Certainty for Rural Saskatchewan

Report of the Infrastructure Subcommittee,
Action Committee on the Rural Economy
(ACRE)

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I INTRODUCTION

Throughout the Action Committee on the Rural Economy (ACRE) process, the availability of infrastructure and its impact on economic development in rural Saskatchewan has been an on-going concern. In response, ACRE established the Infrastructure Subcommittee in the summer of 2003 to develop broad policy recommendations on how to direct infrastructure resources to most efficiently and effectively encourage and support economic development in that area of Saskatchewan south of the northern forest region, excluding the cities of Regina and Saskatoon.

The Infrastructure Subcommittee set out to seek the most appropriate approach to providing infrastructure to rural Saskatchewan. Its mandate was to make recommendations for provincial government consideration as they relate to the development of policies that will maximize the economic development opportunities in rural Saskatchewan.

Any approach to infrastructure has to face the reality that rural Saskatchewan is a large geographic area with a relatively small population. Rural Saskatchewan's low population density has often meant there is no business or economic case to justify infrastructure. In a sense, providing infrastructure to rural Saskatchewan has been as much a social policy as an economic one. This means that Saskatchewan has traditionally used the equity approach to infrastructure development, giving everyone more or less equal access to the same level of infrastructure. The question facing us was this: can we continue to provide the financial resources to continue this policy, and is it effective?

The alternative is a more targeted approach, where resources are provided to areas where they are most needed and most beneficial, accomplished through support of existing and potential clusters and corridors of economic and social activity. This more targeted approach means more resources (financial and infrastructure) for some regions, and thus less for others.

We are keenly aware that this targeted approach, which ACRE favours, moves us away from Saskatchewan's tradition of providing services and infrastructure equitably across the province. Instead, it targets specific clusters, corridors and communities that have the greatest potential for growth.

The recommendations in this report are driven, to a large degree, by the need for certainty in rural Saskatchewan. The subcommittee heard that a lack of certainty about the future of communities in rural Saskatchewan, including the lack of certainty that basic infrastructure and services will be in place, is affecting investment decisions, business startups, the willingness for professionals to relocate, and retirement decisions. This uncertainty leads to migration of investment dollars, families looking for employment

opportunities, retirees seeking assurance of health services, and others, to a handful of the larger cities in Saskatchewan, continuing the 50-year trend of depopulation of rural Saskatchewan.

Many in Saskatchewan continue to be passionate about rural life, whether on farms, or in small communities and smaller cities. But that passion gives way to reality when there is no certainty that basic infrastructure will continue to be in place within reasonable distance.

Concepts for basic structural change in rural Saskatchewan are often met with emotion-based arguments and political rhetoric. ACRE may be one of few broad-based, politically-neutral organizations, one without a vested interest, that can provide the background and forum for a fact-based discussion about the nature of infrastructure development in rural Saskatchewan.

An objective examination of this report, we trust, will conclude that the recommendations are not intended to diminish communities, but that they set out a plan to create strong centres of economic and social activity throughout rural Saskatchewan.

The provincial government is called on to commit to infrastructure support in a defined number of regional centres. With a commitment of support for these centres, there will be certainty that jobs, goods, services and infrastructure will be available to the entire region. Much of the critical infrastructure will be available primarily in the regional centre, but within a reasonable travel distance for others in the region. A strong centre, however, will also create opportunities to develop and expand infrastructure, such as water distribution, waste water treatment and refuse collection, to other communities in the region, where it may not be feasible or affordable to provide that on individual bases.

Without a strong regional centre, entire regions will suffer a lack of both government and private infrastructure. Residents of rural Saskatchewan may well end up having to commute to one of a dozen or fewer large cities, as the longterm trend of depopulation and consolidation continues to the detriment of large areas of rural Saskatchewan.

For the purposes of our work, infrastructure includes both economic and social infrastructure (sometimes referred to as hard and soft infrastructure). Economic or hard infrastructure includes transportation, water and sewer, natural gas, power and telecommunications. Social or soft infrastructure, in our work, includes the bricks and mortar components of health care, education and recreation, without which those services cannot be provided.

II STAKEHOLDER PARTICIPATION AND RESEARCH

To examine the options of equity and targeted approaches, we met with stakeholders who were either infrastructure providers, had an impact on infrastructure decisions, or were strongly affected by infrastructure policy. The list of stakeholders is in Appendix A. We felt it was important not only to meet with the traditional infrastructure stakeholders, such as crown corporations and the government departments providing hard infrastructure, but also with stakeholders who provide social infrastructure, such as the educational and health authorities and arts and tourism communities. We believe that social infrastructure plays an important but unsung role in economic development.

We also met with a number of community leaders (Appendix A) who use a regional approach to municipal infrastructure development. Community-based groups that are cooperating on regional infrastructure projects gave us valuable insight into the potential of a regional approach to infrastructure provision.

We also undertook an extensive literature review on recent developments in rural economic development policy and the role that infrastructure plays in this development. The research focused on Canadian and American rural infrastructure policy, and is outlined in more detail in Appendix B.

III DEVELOPMENT OF THE VISION

On the completion of the consultation process, we compiled an inventory of relevant facts pertaining to the situation currently in place in rural Saskatchewan. Among the current key conditions are the following:

- For the past century, there has been an expectation among Saskatchewan's residents that everyone in the province, regardless of location, is entitled to an equitable level of infrastructure at a reasonable cost. Until quite recently, these expectations have generally been met, whether it was rural electrification, provision of natural gas to farms, land telephone lines or the extensive provincial highway and municipal road network;

- Fiscal pressures at all levels of government mean the province has limited resources to build new infrastructure, and maintain existing infrastructure. Deregulation and the move toward a business case or user-pay model have meant that crown corporations no longer have the resources or the regulatory permission to provide infrastructure in the universal manner at a reasonable cost;

- Saskatchewan is a large province with a small population scattered across a wide area. Saskatchewan has a large rural population, with more than 35 per cent of its population classified as rural, compared to 28 per cent in Manitoba and 19 per cent in Alberta.[1] The population distribution of Saskatchewan significantly increases the cost of providing infrastructure, especially to rural areas. Comparison to neighbouring provinces are often made, but in Alberta, 72 per cent of the population lives in the three Census divisions encompassing the Highway 2 corridor from Calgary to Edmonton, and in Manitoba 67 per cent of the population lives in Winnipeg and surrounding areas.[2] In contrast, approximately 43 per cent of Saskatchewan's population is in the two Census Metropolitan Areas (CMA) of Regina and Saskatoon. Concentrations of population make the provision of infrastructure considerably easier and more economical;

- Fiscal pressures, deregulation and the slow but continuing decline in rural population and economic activity is creating uncertainty about the future of infrastructure in rural areas. This uncertainty hampers private investment in rural Saskatchewan, because investors are unsure whether the infrastructure that is necessary for economic and social development will be there for the long term. Private investors require assurance that their investments are safe and will earn a return in the future. The lack of certainty about infrastructure in rural Saskatchewan leads to investment in the major cities, where there is greater likelihood that the necessary infrastructure will be in place to enhance economic and social activity. An observation from Ken Hamilton, a resident of Assiniboia, sums up what the lack of certainty is doing to the potential of his community:

[1] Appendix C, table 1.
[2] Appendix C, tables 2, 3 and 4.

"Historically, Assiniboia has been the regional centre for south central Saskatchewan. Many people from the surrounding farms and smaller centres who were planning to retire traditionally chose Assiniboia as the place to retire to, when the time came. Many people are now choosing to retire into Moose Jaw as they are concerned about the future operation of health care facilities in Assiniboia. They know that if they retire into Moose Jaw there will be health care facilities available for as long as they need them. However, in their mind, there is no such guarantee in Assiniboia. Towns like Assiniboia need to know with some certainty, what facilities are going to be available into the future. Uncertainty leads to a loss of people and unwillingness for entrepreneurs to make business investments."

- Our discussions with stakeholders brought out the common theme that there is no coordinated government-wide strategy and direction for the provision of social and economic infrastructure. It appears government departments and crown corporations each have their own business plan and in most cases build their infrastructure independently from each other;

- The decline in the number of farms and farm population and the subsequent reduction in services required in rural Saskatchewan brought about a decline in the rural population over the past 50 years.[3] The advent of better roads and better vehicles has meant people are able (and largely willing) to travel further for employment and services. Concurrently, there has been a decline in the population of a large number of rural towns and villages as the services provided by these communities were no longer sought or used by the rural residents. While the vast majority of rural communities have declined significantly over the last 50 years, a number of larger communities have been able to maintain their population and a significant number of services, thereby becoming larger service centres;[4]

- These larger service centres have not only become the focal point of the region for the supply of services, but also for employing residents of the surrounding region.[5] The regional centres have become the most popular places in which to retire because of the certainty that a range of services will be available;

- In today's economy, a critical mass of infrastructure, labour supply, amenities (including cultural and recreational) and services are necessary to attract people and businesses. These are generally available only in these larger regional centres;

- There is a perception in rural Saskatchewan that there will be a further decline in infrastructure such as hospitals and schools, leading to high levels of uncertainty, which can only be changed by government making a long term commitment to provide infrastructure in rural Saskatchewan;

[3] Appendix C, table 5
[4] Appendix C, table 6
[5] Appendix C, table 7

- A long term commitment to infrastructure in regional rural centres will result in more certainty, which will provide an incentive for the private sector to invest in rural Saskatchewan. More private investment should mean more jobs and economic activity;

- Given the limited resources, the provision of infrastructure in the larger regional centres means there will be less infrastructure investment in other rural communities. Decisions based on strategic investment means that dollars are spent where they offer the best overall long term benefit for the communities and the province;

- People travel significant distances (up to an hour) to commute to jobs and to access services. If the regional centres grow and prosper as a result of increased investment, people living in communities outside the regional centre will also benefit. There will be more jobs available for those within commuting distance. As the regional centres grow, the variety and level of services will also increase. This will benefit the communities in the vicinity of the regional centre, since individuals in these communities will continue to have access to goods and services within a reasonable commuting distance. If the regional centre declines because of the lack of infrastructure and business investment, residents of nearby smaller communities will not have employment opportunities and will not have services, which will lead to a spiral of decline.

Following a fact and opinion-finding process, the subcommittee developed a series of successive statements. About each, the following questions were asked: "Is this statement true? If not, then what statement can we substitute that is true? If it is true, then does the next statement follow logically?"

There are many emotional and political arguments that can be made in regard to these statements, but in the interest of an honest examination of the issues, we trust that recognition of reality will prevail. To provide the greatest benefit to the greatest number of people in Saskatchewan, we must operate from a basis of logic, recognizing that some of the consequences will elicit highly emotional responses.

We trust that these statements will be examined from a logical perspective, rather than from an emotional or political one:

- Social and physical infrastructure in Saskatchewan has traditionally been provided on an equity basis.

- Government resources (including crown corporations) for maintaining and expanding infrastructure are limited.

- Saskatchewan's rural population is widely scattered over a large geographic area with few concentrations outside Regina and Saskatoon.

- There is a lack of certainty in rural Saskatchewan about the province's ability to sustain social and physical infrastructure in this large geographic area.

- There is no clearly discernable government-wide strategy and direction for economic and social infrastructure development.

- Individuals and businesses need to be convinced of the government's long-term commitment to the future of infrastructure in rural Saskatchewan in order to make investments in communities outside Regina and Saskatoon.

- Two to three dozen larger communities have been able to sustain themselves, and experience very moderate growth, in recent years.

- These larger communities have, over the course of the past several decades, become service centres for an increasingly-larger region as rural residents have become more mobile.

- Until now these service centres have had sufficient labour supply, services and amenities necessary to keep and attract businesses and people.

- Generally these service centres have the greatest potential for growth and economic development in rural Saskatchewan.

- A provincial strategy that provides a greater degree of certainty for regional service centres will send signals to the private sector and encourage investment.

- Focusing infrastructure development in a limited number of larger regional centres means other communities will be receiving a diminished level of infrastructure in the future, given the limited resources available in government.

- If regional centres attract investment, other communities within their region will benefit by keeping and attracting residents as people commute to their regional centre for jobs and services.

- If the regional centre does well, the region will do well and the communities within the region will likewise do much better.

We believe these statements to be a logical progression, leading to a logical conclusion which gives rise to the recommendations that follow.

IV RECOMMENDATIONS FOR INFRASTRUCTURE DEVELOPMENT IN RURAL SASKATCHEWAN

The provision of infrastructure in Saskatchewan has traditionally followed the equity model approach with the underlying notion that we need to save every community. Consequently, resources have been spread widely but thinly across the province. Instead of building a significant number of strong regional centres, the lack of critical mass in most smaller communities means that growth and development have largely gravitated to Regina, Saskatoon and a handful of larger cities. In trying to save every community, we have saved very few.

By focusing on regional centres, we can achieve a critical mass of population, services and infrastructure to enhance economic development for the regional centre, and for the surrounding region as well. If the regional centre does well, other communities in the region will benefit through stable population and the availability of jobs and services within the region.

To secure a future for rural Saskatchewan, we need to ensure there are strong centres of economic and social activity outside Regina and Saskatoon. The number of such centres needs to be limited so that government can provide the infrastructure for the centres, and the region, to grow.

We have only two choices:

- Build on the strengths of the regional centres, for their benefit and the benefit of the surrounding region; or
- Continue to slide into widespread mediocrity by disbursing our limited resources thinly over the entire province.

Our vision for rural Saskatchewan is a network of strong communities that serve as social and economic centres for their region. They will strengthen their surrounding region by providing employment opportunities and ensuring the supply of a wide variety of services for those who live on farms and in the smaller communities within the region. With strong regional centres that have assurance of infrastructure, possibilities are also created to extend certain critical infrastructure to other nearby communities.

To achieve this vision, the subcommittee makes three recommendations. We recognize that strong political and emotional arguments can be made to promote alternative points of view. We also recognize that the notion of equity, and expectations of entitlement, remains strong in rural Saskatchewan. Changes in recent years to a more cluster-based approach (especially in health care and education) and greater implementation of user-pay (such as the provision of telecommunications connections), has met with resistance and concern from rural residents.

