

Giving in Action, Receiving in Kind

A Summary Evaluation of Impact of the Giving in Action Society's "Family Independence Fund" and "Children with Special Needs Fund"

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Giving in Action, Receiving in Kind: A Summary Evaluation of Impact of the Giving in Action Society's "Family Independence Fund" and "Children with Special Needs Fund" (June 15, 2014)

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Executive Summary

The Giving in Action (GIA) Society has administered the Family Independence Fund (FIF) and the Children and Youth with Special Needs (CYSN) Fund since their inception in 2006. Both funds have the core objective to support individuals with disabilities in collaboration with their families in a home environment by funding the development of appropriate infrastructural supports. Through the activities of the funds the total amount granted to renovations was \$23,493,294.48, the total to vehicles was \$18,734,996.73, and the total to all projects of all types was \$42,227,291.21. This report evaluates the impact of the program, and the relative costs and benefits realized through the program to date. While it is clear that the program has had beneficial impacts in terms of quality of life for individuals and families by fostering both the support of individuals by their families and by enhancing inclusion more generally, we have noted but not quantified these impacts. Direct fiscal impacts have been calculated by estimating cost avoidance to Government. We have erred on the side of caution, and where insufficient data did not allow the assumption/calculation of particular costs (like increased medical costs), we excluded these from the analyses. Our estimate is certainly an underestimate. In residential costs the GIA program can be conservatively estimated to defray between 38.4 million dollars and 56.2 million dollars. In terms of transportation the costs avoided are about 12.2 million dollars. Thus the GIA investment of just over 42 million dollars renders direct costs avoided of between 50.6 and 68.4 million dollars. Given the other demonstrable benefits (well-being and quality of life), and the downstream savings that accrue from these intangible values, it is clear that the GIA programs were, and are, a sound investment in simple fiscal terms. Further, we note that in the absence of the GIA, there will be a generally negative impact on the sector and a disproportionately negative impact on low and middle income families, and families in rural BC.

Introduction

The Giving in Action (GIA) Society has administered the Family Independence Fund (FIF) and the Children and Youth with Special Needs (CYSN) Fund since their inception in 2006. Both funds have the core objective to support individuals with disabilities in collaboration with their families in a home environment by funding the development of appropriate infrastructural supports. FIF provides support to families who have a family member living at home who has a developmental disability as defined by Community Living Authority Act of BC (2004). Individuals who do not have a developmental disability but meet the CLBC eligibility may also be eligible. Grants go towards the costs associated with home renovations and retrofits, and purchasing vehicles configured to accommodate the particular disabilities of the individuals involved; both types of expenditure seek to ensure that the family member can remain at home, living with their families, in their communities, and in supportive surroundings both comfortable and appropriate. CYSN is targeted at families who have a child (under the age of 19) living at home who has special needs, and offers the same supports as in FIF. Since 2013, due to depleting funds, both funds (CYSN & FIF) have been collapsed into one “Family Fund” which continues to serve these two populations. These expenditures have been administered relatively inexpensively, by the GIA with the support of the Vancouver Foundation (VF), and a volunteer committee that has assessed files and made recommendations.

The GIA programs (FIF and CYSN)¹: activities and foci

At the outset, a brief summary of the scope of the GIA programs is in order; the following analyses are generated from a database of grant applications supplied by the GIA; the database was complete, including all applications made, whether approved and taken up or not. The first grants were approved in November of 2006, and the last in November of 2013. Over that time period some 1290 applications were received, and 1228 approved.

Table 1: CYSN Grants 2006-2013

| CYSN | Number | Percent |
|---------------|--------|---------|
| Approved | 356 | 95.4 |
| Declined | 9 | 2.4 |
| Grant Expired | 1 | .3 |
| Withdrawn | 7 | 1.9 |
| Total | 373 | 100.0 |

Table 2: FIF Grants 2006-2013

| FIF | Number | Percent |
|---------------|--------|---------|
| Approved | 872 | 95.1 |
| Declined | 16 | 1.7 |
| Grant Expired | 6 | .7 |
| Withdrawn | 23 | 2.5 |
| Total | 917 | 100.0 |

The grants range in size from \$500 to \$150,000 and the mean size of a grant is \$34,000. Direct administration costs of the grants and grant adjudication process are 6 cents per grant dollar, with additional in kind and volunteer contributions of time and expertise organized through the GIA of an estimated \$90,000 (for 75 days of meetings).

¹ Throughout the rest of this report references to “GIA programs” are to the FIF and CYSN; note, the GIA Society also administers other unrelated programs.

In order to understand the circumstances of the individuals served through the program, further analyses were conducted. The database supplied by the GIA was modified in the following ways. First, only approved applications were considered. Second, in cases where households had received multiple grants (either within one program or between the two programs), the grant amounts and information were combined, and considered as one case²; as a result the analyses below consider households as cases rather than individual grants as cases. Structured this way, there were 329 households approved for the CYSN grant, 891 for FIF grants, and 14 for both, for a total of 1162 households approved for funds. These programs have dispersed \$42 million through 1200 grants. Table 3 provides details.

