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Municipal Infrastructure Planning and Financing

COMMONWEALTH LOCAL GOVERNMENT FORUM



Report of the CLGF roundtable, Vancouver, 3 September 2008

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Preface



Across the Commonwealth citizens expect good quality services to meet their needs and aspirations: basic services such as water, waste collection and disposal, education, health services, electricity, transportation, access to technology. Businesses also demand a high level of good quality services which local councils must provide to attract development and contribute to the growth of the local economy and economic prosperity.

The rapid urbanisation that is taking place in many countries places particular demands on municipal infrastructure development and renewal. Thus there is an ever-increasing demand for more and better infrastructure: for schools, hospitals, roads, airports, telecoms and broadband services, water filtration and supply lines, power generation stations and power distribution lines, waste disposal facilities and many others.

As the sphere of government most concerned with providing the basic services to meet peoples' needs and acting as a community leader and space-shaper for their areas, local councils and municipalities are at the forefront of infrastructure planning and development. In developing countries local authorities are striving to build their infrastructure to provide the key services that will help to reduce poverty and meet the Millennium Development Goals.

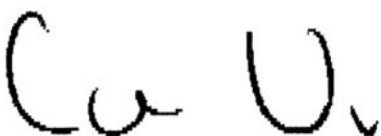
The challenge for all these local authorities is how to finance these infrastructure projects.

CLGF in partnership with Metro Vancouver, the Ministry of Community Development, British Columbia, the Federation of Canadian Municipalities and Infrastructure Canada, agreed to hold a roundtable on municipal infrastructure planning and financing to address this issue. This brought together leaders in the field to look at some of the challenges and issues that local councils face and present examples of best practice. The roundtable event was held in the Morris Wosk Centre, Vancouver. As well as the participants from Canada, ministers and senior local government representatives from Africa, Asia-Pacific, the Caribbean and Europe attended the event to discuss the issues and share knowledge and experience.

It is clear that infrastructure funding is a big challenge for local government. Wherever we are, there are never sufficient funds for all the projects we would like to undertake. This report brings out some of the innovations, themes, ideas and challenges that arose from the presentations and discussion, highlighting some of fiscal tools that are used in different countries of the Commonwealth. We hope that some of these tools will help other municipalities when considering their approaches to funding new infrastructure projects.

The outcomes will be input into the forthcoming Commonwealth Local Government Conference 2009 on *Improving local government: the Commonwealth vision* to be held in Freeport, The Bahamas, in May 2009 and into our ongoing work on local government financing.

CLGF would like to thank our Canadian partners, especially Metro Vancouver, for their support. We would also like to thank the Commonwealth Secretariat for financial support, and consultant Greg Clark for producing a background discussion paper, which informed discussion at the event and has been used in producing this report, along with the presentations and discussion from the event.



Carl Wright, Secretary-General, CLGF

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Introductions by conference partners



"When ministers with responsibility for local government, mayors, local government leaders and councillors face a new challenge or issue, they often turn to their counterparts in other areas, local authorities or countries to see how other people have handled similar situations. Having good networks to enable this is vital. The Commonwealth Local Government Forum (CLGF) provides such a network. CLGF is unique in bringing together all spheres of government through its members which come from ministries, local government associations, municipalities and other local councils, provincial and regional government, professional organisations whose members are local government officers, and academic institutions. One of its key aims is to share experiences and learning.

The roundtable on Municipal Infrastructure Financing and Planning is an example of how CLGF works with its members to share knowledge and ideas around some of the key challenges that we face in local government today. I hope that those who attended the roundtable and who read this report take away new ideas and inspiration to help them in developing their plans and meeting the challenges in their own municipalities. I would also like to thank our Canadian hosts for their tremendous hospitality and contributions to the discussions."

Basil Morrison, Chairperson, CLGF



As local councils we must strive to respond to residents and their needs. We face a constant demand for more and better infrastructure – roads, public transport, water supply, homes and public buildings – so that we can provide effective and sustainable services for our communities. We also have to maintain and update the infrastructure that we already have.

Whatever their stage of development, though some of the challenges and scales may be different, all countries have this need for infrastructure and must find ways of financing it. This forum provided a wonderful opportunity for us to share experiences and learn about different approaches to financing infrastructure projects from different countries and different types of local councils.

I would like to thank our partners in Canada for helping to organise this event, the speakers for their enlightening presentations, and our colleagues from other countries of the Commonwealth who took their time to visit us and attend the event. I hope that everyone found it as useful as we did and that participants were able to take some of the ideas back to their own local authorities to adapt them to their own circumstances.

Lois Jackson, Chair of Metro Vancouver Board of Directors



No single tier of government can do it alone. British Columbia (BC) is proud of its relationships with local and federal government that provide a solid foundation for infrastructure planning. Infrastructure projects are always needed, and the challenge is to plan and prioritise within the resources we have.

We must also be responsive to the needs of our communities and recognise that some are different and some are the same. BC is a leader in creating green, sustainable communities, always taking into account the impact and ecological footprints of projects.

Learning from each other is very important, and I hope that we all took away ideas and examples that can help us in our own situations to improve the lives of the people we represent. The Commonwealth, and in particular CLGF, provides us with an excellent network and opportunity to work together to help us do this.

