COMMITTEE OF THE WHOLE (PUBLIC) Report No. 14-044

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Play Structures and Outdoor Play Environments in Elementary Schools

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PURPOSE:

1. To facilitate a discussion with respect to play structures and outdoor play environments in elementary schools.

CONTEXT:

There is great demand from parents to have a play structure in their immediate neighbourhood, whether in a City of Ottawa park or the school yard for use by children after school hours. This demand is particularly noticeable in new subdivisions where the school play yard may be the main local public space for young children. There is little differentiation among the public between a school yard and a city park.

At present, almost all District elementary schools serving junior kindergarten to grade 6 students have one or more play structures. The conventional play structures within the District have a life span of approximately 20 to 25 years. Many of them are reaching the end of their life cycle and need to be removed or replaced.

There have been significant changes in provincially-mandated standards for play structures in recent years, with much more rigorous requirements from both the Canadian Standards Association (CSA) and the Accessibility for Ontarians with Disabilities Act (AODA) integrated standard of Design of Public Spaces.

When designing new elementary schools, it is District practice to include one play structure for the kindergarten play area and one play structure for the primary grades. Provision has been made in some site plans for a second primary play structure, but the structure itself is not part of the capital project. School councils have fundraised to add play structures to older schools or a second play structure in large schools.

KEY CONSIDERATIONS:

3. Curriculum Connections to Play Structures and Outdoor Play Environments

Active participation and development of fundamental movement skills by students are key components of the curriculum policy document for Health and Physical Education. The District's Time Allocation Model at the elementary level provides 75 minutes per week (for junior kindergarten and senior kindergarten) and 190 minutes per week (for grades 1-8), including the specific 'daily physical activity' (DPA) component in grades 1-8 (20 minutes) of physical activity/exercise per day at the elementary level. Time spent in the school yard, including play structures, supports this commitment to physical activity for students.

The Ministry does not specify how best to meet the DPA goal leaving it to the school board to decide the delivery method. Play yards with play structures have become one of the accepted methods of delivery of this aspect of the curriculum for students up to age 10.

Curriculum Services commissioned a literature review to develop a better understanding of play structures and outdoor play environments in December 2013. A copy is provided in Appendix A. There is not a clear consensus that play structures are the best model for the delivery of daily physical activity.

4. Play Structures in the OCDSB

Play structures in the District can be divided into three categories: structures in day care play yards, structures in kindergarten play yards, and structures for older students on the school play yard. The District has an inventory of 291 play structures, including 137 for kindergarten students and 154 for students in the primary and junior division. Kindergarten play structures tend to be smaller structures and are often in a fenced area of the play yard for junior and senior kindergarten students. Appendix B lists all the play structures by school with a summary of their current condition.

There are 131 play structures constructed prior to 1996 that potentially need to be replaced over the next five to seven years. The cost to replace these structures is approximately \$7.5 million of the \$18.1 million it would cost to replace all structures. A play structure's life is increased by annual inspections and repairs by certified maintenance staff. Every third year the structures are inspected by a qualified outside consultant to update our inventory and ensure that they are safe and compliant.

Principals have stated that there is a limited amount of the school year that play structures can be accessed. Safety requirements mandate that the structures are not used for the months of December to early spring, dependent upon the weather; this is approximately fifty percent of the school year. This raises questions as to the effectiveness of play structures as a channel to implement the curriculum.

Historically, the replacement or creation of a new play structure was funded by a \$7,500 grant from the City, \$7,500 from Facilities and the school community would fund the remaining cost. For example, for a \$30,000 play structure, the school community would raise \$15,000. However, the City has recently adopted the AODA standard which stipulates that all new play structures must be AODA compliant, but the City has not changed its financing. The new standard has raised the cost due to the site preparation and increased specification for play structure components. For example the \$30,000 structure now costs approximately \$40,000.

5. Alternatives to Play Structures: Outdoor Play Environments

There are alternatives to the conventional play structures which vary depending upon the site, the concept for the play yard, desired play value and learning value. Many schools across the province are moving towards 'naturalized play areas' which incorporate natural play structures, school yard greening and outdoor classrooms. The incorporation of conventional play structures with a natural playground can result in a transformed play yard which will enhance both the play and learning experience for our students.

As the literature review highlights, (Appendix A), there is a growing movement within Canada and internationally towards creating naturalized/green play yards rather than installing play structures. Such play yards provide rocks to sit and climb on in a naturalized/green landscaped area with the intent of providing children with opportunities for imaginative play. Benefits include improved ease of access for disabled users, a longer period of the school year in which the feature is usable and lower ongoing maintenance costs.

The most complete document that covers the above points (and mentioned in the literary review) is the Toronto District School Board's (TDSB) 'Transforming the Schoolyard' (Appendix C). Although this document's revised edition is 10 years old it is quite exhaustive in covering all aspects of how school communities design and build their playgrounds. The OCDSB has been following this model with our Evergreen associate in many of our schools.

6. Naturalized Settings

Appendix D (Evergreen Workshop Series "School Ground Greening") provides photos and schematics of such installations.

The City of Ottawa site plan approval process on recent projects has made the provision of such a feature a requirement for building construction approval.

In terms of delivery of the curriculum, such an area increases the opportunities for active learning for a longer portion of the school year than play structures can provide.

7. Co-operative Efforts

The OCDSB has been involved with the Evergreen group for the past 7 years. Maintenance, Design and Construction staff, Evergreen, and our external

consultants all work closely to support the schools in maintaining what is already installed, developing new play yard structure designs and greening the school yards. In addition, staff works with the City to take advantage of their grants. District staff coordinates site plans where OCDSB play grounds border City parks to leverage benefits for school-age children and the general community.

8. Next Steps

This report has provided information for discussion purposes on the topic of play structures and outdoor play environments. Based in part on the nature of the comments at this meeting of Committee of the Whole, an action report with recommendations will be presented to a future meeting of the Committee of the Whole. The timing of the report will allow for contemplation during this year's Budget Committee meetings.

RESOURCE IMPLICATIONS:

9. Current Use of Resources

There is a significant annual District investment to support existing play structures, including:

- i. The Chief Custodian inspects play structures daily;
- ii. Certified maintenance staff perform an annual inspection of each play structure;
- iii. A jointly funded Evergreen consultant, with expertise in the field of green play yards made available to the school communities;
- iv. The play structure pad is annually tilled and the sand topped up;
- v. The tri-annual major inspection and evaluation of play structures is performed by an independent consultant; and
- vi. Any play structure deemed unsafe is removed.

There is a significant commitment of school staff's time to supervise the play structures while students are in the school yard.

To date, the District has provided funds to remove play structures deemed unsafe. In rare circumstances the OCDSB has funded the replacement of a play structure with no school community contribution. Past practice has been to provide a play structure as part of the construction of new elementary schools.