Table 3: Approved GIA Grants only (maximum, sum and mean by program)

| Type | N | Maximum | Sum | Mean | |
|------|----------------|---------|--------------|-----------------|-------------|
| CYSN | Total Approved | 329 | \$90,000.00 | \$11,762,263.64 | \$35,751.56 |
| | Renovation | | \$90,000.00 | \$5,979,266.13 | \$18,174.06 |
| | Vehicle | | \$50,000.00 | \$5,782,997.51 | \$17,577.50 |
| FIF | Total Approved | 819 | \$175,000.00 | \$29,604,210.04 | \$36,146.78 |
| | Renovation | | \$175,000.00 | \$17,044,245.66 | \$20,811.05 |
| | Vehicle | | \$61,500.00 | \$12,560,464.38 | \$15,336.34 |
| Both | Total Approved | 14 | \$95,000.00 | \$860,817.53 | \$61,486.97 |
| | Renovation | | \$60,000.00 | \$468,782.69 | \$33,484.48 |
| | Vehicle | | \$40,000.00 | \$391,534.84 | \$27,966.77 |

The total amount granted to renovations was \$23,493,294.48, the total to vehicles was \$18,734,996.73, and the total to all projects of all types was **\$42,227,291.21**.

² The databases analysed were received in anonymized form, however, it was possible to identify cases in which the same household was involved by cross-matching dates. In such cases demographic data had sometimes changed as the time between grants was as much as 5 years; where this occurred the more recent demographic data was used for subsequent analyses.

Background: the purpose of this report

This report evaluates the impact of the program, and the relative costs and benefits realized through the program to date. There have been two previous assessments of the programs. One, by Patricia Evans and Associates (September 2011), attempted to establish the unmet need or demand for the program by developing a number of measures reflecting the numbers of disabled persons in the province potentially needing the supports. The result of that survey was a very wide range of numbers of users for both programs. The root cause for the tremendous variation in numbers lies in the incommensurability of definitions of disability and associated level of service requirements that result. Using the most “relevant” measure developed, the report estimates that unmet needs for the CYSN program was just under 11,000 children³ (range, 1446 – 10,949), while the FIF number was just over 12,000 adults (range, 4911 -101,557) (P. Evans 2011: 4). The lowest measures of the range almost certainly under-estimates the potential demands of the program; nonetheless, taking the lowest estimate into account, the grants at the time of the 2011 report had served about 12% of the most conservative estimate of the target client base; using the more reasonable measures (deemed most relevant by the report), well under 10% of the client base had been served. By any reasonable estimation, there was and is⁴ an unmet demand for these supports. **By the time of the last grant in 2013, and assuming no growth in the potential client base (an unwarranted assumption), the program had still met well under 20% of the potential demand⁵.**

A slightly earlier report by Mitchell Temkin contains the results of a comprehensive program evaluation conducted in the fall of 2010. That research surveyed recipients and professional service providers

³ Please note, here and throughout this evaluation we will be making a practice of presenting overall results in round terms; this reflects the reality that evaluation relies on estimates, and thus even where it is possible to represent a result in exact terms, this may be misleading in that it expresses an unrealistic level of precision.

⁴ At the time of the 2011 report just over 800 families had been served, an additional 350 or so have been supported since.

⁵ The introduction of the Home Adaptations for Independence (HAFI) program administered by BC Housing will have an impact on this conclusion, but it is difficult to assess how much. In its first year of operation the program served 213 clients at a cost of 4.6 M dollars; the program serves a wider scope of clients, and it is unclear how many of the 213 clients served overlap with the GIA eligible client base. It is important to note several elements of the program. First the program has a normal maximum contribution level of \$20,000 (an additional \$20,000 is available in extraordinary circumstances), well below the requests and approved funding level of the GIA. Second, Housing Income Levels and home value limits are used as means tests, and an absolute bar to many households. These issues are taken up below.

working with those recipients⁶. In addition to assessing the quality of the grant application format and processing undertaken by the GIA, the survey also took a series of measures of the efficacy of the program.

Respondents found the program operations to be well organized, run, and generally accessible in large measure (we will not detail these here, see Temkin 2010: 7 – 14). The measures of efficacy were based on a large (and statistically valid) sample size, but were quite varied in type; a number of the measures might be considered measures of quality of life. For example respondents (both grant recipients and the professionals referring them) were asked to assess impact/outcomes in terms of independence for the person with disabilities, self-esteem, and ease of participation in community, school, and home. Again, responses were overwhelmingly positive (:14-17).

However, it is difficult to assess the economic impact of these measures, important as they clearly are. While we know that well-being and physical health are generally positively correlated (and stressors on well-being have a negative effect on health, see Cadman et al. 1990; Murphy et al 2007). Recent work (Raina et al. 2007) emphasizes that family well-being and stress management within the family may be a key factor here. The costs of decreased well-being in terms of the consequences of ill health in any one instance are very difficult to quantify; that is, as obvious as it may be that there are consequences, assessing the resource related implications of positive or negative health status is not a simple matter. For the purposes of assessing a program like those here, this is germane for both the impacts on the person with disabilities and the care giving family, both of whom are reported to have had improved health, improved family interactions, relief from stress, and improved quality of life generally (see page 18; professional assessments were very similar in scope, see page 21). While 33% of recipients (and 35% of professionals) reported that there was an increase in family member's ability to work, the monetary impact of that increase was not, nor could it easily be, assessed.