Hon Blair Lekstrom, Minister of Community Development, BC



Local governments face many challenges. Infrastructure is at or near the top of these for many of us. The growth of urban areas in all countries needs a growth in infrastructure to support this. We must also take account of the social and environmental impact when planning infrastructure developments. Towns and cities are now competing with others on a global scale, and must be able to attract inward investment and a skilled workforce. To maintain competitiveness requires full infrastructure regardless of size. And we must find innovative ways of paying for infrastructure development and introducing new and greener technologies to make our development sustainable.

I would like to thank CLGF and Metro Vancouver for the opportunity to participate in this event and share ideas and learning with colleagues from across the Commonwealth.

Brian Jean MP, Parliamentary Secretary to the Minister of Transport, Infrastructure and Communities, Canada

1 Background: Trends in municipal infrastructure finance

Municipal Infrastructure is a broad term, encompassing everything from buildings, structures, facilities, equipment, rolling stock, furnishings, developments and purchase of land - schools, hospitals, roads, airports, telecoms and broadband services, water filtration and supply lines, power generation stations and power distribution lines, waste disposal facilities. Funding such projects is capital intensive and, with rapid urbanisation and population growth, there is increasing pressure on local and regional governments worldwide in both rapidly growing developing nations and in more developed countries.

Good infrastructure provides social, economic and environmental benefits.

Social – improves quality of people’s lives by providing better services and better access to services, reduce poverty, meet the Millennium Development Goals (MDGs). Without the necessary infrastructure in place, local government cannot provide the services to meet the needs of its citizens and promote economic prosperity, a healthy environment and strong communities.

Economic – allows areas to compete by being attractive places to live and work to encourage inward investment. Good infrastructure helps to attract private sector capital and expertise, reduces costs of production and enhances competitiveness of urban centres, supports domestic and international trade, creates jobs and attracts skilled knowledge workers.

Environmental – not just improving quality of environment but make facilities more environmentally friendly using less energy to combat climate change and reduce costs. Infrastructure can also help tackle other issues such as improving the environment and addressing climate change by improving air quality, ensuring clean drinking water and ground water, decontamination of brownfields in urban areas and promoting redevelopment of a healthier and safer environment with vibrant and liveable communities.

Developing countries need infrastructure to be able to provide basic services to improve people’s quality of life and access to economic activities to reduce poverty and meet the MDGs; developed countries need more infrastructure to meet increasing needs and demands, especially with increasing urbanisation and population growth in towns and cities. The increasing need to be internationally competitive to attract inward investment puts pressure on local authorities to not only deliver essential local services but also to provide the services and infrastructure that will attract skilled labour.

Financing municipal infrastructure

The costs of financing municipal infrastructure are a key concern to municipalities in Canada and throughout the Commonwealth. In recent years there has been a trend towards decentralisation in many Commonwealth countries, with local and regional government taking on more responsibilities for local services, bringing increasing responsibilities to build and maintain infrastructure to support these services. However, the funding to carry out these responsibilities does not always follow and so local

governments often do not have the resource base, or financial instruments and mechanisms, to fund municipal infrastructure projects. This includes the resources to maintain infrastructure as well as to build new facilities.

Local government general revenues are earmarked to fund the day-to-day running of the services for which they are responsible and therefore are not generally available for major infrastructure projects which are usually large scale and run over multiple time periods.

It is difficult for local government to plan and prioritise without knowing what funding will be available. However, the growing gap between infrastructure demands/needs and available funding means that there is an urgent need to address the situation now along with the increasing demand for high environmental standards. Traditionally local government funding has come from transfers from central government and local property taxes but the increasing gap that many authorities experience between their available funds for infrastructure projects against their long-term requirements mean that they have had to adopt more innovative approaches to financing for infrastructure projects.

Financing is a core issue for local government organisations such as the Federation of Canadian Municipalities (FCM) to help members both lobby for funds and share ideas and experience to use new methods of funding.

Some of the approaches that are now being used in by local governments include:

- Transfers from central government through grants and other mechanisms
- Public-private partnerships (PPPs)
- Shared service arrangements
- Structured borrowings e.g. bonds, debentures, long term loans
- User fees, levies and other charges
- Value capture finance and asset backed funds.

There are different geographic trends in the use of these approaches. For example, there are marked contrasts between the financing of municipal networks in North America and those in Europe. In the US the principal source of financing of infrastructure projects is through the use of municipal bonds, whereas in the UK there is a higher reliance on public-private partnerships. Canada has developed new ways of providing transfers from central government through innovative schemes such as the transfer of a percentage of Gas Tax revenues and the establishment of a Green Municipal Fund to stimulate investment in green infrastructure.

Generally local authorities use a mixture of mechanisms for funding. Often the choice of financing tool depends on the type of infrastructure investment. Some countries are also looking at combining financial instruments and infrastructure financing with social costs, for example through charging for waste that is not recycled or congestion charging and other taxes on vehicles.

2 Fiscal tools: Canadian and international innovations

Local government operates in a complex and dynamic environment. The responsibilities and issues that local governments now face often run beyond those traditionally associated with local government requiring a greater degree of forward planning and cooperation with other spheres of government.

