TRENDS

Analysis

Section I: National Trends

Following are national trends that have been identified as having an impact on the Parks and Recreation Department. While the Department is unable to control external factors that result in these trends, they can acknowledge the facts and create a strategic long-range plan to address them within the community.

Adult and Childhood Obesity

The evidence regarding a surge in childhood and adult obesity is compelling and the implications are troubling. Research indicates that poor eating habits and physical inactivity are the major culprits contributing to today's obesity rates and over-the-top presence of life threatening diseases. The most recent projections published in the American Journal of Preventive Medicine warn that 42% of Americans may end up obese by 2030 (up from 36% in 2010), and 11% could be severely obese, roughly 100 or more pounds over a healthy weight (vs. 6% in 2010). The Columbia/Boone County Department of Public Health and Human Services estimates that approximately 10 percent of the area's children are overweight or obese, and almost twice as

many have a risk of becoming overweight or obese. Local government and non-profit agencies in Columbia are working to create a culture of health and wellness through policies, infrastructure, and education.

Approximately 10% of Columbia/ Boone County children are overweight or obese.

Recommendations:

- Construct playgrounds and provide fitness equipment at all park and sport facilities.
- Develop park and sport facilities in underserved neighborhoods.
- Continue to increase opportunities for trail access within close proximity to existing and future residential developments.
- Promote community gardens and edible landscaping on public lands.
- Advocate for public transportation and non-motorized transportation for easy access to park and trail facilities.
- Conduct "walking audits" to identify problems with connectivity, safety or traffic calming needs for safe access to neighborhood parks.
- Provide nutritious food and beverage options at concessions, vending machines and recreation programs.

Surge in Older Adult Demographics

The ever-changing complexion of the nation's population is creating a new future. U.S. Census Bureau projections indicate a much more aged population with increases in the numbers of "new-old" and the "old-old" as the "Silver Tsunami" of the baby boom generation hits. Older adults will become a larger segment of the population while enjoying better health and longer life expectancy. Recent Census studies estimate that by 2030, 20 percent of the U.S. population will have reached the age of 65 (72 million Americans). The average life expectancy in the United States is 78 (75.6 for men and 80.8 years of age for women). With breakthroughs in

medicine, technology, and improved standards of living, the life expectancy is still growing. Leisure service providers are now presented with the challenges of providing services for a group that is not only diverse in age, but also in economic status and physical and mental capabilities. Columbia is a highly-rated choice for Americans looking to buy retirement

By 2030, 20% of the U.S. population will have reached the age of 65.

property. In 2011, *U.S. News and World Report* placed Columbia as number 8 on the "Top 10 List" for where retirees can plan to purchase property for less than \$600 a month in a smaller metropolitan community. An influx of retirees can have a significant economic impact. If 100 senior households (each earning \$40,000 in retirement income) relocate to Columbia, then the addition of \$4 million in household income could have as much of economic impact on the community as a new business. CPRD has much to gain by engaging this demographic with their newfound discretionary time for volunteering and potential program participation.

Recommendations:

- Expand opportunities to meet the desires of skilled baby boomers looking for professional and management volunteer positions.
- Program to include aging population needs, (aquatic therapy pools, pickleball courts, low-impact fitness classes, etc.) with more programs offered at mid-day.
- Expand facilities and programs that provide social interaction.
- Expand facilities that support healthy activities, such as golf, swimming, walking and bicycling, as well as passive-use areas, such as gardens, cultural and historic sites.
- Develop educational programs and opportunities, such as interpretative signs and programs.
- Establish medical emergency criteria geared toward senior participants (i.e. emergency procedures, medical/pharmaceutical history forms, adequate medical equipment in place, etc.) to ensure their safety and well-being.

Ethnic Diversity

Data from the 2010 U.S. Census Report provides insight to an ethnically diverse nation. According to the report, more than half of the growth in the total population of the United States between 2000 and 2010 was due to an increase in the Hispanic population. The

By 2035, one third of all American youth under 18 will be Latino.

Hispanic population experienced growth during that time in all 50 states, with the state of Missouri seeing a 79.2 percent increase. California, Texas and Florida had the highest percentage of Hispanic population growth. According to the same report, approximately one in every four youth in the United States is Latino (i.e., individuals from Latin American descent who are under 18 years of age). Research by the Pew Hispanic Center indicates that by 2035, one third of all American youth under 18 will be Latino. The rapid increase in the Hispanic population has prompted a desire among recreation service providers to better understand their cultural and recreational needs. The spring 2012 Journal of Parks and Recreation Administration cites a research study that found Latino youth differed greatly from non-Latino youth in a number of key areas, including inactivity, poverty, overweight, teen pregnancy, and education levels. The study also found that Latino families place a higher importance on using parks as a location for family and social gatherings.