Assessing the savings to Government arising from the GIA programs: the strategy of this evaluation

The most assessable return on the investment represented by the GIA funds are the cost savings to Government when, in the absence of the family's efforts, alternative forms of support are required. For

⁶ The sample size was relatively large (from families n=346 with a response rate of 58.5%; for professional support workers n=93 with a response rate of 35.9%), and the survey data and analyses is quite useful; further, in the absence of any particular changes in the landscape of the sector since that survey was undertaken, there is no reason to assume that significant changes in program scope or reception has occurred.

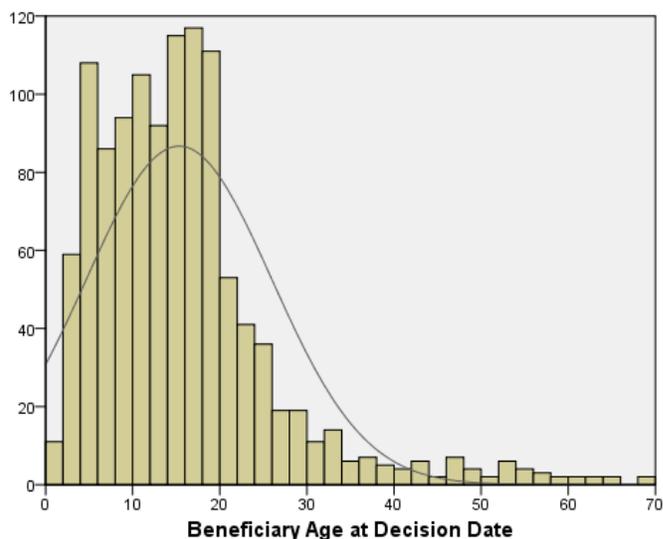
example, this can be seen when more expensive care options are avoided because families can maintain their members at or adjacent (in a suite for example) to the natal home. This represents a continued investment on the part of the family in the well-being of the person with disabilities, with consequences in terms of costs avoidance to government as well. Acquisition of a suitable vehicle, also a focus of the GIA programs, has a similar dual payoff, with the beneficiary and their family gaining in terms of access and the opportunity to participate, and pressures on the handyDART system reduced. The benefits of inclusion are hard to express in dollar terms, but they are benefits nonetheless; although this evaluation focuses on the fiscal consequences of the GIA investments in families, the overall goal of inclusion through progressive policy and programs is not well served by exclusively focussing on fiscal measures, or more correctly, by focussing only on those fiscal measures that can be easily measured. Supports of the sort provided have, as a matter of course, positive effects on their recipients' in intangible terms (e.g. well-being), and distinct effects in tangible (if difficult to quantify) terms like reduced health related costs and time savings; there are also real and immediate reductions in demands on alternative care systems⁷. Renovations, be they renovations that facilitate co-residency in the family home or the creation of a suite to facilitate ongoing family and community supports clearly support short to medium term family based caregiving vs more costly alternatives.

Calculating the costs of alternatives is relatively complex. These vary due to the level and complexity of care required, care which might include very expensive circumstances requiring intensive institutional medical care. Costs may be borne by different agencies in Government, but these are nonetheless costs

⁷ There is a difficult issue lurking here. Demand for an alternative care situation, even if clearly warranted and expressed, might not be met, nor costs incurred, because alternative care simply is not immediately available. That is in lieu of a placement elsewhere, family caregivers and their supporters may have no alternative but to cope, or in a worst case scenario relinquish responsibility entirely; all indications are that the latter situation is both rare and extraordinarily costly in fiscal terms for the Province, and emotional, health, and well-being terms for the families involved. For the purposes of this evaluation, cost savings will be taken/ given when it can be demonstrated the extent and urgency of the demands on the wider publically funded system supports are decreased through the provision of family based support enabled through the GIA programs; the difference between the costs to government of family supports and the next least expensive alternative is taken to be a measure of the value derived through the GIA. We acknowledge that rationing can be achieved by constraining operational budgets for the agencies involved, limiting places for programs and supports, and thus forcing families to find (non-funded) solutions; the pressures generated from such an approach can easily create crises, with catastrophic human and fiscal consequences, and does not reflect a progressive approach to the sector. Estimating the costs of crises, especially in human terms, is extremely difficult; we all know full well however, just how steep the toll can be for families driven to desperate acts by the sometimes seemingly insurmountable obstacles they face.

to the public purse as a whole, and will be estimated as such⁸. While there are significant differences in the support regimes for individuals served by the CYSN program (i.e. persons under age 19) and the FIF program, it is important to note that the two programs are not separate in terms of the lives of the people being supported. Projects supported by the CYSN continue to support those individuals who pass into the CLBC client base⁹. Indeed, preparation for this transition through the CYSN may well be a key element supporting success in maintaining a stable and sustainable support network after the funding mechanisms change in type and focus as people move into adulthood. When we consider the age of the beneficiary at the time the grant was approved, there is a clear indication that families are using the grants to adjust as children age out of infancy, and then again into adulthood.

Table 3: Histogram of Age of Beneficiaries of GIA Programs



Not coincidentally, the age of the beneficiaries corresponds to the age of the applicants that in turn reflects the growing challenges of aging caregivers providing support for beneficiaries growing physically and socially.