In each school year, the District matches the grants the City of Ottawa provides to OCDSB school councils for new play structures. The City has a fixed budget which is allocated between all eligible applicants (all local schools and other public bodies), resulting in great variations between years for the OCDSB's schools.

10. Costs of Play Structures and Outdoor Play Environments

The replacement of individual play structures with a standard design can range from \$40,000 to \$80,000. Outdoor naturalized play environments can be equally or more expensive. Facilities staff will continue their work in establishing costing for both. Pages 113 and 115 of Appendix C outline some unit prices of

components (2004 prices) and they demonstrate the range of costs. Additional costs would be required to do the design, site preparation, achieve AODA compliance and to install the other features.

COMMUNICATION/CONSULTATION ISSUES:

11. Facilities staff has held a brainstorming session with its design and maintenance staff on alternatives to play structures. Informal discussions have been held with a sampling of principals.

Facilities staff assists in all new play structure requests, working with the school communities to explain the City application process, assisting in the design, and raising the necessary contracts for implementation once funding is secured. The District's Evergreen consultant conducts training seminars for schools and school communities on natural landscape and in assisting the communities in their design of play grounds. Workshops are offered regularly to the OCDSB communities. If there is interest, a workshop can be presented at the next school council training day. There is a direct link to Evergreen found on the Board's website under District News (School Ground Greening Workshops) to facilitate school council and parent access to Evergreen's resources.

STRATEGIC LINKS:

12. The District strives to provide a supportive learning environment for its students. Outdoor physical activity is key to creating optimal conditions for learning in the classroom, and a key component in the pursuit of physical well-being for students.

The Board values its community partnerships. Fundraising for play yard equipment has been a valuable community building experience.

The Board has set goals for the greening of its facilities and that all students have equitable access to features deemed necessary to achieve the curriculum goals.

GUIDING QUESTIONS:

- **13.** The following questions are provided to support the discussion of this item by the Committee:
 - What is the primary purpose of play structures and/or outdoor play environments, e.g., a community recreation resource, the provision of physical activity for students, a creative learning environment?
 - Should the funding of play structures/outdoor learning environments continue to be a shared responsibility of the City, the OCDSB, and school councils?
 - Is there a need to increase the OCDSB's amount cost sharing beyond the current \$7500?

- How do we increase the amount of information available to school councils with respect to play structures and outdoor play environments to support them in making decisions?
- How does the District enhance equity of access to all school communities for play structures and/or outdoor play environments?

Submitted for discussion.

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APPENDICES

Piùs Buffone

Appendix A – Literature Review of the Educational Impact of Play Structures

Appendix B – Play Equipment Replacement Program

Appendix C – TDSB Transforming the Schoolyard (available upon request, copy in the Trustee's lounge)

Appendix D – Evergreen Workshop Series 'School Ground Greening' (available upon request, copy in the Trustee's lounge)

Literature Review of the Educational Impact of Play Structures

Issue

Aging play structures in OCDSB schoolyards

Introduction

Play structures are the centrepieces of most school playgrounds. Proponents maintain that they promote different types of play that contribute to a child's cognitive, emotional, physical and social development. Detractors see them as expensive, dangerous pieces of equipment that lack opportunities for creativity and appeal to a limited number of children. The following brief literature review will look at some of the current findings related to these issues.

Physical Benefits and Limitations of Play Structures

Benefits

- Play structures incorporate a wide range of active play opportunities into a relatively small space.
 One study (Bowers, 2002) observed 18 different play behaviours on the structure in his investigation. These included different forms of climbing, sliding, hanging, swinging, running, jumping, gliding, spinning, twisting, exploring, and role playing.
- Play structures "positively contribute to the caloric expenditure of children" (Bowers, 2002).
 Students playing on play structures consistently burned calories and the number of calories burned increased over time. This has been cited as important in the fight against childhood obesity.
- Some research suggests that play structures maintain children's interest across ages and over time. The total number of play activities engaged in by pre-kindergarten to Grade 3 students in one quantitative study did not change over the course of a 20-week investigation (Bowers, 2002). This suggests that children of different ages remain engaged and physically active on play structures for ongoing periods.
- Play structure use accounts for fewer reported injuries to school-aged children than some other activities, such as biking and sports (Health Canada Injury Reports).

Limitations

- Some research suggests that other types of school playgrounds (e.g., those that have been "greened") promote more vigorous, moderate and light physical activity than do conventional school grounds - those composed solely of play structures, asphalt, and lawn or playing fields (Bell & Dyment, 2006).
- Play structures account for many playground injuries each year. 77% of Ontario school-related playground insurance claims from 2005-2009 came from injuries on the climber alone, and cost

the Ontario School Boards' Insurance Exchange just over \$850,000.00. (Oracle, Vol. 10, No. 2, Revised 2010). Because of their height, the injuries obtained by falling from play structures can be serious (Canadian Paediatric Society Position Statement).

- It is difficult for one play structure to meet the physical capabilities and interests of all students who will use it. If the structure is challenging enough to appeal to older students, it can be dangerous for younger ones. Similarly, if it is designed to be safe for children in lower grades, upper-grade students will find it unappealing. Jay Beckwith, a leading U.S. playground expert, suggests that today's average playground is appropriate for kids 7-10 years of age. Those younger get hurt when trying to do activities too advanced and from being in the way of older kids tearing around the equipment. Older children often get hurt trying to find a challenge by using the structures inappropriately, such as climbing up the slide or sitting on top of the hanging bars (Beckwith, 2000).
- Some researchers maintain that children are fundamentally different than they were a decade ago, and that most current play structures do not connect with the wired and worldly students of the 21st century. According to Beckwith, "the play structures that used to attract kids in the 70s from five to preteens are now used only a little by 8 year olds. A 10 year old plays there only when there is no other option" (Beckwith, 2000).
- Play structures are often not inclusive. Students with certain physical and cognitive limitations are
 frequently unable to access many of the components that they offer (Prellwitz & Skär, 2007). By
 2025, Ontario municipalities and school boards will need to upgrade their traditional playgrounds
 to be accessible when their current playground equipment is replaced or substantially renovated
 (Accessible Built Environment Standard of the Accessibility for Ontarians with Disabilities Act).