Fiscal pressures, changing demographics, and large-scale changes in the agricultural economy means a return to the equity model is neither feasible nor a wise use of the province's limited resources. Our recommendations focus on the future.

Implementing what we feel are absolutely crucial changes in infrastructure provision in rural Saskatchewan will require bold leadership. These recommendations confront and challenge the unrealistic expectations of many residents about the provision of infrastructure. The need to bring leadership to this issue brings to mind a quote from Winston Churchill during the Second World War:

> *"There is no worse mistake in public leadership than to hold out false hopes soon to be swept away. …[people] can face peril or misfortune with fortitude and buoyancy. But they bitterly resent being deceived or finding that those responsible for their affairs are themselves dwelling in a fool's paradise."*[6]

Our recommendations are:

1. That the government adopt a strategy to support infrastructure in a defined number of regional centres.

The subcommittee believes that a labour force of sufficient size is the critical factor in determining the future prospects for economic growth. Firms locating in a community, whether they are local start-ups or firms moving into the community, need a labour pool in order to meet current and future needs. Generally, communities with at least 1,000 people in the labour force have a population that is large enough to attract and sustain a reasonable level of services and amenities that entice people to live in these communities. These communities have the critical mass of labour, population, services and amenities that give them the potential to grow and expand.

Using criteria that take into account labour force and existing levels of services, we see between 26 and 32 such centres outside Regina and Saskatoon. These communities, and an area surrounding them within a one-hour driving distance (80 kms), account for approximately 95 per cent of the population south of the tree line (including the populations of Regina and Saskatoon).

The communities that meet those criteria and fall in that range will not come as a surprise to anyone in rural Saskatchewan. Most are already seen as regional centres because of shopping patterns, existing infrastructure and sphere of influence. Rural residents, by their actions and choices, have made these communities their centres for services and employment.

The provincial government must commit to providing a high level of infrastructure to these centres for the long-term. A long-term commitment to these regional centres will provide the certainty that is required for the private sector to make investments, which

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[6] Meacham, Jon, "D-Day's Real Lessons: War Leadership Takes More Than Resolve and Rhetoric." Newsweek, May 31, 2004, page 48.

will create economic activity and employment in both the regional centre and the surrounding communities. Committing to infrastructure in these communities not only provides certainty to investors, but confirms the reality of what is already happening in rural Saskatchewan.

With respect to other communities, we are not suggesting that infrastructure be physically removed where it now exists. Social infrastructure, such as health care and education, must provide the best quality of service on a regional basis. However, in the future, communities which are not regional centres may forego infrastructure renewal unless it can be rationalized within a regional context.

We suggest that there are a number of communities in the province that already serve as regional centres. We make this recommendation based on the concept that the regional centres need to be clearly defined. The number of such centres, and the criteria to be applied to determine them, will require more detailed examination than was within the capabilities of our subcommittee.

This recommendation is made with the full recognition that there must be flexibility in providing infrastructure outside the regional centres in such areas and industries as the irrigation area around Lake Diefenbaker, the oil and mining industry, intensive livestock operations, tourism, and First Nations developments.

These areas and industries have significant economic development potential and will need infrastructure to ensure that this potential is met. In addition, there will be communities that may show significant growth in the future, and will need more infrastructure to continue that trend.

First Nations are becoming increasingly active in generating development on reserve land in rural Saskatchewan. Those developments have wide public impact but often are located outside regional centres.

A strategic approach will ensure that projects, industries and communities with the greatest potential will be at the top of the list for infrastructure.

We are also of the view that discretionary funds, such as those provided by lotteries, should continue to be available to communities that are not regional centres, so that recreational and cultural activities these funds typically support will continue to be available.

Communities are free to undertake projects that are entirely self-funded for the life of the project. If the community is prepared to provide the resources, and there is a clear recognition that there will not be provincial government support in the future, communities should be free to spend their own money.

The recommendation to concentrate infrastructure in a defined number of regional centres might lead people to point to success stories in a number of small communities,

and suggest that by limiting the location of infrastructure these success stories will be precluded from taking place again.

It is important to note that single-enterprise communities, many of which were featured in *Don't Turn Out the Lights*[7], do not necessarily constitute a regional centre. Such enterprises are most often the result of efforts by a single person, family, or small group. There is ample evidence that many of those enterprises are not sustainable within their community in the long term:

- The founder(s) die, without a solid succession plan in place, leading to the demise of the company;
- The business grows to the point where it needs to move to a larger centre in order to have a source of labour, transportation or supply;
- The business is sold, and the new owners merge it with existing operations in larger centres, or move to a larger centre because they do not have an attachment to the "quaint" location;
- The business grows and moves from entrepreneurial management to professional management, which often requires a location with more amenities than can be offered by a small community.

Such enterprises should be encouraged, but public investment in infrastructure must be rationalized on the basis of a direct return on investment (tax revenue and other tangible returns). In most cases a significant portion of the cost of services should be borne by the single benefactor of the infrastructure.

2. That the government ensure a high level of co-ordination for the implementation of this strategy.

This strategy absolutely requires that all government departments and crown corporations work together to ensure that the provision of infrastructure in rural Saskatchewan is carried out in a coordinated and strategic manner.[8] A change from an equity-based to a strategy-based approach to infrastructure provision means that coordination of departments and crown corporations responsible for infrastructure provision is critical. If we are going to concentrate infrastructure at strategic locations to maximize the provision of services and economic development, not having all the necessary infrastructure in place at the right time will lead to failure.

During the course of the subcommittee's deliberations, it heard from many sources inside and outside government that there appears to be no discernable economic development strategy for the province, and that there is no coordinated or central strategy for the provision of infrastructure in rural Saskatchewan. Generally, each department or crown

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[7] Scholz, Al, Don't Turn Out the Lights: Entrepreneurship in Rural Saskatchewan, Saskatchewan Council for Community Development, 2000.

[8] Work done previously by ACRE included a number of recommendations that dealt with the need for more interdepartmental cooperation within government.

corporation has its own business plan for building and renewing infrastructure. There are several examples of this lack of coordination, including:

- In the irrigation area surrounding Lake Diefenbaker, there was a lack of a coordinated strategy to develop both the water and highway infrastructure at the same time. As a result, the development of the irrigation industry was hampered and its full potential has not been realized.
- The province has spent significant funds building excellent facilities in a number of parks throughout the province. However, in some cases, the lack of coordination within government has meant that poor road access has discouraged tourists from using these facilities.

3. That the government adopt a regional approach to infrastructure development.

A number of infrastructure projects have the potential to be regional in nature, where two or more communities in a region work together to provide infrastructure for such services as water and waste water treatment, landfills, transportation, tourist and culture facilities and others. Where projects can benefit several communities and thereby realize potential savings, the provincial government should only participate in funding if the project is approached on a regional basis. Communities seeking funds for stand-alone projects must be directed to seek out nearby partners to ensure regional co-operation and benefits.

A regional approach offers a number of advantages, including economies of scale through which infrastructure can be provided at a lower cost to a larger number of people. Given the limited resources available to the province, it makes little fiscal or practical sense to fund separate community-specific projects when a regional approach will be more economical and efficient.

V BACKGROUND AND SUPPORTING INFORMATION

A. INTRODUCTION

The purpose of this section of the report is to provide background information for the foregoing recommendations, and thus provide a more detailed view of infrastructure issues facing rural Saskatchewan.

Contained within this section is information (from review of the literature) on the linkages between economic development and the provision of infrastructure. In addition, there is a summation of recent studies that have examined rural development from an infrastructure perspective. Section C looks at the state of infrastructure in rural Saskatchewan. Section D looks at some models for providing infrastructure. Information for these sections came from both a review of the current literature and from our meetings with various stakeholders. Section E looks at some of the key issues facing rural Saskatchewan such as:

- uncertainty about the future provision of infrastructure;
- the demographic situation and its impact on stranding infrastructure;
- deregulation;
- a regional approach to infrastructure development;
- an equity vs. cluster/corridor approach to infrastructure provision.

B. INFRASTRUCTURE TRENDS

Economic Development and Infrastructure

A vast amount of literature has examined the linkage between the provision of infrastructure and the level of economic development. Within the academic community there are various opinions as to the importance of infrastructure to economic development. Some argue that certain kinds of infrastructure such as transportation can be an important enabler to economic development, while others argue that other factors such as human capital and location are at least, if not more, important drivers.

At the most basic level, it can be clearly stated that without infrastructure, little or no economic development can take place. However, at the other end of the spectrum a high level of infrastructure does not in itself guarantee a high level of economic development. Both of these degrees of infrastructure and their impact on economic development can be found in rural Saskatchewan. In the irrigation area, there is a common view that the lack of a primary highway west of, and running parallel to Lake Diefenbaker, has retarded the development of the irrigation industry in the area. On the other hand, there are various communities across rural Saskatchewan where little or no economic development is taking place despite having a full complement of high quality infrastructure. If there is an underlying consensus around the theory of infrastructure and economic development, it is that infrastructure is an enabler and helps to facilitate economic development. There is also a common view that in an economy where the state of the infrastructure is quite mature, any additional capital improvements to the infrastructure base bring a smaller return than in an economy where the state of infrastructure is much less mature.

Economic Growth Built on Clusters[9]

The term "clusters" was initially used by Harvard business economist Michael Porter. Porter defines clusters as "geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions."[10] Rural clusters in Saskatchewan include mining in Rocanville, manufacturing in the Humboldt area, and forestry in Prince Albert.

Locating in clusters gives industry players an opportunity for close contact with competitors, suppliers, buyers, knowledgeable financial institutions, regulators and scientific experts. Some of the other benefits arising from clusters are:

- increased productivity from information sharing within the cluster;
- savings from shared infrastructure (for example, costs of three-phase power);
- ability to focus public resources on a specific area;
- increased lobbying ability;
- enhanced new business start ups in the area.

[9] This section on clusters is a summary of a paper: Cluster Economics: Implications for Rural Development in Rural Saskatchewan, 2003, by Leeann Minogue.
[10] Porter, Michael, On Competition, Harvard Business School Press, Harvard, MA, 1998, page198

In many parts of rural Saskatchewan, there are no existing business clusters. Academics have listed several ways that clusters have been started:

- public sector initiative and investment (this approach is expensive and requires government to "pick winners");
- local entrepreneurs develop a business (for example, the manufacturing cluster in the Humboldt area);
- one large firm chooses the location for development;
- a craft cluster develops on the basis of local artisans;
- "unwanted" businesses are accepted in the area (such as prisons).

For areas such as southwest Saskatchewan where there are no clusters, academics have suggested government action that could set the stage for cluster development:

- work to improve the local labour force;
- provide a basic standard of public services;
- work to develop leadership at the local level;
- ensure patient venture capital is available to entrepreneurs with viable business plans;
- ensure that government regulations enable business start up;
- provide entrepreneurs with access to technology;
- retain and expand existing firms;
- protect intellectual property; and,
- enforce antitrust laws.

Trends in Economic and Community Development in Relation to Infrastructure Provision

This section will summarize some recent work that has been undertaken in the area of rural development with particular emphasis on infrastructure related matters.

Saskatchewan's Communities in the 21st Century: From Places to Regions, Jack Stabler and Rose Olfert

This latest work from Stabler and Olfert, published in 2002, is a continuation of the work they have done for several years that documents Saskatchewan communities and their evolution since 1961. In their study of Saskatchewan communities they begin with the premise that communities are economic units where economic functions occur such as employment, shopping, residency and the use and provision of other services.[11]

A total of 598 communities were examined by Stabler and Olfert and are divided into six categories based on the level of services provided in each community. The six categories are:

[11] They would not consider a farm as a functionally economic unit as you may work and live there, but you get all your other services somewhere else.

- Primary Wholesale-Retail (PWR)
- Secondary Wholesale-Retail (SWR)
- Complete Shopping Centre (CSC)
- Partial Shopping Centre (PSC)
- Full Convenience Centre (FCC) and
- Minimum Convenience Centre (MCC)

As one goes from MCC to PWR the level of services increases. There are currently two communities in the PWR, eight communities in SWR, eight communities in CSC, six communities in PSC, 72 communities in FCC and 502 communities in MCC. The following table identifies the top 24 communities in Saskatchewan, which are found in the top four categories and the next 22 communities which they have classified as the strongest of FCC. Stabler and Olfert have identified these communities as the top 46 communities in Saskatchewan in 2001.

Table 1: Top 46 Communities in Saskatchewan in 2001

Full Convenience Centres (Strongest)	Partial Shopping Centres	Complete Shopping Centres	Secondary Wholesale- Retail	Primary Wholesale- Retail
Battleford	Maple Creek	Assiniboia	Estevan	Regina
Big River	Moosomin	Humboldt	Lloydminister	Saskatoon
Biggar	Outlook	Kindersley	Moose Jaw	
Canora	Rosetown	Meadow Lake	North Battleford	
Carlyle	Shaunavon	Melfort	Prince Albert	
Davidson	Unity	Melville	Swift Current	
Esterhazy		Nipawin	Weyburn	
Fort Qu'Appelle		Tisdale	Yorkton	
Hudson Bay				
Indian Head				
Kamsack				
Kipling				
Leader				
Lumsden				
Maidstone				
Oxbow				
Redvers				
Shellbrook				
Spiritwood				
Wadena				
Watrous				
Wynyard				

From the categorization of the communities, the authors are then able to define 11 Functional Economic Areas (FEAs) in southern Saskatchewan. These FEAs or more commonly referred to as regions, are defined as trade areas which reflect shopping patterns of rural residents and commuting patterns to work within an area. In defining these FEAs, Stabler and Olfert were of the view that the definition of a community is one that goes well beyond the home town to include the region.