⁸ This approach is consistent with the whole of government approach taken in Improving Service to People with Developmental Disabilities, December 2011 (The Deputy Ministers' Review of Community Living British Columbia - DMRCLBC).

⁹ Note, not all of the CYSN client base is CLBC eligible at age 19.

Table 4: Histogram of Age of Applicants to GIA Programs

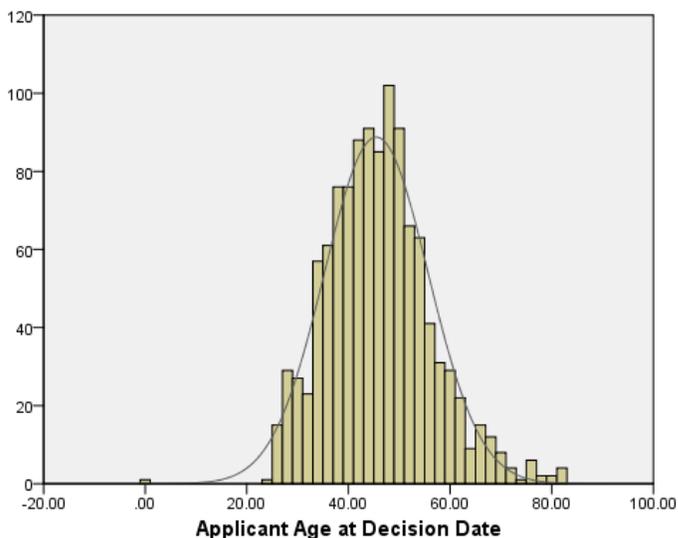


Table 5 provides these data in numerical form.

Table 5: Age of Applicants and Beneficiaries of GIA Programs (range and means)

| | N | Minimum | Maximum | Mean | Std. Deviation |
|----------------------------------|------|---------|---------|-------|----------------|
| Applicant Age at Decision Date | 1137 | 23 | 82 | 45.51 | 10.140 |
| Beneficiary Age at Decision Date | 1157 | 1 | 68 | 15.33 | 10.645 |
| Valid N (listwise) | 1135 | | | | |

In order to estimate the cost savings realized by the GIA programs a survey of the persons most knowledgeable of the client base who had used the program was conducted. The purpose of the survey was to derive estimates of the demographic and health needs of the client base not discernable from the database provided. For the CYSN program, members of the Program Advisory Committee and the Program Manager were asked to estimate the portion of the client base with low, moderate, and high support needs¹⁰; the portion of the client base corresponding to the Guide to Service Allocation (GSA) levels used by CLBC¹¹; the percentage eligible for *At Home* program benefits; the percentage of people qualifying for services under the autism programs policy; the percentage of people qualifying for the MCFD Nursing Support Program; the percentage of people qualifying for the Disability Tax Credit; and

¹⁰ Note, this scale does not have exact parameters, and was adopted from DMRCLBC: 26.

¹¹ The GSA has no direct applicability to children in terms of existing programs, it is however a measure of support requirements, and useful in estimations for that reason.

the percentage of projects that probably would not have gone ahead in the absence of support from the GIA. For the FIF program, members of the Program Advisory Committee and the Program Manager were asked to estimate the portion of the client base corresponding to the Guide to Service Allocation (GSA) levels used by CLBC; the portion of the client base with low, moderate, and high support needs; the percentage of people qualifying for the Disability Tax Credit; the percentage of beneficiaries eligible for CLBC support; and the percentage of projects that probably would not have gone ahead in the absence of support from the GIA. These estimates were then averaged, and those averages have informed the analyses¹².

Costs Avoided: Residential

The renovations supported by programs range from safety measures (fences and security strategies etc.), to various supports to ensure that homes are accessible (ramps, floors, lifts etc.), to creating suitable co-residency arrangements (e.g. suites). The urgency for renovations are, again, directly related to the age of the beneficiary, which has implications for the sheer physical demands on the caregivers, and the psycho-social changes in relationship between beneficiaries and their supporters occurring with adulthood.

Alternative care situations, against which cost savings are realised, also vary by the age of the beneficiary. For persons under the age of 19 with special needs, alternative forms of care range from a foster care situation, to a residential facility with medical care (i.e. Sunnyhill Health Centre for Children). All other services being equal, when a child moves from the family home to a foster situation, some small costs might be avoided (i.e. respite care payments of \$2800 per year), while depending on the level of foster care required, considerable additional costs accrue; a Specialised Care Level Three (the likely need level for the cohort of CSYN recipients)¹³ placement for children under 12 has a direct cost of just under \$33,000, and 12 -19 is about \$31,500 per annum; Temkin reports that MCFD estimates the average cost of children in care to be \$208 per day (:26). The cost of care at an institution like Sunnyhill

¹² Note, additional questions were included in the survey, but did not affect the outcome of the analyses and are not discussed in this report.