Social-Emotional Benefits and Limitations of Play Structures

Benefits

- Play structures provide places for children of different ages, cultures and abilities to congregate and communicate.
- Play structures provide opportunities for children to learn such social skills as sharing, taking turns, cooperating, collaborating and conflict resolution (Lundman, 2010).
- Play structures provide opportunities for controlled risk-taking. Dr. Ellen Sandseter, associate professor of psychology at Queen Maud University in Trongheim, maintains that "children need to encounter risks and overcome fears on the playground." This helps them learn to cope with the challenges and fears that they will encounter in life. According to her research, not exposing children to risk can result in increases in anxiety and other phobias. Children who never climb, for example, are more likely to develop a fear of heights. (Sandseter, 2011). The importance of risk-taking for children's development is also highlighted by Canadian social worker and family therapist, Michael Unger (Unger, 2007).
- Play structures allow children to gain self-confidence and self-esteem by providing physical challenges for them to master.

Limitations

• The number of children who can use a play structure at any one time is limited.

Cognitive Benefits and Limitations of Play Structures

Benefits

- Research evidence supports a positive relation between levels of activity, physical fitness, and
 cognitive ability among young persons. Because play structures encourage children to be active,
 they can be seen to contribute to children's cognitive development. For example, a positive
 correlation has been found between physical activity and seven categories of cognitive
 performance (perceptual skills, intelligence quotient, achievement, verbal tests, mathematics
 tests, developmental level/ academic readiness) among school-aged children (Sibley, 2003).
- Research also suggests that specific types of playground equipment facilitate cognitive learning for kids (Voice of Play).
 - Activity panels and decorative barriers improve children's perception of form and shape,
 spatial orientation, depth and size, and their visual and tactile perception.
 - Overhead hanging equipment helps kids learn scientific concepts such as the force of gravity and spatial awareness.
 - Swings help kids learn perceptual processes and body awareness through space. They
 promote a sense of rhythm and timing and can improve balance.

Limitations

- Play structures are most often fixed and cannot easily be manipulated or changed. There is a
 finite number of ways to use each aspect of the equipment (Groves & Mason, 1993 and Titman,
 1994).
- "The types of play afforded by most pre-fabricated play structures does not provide the types of play experiences children need as they grow." The same basic play environment exists from K to high school with the only real differences being the amount of space given and the scale of the equipment (Innovative Playground Research).

Cost Considerations of Play Structures

- Play structures are available to fit a wide range of budgets. Purchasers can, therefore, tailor the play structure they buy to the amount of money they have.
- Play structures can often be purchased in stages, with a core section bought initially and other elements added as funds permit.
- Play structures are expensive to purchase and to maintain. Depending on their size and complexity, they can cost tens, or even hundreds, of thousands of dollars. They also require substantial money

each year for regular maintenance and for replenishing the ground materials that surround them (Report in the Kingston Whig Standard May 10, 2013). Over time, they wear out, may no longer conform to new safety standards, and may need to be removed.

Other types of playgrounds (e.g., naturalized and inclusively designed playgrounds accessible to
people with disabilities), while significantly more expensive to install, can save money over the long
term due to decreased maintenance costs. (Accessibility News Blog, April 16, 2012)

Design, Construction, and Use Considerations of Play Structures

- Play structures are quick, ready-made solutions for those individuals or groups who lack the
 background to develop play solutions on their own. If purchased from a reputable firm, they
 already meet national standards. Most communities see purchasing a play structure as "an
 efficient and readily available one stop shop for creating a playground" (Innovative Playgrounds
 Report).
- Play structures or parts of play structures often cannot be used year-round. Many have to be closed for safety reasons in the winter months.

Play Structures in the News

Toronto

In 2000, the Toronto District School Board removed playground equipment from 172 of its elementary schools because of concerns that it did not meet the set of new voluntary playground safety guidelines established by the Canadian Standards Association. The TDSB produced a document entitled Transforming the Schoolyard: How local school communities design and build their playground learning environments to help guide future playground design. Since then, it has built many new play structures in schools that meet the new safety standards and has been increasingly involved in the greening of schoolyards movement.

Greater Essex County

In April 2012, the Greater Essex County District School Board closed half of its play structures to students for that year. Similarly, the Greater Essex Catholic School Board announced that it would continue to maintain its play structures that were deemed to still have reasonable play value for the 2012-2013 school year, but that after that time, each school would have to make a decision whether it wanted to maintain the play areas at their own cost or have the structures removed at board expense. A recent report indicates that the public board in this area has closed many of its traditional playgrounds, and is planning to replace them with naturalized, inclusively designed yards, which will be accessible to people with disabilities (Accessibility News Blog, April 16, 2012).

Manitoba

In May 2013, the Manitoba Government contributed funds to a new accessible play structure at Windsor School. The old existing wooden structure was to be replaced with a new accessible EVOS brand play structure.

Recent Trends

Naturalized/Green Playgrounds

There appears to be a growing movement both within Canada and internationally towards naturalized or green playgrounds. These playgrounds include such things as rolling topography, boulders, logs, stumps, pathways, butterfly and vegetable gardens, bushes and trees. Often they contain loose natural materials, such as sticks, branches, leaves and stones for children to use for construction and imaginative play. While they are more expensive to design and build, a growing body of research has shown that students who attend schools with green playgrounds benefit from: increased play opportunities (Malone and Tranter 2003; Moore 1996), enhanced social relations (Dyment and Bell 2008; Titman 1994), unique opportunities to become engaged and reflexive citizens (Dyment 2004; Mannion 2003), safer and less hostile outdoor environments (Cheskey 1994; Evans 2001), enhanced relationships with the natural world (Bell 2000, 2001; Nabhan and Trimble 1994; Tranter and Malone 2004), heightened environmental stewardship (Bell 2001; Harvey 1989), increased learning opportunities (Centre for Ecoliteracy 1999; Dyment 2005b) and improved academic performance (Ernst and Monroe 2004; Lieberman and Hoody 1998; Simone 2002). Teachers working at schools that have been greened report unique curriculum development (Evergreen 2000; Moore and Wong 1997) and reduced classroom management problems (Lieberman and Hoody 1998). All of the benefits listed above were cited in Bell & Dymant's 2008 article entitled Grounds for Health: The Intersection of Green School Grounds on Health-Promoting Schools.

Conclusion

In summary, play structures have both advantages and disadvantages as do all playground components. They appear to work best when combined with other playground elements, such as green/naturalized areas, areas for sports, quiet play areas, and when they each are designed for, and used by, a specific, not-too- broad age group.

Green playgrounds are gaining popularity because they promote vigorous physical activity, appeal to a wide variety of student interests, are more inclusive, and support a wide variety of play and learning opportunities.

References

Accessibility for Ontarians with Disabilities Act. Accessible Built Environment Standard for Outdoor Play Spaces

http://www.mcss.gov.on.ca/en/mcss/programs/accessibility/info_sheets/public_spaces/play_spaces.aspx

Accessibility News Blog. Accessible Parks and Playgrounds in Ontario. Posted April 16, 2012 @ 03:04 p.m.

