

RURAL CHILDCARE:

Childcare as Economic and Social Development in Parkland



CHILD CARE COALITION OF MANITOBA www.childcaremanitoba.ca

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The childcare sector is directly worth \$1.73 million to the Parkland economy. As this money "ripples" through the local economy, it is estimated to produce economic benefits of \$2.74 million, accounting for direct and indirect effects.

he Child Care Coalition of Manitoba studied the economic and social impact of childcare in southwestern Parkland over 2006. The research was supported by a local Advisory Council of leading stakeholders.

This study finds childcare generates multiple benefits for children, families and the regional economy. The report provides detailed information on Parkland's childcare services and childcare labour force, and the economic effects of the childcare sector. In additional to economic and statistical data, we include the voices of Parkland residents, who speak eloquently about gaps in childcare provision.

The six rural municipalities and five towns/villages of southwestern Parkland have 2,556 children aged 12 and under. For these children, there are 362 licensed spaces (in homes and centres, full-time and part-time), meaning that about 14 percent of the area's children have access. Outside of Dauphin, services are scarce. Infant and school-aged care is particularly lacking. Many facilities cannot recruit and retain trained early childhood educators, mainly due to low wages. Parkland's services are underdeveloped—with long waiting lists. Services for young families are particularly important to rural regions which are losing people to out-migration, helping to mitigate population decline.

Childcare is important to rural Manitoba. Regulated childcare helps parents balance work and family responsibilities, and provides children with a rich environment for development and care. Childcare is also important to the regional economy. Childcare dollars ripple through the local economy with solid multiplier effects. Every \$1 spent on childcare in Parkland generates \$1.58 of benefits.

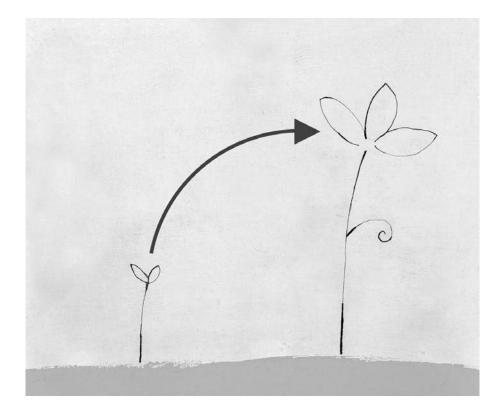
The childcare sector is directly worth \$1.73 million to the Parkland economy. As this money "ripples" through the local economy, it is estimated to produce economic benefits of \$2.74 million, accounting for direct and indirect effects. Childcare enables parents to work, and we calculate the annual earnings of parents who use full-time childcare in Parkland to be over \$12.3 million.

Childcare also provides jobs, as well as supporting parents. There are 76 full and part-time childcare workers in Parkland, and the sector creates the equivalent of an additional 28 full time jobs. The childcare sector is an important site of job creation, particularly for women.

We find that Parkland needs many more services (at least 1,122 more childcare spaces), that childcare must become more affordable and accessible to families, that the quality of care must rise and that more trained staff must be recruited through better wages and benefits. These improvements will require policy innovation, political will, and increased public funding.

Investment in childcare creates high yields and brings significant benefits to children, families, communities and Parkland's economy. Parkland's economy, along with its families and children, would see even greater returns if childcare services were expanded.

Project Background



C hildcare services are part of modern family life. In Canada, three out of four mothers is in the paid labour force, and most families use some form of childcare. Over half of all children, according to Statistics Canada, are cared for by someone other than their parents [1]. However, few children have access to regulated care—the service that is considered developmental early childhood care and learning.

The Child Care Coalition of Manitoba set out to study the economic and social contributions made by childcare in Parkland, as well as in Thompson and St-Pierre-Jolys. These studies build on the Coalition's 2004 *Time for Action: An Economic and Social Analysis of Childcare in Winnipeg.* Such studies are both new and uncommon in Canada; unlike in the USA, where dozens have been completed [2, 3].

This Parkland study is particularly timely, as childcare has a high profile on the national policy agenda (under successive administrations) and at the provincial level. Yet the financing of childcare is uncertain. Beginning April 2007, Manitoba lost federal dollars committed to childcare under the cancelled childcare agreements. At the same time, Manitoba's first-ever Five Year Plan (2002–2007) concluded, and the province is actively considering how it will 'move forward' on childcare. Close economic and social analysis can provide decision-makers with useful information for policy development and planning.

This report focuses on a rural region. Over 28 percent of Manitobans live in a rural area, and rural areas have their own unique set of opportunities and challenges, including population decline and seasonal needs. We explore the many contributions childcare makes in an agricultural area—and lay to rest the Early childhood development programs are rarely portrayed as economic development initiatives... and this is a mistake. Such programs often appear at the bottom of economic development lists. They should be at the top. Studies find that wellfocused investments in early childhood development yield high public as well as private returns.

 Art Rolnick and Rob Grunewald, Federal Reserve Bank of Minneapolis We explore the many contributions childcare makes in an agricultural area-and lay to rest the old myth that childcare is "just an urban issue."

old myth that childcare is "just an urban issue."

In preparing this report, we consulted with expert stakeholders. Our Advisory Council members included elected representatives and leaders from rural economic development, child-centred organizations, business, education, labour, Aboriginal and Métis, and health organizations among others. We are proud to announce the members:

Robert Annis,

Director, Rural Development Institute, Brandon University Marli Brown and Ilene Dowd, Community Coordinators, Parkland Healthy Child Coalition, Dauphin Tracy Cholka, Business Owner, Ethelbert Tim De Ruvck. Assistant Superintendent, Mountain View School Division, Dauphin Vern Ellis. Mayor, Gilbert Plains Gisele Funk. Metis Child and Family Services Board Authority Gerald Hackenschmidt, VP Corporate Services, Parkland Regional Health Authority Marnie Kostur, Executive Administrator, Parkland Agricultural Resource Cooperative Robert Misko. Reeve, Rural Municipality of Hillsburg Shellev Neel, Staff Representative, Manitoba Government and General Employees Union Barb St. Goddard, Executive Director, Dauphin Friendship Centre, Dauphin Jody Stuart, Roblin Chamber of Commerce

Susan Prentice, Ph.D. (Sociology, University of Manitoba), was the project's Principal Investigator. Molly McCracken, MPA, worked on the latter phase of the project, including data analysis and literature review; Nikki Isaac, MA, coordinated the first phase, including community consultations. Thelma Randall, BHEc, member of the Steering Committee of the Child Care Coalition of Manitoba, provided financial management.

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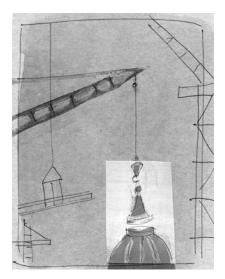
1. Introduction

hildcare is an important service. It simultaneously supports children and their parents (particularly mothers), as well as employers. It contributes to community strength and infrastructure, and has surprisingly significant local economic impacts. Childcare offers multi-faceted benefits to Parkland.

GOOD CHILDCARE IS GOOD FOR CHILDREN

Anyone who has witnessed quality childcare in action knows that young children learn through play, and that development in the early years is a foundation for future success.

Educators and child development experts confirm that high quality childcare services are good for children. The benefits are wide-ranging. "Much research has demonstrated the remarkable power of quality early childhood care and educational programs to improve a vast range of social outcomes, particularly for socio-economically disadvantaged children: reduced grade retention, higher reading and mathematics scores, increased IQ, higher levels of social competence, higher graduation rates, lower teen pregnancy rates, less smoking and drug use, higher employment and income levels, and lower crime rates" [4]. The American National Academy of Science calls results such as these some of "the most consistent findings in developmental science" [5].