¹³ From the BC website (<http://www.mcf.gov.bc.ca/foster/levels.htm#3>): "Children being cared for in level three homes require the most extensive daily care, including health related care such as tube feeding, and interventions related to mental health concerns, including behaviours that may pose a risk to self or others that require additional support and supervision."

is at least an order of magnitude higher, and maybe as much as two orders of magnitude higher¹⁴; while it is unlikely that Sunnyhill is a frequent alternative for children who cannot be supported in their homes, it is worth reflecting that should this be the case, the costs would certainly be at least twice those of those reported for a youth of 18 living at home with highly complex health care needs (estimated at \$156,000 in the DMRCLBC: 26). These sorts of costs might well be the result of crisis, and on this basis alone crisis is something to be avoided.

It is difficult to estimate just how many of the families applying to the GIA programs (note, children are beneficiaries of both programs) would foster their children in the absence of the program. It is likely that the large majority of families will absorb the stress and strain of increasing burdens of care¹⁵, though again, catastrophic consequences may well result¹⁶. It is important to note that these stresses intensify as the child ages, and insufficient support as the child moves through adolescence has been identified as a key tipping point (Victorian Equal Opportunity and Human Rights Commission 2012).

The FIF serves a wider age range of recipients, and includes children. Like the CYSN it provides supports for both renovations and vehicle retrofit or acquisition. The key difference between the programs for the purposes of this evaluation is that the alternative care arrangements for adult beneficiaries of the FIF are much different than for children. The most likely alternative care arrangement for adults is a home share placement through CLBC; again, it is worthy of note that the likelihood that an alternative care arrangement would be sought becomes much higher as both beneficiaries and caregivers age. Temkin conducted an evaluation of adult grant beneficiary's cost savings on the basis of a random sample (n=8) drawn from the GIA database, assessing the costs that would have been accrued to the CLBC system on the basis of the individual files, and in particular the GSA level of those involved. In the small survey conducted for this report, key informants were asked to estimate the GSA levels of beneficiaries of the GIA program as well. It is instructive to compare the results.

¹⁴ The cost of a day at Sunnyhill could not be determined with any certainty. However, according to one Insurer (http://www.david-cummings.com/documents/canadian_hospital_rates.htm) "Vancouver Children's Hospital" has non-residential charges of over \$11,000 per day. Other studies assess the average cost of a hospital stay at closer to \$1000 per day (Wen et al. 2012), hence the claim that the relative costs can vary from between 1 and 2 orders of magnitude greater than home based care.

¹⁵ There is little literature or data to provide a sound basis for estimation here (Nankervis et al, 2011a; Nankervis et al. 2011b).

¹⁶ It is also clear that the strains on families have consequences in terms of health and well-being generally (McConkey et al. 2012).

Table 6: Estimation of the GSA Levels of Adult Beneficiaries of GIA Programs

| GSA Level | 2 | 3 | 4 | 5 |
|---------------|-----|-------|-----|-------|
| Temkin Sample | | 12.5% | 25% | 67.5% |
| Survey Sample | 15% | 40% | 30% | 25% |

Both samples have limitations. The Temkin sample is small, and thus cannot be assumed to be representative of the whole. The survey sample we undertook asked informed and experienced people to estimate the proportions of the client base that corresponded to the GSA levels¹⁷: this is a very difficult thing to do, and only people intimately familiar with the client base and the sector are in a position to do it. The variation from the Temkin sample and ours suggests that ours is the more conservative one. It is also important to note that for the GSA level 5, which has four sub-categories (A-D), we will be costing alternatives using the 5A category, which again is the most conservative route (and will lead to an under-estimate). Finally, a small subset of clients represents very costly outliers in the sample¹⁸. Although these cases are important and important elements of the cost savings garnered through the GIA programs, because we cannot accurately estimate the frequency of the cases in the database they will be discounted to the GSA 5A cost level.

Unlike the situation for children, where there is a general expectation and desire that families will continue to care for those children, families caring for adults with developmental disabilities and special needs must, at some point, plan a future for their family members that incorporates the aging processes of both the persons with disabilities and the caregivers. Indeed, the pattern of GIA programs use clearly indicates that adolescence and young-adulthood are the focus of attention, planning, and actions that seeking to stabilize living arrangements and supports. One can be assured then that the proportion of families moving towards alternative care models, while very small among families with children, will be much larger among families planning with adults; therefore the investments of the GIA have a much more certain and marked return in direct and immediate cost avoidance for Government.

¹⁷ Estimates based on the low, moderate, and high support needs scale have been merged into the GSA scales to form a composite then mapped into the GSA scale. We acknowledge this is very much an estimate.

¹⁸ In Temkin's sample one individual had complex health needs that could only be met by staffed residential care at a cost of something on the order of \$10,000 per month. A non-random sample of complex cases in the GIA database submitted to CLBC for cost estimates returned several cases in which similar costs were evident; because this later sample was not random, it cannot be assumed representative of the client base, and thus is not used for that purpose here.

In considering the return on these investments, consider the following. The Temkin report calculates the cost savings to Government for one child by using the MCFD estimate of costs for children in care (\$208 per day), and then deducting the cost savings from programs not accessible to children in care (like the At Home program); on this basis he calculates the cost of alternative care is \$75,920 per child per annum. Assuming that the investments have a 5 to 7 year lifespan (this is again, a conservative assumption¹⁹), there are some 3350 – 4326 child years²⁰ supported by the GIA programs. The value to government then is 3350 – 4326 multiplied by the cost avoided per year (\$75,920), or some \$254,332,000 - \$328,429,920. It is not likely that all children in the sample would move into MCFD care in the absence of the program, indeed, it is unlikely that even a majority would. For the purposes of this study, we will assume that only 5% of families would be forced to relinquish their children due to the stresses and challenges of caregiving. Under these conditions, the costs saved would still be \$12,716,600 – \$16,421,496.

