A Henderson Consulting Services, Inc. Report

Playgrounds in the Nation's Largest Urban Park Districts

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Introduction

This report summarizes the results of a survey of playgrounds and playground planning in the nation's largest urban park districts. The survey was conducted among park districts in the country's twenty five largest population centers. These were, for the most part cities, although large counties were included if they operated a significant (i.e. 100 or more) number of playgrounds or were the primary playground provider for the metropolitan area (i.e. associated city had limited playgrounds). A complete list of cities and counties surveyed appears in Appendix 1.

The report contains information on the number of playgrounds in each district; plans for new playground construction and renovation of existing playgrounds during the next five years; and equipment and protective surfacing used and planned on district playgrounds.

Number of Playgrounds Operated

The number of playgrounds in park districts surveyed ranged from a low of 85 to a high of 990. As might be expected, the number of playgrounds generally followed the size (in population served) of districts, although there was considerable variation in the ratio of number of playgrounds to population. The distribution of playgrounds in districts surveyed is summarized below in Exhibit 1.

Exhibit 1
Distribution of Playgrounds Operated

Number of Playgrounds Operated	Number of Districts Reporting
< 100	1
100-149	10
150-199	6
200-299	4
>300	4
Mean (average)	*218 Playgrounds*
Median (midpoint)	*150 Playgrounds*

Combining data on the number of playgrounds operated with that on district population allowed calculation of the number of residents served by each playground. This data is shown in Exhibit 2 below.

Exhibit 2
Residents/Playground

Population (thousands) per playground	Number of Districts Reporting
> 10	6
7.0-9.9	5
6.0-6.9	4
5.0-5.9	5
< 5.0	5
Mean (average)	*9,900 residents/playground*
Median (midpoint)	*6,300 residents/playground*

It should be noted that three of the six districts with more than 10,000 residents per playground were counties, which typically have fewer parks and, therefore, fewer playgrounds, than cities. County playgrounds are also supplemented by playgrounds of other municipalities (e.g. cities) within their boundaries. If these three counties are eliminated, the average number of residents per playground deceases to 6,700 and the median number of residents per playground to 6,000.

Current recreation planning discourages universal guidelines, preferring instead that communities establish their own space and service targets based on local community preferences, needs and conditions. That said, comparison of the playground service levels determined by the survey to some broad guidelines may be useful in assessing how major urban park district playgrounds meet the needs of their constituents. *Recreation, Park and Open Space Standards and Guidelines*, published by the National Recreation and Park Association in 1990[1], classifies a Neighborhood Park/Playground as one servicing a population of up to 5,000 people. Most districts surveyed approached this figure, with 14 districts averaging less than 7,000 residents per playground, and the median number of residents per playground being about 6,000. This would indicate that residents of most districts surveyed do indeed have access to a neighborhood playground.

New and Renovated Playgrounds

New Playgrounds

The majority of districts surveyed planned construction of one or more new playgrounds during the next five years, most often as part of a new park. Exhibit 3 summarizes new playground construction plans.

Exhibit 3
New Playground Construction
2006-2011

Number of New Playgrounds Planned 2006-2011	Number of Districts Reporting
None	6
1-9	12
10-19	5
20-30	2
Mean (average)	*7 new playgrounds planned*
Median (midpoint)	*6 new playgrounds planned*

[1] Recreation, Park and Open Space Standards and Guidelines, Lancaster, Roger A., National Recreation and Park Association, 1990.

New playground construction plans differed markedly by region, as Exhibit 4 below demonstrates.

Exhibit 4
Regional New Playground Construction Plans
2006-2011

Region	Districts Planning New Playgrounds:2006-2011/ Total Number of Districts	Average Number of New Playgrounds per District
Northeast	1/3	2
Southeast	3/4	7
Midwest	4/5	5
Southwest	5/7	11
West	6/6	8

Regional new playground construction reflects national population trends, with districts in rapidly growing large cities and counties in the south and west building new parks and playgrounds to serve new residents.

Planned spending on new playgrounds (for playground equipment, playground surfacing, and installation) was generally less than $200,000 per playground. A few districts planning large playground complexes in new regional parks expected to exceed this figure. Exhibit 5 shows distribution of expected spending among districts.

Exhibit 5
New Playground Construction Spending
2006-2011

New Playground Construction Budget, $000	Number of Districts Reporting
< 100	8
100-199	7
> 200	3
Mean (average)	*$ 143,000*
Median (midpoint)	*$ 100,000*

One district did not report its new playground budget.

Funding for new playground construction was mainly from bond issues (16 districts). Other funding sources reported were developer funds (4 districts), community funds (4 districts), operating budgets (3 districts), state grants (3 districts), federal community development block grants (3 districts), and sales taxes (1 district). Most districts used more than one funding source.