CHILDCARE IS GOOD FOR THE ECONOMY

Childcare services also have remarkable economic impacts. Research shows that quality early childhood education programs more than pay for themselves. Some American studies have suggested that the return on \$1 of childcare spending can be as high as \$17 [6]. Closer to home, and using a different methodology, University of Toronto economists have calculated that for every \$1 invested in childcare, \$2 is returned over the long-term through benefits to children and parents [7].

In this report, we found that every \$1 spent on childcare returns \$1.58 to Parkland—even before any child development returns or parent lifetime effects are assessed. Thus, the real value of childcare is much more than \$1.58 to the dollar.

CHILDCARE COMBATS POVERTY

Childcare is good for all children, and is particularly important for children living in poverty. It can help promote children's school-readiness, and buffer some of the developmental disadvantages of growing up in a poor family. The Organization for Economic Co-operation and Development (OECD) explains:

The reduction of child and family poverty is a precondition for successful early childhood care and education systems. Early childhood services do much to alleviate the negative effects of disadvantage by educating young children and facilitating the access of families to basic services and social participation. [8].

The returns from investing in childcare for children in poverty are compelling. A recent American study estimated the economic gains the US could realize from high quality services for all low-income 3 and 4 year olds. During the first

The Federation of Canadian Municipalities has pointed out that "the quality-of-life and competitiveness of rural communities depend on their having the infrastructure they need" and this includes childcare services.

16 years of the program, costs would exceed the benefits by a declining margin. After 16 years, the benefits would begin to exceed the costs by a growing margin each year, and there would be a net budgetary surplus of 0.25 percent GDP in 2050 [9].

CHILDCARE IS GOOD FOR WOMEN'S EQUITY AND EMPLOYMENT

According to the Business Council of Manitoba, the biggest single threat to economic growth in Manitoba is our chronic labour shortage [10]. Childcare is one of the main ways to enable parents, especially women, to participate and stay in the labour force. In an era of global competitiveness and a knowledgebased economy, skilled workers are the key to economic success. We can't afford to forego the contributions women can make.

Economists point out that childcare has a high level of "price elasticity," which means that the cost of childcare is strongly connected with the likelihood that parents will buy the service. Lower-cost childcare increases the number of parents who use it, which raises the labour force participation rate of parents, especially women with children [11]. When childcare is available, women experience fewer workforce interruptions and accumulate longer and more continuous labour market experience. This, in turn, influences the types of jobs they can obtain and the level of their lifetime earnings. Therefore, childcare is crucial to reducing labour market inequality between men and women.

In Parkland, women participate in the labour force at much lower rates than in the rest of Manitoba. Childcare services can make it easier for mothers to work, boosting the local labour force and increasing household incomes.

CHILDCARE IS REGIONAL INFRASTRUCTURE AND ECONOMIC DEVELOPMENT

Childcare infrastructure is needed in rural areas, just as in larger centres. The Federation of Canadian Municipalities has pointed out that "the quality-of-life and competitiveness of rural communities depend on their having the infrastructure they need"— and this includes childcare services [12]. Lack of childcare is a barrier to employment and rural development.

CHILDCARE IS FARM SAFETY

As others have observed, farming is a unique work site. It is one of the last occupations where parents regularly take their children to the workplace. A recent report from Brandon's Rural Development Institute notes that "Unless childcare services are available locally at an affordable cost, farm families will continue to take their children to work with them and the number of children injured or killed in farming related accidents will continue to climb" [13].

CHILDCARE IS A "GREEN" INDUSTRY

Childcare is eco-friendly and labour-intensive. Like many other services, it is a relatively low-consumption sector which generates little waste and no toxic by-products. As early childhood care and education, it provides development services that improve human capital in children. As a sector, childcare is sustainable and non-polluting.

2. Profile of Parkland: Rural Manitoba

his study focuses on the southern and western portion of the Parkland region (*See Note 2*). To the north is Duck Mountain Provincial Park and to the south is beautiful Riding Mountain National Park. The region is bounded by Saskatchewan on the west and Dauphin Lake on the east **SEE MAP 1**.

Farming and agricultural industries are the major economic activities of the region. There are 5,200 farms in the area, which includes some of the most fertile farmland in Manitoba. Local farmers produce everything from grains, oilseeds, and livestock to honey bees, greenhouse products and hemp [14]. About one quarter of Manitoba's beef cattle and horses and nearly one-half of its bison and elk, are located in the area. In addition, the economic base includes public services (such as hospitals and personal care homes), and tourism related to the nearby provincial and national parks. A new bio-fuel initiative may spur development in the green and alternative fuels sector. The area has several large employers and many residents are self-employed farmers.

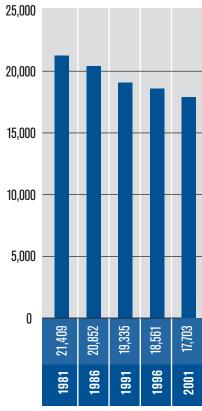
Overall, the poverty rate in the RHA of Parkland is 21 percent (See Note 5). Federal MP Inky Mark reports that the Dauphin-Swan River-Marquette constituency has the 5th lowest average family income in Canada [15]. The unemployment rate in the Parkland region is 6.24 percent, and the average participation rate is 61 percent [16]. Women participate in the labour force at lower rates than in the rest of Manitoba **SEE TABLE 8**.

The population of Parkland has steadily fallen over recent years **SEE TABLE 1**—in fact, south-western Parkland has seen very steep population declines over the past 30 years. The 2001 census reports 17,703 people, including 2,556 children under 12. From 1981 to 2001 the population decreased by 3,706 people—a drop of almost 20 percent. As Map 1 illustrates, the area's children are unequally distributed. The towns, villages and city of Dauphin have a higher number of children; the rural municipalities have fewer.

Population decline has been particularly acute among young families. Farms are getting larger, and many young people out-migrate to urban centres. At the same time, family sizes are decreasing and rural farmland is supporting fewer families with children [14]. A discussion paper released in May 2006 by Mountain View School Division noted that school age child populations have fallen by up to 60 percent since 1976. The average decline in the whole Mountain View School Division population over the past quarter century is slightly in excess of 2 percent per year. "It is worth noting," the report points out, "that while overall enrollment is in decline the Aboriginal (status, nonstatus, Metis, Inuit) population in the division is growing and now exceeds forty percent of the division's total student population" [17].

