

# **The Economic and Social Contribution of the Public Sector to Rural Saskatchewan**

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## **Abstract**

As the economic and social landscape of rural Saskatchewan continues to change, the capacity of rural communities to remain viable is tenuous. Employment opportunities are a significant determinant of the economic viability of rural areas. In Saskatchewan, the public sector is an important component of the labour force, representing an estimated 23% of employment, with approximately 46% of those employment opportunities occurring in rural and northern areas. This represents more than 55,000 jobs with a further 21,762 jobs estimated as indirect employment supported by the public sector work. The estimated economic impact generated by these rural and northern jobs is represented by the direct public sector earnings of \$1,856 million and a further \$823 million in indirect expenditure generated from these earnings. The public sector also tends to employ highly skilled individuals and provides well-paying jobs. This is especially important for rural women as there are often fewer high waged opportunities for women in rural areas.

In addition to economic benefits, these public sector employees bring skills and networks that generate economic and social benefits for the communities and rural areas where they live and work. As services consolidate in larger centres rural communities continue to lose public facilities and the economic and social benefits generated by those who were employed there. Public sector employees contribute not only to the economic viability but also to the social capacity of their communities through their important roles as volunteers, often in leadership positions. To assess the economic and social impact of the public sector on rural communities, an analysis of the economic impacts of public sector employment and a survey of public sector employees in two Saskatchewan communities were undertaken. This research reports on the economic and social benefits that public sector employment brings to rural Saskatchewan.

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## **Introduction**

The rural landscape is undergoing significant change. Urbanization, globalization and technological change have altered the rural way of life forever. Rural communities face stresses as they attempt to deal with the economic and social implications of this change. This has led to an interest in understanding the economic and social structure of rural areas as well as the interdependencies that exist and are necessary for the continued viability of the rural way of life.

By identifying and understanding the essential economic and social elements of community viability and vitality it may be possible to assess and strengthen a community's ability or capacity to be self-sustaining. Communities must be able to

mobilize their resources to not only cope with the challenges facing rural areas, but overcome them. As a result it is important to identify those factors that contribute to a community's ability to survive and flourish in a complex, changing environment. This paper begins by examining the economic contribution of the public sector to rural Saskatchewan. It goes on to present a model of community capacity which provides the structure for examining a broader range of contributions of public sector employees to rural communities through their roles in access to human, natural and social capital. Finally, it explores the ways public sector employees contribute to a number of different community capacity outcomes.

## **Public Service Employment<sup>1</sup>**

Employment opportunities in rural areas are critical to attracting and retaining people to live outside of urban centres. The service sector plays an important role in the economic and social viability of many rural communities. This sector is growing and with it the importance of service sector employment opportunities to the rural economy (Cunningham and Bollman 1997). Public sector employment is one segment of the service sector that employs skilled labour and provides relatively high wages. The location of public services and the direct and indirect employment associated with these facilities are an important source of economic capital for rural communities. Government offices are often associated with secure, continuing employment in the communities where they exist (Beckley et al. 2002).

Public sector employment in Saskatchewan includes a broad range of occupations spanning three levels of government. Approximately 52% of public sector employment is provincial, while 28% is under local government jurisdiction and 8% is federal government (Minister of Industry, 2003). The remaining 12% are employed in government funded business enterprises. An estimated 23% of employment in Saskatchewan is with the public sector compared to the national average of 19%. The public sector makes up just over 25% of employment in Manitoba compared to 16% in Alberta (Sask Trends Monitor 2001). In 2001, the public sector contributed an estimated \$4,244 million to the gross domestic product (GDP) in Saskatchewan (Sask Trends Monitor and Econex 2002). This accounted for over 17% of the total GDP generated in Saskatchewan that year.

The public sector is the primary provider of core services such as health care, education, social services and all levels of government services. These labour-intensive services create significant employment in rural Saskatchewan and the presence of such services contributes to the sustainability of rural communities. Hospitals and schools are often the two largest employers in many rural communities and are important to the promotion of economic development (Doeksen et al. 1997). Health care is significant to rural areas not only for the jobs

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<sup>1</sup> For comparative purposes, the Statistics Canada definition of public sector was adapted for this study and includes federal, provincial and local governments as well as health, education and social service agencies funded in part by government, crown corporations, military and other agencies under the control of government. First Nation's government is not included in the public sector employment statistics.

it creates but also for its importance in attracting industry and retirees (Doeksen et al. 1997; Cordes 1996).

Estimates based on employment figures for 2001 suggest that approximately 46% of public sector jobs in the province occur in rural<sup>2</sup> and northern areas (Sask Trends Monitor and Econex 2002). Over the period 1987-1994 employment in all public sector social services grew in rural areas. However, from 1995-1999 only health care and education in the public sector social services grew while employment in all levels of government declined (Minister of Industry 2001). The number of individuals employed in health care, education, social services and all levels of government in rural Saskatchewan was 36,600 in 1999 representing 19.3% of all rural employment.

In Saskatchewan, population and employment in rural areas are changing. Between 1981 and 2001 the rural population dropped by 11% while the urban population in the two major centres of Saskatoon and Regina increased by 20% (Sask Trends Monitor and Econex 2002). The rural population is becoming more “urbanized” with the farm population declining provincially from 20% in 1986 to approximately 13% in 2001 while the non-farm rural population remained relatively stable over this same period. The number of farm operations<sup>3</sup> also declined dramatically with the number of farms falling by 10.5% between 1996 and 2001. As a result, the industries in which rural people are employed in Saskatchewan have also changed. Between 1987 and 2001 employment in agriculture declined by 46% (Sask Trends Monitor and Econex 2002). Excluding agriculture, employment in the rural goods-producing sector<sup>4</sup> increased by 33% and in the service-producing industries by 9%. Specifically public sector employment in education services increased by 10% and health care and social assistance by 12% while public administration employment declined by 20%.

With the rural non-farm population remaining stable while employment in farming declines, employment in sectors outside of agriculture has become more important to the continued viability of rural communities. Communities must plan and undertake economic development activities at the regional level to retain employment opportunities. To mitigate urban consolidation and retain rural regions, communities need to continue to perform all essential economic and social functions for the population they serve. In the rural United States, diversification in available employment opportunities has been linked to rural population growth with the most diversified areas having significantly higher growth rates (Huang et al. 2002).