Beckwith, Jay. (2000) Why Our Playgrounds are Boring to Today's Wired Child, Paper given at the Minnesota Recreation and Parks Association 63rd Annual Conference, November 5, 2000.

Bell, A. & Dyment, J. (2006). *Grounds for action: Promoting Physical Activity through School Ground Greening in Canada.* Available at http://www.evergreen.ca/en/resources/school-ground-greening/research-and-policy/.

Bell, A. & Dyment, J. (2008). *Grounds for health: the intersection of green school grounds and health-promoting schools.* Environmental Education Research, Vol. 14 No. 1, 77-90.

Bowers, L. (2002). A Research Study of Comparisons of Physical Activity on a Play Structure Between Age Groups Over Twenty Weeks. School of Physical Education, Wellness, and Sports of the University of South Florida, Tampa, FL.

Canadian Paedriatric Society Position Statement (2012). Preventing Playground Injuries. www.cps.ca/documents/position/playground-injuries.

CBC News. April 4, 2012 *Playground equipment to be removed from schools*, Article retrieved from http://www.cbc.ca/news/canada/windsor/playground-equipment-to-be-removed-from-schools-1.1184553

CBC News, April 11, 2012 *Play structures could disappear at Catholic schools: Liability, insurance and age all factors in decision to change policy.* Article retrieved from http://www.cbc.ca/news/canada/windsor/play-structures-could-disappear-at-catholic-schools-1.118551.

Gamson, S. (2010). Asphalt to Ecosystems: Design Ideas for Schoolyard Transformation. New York, NY: New Village Press.

Groves, M. & Mason, C. (1993), The relationship between preference and environment in the school playground. *Children's Environments*, Vol.10(1), 52-59.

Innovative Playgrounds Research Project Report (August 2001). Prepared for the Government of Manitoba Department of Intergovernmental Affairs.

Lundman, S. What are the Benefits of Children's Playground Equipment? Retrieved from www.livestrong.com/article/239867-what-are-the-benefits-of-childrens-playground-equipment/

Manitoba- News Release. May 16, 2013 *Province invests in new accessible play structure at Windsor School.* Article retrieved from http://news.gov.mb.ca/news/index.html?item=17349.

McGinn, D. How kids can connect with nature on the playground, The Globe and Mail, Nov. 23, 2012.

McLaren, L. Back-to-school folly: When playgrounds are outlawed, kids will play more dangerously, like the natural outlaws they are. Globe and Mail, Sept.9 2000.

Oracle. *Are Playgrounds Safe?* The Ontario School Boards' Insurance Exchange, Vol. 10, No.2, 2010. Article retrieved from www.osbie.on.ca.

Prellwitz, M & Skär, L. (2007). *Usability of playgrounds for children with different abilities.* Occupational Therapy 14(3), p. 144-155.

Sandseter, E & Kennair, L. (2011). *Children's Risky Play from an Evolutionary Perspective: The Anti-phobic Effect of Thrilling Experiences.* Evolutionary Psychology, Volume 9(2) p. 257-284.

School Grounds Transformation. News Postings. News Item No. 1 Retrieved from www.schoolgrounds.ca/sharing/postings.html.

Sibley, Benjamin A., and Jennifer L. Etnier. (2003). The relationship between physical activity and cognition in children: A meta-analysis. Pediatric Exercise Science, 15:243–56.

Titman, W. (1994), Special Places, Special People: The Hidden Curriculum of School Grounds. England, Learning Through Landscapes.

Ungar, M. (2007). Too Safe for Their Own Good. Toronto, ON: McClelland and Stewart.