Recommendations:

- Foster better communication between various international stakeholder groups with Spanish-language public service advertising campaigns and program information.
- Train and hire as diverse a staff as possible at aquatic and recreational facilities and provide outreach efforts utilizing bicultural and bilingual staff.
- Partner with the Health Department on social marketing campaigns focused on drowning prevention for lessor served communities.
- Encourage Latino youth-specific research in the field of recreation and park services.
- Train staff to successfully communicate and deliver quality customer service for multicultural environments.
- More space for special events and non-programmed areas.

Economic Climate

Recreation and park agencies are not immune to the challenges of an economic downturn and high unemployment rates. Early in 2012, the State of California announced its preliminary plans to close 70 of its 276 state parks. Closer to home, St. Louis County recently struggled with threats to reduce a budget funding gap by selling park

Columbia's 22.9% poverty rate is higher than both the state and national rate.

land to private investors. Poverty, another economic indicator, infiltrates every aspect of local government with burdens that are multiplied by decreasing federal and state support. In stark contrast to Columbia's unemployment rate (4.6 percent vs. 7.8 percent nationwide), the City's 22.9% poverty rate is higher than both the Missouri rate (14%) and the national rate (13.8%).

Fortunately, with every recession comes the prospect and importance of preparing for economic recovery. City financial reports show a minimal increase in sales tax revenue - estimated at 2% increase from FY 2012 over FY 2011 - indicating that family budgets are loosening, but discretionary spending is still limited. Parks and public spaces are well known as free places to play, rejuvenate, and meet and mingle. In addition to social and ecological functions, parks and trails also serve as catalysts for economic development, neighborhood and town center revitalization and increased property values. A case study on Ludlam Trail in Miami indicates the shared-use trail will increase property values from \$121 to \$282 million over a twenty-five year period realizing between \$2.47 million and \$5.74 million in

Did You Know?

Outdoor recreation provides the nation with the following economic benefits:

- 6.1 million American jobs
- \$646 billion in outdoor recreation spending each year
- \$39.9 billion in federal tax revenue
- \$39.7 billion in state/local tax revenue

additional property tax revenue. According to the Birmingham Business Journal, a weekend 2012 soccer tournament hosted 226 teams with over 6,000 visitors and generated a local economic impact of \$3.7 million. It is increasingly important for CPRD to be in a position to be an economic driving force in the community while also emerging from the recession.

Recommendations:

- Allocate resources to establish partnerships to fund park acquisition and development.
- Allocate financial resources for strategic land acquisition to preserve parks, trails, open space and green belts especially in underserved neighborhoods.
- Increase advocacy efforts with constituents regarding investments in facilities, parks and green space as beneficial to tourism, job creation and increased community health and wellness.
- Continue to evaluate fees and charges in order to retain customer base and remain competitive in the market.
- Leverage available financial resources with both private and public grant funding.
- Balance fee-based program and facility offerings with low-cost and no-cost opportunities for low-income citizens.
- Continue budgeting funds for recreation financial assistance and adapt the financial assistance budget to meet community needs, as funding allows.

Technology and Social Learning

Social learning, combined with the explosion of mobile devices such as smartphones and tablets, is having a huge impact on how governments think about communicating with the general public - especially the 76 million Generation Y or Millennials who are plugged-in 24/7. According to the White Hutchinson Group, approximately 50% of cell phone owners will soon utilize a smart phone with Internet access. Mobile apps are growing in popularity, as is the use of Quick Response (QR) codes. A trend in 2012 that further encourages the use of mobile devices is cloud computing. NASA's Linda Cureton, Chief Information Officer, speaks of the importance of cloud technology in 2012, "The thing everyone was looking at in 2012 was cloud computing." Government agencies, businesses, and local organizations are using cloud technology to provide access to software and relevant data from any desktop computer, tablet or smartphone. Additionally, the power of social media, defined as a "social instrument of two-way communication" is having a global effect that has never been seen before. Online media is effectively creating a global living room by allowing people nationwide to share an experience. Technology also creates customer expectation of instant services and communication. In order to meet these expectations, the Department will need to continually upgrade its technology and provide adequate training for staff.

- Create a Department mobile application for access to programming and facility information.
- Increase access to online program and facility reservations.
- Provide Wi-Fi access at large gathering areas, such as park shelters, special event sites, and sport complexes.
- Increase utilization of social networks to promote programs, facilities and to assist with public input on park planning.
- Increase utilization of YouTube, blogging, podcasting for Department updates, programming and awareness campaigns.
- Provide "work friendly" places in parks with shade and access to power and Wi-Fi.