In their study Stabler and Olfert reach a number of conclusions that have relevance to the provision of infrastructure, particularly around the discussion of equity versus a targeted approach for infrastructure provision. These include:

- "For many years major cities and larger towns have been the engines of job creation, not only in Saskatchewan, but throughout the developed world" (page 39). Investments in larger rural communities will actually provide more economic benefits to rural Saskatchewan than investments in smaller rural communities. Investments in smaller communities will see more benefits go to Regina and Saskatoon than smaller centres (page 31);

- A sufficient labour force is necessary to satisfy potential manufacturing plants willing to locate to a community. "Below some threshold of population density, the likelihood of satisfying the requirement for labour apparently becomes too uncertain and firms avoid these areas" (page 50);

- "FCCs as a group did very poorly in attracting manufacturing activity, is spite of intensity of local initiative, even when they were located in areas of high population density and were adequately situated on the provincial highway network" (page 50);

- "If the concept of community is to have any functional meaning, it must be defined in such a way that it encompasses the entire area within which people live, work, shop for everyday goods and services, go to school through grade 12, obtain routine medical services and find much of their recreation and entertainment" (page 55);

- "De facto economic regions have emerged within the province. We have defined these regions based on employment and shopping behaviour of their residents. These regions, referred to as Functional Economic Areas, provide a framework within which to plan for public and private initiatives. At the centre of each is a city or larger rural community. The centre provides jobs, trade and services, both public and private. The rural areas tributary to the centres provide labour and a market for a substantial portion of the centre's business outlets and public services" (page 61);

- "The top 18 centres in the top three community categories dominate the hierarchy in terms of retail trade, manufacturing, public services and as employment centres that provide the vast majority of jobs for rural commuters. The future viability of the Saskatchewan economy depends upon the viability of these 18 communities. At the other end of the spectrum, the 502 communities in the lowest category no longer play any meaningful role in the trade centre system" (page 63);

- "The six PSCs and 22 largest FCCs have retained enough population and commercial functions that they could, through good planning, good management,

and good luck continue in their present roles or probably even enhance their positions somewhat. Key to their future is the presence of a sufficient supply of underemployed or unemployed labour with requisite skills within commuting distance" (page 64);

- "Provincial government policies continue to support a plethora of governments and infrastructure which are too small to capture economies of scale, too fragmented to realize economies of scope and too dispersed to generate agglomeration (*cluster*) economies. Such policies ensure that trade centre decline reaches higher into the system than what would have been the case had rationalization been pursued at an earlier date" (page 64).

Reversing Rural America's Economic Decline: The Case for a National Balanced Growth Strategy, Robert D. Atkinson, Progressive Policy Institute

Although this report was written for an American audience and speaks to American agricultural policies in the context of rural economic development, the issues in the paper are applicable to the Saskatchewan setting. The following is a summary of the report with a focus on infrastructure and infrastructure related issues.

Rural America has been declining relative to metro America (cities) due to four main reasons:

1. Rural economies rely on slow-growth, goods-producing industries. Due to the high productivity in these industries, these industries have been shedding jobs faster than the rest of the economy.

2. Rural economies have fewer fast growing knowledge and technology based industries and a less educated work force.
    - Rural areas have few clusters of companies in similar industries, which are increasingly important to growth, particularly in innovation-based industries;
    - Many rural areas lack high-speed data communications infrastructure, which in an economy powered by information technology is a requirement for growth; and
    - Rural areas also suffer from infrequent and costly air travel service, making them less attractive locations for many facilities, especially corporate and regional headquarters.

3. Deregulation has helped metro America more than rural America.
    - Deregulation of telecommunication, banking, trucking, airlines, electricity and other industries allowed an increasing share of services to be price based on the costs of providing service. While it boosted overall economic efficiency, in many cases it meant the reduction or elimination of implicit subsidies to rural areas, which resulted in higher prices and/or reduced service.

4. Globalization has increased cost pressures on rural economies.

The report suggests there are opportunities for rural America in the New Economy as the digital economy appears to favour smaller cities in the US (between 50,000 and 250,000 in population). While the costs in these places are lower, they have the critical mass of skilled workers, infrastructure and transportation access to compete with large metropolitan areas. In addition the internet revolution has reduced the isolation that rural locations used to face – as a result, the increased retail, learning, health care, entertainment and information access of the high-speed Internet reduces the disparities between rural and metro areas' access to goods and services.

The study then highlights the problems with current federal government policy towards rural America. Among their criticisms is that government investment is too scattered and not focussed and what funds go to general rural development largely goes to physical infrastructure, more suited to old economy needs: roads, industrial parks, sewer systems, and public buildings. In the new knowledge-based economy, establishing an economic development strategy focused on old economy physical infrastructure is not likely to help transform rural economies. The marginal benefit of more physical infrastructure is small, given that most needed infrastructure already exists.

The author makes a number of recommendations to the US federal government on how to redirect government spending. The most interesting recommendation and one that has the most relevance for the ACRE committee, is to target funding and support to communities with the best chance of achieving self-sustaining growth and employing the most residents. He outlines a number of reasons for supporting this direction:

- the advantages firms get from locating in areas where there is a concentration of resources matter even more now when determining the location of economic activity. Places too small or remote will find it difficult to develop the critical mass needed to succeed since infrastructure providers such as airlines and telecommunications' companies do not serve areas too small to be economical;
- in the New Economy, agglomeration economies are becoming more important, and small, geographically isolated rural areas with a poor quality of life and few amenities will find it difficult to prosper no matter how much funding they get;
- in order to effectively create the most jobs in rural areas, efforts should be targeted to a smaller number of centres with the potential to be the regional anchors for growth that surrounding rural residents can commute to for employment;
- growth poles (clusters) do not have to be one city, but could be broader regions of several contiguous towns, as long as they agree to work together, possibly including the development of unified management of schools, public infrastructure, and economic development planning;
- selecting a larger number of smaller poles will not only lead to more growth in the growth poles, but will lead to more growth in the surrounding regions as rural residents commute to work in growth centres.
- while it might be more equitable to target resources to the most disadvantaged communities, the reality is that a number of these communities are unlikely to grow much even if they receive assistance. The focus should be on helping rural residents

live and work in rural areas, not on helping every community. A more diffused strategy is likely to produce less growth in rural areas.

Saskatchewan Agriculture, Food and Rural Revitalization Infrastructure Report Prepared by Toma and Bouma Management Consultants

During the ACRE process concerns were raised about the state of infrastructure and infrastructure development policy in Saskatchewan relative to our neighbouring provinces, especially Alberta. In response, Saskatchewan Agriculture, Food and Rural Revitalization (SAFRR) hired Toma & Bouma Management Consultants from Edmonton to compare and contrast infrastructure development policy across the three Prairie Provinces.

The following highlights the major findings, conclusions and policy choices in the report for the provincial government:

Major Findings

- Infrastructure in Alberta is generally provided in response to business demand; however, Alberta has also been successful in fostering growth through the proactive development of infrastructure in rural areas.

- Alberta public policy approaches have been linked across departments through a standard business planning process and use of performance measures. Cross-ministry projects are also being used more often to ensure all components for a solution are being considered. (*"The behaviour of senior officials in the departments largely determines whether departments sincerely commit themselves to advancing horizontal policy agendas or merely lip service to the process".*[12] *Therefore to encourage interdepartmental cooperation, Alberta has instituted a policy where a portion of Deputy Ministers' and Assistant Deputy Ministers' salaries are tied to how well departments coordinate with each other to reach provincial goals and objectives.)*

- Alberta has developed strong economic growth in the Edmonton-Calgary corridor. Growth off this corridor is much less but is due to factors other than infrastructure. Also, several clusters of economic growth (e.g. Fort McMurray, Lethbridge region) are evident.

- Saskatchewan has areas of expanding economic activity, which are emerging and reflect market-based "clusters" more than corridors. It is important to pursue infrastructure policy development according to market-based clusters to increase business competitiveness. Although Saskatchewan appears to be heading in this direction, the province needs to be more proactive in anticipating industry needs.

[12] Peach, Ian, Managing Complexity: The Lessons of Horizontal Policy-Making in the Provinces, Saskatchewan Institute of Public Policy, Scholar Series, Spring/Summer 2004, page 18.

- Currently, the Saskatchewan government does not use a common business planning process that links public sector plans and actions to common provincial economic development goals. This is a concern as it has been shown that a focus of scarce infrastructure and public resources is very important to implement economic development policy for results (new business starts, expansions, and new investments).

- Manitoba develops infrastructure along economic corridors through cooperation among government departments, crown corporations and private providers. For example, Manitoba Hydro works with the Department of Transportation and Government Services to provide transmission line access, and at the same time, the corporation provides pole space for private telecommunications providers.

- Similar to Saskatchewan, Manitoba does not employ a common business planning process that links public sector plans and actions to common provincial economic development goals. Although economic development is important, for some government departments and crown corporations, efficiency and safety issues take precedence.

Conclusions

- Given limited resources, Saskatchewan should focus its infrastructure investments in a strategic approach to maximize economic impacts. This means making choices on infrastructure based on an economic vision for the province.

- The provincial economic development strategy and goals should be clearly described and be the common link for cross-department plans and related investments. This economic strategy should guide decisions. The current general vision should address four specific growth areas - supporting SMEs (small and medium size enterprises), light manufacturing, value-added agri-food and tourism. Furthermore, the area of technology commercialization from agriculture biotechnology research and development activities can provide many novel opportunities. These are obvious strengths and growth areas. A strong strategy and implementation process will help increase the industrial/commercial assessment base at a local level and provide diversification in non-traditional markets.

- Developing specific industry clusters is important and has a major economic impact as shown in many jurisdictions. They can be developed in many rural areas and will increase infrastructure use and reduce common costs for light manufacturing, value added agri-food and SMEs. This industry cluster or industrial land strategy is not addressed in the current economic strategy.

- From the review, infrastructure does not appear to limit opportunities, but can influence investment decisions. Decisions on where to locate specific plants rely on more than just infrastructure factors. Other factors include customers, market conditions and so on, and they reflect a high “quality of place” factor.

Given difficulties in sourcing scarce labour, quality of place is becoming an important issue for business.

- A common economic strategy (the how-to) to support the Saskatchewan provincial vision (where we want to be) is not apparent from the interviews conducted for this study. In contrast, common provincial government business planning processes have been used in Alberta for over eight years with specific strategies, goals and performance measures. This was not seen in the Saskatchewan approach to economic development.

Policy Choices

1. Continued approach: infrastructure provided through the current agencies on a demand basis and in response to a specific need. This has worked in the past and the main deficiency is the lack of a coordinated basis across agencies and no focus on the emerging economic sectors. On an investment basis this will not be strategic and may limit business growth potentials. A change is needed to better link the infrastructure investments with economic policy.

2. Proactive approach: based on the experiences of Alberta and from other economic development studies cited herein, a prescription for Saskatchewan to meet its economic vision, building from its core strengths, includes:

    - Developing a provincial level economic strategy, which will catalyze the growth potentials of business (SMEs), rural light manufacturing, technology and tourism through appropriate strategies and cross-Ministry linkages.
    - Having the core economic strategy validated by the private sector and become a core part of the government departments' annual business plans, which have appropriate goals, strategies, performance measures and expected economic outcomes.
    - Understanding that economic "clusters" of businesses, people and infrastructure are occurring in the province and need support. These clusters may be different operating models than in other jurisdictions.
    - Better integration of knowledge-based businesses with the economic strategy and linkages for "footloose" ventures which are seeking "quality of place and quality of life" communities.

Fighting the Odds: Rural Development Strategies for Western Canada, Canada West Foundation

The focus of this report is business development and employment strategies; however there are some insights on infrastructure and infrastructure related issues.

- Low population densities and long distances – both between and within rural communities – has resulted in a comparably weaker infrastructure in rural areas than

in most cities. Low demand in areas with lower population density renders it unprofitable to provide some services (Freshwater 2000). Even when these services are accessible, they are often expensive and out of reach for some rural residents.

Moreover, a low tax base makes it difficult for rural communities to muster the necessary funds to create and maintain sufficient roads, bridges and other forms of transportation infrastructure. Before the infrastructure deficiency can be addressed there must be an increase in the local tax base and increase in demand. In the absence of expanding economic activity to use the new roads, electricity lines and faster Internet there is little need or means to pay for upgrades. In these circumstances, the financial burden of maintaining a foundation of competitiveness in the rural regions becomes the responsibility of the state.

- Low population densities and long distances make it "difficult for rural businesses to achieve economies of scale or critical mass" (Dabson 2001).

- The increasing use of and demand for Internet access in rural areas is a double-edged sword for rural areas. On one hand, the Internet overcomes the distance that hinders development of many rural entrepreneurs. It gives them access to a wider range of goods and services and also, with the development of online shopping, to a larger market. However, what comes in may also go out. High speed Internet gives rural customers the opportunity to buy online from outside markets.

- Rural community cooperation with smaller economic areas offers growth potential by addressing some inefficiencies associated with low population density.

- Rural communities should realize the importance of recreational activities to the quality of life of a young population, which in turn, is important to the future development of their community.

Rural Alberta: Land of Opportunity, MLA Steering Committee Report on Rural Development

The MLA committee was struck in 2002 after concerns were expressed that rural Alberta, especially the rural areas outside the Highway 2 corridor, were not benefitting from Alberta's economic expansion and that the drive toward efficiency and centralization was hurting rural Alberta. The following is a summary of the report with a focus on issues that are infrastructure or infrastructure related in nature.

- Many rural communities are losing vital services such as hospitals and schools and are concerned about access to essential services. Rural municipalities face challenges in financing new infrastructure or upgrades to existing infrastructure out of their local property tax base.

- Many rural Albertans feel the highway system needs improvement: their roads are of poor quality, or there simply are not enough roads to meet their needs.

- There is a broad understanding that not every rural community can meet all the needs of its residents. Rural Albertans also know that regional cooperation is the only way they can afford the services and service standards expected in modern Alberta.

- Regional restructuring and an interest in developing new delivery systems for essential services – such as health and education – may be opportunities for revitalization. Policies that promote regional cooperation and collaboration may provide for efficiency across the region and help preserve essential services and jobs in individual communities.