In addition to their role in providing employment, civic institutions such as health care facilities and schools play an important role in delivering programs and services to rural communities. Schools and hospitals often serve as meeting places for the community with resources such as gymnasiums and computer rooms being utilized by citizens after hours (Bruce and Halseth, 2000). The closure of hospitals

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<sup>2</sup> Rural is defined in the report as the southern part of the province outside of the Census Metropolitan Areas of Saskatoon and Regina.

<sup>3</sup> Operating farm is defined broadly as one with gross receipts of at least \$2,500. When this definition is narrowed to only those farms with gross receipts over \$10,000 the count in 2001 is 44,400 and the percentage decrease since 1996 increases to 22% (Sask Trends Monitor and Econex, 2002).

<sup>4</sup> Goods producing sector includes manufacturing, construction and resource industries such as forestry, oil, gas, utilities and mining.

in rural communities impacts residents' sense of community (Doeksen et al., 1997; Doelker and Bedics 1989). A study of 20 rural communities in Canada revealed that rural residents believed the closure of health and educational institutions would make access to key services more difficult and result in a loss of identity for the community (Bruce and Halseth, 2000).

This research will attempt to identify the specific contributions of public sector employment to the capacity of rural communities to remain viable. Qualitative and quantitative contributions are considered to provide both economic and social benefits to rural communities, helping them to remain self-sustaining and improving the quality of life for those residing there.

## **Community Capacity Model**

Specific resources and skills are needed to adapt and deal with the significant changes and stresses currently facing rural areas. Community capacity has been defined as the ability of a group of people to collectively combine and mobilize different forms of capital within institutional and relational contexts to meet challenges and create beneficial outcomes for the community (Beckley et al. 2002). Identifying and measuring a community's assets is important for the assessment of collective strengths and weaknesses. Strengths can be utilized so that the maximum benefit is gained while deficits can be compensated for from outside sources.

Sociologists have identified four types of capital that communities can use and combine to achieve economic and social outcomes. These four types of capital are economic, natural, human, and social (Flora 2001). Economic capital is often associated with economic and community development initiatives and takes two forms, physical capital or infrastructure and financial capital (Beckley et al. 2002). Physical capital includes utilities such as water, power and sewer and the fixed assets of business such as buildings, transportation and machinery. Financial capital encompasses the liquid assets of business such as public and private investments, cash and operating funds (Beckley et al. 2002). Financing institutions are another form of financial capital.

Natural capital refers to the natural resources a community has such as clean water and air and availability of waterfowl, fish and wild game as well as the habitats that support them. Productive natural capital such as soil, oil, gas, forest and minerals are important contributors to the ability of a community to undertake economic activities and achieve quality of life objectives. Natural capital can be combined with labour to create commodities or services to provide amenities valued by the community and visitors to the area.

Human capital comes from the individual members of the communities. It refers to the skills, education, job experience and health found within the people who make up a community. Human capital takes the form of leadership, entrepreneurship, problem solving skills and local knowledge (Flora 1994). It can be obtained through formal education or informally through work experience and social interaction with family and friends (Beckley et al. 2002).

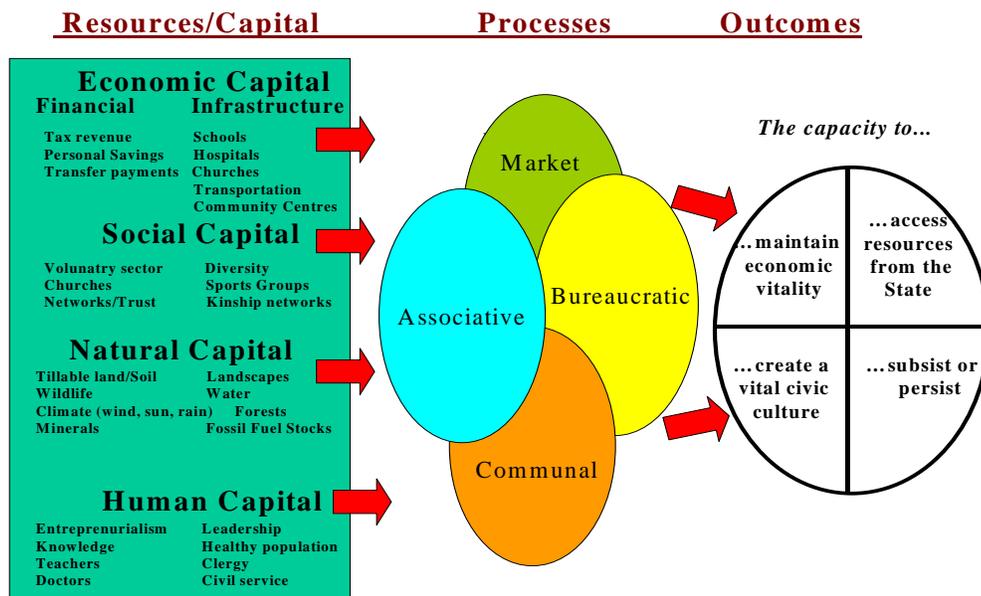
Social capital refers to the use of norms and networks between individuals for the purpose of facilitating collective action and creating specific outcomes (Beckley et

al. 2002). It is relationship based and is generated through people working together for a common purpose.

These four types of capital represent the assets any given community has to combine and mobilize for the purpose of achieving goals or outcomes. The amount of each type of capital a community has, and more importantly how effectively the community can collectively mobilize and utilize its capital endowment, will determine its ability to create capacity outcomes. The process of organizing and combining capital occurs within established social relations (Beckley et al. 2002). Market, bureaucratic, associative and communal relations are four types of social interactions that occur.

Recognizing that not every community will have the same goals, Beckley et al. (2002) defined four types of capacity outcomes that may result from interactions and relations in communities: capacity to maintain or enhance economic vitality; capacity to access resources from the state; capacity to create or maintain a vital civic culture; and capacity to subsist or persist. The capacity to maintain or enhance economic vitality encompasses economic outcomes measured in employment and financial wealth (Beckley et al. 2002). The capacity to access state resources is a community's ability to access the finite resources controlled by various levels of government. Capacity to create or maintain a vital civic culture refers to the sense of involvement and inclusion citizens feel and their ability to mobilize these feelings to accomplish activities for the benefit of the community as a whole. The capacity to subsist or persist is the ability of a community to find alternate means of obtaining goods and services when financial resources are limited. Figure 1 illustrates the interactions among the dimensions of the community capacity model.