Children and Nature Movement

Increasingly, terms such as "natural playscapes" and "nature explorer classrooms" are finding their way into the lexicon of public parks and recreation agencies. This comes from a surge in encouraging families to reconnect with nature as suggested in Richard Louv's book *Last Child in the Woods*. Louv coined the term "nature deficit disorder" and also popularized the notions that as children have become more sedentary and "plugged-in," their subsequent disconnect with nature has resulted in serious consequences for their health, education and general well-being.

The need for a child-nature movement has created an increase in public ad campaigns and gateway activities - outdoor activities that are popular and accessible - to encourage families to reconnect with the outdoor environment. In an effort to motivate Hispanic families to reconnect with nature, the Ad Council and the U.S. Forest Service partnered in 2012 to launch the *Descubre el Bosque* public service advertising campaign - an extension of their popular Englishlanguage *Discover the Forest* campaign started in 2009. The ads reinforce the idea that forested destinations are ideal sites for family enjoyment and are often much closer than people perceive. Additionally, the Missouri Department of Natural Resources initiated the *Children in Nature* campaign, which is similar to other national programs aiming to provide outdoor education programs to children. The goal of both campaigns is to increase visits to state parks and our Nation's forests and grasslands, as well as to help children develop a love of nature and an understanding of their role in protecting it.

Recommendations:

- Continue acquisition of land for community parks, greenbelts, trails, and natural area preservation.
- Create or incorporate smaller theme-based nature playgrounds or "pocket parks" along existing trail connections or greenbelts.
- Program environmental education programs within new or existing youth programs to encourage outdoor interactive play.
- Partner with other governmental agencies and public/private schools on nature education programs.
- Develop interpretative sign or smart phone applications that allow for self-guided tours along unique natural areas.

Bicycles and Non-Motorized Transportation

According to the World Future Society publication Forecasts, the future is full of bicycles with "bike use increasing around the world, as evidenced by the creation of bike trails, rising popularity of bike tours, and more doctors encouraging their elderly patients to bike for

exercise." A Rutgers University study found that the number of cycling trips rose 64% in the United States between the years of 1990 and 2009, with biking specifically for transportation (as opposed to recreation) comprising 54% of all trips. The Rutgers study indicates that the surge in bicycling can be attributed to a major increase in Transportation Enhancement funding aimed

Bicycling trips in Columbia increased 26% between 2007 and 2010.

at improving cycling and pedestrian infrastructure. This increase in funding has led to a "cycling renaissance" nationwide with bicyclists increasingly becoming part of the daily landscape,

whether commuting or enjoying trails and parks for health, wellness, and/or recreation. Vibrant cities are going to great lengths to support residents' desires for more of a "bicycle culture" in terms of existing and planned infrastructure.

In 2006, Columbia and three other pilot communities were selected to participate in the federal Non-motorized Transportation Pilot Program under the SAFETEA-LU legislative act. The purpose of the program was to reduce motor vehicle trips and replace them with trips made by bicycling or walking. In Columbia, the original \$22 million in allocated funding focused on sidewalk, intersection and roadway improvements (sharrows, bike lanes and bike boulevards) and the development of pedways and trails. Funds were also allocated for encouragement and education programs. The U.S. Department of Transportation confirmed in its final report to Congress that positive results had been measured from Columbia's participation in the program. The report revealed that bicycling and walking trips increased 26 percent and 14 percent, respectively, between 2007 and 2010. This equates to 541,000 additional non-motorized trips in 2010 with a commensurate reduction in driving trips. Complementing this finding is a perception change, with surveys indicating that residents' impression of Columbia as a bicycle-friendly city increased from 66 percent in 2007 to 80 percent in 2010.

Recommendations:

- Continue strategic land acquisition for parks, greenbelts, green space and natural area
 preservation to create recreational trails that aid in the creation of a bicycling and
 pedestrian system.
- Develop a bike park to include the following: BMX track, cyclocross course, mountain bike skills course and traffic skills course.
- Provide programs and services to promote bicycling as a lifelong leisure activity.
- Incorporate infrastructure in greenways, and parks and trails that support and encourage pedestrian, wheeled recreation, and utilitarian bicycling to local places of interest.
- Advocate for lower speed limits and develop traffic calming infrastructure near neighborhood parks and greenways.

Section II: Policy and Management Trends

Municipal parks and recreation departments are guided by ordinances and policies that influence management decisions and subsequent procedures for how work is conducted. These policies may impact how parks are designed or lead to park renovations. For example, if it was decided that the new baseball fields are for games or tournament play only and not open for practices, perimeter fencing or other means to control or restrict access would have to be included in the design or renovation plans. Often these additions or changes to policies are driven by new mandates imposed by federal or state legislative regulations, consumer demand, or industry best practices. Federal mandates are not often accompanied by funds for implementation, resulting in a trickle down financial burden to states and local municipalities. The impetus for including the following policy and management trends is based on a need to plan for potential implementation, as well as keep up with industry trends.