The MLA committee made a number of recommendations around infrastructure issues. These include:

- Adjust funding formulas to reflect the additional costs and real benefits of providing services in rural and remote regions (health, education and municipal funding);
- Encourage rural partnerships and regional cooperation as a driving force for rural growth and sustainability. For example, cooperation should be encouraged on joint community facilities; and
- Maintain and utilize publicly funded infrastructure to maximize community and regional benefit by:
    - reviewing policies and regulations to allow for alternative use of existing publicly funded infrastructure;
    - planning new publicly funded infrastructure to permit easy conversion to future alternative use;
    - assessing rural transportation infrastructures (highway, air and rail) for sustainability, with input from the public, and improve where necessary;
    - ensuring cost comparable service and technical support for high speed Internet to 95 per cent of Albertans;
    - establishing a financial framework that allows rural municipalities to build and maintain adequate and sufficient infrastructure to capitalize on their unique competitive advantages;
    - reducing the barriers to living and doing business in rural Alberta by ensuring a reasonable price for, and timely access to utilities; and
    - continuing to support Rural Gas Co-ops and Rural Electrification Associations as they provide rural Albertans with quality service delivery and affordable gas and electricity.

Small, Rural, and Remote Communities: The Anatomy of Risk, A Paper Prepared for the Panel on the Role of Government

This report was prepared as a backgrounder for the Panel on the Role of Government. The Panel was struck by the Ontario Government in January 2002, to make recommendations on the future roles that government should fulfill. This report comprises two maintain sections. The first section outlines recent trends in economic and demographic developments within Ontario; the second section outlines a number of

recommendations. The following is a summary of the recent trends and recommendations of the report.

Recent Trends

- Most rural areas, small towns, and isolated communities outside of the zone of metropolitan influence share similar attributes. These include: the lack of economic diversity and opportunity, high levels of social dependency and a weak tax base. These attributes become more serious if the community is remote.

- Small remote communities face special economic challenges:

    - over-dependence on a small number of sectors and employers;
    - thin local labour markets;
    - difficulty in attracting and retaining highly educated workers;
    - limited sources of investment capital to support local entrepreneurial activity;
    - a relatively underdeveloped local supply base of specialized goods, services and infrastructure; and,
    - limited ability to engage in the direct, face-to-face exchange of knowledge with customers and suppliers.

- Most communities in the periphery cannot be self-sustaining, economically, socially or fiscally. They have an inadequate local tax base and the cost of services is higher because these communities are unable to take advantage of economies of scale due to their size, and because transportation and living costs are often high. The result is that services are often inadequate and/or standards of repair and maintenance are lower. Small, remote municipal governments also have difficulty finding and retaining suitably qualified personnel.

- In developing new settlement strategies for rural areas and any new intergovernmental relationships, equal weight must be given to efficiency and accountability arguments, as well as arguments based on equity, social justice and the concept of place-based rights.

- The information and telecommunications revolution, rather than dispersing growth and prosperity more widely, has actually had the reverse effect of concentrating development in larger centres.

Recommendations

- The province needs to develop a distinct and comprehensive strategy for small, rural and particularly remote communities. Such a strategy must inevitably involve the development of policies that both anticipate and accommodate widespread population decline.

- To achieve economies of scale in service provision it will be necessary to concentrate growth and resources – not only private development but public investment in specialized (i.e. high order) services – in designated urban growth centres. This will require a region-wide approach, involving local, regional and provincial agencies and considerable inter-governmental cooperation. Deciding on where to concentrate such services also requires a settlement strategy that incorporates both designation of growth centres and community downsizing. The Nordic countries (especially Sweden, Finland, and Norway) have been able to build and maintain viable cities in remote regions by concentrating public services, including government and public sector employment, while also relocating populations from less viable regions.

- Economic development strategies and diversification efforts should be designed to promote growth in those communities that have the greatest potential to support it – that is, in those places that have (or can reasonably achieve) the critical mass to support a high quality of place. These strategies could include investing in physical infrastructure such as roads, water, and sewers, as well as in knowledge infrastructure. While it is recognized that an appealing natural environment offering opportunities for recreational activity can be a major asset contributing to local quality of life, this alone is insufficient in the absence of more urban-focused quality of place attributes. In those communities without sufficient potential, the goal of provincial policy should be to facilitate downsizing in an orderly and systematic way.

- While it is fashionable to pursue economic development strategies for smaller and remote communities that promote diversification, it should be acknowledged that regionally appropriate activities must form the basis for a sound economic development effort.

- Government services – especially education and healthcare – should be enhanced and strengthened in larger, better connected communities with the greatest potential to achieve critical mass, in order to attain the quality and range necessary to attract and retain mobile people and capital.

- The location of public sector employment has always been a major component of economic development strategies, although often indirectly. Decisions on the location of employment in the provincial government and its agencies should become part of any strategy to maintain and enhance local economies in peripheral regions.

- Wider and better use could be made of modern communication technologies, notably those described as e-democracy, e-government, e-business and e-services. These technologies offer the only feasible solution to the problems of communication and service delivery posed by very low population densities, vast distances and extreme remoteness.

- If small and remote communities are to be maintained as viable places to live and work, they should be as financially self-sufficient as is possible. This means that, to the extent that it is possible, users should pay the full costs of local services and

property taxes should be more closely related to the actual benefits received from those services.

C. STATE OF INFRASTRUCTURE IN SASKATCHEWAN

This section of the report outlines the state of the various types of infrastructure in Saskatchewan. In keeping with the equity vs. cluster/corridor approach to infrastructure development that guides this report, the description of each of the infrastructure components will include, where possible, what percentage of the province's population or traffic is served by a type of infrastructure and what the cost would be to bring the remaining population up to this level of infrastructure. There will also be a discussion of the type of infrastructure that is available in the top 46 communities as outlined by Stabler and Olfert.

Transportation

The transportation system plays a key role in Saskatchewan's economy because markets for Saskatchewan products are a long distance away. Therefore, Saskatchewan needs an efficient and low cost transportation system for Saskatchewan products to remain competitive on world markets. The transportation system is made up of three components: road, rail and air. The first two play an important role in the rural economy. The following discussion will focus on roads, as it is roads where the greatest concern is shown by rural residents and where provincial policy has the greatest impact. The sections on rail and air come from the ACRE Transportation Subcommittee Final Report, pages 5 and 6.

Roads

There is an extensive road system in Saskatchewan consisting of 26,220 kilometres (kms) of provincial highways, 158,900 kms of rural municipal roads and 13,700 kms of urban streets and federal roads. Of the 26,220 kms of provincial highways (operated by the Department of Highways & Transportation), approximately 8,200 km can carry primary weights. There is also a 15 km extension policy which allows trucks to haul at primary weights on secondary weight highways up to 15 kms off a primary highway. This adds approximately 3,000 kms to the primary weight system. On the remaining highway system shipments can only be carried at secondary weights.

The debate in Saskatchewan (south of the tree line) regarding the road network is not about access to a road or highway, because virtually everyone has access to a road. The debate is more about the type or quality of road or highway. There are significant economic advantages (lower shipping costs) for shippers if they are located adjacent or within 15 kms of a primary highway. For example, it is estimated that a shipper would save $3,500 moving 10,000 tonnes of product 100 kms if the movement is shipped at primary weight vs. secondary weights.[13] Due to these cost savings, shippers who are not within 15 kms of a primary highway are continuously pressuring the provincial government to improve the quality of the highways to a standard where primary weights

[13] The shipper is using an 8 axle truck. The cost to the highway for this particular movement on structural pavement is $5,000.

can be used. These shippers feel that their businesses are at a significant cost disadvantage if they cannot run at primary weights.

Unlike other infrastructure, such as power or natural gas, highways are generally viewed as a public and free good and that everyone is entitled to, i.e. everyone expects a good quality road. In addition, roads and highways are consumed over time through use. Therefore, preservation of the infrastructure base becomes a major focus for reinvestment in order to sustain the system. Given the limited resources, this makes funding for new initiatives more difficult.

There is a perception that Saskatchewan's highway system is in a state of disrepair and that the lack of an extensive primary highway system is hurting economic development in rural Saskatchewan.[14] While there is no doubt that the lack of a universal primary weight highway system does add extra costs to shippers, the committee felt that this issue needs to be put into perspective.

The committee found that approximately 20 per cent of the highways, which are essentially all primary weight highways, carry 80 per cent of the freight traffic.[15] A rough estimate would suggest that at least 79 per cent of Saskatchewan's population (not including northern Saskatchewan) lives adjacent to or within 15 kms of a primary highway. Of the 46 top communities designated by Stabler and Olfert, only three, Kipling, Leader and Spiritwood, are not adjacent to or within 15 kms of a primary highway. These 43 communities, which include Regina and Saskatoon, accounted for 84.9 per cent of the population that resided in the 598 communities studied by Stabler and Olfert.[16] If Regina and Saskatoon are removed from the equation then this percentage drops to 68.4 per cent.

Under an equity model where everyone is entitled to the same level of service, it is estimated that it would cost approximately $1 billion to ensure that the remaining 21 per cent of the population will have access to a primary highway.

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[14] Highways are the responsibility of the provincial government. There is a view that often a road is considered adequate while it is part of the municipal system but expectations increase when it is transferred to the provincial system.

[15] Some parts of the provincial highway system carry fewer than 50 vehicles per day. To put this into perspective, the Department of Highways & Transportation considers a minimum 250 vehicles per day as a more appropriate threshold for a provincial highway. In some jurisdictions 500 vehicles per day is a more realistic threshold.

[16] The population figures in Stabler's and Olfert's book only go up to 1996. For this report these figures have been updated to the 2001 census.

Rail

Saskatchewan is a large producer of low-value high-volume bulk commodities (grain and potash) and relies on rail transportation to a large extent to move these products from Saskatchewan to world markets. Approximately 32 million metric tonnes of Saskatchewan product moves by rail annually.

Currently, Canadian Pacific (CP), Canadian National (CN), both federally regulated, and nine provincially regulated rail companies operate 9,900 kms of rail line in the province. CP and CN operate approximately 3,600 kms of mainline and approximately 5,000 kms of branch lines. The nine provincially regulated rail companies operate approximately 1,300 kms of rail lines in the province.[17] CP and CN are considered Class 1 carriers while the other railways are considered short lines.

The most significant change to railway operations in Saskatchewan over the last several years has been the abandonment of grain dependent branch lines, along with consolidation of the grain collection system and the establishment of several short lines in the province. For example, since 1974, both CP and CN have abandoned approximately 5,300 kms of rail line, with short line operators picking up 1,300 kms of these lines.[18]

Air

Air transportation plays an important role in transporting people inter-provincially and to a lesser extent intra-provincially. Air freight is not a big issue in Saskatchewan, as only very high-value goods move by air. In rural Saskatchewan air travel is not a major transportation mode as rural residents must either travel to Regina or Saskatoon to access out-of-province locations. However, air ambulance service is becoming more important for health care in rural areas.

There are 148 airports in the province. Of these, two are owned by Transport Canada, 18 (16 are in the north) by the provincial government, 10 by cities, 55 by towns, 10 by villages, nine by rural municipalities, one by the military and 43 are privately owned.[19]

Natural Gas

SaskEnergy has been providing infrastructure specifically related to natural gas gathering, transmission, distribution and storage for 50 years in Saskatchewan. The utility was formed as a crown corporation in order to provide services to communities, farms and small businesses too often overlooked by other private sector companies. Expansion throughout the province was supported by a delivery rate structure referred to as "postage-stamp" methodology. Under this concept, every customer on the system pays the same price for basic delivery service within a given customer class. For example, a residential customer in Regina pays the same rate as a residential customer in Arborfield.

[17] Saskatchewan Highways and Transportation, Short Line Advisory Unit.
[18] Ibid.
[19] Saskatchewan Highways and Transportation, Northern Access, Air and Safety Unit.

Clearly the natural gas is transported a longer distance to fewer homes in Arborfield, but each customer pays the same delivery rate. The underlying principle is that in Saskatchewan, every customer should pay the same rate for the same service as other similar customers.

It does take more dollars per capita to provide infrastructure to smaller customer bases. SaskEnergy balances the cost-versus-service rate issue by constructing facilities using a cost-less-investment policy. Under this framework SaskEnergy will allow itself to invest in a delivery service project up to the point that it does not impact the cost-of-service established for the remainder of its customer base. Communities or businesses that desire natural gas service, but require more capital infrastructure than SaskEnergy investment policy allows, have the option to fund the remainder of the capital themselves, or to choose other alternatives to meet their needs. In some cases that may be other heating alternatives; in other cases it may be altering the location of business facilities in keeping with other infrastructure needs and drivers for that business, such as road, rail, power and water access.

Through SaskEnergy's consistent application of its business policies, and additional financing tools, it has been able to achieve 92 per cent penetration of the market within its established service area. Of the 598 communities identified by Stabler and Olfert, only five, which have a 2001 census population in excess of 200 people, are not currently served with natural gas. The five communities (Peterson, Sonningdale, Fir Mountain, McKague and St. Front) have all had natural gas service offered to them, but have not achieved sufficient interest to support the necessary capital infrastructure. In each case, the actual number of potential customers within those communities is significantly lower than what census data would suggest. For example; although Fir Mountain's 2001 census data suggests a population of 255, SaskEnergy could only identify six potential customers within the community. The community has also reduced its census population by 30 people since the 1996 census (11 per cent reduction), not a trend that supports long-term infrastructure investments.

SaskEnergy continues to receive new requests for gas service. Currently the area around Saskatoon is seeing significant housing starts, while other areas of the province are seeing new business starts such as hog barns, biodigestors and other agri-value businesses. Each of these new requests continues to be handled under the business-case evaluation that ensures consistent investments that do not require cross-subsidization from other customers, or other customer classes.

SaskEnergy maintains a suite of business tools to assist customers in managing any capital costs that they may be required to contribute to the service infrastructure; capital financing, deferred investment and future capital allowances. SaskEnergy works with the banking industry to support its capital financing program. The deferred investment program allows subsequent growth on a new lateral (i.e. more customers or higher loads) to continue to attract capital investment from SaskEnergy within a prescribed timeframe. Future capital allowance is a mechanism that SaskEnergy uses to identify reasonable load

growth potential on a new project. The policy allows SaskEnergy to provide additional capital funding for some projects to ensure availability of capacity for future customers.