Voice of Play web-site: http://www.voiceofplay.com/default.aspx



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School Name	Zone	Equipment	Description of Equipment	Manufacturer	Installation Date		Owners B D		Surface Area	Replacement Budget	ODA Comliance	То
gincourt Public School	5	playstructure	composite	OCDSB	1982	1	Х	XX	300	91000	27000	11
W.E. Gowling	1	playstructure	composite	Hilan Corp.	1984	2	X	X X	104	32000	10000	
Clifford Bowey	4	playstructure	composite	Hilan Corp.	1994	6	X	X X	300	91000	27000	11
Riverview Alternative	4	playstructure	composite	Hilan Corp.	1994	4	Х	X X	196	60000	18000	7
Devonshire	5	playstructure	composite	Hilan Corp.	1995	3	X	X X	149	46000	14000	6
Devonshire	5	playstructure	composite	Hilan Corp.	1995	3	Х	x x	234	71000	22000	(
D. Roy Kennedy	5	playstructure	composite	Hilan Corp.	1996	4	X	X X	154	47000	14000	6
First Ave.	1	playstructure	composite	Kompan/Big Toys	1997	1	X		168	51000	16000	ì
Broadview	4	playstructure	composite	Big Toys/Kompan	1998	0	x		300	91000	27000	1
Adrienne Clarkson	6	playstructure	composite	Little Tikes	2001	1	x		77	24000	7000	
Adrienne Clarkson	6	playstructure	composite	Little Tikes	2001		x		77	24000	7000	3
Berrigan	2	playstructure	composite	Little Tikes	2005	0	x	X X	82	25000	8000	3
Castlefrank	2		· ·	Belair	2005	1	x	$\begin{vmatrix} \hat{x} & \hat{x} \end{vmatrix}$	210	64000	19000	8
	1	playstructure	composite			1 - 1						
Forest Valley	3	playstructure	composite	Belair	2005	0	X	XX	99	30000	9000	3
Munster	6	playstructure	composite	Active Playgrounds		1	X	X X	110	34000	10000	4
Stittsville	6	playstructure	composite	Little Tikes	2005	0	X	X X	114	35000	11000	4
Roch Carrier	2	playstructure	composite	Little Tikes	2006	0	X	X X	47	15000	5000	2
Heritage	3	playstructure	composite	Playpower LT	2006	0	X	X X	119	37000	11000	4
Forest Valley	3	playstructure	composite	Belair	2007	0	X	X X	76	24000	7000	3
General Vanier	4	playstructure	composite	Paris Playgrounds	1984	0	X	X	55	17000	5000	2
Sawmilll Creek	4	playstructure	composite	Kompan	1987	5	X	X	98	30000	9000	3
Castor Valley	6	playstructure	composite	C.P.I	1987	2	Х	x	268	82000	25000	10
Hawthorne	4	playstructure	composite	C.P.I	1987	4	Х	x	139	43000	13000	5
Manotick	6	playstructure	composite	Hilan Corp.	1987	3	X	X	249	76000	23000	9
Parkwood Hills	5	playstructure	composite	Hilan Corp.	1987	2	X		217	66000	20000	8
Grant Alternative	5	playstructure	composite	Hilan Corp.	1989	6	x		111	34000	10000	
Mary Honeywell	6	playstructure	composite	Paris Playgrounds		4	x	x	130	40000	12000	5
Osgoode	6		· ·	Hilan Corp.	1989	3	x		178	54000	17000	7
<u> </u>	_	playstructure	composite	•		_			-			
Centennial	9	playstructure	composite	`Kompan	1990	3	X	X	56	17000	6000	2
John Young	2	playstructure	composite	Paris Playgrounds		2	X	X	218	67000	20000	8
Queenswood	3	playstructure	composite	Hilan Corp.	1990	4	X	X	145	44000	14000	5
Robert E. Wilson	1	playstructure	composite	Hilan Corp.	1990	3	X	X	163	50000	15000	6
Stephen Leacock	2	playstructure	composite	C.P.I	1990	4	X	X	110	34000	10000	4
A. Lorne Cassidy	6	playstructure	composite	Hilan Corp.	1991	3	X	X	72.7	23000	7000	3
Alta Vista	4	playstructure	composite	Hilan Corp.	1991	5	X	X	300	91000	27000	11
Cambridge St.	1	playstructure	composite	Kompan	1991	5	X	X	75	23000	7000	(1)
Carleton Heights	5	playstructure	composite	Hilan Corp.	1991	3	X	X	126	39000	12000	5
Churchill Alternative	4	playstructure	composite	Hilan Corp.	1991	4	Х	x	65	20000	6000	2
Clifford Bowey	4	playstructure	composite	Hilan Corp.	1991	4	Х	x	277	84000	25000	10
Elgin St.	1	playstructure	composite	Kompan	1991	3	Х	x	42	13000	4000	1
Elmdale	4	playstructure	composite	Hilan Corp.	1991	1	X		76	24000		3
McGregor Easson	5	playstructure	composite	Hilan Corp.	1991	4	X		131	40000		5
Meadowlands	5	playstructure	composite	Hilan Corp.	1991	5	X	x	110	34000		2
Viscount Alexander	1	playstructure	composite	Hilan Corp.	1991	2	X		142	44000	13000	5
			•									
General Vanier	4	playstructure	composite	Hilan Corp. Paris/Hilan	1993	2	X	X	118	36000	11000	4
Huntley Centennial	2	playstructure	composite		1993	4	X	X	214	65000		4.0
Carson Grove	3	playstructure	composite	Paris Playgrounds		2	X	X	255	78000		10
Connaught	1	playstructure	composite	Hilan Corp.	1994	6	X	X	104	32000	10000	4
Frederick Banting	2	playstructure	composite	Hilan Corp.	1994	2	X	X	226	69000	21000	9
Barrhaven	6	playstructure	composite	Hilan Corp.	1995	2	X	X	92	28000		3
Bayshore	2	playstructure	composite	Hilan Corp.	1995	3	X	X	119	37000	11000	4
Bells Corners P.S.	2	playstructure	composite	Hilan Corp.	1995	3	X	X	94	29000		3
Blossom Park	4	playstructure	composite	Hilan Corp.	1995	4	X	X	142.5	44000	13000	Ę
Century	5	playstructure	composite	Hilan Corp.	1995	3	X	X	90	28000	9000	3
Dunning Foubert	3	playstructure	composite	Hilan Corp.	1995	4	X	x	110	34000		
Elizabeth Park	4	playstructure	composite	Hilan Corp.	1995	2	Х	x	122	37000	11000	
Glen Cairn	2	playstructure	composite	Hilan Corp.	1995	0	X		235	72000	22000	(
Greely	6	playstructure	composite	Hilan Corp.	1995	3	X		154	47000	14000	ě
Henry Larsen	3	playstructure	composite	Hilan Corp.	1995	5	X	X	135	41000	13000	
Jockvale	6	playstructure	composite	Hilan Corp.	1995	4	X		135 176	54000	16000	7
	1 0 1	DIAVSHUGUIE	COMPOSITE		1990	- 4			177)	 34000 	. 10000	. /