Power-Driven Mobility Devices and Trail Accessibility

On September 15, 2010 the United States Department of Justice revised rules to the Americans with Disabilities Act (ADA) in regards to Other Power Driven Mobility Devices or OPDMDs. The new rule became effective March 15, 2011 recognizing OPDMDs and also allowing persons with mobility disabilities to operate a "mobility device of choice" in any indoor or outdoor areas open to pedestrian use. The new rule states that "other power-driven mobility device means any mobility device powered by batteries, fuel, or other engines—whether or not designed primarily for use by individuals with mobility disabilities—that is used by individuals with mobility disabilities for the purpose of locomotion, including golf cars, electronic personal assistance mobility devices, such as the Segway® PT, or any mobility device designed to operate in areas without defined pedestrian routes, but that is not a wheelchair."

This two-tiered approach has public agencies scrambling to make "reasonable modifications" in policies, practices and procedures. Identified issues to be specified in established policies include: type of motor vehicle to allow or not allow (e.g., internal combustion engines), use of electric vehicles (e.g., Segways® or electric assisted bicycles), size and weight limits, speed limit and trail limitations (e.g., grade or trail surface). Agencies are recognizing the need to modify policies as they gain experience with visitor needs and new uses on trails. Interim policies - many requiring an operating permit - are being utilized to ensure both safety and legality of vehicle use.

Recommendations:

- Reevaluate trail surfaces to meet ADA regulations.
- Replicate regulations as adopted by the Missouri Department of Natural Resources for ADA accessibility specifically related to the KATY Trail.
- Monitor public use patterns and technology advances in order to modify the type of OPDMD allowed in specific facilities and on specific trails.
- Update signage, brochures, website, and other media to reflect rule modifications.

Tobacco-Free Park Zones

Creating designated tobacco-free zones in outdoor parks and recreation facilities is rapidly becoming standard practice in outdoor facility management. This initiative most often stems from resident concerns and desires for a clean and healthy environment throughout community park systems. The New York State Office of Parks, Recreation and Historic Preservation created smoke-free areas in outdoor settings where large numbers of people congregate (e.g. 100 ft. within historic sites), including around playgrounds and pools. The Young Lungs at Play initiative, funded by Penn State Extension, is a program to help Pennsylvania communities create smoke-free parks, playgrounds and recreational areas for children. Proponents of tobacco-free playground policies indicate they are an important health initiative that will greatly discourage smoking in areas that are used by children, as well as eliminate second-hand smoke. An added benefit is a visible reduction in litter from discarded cigarette butts. Active enforcement is cited as an issue, with most agencies expecting voluntary compliance from park patrons.

- Install signage at all playgrounds indicating "smoke or tobacco free" facility.
- Work with youth athletic organizations regarding tobacco-free education.

Sustainable Design and Management Practices

Incorporating energy saving and sustainable practices in the design, maintenance, and construction of parks and facilities are now expected by the general public. Examples of "green" building concepts include geothermal heating and cooling, structural insulated panels (SIPS), high-efficiency windows, smart irrigation controllers and utilization of recycled-content materials. There is also a movement towards reducing landfill debris by incorporating "deconstruction" building techniques – diverting waste with re-use of building components from vacated structures. Studies have shown that only 25% to 30% of building material debris is recycled, but as much as 75% could be reused with a concentrated effort. The 2011 Columbia citizen survey found that 87% of respondents think it's important for the City of Columbia to support sustainability programs that help reduce landfill waste and pollution, conserve energy and protect water resources.

Recommendations:

- Construct, remodel, maintain and operate facilities with sustainable and environmentally-conscious practices.
- Place greater emphasis on environmental choices and ecological services.
- Promote LEED certification and sustainable design of landscapes and park facilities, including waterway restoration and stormwater facility improvement.
- Increase tree canopy through preservation of open space and tree planting.
- Utilize synthetic turf at select outdoor facilities in order to reduce use of fertilizer and pesticides.
- Increase interpretive signage as a means of education and eliciting increased conservation practices citywide.
- Enhance recycling and composting at public facilities.

Urban Wildlife and Habitat Management

Being a good steward of conserved land sometimes means more than just leaving the land untouched. Allocating resources to create habitat is a growing 38% of Americans 16 years and older participated in wildlife-related recreation in 2011.

movement within municipal parks and recreation departments for wildlife management and wildlife viewing opportunities. Participation in wildlife-associated recreation has increased in 28 states since 2006, according to the findings of the 2011 report released by the U.S. Fish and Wildlife Service. Overall, the 2011 survey found that 38 percent of Americans 16 years of age and older participated in wildlife-related recreation in 2011, an increase of 2.6 million participants from the 2006 survey. Specifically, 11 percent more Americans fished and 9 percent more hunted in 2011 than in 2006. Habitat management involves manipulating the types, amount, or arrangement of food, water and cover for the purpose of making the habitat more suitable for a specific species or group or species.