Figure 1: Community Capacity Model (Beckley et al. 2002)



This framework of capital assets, social interactions and community capacity outcomes provides an appropriate context in which to evaluate the contribution of the public sector to rural Saskatchewan.

## Methodology

To evaluate the role of public sector workers in supporting community capacity, a self-administered survey of public sector employees was conducted in two rural Saskatchewan communities. Meadow Lake and Melville were chosen as representative rural communities to assess in detail the economic and social impact of the public sector. Meadow Lake represents a more northern community with an agri-forestry and tourism economic base while Melville is a south-central community with an agricultural economy. Meadow Lake is relatively removed from either of the province's large urban centres while Melville is closer to Regina and within 30 minutes of Yorkton, a large rural centre.

Community contacts were hired in each community to distribute and pick up completed surveys. We hoped that having a local contact for the survey would improve our response rates. Surveys were delivered to public sector employment locations in the two communities. As well, several local union representatives were contacted by mail and asked to distribute surveys to fellow members. Public sector employers identified in the two communities included the following:

Law enforcement agencies	Environmental and agricultural agencies
Legal Aid Commission	Local government
Educational and vocational institutions	Public works
Health care agencies	Department of Highways
Crown utilities	Postal services
Social services	Public libraries
Housing Authorities	Employment agencies

Employees were asked to review and then complete the questionnaire. Those surveyed included nursing staff, emergency personnel, therapists, social services workers, teachers, lawyers, RCMP officers, corrections workers, highway workers, linemen, environmental workers, postal clerks, library staff, group home workers, counsellors, agricultural workers and professional and clerical support staff for various public sector agencies. A total of 750 surveys were distributed in each of the two communities of which 216 were returned from Meadow Lake and 208 from Melville. Together, the 424 returned surveys resulted in a response rate of 28 percent. The number of public sector employees was estimated at 685 for Meadow Lake and 510 for Melville based on industry categories of resource-based industries, health and education. To the extent that these categories include private sector employees, the estimates would be high, although the numbers do not include employment related to crown corporations or local government. Although the exact number of public sector employees in the two communities is difficult to

approximate, the returned surveys represent a combined response rate of about 35%. It is important to note that in Meadow Lake we anticipate that a significant number of summer seasonal public sector employees associated with parks and tourism would not have been included in this survey distributed in November.

## Results

### Economic Capital

It is estimated that in 2001 public sector jobs comprise 21% of the employment in rural and northern areas<sup>5</sup> of Saskatchewan and represents \$1,943 million of the provincial GDP (Sask Trends Monitor and Econex 2002). This accounted for almost 15% of the GDP generated in rural and northern areas in that year. This compares favourably to the economic output of agriculture, which was reported at 10% of the rural GDP in the same year (Sask Trends Monitor and Econex 2002).

The economic activity resulting from public sector employment in rural Saskatchewan for the year 2000 is provided in Tables 1 and 2. The direct and indirect employment generated by the public sector in Saskatchewan is estimated in Table 1. The public sector employed 116,433 people in 2000 representing 23.5% of the employment in the province for that year (Minister of Industry 2003). In rural and northern areas work in the public sector made up 21.1% of employment or an annual average of 55,800 jobs in 2000 (Sask Trends Monitor and Econex 2002).

*Table 1: Public Sector Employment Impact on Saskatchewan in 2000 (Estimated)*

Saskatchewan	All Employment	(A) Public Sector	%	Multiplier	(B) Indirect Employment Generated <sup>6</sup>	Total Employment Generated (A+B)
Total	485,000	116,433	24.0			
Rural and Northern Areas	263,900	55,800	21.1	.39 <sup>7</sup>	21,762	77,562

Source: Sask Trends Monitor and Econex (2002)

The impact of employment opportunities on rural areas extends beyond the direct jobs it creates. To estimate the total value of this employment for rural areas it is necessary to consider the indirect employment created as a result of these public sector jobs. This multiplier effect occurs because the presence of public sector employment in rural communities means jobs in other sectors are created to provide services to public sector employees and households.

Stabler et al. (1993) established an employment multiplier appropriate for rural Saskatchewan. The multiplier is derived by estimating the cumulative increase in total non-basic employment that is created by the addition of one basic job. A

<sup>5</sup> Rural and northern is defined as all communities outside of Saskatoon and Regina (Sask Trends Monitor and Econex, 2002).

<sup>6</sup> Indirect employment is created when public sector employees and their families purchase and consume goods and services in the community and surrounding area.

<sup>7</sup> Given that the total includes two larger urban centres using the rural multiplier results in a low estimate of the indirect employment generated by the public sector in Saskatchewan.

basic job is defined as a job that brings revenues into a community either by producing a product for export or because it is funded from outside the community (Stabler et al. 1993). Public sector employment in rural communities that is fully funded by the provincial government such as health care, social services and support services for resource based industries would be considered a basic activity while education would be only partially basic as local tax revenue supports a portion of education expenditures. This employment multiplier reflects the high-import, limited-production nature of Saskatchewan's rural economy and is therefore a low employment multiplier relative to those calculated for large urban centres where the internal linkages within the local economy are higher (Stabler et al. 1993). This multiplier is applied to the employment estimates for Saskatchewan to calculate the additional jobs generated by the public sector. The indirect employment generated in rural Saskatchewan is 21,762 jobs. Direct and indirect employment in the public sector together account for 77,562 jobs in rural Saskatchewan, representing almost 30% of the employment available in rural and northern areas.

The presence of public sector employment has a direct economic impact on the viability of rural and northern communities. The earnings from public sector employment are estimated in Table 2. To approximate employment earnings for Saskatchewan the number of persons 15 years of age or older receiving earnings was multiplied by average earnings (Statistics Canada 2004a). Public sector earnings for the province in 2000 were \$4,036 million (Minister of Industry 2003) with the rural and northern earnings estimated to be \$1,856 million<sup>8</sup>. This estimate represents almost 25% of earnings in rural and northern areas.