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						Н			- 1		Replacement Bas		ig arca
					Installation	az		ship Us	sage	Surface	Replacement	ODA	Tot
School Name	Zone	Equipment	Description of Equipment	Manufacturer	Date				S	Area	Budget	Comliance	
Katimavik	2	playstructure	composite	Hilan Corp.	1995	1	X	X		93	29000	9000	38
Knoxdale	5	playstructure	composite	Hilan Corp.	1995	3	X	X		102	31000	10000	41
Lakeview	2	playstructure	composite	Hilan Corp.	1995	5	X	X		98	30000	9000	3
Le Phare	3	playstructure	composite	Hilan Corp.	1995	3	X	X		133	41000	12000	5
Leslie Park	5	playstructure	composite	Hilan Corp.	1995	4	Χ	X		64	20000	6000	2
Manordale	5	playstructure	composite	Hilan Corp.	1995	2	Х	X		100	31000	9000	4
Metcalfe	6	playstructure	composite	Hilan Corp.	1995	5	X	X		92	28000	9000	3
Orleans Wood	3	playstructure	composite	Hilan Corp.	1995	1	X	X		102	31000	10000	
	5			·		3	X	X		217	66000	20000	8
Parkwood Hills	_	playstructure	composite	Hilan Corp.	1995								
Robert Hopkins	3	playstructure	composite	Hilan Corp.	1995	5	X	Х		88.2	27000	8000	3
Roberta Bondar	4	playstructure	composite	Hilan Corp.	1995	3	X	X		196	60000	18000	-
Roland Michener	2	playstructure	composite	Hilan Corp.	1995	1	X	X		199	61000	18000	7
W.E. Johnston	2	playstructure	composite	Hilan Corp.	1995	1	X	X		100	31000	9000	4
Pinecrest	5	playstructure	composite	Hilan Corp.	1996	2	Х	X		263	80000	24000	10
Dunlop	4	playstructure	composite	Kompan/Big Toys	1997	2	X	X		48	15000	5000	2
•	-		·	Little Tikes	1997	1	X	X		133	41000	12000	5
Hopewell		playstructure	composite										
Queen Elizabeth	1 1	playstructure	composite	Little Tikes	1997	3	X	X		80	25000	8000	
Queen Mary	1	playstructure	composite	Little Tikes	1997	1	X	X		100	31000	9000	4
Richmond	6	playstructure	composite	Little Tikes	1997	2	X	X		61	19000	6000	12
Convent Glen	3	playstructure	composite	OCDSB	1998	2	X	X		89	27000	9000	(
Rockliffe Park	1	playstructure	composite	Kompan	1998	1	Х	X		69	21000	7000	2
Rockliffe Park	1	playstructure	composite	Kompan	1998	0	X	X		50	16000	5000	- 2
Stonecrest	2		•	Little Tikes	1998	2	X	x		144	44000	13000	
	_	playstructure	composite										
W.O. Mitchell	2	playstructure	composite	Little Tikes	1998	3	X	X		256	78000	24000	10
Maple Ridge	3	playstructure	composite	Little Tikes	1999	2	X	X		111	34000	10000	4
Rockliffe Park	1	playstructure	composite	Belair	1999	1	X	X		65	20000	6000	2
Regina St.	5	playstructure	composite	Little Tikes	2000	1	Χ	X		110	34000	10000	4
_ady Evelyn Alternative	1	playstructure	composite	Belair	2005	1	Х	X		177	54000	16000	7
Arch St.	1 1	playstructure	composite	Belair	2006		X	X		129	40000	12000	
Farley Mowat	6		•		2006	o	X	x		122	37000	11000	
,	0	playstructure	composite	Playpower LT		_							
Robert Bateman	4	playstructure	composite	Henderson	2006	0	X	X		149	46000	14000	6
Steve MacLean	4	playstructure	composite	Playpower LT	2006	0	X	X		107	33000	10000	4
Woodroffe Ave.	5	playstructure	composite	Henderson	2006	0	X	X		84	26000	8000	(*)
Woodroffe Ave.	5	playstructure	composite	Henderson	2006	0	X	X		64	20000	6000	2
Avalon	8	playstructure	composite	Henderson	2008	0	Х	X		133	41000	12000	5
Bayshore	2	playstructure	composite	Henderson	2008	0	X	X		119	37000	11000	
Briargreen	5	. ,	·	Belair	2008	0	X	x		159	49000	15000	6
	_	playstructure	composite			_							
Severn Avenue	5	playstructure	composite	Belair	2008	0	X	X		122	37000	11000	4
Avalon	8	playstructure	composite	Henderson	2008	0	X	X		76	24000	7000	3
Bayview	4	playstructure	composite	Henderson	2009	0	X	X		173	53000	16000	(
Pleasant Park	6	playstructure	composite	Henderson	2009	0	Х	X		157	48000	15000	(
Cambridge St.	1 1	playstructure	composite	Henderson	2010	0		X		78	24000		- 3
Lakeview	1 ' 1	playstructure	composite	Henderson	2010	0	X	X		116	36000	11000	
Orleans Wood	9	playstructure						X			35000		
	3	. ,	compositre	Little Tikes	2010	0	X	^	,	115		11000	4
Le Phare	3	playstructure	composite	Hilan Corp.	1980	1	X		X	426	130000	39000	16
Agincourt Public School	5	playstructure	composite	Hilan Corp.	1982	1	X		Х	434	132000	40000	17
Rockliffe Park	1	playstructure	composite	Hilan Corp.	1984	6	X		Х	186	57000	17000	-
Vincent Massey	4	playstructure	composite	Hilan Corp.	1984	4	Х		Χ	298	91000	27000	11
Woodroffe Ave.	5	playstructure	composite	Hilan Corp.	1984	4	X		Х	148	45000	14000	
Jockvale	6	playstructure	composite	Hilan Corp.	1985	4	X		X	124	38000	12000	,
John Young	1					4					91000	27000	1
3	2	playstructure	composite	C.P.I	1985	1 - 1	X		X	300			
Terry Fox	3	playstructure	composite	Hilan Corp.	1985	4	X		X	173	53000	16000	6
Castor Valley	6	playstructure	composite	C.P.I	1986	4	X		Х	249	76000	23000	Ç
Dunning Foubert	3	playstructure	composite	Hilan Corp.	1986	2	X		Х	77.6	24000	7000	()
Henry Larsen	3	playstructure	composite	Hilan Corp.	1986	2	X		Х	167	51000	16000	(
Meadowlands	5	playstructure	composite	OCDSB	1986	4	X		X	222	68000	20000	
Kars	6		· ·	Hilan Corp.	1987	5	X		X	172	53000	16000	
	0	playstructure	composite										6
York St.	1 1	playstructure	composite	Hilan Corp.	1987	2	X		X	204	62000	19000	8
Convent Glen	3	playstructure	composite	Hilan Corp.	1988	4	X		Х	205	63000	19000	8
Fallingbrook	3	playstructure	composite	Hilan Corp.	1988	2	X		Х	111	34000	10000	4
Leslie Park	5	playstructure	composite	C.P.I	1988	8	X		Х	234	71000	22000	Ç
	6	playstructure	composite	Hilan Corp.	1989	4	X	i l	Х	168	51000	16000	6

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										Replacement Bas	sed on existing	g areas
						Н						
					Installation	az	Ownersh	ip Usage	Surface	Replacement	ODA	Total
School Name	Zone	Equipment	Description of Equipment	Manufacturer	Date	H4	B D	C K S	Area	Budget	Comliance	
Dunlop	4	playstructure	composite	Hilan Corp.	1989	4	Х	X	211	64000	19000	83000
Fielding	4	playstructure	composite	Hilan Corp.	1989	3	X	X	300	91000	27000	118000
Hawthorne	4	playstructure	composite	Hilan Corp.	1989	7	X	X	209	64000	19000	83000
Hawthorne	4	playstructure	composite	Hilan Corp.	1989	3	X	X	265	81000	24000	105000
Hopewell	1	playstructure	composite	Hilan Corp.	1989	1	X	X	75	23000	7000	30000
Viscount Alexander	1	playstructure	composite	Kompan	1989	5	X	X	108	33000	10000	43000