- Partner with land management agencies and research funding sources for development of an urban wildlife and habitat management plan to provide guidelines for integrating natural and human systems in Columbia's parks and open spaces.
- Create educational and recreational programming opportunities regarding land use management and wildlife preservation.

• Continue to protect interconnected natural land and water networks. It is this network that provides habitat, clean air, clean water, and significant economic, environmental, and social benefits for people and nature.

Special Events

Park special events include sporting events, concerts, and festivals held at sports complexes, stadiums, fairgrounds, amphitheaters, and shelters. They also include events at temporary venues such as parades, fireworks displays, bicycle rides, sporting games, marathons, seasonal festivals, and milestone celebrations. In a 2009 Federal Highway Administration report, the number of planned special events held annually is growing, subsequently resulting in a strain on municipal budgets and infrastructure. The study also found that direct revenues are about \$40 billion annually in the U.S., but indirect spending and secondary economic effects raise the total economic impact of large special events to \$164 billion.

Municipal leaders are challenged with minimizing the financial impact special events have on public resources while retaining their many benefits. The *Portland Tribune* recently published an article noting that in 2006, the traffic division of the Portland Police Department spent \$363,000 in overtime expenses alone for special events, out of which the department recovered only \$48,000. The City of Phoenix has policies in place stating clear objectives of full cost recovery for public special events.

An increasing number of private individuals and for profit businesses recognize the financial benefit of hosting special events on government property. Event organizers often promote the economic benefit of increased sales tax as a means to negotiate reduced fees for municipal services. In Fiscal Year 2007 the Columbia Parks and Recreation Department processed 216 special event applications from private individuals, agencies and corporations. Applications grew to 290 in Fiscal Year 2011. As these events continue to grow in number and complexity, an ongoing concern is that the City is only recovering a small percentage of labor and financial resources required to host these events.

Nationwide, city leaders are considering the benefits of conducting and operating their own special events in order to at least minimally recover operating costs and at best, generate revenue. As part of effective cost recovery of programs and facilities, municipalities must evaluate the resources involved and the expected benefits. Once such an evaluation is completed, appropriate management policies can be selected and implemented to assist with cost recovery efforts.

- Identify, acquire and develop parkland to include generic, open space to provide opportunities for large scale events (e.g. concerts, hot air balloon rallies, etc.). Plan for adequate infrastructure (e.g. restrooms, potable water, shade, parking) to accommodate special event use.
- Provide Wi-Fi access at large gathering areas, such as park shelters, special event sites, and sport complexes.

- In an effort to minimize solid waste, establish guidelines and policies requiring 25%-100% recycling of generated waste (e.g. food composting stations, recycling containers, etc.).
- Work with City Council and other departments to establish policies and standards regarding the City's support of special events as related to fee structure and in-kind services. Policies and standards should be established to support economic commerce without impacting the department's established cost recovery goals.
- Identify City resources to establish true cost tracking methods related to special event municipal services.
- Work with City Council to establish a planned special event contingency line item for events that are granted partial or full-fee waiver status. Contingency funds would not only create transparency in cost management, but also be available for distribution to appropriate City departments for cost recovery measures.
- Identify and establish City staff resources to organize and promote revenue generating special events to include concerts, sporting events and festivals.

Section III: Parks and Recreation Facility and Program Trends

Following are leisure service trends which require supporting park facilities and may eventually have some impact on CPRD. While the Department acknowledges that other trends exist, it has been determined that the following will have significant impact based on the public input process and best practices occurring within the field of parks and recreation.

Sports Tourism Facilities

Development of an indoor and/or outdoor sport complex is a concept many cities are considering for their long-term strategic plans in combination with promoting their community as a traveling sports market destination. Creating a sports tourism lure involves collaboration of multiple organizations to build tournament-quality facilities capable of hosting regional and national events while also servicing local recreational needs. Sports tourism is



Photo Courtesy of smithriversportscomplex.com

being tried on for size in large cities, as well as communities with populations as low as 70,000. In Martinsville-Henry County, Virginia (population 68,000), the Smith River Sport Complex, a \$9 million, 90-acre multi-use sports facility has quickly become an economic driver. Early reports indicate that it more than doubled its estimated impact on the local economy between 2010 and 2012. Scheduled activities include sport tournaments (soccer, football, lacrosse, T-ball and ultimate Frisbee), as well as sport camps and special events. Small communities that are excelling in their sport tourism endeavors appear to be those with expanded reach into surrounding counties or those with significant natural or man-made tourist attractions (e.g. shopping, premier aquatic facilities, professional sporting events, etc.) already serving as a regional draw.

