur everywhere, providing a healthy and safe environment for play requires considering not just the quality of parks, but the overall public environment, including the transportation routes that bring children and families to parks and schools, the location of new community housing, and the commercial uses that attract children and families. Looking to the future, there may be opportunities to make the entire public realm not just functional, but also more imaginative, playful, interactive and stimulating to children and adults alike.

#### **RECOMMENDATIONS:**

- **Explore ways to incorporate imaginative, interactive and playful elements into public areas such as streetscapes, foot/bike pathways, plazas and pocket parks.** Some possibilities include public art pieces, fountains, varied terrain features, and information displays.
- **Encourage the incorporation of playful features or play environments into new housing and commercial development where appropriate.** This could be done by incorporate small, interactive play elements into retail plazas or open yard spaces, and may be especially important in instances where the space will be open to the general public.

## **Implementation Steps and Timeline**

The following timeline provides a framework for implementing the recommendations of the Healthy Parks and Playgrounds Task Force. The specific actions that advance the Task Force’s goals and objectives are intended to be incorporated into the City’s ongoing open space projects, recreational programs and other initiatives related to children’s health, development and education. Such initiatives are overseen by the interdepartmental Open Space Committee, the Healthy Children Task Force, and the Cambridge Public School Department, among other departments and groups.

### **Short Range (1-2 years)**

- 
- Establish a Healthy Parks and Playgrounds Advisory Committee to provide periodic advice on implementation of the Healthy Parks and Playgrounds recommendations.
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- Develop an inventory of existing parks and playgrounds to determine how they currently support the Healthy Parks and Playgrounds goals.
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- Develop guidelines for the appropriate distribution of different types of play features and activities throughout the City and incorporate Healthy Parks and Playgrounds goals and objectives into ongoing playground renovation projects.
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- Develop “Design of Healthy Parks and Playgrounds” guidelines for design consultants.
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- Develop “Healthy Parks and Playgrounds” publications and resources for the general public.
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- Plan and implement a series of Healthy Parks and Playgrounds education and outreach activities (e.g. lectures, presentations, video screenings, community events, interactive gallery exhibit).
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- Compile a resource of public and private grant sources that might fund the development or operation of innovative play environments. Identify and pursue grant funding opportunities for projects that support the Healthy Parks and Playgrounds goals.
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- Develop a plan for identifying businesses, institutions or organizations that could be potential partners in operating, maintaining, programming and evaluating new play environments. Explore ways for volunteers to supplement existing maintenance programs, and for local institutions to support programming, research and evaluation.
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- Develop guidelines as a resource for the incorporation of play environments into residential and commercial development as appropriate.
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## **Implementation Steps and Timeline**

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### **Medium Range (within 6 years)**

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- Identify locations for new park facilities that serve groups of children with different needs, including teenagers, infants/toddlers and children with special disabilities or chronic health problems.

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- Identify locations for unique types of playgrounds including adventure playgrounds, playscapes, nature playgrounds and indoor playgrounds. Identify appropriate grants or other funding sources for these playground types where they might require additional staff or other ongoing operational expenditures.

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- Working with School Department officials, identify spaces on or near school facilities that could serve as “outdoor classrooms” for specific subjects (science, art, physical education, &c.) or general studies. Determine what park features would be included in such a space and develop “learning kits” to facilitate the use of park elements.

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- Work with transportation planners, the Traffic, Parking and Transportation Department and the Department of Public Works to identify opportunities for play-friendly streetscapes, nodes of incidental play along vehicular corridors, and non-vehicular corridors linking existing and future parks.

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- Implement new training programs for parks staff, recreation staff and volunteers to support the maintenance and programming of play environments, including active participation from park design staff and school staff.

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- Implement partnerships with businesses and organizations to aid in the maintenance and operation of existing and new play environments.

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- Begin evaluating the benefits of newly developed play environments and opportunities, possibly through partnerships with local institutions or foundations.

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### **Long Range (within 10 years)**

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- Provide access to a variety of unique play environments throughout the city. Priorities include an adventure playground, nature playground, indoor playground, and a park that specifically serves the needs of teenagers. Other unique environments that may be provided include an infant park, disability/healing park, science park, arts park, and outdoor classroom. These could be new parks or elements within existing parks. Ensure that long-range funding from grants or other sources are provided to support increased staff and/or facility operational needs.

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- Complete post-construction evaluations of the performance of Cambridge’s new play environments, investigating issues such as the quality and variety of play opportunities offered, user comments and satisfaction, correlations between playground use and overall health, and effectiveness of maintenance and programming practices.

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- Based on evaluations of these new play spaces, revise and update the plan for expansion of new park and playground types citywide as appropriate, accounting for community needs, space needs, design and development needs, maintenance needs, and recreation staffing needs.

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