Power[20]

With the exception of Saskatoon and Swift Current, customers in Saskatchewan receive their electrical power through SaskPower, a provincial crown corporation which was established in 1950. SaskPower generates over 3,000 mega watts (MW) of power with 60 per cent from coal, 25 per cent from natural gas and 15 per cent from water. Due to its high reliance on coal, SaskPower is considered a high cost operator in western Canada.

SaskPower supplies power to 436,000 customers and operates a distribution network of 152,000 kms of power lines in the province (12,000+ kms transmission and 140,000+ kms distribution). It has the most extensive network in western Canada. Due to Saskatchewan's large geographic area and low population, the density of the power network is low at 3 customers per circuit kilometre vs. 12 customers per circuit kilometre for the average North American utility. Of the 436,000 customers, 37 account for 33 per cent of SaskPower's demand.

Although there are some power generation issues, (some of SaskPower's generation assets are getting old and new sources of generation will be needed), there do not appear to be major power issues in the province. Virtually every community in Saskatchewan south of the tree line has three phase power available in their community. Customers wishing to have three phase power installed can do so as long as they are willing to pay the installation price.

Telecommunications

In debating whether there is sufficient telecommunications infrastructure in rural Saskatchewan, it is necessary to separate the infrastructure into three components: traditional wired hard land lines, cellular phone service and high speed Internet or broadband service. Although there are other providers of telecommunications services in Saskatchewan, SaskTel dominates the market, especially in rural Saskatchewan. Therefore the focus in this report will be SaskTel.

Wired or Land Lines Network

SaskTel is the main provider of wired services in Saskatchewan, serving 425,000 customers, 49,000 farms and 535 communities. It has 100 per cent of the market share in the local market and 89 per cent of the long distance market. Until the introduction of high speed Internet and cellular phone service, the traditional wired or land line telephone was essentially the sole means of communicating electronically. The wired system developed by SaskTel was for many years a monopoly system which collected money from all and provided service for all, i.e. a business case was not needed to justify an

[20] Much of the information in this section comes from Saskatchewan Agriculture, Food and Rural Revitalization Infrastructure Report prepared by Toma & Bouma Management Consultants.

investment. As a result virtually all residents in Saskatchewan (south of the tree line) have access to at least one land line.

Rural Saskatchewan is considered a high cost area according to the Canadian Radio Telecommunications Commission (CRTC); approximately 40 per cent of SaskTel's customer base is considered high cost. It is estimated that the delivery of basic local phone coverage to rural and northern communities for the 2004-05 year is subsidized by about $43 million. This is substantially less than it was several years ago when the subsidy was over $100 million per year.

However, with deregulation, SaskTel now operates in a very competitive market and investment decisions are now made on a business case basis.[21] The need to move to a business case model has led to concerns that SaskTel's investment strategy is hurting economic development in rural Saskatchewan. Often cited is the high cost (approximately $10,000) of establishing a second phone line in rural Saskatchewan as compared to the $200 cost for the first line.[22]

Wireless or Cellular Phone Network

The development of the wireless or cellular network has taken place in a competitive market. However, there was an expectation among Saskatchewan residents that cellular service should be provided to all just as the wired service was. From SaskTel's perspective, operating in a competitive market means that investments in the cellular network infrastructure must be made on a business case model.

Given the circumstances in rural Saskatchewan--a small population scattered over a large geographical area--in many cases a business case cannot be made to provide cellular service. This has led to a concern in rural Saskatchewan that SaskTel's lack of commitment to universal cellular is hurting economic development. When one examines the coverage of cellular service in Saskatchewan, SaskTel estimates that 94 per cent of Saskatchewan residents have access to digital cell phone service (this includes the top 46 communities in Saskatchewan). The cost of bringing cellular service to these residents is estimated at $92 million. It is estimated that it would cost an additional $50 million to bring digital cellular service to the remaining six per cent of population, which is 8.5 times as much on a per capita basis as bringing this service to the first 94 percent of the population.

The relatively poor economics of providing cellular service in rural Saskatchewan means that SaskTel is really the only supplier of this service in rural areas. Competitors of SaskTel have focused their activities in larger urban centres and along main highway corridors such as Highways 1, 11 or 16. As a result, in 2003 SaskTel had over 295,000 customers or an 83 per cent share of the market.

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[21] A more thorough discussion of the impact of deregulation will be discussed in the Key Issues Section.
[22] The CRTC regulations state that users must pay the full cost of installation for any additional phone lines.

High Speed Internet/Broadband

The provision of broadband or high speed Internet to rural residents of Saskatchewan has been and will continue to be an important concern for rural residents, SaskTel and the provincial government. It is the view of SaskTel that high speed Internet is the way of the future for communications. In fact some in the industry, including SaskTel, believe that the Internet phone will eventually replace the wired phone network. Thus, for those (rural residents) who do not have high speed Internet, they may well have no wired phone service in the future.

Given that SaskTel is operating in a highly competitive market, the provision of high speed Internet, like the installation of the cellular network, comes down to the question: can a business case be made to provide this service? In the cities and the major trading centres a business case can be made so SaskTel is using internal financing to provide this service. However, in smaller communities, where no business case can be made, the province through CommunityNet has brought high speed Internet to 237 communities by the end of 2003.[23] It is estimated that 75 per cent of Saskatchewan residents now have access to high speed Internet. SaskTel's goal is to reach 95 per cent of the population. It is estimated that the cost of bringing CommunityNet to 75 per cent of the population was $70.9 million. For the next 20 percent of the population, it is estimated the cost will be upwards of $67 million, which is 3.5 times as much on a per capita basis as bringing this service to the first 75 per cent of the population.[24] The cost to connect the last five per cent of the population is so high that SaskTel has not even calculated the numbers.

Water and Waste Water

In Saskatchewan there are currently 554 municipal waterworks, eight pipelines, 68 large private, government and other waterworks, and 617 wastewater facilities regulated under *The Water Regulations, 2002*.

Several government departments and agencies play a role in administrating these systems. Saskatchewan Environment is responsible for the implementation, inspections and compliance of these systems. The Saskatchewan Watershed Authority provides source (surface/ground) water protection. Saskatchewan Health through the Health Regions is responsible for inspection and compliance at semi-public waterworks and certain other waterworks as required by *Health Hazard Regulations.* Municipal water infrastructure funding assistance and legislation and regulations regarding municipal protection of water sources falls within the purview of Government Relations and Aboriginal Affairs. Saskatchewan Agriculture, Food and Rural Revitalization will oversee water issues related to intensive livestock provisions while SaskWater will deal

[23] High speed Internet was brought to the designated communities by the province signing a seven year contract with SaskTel to use only SaskTel services in all government offices, schools and health facilities. This provided the business case SaskTel needed to provide the physical infrastructure to these communities.

[24] On June 23, 2004, SaskTel announced that it was expanding Community Net at a cost of $34M. When this expansion is completed, 86 percent of the population will now be covered by high speed Internet.

with water and waste water services and the operation and maintenance of various water systems.

As part of the Safe Drinking Water Strategy in the province, a number of key changes are being implemented by Saskatchewan Environment, which effect water and wastewater infrastructure and operations in Saskatchewan communities. They include:

- New legally enforceable drinking water standards, based on national drinking water quality guidelines for turbidity, chemical-health, pesticides and radiological parameters, are being phased in and include permitting and a follow-up system to track and ensure needed improvements are brought about;
- Regulatory requirements for independent waterworks assessments, policy development to ensure quality assurance/quality control and emergency preparedness and consumer reporting. These requirements took effect on December 5, 2002, although some have phase in periods;
- Mandatory operator certification and a need for continuing operator education which takes effect in July 2005; and
- Independent waterworks assessments are required for Saskatchewan Environment regulated waterworks by December 31, 2005

With respect to waterworks systems and operations regulated by Saskatchewan Environment, there are over 580 certified operators. Regulated systems have shown a significant increase in compliance with bacteriological water quality standards and disinfection standards from those reported in the 2002-03 Annual Report on the State of Drinking Water in Saskatchewan. There was also an improvement in the number of waterworks that did not meet Saskatchewan Environment's minimum treatment requirements

As part of the Safe Drinking Water Strategy, Saskatchewan Environment monitors the system and develops standards and protocols to ensure the integrity of the system. As part of that monitoring process, 107 precautionary drinking water advisories (PDWA) and 16 emergency boil water orders (EBWO) were issued for waterworks regulated by Saskatchewan Environment during the 2002-03 fiscal year. At the end of that year there were 72 PDWA's and 3 EBWO's still in effect. This information and up to date current information is available on the SaskH_2O web site at the following address: http://www.saskh2o.ca/advisories/Currently%20%20In%20Effect.pdf. Two additional laboratories were accredited in the past year for a total of four in the province. Another two laboratories are awaiting accreditation.

The new drinking requirements will have implications for rural communities. The first significant challenge will be obtaining the services of a certified waterworks operator for systems regulated by Saskatchewan Environment. An independent engineering assessment of waterworks is required by December 2005. The results of this assessment will be used to aid waterworks owners in understanding the changes necessary to ensure both sustainable water supplies and water that meet the drinking water quality standards.

Some smaller communities (populations less than 5,000) will need to upgrade infrastructure to meet standards for turbidity, which take effect in December 2008. Larger communities (populations of 5,000 or more) will need to upgrade infrastructure to meet standards for turbidity, which take effect in December 2006 for larger centres. A smaller number of communities will face similar challenges in dealing with trace chemical-health constituents, such as naturally occurring arsenic, selenium, uranium, etc. for the standards that take effect in December 2010 for communities with populations less than 5,000. Larger centres identified with any of these trace chemical constituents will have to comply with the chemical-health standards by December 2008.

An issue for many of the smaller communities will be that they do not have the resources to upgrade their facilities or personnel to meet the new standards. It is likely that a number of these communities will either look to pool and share resources or contract out these services to a third party.

Health Care

The future of the local hospital continues to be a major worry for the people of rural Saskatchewan. The closure and/or conversion of the 52 hospitals to reduced health care facilities in 1993 continues to resonate with rural residents. There is a genuine concern that with health care spending continuing to rise and the fiscal situation facing the province, more closures may be in the offing. With respect to the top 46 communities in Saskatchewan only four communities, Lumsden, Battleford, Carlyle and Oxbow do not have a hospital. Two of these communities, Lumsden and Battleford, are close to large urban hospitals while Oxbow has a designated ER site on a 24/7 basis.

While facilities are an important component of the health system, it is the Department of Health's view that the biggest challenge facing the health system is the ability to attract health care providers to rural areas and to the facilities that are already there. They also believe that telehealth technology may overcome some of the service issues that have affected rural health delivery.

From the Department of Health's perspective, the location of health care facilities in the province is guided by four principles. These principles were developed based on trends that are occurring in rural Saskatchewan, including population decline and the increasing pattern of seeking care in urban centres.

The first of these principles is access. That is, what is the average travel time in rural areas to reach a health care facility? Currently the department's objective is that no one should be more than 30 minutes away from primary health care services.

The second and third principles are: does the facility have the required qualified human resources required or available to staff a hospital, and are these human resources sustainable? Major changes have occurred in the rural medical practice model, with few solo practitioners still operating. Higher expectations from today's medical graduates and a desire for a more satisfying personal and professional life have resulted in the

emergence of health care teams. The focus of the Department of Health in rural areas is to develop medical teams consisting of doctors, nurses and others such as physiotherapists and pharmacists.

The fourth principle is the economic viability of the facility. That is, what is the impact on ongoing operations and how well does the facility fit into sustaining the health care system?

There are two issues that are of concern. The first is the trend towards deinstitutionalizing health care with shorter hospital stays and a corresponding increase in home care.[25] This trend should reduce the need for hospital beds in the future. A major challenge facing the health care sector today is how best to handle long term care. A related development is the consolidation or redeployment of facilities in smaller communities with hospitals, for example, being converted into long term care facilities perhaps in conjunction with a clinic.

The second issue is the economies of scale in health care facilities. For example, a 24 bed facility will cost approximately $70,000 per bed to build compared to the $45,000 to $50,000 per bed cost for a 48 bed facility. An increased number of smaller facilities improves accessibility for rural residents, but comes at an increased cost to the taxpayer.

Funding of new rural health infrastructure is cost shared between the province and the local communities, with communities responsible for 35 per cent of the capital cost and 100 per cent of the furnishings and the province responsible for 100 per cent of the operating costs.

Education

The focus of this discussion will be on the K to Grade 12 school system with some discussion on the regional college network. The decision to focus on the K to 12 system arises from the fact that the lack of certainty about the future of many rural schools is an important question facing a number of rural areas. Many people in rural Saskatchewan view the closure of their school as a death knell for their community.

As of September 30, 2003, there were 806 active schools in Saskatchewan, not including schools on First Nations, in 82 school divisions throughout the province. [26] This number comprises 767 schools that were eligible to receive grants (provincial funding) and 39 independent schools. Of the 806 schools, 145 have a student population of less than 50 students. Of these 145, sixty schools were classified as Hutterite schools (all having a population of less than 50 students) and 21 were considered independent schools. Of the 806 schools, 545 had a student population of less than 250. From the province's

[25] Despite the concern with hospital bed closures and move towards more home care, Saskatchewan is still above the national average for institutional beds per capita (115 per 100,000 vs. the Canadian average of 90 per 100,000).

[26] The province recently announced that the 82 school divisions will be consolidated down to no more than 40.

perspective the minimum economic size for a school is no fewer than 250 to 300 students and no schools built in the last few years have been below this level. The decline in the number of schools, especially in rural Saskatchewan, reflects the continuing decline in the rural population.

The construction of schools (K to 12) is cost shared between the local school board (35 per cent on average) and the province (65 per cent on average). At one time the province paid over 90 per cent of the cost. The province's share is typically higher for rural schools than urban schools because of the higher construction costs in rural areas. With respect to the funding of school facilities, the province does not initiate facility construction or own any schools but responds to infrastructure requests from local school divisions. Each division must submit a five year plan for capital funding requirements. The province reviews each request to determine if it meets the province's criteria for funding. There is a set amount of funding per child; however, the province usually does not fund a new school unless the current enrolment is at least 110 per cent of utilization of the current facilities.