Long-term infrastructure planning in Canada: Building Canada

Building Canada was set up by the national government to provide long-term structure and funding, for all levels of government, to plan and build a modern Canada that can compete with the best in the world. It currently provides \$33 billion for funding public infrastructure up to 2014, with more than half of the funding (\$17.6 billion) set aside for transfers to local governments.

Building Canada was the government's response to decreasing infrastructure investments in the 1960s and 70s, ageing infrastructure, economic, environmental and social trends creating pressures for new infrastructure investments along with calls to address the municipal infrastructure 'deficit' or 'gap', estimated variously at \$50-\$125 billion.

Based on targets and objectives of growing the economy, creating a cleaner environment and supporting stronger communities, it provides a suite of flexible programmes and initiatives that balances regional needs with national priorities, supporting infrastructure projects in large and small communities. Funds will focus on national priorities: core national highways; drinking water and wastewater; public transit and green energy.

The funds are administered through strengthened national partnerships between Canada and each province/territory that includes framework agreements that govern implementation, facilitate coordination, and promote accountability through regular reporting on outcomes.

Provinces and territories are partners in setting overall priorities, signing framework and funding agreements, research, funding and program delivery. Municipalities are partners in setting local priorities, funding, research, program delivery, infrastructure project management and community sustainability. Municipal associations are partners in setting regional priorities, delivery of the Gas Tax Fund, and identifying municipal priorities. Other stakeholders are partners in research (eg research on the state of infrastructure through the National Roundtable on Sustainable Infrastructure)

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by John Forster

■ Transfers from central government

In many countries a significant amount of municipal infrastructure is funded through some sort of grants and transfers from central government. These can be conditional or unconditional.

Most Commonwealth countries have some form of grant arrangements or other transfers from central government to help fund some infrastructure developments. In response to shortages in funding to meet new infrastructure needs to respond to the changing social and economic environment, both Canada and Australia have set up national programmes as a framework for planning and funding of infrastructure, with local government involved as a partner in setting priorities and in delivering infrastructure developments. Ghana sets a percentage of its national development funding for transfer to local governments and South Africa has a range of funds for different types of infrastructure investment.

To be able to access government funds and use them most effectively, local governments must plan and set priorities according to their communities needs, with input from the community and other stakeholders. Development of a forward vision for the area can be helpful in enabling this process.

Local government infrastructure funding programmes in British Columbia

In Canada, provinces provide a strategic framework for municipal infrastructure in their region, both through legislation and through plans and programmes. These set standards, provide targets, and identify good management and sustainability practices, such as Climate Change Action Plan.

In British Columbia, for example, legislation has included the Drinking Water Protection Act, Environmental Management Act, Water Act, Health Act and the BC Building Code. There are a number of programmes that set standards and frameworks including: Living Water Smart, Energy efficient building strategy, the Climate Action Plan and Action plan for safe drinking water.

Funding is provided through both federal programmes, administered through the province, and the provinces' own competitive planning and capital grant programmes. Provincial funding programmes focus on supporting good management and sustainability. Upfront capital cost represents only 20 per cent of the full life-cycle infrastructure costs: the remaining 80 per cent of funding is for operation and maintenance.

The province showcases good practice through an award scheme called the Green City Awards.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Glen Brown

2 Fiscal tools: Canadian and international innovations

■ Shared service and governance arrangements

Often greater efficiency and effectiveness can be gained in developing infrastructure projects on a bigger scale than some municipalities can support on their own. Local councils are increasingly creating partnerships for bigger infrastructure projects that can serve all their communities. Generally these are groups of authorities that set up a company to develop and run either a particular service or several services.

In Vancouver the 21 municipalities in the region got together and formed Metro Vancouver to plan for their future needs and find means to access the necessary funds for future infrastructure projects, including acting together to present their needs to the federal and state governments.

■ User fees, levies and supplementary charges

Infrastructure investment can also be raised through user fees, levies, tax increments and supplementary rates. The advantage of such charges is that they recover the cost of infrastructure developments from the people who will directly benefit. For example road tolls, which are used to finance highways, place the burden on the road users rather than the public at large. These tools are not always appropriate for investments that are “lumpy” (i.e. that require large capital inputs in some years and small inputs other years).

London's congestion charge, a fee for driving private vehicles into the centre of the city, is generally regarded as one of the most innovative financing tools. In recent years other cities have followed London's example and implemented various forms of congestion pricing, including Singapore, Orange County in California, and the cities of Trondheim, Oslo, and Bergen in Norway.

The Canadian government has its own innovative approach to raising finance and helping to promote a greener approach through a tax on fuel – the Gas Tax Fund. Canadian municipalities receive a percentage of this tax for investment in local, environmentally sustainable infrastructure.

Metro Vancouver

Like many big cities, Vancouver is expecting an increase in population of one million people by 2013. This will bring its own challenges in infrastructure needs to meet this growing population. Recognising that separate authorities cannot handle this in isolation, the 21 municipalities in the region got together and formed Metro Vancouver to plan for these future needs and find means to access the necessary funds for future infrastructure projects, including presenting their needs to the federal and state governments together.

Thus Translink, the regional transport provider, serves all 21 municipalities and a new water filtration plant now under construction will supply water for the whole city.