Waterparks

When it comes to improving the attendance and cost recovery of commercial pools, the consensus is overwhelming in favor of adding more fun. Aging "cement hole" facilities – with exorbitant repair and maintenance costs - are increasingly being replaced with multi-service recreational facilities. Aquatic facilities with the best financial returns also have amenities that appeal to broader audiences with inclusion of aquatic therapy pools, vertical exercise areas (both shallow and deep water) and learn to swim amenities. In a 2009 Industry Report Survey



Photo Courtesy of topxlists.com

conducted by *Recreation Management*, 10.5 percent of Parks and Recreation Department respondents indicated they have waterparks or foresee this as a trend within municipal agencies. Park departments were also more likely to plan for aquatic exercise programs, special needs and youth and adult swim teams. The top planned addition (10.2 percent) for all aquatic management agencies surveyed (including YMCA, municipal agencies and health clubs) were splash play areas due to their recreational appeal, low maintenance and minimal staffing costs. Nearly a third (28.5 percent) said they planned to add additional play features to their facilities in the next three years. The most commonly planned additions included:

- 1. Water play structures
- 2. UV disinfection systems
- 3. Waterslides
- 4. Zero-depth entry
- 5. Solar pool heating and pool lifts/accessibility equipment (tied)

Bike Parks and Mountain Bike Facilities

According to the Outdoor Foundation's 2010 Outdoor Recreation Participation Report, road biking, mountain biking and BMX biking are fourth in most popular outdoor activities by participation rate for Americans, ages 6 and older. Interest in bicycling of all types has led to an increase in development of bike parks. Bike parks are typically family-oriented facilities with a variety of amenities such as BMX tracks, bike skills courses, pump tracks (short loop course) and flow tracks (roller coaster for bikes). Cyclocross courses and



Photo Courtesy of bouldermountainbikes.com

mountain bike trails are also frequently utilized in bike park design, as well as amenities for spectators and non-cyclists. Bike parks range in size from 3 to 50 acres and typically service day to day recreation use, programming and as a venue for races. The Boulder Parks and Recreation Department recently developed Valmont Bike Park, a 42 acre natural-surface cycling facility with a "skill progression" design that services all ages, abilities and riding styles. This design allows riders to improve their skills as they work their way up to advanced-level single track, hard-packed dirt jumps and cyclocross elements throughout the park. Additionally, the National Interscholastic Cycling Association was recently created as a non-profit organization dedicated to establishing mountain-biking as a high school sport.

Outdoor Adult Gyms

The outdoor adult gym – or multigenerational playground concept -originates in China where it was promoted as a national fitness campaign prior to the 2008 Summer Olympics. This concept is a progressive evolution of fitness trail par courses which gained popularity in the early 70's. Outdoor gyms incorporate low impact exercise-equipment (e.g. chin-up bars, cross trainers, stationary exercise bikes) designed to be used without the need to adjust weights, pins or cords and instead rely on balance or low resistance. Each



Outdoor Gym at MKT Stadium Access, Columbia

apparatus is designed to be outside 24/7 with the initial purchase costs and in-house installation and maintenance being significantly less than similar fitness center machines. Outdoor adult gyms are increasing in number and are often found as clusters along trailheads, abandoned lots or adjacent to children's playgrounds – encouraging healthy multigenerational interaction between caregivers and children. Outdoor gyms located at trailheads have a wide appeal to walking or running groups serving as a social gathering location. Research indicates that cost and accessibility are the two main barriers for people wanting to exercise. The adult playground concept allows for a free, convenient workout location.

Nature Playgrounds/Nature Explorer Classrooms

In response to the epidemic of "nature deficit disorder," park planners are taking part in a robust movement to design play areas with more natural elements in order to encourage traditional outdoor play, as opposed to "structure play." "Undeveloped" sites with minimal alterations use the natural landscape and natural textures as a model to incorporate interactive structures, such as hollowed-out logs, tree forts, large boulders, climbing walls and natural water



AP Photo/Natural Playgrounds Company

features. Developed or hybridized sites utilize a healthy mix of manufactured structures while still maintaining the natural integrity of the site. Commonalities include access to trees for climbing on or through, moving water, rocks, native plants and a place for quiet play. Learning tools for programming include natural amphitheaters, wood blocks, sundials, rain gauges and lots of other "loose" parts for creative play. Studies indicate that sustainable park design; and the use of more natural elements not only help the

environment and are less expensive, they also improve a child's sense of well-being.