Parkland

Rural Municipalities:
Dauphin
Ethelbert
Gilbert Plains
Grandview
Hillsburg
Shell River
Towns, Villages and Cities:
Dauphin
Ethelbert
Gilbert Plains
Grandview
Roblin



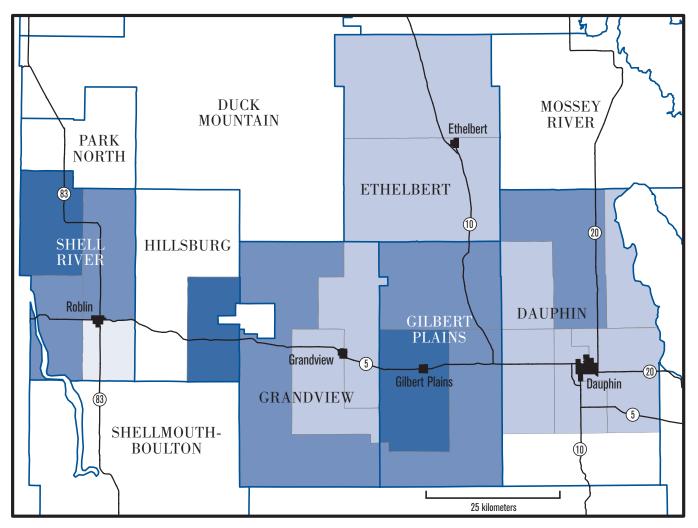
Source: Calculated from Statistics Canada Census data

Rural Childcare – Parkland

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TABLE 1 Parkland Population,1981-2001

MAP 1 The Parkland Region



Child Population (as a percentage of population)



3. Why Does Rural Manitoba Need Childcare?

Maintoba is a rural province, and agriculture is one of our primary industries: more than 28 percent of Manitobans lives rurally, and one in every eleven jobs in the province is dependent on agriculture [18]. Yet, in the past twenty years, rural life has changed dramatically. Today, farm incomes are in decline for a host of reasons—including the crisis of BSE that led to catastrophically low beef prices, badly hurting this cattle-producing region. The BSE crisis is the latest in a series of challenges to farmers that now means that many rural families must rely on off-farm income. Increasingly, women are undertaking paid labour, in addition to their traditional home and farm-based work. Women's increased employment puts pressure on caregiving and community volunteerism.

Parkland is typical of national trends. A Canada-wide study of women in the agricultural sector found that the number of women working off the farm to supplement income increased from 31 percent in 1982 to 49 percent in 2001 [14]. This places demands on women's time. Rural women aged 35–44 years, who work on and off-farms, are occupied for 2.5 hours/day more than the average Canadian woman the same age [14].

Many research studies have discovered that rural families are severely timestressed. Rural families work long hours, with both men and women working an average of 11 hours per day, 7 days per week, all year round [19]. This is 1.5 hours more than the Canadian average.

Farm families face serious time pressures, which are exacerbated by a lack of supports such as childcare. Balancing family and farm needs is stressful, and may compromise rural women's health [20, 21]. Childcare services can provide respite for mothers and families, whether they are in or out of paid labour.

FARM CHILDREN'S SAFETY

Farm families find different ways to care for children—through sharing with neighbours or extended family. However, farming communities are becoming more sparsely populated, and grandparents and extended family are less available to step in when childcare is needed. Research demonstrates that farm families develop their own childminding arrangements because childcare is not available or is out-of-reach financially [14].

Farming is one of the very few workplaces where children are regularly present [13, 22]. Because of the nature of this work, farm children are at grave risk. Farm children are exposed to greater dangers than are non-farm children. The proof is the fact that injuries and fatalities among farm children are much higher than in the general population.

The main cause of injury and death among farm children is related to riding on farm machinery, or being present at a worksite [23]. Very young children are at even higher risk. Close to half of fatalities and over a third of child injuries, involve children aged 1–6 years. This is a testament to the vulnerability of young children on farms.

The Canadian Agricultural Injury Surveillance Program's research on farmrelated injuries and deaths from 1990-2000 found that the main cause of child death is from accidents resulting from being "extra riders" on farm machines or drowning. The death rate is stark: over a decade, Canada lost 171 children (ages 0-14) to fatalities, and 1,849 more were hospitalized for agricultural injuries Farm children are exposed to greater dangers than are non-farm children. The proof is the fact that injuries and fatalities among farm children are much higher than in the general population. Keystone Agricultural Producers (KAP) calls for increased awareness of child farm safety issues, as well as more affordable childcare services.

[24]. In Manitoba, from 1983–1992, 305 children incurred injuries on the farm serious enough required medical attention [25].

Manitoba farm families are concerned about the safety of their children. The Manitoba agricultural community takes the issue of child farm safety seriously, and advocates for increased support for families. Keystone Agricultural Producers (KAP) calls for increased awareness of child farm safety issues, as well as more affordable childcare services [26].

CHILDCARE, SEASONAL NEEDS, AND SHIFT WORK

Farm families experience fluctuations in workload and schedules. Families in rural areas need flexible and extended hours care to accommodate the realities of rural life [27, 28].

At times such as seeding, harvesting, calving or haying these farming operations take precedence over other activities. The window of opportunity to complete these operations is restricted and, depending on weather conditions, can be erratic. The need for someone to care for younger children at these times becomes critical, particularly when the weather is less than favorable [25].

A Manitoba study found that families that derive less than 75 percent of their income from farming are more likely to require childcare [25].

CHILDCARE & RURAL ECONOMIC DEVELOPMENT

Rural areas are important to Canada and make significant contributions to national economic growth [12]. In rural and small towns, services are crucial for both quality of life and the local economy [29]. The services sector is important to the viability of rural communities, as more people look for off-farm income [30].

Childcare supports and creates jobs — parents are more available to work for pay when their children are cared for. In addition to allowing parents to work, childcare also provides employment to childcare workers. Additional job creation and economic benefits occur from childcare's direct and indirect spending.

The existence of services such as schools, hospitals, and childcare creates employment opportunities. Locations with good services help to attract and retain long-term residents, and newcomers, and can mitigate out-migration [31, 32]. The Federation of Canadian Municipalities supports a national rural childcare system to support families in rural communities [12].

A 2005 case study of immigrants to Parkland found that lack of childcare was one of the negative aspects of living in the community [33]. Parkland may become a more appealing destination to immigrants if more childcare services are accessible.

4. Childcare Services in Parkland

hildcare in south-western Parkland is comprised of licensed facilities which offer full and part time care to children ages 0-12 years. These include childcare centres, nurseries and family or group childcare homes. The provincial *Community Child Day Care Standards Act and Child Day Care Regulations* regulate all of these facilities (See Note 1).

Parkland has 2,556 children aged 0-12, and a total of 362 licensed spaces (*See Note 3*). There is a licensed space for 14 percent of the area's children. This access rate is worse than in Winnipeg (about 17 percent), but on par with the Manitoba average of 14.3 percent [34].

Parkland has twelve centres and/or childcare nurseries, licensed for 274 childcare spaces **TABLE 2**. Of these spaces, 112 are part-day nursery spaces and 162 are available for full-day use. Twelve family and group homes are licensed for 88 spaces. Family homes are licensed for up to eight children (including the provider's own)—or 8 to 12 children in a group family home with two adults.

	Infant	Nursery (part-day)	Preschool	School-age	Total Spaces
Dauphin					
Tinker Bell Nursery School Inc.		18			18
Dauphin Mini Franglais Preschool Corp		20			20
Dauphin Ukrainian Nursery School		15		15	30
Dauphin School Age Day Care Inc			5	25	30
Peter Pan Day Nursery Inc.	12		38		50
Parkland Campus Kids Inc			16		16
Little Steps Head Start Family Program		20			20
Gilbert Plains					
Daily Discoveries Inc.	1	9	17	1	26
Grandview					
Grandview Nursery		15			15
Grandview Tiny Treasures Children's Centre Inc			16		16
Roblin					
Roblin Day Nursery School Inc.		15			15
Roblin Children's Center Inc.			16		16
Total Centres	13	112	108	41	274
Dauphin					
Eleven Homes					80
Roblin					
One Home					8
Total Spaces					362

TABLE 2: Licensed Childcare Services and Spaces in Parkland (2006)

Parkland has a shortfall of 1,116 spaces, and requires an additional 146 additional ECE staff.

Homes can serve children of any age, within specified safety ranges.