Source: Metro Vancouver

The Municipal Finance Authority of British Columbia

Historically, obtaining capital financing under favourable borrowing terms was a challenge for local governments in British Columbia (BC), especially for small, rural or developing municipalities which often had difficulty borrowing and, if they did not have a high credit rating, they were likely to pay very high interest rates.

The Municipal Finance Authority of British Columbia (MFA) was set up in 1970 by local municipalities in BC to address this. It operates much like a credit union, pooling the borrowing needs of regional districts and their member municipalities, and providing a wide range of flexible, low-cost financial services. Its members are the elected officials representing every regional district in BC.

MFA operates under the Municipal Finance Authority Act and has authority to impose property tax to help fund its operations. While created by provincial legislation, the MFA is an independent, local government organisation directed by its members. At its founding, MFA focused on long-term capital financing to its members. Since 1989, the MFA covers not only long and short term capital financing, but also investment management, leasing, interim financing and other financial services to local governments and other public institutions in BC.

Borrowing collectively and pooling the risk across all local governments has helped the MFA achieve AAA credit ratings from key international rating agencies. Because the MFA was created as a local government-owned corporation (it has no provincial representation), the provincial treasury is insulated from liabilities associated with local government borrowing. The MFA has raised over \$5 billion for community capital projects; pooled long-term borrowing needs to negotiate low-interest rates and favourable terms each year; and saved taxpayers millions of dollars in debt repayments due to its high credit rating.

Source: Government of British Columbia. For more information visit: www.mfa.bc.ca.

Structured borrowings - bonds, debentures and long term loans

Borrowing money is one option for municipalities to pay for at least some of the costs of major capital works. The repayment of the borrowed funds generally comes from operating revenues, for example property taxes or user fees. Borrowing funds to finance infrastructure development has the advantage that it allows for immediate benefit from the infrastructure.

It also allows local governments to avoid the large year to year fluctuations which often occur in local taxes. The disadvantage is that the debt charges can impact on other municipal

2 Fiscal tools: Canadian and international innovations

expenditures and constrain local flexibility. Borrowing as a financing option can carry a high risk compared to financing from own revenue and national transfers. Structured borrowings are generally thought to be most appropriate for financing large capital investments or mega projects.

Bond issues have been used by municipalities in the USA for some time. Now countries such as India and South Africa are finding them a useful way to raise funds for major infrastructure investments. South Africa regards municipal bonds as a good instrument for financing large capital projects. The City of Johannesburg and the City of Cape Town have successfully launched bonds totalling R5.7 billion and R1 billion respectively for the development of roads, water and electricity. The City of Johannesburg's first issue was launched at a coupon rate of 11.95 per cent in 2004 and the City of Cape Town's rate was 12.57 per cent in 2008.

In Zimbabwe the cities of Harare and Bulawayo have also raised funds through bond issues. Bulawayo City Council raised \$100 m in 1996 and another \$100m in 1997 from the issue of stocks. This was used for the construction of factory buildings, fire stations, refuse disposal tipping sites, bridges, roads, schools, sewerage and water reticulation among others. Mutare City Council also raised money from its Pungwe water project from in a similar way. Between 1997

Canada's Gas Tax Fund

The Canadian Gas Tax Fund provides stable and predictable funding for municipal infrastructure priorities that contribute to cleaner air, cleaner water and reduced greenhouse gas emissions

The 2007 budget extended the Gas Tax Fund at \$2 billion per year from 2010 to 2014, with a further announcement in 2008 that the GTF was to be made a permanent measure at \$2 billion per year after 2014.

To implement the programme, detailed agreements have been prepared with every province establishing an allocation formula under which allocates the revenues to provinces on a per capita basis. This allocation is shared between the province and its constituent municipalities; different formulae are used by each province to allocate funding to municipalities. In British Columbia and Ontario the local government associations distribute and monitor the funds.

The gas tax transfers are conditional, non-matching funds. The funds have to be spent on environmentally sustainable municipal infrastructure. Municipalities receive a lump sum based on their population. Municipalities can use interest received from investments or borrow against funds.

Five per cent of the fund is earmarked for innovative projects developing new technologies for achieving environmental objectives

Source: *Federation of Canadian Municipalities*

London's Congestion Charge.

London's congestion charge was introduced in February 2003 by the then Mayor Ken Livingstone; the scheme charges a fee for driving private vehicles in the central area of the city. Although initially unpopular with many Londoners, the scheme is now widely perceived to have been a success, and in February 2007 was expanded to the west of the city.

Since the scheme was introduced the number of cars on London's roads has fallen by about 20 per cent while the number of passengers on the city's buses has risen by about two million passengers per day. Simultaneously, the number of bicycle journeys on London's major roads has risen by 83 per cent, to almost half a million a day.

The congestion charge is not only a useful environmental tool, but also provides net revenues, which in the medium to longer term could help to bring forward new infrastructure projects such as:

- expanded underground and rail capacity with new services across central London, and improved orbital rail services
 - schemes to provide improved access to London's many town centres
 - light rail, tram, or high quality segregated bus schemes
 - selected improvements to London's road system.
- The charge has already raised \$240m to be put towards London's transport infrastructure.