*Table 2: Public Sector Employment Earnings in Saskatchewan in 2000 (Estimated)*

Earnings estimated in millions of dollars

Saskatchewan	All Employment Earnings <sup>9</sup>	Public Sector Earnings	Percentage Public Sector	Multiplier	Indirect Expenditure Generated
Total	\$13,728	\$4,036	29.4		
Rural and Northern Areas	\$7,500 <sup>10</sup>	\$1,856	24.7	.4434	\$823

Source: Sask Trends Monitor and Econex (2002)

The true economic impact of the income gained from public sector employment is larger than the direct earnings because of induced spending when the income is spent and then re-spent others. Expenditure of these earnings has a multiplier effect in the communities where employees work, live and shop. Stabler and Olfert (2002) studied the anticipated impact of earnings on rural communities of

<sup>8</sup> Rural and northern earnings were estimated to be 46% of the total public sector earnings. This was based on the percentage of public sector GDP calculated to be generated in rural and northern areas (Sask Trends Monitor and Econex 2002)

<sup>9</sup> Calculated using persons 15 years of age and over who received wages and salaries, net income from a non-farm unincorporated business and/or professional practice, and/or net farm self-employment income during calendar year 2000, who reported non-zero earnings multiplied by the average total earnings for Saskatchewan.

<sup>10</sup> To calculate the rural portion of employment earnings Saskatoon and Regina earnings estimates (Statistics Canada 2004a) were subtracted from the total Saskatchewan earnings estimate.

different sizes. Although the local impact varies depending on the size of the community and the services and goods that are available, they estimated the system-wide multiplier to be 1.4434 suggesting that for every \$100 of income expenditure there is induced additional spending of \$44.34. Using this multiplier effect, the presence of public sector employment in rural Saskatchewan is estimated to create additional economic activity valued at \$823 million in rural communities. When this indirect expenditure is added to the estimated earnings contributed by the public sector to rural and northern areas, the total is \$2.68 billion.

In a rural trading area with a Complete Shopping Centre (CSC) such as Melville or Meadow Lake as its largest community it is anticipated that approximately 75% of the consumption expenditure made by residents will occur within that area (Stabler and Olfert 2002). When the appropriate multipliers are applied, every \$100 of expenditure originating in a CSC will have an induced spending impact on the rural community of an additional \$33.48. When the direct and induced spending related to public sector employment is applied to the communities of Meadow Lake and Melville, the substantial economic impact of public sector employment on these rural communities becomes more apparent. Public sector employment data by community were not available but the total number of public sector employees estimated to be working in the two communities in 2000 was 1,19511. Table 3 (Statistics Canada 2004a) shows the estimated employment impact for the two representative rural communities of Meadow Lake and Melville. It should be emphasized that these are only estimates as exact public sector employment numbers for the two communities were not available.

*Table 3: Public Sector Employment Impact on Meadow Lake and Melville in 2000 (Estimated)*

<b>Community</b>	<b>Experienced Labour Force<sup>12</sup></b>	<b>Estimated Public Sector</b>	<b>Percentage Public Sector</b>	<b>Multiplier</b>	<b>Estimated Indirect Employment Generated</b>
Meadow Lake	2,110	685	32.5	.39	267
Melville	1940	510	26.3	.39	199

Source: Statistics Canada (2004a)

Table 3 indicates that the impact of public sector employment represents a significant percentage of the labour force at more than 25% in both communities. In Meadow Lake 32.5% of the experienced labour force is estimated to be in industries dominated by the public sector while in Melville the number is slightly lower at 26.3%. When indirect employment created is considered, employment related to the public sector industries makes up 45% of the experienced labour

<sup>11</sup> Estimated using 2001 Community Profile experienced labour force statistics. The industry categories of agriculture and other resource-based industries and health and education were summed for both communities as an approximation of public sector employment (Statistics Canada 2004a).

<sup>12</sup> Experienced Labour Force refers to persons 15 years and over, excluding institutional residents, who were employed or unemployed during the week (Sunday to Saturday) prior to Census Day, and who had last worked for pay or in self-employment in either 2000 or 2001.

force in the Meadow Lake area and approximately 37% of the experienced labour force in Melville.

To better understand the economic impact of public sector jobs on rural communities, respondents to the survey were asked to indicate whether they would leave the community if they were to lose their employment in the public sector. Of the 424 respondents, 239 or 56% indicated they would likely move to another community to seek employment. Applying this percentage to the 1195 public sector workforce estimated to be present in Meadow Lake and Melville, the result is a total of 670 households leaving the two communities if this employment were to disappear. This represents a significant 18% of the 3,680 households in the two communities. These individuals indicated a lack of other employment opportunities that matched their skills and the inability to obtain similar income with another employer as the reasons why they would leave. This provides evidence of the job specific skills public sector employees have that are often not utilized in other sectors of the economy at comparable wage rates. Without public sector jobs these skilled workers often cannot find employment within the community. It also points to the financial dependence these households have on these jobs as a primary source of income. Of those who said they would not move the reason was frequently a commitment to the community related to spouse's employment or the ability to retire rather than move.

Although often unacknowledged, the retired population makes a significant contribution to the rural economy. Public sector employment often offers the opportunity to participate in a pension plan and the option of early retirement. Of those who responded, approximately 75% agreed or strongly agreed with the statement "Overall I am very attracted to living in the Meadow Lake/Melville area." Almost 41% of respondents indicated that they would not move even if they lost their public sector employment. This statistics provide support for speculation that many public sector employees retire in the rural communities they once worked in. Communities offering public sector employment are therefore "doubly blessed" when they are able to retain those who retire and attract new families to the community as a result of these jobs.

### **Natural Capital**

Natural capital refers to natural amenities such as clean air and water as well as productive resources such as soil, minerals and forests (Martz and Sanderson 2002). The presence of these resources improves living conditions for local residents and facilitates ecotourism and outdoor recreation including camping, swimming, fishing and hunting. Control, support and protection of these resources is often considered to be a public good and many of the jobs associated with the preservation and management of natural resources are found in the public sector. The agricultural industry is supported by a variety of public sector jobs that help producers balance soil productivity with preservation. Agrologists, conservation officers, fisheries technicians, and forestry officers are just a few examples of the jobs that help preserve and monitor the valuable natural resources in Saskatchewan.