Between 88 family home childcare spaces and 162 full-time centre spaces, Parkland has a capacity of 250 licensed spaces available for parents who need full-day, full-week care. Dauphin has the lion's share of centre spaces: 184 of 274, or two-thirds of the total. Eleven of the region's 12 licensed homes are in Dauphin. Compared to Winnipeg, Parkland has a very high degree of part-time nursery services.

MORE SPACES NEEDED

Most western European countries provide early learning and care services to well over 80 percent of their youngsters [8]. Many Canadian experts believe that, at a minimum, an adequate childcare supply must ensure at least half of all children aged 0-12 have access to full-time service [35, 36]. By this measure, Parkland has a shortfall of 1,116 spaces. To ensure half of the region's youngsters have full-time care, a total 1,278 full-time spaces are needed. To ensure each age group has its natural share of spaces, Parkland needs 168 more infant spaces, 390 more preschool spaces and 558 more school-age spaces in order to serve just half of the region's youngsters (*See Note 3.*) The shortfall is presented in Table 3. These 1,116 new spaces will require an additional 146 new ECE staff.

LACK OF PUBLIC MANDATE AND RELIANCE ON COMMUNITY

All of Parkland's childcare centres are community-based, operated by non-profit organizations. There is no publicly-operated childcare in Manitoba, and no entitlement of parents or children to service. The role of the provincial government is limited to licensing and funding facilities, and excludes planning, starting-up or delivering services. No role exists for local government. International evidence shows that reliance on the community to maintain childcare produces uneven results [8]. In Winnipeg, for example, childcare services are mal-distributed: poorer and inner-city neighbourhoods fare worst, and more affluent neighbourhoods fare better, a reflection of differential social and material capital. An equivalent phenomenon appears to occur in Parkland, where Dauphin garners the lion's share of spaces and other regions are severely under-served.

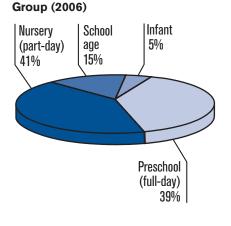


FIGURE 1: Centre Spaces By Age

TABLE 3: Current Service and Projected Need: Full-time Centre-based Childcare in Parkland

	Currently Exists	50% Target	Shortfall New Spaces Needed
Infant spaces	13	192	179
Preschool spaces	108	447	339
School-age spaces	41	639	598
Total	162	1,278	1,116

(See Note 3)

For new childcare facilities to be established in Parkland, local residents must come together. They face the challenging task of applying for funding, hiring staff, locating appropriate space, equipping a facility, and operating a program. They will undertake this start-up work with minimal assistance, in the context of scarce capital funding. These factors make expansion of childcare services a daunting initiative, and one that severely tests community capacity.

HOW MANY CHILDREN AND PARENTS CURRENTLY USE CHILDCARE?

How many children and parents use childcare? This seemingly obvious question is surprisingly hard to answer, all across Canada as well as in Parkland [37]. Our best calculations show that between children enrolled full-time and part-time in homes and centres, a total of 511 children participate the regulated childcare sector in Parkland, though this number may vary slightly at any one time.

A total of 362 spaces can serve more than that many children because some children 'share' a licensed space. This most clear for nurseries, which offer a part-day and part-week program. A nursery program with 20 licensed spaces for example, may serve 40 or more children in a week. Even in full-day centres, some parents share a space. Unlike in nursery, where parents select only a partday/part-week program, other factors are at play in this case. Reasons may include cost, hours of care, transportation or other factors.

How many households do 511 children represent? Assuming that childcareusing families are typical of other Parkland families, we estimate about 398 households rely on full or part-time childcare (See Note 7.)

We estimate about 228 households use childcare full-time; 170 households use childcare part-time (*See Note 7.*) We assume that mothers and fathers who are full-time users are able to work while their children enjoy developmental benefits. We assume users of part-time care value their children's early childhood education, and benefit from some respite and time.

LIMITED ACCESS TO CHILDCARE

Parkland is a big area—with large stretches of low density, punctuated by small towns, villages and the City of Dauphin. Access to childcare services perfectly corresponds to population density. As **MAP 2** shows, childcare services are very unevenly distributed. Almost all the family homes and over half of Parkland's 12 centre-based (a total of seven) facilities are in Dauphin; Grandview has two centres, Roblin has two centres and one home, while Gilbert Plains has just one centre. Ethelbert has an elementary school but no childcare. Many families live very far from a childcare facility.

Many parents and children are denied access due to distance. In our community consultations, Parkland citizens repeatedly stressed the problems of access, including transportation. While the local school division is required to provide transportation to its pupils, childcare facilities lack both the mandate and the resources to do the same. Only Little Steps, a nursery school in the Dauphin Friendship Centre, provides transportation.

LIMITED SERVICE BY AGE OF CHILD

Figure 1 shows the breakdown of centre-based spaces by age-group. Preschool children have the best access to centre care. A full eight out of every 10 licensed

Provincial regulations set out a staff to child ratio in centre-based childcare as follows:

Infants	1:4
Preschool	1:8
School Age	1:15

Nursery centres providing less than 4 hours of care per day are permitted to have a 1:10 ratio.

TABLE 4: Childcare Centre FeesBy Age of Child (2006)

	Per Day	Per Year
Infant Spaces	\$28.00	\$7,280
Preschooler	\$18.80	\$4,888
School age, (cost for school days varies by before-, after- school and lunchtime slots.)	\$8.00- \$9.60 (school days) \$18.80 (out-of- school days)	\$2,836- \$3,140

spaces are for children aged 2 to 5 years, split between full-day childcare centres and part-day nurseries. Even though school-aged children (6 to 12 years) make up half the population requiring care, just 15 percent of centre spaces are for them. Infants have the worst access, at just 5 percent. All across Canada, infant care is scarce [38].

WAITING LISTS

In Parkland, many parents are waiting for a licensed childcare space. In March 2006, we asked childcare centres and homes if they had a waiting list. We learned that there were 99 names on waiting lists, and 19 spaces available. The waiting list is evidence of unmet need.

Open spaces and waiting lists can co-exist for many reasons: some troubling, others predictable. For example, available spaces may not be used due to high cost, the age of the child(ren), location and/or hours of operation. Of less concern are those spaces that open up on a regular basis as children turn over. For example, a preschool space may temporarily be unfilled as a 5 year old begins kindergarten and moves up to school-age care, while the facility waits for the next preschooler to begin attending.

HIGH PARENT FEES

Parent fees vary by age of child, length of day, and type of care **SEE TABLE 4**. In centres and homes with trained staff, the daily fee for infants is \$28.00; preschool care costs \$18.80 and school age care is least expensive. Home-based regulated care with untrained providers may be slightly less expensive. School-age care fees vary depending on whether care is just before and after-school or also includes lunchtime, and whether it is provided on a school day or a non-school day. The cost of providing care to younger children is higher because quality and safety regulations require a higher staff to child ratio. Table 4 itemizes daily and annual childcare fees.

In 2006, Parkland parent fees totalled approximately \$1,054,000 (See Note 4). Most of this was paid directly by parents; the remainder was paid on behalf of very low-income parents by the provincial childcare fee subsidy system. Parents are the major funders of childcare; parent fees (and subsidies) represent 60.8 percent of sector revenue.

INADEQUATE SUBSIDY SYSTEM

Low-income parents may qualify for a fee subsidy **SEE TABLE 5**. Approximately 42 percent of Parkland households using childcare receive some subsidy.