Regional Colleges

There are currently nine regional colleges operating throughout the province. The colleges operate throughout rural and northern Saskatchewan. "They offer a wide variety of educational and training programs and services to adult learners, organizations, and communities located within their service regions."[27] The Colleges operate in 40 offices, of which 35 are located in the top 46 communities identified by Stabler and Olfert. However, most of the activity for teaching is taking place in towns of 2,000+ people. The consolidation of training into larger centres is due to the demographics of rural Saskatchewan. As a result, over the last several years the regional colleges have consolidated their offices in each region from about 15 to three to five offices in each region.

The consolidation into larger centres is the result of colleges using a regional approach to their development. Their view is that we need to become more regionally focussed, i.e. what is good for the region, not what is good for the local community. Communities need to know that if the region does well, their local communities may benefit.

Tourism and Arts Infrastructure

In 2002 tourism generated approximately $1.4 billion in consumer spending in Saskatchewan. The cities of Regina and Saskatoon accounted for 22 per cent and 29 per cent respectively, with the balance distributed throughout the rest of the province. Of the $1.4 billion, $450 to $500 million came from out-of-province visitors. Tourism has therefore become a major export revenue earner for Saskatchewan ranking fourth overall after agriculture; mining, oil and gas; and manufacturing.

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[27] Saskatchewan's Regional College's, A Presentation to the Infrastructure Sub-Committee of ACRE, by the Council of CEO's of Saskatchewan Regional Colleges, February 2004, slide 6.

The province boasts two national parks, 25 provincial parks and 101 regional parks as well as 10 provincial and seven national historic parks. There are approximately 600 heritage and cultural attractions, such as museums, art galleries and sports facilities in the province. There are more than 5,000 tourism businesses, organizations and events in Saskatchewan.

Tourism officials believe that adequate and affordable infrastructure is essential to maximizing an area's tourism potential. Generally speaking the tourism industry does not have the capacity to share in the cost of providing basic infrastructure such as parks and access highways. The cost burden therefore falls on government. The industry believes that the provision of that tourism infrastructure should be considered an investment which will generate significant revenue for the province. In addition, frequently the benefits of tourism-related infrastructure enhancements can result in secondary benefits such as enhanced sewer services or better quality water to local residents.

Saskatchewan is also well supplied with facilities that cater to the arts. The province boasts 76 performing arts venues and 65 visual arts venues. Many of these facilities are located in rural communities.

The arts community feels that provision for the arts should be part of any community economic development plan. It should be considered as a quality of life issue and not necessarily as a driver for job creation. With significant funding from the Saskatchewan Arts Board and lottery funding from Saskatchewan Culture and Youth, arts, culture and recreation are reasonably well funded in Saskatchewan. When comparing provinces solely on the basis of legislative funding provided to primary provincial funding agencies, Saskatchewan ranks fourth in the country with funding of $3.65 per capita compared to $8.35 in Quebec. Alberta and Manitoba follow closely behind Quebec. However, when the substantial lottery funding that the Saskatchewan arts community receives is factored into the equation, the results are much more favourable to Saskatchewan with a total per capita funding coming second only to Quebec.

However, the arts community does not feel that there is an overarching policy guiding arts infrastructure development in Saskatchewan. Funding is essentially provided on a demand basis and is not targeted, leaving the potential for overlap in funding to occur. Schools represent an underutilized physical resource in many rural communities and could play a bigger role, both as a way of making more efficient use of that resource and as a venue for engaging the arts community with teachers and students.

Larger facilities such as performing arts centres are generally restricted to larger population centres that can offer access to a sufficiently large market and provide minimum requirements for elements such as lighting and sound. While exceptions do occur in rural Saskatchewan, performance facilities are usually physically located in large urban centre and can draw on that larger population base for support. There are more distant "one off" facilities, but they generally suffer from a lack of self-sustaining critical mass and do not represent a realistic sustainable model for rural Saskatchewan. They do

demonstrate, however, that people will travel significant distances to attend a rural event if the basic amenities are available and the performance is well presented.

D. MODELS FOR PRIORIZING AND FINANCING INFRASTRUCTURE

Models for Priorizing Infrastructure

As part of the terms of reference for the committee, the committee was asked to examine models that are used to priorize infrastructure decisions. The committee found there are four potential models: Return on Investment (RIO), Level of Service, Social Priorities and Maintenance Cycles. Some suggest that fiscal capabilities should also be considered a model for priorizing infrastructure decisions. However, the committee felt that fiscal capability is not a method of priorizing infrastructure investments; fiscal capability determines how many projects can proceed, not which projects have the greatest priority.

Based on discussions with the public infrastructure providers, a number of different methods are used to priorize infrastructure decisions. However, as a general statement, one can say that where consumers of infrastructure are on a user pay system, it is more likely that ROI is the key factor in priorizing infrastructure. The utilities, SaskPower, SaskTel, SaskEnergy and SaskWater, would fall into this group. For other infrastructure where taxes pay for all or the majority of the cost of providing infrastructure, other factors such as the level of service and social priorities are the more important factors in priorizing infrastructure. Roads and education and health facilities would fall into this category.

Return on Investment (ROI)

Under this option, investments are priorized based on the ROI of individual projects. The ranking of projects would see the highest priority given to those projects with the highest ROI and the lowest priority given to those projects with the lowest ROI. This type of priorizing is the way most if not all private sector projects are evaluated. However, publicly funded or heavily regulated privately funded infrastructure developments usually priorize projects on a broader set of criteria than just ROI.

While it is quite easy to calculate ROIs for most types of infrastructure, it is more problematic to calculate an accurate ROI for publicly funded roads. With the exception of roads, the consumers of other utilities pay a direct fee to use the service. With knowledge of both the direct costs and direct revenue generated by a project, infrastructure providers can then obtain an ROI. In the case of roads, consumers of infrastructure pay no direct fee that is strictly linked to a specific project[28]. Therefore, it is much more difficult to accurately assign revenue generated to a particular project and thus more difficult to calculate an ROI for a particular investment.

The crown utilities, SaskPower, SaskTel, SaskWater and SaskEnergy, all use ROI to base their investment decisions. The emphasis on ROI is much stronger than it was 15 or 20 years ago when other criteria such as level of service played a larger role. For example,

[28] The exception to this is Saskatchewan Highways & Transportation's Transportation Partnership Program (TPP). Under this program users do pay a direct fee that is linked to a specific highway route.

the deregulation of the telecommunications industry has forced SaskTel to use the business case model to justify an investment.

Level of Service

With this option, infrastructure providers must first determine what is an appropriate level of service. Once that is completed, a comparison is done between the proposed level of service and the current level of service. Investments are then made in areas to meet the new standards.

An argument can be made that all infrastructure providers use some level of service criteria in priorizing investments. This is especially so in upgrading current infrastructure to a higher standard. Thus it is important to distinguish between investing based on a traditional equity model, where everyone is entitled to the same "level of service" compared to investing to increase the "level of service" in order to retain customers. Increasing the level of service to retain customers is part of most business case models.

The "level of service" still plays an important part, although less than in the past, in the provision of infrastructure in rural Saskatchewan. The traditional equity model employed in Saskatchewan was based on the concept that every citizen was entitled to a certain level of service regardless of the cost to provide this service. As mentioned earlier, deregulation has shifted the utilities, especially SaskTel, away from "a level of service" toward an ROI basis for priorizing infrastructure decisions. However, the Department of Health uses a "level of service" commitment that no one should be more than 30 minutes away from primary health care services, as one of the criteria in determining the location of a health care facility.

Social Priorities

Social priorities could be considered a subset of "level of service" with the notion that all citizens are entitled to a certain level of infrastructure, i.e. the equity model. With this option, social priorities would guide infrastructure providers in priorizing infrastructure. Once the social priorities are set, investments would be made in areas where the current infrastructure does not meet the social priorities.

Health care and education facilities are probably the best examples of basing infrastructure decisions on meeting certain social objectives. An argument could be made that the provision of a road can be priorized on a social priority basis, i.e. that everyone is entitled to some form of road access.

Maintenance Cycles

Infrastructure providers, especially in the repair and maintenance of current infrastructure, will priorize investments based on needed maintenance. Infrastructure providers usually have a good idea of the lifecycle of a particular piece of infrastructure and will priorize their investments based on the maintenance lifecycle. Therefore,

infrastructure that is nearing the end of its lifecycle will receive priority over other projects that are not near the end of their lifecycle. For example, Saskatchewan Highways & Transportation has a 15-year design life for structural pavement.

Models for Financing Infrastructure

In general there are three models of funding available to finance infrastructure: the public sector; the private sector and public/private partnership (P3).[29] Within these three models there are several different ways to finance infrastructure. In the public sector, infrastructure can either be funded through:

- taxes: for example roads, health and Kto12 education in Saskatchewan;
- fees: post secondary education, highways (Transportation Partnership Program) in Saskatchewan and health care premiums in Alberta and BC; and
- user payments: linked to usage (telephone, power, natural gas).

In the private sector, funding for infrastructure is limited to either fees or user payments linked to usage. In Saskatchewan there are some private infrastructure operators such as cellular service, Internet providers, cable TV operators, private schools and long distance operators who use both fees and user-pay linked to usage to fund their infrastructure. The largest obstacle to funding of private infrastructure in rural Saskatchewan is the large cost of providing the infrastructure (large geographic base) and relatively low revenues that can be generated (due to the small and dispersed population).

Public/private partnerships, commonly referred to as P3s, are a relatively new concept for the funding of infrastructure. According to a recent study, about 50 P3s have been implemented in rural and northern Canada, mostly in the recreation, transportation and water/wastewater sectors. Most of these projects were close to larger urban centres.

P3s arose out of need for further investment in infrastructure, especially roads and water systems, coupled with the fact that governments who have traditionally provided most if not all of the funding for these types of infrastructure did not have the necessary funds to invest. An additional argument was that the private sector could bring efficiencies and innovation to these projects that could not be provided by the public sector.

From the committee's perspective the major question about P3s, given the high costs and the low return, is this: Is it realistic to expect private companies to invest in rural Saskatchewan without some form of public subsidy? Referring back to the study on P3s, the authors found:

> *"...limited evidence to show that access to capital/private sector financing is a likely benefit of public-private partnerships for smaller projects and smaller communities. In most of the cases in rural and northern Canada, where initial capital financing was part of the project, the public sector took a very active role*

[29] For the purposes of this report financing by co-ops is included as private financing, as financing by co-op members is still private decision, i.e. there is no public funding.

in either providing the capital or guaranteeing some aspects of the capital funding. In addition, the study found that less risk has been transferred to the private sector in the rural and northern projects than is typically the case with public-private partnerships."[30]

[30] Summary Report: Sub-teams on Access to Capital, Infrastructure Investments and Public-Private Partnerships, June 2004, page 6.

E. KEY ISSUES

Uncertainty and its Impact on Economic Development

Confidence in the future and the certainty that one's investment, whether it's a home or a business, will retain its value or earn a return are fundamental perquisites for economic development. If a person or a business does not have confidence in the future or is concerned about the certainty of his/her investment in a particular location, it is less likely that this person will make an investment in that location. Without this investment no jobs are created and therefore no economic activity takes place. If this concern about the future and the lack of certainty is widespread within the community, then what happens at the individual level will become reality at the community level.

The lack of certainty about the future of rural Saskatchewan is, in the opinion of the committee, a significant problem impeding economic development in rural Saskatchewan. The private sector, whether households or businesses, are so uncertain about the future of rural Saskatchewan that they are not willing to make the investments that are necessary to create economic activity.

In contrast, if one invests in the larger centres of Saskatchewan or along the Highway 2 corridor in Alberta, one is quite confident that one's investment will be secure and grow. This confidence in the future has a snowball effect where initial investments lead to economic activity which leads to more investments which further increases economic activity, and so on. This positive snowball effect is in contrast to the negative outlook that is prevalent in rural Saskatchewan where disinvestment is occurring, resulting in declining economic activity which leads to more disinvestment.

How can infrastructure and government policy toward infrastructure development be used to restore confidence in the future and restore certainty? Presently there is the perception in rural Saskatchewan that there will be a further downgrading of infrastructure such as hospital and schools. Whether the perception is true or not--and perception is what matters--there is uncertainty in rural Saskatchewan, even in the larger centres, as to what level of infrastructure will be there in the future. The lack of certainty is by default encouraging people and businesses to locate and invest in the larger centres, primarily Saskatoon and Regina.

To reduce this uncertainty and to encourage investment, the province must designate the communities where they will make a long-term commitment to providing infrastructure.

Demographics of Rural Saskatchewan and Stranded Assets

The future demographic picture facing rural Saskatchewan is not encouraging based on past trends and the current age distribution in many of these communities. As part of the committee's work, population projections were carried out to 2021 to determine what the

population levels could be like if the present trends continued.[31] It is important to keep in mind that these are just projections. Some communities may see a reversal of their fortunes; however it is likely that without a major change in the rural economy, these population projections are in general likely to be fairly accurate. The following is a summary of projections to 2021:

Communities between 40 and 100 people in 2001 (a total of 81)

- 31 communities will have no population;
- 18 communities will lose over 50 per cent of their population;
- 19 communities will lose between 1 per cent and 50 per cent of their population;
- 1 community will have a stable population; and
- 12 communities will see their population increase during this time frame; seven of these are within commuting distance of a city.

Communities between 100 and 499 people in 2001 (a total of 214)

- 25 communities will have no population;
- 84 communities will lose over 50 per cent of their population;
- 69 communities will lose between 1 per cent and 50 per cent of their population;
- 1 community will have a stable population; and
- 35 communities will see increases in their population, of these 18 are within commuting distance of a city.

Communities between 500 and 999 people in 2001 (a total of 56)

- 20 communities will lose more than 50 per cent of their population;
- 28 communities will lose between 1 per cent and 50 per cent of their population;
- 1 community will have a stable population; and
- 7 communities will see an increase in their population. Of these seven communities, five are within commuting distance of Saskatoon, while the other two are within commuting distance of Lloydminster.