It is estimated that 1,400 provincial, public sector jobs provide natural resource support and management services in Saskatchewan. In Melville and Meadow Lake these jobs are primarily related to agriculture, forestry and conservation of wildlife.

Of the 424 respondents, 79 or 18.6% were employed in jobs related to natural resource management and support services. Individuals employed in these areas have training and job related skills that are utilized not only within their professional careers but also on a voluntary basis to support their communities. When asked how they used their work skills outside their employment with the public sector respondents working in agriculture or environmental services mentioned teaching firearm safety; school presentations on fisheries, agriculture and environmental issues; involvement in related research and enhancement projects; outdoor education for youth groups; tree planting for community-based organizations; and the provision of information to groups and individuals about crop conditions, disease and insect problems. These examples provide evidence of how the skills and expertise of those employed in resource related jobs help support natural capital through community education and services.

Natural capital is necessary for the economic, environmental and quality of life outcomes valued by communities (Martz and Sanderson 2002). Communities must be able to manage and utilize these resources such that the maximum benefit is achieved. Public sector employment provides support for natural resources through the work done in these industries and the knowledge and skills these employees bring to the communities where they live and work.

### **Human Capital**

Human capital comes from the skills, knowledge and capabilities of those in the community. This capital is in the form of formal education and informal learning including work and life experiences. Public sector employment often requires technical and professional skills that must be acquired through formal education or job training. Compared to the general Canadian population (Statistics Canada 2004a), respondents had a higher education with 87% reporting some post-secondary education and 36% having a university bachelor's degree or higher. Census 2001 data from the communities of Melville and Meadow Lake show an average of 70% of the population between 20 and 65 years of age has an education higher than high school graduation and just over 14% has a university degree (Statistics Canada 2004a). These statistics indicate that the public sector employees surveyed have a higher education level than the general population in the two communities supporting the idea that public sector employees tend to have more formal education.

As an educated workforce, public sector employees are a valuable resource to the communities. Through their work and their social interactions in the community, they use and share this knowledge to help achieve community objectives. Of the 424 individual respondents, 112 (26%) reported undertaking a teaching or instructional role in their community outside their employment in the public sector. In some cases the same individual was providing instruction to several different groups in the community.

The presence of diverse employment opportunities in a community creates a workforce with a variety of skills and experience that can be drawn upon to produce both economic and community development outcomes. Public sector jobs often require very specific skills and expertise not found in jobs outside of public employment. These skills are often accessed on a voluntary basis for community objectives. A total of 147(35%) respondents indicated that they used their work

skills outside of their employment in the public sector. This number is expected to be low as many reported being involved in voluntary activities that would be directly related to their work skills and experience yet did not indicate they used work skills on a voluntary basis. It is anticipated that this may be because many individuals do not think about the connection between the voluntary activities they participate in and their work experience and training. Those who reported employing their work expertise outside of the workplace mentioned using organizational abilities, public speaking, strategic planning, teaching, leadership skills, interpersonal communication, and technical skills such as database development, typing and bookkeeping.

Public sector employees with medical training reported instructing first aid and babysitting courses, as well as acting as volunteer emergency medical help at rodeos and hockey games in their communities. Those in law and environmental enforcement are educating youth on firearm safety, drug addiction and environmental issues. Organizational, computer and accounting skills acquired through work are being used to assist numerous community groups and voluntary organizations. Those in agriculture are helping neighbours with crop problems after hours while teachers are coaching and leading youth in a large variety of extra-curricular activities. The presence of these skills in the community is often taken for granted yet without these individuals it would not be possible to provide these services. It is important to realize that when schools and hospitals are closed there is not only an economic loss but also a loss of skills and expertise that contribute to social outcomes in rural communities.

Leadership is an important form of human capital for a community. It is essential for the organization of activities related to economic and social outcomes. Leadership has been identified as one of the most important determinants of community development and the quantity and quality of leadership a community has available to it will often determine its capacity and viability (Martz and Sanderson 2002). Those who provide leadership are often responsible for initiating and co-ordinating activities for the benefit of the community. Leadership skills and experiences can come from work-related activities that require personal responsibility and initiative. Individuals also learn about leadership through formal educational opportunities and the example of co-workers.

Public sector employment often involves high levels of social interaction that teach interpersonal skills essential for leadership positions. Educators, health care workers, and law enforcement officers provide leadership to others on a daily basis as they work with people in their communities. These individuals are therefore well equipped to take on leadership roles outside of the workplace. A total of 161 respondents to the survey (38%) identified that they were involved in some sort of leadership position for a community or voluntary organization.

Leadership is often related to entrepreneurship (Martz and Sanderson 2002). Entrepreneurship is an indicator of initiative as well as the ability to conceptualize a goal and then simultaneously undertake and manage a variety of activities associated with achieving that goal. Organizing community groups to achieve some purpose requires similar skills. People who have the skills to realize economic and social objectives are necessary for a community to achieve related community outcomes. Individuals with entrepreneurial skills contribute to the diversity of the local economy by operating businesses that create employment and economic spending and spin-offs in the community. They provide economic

support for social activities and supply much needed management skills for achieving social objectives. Approximately 12% of the public sector employees surveyed had another source of employment, while 29% had someone in their household that owned a business.

Local knowledge refers to an understanding of the local culture, customs and history of a community. Achieving community economic and social outcomes requires an understanding of how to get things done in the most effective and efficient manner. Local knowledge makes it possible to identify what needs to be achieved and how resources can be mobilized to accomplish the necessary tasks and obtain the desired outcomes. An understanding of how a community functions is acquired over time and through interactions with others. Public sector employees by the very nature of their “public” work interact with individuals from all facets of the community. These interactions provide public sector workers with opportunities to gather information about the community and how it operates. This knowledge can be used to achieve economic and social outcomes for the community.

One measure of the presence of local knowledge is the length of time individuals have been part of the community. Over half of the respondents had lived in their community for at least 19 years, with the average number of years being just over 22. A total of 123 respondents (29%) indicated that they were born in the community. These figures suggest public sector employees are vested members of the communities they work and live in.

The average age of the public sector employees surveyed was 42. This compares closely to the average for the public service in Saskatchewan reported to be 45 years (Saskatchewan Public Service Commission 2001). Good pension plans and adequate wages have made it possible for these employees to consider early retirement. This increases the rate of turnover in these positions bringing young workers into the community. Those taking early retirements are often capable and willing to contribute time and energy to community projects and activities. This is a valuable resource to the rural areas they live in.