The subsidy system, designed to meet the needs of low-income parents, is grossly inadequate. As Table 5 shows, parents must be at or below the low-income cut-off (known as the poverty line) to qualify for any fee subsidy. The before-tax poverty line in 2005 for a family of 2 in a rural area was \$17,807, and \$26,579 for a family of four, according to Statistics Canada [39].

The income level at which parents become eligible for a fee subsidy was last set in 1991. If the 1991 eligible incomes had simply kept pace with inflation, many more parents would be receiving a subsidy today.

Adjusted to today's (2007) dollars, single parents should be eligible for a maximum subsidy at incomes up to \$18,406 (turning point), with subsidy

ceasing at \$32,811 (break-even point). Two parent families with two children should be eligible for a maximum subsidy at incomes up to \$25,225 (turning point), with subsidy ceasing at \$54,035 (break-even point). These adjusted incomes are a full 33.5 percent higher than the rates the provincial government currently uses to determine which families are eligible for a subsidy.

A parent may qualify for a subsidy, but if there is no licensed program with an available space, that parent and child will be shut out of service. In a region with just 362 spaces, we predict this must happen frequently.

In 2002, at the inauguration of Manitoba's Five Year Plan for Child Care, the provincial government announced it would "reduce" the \$2.40/day per child fee surcharge [41]. The Plan ended April 2007, but the surcharge—levied against very poor families—was in effect as of mid-March.

CHILDREN'S PROGRAMMING AND QUALITY

The small stock of licensed programs provides impressive services to Parkland residents, supporting children's development in many ways.

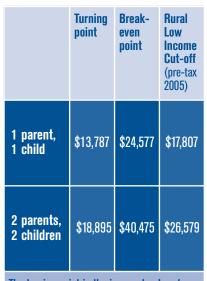
Children have access to several heritage languages, including French, Ukrainian, Ojibway and Saulteaux. Program quality, however, is constrained by finances. In Parkland, under 7.5 percent of total centre revenues are spent on programming **SEE TABLE 7**.

Licensed childcare services in Manitoba aim to include all children. An estimated 10 percent of children have special needs (for example health problems or disabilities, delays or disorders in physical, social, intellectual, communicative, emotional, or behavioural development) that require some level of additional support to assure their full participation in childcare programs [42]. The inclusion of children with special needs in Parkland facilities, however, is uneven, often because of lack of staff or specially trained staff, and/or transportation or other required supports.

SLOW GROWTH IN CHILDCARE

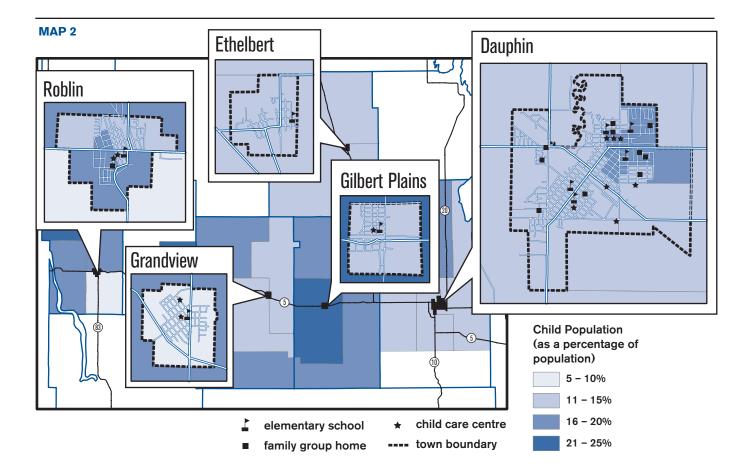
The childcare system in Parkland has remained relatively static for some time. Ten of Parkland's 12 childcare centres opened before 2000. Two began operating over thirty years, ago, in 1974–75. The situation is only slighter better for family homes. Half of the 12 family homes opened prior to 2001. The longest running family home in the area opened in 1989. Licensed family childcare homes open and close more frequently than do centres.

TABLE 5: Eligibility for Childcare Fee Subsidy in Manitoba (2006)



The turning point is the income level up to which the maximum subsidy is available. Partial subsidy is available up to the breakeven point at which income subsidy ceases. In Manitoba, nearly all subsidized parents are surcharged \$2.40/day per child.

5. Early Childhood Educator Labour Force in Parkland



Parkland's licensed childcare centres and nurseries, a total of 62 educators are employed. The centre-based childcare labour force is made up of 25 full-time and 37 part time staff. There are 10 family and 2 group childcare homes, with a full-time staff of 14 people. Between centres and homes, 76 people work in childcare. Adjusted for full-time equivalency, the childcare labour force is made up of 57 full-time equivalents (FTE). (See Note 1.)

Manitoba has three training classifications for staff. Child Care Assistants (CCA) have no formal childcare training, but must have first aid and CPR. Beginning April 2007, CCAs must also be enrolled in or have completed a basic 40-hour introduction to childcare course. An Early Childhood Educator (ECE) II has earned a two-year community college diploma in Early Childhood Education, or has been assessed to have these skills. An ECE III holds a four-year university degree in a recognized discipline, or is an ECE II who has upgraded through approved post-diploma courses, or has been assessed as having equivalent qualifications. Family home care providers are not usually classified and are not required to have specialized early childhood education training beyond a forty-hour introduction.

If Parkland had enough childcare spaces to provide full-time centre-based care to half of all children aged 0-12, an additional 146 trained early childhood educators positions would be created *(See Note 3).*

The Community Child Care Standards Act sets out standards for quality and safety, including staff to child ratios, group size, and other criteria. One of its regulations is that all directors of centres hold ECE III qualifications (nursery and school age directors must hold ECE II), and that two-thirds of centre staff (and half in nurseries) should have ECE II or III qualifications. Facilities that cannot meet these training levels must apply for and receive an exemption to their license. Exemption are provided if facilities can propose a staffing plan that meets provincial approval.

Parkland has few trained early childhood educators (*See Note 1*). Almost half (49 percent) of all workers are Child Care Assistants (CCA) with no training. Of the remaining half, 42 percent are ECE II and 8.8 percent are ECE III. ECE training is available locally at the Assiniboine Community College campus in Dauphin, but only ECE II certification can be earned there. Staff who seek ECE III qualifications (a requirement for most centre directors) must enroll in a university-based program not available locally.

All of Manitoba confronts a shortage of trained ECE staff. In 2005-06, 30 percent of Manitoba centres were unable to meet training requirements, due to shortages [43]. In Parkland, this ratio is worse: 5 of the 12 centres and nurseries—or 42 percent—have a temporary exemption to their license because they do not have the required ratio of trained staff or a trained director. Low numbers of trained staff brings downward pressure on the quality of the programming provided to children.

Wage levels are important for recruitment and retention of childcare workers. It is all too common for students to complete their ECE training, but be diverted out of childcare into better paying work. Low wages are also associated with high levels of staff turnover and can "prevent competent individuals from considering childcare work in the first place, particularly if they are primary breadwinners" [44].

The field has trouble recruiting and retaining staff primarily because of wages. Childcare wages are low, and have been for some time. In Manitoba in 2005/06, the average CCA earned between \$19,762-\$27,489. Those with ECE II qualifications earned an average of \$28,636-\$36,260. ECE III staff, many of whom are directors and supervisors, earned between \$30,829-\$44,064 [45].

The provincial government has recognized the links between a shortage of trained staff and low wages. New initiatives are underway to increase enrollment in training programs, and to recruit former staff back into the field, and are accompanied by small funding increases to permit wages to rise [46].