Communities between 1,000 and 1,499 people in 2001 (a total of 25)

- 8 communities will lose more than 50 per cent of their population;
- 14 communities will lose between 1 per cent and 50 per cent of their population; and

[31] To determine future population, it was assumed that the number of people over 65 in 2001 would all be deceased in 2021, based on the average age of Canadians, i.e. around 80 years. We also assumed that the net migration for each of the communities over the period 1996 to 2001 would continue on the same trend line to 2021. The population projections for the larger communities (over 1,000 population in 2001), especially those which are declining in population, are likely to be less accurate than the projections for smaller communities. It is likely that as more people retire and move from the farm they are more likely to move into larger centres which would tend to mitigate somewhat the projected decline in their population. This would also likely apply to recreational villages which are also popular places for retirement.

- 3 communities will see an increase in their population. These three communities are all bedroom communities around Regina.

Communities over 1,500 people in 2001 (a total of 27) [32]

- 3 communities will lose over 50 per cent of their population;
- 19 communities will lose between 1 per cent and 50 per cent of their population;
- 1 community will have a stable population; and
- 4 communities are expected to gain population; these communities are bedroom communities around Regina and Saskatoon.

Recreational Villages in 2001 with over 40 permanent residents (a total of 21)

- 1 community will have no residents on a full time basis;
- 3 communities will lose over 50 per cent of their population; and
- 17 will see an increase in their population.

The demographic picture in rural Saskatchewan has raised concerns that some infrastructure may be stranded if the current demographic trends continue.[33] When infrastructure was built, it was on the premise that the infrastructure providers would earn a return on their investment. However, when a community's population declines as a result of changing economic circumstances (such as mine closure or a decline in agriculture) often there are not enough customers left to pay off the remaining portion of the infrastructure investment. Thus, the infrastructure provider is left holding an investment that has not been fully paid and provides little or no revenue.

The issue of stranded assets has a number of implications for rural Saskatchewan. First, infrastructure providers are forced to write off these investments which affects their balance sheet, profitability and rates that their remaining customers must pay. Second, infrastructure providers become more cautious or more risk-adverse in deciding whether to invest in rural Saskatchewan. Third, rural communities may face higher upfront capital costs as infrastructure providers may require a faster capital repayment schedule to avoid long term risks to their investments. These higher upfront infrastructure costs lead to higher business costs which hurts the competitive position of rural businesses.

In response to the concern about stranded assets the crown utilities have the following policies:

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[32] The population projections for communities over 1,500 did not include any communities that were cities in 2001.

[33] In businesses (including crown corporations) that sell goods and services to consumers, stranded assets are created when the capital cost has not been recovered, and there has not been a return on investment when the assets are abandoned. For public infrastructure, an asset is stranded when the infrastructure is abandoned before the intended life of the structure is reached because the infrastructure is no longer required or useful.

- SaskPower is not overly concerned about stranded assets as the pay back period is fast and farmers have to pay up front any costs above $1,300 (SaskPower provides the first $1,300 towards any farm installation). SaskPower can also salvage some of the infrastructure.

- SaskEnergy has an established process for managing out-of-service assets. When an asset is not currently required to provide service it is safely deactivated and monitored for potential business applications for a period of five years. After the five-year period any remaining economic value is written-off. Above ground assets such as meter stations are salvaged, refurbished and reused where appropriate while underground assets are abandoned as they cannot typically be recovered economically. When a new natural gas customer locates near existing facilities (either in-service or deactivated) it generally reduces the cost of providing service.

- SaskWater has some underutilized infrastructure and would encourage new industries to go there as water would be at a lower cost. In the future they will concentrate on new areas where there is potential, such as Regina East, Fort Qu'Appelle, Nipawin, etc. SaskWater has a 20 year pay back period for projects. For smaller communities, SaskWater may ask for a higher upfront capital commitment from the local community to offset the risk of stranded assets.

- SaskTel has a five-year payback period for the installation of infrastructure. Technological change is very fast in the telecommunications field. On average a technology lasts seven years before it becomes obsolete, thus the payback period is linked to how long the technology lasts.

- The Health Department does not view stranded assets as a major concern. Most of the 52 hospitals closed in 1993 are still being used, but not as acute care facilities.

- The Department of Learning is not very concerned about stranded assets because the province does not own any of the schools.[34] However, the department indicated that 30 per cent of the schools in the province have less than 50 students. Depending on the age of the school, if any of these schools close in the near future there could be stranded assets.

While there are stranded assets in rural Saskatchewan, a move away from the equity model should result in fewer stranded assets in the future. The move to a business case model by the crown utilities and the setting of minimum standards for financing new hospitals (a location must have three to five doctors) and new schools (unlikely to fund a school of less than 250 to 300 children and current utilization rate of 110 per cent for current facilities) should mean that any new infrastructure that is built, is built in locations that are not going to disappear before the capital cost is recovered.

[34] Although the province does not own the infrastructure, the province has committed provincial funds to construct schools (on average 65 per cent of construction costs). One can argue that the province's funds are stranded if any schools close.

The one exception to this move towards the cluster-based approach which has implications for stranding of assets is the provincial program of bringing high speed Internet to smaller communities (CommunityNet). There is no business case to bring high speed Internet to many of the small communities, but with provincial government backing, SaskTel is bringing high speed Internet to these smaller communities. Many of the communities noted earlier with respect to the declining demographic trends have been hooked up to CommunityNet.

Deregulation and impact on rural Saskatchewan

The deregulation that has swept over North American utility industries over the last 20 years has had an enormous impact on rural areas. Prior to deregulation, the situation facing most utilities, at least those that operated at a provincial level or had both rural and urban customers, was essentially static. These utilities were monopolies and served two markets: the high cost, low revenue market (generally rural areas) and low cost, high revenue market (urban areas and big industrial and business users). To maintain rates at reasonable levels in high cost areas, the utilities raised rates in the low cost areas (rates above costs) and reduced rates in the high cost areas (rates below costs). This practice was and is commonly known as cross-subsidization.

However, with the deregulation of the utility sectors, competitors entered the market place and started competing with the old line utility companies. Given that these new entrants are profit maximizers, these competitors for the most part have devoted their efforts to serving the high revenue, low cost areas (i.e. urban areas and big industrial and business users).

Since these new entrants tend to have a lower cost structure than the old line utilities, they are able to price their services at lower rates. In order to be competitive, the old line utilities have had to drop rates which has reduced revenues. The utility in Saskatchewan that has been most affected by deregulation has been SaskTel.[35] For example, SaskTel has seen its revenue on its long distance service drop from $400 million in 1990 to approximately $125 million in 2003. As revenues drop, the old line utility's ability to cross-subsidize the high cost low revenue areas becomes more difficult and therefore, utilities have been reducing the level of cross-subsidization and raising rates in the high cost areas.[36]

The possibility that cross-subsidization of rates will end means that rural areas could face significantly higher utility rates relative to urban areas. These higher rates will increase the cost of doing business in rural areas and make businesses less competitive relative to their urban counterparts. The higher utility costs are also likely to affect investment as

[35] At the same time deregulation was occurring, SaskTel came under regulatory control by CRTC. One consequence of CRTC oversight is that SaskTel can no longer subsidize the installation of a second telephone line. Therefore, while the cost of installing a first telephone in rural Saskatchewan may only cost $200, the second one can cost on average $10,000 which reflects the true cost of installation.

[36] Recently SaskTel increased business local line rates in high cost areas by 10 percent to offset the continuing competitive pressures in their long distance business.

investors are likely to look to invest in urban areas where costs are lower. As one person in the utility industry put it: *"By moving to a user pay model for infrastructure, society is indirectly saying that people need to clump together in viable economic units. The decision where to locate will need to be done based on market conditions."*

In an attempt to help reduce the impact of telephone deregulation on rural areas, the CRTC in a 2000 decision established "a nationally industry-funded mechanism to support residential telephone service in Canada's high cost areas." [37] Under the plan all telephone companies contribute a percentage of their revenues to a national service fund. Companies providing service to rural and northern residents are able to access this fund and use this money to help keep rates reasonable in rural and high cost areas.

Deregulation of the grain transportation and handling industry, beginning with the loss of the Crow Benefit in 1995 and *The Canadian Transportation Act (*CTA) in 1996, accelerated the trends in elevator closures and branch line abandonment that had been on-going for a number of years. The net effect was the abandonment of a significant number of branch lines, the closure of small elevators and the building of large high throughput terminals. This has resulted in significantly more grain traffic using Saskatchewan roads which has increased maintenance costs as many of the roads were not built for this type of traffic. It is estimated grain traffic in Saskatchewan will have increased from 250 million tonne kilometres in 1984 to a projected 3 billion tonne kilometres in 2005.

Regional Approach to Infrastructure Development

Throughout the committee's deliberations, both in meetings with stakeholders and in reviewing the literature, a regional approach to infrastructure development was emphasized as a way of providing infrastructure to rural residents at a reasonable cost. A regional approach to infrastructure can either be communities within the region cooperating on projects, or concentrating infrastructure in the regional centre or the larger centres in the region.

Cooperation Among Communities in a Region

There is ample evidence to suggest that by cooperating and working together communities within a region can reduce the costs of operating infrastructure. By having a larger customer base the fixed costs of the project can be spread out over more customers, thus reducing per unit costs for the project. Another driving force behind more cooperation is the increased regulatory environment, especially for landfills and water and sewage treatment. As noted in the section on water infrastructure, many smaller communities do not have the customer base or resources to upgrade their infrastructure to meet the new regulations. By cooperating many of these communities can now afford to meet the new regulatory standards.

[37] Government of Saskatchewan News Release, CRTC Decision Good For Rural and Northern Saskatchewan, December 8, 2000.

Three examples of communities cooperating within a region are the West Central Water West Project (WCWWP) in the Kindersley area, the West Central Municipal Governance Committee (WCMGC) and the Saskatoon North Communities Association (SNCA).

The WCWWP, which originally started out as a water project for the town and the RM of Kindersley, has now evolved into a project involving 25 communities with the farthest being approximately 80 kms from Kindersley. When completed there will be 176 kms of pipe.

The WCMGC was established in 1994 and has representation from 89 urban and rural municipalities, local school boards and health boards. The members meet on a monthly basis in different locations throughout the area. The volunteer membership group is non-political, does self education on local issues and has an Area Transportation Planning Subcommittee. It also does lobbying, makes presentations to various government departments and sends representatives from its sub-committees to relevant meetings. The group has adopted a proactive stance in that it looks at initiating programs that would benefit a wider area.

The SNCA was formed in 2003 and consisted of Warman, Martensville, Olser, Dalmeny and the RM of Corman Park. Delisle joined the association in the spring of 2004. The focus of the association is to discuss common problems and to work cooperatively where there is a need. The communities are working together or thinking about working together is such areas as joint bids for facilities, fire fighting, animal control, and community planning. All of these joint ventures are on a voluntary basis.

One of the roadblocks to cooperation in rural Saskatchewan is the “hockey team” mentality of many rural communities. While difficult to substantiate, the subcommittee did hear anecdotal stories about communities refusing to cooperate because of long-standing sports rivalries.

Providing Support to Regional Centres

The concept of concentrating infrastructure in the larger centres in the region is based on the notion that if the regional or large centre does well, the region does well. If the region does well, communities within the region do well. The theory of supporting growth poles, i.e. larger centres in the region, comes from a Progressive Policy Institute (PPI) report. The thrust behind focusing on growth poles is that in today’s economy, a critical mass of infrastructure, labour supply, amenities and other economic factors is necessary to attract firms and people to live there. Places that are too small and do not have the critical mass will not prosper no matter how much infrastructure and money is poured into them.

If the regional and larger centres within the region become strong, they become regional anchors for growth that surrounding rural residents and residents from small towns can commute to for employment and other services. “The focus should be on helping rural

residents live and work in rural areas, not helping every community."[38] The advantage for rural residents of concentrating resources in growth poles is that rural residents can still live in their local community, but have employment and services within driving distance. However, if the growth pole does not survive, residents seeking employment can no longer reside in their local communities because employment opportunities have migrated to large communities that are too far away for commuting purposes.

Saskatchewan has traditionally focussed on helping all communities, the equity model, rather than concentrating resources where the most good can be generated. However the subcommittee agrees with the Stabler and Olfert position that by not focussing on communities with the critical mass, we are eventually forcing rural consolidation further up the community structure level than what would have occurred had we concentrated resources on those communities with a critical mass. In other words, by trying to save every community, we may not save any.

Applying the growth pole theory to Saskatchewan and using Stabler and Olfert's community profiles, the subcommittee examined commuting patterns in the top 46 communities in Saskatchewan as defined by Stabler and Olfert. The following table shows the number of commuters that commute regularly into the 46 communities, but reside outside these communities, and the number of commuters residing in the top 46 communities but commuting outside their particular community.[39]

The table reveals two important points related to commuting patterns. First, with the exception of Maidstone, all 46 communities have an inflow of residents who reside outside the community but commute into these centres for employment. Second, these 46 communities, with a few exceptions, have more commuters coming into their communities for employment than they have residents commuting to jobs outside these communities. From a regional employment perspective, it is the regional or large centres that play the more important role in employment commuting patterns.

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[38] Atkinson, Robert D., Reversing Rural America's Economic Decline: The Case for a National Balanced Growth Strategy, Progressive Policy Institute Policy Report, February 2004, page 16.

[39] This information comes from the 2001 Census. The actual number of commuters is likely more than what is shown in the Census, as information on areas that have less than 40 people in the labour force are suppressed. In addition, the numbers are all rounded to either 5 or 10. With the exception of Lloydminster, commuters do not include those commuting from outside the province into Saskatchewan or those commuting outside the province from Saskatchewan.