Source: *Municipal infrastructure finance trends*, by Greg Clark for CLGF, 2008.

and 2001 Gweru City Council depended on external funding for capital expenditure. \$72m was borrowed from the money markets in 1997/8 derived from the issue of stocks for \$32m and a \$42m loan from the Local Authority Pension Fund.

Tax Increment Financing (TIF) is a specific type of levy which is used as a tool to generate revenues for development in specific geographical areas. TIF allows the city to re-invest all new property tax dollars in the neighbourhood from which they came. These new revenues – also called increments – arise if new development takes place in the TIF district, or if the value of existing properties rises, resulting in higher property tax bills. These funds can be spent on public works' projects or given as subsidies to encourage private development. TIF also makes it much easier for the city to acquire private property and demolish buildings to make way for new construction. The process includes the designation of a TIF district, usually for a fixed number of years, a redevelopment plan for the TIF district, and redevelopment agreements with developers and companies who promise to fulfil some aspect of the plan in exchange for benefits from the TIF fund. Unlike some other programmes, most TIFs do not come with cash up-front.

2 Fiscal tools: Canadian and international innovations

Municipal bonds in Ahmedabad, India

In 1996, Ahmedabad became the first urban authority in India to request and receive a rating for a municipal bond issue for water and sewerage expansion. The capital raised from this bond issue financed Ahmedabad's water and sewerage projects along with Ahmedabad Municipal Corporation's own revenue, funds from USAID's Urban and Environment Guaranty Program and grants from other financial institutions including the Housing and Urban Development Corporation and the Life Insurance Corporation of India.

As a result of this project, Ahmedabad's local government has learned to use bonds as a financial tool to raise investments for capital investment priorities.

Source: *Municipal infrastructure finance trends*, by Greg Clark for CLGF, 2008.



Money is not available until the TIF begins to generate its own tax revenue from rising property values, or a bond is issued to 'front-fund' the TIF. TIF projects do not compete with other citywide projects because they have a dedicated source of revenue to draw on.

Value capture finance and asset-backed funds

Value capture is an innovative type of public financing in which increases in private land values generated by a new public investment are used or captured through a land related tax. The revenue produced is used for that investment or other public projects. For example transportation projects can increase the value of adjacent land, and thus generate a windfall for private landowners.

Local government can capture a portion of that windfall in a number of different ways: the authority could buy privately held land near transportation hubs that is zoned for low-density use, increase the designated use density, then sell the land back to private developers, capturing the capital gain resulting from both the increase in designated use density and the presence of the transportation hub.

Similarly, public assets can be used to generate investment capital, through offering the public asset as the municipal contribution towards a joint venture with other capital investors to finance infrastructure development. This carries a certain amount of risk but can be an effective way of attracting investment when there are assets but no cash available.

Private capital through the Infrastructure Finance Corporation Limited for municipalities in Southern Africa

INCA is an infrastructure debt fund in South Africa that is 100 per cent privately owned and operated. It was established following a call by the South African government for increased private sector involvement in infrastructure funding. It draws on local and international market funds, raised through a series of INCA bond issues and long-term loans. Shareholder capital is another source of funding. It also has a commitment to have funding available from the issue of Junior Bonds in the future.

INCA's borrowers include municipalities, water boards and other statutory institutions to establish social and economic infrastructure in South Africa. Funding has mainly been in the form of long-term fixed interest rate loans. INCA's loans vary between five to thirteen years, depending on the repayment profile of the funds that INCA has itself raised on the local and international capital markets. Normally INCA would have a number of different sources of funding available, and the most suitable option would be offered to the borrower.

Typical long-term funds available on the capital markets require six-monthly interest payment with a bullet capital repayment. INCA loans can also be amortized (regular payments that pay off both interest and principal sufficient to pay off a loan by maturity). INCA also assists local authorities with long-term financial planning, and has a forecasting model to assist municipalities to calculate maximum levels of affordable borrowing.

Source: *Municipal infrastructure finance trends*, by Greg Clark for CLGF, 2008.

3 Public private partnerships

“Public private partnerships are not a panacea for all infrastructure issues and there are some important considerations to take into account” Sue-Ann Fimrite

“There has to be competition in the market and there must be a good procurement process that has been tested”

Public-private partnerships (often known as PPPs or P3s) are a means for the public sector to engage with the private sector in business ventures which are funded and operated through a partnership of government and one or more private sector companies. The key feature is that the financial risk is shared, with the private sector taking on a substantial part of the financial, technical and operational risk of the project.

Public private partnerships have become a popular means for funding municipal infrastructure projects in Canada as in many other countries. British Columbia is seen as a leader in P3s, but many other provinces are also beginning to use this approach for certain projects. The Canadian government's 2008 budget announced the creation of PPP Canada Inc. to work with the public and private sectors to encourage development of Canada's P3 market and deliver federal P3 projects.

In the UK PPPs have been widely used by local authorities since the 80s, but political leadership and experience has changed the way in which they operate. PPPs were used initially to increase the involvement and influence of the private sector in providing local services. This has now been replaced by the Private Finance Initiative which has increased investment in municipal infrastructure projects to £25billion.

In contrast, Australia sees only limited scope for conventional PPPs with the private sector at local level because of the relatively small scale of local government activities and the problems of expertise in the management of such projects. However wider partnerships, involving community effort and other organisations are important.