The very design of the childcare system, however, must change if quality and staffing is to improve. Most of the funds spent by a childcare program go to wages and benefits: a full 82 percent in Parkland (*See Note 6*). The main source of revenue is parent fees (and subsidies) and costs are already too high for many parents to afford. Clearly, increased public operating support is needed.

If Parkland had enough childcare spaces to provide full-time centrebased care to half of all children aged 0–12, an additional 1,116 spaces and 146 trained early childhood educators positions would need to be created.

6. The Economics Of Childcare In Parkland

TABLE 6: Revenue by Source for Parkland Childcare

Centres	Revenue		
Fees	\$647,957		
Disability Grant	\$39,758		
Fundraising	\$32,597		
Donations	\$1,676		
Interest	\$1,126		
Other	\$46,152		
Operating Grant	\$475,806		
Subtotal Centres	\$1,245,074		
Family Group Homes			
Parent Fees	\$406,047		
Grants	\$81,934		
Total Family Homes	\$487,981		
Total All Parkland Childcare	\$1,733,055		

TABLE 7Expenditures byParkland Childcare Centres

Centres	Expenditures	%
Salaries	\$896,892	74
Benefits	\$91,361	8
Program	\$90,286	7
Office and Building	\$60,156	5
Administration	\$65,807	5
Total Centres Only	\$1,204,504	

Note: No data on expenditures by family or group homes is available.

don't usually consider childcare as an industry. However, we can look at childcare through an economic lens. Childcare is both an industry in its own right and also is an infrastructure that enables other sectors of the economy to function. Further, since childcare builds human capital (for children and their parents), it generates long-term as well as shortterm returns.

In this report, we focus only on the sector's immediate effects, and not the longer-term returns. Canada does not yet have reliable calculations for the economic effects of childcare on children's outcomes, although the American research base is strong and most experts agree that gains are considerable. As a result, the economic projections of this report are only a sub-set of the total economic and social impact of childcare.

In this section, we present an analysis of childcare spending in Parkland, using input/output multipliers (*See Notes 4 & 6*). Non-economists are familiar with this as the 'ripple effect' of spending. As money 'ripples' through the economy, each \$1 generates other effects. As we shall see, the impact of spending by 12 childcare centres and 12 family and group childcare homes in the Parkland region is impressive.

In 2006, childcare revenues in Parkland are estimated at \$1,733,055 **TABLE** 6. This revenue is mainly the sum of parental fees and government grants. Parents are the biggest spenders on childcare: fees (including subsidies) make up 60.8 percent of total sector revenues **SEE FIGURE 2**. Provincial operating grants contribute 32 percent of centre revenues. When provincial disability grants are included in government funding, government funding rises to 34.5 percent of total revenues. Fundraising, interest on investments, donations and other revenues provide small extra funds to some programs.

The standard measure of an industry on a regional economy is input/output analysis. Input/output models are based on the assumption that an industry's spending in a regional economy create economic growth [2]. In Parkland, childcare homes and centres spend over \$1.7 million in the local economy.

Input/output analysis also includes other types of multiplier effects, or ways to measure the impact of childcare spending in the economy. *Indirect effects* measure how money spent by childcare facilities stimulates economic activity. Childcare programs need supplies and food and pay rent, which in turn generates activity in other sectors.

In Parkland, for every \$1 spent on childcare, \$1.58 circulates through the economy. The childcare sector generates an extra \$1,005,172, in addition to the \$1,733,055 already being spent in the economy. The total direct and indirect effects of childcare in Parkland are \$2,738,228.

In childcare, labour is the biggest single cost. Parkland's centre-based facilities (childcare centres and nurseries) spend an average of 82 percent of their total expenditures on salaries and benefits **TABLE 7**. Administrative and office costs consume about 10.5 percent, leaving just 7.5 percent for the program (toys, books, snacks, craft supplies, etc.) **SEE FIGURE 3**

Parkland has 57 full time equivalent (FTE) childcare staff. In both family homes and centres, the total wage bill (including benefits) is \$1,388,399 (See Note 4). This total generates an estimated \$916,343 in take-home pay to be spent in the regional economy. This local spending supports employment and

growth in other sectors.

Employment multipliers estimate the jobs created or supported by childcare in Manitoba through industry spending in other sectors. For every one job in childcare, an extra 0.49 jobs are created or supported. The 57 FTE childcare workers support 28 more for a total employment of 85 FTE jobs directly attributable to childcare.

PARENTAL EMPLOYMENT AND CHILDCARE

Parents who use full-time childcare are available for other activity, including employment or education. Parkland has 250 full time licensed infant, preschool and school age spaces. We estimate these spaces enable the adults in 228 households to work or study. Of these households, we anticipate 169 are two-parent families, and 59 are single parents. Assuming these parents earned average incomes, the labour force participation of mothers and fathers whose children are in full-time childcare is worth \$12,373,284. (See Note 7)

When the labour force rates of mothers and fathers in the broader RHA region of Parkland are compared against the provincial averages, some interesting findings emerge. One similarity is that in Parkland, as across the province, women with children participate in the labour force at lower rates than do men with children. There are also some striking differences.

TABLE 8 compares Parkland mothers' and fathers' employment rates to Manitoba averages. In Parkland, both men and women with children participate in the labour force at much lower rates than in the rest of Manitoba. The gap is highest for mothers of very young children: in Parkland, 53.4 percent of mothers with children under three work for pay, compared to a provincial average of 63.5 percent—a difference of 10 percent. The gap between employed mothers of

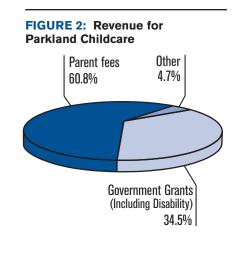
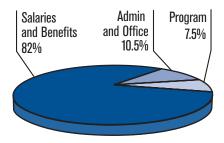


FIGURE 3: Childcare Spending in **Parkland Centres**



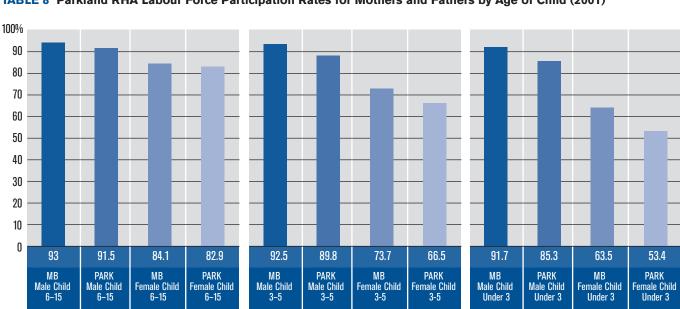


TABLE 8 Parkland RHA Labour Force Participation Rates for Mothers and Fathers by Age of Child (2001)

19

Source: See Note 5

It is important to recognize that over half of Parkland mothers are in the paid labour force – even mothers of very young children. The 'new normal' for families is two parents working for pay.

children aged 3-5 is 7.2 percent, and for mothers of children in school, it shrinks to just 1.2 percent.

In Parkland, as in Manitoba, women are more likely to do paid work as their children grow older and enter school. As a result, the labour force participation rates of mothers and fathers become more similar. When children are ages 3–5, two-thirds of their mothers and 89.8 percent of their fathers are in the labour force. Once children reach school age, the likelihood of both their parents being in the labour force increases—82.9 percent of mothers and 91.5 percent of fathers.