## **Social Capital**

Social capital is an important resource for accomplishing outcomes valued by individuals, groups and the community as a whole. It is collectively created by community members in organizations, group activities, networks and relationships, and is utilized within social relations (Reimer 2002). Four types of social relations exist including market, bureaucratic, associative and communal relations (Reimer, 2006). Market relations result from economic activities and exchanges between individuals. Bureaucratic relations arise from the formal institutional relationships bureaucracies impose on individuals within an organization. Associative relations are found in voluntary organizations where individuals share common interests such as service and recreational clubs. Common goals form the basis for these relationships. Communal relations result from a strong sense of shared identity such as families and close friendships (Reimer, 2006).

Bureaucratic relations are associated with public service institutions (Reimer, 2006). Public sector employees are involved on a daily basis in these types of relationships through their jobs. They have experience with bureaucratic processes and an understanding of how they work. Of the 424 individuals who completed

the survey, 320 indicated they were unionized employees. Unions have a bureaucratic structure and internal processes that members are included within. Public sector employees are exposed to how these institutions operate and how they interact with other organizations. This understanding of how to function within a bureaucracy can be transferred outside of the workplace to community groups and voluntary organizations. This knowledge is a valuable tool in accessing state resources for economic and social purposes. Public sector employees by virtue of their occupations are well equipped to work within a bureaucratic structure to organize, lead, delegate, and accept responsibility for specific duties to achieve specific goals or outcomes for the community. The World Bank identified the public sector as one of the seven key sources of social capital because of its essential role in the functioning of a society (van Kemenade 2003).

Public sector employment tends to involve high levels of human interactions and requires the continual building and maintenance of relationships with others in the community. The ability to establish and foster relationships with others is key to involvement in associative relations. People who can effectively interact with others are a valuable resource to their community. A total of 307 (73%) of respondents indicated that they belonged to a voluntary organization or volunteered in their community and over half indicated they held a leadership position in such an organization or activity. Involvement in voluntary organizations provides evidence that public sector employees are well represented in associative relations with friends and neighbours in their communities.

Communal relations arise from a sense of belonging and shared identity with others in the community. Survey respondents were asked to agree or disagree with statements about their sense of commitment to the community. The results are shown below in Table 4. Approximately 75% of respondents agreed or strongly agreed with the statement that they were very attracted to living in their community and 73% (agreed/strongly agreed) felt they belonged in the community. An estimated 82% of respondents agreed or strongly agreed with the statement that the friendships and associations they had with others in the community meant a lot to them. Respondents seemed to feel a sense of shared priorities and thought of themselves as similar to others in the community. These results provide evidence that respondents have in communal relations in their communities. The survey results are comparable with findings from another study of four rural prairie communities where 83% of respondents agreed or strongly agreed with the statement that they were attracted to living in the community and 83% felt that they belonged in the community (Martz and Sanderson 2003).

**Table 4: Evidence of Communal Relations**

Statement	Percentage					No Answer
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Overall I am very attracted to living in this community	1.4	3.8	16.7	42.0	32.8	3.3
I feel like I belong in my community	2.1	4.7	17.2	46.9	25.7	3.3
The friendships and associations I have with other people in my community mean a lot to me	.7	2.8	10.6	44.3	37.7	3.8
If the people in my community were planning something I'd think of it as something "we" were doing rather than "they" were doing	2.8	13.4	34.2	35.8	8.3	5.4
I think I agree with most people in my community about what is important in life	3.1	9.2	27.8	47.9	5.4	6.6
I like to think of myself as similar to the people who live in my community	2.4	8.5	24.8	49.5	10.1	4.7

Woolcock (2001) identified three forms of social capital: bonding, bridging, and linking social capital. Bonding social capital refers to relationships between family, friends and neighbours within a community. Bridging social capital includes relations among communities that have common demographics and may be connected with one another through social and economic activities. Linking capital describes affiliations with individuals having positions of power outside the community (Woolcock 2001).

To provide evidence of social capital, survey respondents were asked to agree or disagree with a number of statements regarding the relationships they had with others in the community. The results, shown in Table 5, illustrate that approximately 52% of respondents agreed or strongly agreed that they visit neighbours in their homes and 63% agreed or strongly agreed with the statement that they borrow or exchange favours with their neighbours. A total of 87% of the public sector employees surveyed agreed or strongly agreed that their neighbours would help them in an emergency while over 75% agreed or strongly agreed that they had someone in the community they could go to if they needed advice. About 70% of respondents agreed or strongly agreed with the statement that they felt loyal to the people in their community and 79% agreed or strongly agreed that they would be willing to work with others on a project to improve their community. These numbers are slightly lower than the findings from the comparable survey of four prairie communities with 87% of respondents in those communities agreeing or strongly agreeing that they feel loyal to others in their community and 95% agreeing or strongly agreeing with the statement that they would be willing to work with others on a project to improve their community (Martz and Sanderson 2003). These differences may be accounted for by the fact that public sector

employees often come into the community as a result of the employment opportunities available. In fact, 12% of respondents had lived in the community 2 years or less.

These results suggest that public sector employees have strong bonding capital with friends and neighbours in their communities. This bonding capital can be used to achieve both economic and social outcomes. When people feel committed to one another and are willing to work together they are more likely to be able to mobilize the resources necessary to achieve community goals. Bonding capital is particularly important in situations of economic and social stress like those currently facing rural agriculture communities. These networks of relationships can be relied on for support in maintaining the viability of rural areas.

*Table 5: Evidence of Bonding Capital*

Statement	Percentage					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	No Answer
I visit with my neighbours in their homes	5.9	15.3	22.6	35.6	16.3	4.3
I borrow things and exchange favours with my neighbours	3.8	12.5	15.6	42.0	21.9	4.3
I believe my neighbours would help me in an emergency	.7	1.9	5.2	40.8	46.2	5.2
If I needed advice about something I could go to someone in my community	2.1	4.7	13.4	58.0	18.2	3.6
I feel loyal to the people in my community	.7	1.9	21.9	49.5	21.2	4.7
I would be willing to work together with others on something to improve my community	.2	1.2	16.7	48.3	30.7	2.8

Bridging social capital is very important in rural areas. As populations shrink, communities have to work together to maintain services on a shared basis. Good working relationships between communities facilitate this kind of cooperation. Public sector employees are in a unique position to create and foster bridging social capital. Public organizations such as hospitals, schools and government service offices often serve regions that encompass several communities and large rural areas. As a result the individuals who work within these agencies have daily contact with people from outside the boundaries of a single town or city. Respondents to the survey were asked if they on average within a week communicate with people in other neighbouring communities. Of the 424 respondents, 259 (61%) indicated they did communicate regularly with people outside the community. This ongoing contact outside the community helps to foster social networks that build inter-community cooperation and can be drawn upon to preserve the viability of rural regions.