Table 2: Commuting Patterns in Saskatchewan

Community	Commuters In	Commuters Out	Community	Commuters In	Commuters Out
Assiniboia CSC	160	0	Melville CSC	535	185
Battleford Top FCC	390	1,105	Moose Jaw SWR	1,220	1,450
Biggar Top FCC	295	0	Moosomin PSC	200	50
Big River Top FCC	75	0	Nipawin CSC	680	0
Canora Top FCC	335	100	North Battleford SWR	2,025	715
Carlyle Top FCC	255	60	Outlook PSC	170	60
Davidson Top FCC	145	0	Oxbow Top FCC	200	40
Esterhazy Top FCC	660	90	Prince Albert SWR	3,595	1,280
Estevan SWR	980	1,095	Redvers Top FCC	155	0
Fort Qu'Appelle Top FCC	590	125	Regina PWR	7535	4,265
Hudson Bay Top FCC	540	0	Rosetown PSC	315	25
Humboldt CSC	610	250	Saskatoon PWR	10,015	4,015
Indian Head Top FCC	120	90	Shaunavon PSC	100	0
Kamsack Top FCC	235	0	Shellbrook Top FCC	105	55
Kindersley CSC	445	20	Spiritwood Top FCC	225	0
Kipling Top FCC	155	0	Swift Current SWR	1,220	695
Leader Top FCC	25	20	Tisdale CSC	625	35
Lloydminster SWR	605	205	Unity PSC	180	20
Lumsden Top FCC	150	370	Wadena Top FCC	200	0
Maidstone Top FCC	0	25	Watrous Top FCC	170	50
Maple Creek PSC	25	0	Weyburn SWR	675	225
Meadow Lake CSC	1,070	25	Wynyard Top FCC	310	20
Melfort CSC	815	145	Yorkton SWR	1225	285

Notes:
"Commuters In" means the number of people commuting into that community but residing outside the community.
"Commuting Out" means the number of people residing in that community but commuting outside the community for employment purposes.
For confidentiality reasons Statistics Canada does not report on communities with a labour force of less than 40.

Equity vs. Cluster/Corridor Approach: Where to Provide Infrastructure

As indicated in the introduction, the notion of comparing an equity versus a cluster/corridor approach to infrastructure development has guided the subcommittee's work. When the subcommittee started its work, there was a general impression that equity considerations still played an important role in infrastructure decision making. However, following meetings with various stakeholders, it became clear that the equity model is not as strong as it once was in delivering infrastructure.

The crown utilities, because of either more competition brought about by deregulation, or business considerations, have moved to a commercial/business case or user pay model in

determining where to provide infrastructure. By moving to a user pay system, the crown utilities, by default, are providing utility infrastructure on a cluster based approach. Infrastructure in a cluster or corridor will be cheaper than outside it.[40] This will encourage businesses to locate where the infrastructure is the cheapest. For example, if a firm is to locate in a rural area, the potential cost of obtaining a second phone line is very high ($10,000). However if this firm was located in an urban setting (town or city) the cost is significantly cheaper, at less than $500.

The extension of Community Net to smaller centres is an example where the equity model continues to resonate. From SaskTel's perspective, there is no business case to provide high speed Internet to some of these communities. However, with provincial financial assistance, these communities were connected to high speed Internet.

With respect to health and education facilities, the Departments of Health and Learning have established criteria that lead to facilities being located in larger centres or clusters. For example, the province will only fund health care facilities where there are three to five (preferably five) doctors on staff. This means that health care facilities are only being built in towns of 3,000+ people with a trading area of 7,000 to 8,000 people. With respect to funding for school construction, it is unlikely the province would help with funding for a school with less than 250 to 300 students and will not fund any new construction below 110 per cent utilization of current facilities. Given the declining enrolment in many rural schools, many smaller towns are unlikely to see the construction of new schools.

Although the Department of Highways & Transportation is doing some work that could be classified as providing roads on clusters or corridors basis,[41] the notion of equity is probably the strongest in this department relative to the crown utilities or the Departments of Health and Learning. The notion of equity is probably the strongest due to people's expectations about the provision of roads.

The move towards a cluster based approach to infrastructure provision is running into significant resistance from Saskatchewan residents and businesses. If there was a central theme running through the consultations with stakeholders, it was the expectations or the entitlement attitude that Saskatchewan people have towards infrastructure. Based on history, Saskatchewan residents and businesses generally have the attitude that everyone should receive the same level of service at the same cost, and resent paying higher costs even if they are in a high cost area.[42]

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[40] All the Crown Utilities indicated that they have no policy of encouraging customers to locate in clusters despite the cheaper costs to provide infrastructure to a cluster. They are willing to provide infrastructure where there is customer demand as long as the customer is willing to pay for it.

[41] Under the current Prairie Grains Road Program (PRGP), a significant of amount of the money is going to strategic regional highways. In contrast under the prior program the majority of the money was allocated on an equity basis to all rural municipalities.

[42] The committee was also told during the consultations, that individuals and firms from outside the province who are investing in Saskatchewan do not have the same expectations or entitlement attitude found in Saskatchewan residents or businesses. These non-Saskatchewan businesses expect to pay more for infrastructure if they are in a high cost service area, and view this cost as a cost of "doing business".

However, as mentioned previously, deregulation and the move towards a user pay model have forced or are forcing infrastructure providers to move towards a more cluster based approach to infrastructure provision. This means places in rural Saskatchewan that were accustomed to getting the same level of service and infrastructure as larger centres at relatively the same cost in the past can no longer expect that. Where the market place is not pushing this, budget constraints are giving rise to similar conflicts in health, education and roads. The move away from the equity model is causing considerable conflict between the infrastructure providers and rural residents. Since the provision of infrastructure is virtually the domain of the province, there is often considerable political pressure to make investments that do not have a business case.

A third theme that was consistent throughout the consultations was a view that there does not appear to be very much coordination or joint planning among the infrastructure providers, i.e. there is no central focus or coordinated strategy for economic development in the province.[43] This same conclusion was reached in a recent report (Toma & Bouma) which looked at infrastructure provision in the province.

When infrastructure was provided on a more equity-based approach, a coordinated approached was not as critical. Since everyone eventually receives infrastructure in the equity approach, there was no real need to coordinate to ensure that all infrastructure providers are providing service to the same location. However, in the cluster based approach, it is critical that infrastructure providers coordinate their activities so that clusters locations receive all necessary infrastructure. For example, there is no point providing half of the necessary infrastructure if successful development at that location requires the full array of infrastructure.

As noted earlier, in the irrigation area surrounding Lake Diefenbaker there was a lack of a coordinated strategy to develop both the water and highway infrastructure at the same time. As a result, the development of the irrigation industry was hampered and to this day, its full potential has not been realized.

[43] The provincial forestry strategy was mentioned as probably the best example of how the different provincial agencies worked together to achieve the provincial goal of expanding the forestry industry.

VI CONCLUSIONS

The debate of how to provide infrastructure has arisen due to a number of factors. These include deregulation, the declining rural population and the budget pressures facing the province. Over the course of the subcommittee's deliberations and through its research work, four general conclusions can be reached regarding the provision of infrastructure in rural Saskatchewan.

First is the move, not based on any formal provincial policy, by the crown utilities and Health and Learning Departments away from an equity to a cluster-based infrastructure approach. In the case of the crown utilities, market conditions and the move towards a user pay model is by default guiding them towards a cluster-based approach. With respect to the Departments of Health, Learning and to some extent Highways & Transportation, the province's fiscal situation is forcing them to move away from an equity approach. However, in other cases, such as the provision of high speed Internet to smaller communities (CommunityNet) and provision of roads, the equity approach is still strong.

Secondly, the lack of, or a perception of the lack of a clear provincial policy towards infrastructure provision, is helping to create uncertainty in rural Saskatchewan about the future level or quality of infrastructure that will be available in the future. This uncertainty is hurting economic development, because investment will only occur when investors are confident about the future, including the future of the infrastructure. By default, uncertainty is leading the private sector to locate in areas where they are assured of continuing infrastructure, such as the province's larger cities.

Thirdly, there is a recognition that Saskatchewan needs to move towards a regional approach and away from the traditional community-based approach to infrastructure development. Within this context, there is the recognition that the regional and large centres (growth poles) are becoming the focus of economic activity in the regions. These large centres have the critical mass of labour force, services and other factors that create the necessary conditions for economic growth. To ensure that the growth poles reach their potential, high quality infrastructure must be in place. Communities outside these growth poles do not have the critical mass and conditions to create economic growth; therefore, providing additional infrastructure in these communities is unlikely to make any substantial difference to their future.

It was also recognized that more regional cooperation among various communities is needed when developing infrastructure. Not only will there be the potential for lower costs, but many communities who otherwise could not afford the infrastructure on their own would now be able to receive it through cooperation with other communities.

Fourthly, there appears to be no coordinated provincial strategy for infrastructure development in the province. The move towards a cluster-based approach means that all infrastructure providers must work together to ensure that all the necessary infrastructure is in place to facilitate economic development.

APPENDIX A

Stakeholders participating in the subcommittee's consultations

- Sask Power (John Wright, Ken Gullen, Kelly Staudt)
- Sask Tel (Don Ching, Stacey Sandison, Daryl Silzer, Mike Anderson)
- Sask Energy/TransGas (Dean Reeve, Fred Hill)
- Sask Water (Greg Argue, Rod Blackwell)
- Saskatchewan Department of Industry and Resources (Van Isman, Cam Pelzer)
- Saskatchewan Regional Colleges (Fay Myers, Neil Clarke, Bruce Probert)
- Saskatchewan Government Relations and Aboriginal Affairs (Russ Krywulak, Doug Morcom, Ralph Leibel)
- Saskatchewan Highways and Transportation (Harvey Brooks, Barry Martin)
- Saskatchewan Health (Mike Shaw, Rod Wiley)
- Saskatchewan Learning (Nelson Wagner)
- Saskatchewan Association of Rural Municipalities (Neil Hardy, Bob Schultz, Ken Engel)
- Saskatchewan Urban Municipalities Association (Phil DeVos, Allan Earle, Keith Schneider)
- Federation of Saskatchewan Indian Nations (Guy Lonechild)
- Saskatchewan Chamber of Commerce (Clay Dowling)
- Saskatchewan Arts Board (Jeremy Morgan)
- SaskTourism (Ian McGilp)
- West Central Municipal Governance Committee (Karen Martin, Daryl Senecal, Alma Dube, Ted Koester, Trent Michelman, Glenn Dow)
- West Central Water West Project (Brenda Burton)
- Saskatoon North Communities Association (Allan Earle, Wally Davis, Mike McLeod, Emery Ens, Ben Buller, Janet Peters, Nick Bakker and Ed Hobday)

APPENDIX B

Rural development literature reviewed by the subcommittee

Action Committee on the Rural Economy: Transportation Subcommittee Final Report, November 2002.

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APPENDIX C

Table 1: Rural and Urban Population in the Prairie Provinces in 2001

	Rural	Urban
Saskatchewan	35.7%	64.3%
Manitoba	28.1%	71.9%
Alberta	19.1%	80.9%

Source: Statistics Canada, 2001 Census

Table 2: Regina and Saskatoon Census Metropolitan Area (CMA's) Population in 2001

	2001 Population
Regina CMA (includes White City, Pilot Butte, Emerald Park Lumsden and Balgonie)	192,800
Saskatoon CMA (includes Martensville, Dalmeny, Warman and Osler)	225,927
Regina and Saskatoon Total	418,727
Saskatchewan	978,935
Regina, Saskatoon as a % of Province	43%

Source: Statistics Canada, 2001 Census

Table 3: Alberta Corridor Population in 2001

	2001 Population
Census Division Number 6 (includes Calgary, Airdrie, Cochrane and Okotoks)	1,021,060
Census Division Number 8 (includes Red Deer, Lacombe and Ponoka)	153,049
Census Division Number 11 (includes Edmonton, Leduc, St. Albert and Wetaskiwin)	975,477
Total of 3 Census Divisions	2,149,586
Alberta	2,974,807
3 Census Divisions as a % of Province	72%

Source: Statistics Canada, 2001 Census

Table 4: Winnipeg and Surrounding Area Population in 2001

	2001 Population
Portion of Census Division Number 2 (includes Steinbach and Niverville)	45,533
Census Division Number 10 (includes the RMs of Macdonald, Cartier and St. Francois Xavier)	9,464
Census Division Number 11 (includes Winnipeg)	621,451
Census Division Number 12 (includes Beausejour)	19,251
Census Division Number 13 (includes Selkirk)	42,183
Census Division Number 14 (includes Stonewall and Teulon)	17,589
Total of 6 Census Divisions	755,471
Manitoba	1,119,585
6 Census Divisions as a % of Province	67%

Source: Statistics Canada, 2001 Census

Table 5: The Number of Farms, Farm Population and Rural Population in Saskatchewan, 1951 and 2001.

	Number of Farms	Farm Population	Rural Population
1951	112,018	399,473	579,249
2001	50,598	123,385	349,897

Source: Statistics Canada, 1951 and 2001 Census

Table 6: Population in the 18 Largest Communities in Saskatchewan, 1951 and 2001

Community	1951 Pop	2001 Pop	Community	1951 Pop	2001 Pop
Assiniboia	1,938	2,483	Nipawin	3,050	4,275
Estevan	3,935	10,242	N Battleford	7,473	13,692
Humboldt	2,435	5,161	Prince Albert	17,149	34,291
Kindersley	1,755	4,458	Regina	71,319	178,225
Lloydminster (Sask Part)	2,232	7,840	Saskatoon	53,268	196,811
Meadow Lake	1,956	4,582	Swift Current	7,458	14,821
Melfort	2,919	5,559	Tisdale	2,141	3,063
Melville	4,458	4,453	Weyburn	7,148	9,534
Moose Jaw	24,355	32,131	Yorkton	7,074	15,107

Source: Statistics Canada, 1951 and 2001 Census

Table 7: Number of Commuters Commuting into the 18 Largest Communities in Saskatchewan in 2001

Community	Commuters into Community	Community	Commuters into Community
Assiniboia	160	Nipawin	680
Estevan	980	N Battleford	2,025
Humboldt	610	Prince Albert	3,595
Kindersley	445	Regina	7,535
Lloydminster (Sask Part)	605	Saskatoon	10,015
Meadow Lake	1,070	Swift Current	1,220
Melfort	815	Tisdale	625
Melville	535	Weyburn	675
Moose Jaw	1,220	Yorkton	1,225

Source: Statistics Canada, 2001 Census: Commuting to Work, table 97F0015XCB01003

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