It is important to recognize that over half of Parkland mothers are in the paid labour force—even mothers of very young children. The 'new normal' for families is two parents working for pay. Today, a stay-at-home mother and breadwinning father is in the minority. This suggests that female employment and childrearing are *complementary* activities—something rural planners may wish to consider.

A word of caution: the data on maternal and paternal labour force participation **TABLE 8** counts only those who are currently working for pay or actively looking for work. It does not measure those who have left the labour market by choice, because of discouragement, or because they cannot find childcare or balance their work-family obligations.

Dropping out of the labour force has consequences beyond short-term forgone wages. The longer people are out the labour market, the more dated their skills become, their employability decreases, and contributions to pensions or RRSPs cease. Even short-term exits can have long-term negative consequences on lifetime earnings resulting in lower income in retirement. Many women discover this sad reality the hard way, through poverty in their senior years, or upon widowhood or marriage dissolution.

Women's equality and financial security is too often compromised by the 'choices' women make about paid and unpaid work. Supportive services, like childcare, can make it easier for women—like men—to earn a living while also caring for their families and their communities.

7. What Parkland Citizens Say About Childcare

P arkland residents care about childcare. Over the course of the project, we held six consultations with over fifty parents, childcare staff and area residents (*See Note 8*). At every consultation, participants spoke about limited access, high costs and the needs of the childcare labour force. Participants were clear that the current situation does not meet the needs of parents or children and that improvements are required.

Parkland parents rely on a variety of types of childcare: informal with friends or family, private at home care, and centre-based care. Parents decided on the type of care based on factors such as availability, proximity, cost and quality. Many parents prefer licensed childcare:

"My son 'blossomed' when moved from home-based care to facility care. He was a shy child, then he learned sharing, got to play with kids his own age."

However, few parents have access to a licensed childcare space. "I had to be on the waiting list for 2 years before I had my child, to get childcare," explained one mother.

Parents find it hard to access licensed childcare because there is a regulated space available for just 14 percent of children in the region. Not all age groups are equally served. Parents of infants and toddlers face very limited options. One mother of a baby explained, *"You can't work if you have an infant."*

In addition to space shortages and age mal-distribution, another problem is program hours. The demand for childcare is particularly high during the busy season of seeding and harvesting. Parents scramble to find care while they work overtime. Year-round, farming families regularly work weekends and evenings, when little licensed care is available.

Parents who work shifts in hospitals or personal care homes also cannot find childcare to match their work schedules. "We have a different definition of 'full time'. It doesn't mean Monday to Friday 9–5. It means 3–4 days of 12 hour shifts," explains one parent.

Parents say childcare is expensive. Some parents viewed the cost as too high for rural families, and thought fees had been established with urban incomes in mind. One mother said, "We have two incomes, and pay full childcare fees, but there is no food on the table. Is it worth working—being the working poor?" Another explained: "Childcare is my biggest expense." Parents told us that lower cost services offered by private, unlicensed care in the area offers discounts to parents with multiple children, something licensed facilities cannot do.

Subsidies for low-income parents can be difficult to access. Many lowincome parents were not aware they were eligible, or find they do not qualify. A lone parent must be earning well below the poverty line to qualify for a maximum subsidy. Even then, subsidized parents will be surcharged \$2.40/day per child. One mother stated sadly, *"Even with a subsidy, I can't afford to put my kids in care."*

One of the biggest challenges facing rural parents is transportation. Most parents we spoke to agreed that the logistics of transportation to and from care is time-consuming and challenging. Since childcare is limited to only certain towns and villages, parents must drive their child to childcare, then drive to work, then return to pick up their child. Only Little Steps, in the Dauphin Friendship Centre, provides transportation.

More facilities would help ease the strain on parents. But building new

"I had to be on the waiting list for 2 years before I had my child, to get childcare," explained one mother. One worried parent told us "I wish services were offered for special needs children with staff that is trained and qualified, so I have peace of mind."

"I just want childcare so I can work and make wages to run our business. I can't quit-our business would fold." childcare centres is a further challenge. One director told us that unless the provincial government provided start-up grants, capital costs would deter new development. *"There is so much talk in town about day care. But it's the start-up cost—no one can afford to do it,"* she explains. Given staff shortages, it would also be difficult to ensure a supply of trained and qualified early educators.

Centres also struggle to meet the needs of different populations of children. Participants in the focus groups recognized the role early childhood development could play in cultural understanding and language retention. Aboriginal families on- and off-reserve also need childcare, to provide culturally appropriate programming.

Participants told us the physical space in centres is not often adequate for children's needs. Minimal space means in many rural centres all age groups are together in one room. This raises problems for children with special needs. Often there is no room to do a wheelchair transfer in the washroom, for example. Children with disabilities require special attention that facilities and staff are not regularly equipped to deliver. Parents agreed that staff need more training to better support children with disabilities. One worried parent told us "I wish services were offered for special needs children with staff that is trained and qualified, so I have peace of mind."

Childcare workers are paid low wages, and require more training and recognition for the important work they do supporting young children. Centres' operating budgets, however, do not allow a competitive wage, and the workers regularly leave for higher paying jobs. Parents have strong concerns about low pay to the staff who care for their children, but cannot afford higher fees.

Despite these problems, Parkland residents are committed to childcare. Most parents need care to earn a living: "*I just want childcare so I can work and make wages to run our business. I can't quit, our business would fold.*" explains one parent. Many also see the value for early childhood development: "Day care centres are fun, there is nurturing and caring. I like the socialization aspect" said another mother. Parkland parents acknowledge that childcare fulfills multiple needs including parental employment, child development and school-readiness. Parkland residents want a better childcare system to meet their needs. From this overview of childcare in Parkland, it is possible to draw out general recommendations. The following observations flow the from the analysis in this report:

MORE CHILDCARE SERVICES ARE NEEDED

The region's 362 licensed spaces can serve only 14 percent of children aged 0-12. In order to provide half of the region's youngsters with full-time centre-based services, Parkland would need at least 1,116 more centrebased spaces, staffed by trained and properly remunerated early childhood educators. To be accessible to parents, services must be close to children's homes and schools. Today, the lion's share of service is in Dauphin. New spaces must be distributed across the region and must serve all age groups equitably. Expanded services will require capital funds as well as on-going operating funds, in facilities renovated or built to developmentally appropriate standards. Services must be flexible and include extended hours and seasonal needs. Special consideration should be paid to the challenge of transportation.

THE QUALITY OF CHILDCARE SERVICES MUST INCREASE

Childcare services must be high quality, developmentally appropriate, and inclusive of all children (including children with special needs). As the Aboriginal and Metis child population grows, childcare services will need to ensure their programming is culturally appropriate and welcoming to Aboriginal and Metis families. Improved quality will require additional public funding, and a greater share of total revenues. Service must be provided through flexible and extended hours, and the additional cost of serving rural families must be built into rural operating formulae.

Staff training is one of the strongest predictors of program quality. The ECE labour force in Parkland currently comprises 39 full-time and 37 part-time staff for a total of 76 educators. Few have ECE II qualifications and fewer still have ECE III training. More training opportunities are required, designed both for new staff and staff currently working in the field. Parkland childcare staff need to be able to earn ECE III qualifications locally. If half the region's youngsters were to have access to centre-based, full-time care, Parkland would need a minimum of 146 additional trained educators. Skilled and trained staff will be recruited and retained when wages and benefits are improved, and when career ladders are built.