Considering the adults supported through the GIA, and again assuming a 5 - 7 year life span for the investments (and including the years of children who will pass into adulthood during that 5 – 7 year period), we can calibrate those costs to the estimates of the proportions of GSA Levels. A total of 2456 - 3804 years of CLBC support were calculated. In Table 7 below these years are distributed according to the values in Table 6.

¹⁹ The lifespan of most renovations are more likely on the order of 10+ years, but the families involved in the GIA program may not have use of the renovations financed because they are forced to move for any number of reasons, most tragically due to the death of a family member or other disruption in the household. There is no particular reason to assume that the client base of the GIA conforms to Canadian mobility patterns, but a comparator is nonetheless informative. In 2006 CMHC reported (on the basis of 2001 census data) that 50% of householders between the ages of 40-44 had moved at least once in the previous 6 years, and 39% of householders between the ages of 45-49 had done likewise; thus 50% between 40-44, and 61% between 45-49 had not moved. The average age of GIA applicants is 45.5, so we may infer that about 55% of the sample had not moved in the last 6 years (see CMHC 2006: 4); if the GIA applicants conform to national averages then, over half would be in their homes for 6 years and more.

²⁰ For people who are beneficiaries as both children and adults during the 5 - 7 year period, those years are split between this and the calculation of adult years; in cases where there are multiple beneficiaries only one has been included in the calculations.

Table 7: Costs Avoided by GSA Level

| GSA Level | 2 | 3 | 4 | 5 | |
|--|-----------|------------|------------|----------|------------|
| Costs avoided per year | 12012 | 15264 | 21348 | 26316 | |
| Number of years of support (5 year span) | 368.4 | 982.4 | 736.8 | 614 | |
| Costs avoided (5yrs) | 4425220.8 | 14995353.6 | 15729206.4 | 16158024 | 51307804.8 |
| Number of years of support (7 year span) | 570.6 | 1521.6 | 1141.2 | 951 | |
| Costs avoided (7yrs) | 6854047 | 23225702 | 24362338 | 25026516 | 79468603 |

The proportion of the total adult client-base likely to move into a home share situation in the absence of suitable infrastructure in the family home is much higher than the 5% we stipulate for children. In the Temkin report almost 60% of survey respondents indicated that the support received from the GIA would allow the person with disabilities to continue living in their homes. While this is not the same question as what percentage of the client-base would be forced to find alternative arrangements (a very difficult question for anyone to answer), given social expectations and policy direction that independent and supported living arrangements outside of the natal home will be the norm, it is reasonable to account all of these savings as immediate ones. If we assume an administration cost commensurate with that of the GIA (i.e. 6%), the total costs avoided if all GIA program recipients entered CLBC sponsored alternative care arrangements at 19, is between 51.3 and 79.5 million dollars. However, in the interests of providing as conservative a framework as possible from which to assess the fiscal cost/benefits of the program, if we estimate only 50% of the adult client base²¹ would enter the CLBC system then, the costs avoided would range from just over 25.7 million dollars to 39.8 million dollars. Thus ***in residential costs alone, the GIA program can be conservatively estimated to defray between 38.4 million dollars and 56.2 million dollars.***

²¹ Or more correctly, only half of the years of support would be borne through the CLBC system.

Costs Avoided: Transportation

Vehicle purchases were also an important element of both GIA programs. The obvious cost savings here is on the handyDART and taxi voucher system in place in most urban areas, though these savings are likely very small in direct terms²² a nominal amount may be assumed as a savings from taxi discount vouchers and the decreased demand for the handyDART system. Table 11 describes the cases in which supports for vehicles was approved.

Table8: Vehicle Related Grants through the GIA

| | N | Maximum | Sum | Mean |
|---------|-----|----------|---------------|----------|
| Vehicle | 726 | \$61,500 | \$18,734,996. | \$25,805 |

If we assign a nominal value to replacement of handyDART service and taxi vouchers of just \$2400 per year, and assume a lifetime of the vehicle of 7 years²³, the cost avoided is about 12.2 million dollars.

This is two thirds of \$18.7 million dollars invested²⁴, but it is important to note that stressors are cumulative, and thus a family's capacity to cope with the stressors involved in caregiving needs to be evaluated on the whole, as do the investments designed to facilitate that capacity. From the acquisition of an accessible vehicle, there are important outcomes for families in terms of increased flexibility, time, and time management capacity. These are crucial elements for active inclusion and participation in wider social activities. In addition, social inclusion and participation in programs that enhance the opportunities for social, intellectual, and physical development have important downstream benefits for individuals, families, and society more generally – benefits which include increased health and well-being for individuals, which in turn has cost savings more generally (Majnemer,1998; Palisano et al. 2004; Matson 2008; Miller et al. 2008). In addition, it is well established that inadequate access to appropriate transportation has a direct effect on whether and how people use medical services in a

²²The cost of the handyDART system is not reflected in the costs to subscribers, and no full cost accounting of the system is available.