Community Gardens and Urban Farms

In an effort to encourage local and sustainable food production, municipalities are increasingly partnering with agricultural and health organizations by offering land for community gardening plots, orchards, edible landscaping, urban farms and green houses. Cities across the nation are also passing resolutions and



Courtesy of bodinestreetgarden.org

offering financial and staff support to improve access to healthy foods for residents. The City of Kansas City partners with Kansas City Community Gardens (KCCG), a nonprofit organization,

and assists in managing over 90 garden plots at Swope Park, the City's premier 1,805-acre park. The KCCG organizes fundraisers to support gardening operations like tilling, garden site improvements and staff support. KCCG also operates the Beanstalk Children's Garden in Swope Park that serves as a fee-based instructional facility for more than 100 local elementary and middle schools.

Sensory Gardens

Sensory gardens allow nature to come to life for individuals with a variety of disabilities. Garden beds are designed to include plant species and hardscape elements intentionally selected to provide experiences for seeing, smelling, hearing, touching and tasting. Interaction is a key objective with sensory garden design. Organic gardening practices are imperative to alleviate pesticide use and often lead to interpretive opportunities. Theme gardens are well received and might include culinary herbs, medicinal plants, sound gardens (e.g. waterfalls, fountain, bamboo gardens, and wind-chimes) or cultural gardens (e.g. Native



Photo Courtesy of wickhampark.org

American Garden). Sensory gardens are particularly popular at park facilities located near residential and health care facilities and schools. Gardens designed to engage all senses serve many functions and provide a venue for therapy, education, socializing and simple relaxation.

Skate Spots

Midwest skate parks appeared in the late 90's with the City of Columbia being one of the first to get behind construction of the Columbia Skate Park. Much has changed with regard to overall demand, obstacle size limitation and skate park construction techniques. Due to an increase in demand, fueled by a growing number of participants in the sport, municipalities are finding a need to both expand existing parks and provide smaller venues known in the industry as "skate dots" or "skate spots." Low maintenance skate spots are



Photo Courtesy of spohnranch.com

designed as single skate features (ramps, benches, rails or fun boxes) and "blend" with the surrounding environment. Skate spots are clearly labeled as a skate facility and are often located in an area that otherwise might not allow for such an amenity. These sites are often designed to allow for spectator viewing and serve as a lunchtime gathering spot for the business community in urban areas.

Bocce Courts

Bocce is a traditional Italian game similar to lawn bowling. It can be played on almost any surface but is most often played in back yards or neighborhood parks. Bocce, until recently, was viewed as appealing only to those of European descent or retirement home residents. Bocce has more recently gone upscale with construction of clay or ag-lime courts designed for



Photo Courtesy of Designscape

tournament play, as well as social gathering spots at trendy eateries, sport facilities or golf courses. Bocce courts are being added to park facilities to allow for activities between games or après golf – often leading to increased concession revenue. White Hutchinson Leisure and Learning Group include bocce-restaurants as a hot "eatertainment" trend in their *Predictions for 2012 and Beyond* list.

Dog Parks

Off-leash dog parks, also mentioned as a trend in the 2002 Facility Needs Update, continue to be a trend and are the fastest-growing segment of city parks according to a 2005 study by the non-profit Trust for Public Land. USA Today reported that in 2010 there were almost 600 off-leash dog parks in the 100 largest cities (Portland, Oregon has the highest per capita: 5.7 dog parks for every 100,000 residents), a 34% jump in five years. The increase in demand for dog parks reflects nationwide household demographics indicating that more households have dogs (43 million) than



Photo Courtesy of hooveral.org

children (38 million). Dog park design is evolving to meet growing demand. Dog parks are typically three to five acres in size with some being as large as 15 acres. Park planners are now considering both small dogs and large dogs when planning facilities. Often the two sizes share a location with a fence separating the facility or in some cases designated hours based on canine size and weight. In addition to drinking water and waste disposal bags, dog park amenities such as washing stations, concrete wading pools and playground-like obstacle courses are commonly

found. To alleviate muddy and overused dog runs, planners are also utilizing "pet turf" in their design plans. The Synthetic Turf Council reports that dog parks and doggie day camps are now installing synthetic grass to provide not only a better experience, but also one that benefits the environment.

More American households have dogs than children.