There are different models in terms of how PPPs are set up and operated. In some types of PPP, the public sector uses revenue to provide investment capital, with operations run jointly with the private sector. In other types, capital investment is made by the private sector on the strength of a contract to provide agreed services. Public sector contributions to a PPP need not only be capital funding but may be the contribution of existing assets, such as land or buildings, or other contributions in kind.

In municipal infrastructure PPPs it is common for the local government to provide a capital subsidy in the form of a one-off grant to make the project more attractive to private sector investors. Other support may be given by providing tax breaks or guaranteeing user fees or levies for a set period. Contributions may also be in kind through the transfer of assets.

There are a number of challenges to operating PPPs or deciding whether a project is suitable for a PPP:

- There must be competition in the market
- Projects should be market-tested to ensure that they are viable
- The procurement process must be sound.

Smaller rural municipalities and municipalities in developing countries may face additional challenges and restrictions, such as a high turnover of elected councillors, or a lack of suppliers with the experience and expertise. In some cases the not-for-profit sector or community organisations may be more appropriate to involve in a particular project.

PPPs are not suitable in all circumstances. Partnerships BC recommend that PPP procurement must link to project objectives and should be considered if a project requires:

- Performance-based contract
- Effective risk allocation (cost, schedule, maintenance)
- Guaranteed lifecycle investment, and
- Smooth and predictable payment stream.

PPPs are now widely used in developing countries as well as more developed ones. South Africa is using PPPs to increase infrastructure for water supply, improve facilities such as roads and public transport and create infrastructure such as airports and ports. However, it has been difficult to get sufficient interest from the private sector in some areas and this has resulted in less competition for private sector involvement and variable results on the performance of the PPPs.

Countries that do have considerable experience of public private partnerships are clear that PPPs are not always the answer. While partnership working has now come of age, PPPs are not right for every situation so, as with other mechanisms, it is important to evaluate what is needed and find the most appropriate solution for a particular project.

3 Public private partnerships

Partnerships BC

Partnerships BC was created in 2002 by the province of British Columbia to evaluate, structure, and implement PPPs. By bringing this together under one umbrella, this has created a centre of expertise that can provide consistency in infrastructure planning and has helped to develop the partnership market.

The result has been that it has been able to ensure consistency, stability, efficiency, track record of value for taxpayers' dollars in terms of PPPs.

Partnerships BC is wholly owned by the British Columbia Ministry of Finance. Its role is:

- to review business plan on behalf of sponsoring ministry
- to participate in project governance of PPP projects
- to lever best-practices in project delivery.

PBC uses Procurement Assessment Criteria (screening criteria) to assess whether a PPP model is likely to deliver value for money. This comprises

- Early Project Assessment (applied early in planning stages)
- Developing a business cases
- Reviewing business cases developed by others.

Assessment criteria includes:

- public interest
- legal and legislative
- if the service and programme delivery meets service requirements
- design, construction and operation
- what opportunities there are for innovation and risk transfer
- market competition and transparency
- financial costs and benefits
- the project's management and operational capacity

So far projects have come in on budget and on time resulting in the centre winning 17 provincial, national and international project awards

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentations by Sue-Ann Fimrite and Jonathan Huggett

DBSA – a broker for South Africa's municipal PPPs

The first municipal PPPs in South Africa started in 1999. By 2007 the total of all municipal PPPs stood at R1.5 bn covering projects to improve water supply, roads and public transportation.

The DBSA was set up as a Private Project Finance Unit in 1996. From 2000-2007 it hosted the Municipal Infrastructure Investment Unit (MIIU), a joint USAID, DFID and South Africa funded project that manages funding for setting up municipal infrastructure partnership projects. MIIU's fund provides resources for local governments to carry out feasibility studies, develop project specifications and contract negotiations.

The DBSA association with PPPs started 10 yrs ago. Its role is to advise the public body involved, facilitate private sector involvement, and provide equity funding for black economic empowerment (BEE).

South African municipal PPPs are governed by tight regulatory frameworks and therefore complex to operate. While there have been some notable successes – the Nelspruit water concession has given 75,000 households connection to the water supply and access to portable water – the use of PPPs has had mixed success and presented some difficulties:

- private sector interest has been low, with the private sector proportion of the investment low and a reluctance to get involved in sectors such as health;
- there has not emerged sufficient competition, and bidders are becoming fewer
- litigation is becoming widespread with challenges to bidding processes and other legal challenges
- the quality and efficiency of services is not always evident
- communities are not convinced.

Cost overruns are also becoming common, with tariffs well above the inflation rate. However, involvement of the private sector has provided a bonus in the form of skills transfer that has assisted BEE.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Landiwe Mahlangu

4 Infrastructure planning for local economic development

“Cities learn by copying one another. When a mayor is faced with solid waste management or scavengers or too much traffic he phones up another mayor and he says ‘What did you guys do?’ or he or she goes to a conference like this and hears people telling stories.”

Nola-Kate Seymoar, ICSC

In many countries local government has a key role in economic development to create conditions that are conducive to economic growth and facilitate the overall development and prosperity in their locality. Economic development is not an add-on, and needs to be part of the long-term planning of an area, part of an integrated approach to sustainability through social, economic and environmental development.