²³ We use a 7 year timeframe here because unlike a housing unit, vehicles are mobile, and thus circumstances which might force a family to move to alternative accommodations would not necessarily mean giving up a vehicle.

²⁴ It is also worthy of note here that the vehicle portion of the GIA programs is regularly matched by other sources. While not strictly speaking part of this calculus, this is an indication of the support for the program, and wide recognition of what an accessible vehicle means for supporting social inclusion.

timely and effective manner²⁵, which in turn results in a greater burden of disease and costs to the health care system. Indeed, a lack of accessible transportation can also result in additional health burdens to caregivers directly, due to the consequences of difficult lifts²⁶. In many cases, a vehicle is the difference that makes the difference, and should be considered integrally linked to the viability, stability, and sustainability of the family in its caregiving role. The need for an appropriately outfitted vehicle is especially felt in rural and remote areas; in these contexts the absence of alternative transportation makes such a vehicle a virtual necessity – certainly if inclusion is to be any part of the equation at all. Finally, it is important to note here that the because handyDart services and taxi voucher programs are limited, while the cost savings to government from eliminating a portion of the client base drawing on the programs may be limited to a nominal \$2400 per annum per household, this is not the sum of the cost savings overall. For households drawing on expensive alternative transportation options, an accessible vehicle can provide a direct cost saving, alleviating financial stressors on the household, and decreasing overall stress levels and consequent negative impacts.

This accepted ***the GIA investment of just over 42 million dollars renders direct costs avoided of between 50.6 and 68.4 million dollars.*** Given the other demonstrable benefits (well-being and quality of life), and the downstream savings that accrue from these intangible values, it is clear that the GIA programs were, and are, a sound investment in simple fiscal terms. Further, the GIA programs, or something like them, might well be an essential element of fostering inclusion, and indeed, making BC the most progressive jurisdiction in terms of programs and policies. There are also some very important equity issues to be considered here.

²⁵ Syed et al. 2013 conducted an overall review of the literature on this issue in the US, and report not only strong evidence for the negative consequences of inadequate transportation, but the particularly negative consequences for vulnerable groups.

²⁶ Nelson and Baptiste (2004) emphasize that mechanical aids, and not training in body mechanics, are required for improving caregiver safety around lifts in a hospital setting; this is a conclusion is clearly applicable in non-hospital settings as well.

Equity without the GIA Programs

The programs were open to, and have been accessed by, families from all over the Province. Further, families at all income levels have used the program. Our survey estimated that in the absence of the GIA programs, approximately 80% of the projects supported would not have gone ahead. Table 12 provides a breakdown of the percentage of families receiving grants by income level and place of residence.

Table 9: Grant Purpose by Income and Residence (% of all grants, n=1162)

| Place of Residence | Income Level | | | | | | | | | | | | | | |
|-----------------------------------|--------------|-----------|-----------------------|-------------------|-----------|-----------------------|-------------------|-----------|-----------------------|-------------------|-----------|-----------------------|---------------------|-----------|-----------------------|
| | \$0 - 25,999 | | | \$26,000 - 39,999 | | | \$40,000 - 69,999 | | | \$70,000 - 99,999 | | | More than \$100,000 | | |
| | Vehicle only | Reno Only | Both Vehicle and Reno | Vehicle only | Reno Only | Both Vehicle and Reno | Vehicle only | Reno Only | Both Vehicle and Reno | Vehicle only | Reno Only | Both Vehicle and Reno | Vehicle only | Reno Only | Both Vehicle and Reno |
| Metropolitan Area & inner Suburbs | 5.6% | 2.5% | 2.4% | 4.2% | 2.0% | 1.7% | 4.0% | 3.3% | 2.2% | 1.0% | 2.7% | 1.8% | 0.8% | 3.3% | 1.4% |
| Small City & Outer Metro Suburbs | 5.3% | 3.0% | 1.8% | 2.0% | 1.7% | 1.9% | 3.2% | 4.4% | 3.9% | 1.9% | 4.5% | 2.6% | 1.7% | 2.6% | 1.8% |
| Small Town and Rural Areas | 2.1% | 1.5% | 0.9% | 0.7% | 0.9% | 0.7% | 2.1% | 1.7% | 1.6% | 1.1% | 2.0% | 0.8% | 0.3% | 1.2% | 0.3% |

We have already discussed the greater significance, or more correctly the lack of alternative transportation options for the almost 11% of grantees living in small town and rural areas for whom an accessible vehicle is the only option. In the absence of access to a suitable vehicle, isolation results, and participation in the wider community is a possibility for urban dwellers alone.