Playground Renovation

The bulk of playground construction activity in large urban park districts during the next five years will occur in playground renovations, which typically involve replacement of old playground equipment and protective surfacing with new materials, essentially creating a “new” playground. All park districts surveyed planned playground renovations during the next half decade, with most planning more than 10 renovations per year. Exhibit 6 below summarizes this planned playground renovation activity.

Exhibit 6
Planned Playground Renovation
2006-2011

Number of Playgrounds Renovated Per Year	Number of Districts Reporting
1-10	12
11-20	12
> 20	1
Mean (average)	*11 playgrounds*
Median (midpoint)	*11 playgrounds*

Planned playground renovation by region differed somewhat from planned new construction, as Exhibit 7 below illustrates.

Exhibit 7
Planned Playground Renovation by Region
2006-2011

Region	Average Number of Planned Playground Renovations per Year
Northeast	27
Southeast	6
Midwest	11
Southwest	10
West	8

Planned renovation activity is strongest in the Northeast. This reflects the larger number of established, older playgrounds, many needing renovation, in this region.

It is also important to analyze renovation activity compared to the existing playground base. This is done in Exhibit 8 below, which shows playgrounds renovated each year in each district as a percent of total existing playgrounds.

Exhibit 8
Planned Playground Renovations per District
As a Percent of Total Playgrounds
2006-2011

% of Playgrounds to be Renovated Each Year	Number of Districts Reporting
1-5%	14
6-10%	7
11-12%	4
Mean (average)	*6% renovated per year*
Median (midpoint)	*5% renovated per year*

The data indicate that about half of the districts surveyed planned on renovating 5% or more of their existing playgrounds each year, equaling or exceeding a 20-year renovation cycle. 20 years is generally considered the approximate expected service life for most playground equipment. Many districts with a planned annual renovation rate of less than 5% had recently renovated the majority of their playgrounds, obviating the need for much renovation in the 2006-2011 time period.

Playground renovation budgets, for new equipment, surfacing, and installation, were quite similar for those for new playgrounds.

Exhibit 9
Playground Renovation Budgets
2006-2011

Renovation Budget, $000	Number of Districts Reporting
< 100	9
100-199	13
200 +	3
Mean (average)	*$ 125,000 per playground*
Median (midpoint)	*$110,000 per playground*

Funding for playground renovation was also similar to that for new playgrounds, with most districts using multiple funding sources and with bond funding (19 districts using) being most prevalent. Other funding sources for playground renovations were operating budgets (5 districts), community funds (4 districts), federal community development block grants (4 districts), state funds (2 districts), and sales taxes (2 districts).

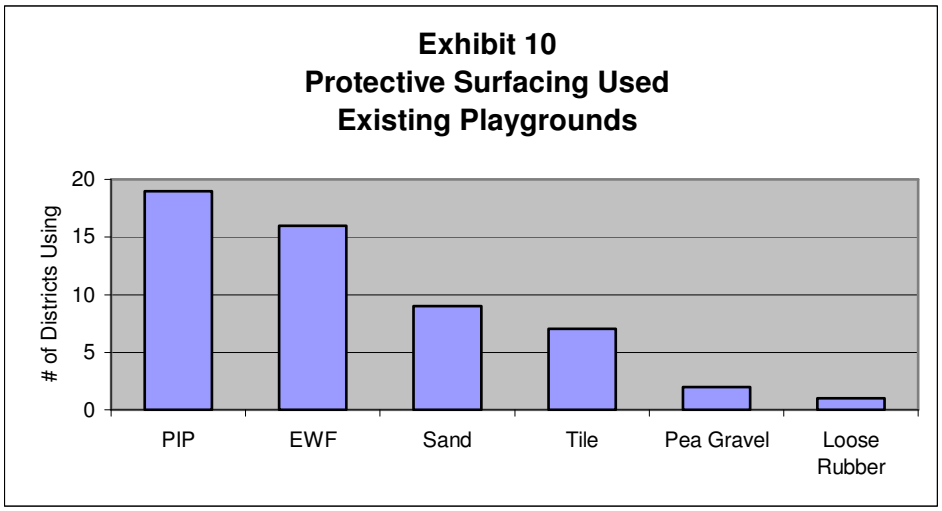
Playground Equipment and Protective Surfacing