Good infrastructure is a key tool for economic development. Providing the basic services to meet the MDGs requires infrastructure – schools, hospitals and clinics, water and sewage treatment plants, and other essential services. Cities and municipalities are increasingly operating in a competitive global market and have to respond to global economic trends. In the current economic climate, spending on infrastructure can help to provide an economic stimulus by

Uganda’s local authority plans feature economic development

In Uganda local economic development is a key component of the three-year rolling development plans that local authorities must prepare. The development plans are community-driven, starting at village level. As part of the decentralisation strategy, local authorities are responsible for safe water supply, construction of education and health facilities and roads, sanitation and energy. Improvements in infrastructure such as electricity supply, roads, building of industrial and commercial parks, physical improvements to urban areas to make them more attractive to investors, are needed for the private sector and others to undertake economic activity. Financing is a big challenge. Now that improvements have been made to raising and collecting local taxes, fees and charges that have resulted in a gradual increase in revenue, local governments are now exploring other ways of raising finances for infrastructure projects including municipal bonds.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Hon Hope Mwesigye MP

Integrated Communities Sustainability model – a umbrella planning model for infrastructure and community sustainability

When the International Centre for Sustainable Cities (ICSC) was invited to produce a 100-year vision for a competition in Japan, they did not realize the impact that their work would have. Spending 18 months developing a vision of what the region could look like in 100 years has led to a totally different way of looking at long-term planning. Changing the timeframe has helped people better understand the concept of sustainability. Now the terminology used is 100 year vision, 30 year strategy and 1-5 year implementation plan. While the project team found that going out that far is very difficult, developing a vision so far out has led to a different way of planning. Looking ahead helps set a direction that enables future challenges to be anticipated and planned for. This has been more successful than forecasting from current trends where often mistakes are repeated and the same project solutions are produced to the same problems.

After winning the competition, there was a great interest in the ideas that had been developed and these ideas became part of the region’s Sustainable Region Initiative (SRI).

CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Nola-Kate Seymoar

providing jobs as well as new economic activity. US President Obama has proposed an economic stimulus package with a public investment programme to fix roads, bridges and schools and build broadband access and healthcare IT as part of the US response to the economic downturn and increasing unemployment.

In developing countries focus on economic development and poverty reduction is often through community action and infrastructure, often around micro enterprises and tourism. In some countries, such as Canada, municipalities and cities are increasingly working together at a regional level to plan longer-term strategies for development.

Canada, through the International Centre for Sustainable Cities (ICSC), a not for profit organisation representing public sector, private sector and civil society, has helped to set up a network of cities around the world interested in long-term sustainable development – dealing with social and environmental needs together. The network involves cities that are different sizes and represent differing development patterns and cultural histories. These cities come together and share their lessons and resources as peers. Often a city of one size will learn from a city of a different size.

5 Promoting green infrastructure and green technologies

Local authorities are very aware of the affects of climate change as they are often at the forefront of dealing with the consequences of a changing climate. Extreme weather events such as floods, hurricanes and other natural disasters have far-reaching social, agricultural, economic and environmental impact. Such events can have a huge impact on local authority finances, both short-term revenue and longer-term capital funding to rebuild infrastructure.

Addressing climate change means different things to different municipalities. Thus municipalities are developing a range of strategies to bring a greener approach to infrastructure developments. Many local governments are developing policies to reduce carbon emissions to help tackle climate change, and exploring ways in which new infrastructure can incorporate greener technologies and providing resources to promote greener approaches. These approaches produce not just environmental benefits but also economic and social benefits, such as lower energy cost, and other financial savings. These lower-cost less capital intensive solutions can often better meet the needs of small and rural communities, and of municipalities in less developed countries.

Central and local governments are using a number of means to ensure new infrastructure projects help to tackle rather than contribute to climate change:

- Legislation is increasingly playing a role in local authorities adopting greener approaches to infrastructure. While the commitment of local authorities is important legislation can also help by empowering councils to look at more sustainable solutions and greener technologies, and by placing a duty on local governments to do so.
- Funding mechanisms can be used to ensure that sustainability principles are met in new projects.
- The application of new technologies to produce sustainable solutions.
- Involving the community - engaging with the community to create solutions.

The big challenge for local authorities is to bring about a culture change in the way people behave. Simon Baker described 'three pillars' of sustainability for local authorities: environmental, social and economic

- Environment - issues such as recycling; environmental impact and waste management
- Social - issues including behaviour, equalities, personnel development, and cultural change
- Economy - issues around procurement, labour supply and social inclusion.

Some countries are levying specific taxes on items that contribute to climate change. The money from this may be earmarked for specific sustainable projects. Examples are Canada's gas tax fund and London's congestion charge (see page 6).

Canada has strategies to tackle climate change at federal, provincial and local level with a number of agreements and initiatives in place to encourage inter-governmental working to common targets and goals.

In New Zealand the national government took a lead to try to become the first carbon neutral nation with local governments a key part of delivering this. The 2002 Local Government Act put more emphasis on long-term planning, community

Climate Action Charter: working together for cleaner, greener communities

The Union of BC Municipalities (UBCM represents all 189 local governments of British Columbia, serving their collective interests. It works closely with the provincial government of BC which recognises that provincial targets can only be achieved by working with local governments

One of their common commitments is to address climate change and support the development of green communities. In 2007 the Province of BC, UBCM and local governments enacted a Climate Action Charter which aims for the province to be carbon neutral by 2010 by developing projects to reduce and offset greenhouse gases. So far 130 of the 189 local governments in the province have signed up to the charter to become more energy efficient and carbon neutral and implement the charter in any new development.