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						Н				Replacement Bas		9
					Installation	az		ip Usage	Surface	Replacement	ODA	То
School Name	Zone	Equipment	Description of Equipment	Manufacturer	Date	H4	B D	C K S	Area	Budget	Comliance	
Bells Corners P.S.	2	playstructure	composite	Hilan Corp.	1990		Х	X	183	56000	17000	7
Carson Grove	3	playstructure	composite	Hilan Corp.	1990		X	X	300	91000	27000	11
Robert Bateman	4	playstructure	composite	Hilan Corp.	1990	2	X	X	100	31000	9000	4
Terry Fox	3	playstructure	composite	Hilan Corp.	1990	0	X	X	97	30000	9000	
Centennial	9	stand alone equipment	monkey bars	Kompan	1991	0	X	X	167	51000	16000	
A. Lorne Cassidy	6	playstructure	composite	Hilan Corp.	1991	2	X	X	107.8	33000	10000	
Churchill Alternative	4	playstructure	composite	Hilan Corp.	1991	4	X	X	414	126000	38000	1
Featherston	4	playstructure	composite	Hilan Corp.	1991	2	X	X	215	66000	20000	
Featherston	3	playstructure	composite	Hilan Corp.	1991		X	l x	215	66000	20000	
First Ave.	1	playstructure	composite	Hilan Corp.	1991	3	X	X	124	38000	12000	
McGregor Easson	5	playstructure	composite	C.P.I	1991	5	X	x	277	84000	25000	1
Queen Mary	1	playstructure	composite	Kompan/Big Toys	1991	0	X	x	236	72000	22000	
Queen Mary	1	playstructure	composite	Kompan	1991		X	l x	236	72000	22000	
Vincent Massey	4	playstructure	composite	Hilan Corp.	1991		X	X	89	27000	9000	
Arch St.	4	playstructure	composite	Hilan Corp.	1992		x	X	136	42000	13000	
Sawmill Creek	4	playstructure	composite	C.P.I	1992		x	X	149	46000	14000	
Alta Vista	1	playstructure	composite	Hilan Corp.	1993	4	x	X	150	46000	14000	
Queenswood	3	playstructure	composite	Hilan Corp.	1993	1 - 1	x	x	250	76000	23000	
Richmond	6	playstructure	composite	C.P.I	1993	7	x		197	60000	18000	
Robert Hopkins	3	playstructure	composite	Hilan Corp.	1993		x		146	45000	14000	
Elmdale	3	' '	•		1993	4	x		268	82000	25000	1
Pleasant Park	4	playstructure	composite	Henderson		1 - 1	x	x	300	91000	27000	1
	2	playstructure	composite	Hilan Corp.	1994		x		300 166	51000	15000	'
Bridlewood	_	playstructure	composite	Henderson	1995			X				
Bridlewood	2	playstructure	composite	Hilan Corp.	1995		X	X	119	37000	11000	
Dunlop	4	playstructure	composite	Hilan Corp.	1995		X	X	196	60000	18000	
Munster	6	playstructure	composite	Paris Playgrounds	1995		X	X	193	59000	18000	
Roberta Bondar	4	playstructure	composite	Hilan Corp.	1995	4	X	X	352	107000	32000	1
Sawmilll Creek	4	playstructure	composite	Paris Playgrounds	1995		X	X	256	78000	24000	1
Severn Avenue	5	playstructure	composite	Hilan Corp.	1995		X	X	126	39000	12000	
Century	5	playstructure	composite	Little Tikes	1996		X	X	266	81000	24000	1
Riverview Alternative	4	playstructure	composite	Kompan/Big Toys	1996		X	X	243	74000	22000	
Robert E. Wilson	1	playstructure	composite	Little Tikes	1996		X	X	200	61000	18000	
Trillium	3	playstructure	composite	Hilan Corp.	1996		X	X	269	82000	25000	1
Blossom Park	4	playstructure	composite	Little Tikes	1997	6	X	X	235	72000	22000	
Crystal Bay	2	playstructure	composite	Hilan Corp.	1997	3	X	X	111	34000	10000	
Frederick Banting	2	playstructure	composite	Little Tikes	1997	2	X	X	263	80000	24000	1
Hopewell	1	playstructure	composite	Kompan/Big Toys	1997	4	X	X	236	72000	22000	
Manotick	6	playstructure	composite	C.P.I	1997	5	X	X	115	35000	11000	
Parkwood Hills	5	playstructure	composite	Little Tikes	1997	7	X	X	250	76000	23000	
Queenswood	3	playstructure	composite	Little Tikes	1997	6	X	X	305	93000	28000	1
Trillium	3	playstructure	composite	C.P.I	1997	3	X	l x	248	76000	23000	
Broadview	4	playstructure	composite	Henderson	1998		X	l x	348	106000	32000	1
Dunning Foubert	3	playstructure	composite	Blue Imp	1998		X	X	260	79000	24000	1
Glen Ogilvie	3	playstructure	composite	Little Tikes	1998		X	X	375	114000	34000	1
Huntley Centennial	2	playstructure	composite	Blue Imp	1998		x	X	210	64000	19000	
Kars	6	playstructure	composite	Jambette	1998		x	X	132	40000	12000	
Le Phare	3	playstructure	composite	Blue Imp	1998		X	X	225	69000	21000	
Osgoode	6	playstructure	composite	Little Tikes	1998		x	X	204	62000	19000	
Stonecrest	2	playstructure	composite	Little Tikes	1998		x	X	368	112000	34000	1
W.O. Mitchell	2	playstructure	composite	Little Tikes	1998		x	X	143	44000	13000	
Alta Vista	4	playstructure	composite	Belair	1999		x	X	236	72000	22000	
Elgin St.	1	playstructure	composite	Little Tikes	1999		x	x	226	69000	21000	
Maple Ridge	3	playstructure	composite	Little Tikes	1999		x		231	70000	21000	
North Gower	6		composite	Little Tikes	1999		x	x	277	84000	25000	1
Queen Elizabeth		playstructure	•	Little Tikes						58000	18000	
	1 1	playstructure	composite		1999		X	X	190			
W.E. Gowling	1	playstructure	composite	Henderson	1999		X	X	165	50000	15000	
Barrhaven	6	playstructure	composite	Blue Imp	2000		X	X	240	73000	22000	
Bells Corners P.S.	2	playstructure	composite	OCDSB	2000		X	X	299	91000	27000	1
Carleton Heights	5	playstructure	composite	Little Tikes	2000		X	X	178	54000	17000	
Carson Grove	3	playstructure	composite	Little Tikes	2000		X	X	300	91000	27000	1
Castor Valley	6	playstructure	composite	OCDSB	2000	2	X	X	270	82000	25000	1
Elizabeth Park	1	playstructure	composite	Little Tikes	2000	2	X	X	202	62000	19000	