CHILDCARE SERVICES MUST BECOME MORE AFFORDABLE AND ACCESSIBLE TO FAMILIES

Parent fees are too high for many rural families to afford, and the fee subsidy system is badly out-of-date. Eligibility income levels, last set in 1991, must be revised to respond to the realities of rural families in 2007 and the current poverty line. Subsidy will require special consideration in farming areas, where families may be land-rich but cash-flow poor. The surcharge of \$2.40/day per child should be eliminated for subsidized families. Services must also be more accessible to families, located closer to their homes or children's schools, and provided through programs and flexible schedules that better meet the needs of rural families and shift workers, for extended and seasonal care.

These improvements will require policy innovation, political will, and increased public funding. Based on the evidence, it seems clear that this greater investment in Parkland's childcare system will bring concrete local benefits to children, families and the regional economy and will enhance the region's quality of life. **NOTE 1:** We use 'childcare' to refer to regulated early learning and care services for children aged 12 weeks (rounded to 0 yrs) to 12 years inclusive, including nurseries, child day care centres and family child care homes and group homes. Most children who require nonparental care receive service from the informal childcare sector; unregulated childcare is excluded from the analysis herein, as are any ECD service not licensed as childcare. Data on childcare services and staff in Parkland is drawn from the provincial Child Care Office and from our direct communication with facilities. Data on the Parkland childcare labour force was gathered in a telephone survey to facilities conducted in March 2006. Family home providers are generally considered to be self-employed; for purposes of this report, we include them as staff in the labour force. Enrolments, waiting lists, and the ratio of subsidized children, as well as total number of staff, may fluctuate over a year. We discuss a snapshot current as of March 2006, and unchanged as of February 2007.

NOTE 2: We operationalized the study site region of Parkland using the geographic coordinates of the Parkland Agricultural Resource Cooperative. The area is presented in Map 1. The area under study is not equivalent to the provincial Regional Health Authority area also known as Parkland, and we take care to distinguish between these two definitions as needed. Total population and child population were calculated from 2001 Census data; data from the 2006 census is not yet available.

NOTE 3: Demographic calculations were made for child populations and the pool of families using childcare. A number of assumptions were necessary. We used Statistics Canada Census data (2001). We determined the number of children from each census division in the Parkland region. Census age categories are 0–4, 5–9 and 10–14. To calculate the number of children 10–12, we took 60 percent of that age group total, and summed the three age groups. Parkland has 2556 children aged 0–12. At 50 percent service, assuming full-day care, the area needs 1,278 spaces. Currently, 162 fulltime centre-based spaces

exist, leaving a shortfall of 1,116 spaces. Assuming all staff were trained: if 15% are infant (ratio 1:4), 35% are preschool (ratio 1:8) and 50% are school age (ratio 1:15), the additional spaces would require 45 ECEs for 179 infant spaces, 42 ECEs for 339 preschooler spaces and 40 ECEs for 598 school-aged children, at an additional ECE total of 127, plus 19 more directors (centres with a 60 space capacity.)

NOTE 4. Budget and financial data is drawn from two sources. We received some budget data from childcare centres and homes, as well as from the Child Care Office. The data generally reconcile. For total fees paid by centreusing parents, we used budget data provided by facilities. For fees in family homes, we used a formula provided by the Child Care Office. We used financial data for input/output analysis. We are indebted to the work of Mildred Warner and colleagues, who have developed the Cornell Methodology guide, on which we drew for our analysis. Special input/output data was generated specifically for this project by the Input/Output Analysis Division of Statistics Canada. Statistics Canada recommended and used primary education as a proxy, since it does not have specific data on childcare. We used conservative assumptions. The indirect multiplier, also known as the GDP multiplier, of 1.58 is the most cautious estimate of spending in the local economy, because taxes and imports are subtracted. The employment multiplier of 1.49 estimates the number of jobs supported by the childcare sector.

NOTE 5: Source for Parkland labour force participation rates and poverty rate: Statistics Canada. 2001. J4013 Revised: Persons in Private Households by Age (6), Sex (3), Aboriginal Identity/Registered Indian Status (5), Labour Force Activity (8), Income Status (4) and Selected Characteristics (22) for Canada, Manitoba, Health Regions and Selected Groupings (15), 2001 Census (20% Sample-based data) Census Custom Tabulation. (Accessed January 2007). This custom tabulation was originally prepared for the Prairie Women's Health

Centre of Excellence. For this report, all computations were prepared by the Child Care Coalition of Manitoba and the responsibility for the use and interpretation of these data is entirely that of this report's author.

NOTE 6: Data on revenues and expenditures for centres were compiled directly from facilities and provincial averages. Actual numbers were not available from two preschool centres and three nursery programs, so we used proxy numbers provided by the Child Day Care Office (June 2006) for rural centres of the same size and type. Family and group homes were totalled separately as budget breakdowns were not available. To attribute wages in family and group homes, we assumed the proportion of revenue on wages and benefits was the same as centres (82 per cent). These figures are as accurate as possible, given the under-developed state of the provincial and regional data. It is not noting that Manitoba's data is slightly better than other jurisdictions' [37].

NOTE 7: All figures for parent earnings are calculated based on 2001 Census data on household characteristics and earnings. No specific data is available on childcareusing households in Manitoba. Therefore, we built a model (first developed in our 2004 report) to estimate parental earnings associated with full-time daycare spaces. For the calculations of parent earnings and childcare-using households, we estimate 2001 Census data separately for 4 regions: Dauphin/Ethelbert, Roblin/Shell River, Grandview/Hillsburg and Gilbert Plains. Then we combine the estimates in these four regions to calculate aggregate parent earnings and households using childcare. In the 11 Parkland communities, the average household with children has 1.5 - 1.6 children, which is adjusted for female employment rates on the basis of child age groupings, since not all of these children have employed mothers. For the full-time day care spaces, we assume that childcare is required when mothers/lone parents are employed. By this assumption, there are 169 married or common-law households, 50 single parent female and 9 single parent male households represented by the 250 full-time spaces in Parkland. We do not include licensed nursery spaces in the calculations of parent earnings because nursery service is only offered a few hours per day, and it is not sufficient to enable parents to earn income. To calculate earnings, we used average full time (gross) earnings for men and women (source: Census 2001 full-time, full-year earnings adjusted for inflation to 2006 dollars using the Bank of Canada's inflation adjuster, at \$37,594 for men and \$29,004 for women in the Dauphin/Ethelbert region; \$38,785 for men and \$25,600 for women in the Roblin/Shell River region; \$25,538 for men and \$27,364 for women in the Grandview/Hillsburg region; and \$18,656 for men and \$22,537 for women in the Gilbert Plains region.) We do not discount for low income subsidized parents, since average earnings include low as well as high earners. For calculation purposes regarding the 228 childcare-using households using full-time care, we assume that all parents are employed. While some parents may use childcare while they study or are engaged in other non-remunerated activity, we attribute average earnings to them. To calculate the 170 part-time childcare using households, we assume that the distribution of family size and type in childcare-using families is representative of all Parkland family sizes and types. Source: Earnings data, labour force indicators (employment/ unemployment rates), age characteristics of the population and family/household characteristics are retrieved from the Statistics Canada-2001 Census Community Profiles. Available online www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang =E

NOTE 8: We held two community consultations in Dauphin in March and four in June 2006 in the communities of Roblin, Ethelbert and Gilbert Plains. Over 50 people attended one of the six public consultations. Nikki Isaac led the participatory meetings, which were conducted under a research ethics approval certificate (Protocol #P2006:015) issued by the University of Manitoba's Psychology/Sociology Research Ethics Board.

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