Concentration of public sector jobs in larger centres results in employees commuting to work from neighbouring communities. The survey results suggest that about 30% of respondents live outside of the community in which they work.

This means that a significant number of public sector employees are part of more than one community network and share information and ideas between those networks. With employees coming from a number of different communities these networks become linked as workers interact and share knowledge in the workplace. These multiple interactions between rural communities can be a valuable resource to rural areas that have become increasingly interdependent in their struggle to maintain services and resources in their regions.

Those public sector employees that are unionized are connected through their professional and social associations with other individuals in their industry outside the community, including local and non-local representatives. These interactions can be forms of both bridging and linking social capital. The knowledge gained from these interactions can be shared with others in the community and used to achieve economic and social goals. Local union groups, although organized for work, often become involved in accomplishing community based economic and social outcomes that benefit the communities in which they exist.

Provincial and federal government offices in rural areas are closely affiliated with departments located in larger urban centres. Public sector employees communicate on a regular basis with individuals outside the community who have access to economic capital or who can link local people with state resources and services. These employees have the skills and networks necessary to make the appropriate connections and be heard in the bureaucracy of government. The presence of these forms of linking capital is important for rural areas that need access to financing and public services for infrastructure projects and community programs.

## **The Role of Public Sector Workers in Community Capacity Outcomes**

### **Capacity to Maintain or Enhance Economic Vitality**

The capacity for economic vitality is associated with the ability to generate economic activity and financial wealth. Survey respondents were asked to indicate what percentage of their household income comes from their public sector employment. Of those who responded to this question, 88% indicated their public sector job contributed 50% or more to their household income while 33% indicated it represented 100% of their household income. Assuming these statistics are representative of the public sector population in Melville and Meadow Lake, of the estimated 1,195 jobs in these two communities approximately 394 households would be dependent solely on public sector employment for their household income.

Home ownership is a form of physical economic capital and provides an indication of the ability of community members to access capital for economic outcomes. When people own their homes they can use the investment to obtain financial resources necessary to undertake economic activities. Public sector employees were asked if they owned or rented their home. Approximately 85% of respondents to this question indicated they owned their home. This suggests that a large portion of these individuals have assets that could be used to obtain financial resources for economic purposes.

In rural areas many individuals have multiple jobs. Farm families are often forced to seek off-farm employment to support themselves. Public sector jobs tend to

provide higher wages relative to other employment available in rural areas. To estimate the impact public sector employment has on other businesses and farming operations respondents were asked to indicate whether anyone in their household owned a business. Of those surveyed, 29% answered yes to this question, while 25% indicated the business was home based. Households that have employment in more than one industry help to diversify and stabilize the local economy. A total of 17% of the households were also involved in a farming operation or an agricultural-related business.

Respondents were asked if their public sector employment financially assisted another business operated by someone in their household. Only 18% of respondents answered yes to this question. Of the 124 households owning a business, 57% were financially supported to some extent by public sector employment. When asked whether they would be able to operate this business without their public sector employment 13% of those surveyed said no. It is beyond the scope of this research to estimate what the economic impact of the loss of these businesses and the employment they generate would be on the two communities. However, these statistics suggest that the availability of public sector jobs in rural areas is an important economic source of financing for other businesses in the community.

At a time when agriculture is facing a financial crisis, public sector jobs are enabling some family farms to continue to operate. Of those surveyed in Melville, just over 20% were in a household that owned a farming operation and 16% of respondents indicated their public sector job financially assisted the farming operation. A total of 14% of the Melville respondents indicated they could not continue to operate the farming business without their public sector employment. If these figures are applied to the 510 public sector employees estimated for Melville, the number of farming operations financially assisted by public sector employment would be 88 and 74 farms would not be able to operate without the public sector employment in the Melville area alone. The economic impact of this employment therefore extends beyond the household to the support of other businesses that generate economic activity in the community.

It is anticipated that public sector jobs available in larger rural centres have economic benefits for smaller surrounding communities within their trading area when people commute to these larger centres for employment. Survey respondents were asked to indicate how far they lived from their place of work. Thirty percent of respondents lived 12 km or more from their place of employment while 15% were more than 35 km away. These commuters are generating economic activity in both the communities they work and live in through the purchase of goods and services.

Of the 424 respondents to the survey, over 70% were female. This is not surprising given that education and health, the two largest public sector employers in rural areas, offer employment opportunities that are traditionally held by women. For farm families, it is often the female partner who must seek employment off the farm to support the family. The availability of these types of higher paying jobs is a valued source of income for agricultural and other rural based business operations facing tough financial times. In Meadow Lake, 74% of the labour force in health and education were females (Statistics Canada 2004a). In Melville the comparable number was 82%. Access to professional jobs is important given that rural women's employment tends to be predominately part-

time, with low job security and low wages (Bokemeier, Sachs and Keith 1983; Domosh and Seager 2001).

In rural areas the economic impact of the voluntary work done by community members is often unacknowledged and seldom quantified. Volunteer hours spent working in the hockey rink booth or preparing and serving a meal for a community event have economic value. In some instances in large urban centres these functions would be handled by private businesses that would receive the economic benefits associated with providing this service. In rural communities, volunteers generate money or provide the labour to achieve social and economic outcomes for the benefit of the community as a whole. Although it is difficult to quantify the value of these voluntary activities it is interesting to speculate what it would cost to replace this time with paid labour. Respondents to the survey were asked to indicate how many hours they volunteer in a year for both the voluntary organizations they belong to and community service work. Although some did not answer this question, if the total volunteer hours reported on the survey were paid at even minimum wage (currently \$7.55 per hour in Saskatchewan (Labour, 2006), the economic impact would be over \$200,000. Each person who reported volunteer hours on average would have provided an estimated \$800 worth of voluntary time. It should be noted that these values were calculated using minimum wage when in fact some of the skills these individuals are “volunteering” for community service such as bookkeeping and medical training would be valued at a substantially higher rate in the labour market.