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				1	ſ				_			Replacement Bas	sea on existin	g areas
					Installation	H az	Ow/	nershi	n 11	sage	Surface	Replacement	ODA	Total
School Name	Zone	Equipment	Description of Equipment	Manufacturer	Date					Sage	Area	Budget	Comliance	Total
Manotick	6	playstructure	composite	Little Tikes	2000	2	Χ			Х	253	77000	23000	10000
Mutchmor	1	playstructure	composite	Henderson	2000	1	Χ			X	331	101000	30000	13100
Pinecrest	5	playstructure	composite	Little Tikes	2000	1	Χ			X	161	49000	15000	6400
Pleasant Park	4	playstructure	composite	Little Tikes	2000	1	Χ			X	194	59000	18000	7700
Roland Michener	2	playstructure	composite	Little Tikes	2000	0	Χ			X	218	67000	20000	8700
Stephen Leacock	2	playstructure	composite	Little Tikes	2000	1	Χ			X	319	97000	29000	12600
Vincent Massey	4	playstructure	composite	Henderson	2000	1	Χ			X	208	64000	19000	8300
Woodroffe Ave.	5	playstructure	composite	Little Tikes	2000	1	Χ			X	134	41000	13000	5400
Adrienne Clarkson	6	playstructure	composite	Little Tikes	2001	3	Χ			X	134	41000	13000	5400
Connaught	1	playstructure	composite	Belair	2001	3	Χ			X	346	105000	32000	13700
Regina St.	5	playstructure	composite	Henderson	2001	2	Χ			X	217	66000	20000	8600
W.E. Johnston	2	playstructure	composite	Little Tikes	2001	2	Χ			X	216	66000	20000	8600
Elmdale	4	playstructure	composite	Little Tikes	2002	0	Χ			X	196	60000	18000	7800
Fallingbrook	3	playstructure	composite	Henderson	2002	1	Χ			X	108	33000	10000	4300
Featherston	4	playstructure	composite	Henderson	2003	1	Χ			X	156	48000	15000	6300
Mary Honeywell	6	playstructure	composite	Little Tikes	2003	3	Χ			X	143	44000	13000	5700
Cambridge St.	1	playstructure	composite	Little Tikes	2004	1	Χ			X	239	73000	22000	9500
Castlefrank	2	playstructure	composite	Little Tikes	2004	0	Χ			X	126	39000	12000	5100
Jack Donohue	2	playstructure	composite	Little Tikes	2004	1	Χ			X	262	80000	24000	10400
Jack Donohue	2	playstructure	composite	Little Tikes	2004	0	Χ			X	130	40000	12000	5200
Mary Honeywell	6	playstructure	composite	Little Tikes	2004	3	Χ			X	151	46000	14000	6000
Carleton Heights	5	playstructure	composite	Henderson	2005	0	Χ			X	189	58000	18000	7600
Robert Hopkins	3	playstructure	composite	Belair	2005	1	Χ			X	162	50000	15000	6500
Roch Carrier	2	playstructure	composite	Little Tikes	2005	1	Х			X	293	89000	27000	11600
Stittsville	6	playstructure	composite	Little Tikes	2005	0	Х			X	300	91000	27000	11800
Steve MacLean	4	playstructure	composite	Playpower LT	2006	0	Х			X	179	55000	17000	7200
Steve MacLean	4	playstructure	composite	Playpower LT	2006	0	Х			X	344	105000	31000	13600
Farley Mowat	6	playstructure	composite	Playpower LT	2006	0	Χ			X	374	114000	34000	14800
Heritage	3	playstructure	composite	Playpower LT	2006	0	Х			X	313	95000	29000	12400
Lakeview	2	playstructure	composite	Henderson	2006	0	Х			X	200	61000	18000	7900
North Gower	6	playstructure	composite	Belair	2007	1	Х			X	180	55000	17000	7200
Bayview	4	playstructure	composite	Little Tikes	2007	2	Χ			X	229	70000	21000	9100
Century	5	playstructure	composite	Belair	2007	0	Х			X	129	40000	12000	5200
Forest Valley	3	playstructure	composite	Belair	2007	0	Х			X	151	46000	14000	6000
General Vanier	4	playstructure	composite	Belair	2007	0	Х			Х	216	66000	20000	8600
Greely	6	playstructure	composite	Henderson	2007	0	X			Х	247	75000	23000	9800
Katimavik	2	playstructure	composite	Henderson	2007	0	X			X	215	66000	20000	8600
Metcalfe	6	playstructure	composite	Henderson	2007	0	Х			Х	194	59000		7700
Viscount Alexander	1	playstructure	composite	Henderson	2007	0	X			Х	142	44000	13000	5700
Grant Alternative	5	playstructure	composite	Kompan	2007	1	X			X	151	46000		6000
A. Lorne Cassidy	6	playstructure	composite	Belair	2008	0	X			X	300	91000	27000	11800
Avalon	8	playstructure	composite	Henderson	2008	0	X			X	376	114000	34000	14800
Bells Corners P.S.	2	playstructure	composite	Henderson	2008	0	X			X	178	54000	17000	7100
Bridlewood	3	playstructure	composite	Henderson	2008	0	X			X	300	91000		11800

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										Replacement Bas	ed on existin	ig areas
					Installation	H	Ownership	Lleage	Surface	Replacement	ODA	Total
School Name	Zone	Equipment	Description of Equipment	Manufacturer	Date		B D C	K S	Area	Budget	Comliance	Total
Charles H. Hulse	4	playstructure	composite	Henderson	2008	0	Х	X	232	71000	21000	920
Glen Ogilvie	3	playstructure	composite	Henderson	2008	0	X	X	182	56000	17000	730
Manor Park	6	playstructure	composite	Belair	2008	0	X	X	444	135000	40000	1750
Mutchmor	1	playstructure	monkey bars	Belair	2008	0	X	X	151	46000	14000	600
Centennial	9	playstructure	composite	Belair	2009	0	X	X	191	58000	18000	760
Manordale	5	playstructure	composite	Henderson	2009	0	X	X	161	49000	15000	640
South March	2	playstructure	composite	Henderson	2009	0	X	X	300	91000	27000	1180
South March	2	playstructure	composite	Henderson	2009	0	X	X	228	70000	21000	910
South March	2	playstructure	composite	Henderson	2009	0	X	X	125	38000	12000	500
Berrigan	2	playstructure	composite	Little Tikes	2009	0	X	X	342	104000	31000	1350
Dunning Foubert	3	playstructure	composite	Recreation	2010	0	X	X	92	28000	9000	370
Meadowlands	5	playstructure	composite	Henderson	2010	0	X	X	262	80000	24000	1040
Roberta Bondar	4	playstructure	composite	Henderson	2010	0	Х	X	350	107000	32000	1390
		_								13922000	4208000	181300

Summary of Structures By Usage

		Both Kinder and			
Year Installed	<u>Kindergarten</u>	Senior Shared	Senior/Junior	<u>Total</u>	Replacement Cost
Removed	6		6	12	
pre - 1985	1	2	5	8	\$1,011,000
86-1990	13		24	37	\$2,284,000
91-1995	55	4	27	86	\$4,585,000
96-2000	25	3	41	69	\$4,702,000
01-2005	1	8	17	26	\$1,718,000
06-2010	16	3	35	54	\$3,830,000
Replacement Costs Average Replacement Cos	\$4,530,000 \$38,718	\$1,161,000 \$58,050	\$12,439,000 \$80,252		\$18,130,000

Summary of Structures

Replacing Structures	for 5 Year plan	\$7,880,000 Total
Budget per year Structure replaced per year	\$1,576,000	\$55,104.90 per structure
2015		\$1,542,937.06
2016	28	\$1,558,366.43 1% inflation / per year
2017	29	\$1,630,162.60 1% inflation / per year
2018	29	\$1,646,464.23 1% inflation / per year
2019	29	\$1,662,928.87 1% inflation / per year

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