Shade Structures

According to a 2009 Recreation Management report, shade structures are one of the most commonly planned additions in park facility planning. This increase stems from medical research indicating a growing risk and increased rates (currently estimated at one million cases of skin cancer per year) of melanoma - the most serious form of skin cancer. Outdoor areas become more user-friendly by incorporating man-made shade structures (e.g. canopies, shelters, table umbrellas, etc.) or natural



Bleacher Shade Structure at Antimi Sports Complex, Cosmo Park, Columbia

shade options like trees or design techniques utilizing shade from existing buildings. Shade structures and park shelters can do more than protect citizen's skin. A growing number of advocates emphasize that providing shade encourages park patrons to be more active by increasing the amount of time spent outdoors as opposed to indoors watching television or playing video games.

Artificial Turf Fields

There is a growing movement in Parks and Recreation to utilize synthetic turf at select sports facilities. There is a wide variation in field costs depending on type of use, regional climate and terrain and product options. A typical multi-use field can easily cost upwards of \$750,000. Departments choose to make the investment for a variety of reasons, including decreased maintenance needs, maximization of field use, injury prevention and water conservation. The Southern Nevada Water Authority estimates that every



Photo Courtesy of University of Missouri

square foot of natural grass replaced saves 55 gallons of water per year.

Synthetic Playground Surface

Rubber tile or poured-in-place playground surfaces are becoming increasingly popular as a shock-absorbing, safety surface (falls to the surface account for nearly 70 percent of all playground injuries), as well as a material chosen to meet ADA standards. Rubber tiles are pre-made and shipped to the site while poured-in-place is constructed from rubber granules which are mixed on site with a binding agent and then installed by hand and trowelled smooth. The thickness of the rubber can be adjusted to match the fall height of



Playground with Poured-in-Place Surface at Smithton Park, Columbia

playground equipment. For ADA purposes, synthetic surfaces are developed with the goal of creating a space where children or caregivers with disabilities can easily interact with others. The cost for rubber tile or poured-in-place surfaces, on average, is more than double the cost of standard, loose-fill material such as engineered wood fiber. The added expense is often offset with extreme durability and less ongoing maintenance.

Archery

Bow hunting, bow fishing and field archery are gaining in popularity and there is a coordinated movement to grow grassroots archery programs nationwide. USA Archery and the National Field Archery Association initiated a "train the trainer" program in 2012 in collaboration with the National Recreation and Park Association to certify and train parks and recreation professionals on best practices in running archery programs. Cable television and Hollywood have helped boost the sport by introducing



Archery at American Legion Park, Columbia

archery to reality television and the book "The Hunger Games" to the big screen. Archery is now being taught in the local school district. The Missouri National Archery in the Schools Program presented the Columbia Public School District with a \$21,000 grant for archery equipment. The seven schools participating are Hickman and Rock Bridge High Schools; Jefferson, Oakland and West Junior High Schools; and Lange and Gentry Middle Schools. Archery is considered an inclusive sport, accessible to people of all abilities, and requires facilities for target practice as well as for instructional programming and competition.

Lacrosse

Lacrosse has long been an anomaly anywhere but in northeast Ivy League territory. According to a 2011 Sporting Goods Manufacturing Association report, lacrosse experienced a 218 percent increase from 2000 – 2010 in the number of overall participants categorized as "casual" to "core" (people that participate on a regular and frequent basis). Grassroots, volunteer youth lacrosse organizations are popping up around the nation hoping to develop community interests along with fundamental skills



Lacrosse at Cosmo Park, Columbia

needed to provide feeder teams for local high school participation. The National Collegiate Athletic Association (NCAA) 2012 annual report shows the number of member institutions sponsoring lacrosse has experienced steady growth. Women's lacrosse teams exist at 34.3% of NCAA colleges (up from 26.9% five years ago), and the number of men's teams is at 26.9% (up from 21.2% five years ago). Major League Lacrosse is also having a cross-country resurgence with teams in cities like Denver setting league attendance records in 2011 with 27,000 attendees.

Parklets

A parklet is a small space designed to extend the grade of the sidewalk and create a park or patio-like setting where people can sit, relax and enjoy the city around them. Parklets are typically installed on two parking spaces and combine design elements including seating, tables, trees or flowers and often incorporate bike parking or public art. Parklets are most often funded and maintained by surrounding businesses or community organizations, while continuing to retain their status as publicly accessible open space.

Parklets were first introduced and installed in 2005 by a private design firm in San Francisco. These efforts have blossomed into Park(ing) Day, an annual worldwide event where artists, designers and citizens transform metered spaces into temporary public parks. San Francisco's original simple design - green turf and seating - is now being emulated around the world and enhanced to include both whimsical and practical café and park-like design elements. The parking meters for the original parklet were continually fed by pedestrians momentarily lingering and enjoying a beautified streetscape.

Parklets provide a low-cost, easily implementable approach to adding urban "green" space to commercial corridors. They support local business communities by encouraging pedestrians to linger. Their presence also helps address the desire and need for beautification and development of urban public open space.





Parklet in Downtown Columbia