### **Capacity to Subsist or Persist**

The establishment and maintenance of social networks through which goods and services can be traded and shared provides evidence of the ability to subsist (Beckley et al. 2002). Public sector employees are involved both professionally and through their voluntary community associations in the development and fostering of social networks. When people feel connected they are more likely to work together to achieve common goals. These relationships can be leveraged in times of economic stress to ensure the continued viability of rural communities.

### **Capacity to Access Resources from the State**

The location of state services and public funding of community programs and services are indicators of the community’s capacity to access state resources. Locating of state services such as prisons, schools, hospitals and government offices within a community has direct and indirect employment and business implications. In particular, services related to health and education, attract residents of all ages to the area. The presence of public sector employment provides evidence that a community is accessing state funds. Government offices and their representatives provide a gateway for local residents to access publicly funded expertise and resources that can be used to achieve both personal and community economic and social outcomes.

### **Capacity to Create or Maintain a Vital Civic Culture**

It is anticipated that public sector employees are making a valuable contribution to the social capacity of their communities. Many are raising families and

participating in numerous community programs where they live and work. Teachers and social service employees by virtue of their training and contact with children are providing leadership in many recreational and social activities that support youth in the community. The presence of these programs and services helps to make these rural communities a desirable place to live and raise a family. The fact that 55% of the people residing in Saskatchewan continue to live outside of the two major urban centres provides evidence that the services and programs available in rural areas are attracting people to live there.

Civic culture is measured by the breadth and depth of community involvement and activity (Beckley et al. 2002). Of those responding to the survey 73% participated in voluntary activities in their community. This number is high relative to provincial statistics that suggest 42% of Saskatchewan residents volunteer (Canadian Centre for Philanthropy 2003). The higher percentage of volunteering may be related to the education level of survey respondents. The national survey of giving, volunteering and participating indicates that volunteering in Saskatchewan tends to be related to education level with 63% of those having a university degree volunteering compared with 31% of those without a high school diploma (Canadian Centre for Philanthropy 2003).

Respondents were asked to quantify the hours they spent volunteering. Although some indicated that they did volunteer they could not estimate the hours. One respondent simply wrote "too many to count". Of those who chose to attempt to quantify their voluntary contribution a total of 32,766 hours per year were reported. Using this total, on average these volunteers each provide 128 hours of time per year to their communities. This number is slightly lower than the provincial average of 154 hours (Canadian Centre for Philanthropy 2003). Given the number of groups and activities those surveyed reported being involved with, and the number of individuals who chose not to report hours, these figures are anticipated to be a very low estimate of the volunteer hours provided by those surveyed.

The social capital and capacity generated by public sector jobs extends beyond the direct contribution of the employees. Many of these individuals have spouses who also contribute to the civic vitality of the community. Two respondents noted on their surveys that their public sector jobs alone supported their households and as a result their spouses were able to volunteer on a "fulltime" basis in the community.

Involvement and action in public affairs is one measure of the capacity for civic vitality and the ability to achieve social outcomes in a community. Survey respondents were asked to indicate whether they had done any of a number of activities related to a public interest issue in the past 12 months. The activities and percentage of respondents who indicated they had been involved in these activities is provided in Table 6. Approximately 40% of those surveyed had signed a petition about a public interest issue within the last 12 months and 63% had given money for a specific emergency action or cause in their community. A total of 38% of respondents had volunteered for a specific action by a community group related to a public interest issue.

It is difficult to estimate how accurate these statistics are given that a number of respondents chose not to answer this question. One respondent wrote a comment implying that as "government" employees, talking about public issues that may be politically sensitive was discouraged.

**Table 6: Public Interest Issues**

Statement	Percentage
	Yes
Written a letter to your mayor, provincial government representative or federal government representative about a public interest issue	8.5
Written a letter to the editor of a newspaper about a public interest issue	4.3
Called a radio talk show about a public interest issue	3.6
Signed a petition about a public interest issue	40.8
Attended a public meeting about a public interest issue	33.6
Spoken out at a public meeting about a public interest issue	12.6
Given money for a specific emergency action or specific opportunity be a group in your community	63.3
Volunteered for a specific action by a group in your community	38.2
Posted a comment to an E-mail discussion group or to a web-based discussion group about a public interest issue	2.8
In some other way represented your public concerns	4.7

## Conclusions

The rural landscape is changing as rural Saskatchewan continues to experience significant restructuring. Communities are feeling the economic and social pressure of urbanization. The combination of resources and capacities needed to maintain viable communities has become an important question for rural leaders to answer. If communities are going to not only respond to the changes facing rural areas but prosper, they must have adequate resources to meet these challenges. More importantly there must be the ability to combine these resources to create the capacity to achieve both economic and social outcomes for the community as a whole.

Employment opportunities have always been identified as key to sustaining rural economies, but to consider generic employment as the answer may be short sighted. A wide variety of skills and expertise are needed to weave a strong economic and social fabric that is capable of withstanding the strains of change occurring in rural Canada. The type and diversity of employment a rural area has to offer may have important implications for creating a sustainable environment that attracts people to live and work there.

The depopulation of rural regions and reductions in government spending have resulted in the consolidation of services in larger centres. While the closure of an individual school in a small community is often quantified in terms of the 10 or 12 jobs lost to the town, what is apparent is that the impact on the host community is far greater. A hospital or school may be the largest single employer in a small town. When these public facilities close, the economic activity generated by those coming to the community to use these services is lost. The indirect employment and economic activity generated by public sector jobs disappears. Households leave the community and the ability to sustain other services is threatened. However, the impact of these job losses to the community can be social as well as economic. These jobs and the individuals who occupy them bring skills and networks that create economic and social benefits for the communities and rural areas where they are located. This research provides evidence that these individuals are important to the community capacity of rural communities as they volunteer in multiple organizations, provide leadership to our children and

voluntary groups and share their knowledge with the community. The skills and networks public sector employees possess by virtue of their employment and training are important resources to the rural communities where they work and live.

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