Playground Equipment

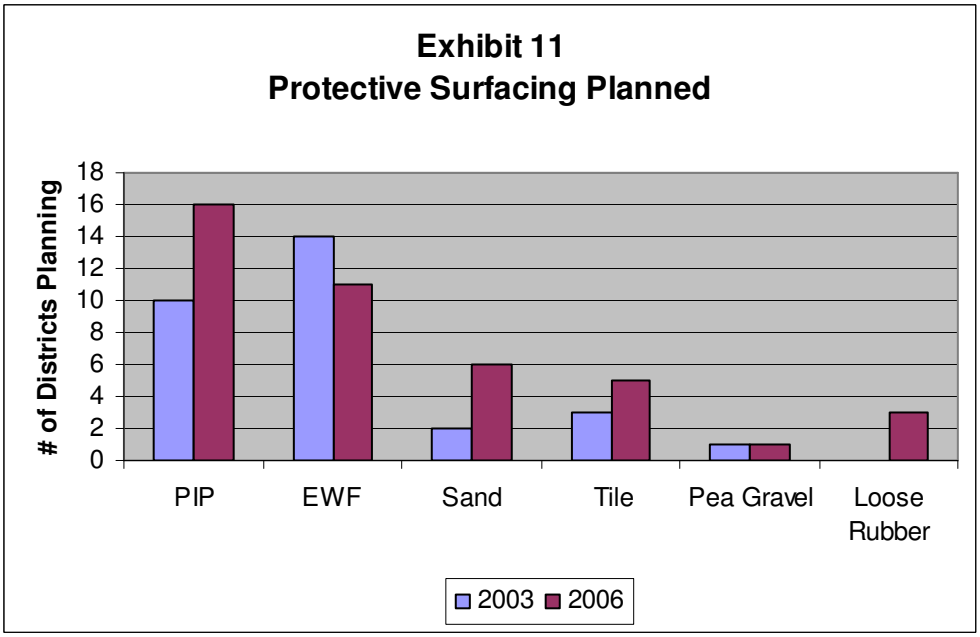
The vast majority of districts (20) install both equipment for 2-5 year olds and equipment for 5-12 year olds on most of their playgrounds. Some districts (4) used mostly 5-12 year old equipment, although equipment for 2-5 year olds was also provided when budgetary and space considerations allowed. These districts typically were in the largest population centers. One district installed equipment for 2-5 year olds and 5-12 year olds in larger parks and only equipment for 2-5 year olds in smaller parks, indicating that this is what most communities preferred.

Protective Surfacing

A wide variety of protective surfacing materials are installed on existing playgrounds, reflecting the many types of surfacing available. Poured in place (PIP) rubber surfacing, sometimes combined with loose fill surfaces, with PIP providing accessibility; was most widely used. Engineered wood fiber (EWF) was also widely used. Most districts had more than one type of protective surfacing on playgrounds throughout their parks. Exhibit 10 shows surfacing currently used by districts surveyed.



Protective surfacing planned for new and renovated playgrounds was similar to that on existing playgrounds, with poured in place rubber and engineered wood fiber the most popular surfacing. Exhibit 11 shows types of surfacing planned for new and renovated playgrounds during the next five years and also shows types planned by districts in a similar survey done in 2003.



As the exhibit makes clear, most districts plan to use more than one type of surfacing; the choice usually dependent on accessibility, maintenance and budget requirements. Exhibit 11 also shows that poured in place rubber has become the most frequently planned protective surfacing for large urban park district playgrounds

Summary and Conclusions

The survey results demonstrate that playgrounds are an important part of recreation programs and planning in large urban park districts. While the population served by each playground in most districts is somewhat higher than recreation and park goals for neighborhood park playgrounds, the number of playgrounds in most districts do seem to provide neighborhood play opportunities for most residents.

Districts were surveyed on their plans for construction of new playgrounds and playground renovation during the next five years. Many districts planned significant construction of new playgrounds, particularly in regions where rapid population growth required new parks and playgrounds. Playground renovation activity was also very strong, indicating that most districts regularly replace and upgrade aged equipment and surfacing. Most districts also provide adequate funding for new and renovated playgrounds, in excess of $100,000 per playground. A variety of funding sources are used, with bond funding the most popular source.

Most districts provided playground equipment for both 2-5 and 5-12 year olds. A variety of protective surfacing products are used, with poured in place rubber and engineered wood fiber the leading surfaces. Both surfaces, when properly installed and maintained, meet federal and industry guidelines for shock attenuation and accessibility.

In conclusion, the outlook for playgrounds in the nation's largest urban park districts, and for the people who use them, is quite positive.

Appendix I

Park Districts Surveyed
(Ranked by population served)

Los Angeles County
New York City
City of Los Angeles
Harris County, TX
Chicago
Miami-Dade County
Houston
Philadelphia
Phoenix
San Diego
San Antonio
Dallas
San Jose
Detroit
Indianapolis
Jacksonville
San Francisco
Columbus
Austin
Memphis
Baltimore
Fort Worth
Mecklenburg County, NC
El Paso
Milwaukee County

Appendix 2

Henderson Consulting Services, Inc.

Henderson Consulting Services, Inc. offers a variety of consulting services for recreation professionals.

Services include:

- market research
- product evaluation
- specification development
- regulatory compliance
- business analysis
- strategic planning
- marketing consultation
- expert testimony

Drawing on over twenty years of experience in the play equipment and recreational surfacing field, and a business and technical background, the HCS principal, Walter Henderson, provides expert, reliable, objective consulting advice to clients throughout the recreation community.

For more information on Henderson Consulting Services, log on to www.hendersonconsult.com.