Table 10: Vehicle Grants in Small Town and Rural Areas by Income Level

| Income Level | | | | |
|--------------|-------------------|-------------------|-------------------|---------------------|
| \$0 - 25,999 | \$26,000 - 39,999 | \$40,000 - 69,999 | \$70,000 - 99,999 | More than \$100,000 |
| Count | Count | Count | Count | Count |
| 35 | 16 | 43 | 22 | 7 |

The loss of the GIA programs would also effect low income families (and single income families) most of all. Aside from the obvious, that is that higher income families generally²⁷ have better access to resources of their own, they can also benefit most from the structure of the income tax system when it comes to the sorts of projects undertaken by the GIA funds²⁸. Renovations and accessible vehicles can be claimed as non-refundable tax credits. Like the disability tax credit itself however, the credit is only accessible if income tax is paid. For low income families, no tax may be payable. Single parent households, because of the non-refundable tax credits for the tax payer's individual deduction, the dependant equivalent of spouse deduction, and the disability deduction may earn close to \$40,000 before tax is payable, and a thus a further deduction (also non-refundable) from a medical expense claim arising from a renovation or vehicle purchase could be made. Table 11 indicates that this latter situation would affect over 200 of the households served thus far.

Table 11: Single Parent Homes by Income Level

| | Income Level | | | | |
|----------------------|--------------|-------------------|-------------------|-------------------|---------------------|
| | \$0 - 25,999 | \$26,000 - 39,999 | \$40,000 - 69,999 | \$70,000 - 99,999 | More than \$100,000 |
| | Count | Count | Count | Count | Count |
| Single Parent home N | 134 | 132 | 271 | 207 | 152 |
| Single Parent home Y | 159 | 52 | 36 | 6 | 3 |

Higher income households can generally realize about 20% of their eligible health related expenditures as a tax credit. Thus higher income household are both more able to contemplate the sorts of projects that the GIA supports, and achieve those projects at 80% of their direct costs after taxes are recouped. For most low income households the decision to invest in such a project may simply not be an option; even if such households could contemplate that option, they would not be able to recoup any income tax for lack of tax payable, and thus pay the full amount. While the new Home Adaptation for Independence initiative administered by BC housing could provide relief for some of these lower income households, the amount of the grant available through that program is much lower than necessary as

²⁷ We say "generally" here because income does not equal wealth, and it is possible to hold wealth without having income, but generally, wealth and income are highly correlated.

²⁸ The tax system is complex in regards to disabilities, and some refundable credits are available to low income families. Regardless, the only deductions available through projects like those supported by the GIA are through the health expenses credit, and that is what is discussed here.

indicated by the subscriptions to the GIA program²⁹. Finally, it is important to note that premise of the GIA programs is that the goal of social inclusion is best achieved when both accommodation and transportation needs of the client base are addressed. Indeed, the intensity and complexity of the demands on single income / low income households are such that an integrated approach and adequate resourcing is imperative.

Table 12: Income Levels of Grant Recipients

| Income Level | Frequency | Percent |
|---------------------|-----------|---------|
| \$0 - 25,999 | 293 | 25.2 |
| \$26,000 - 39,999 | 184 | 15.8 |
| \$40,000 - 69,999 | 307 | 26.4 |
| \$70,000 - 99,999 | 213 | 18.3 |
| More than \$100,000 | 155 | 13.3 |
| Total | 1152 | 99.1 |
| Missing | 10 | .9 |
| Total | 1162 | 100.0 |

In sum, in the absence of the GIA programs, the burden of unmet needs would fall differentially low income households, and rural households would suffer disproportionately from unmet transportation needs.

²⁹ Further, a great many middle income households, or households with limited income but about average assessed house values, are ineligible. Given the increased demands on caregivers of developmentally disabled children, situations in which a household might fall within the eligibility by income, but outside the eligibility for house value will not be uncommon due to the very real likelihood of a drop in household income as unpaid caregiving demands rise. Note also that households on Reserve lands are not eligible for HAFI funds; although the Investment in Affordable Housing funding envelop announced in July 2011 does include initiatives targeted at Aboriginal communities, it is unclear how on-reserve initiatives might involve renovations for accessibility (and none are reported in the 2012-2013 BC Housing Annual Report).

Conclusion

The analyses above assess the impact of the GIA programs on grant beneficiaries, their families, and cost avoidance for Government. Table 13 recapitulates our analyses in brief.

Table 13: Direct Costs Avoided because of GIA Investments

| Type of Support | GIA Investment | Agency responsible for alternative system | Costs Defrayed/Avoided |
|-----------------|-------------------|---|------------------------|
| Residential | 23.5 million \$ | MCFD | 12.7 – 16.4 million \$ |
| | | CLBC | 25.7 – 39.8 million \$ |
| Transportation | \$18.7 million \$ | BC Transit? | 12.2 million \$ |
| Total | | | 50.6 – 68.4 million \$ |

While intangible benefits in terms of well-being have been reported in earlier evaluations, and indeed concur with the literature on these issues, it is not possible with the data available to translate these benefits into straightforward fiscal terms. We know however, there are both quality of life and financial impacts for the families involved. Direct fiscal impacts have been calculated by estimating cost avoidance to Government. We have erred on the side of caution, and where insufficient data did not allow the assumption/calculation of particular costs (like increased medical costs), we excluded these from the analyses. Our estimate is certainly an underestimate. Nonetheless, we conclude that the GIA programs' expenditures are balanced by costs avoided by at least an equivalent amount. Further, we note that in the absence of the GIA, there will be a generally negative impact on the sector and a disproportionately negative impact on low and middle income families, and families in rural BC. Given these conclusions, a continuation of the GIA programs, or something very like them, is both warranted, and wise.

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