In addition to the environmental benefits (reducing GHGs and consumption of natural resources) the local authorities have also found economic and health and safety benefits including:

- Significant energy savings which reduce operating costs
- Optimised life cycle economic performance
- New jobs and businesses
- Reduction in health care costs
- Improved air quality creating a healthy workplace.

To oversee the implementation of the Charter a joint Provincial-UBCM Green Communities Committee has been set up and community working groups to ensure the involvement of the community.

Some of the green initiatives developed include working to a nationally-accepted benchmark for the design, construction and operation of high performance green buildings, smart cars, electric vehicles, bio-diesel, wind power, and 5MW wave power plant in west of Vancouver Island.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Susan Gimse

5 Promoting green infrastructure and green technologies

consultation and councils moving away from being just service providers to promoting the economic, social and environmental well-being of their areas. Councils are therefore in a stronger position to develop local and regional models of sustainable development in line with their own priorities and the priorities of their communities. A central-local forum allows ministers and mayors to meet to discuss priorities and issues.

In the UK some solutions arise from local needs, others from central government guidelines and legislation. There are a range of initiatives in place to encourage 'green' approaches, including:

- National legislation - the UK Climate Change Bill was the first piece of climate change legislation in the world which places a duty on local authorities to minimise waste and carbon emissions to achieve EU targets of zero waste to landfill by 2020. Recently introduced legislation allows local authorities to charge for refuse that is not recycled
- Investment in renewable energy with targets to reduce CO2 emissions
- Reducing waste to landfill through recycling – local authorities at the forefront of this
- Proposed changes to the planning framework.
- The Nottingham Declaration, a voluntary commitment to develop local strategies for addressing climate change, to which over 340 UK councils have so far signed up.

Energy efficiency helps combat fuel poverty in Leeds

Leeds Council, a large city council in north of England, has developed a Fuelsavers programme to improve the energy efficiency of council housing thereby reducing fuel poverty and CO2 emissions. The scheme provides checks on heating devices, and grants for improvement and upgrades. Since it started in 1996 it has improved energy efficiency by more than 21%.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing presentation by Simon Baker

Infrastructure funding strategies to address climate change in BC

British Columbia is a large province, with different kinds of municipalities. With its diverse climate, geology and ecology, water provision and use is a major issue, along with addressing climate change. The BC Climate Action Plan, passed by legislation, guides developments and sets targets for a 33 per cent reduction in greenhouse gas emissions by 2020 and at least 80 per cent reduction (from 2007 levels) by 2050. It also commits the province to making public services carbon neutral by 2010 and to work with local authorities through the Climate Action Charter.

Addressing climate change means different things to different municipalities. A range of strategies and tools have been developed to bring a greener approach to infrastructure developments. These include:

Living Water Smart – this aims to make water use in BC 33% more efficient by 2020, with half of new municipal water needs acquired through conservation, and to introduce new approaches to water management to address the impacts from a changing water cycle, increased drought risk, and other impacts on water caused by climate change.

Energy efficient buildings strategy Action Plan for Safer Drinking Water, Live Smart BC. The province's funding programs take into account these provincial strategies, and supports applications/projects that best meet its program goals and objectives.

The province is also developing ways to help build the capacity of local authorities and others to develop a greener approach by providing tools and resources such as:

- Water balance model
- Water conservation calculator and toolkit
- Smart Planning for Communities initiative
- BC Asset Management Strategy and Working Group

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing, presentation by Glen Brown

5 Promoting green infrastructure and green technologies

Metro Vancouver's Seymour-Capilano Water Filtration Plant

Participants in the round table were able to see sustainable design and construction in practice at the Metro Vancouver Capilano Water Filtration Plant, currently under construction.

Metro Vancouver has been planning for improved drinking water quality since the 1980s, resulting in the region's Drinking Water Treatment Programme with the Seymour-Capilano Filtration Plant, the largest in Canada, as the showcase using the latest water treatment advances. The filtration plant contains the largest capacity UV disinfection works in the world and is designed to meet an expected population increase of 800,000 people over the next 20 years. It will treat 1.8 billion litres of water per day. The water sources are the Seymour and Capilano watersheds on the periphery of the City of Vancouver.

The new filtration plant uses leading edge building standards in an on-the-ground demonstration of sustainable construction practices. Best practices range from recycling construction materials and using green roof technologies to using ground source energy to heat and cool the facility.



The Merton rule

The London Borough of Merton in south-west London is regarded as a leader in green solutions. It was the first local authority in the UK with targets for specific reductions in carbon emissions - the reduction of CO2 emissions by at least 10% - and requires non-residential developments to generate at least 10% of energy needs from renewable sources.

The 'Merton Rule' has now been extended as a guiding rule throughout UK local government and there are plans to extend this to residential properties.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing presentation by Simon Baker

Capilano Water Filtration Plant

5 Promoting green infrastructure and green technologies

UK's carbon challenge

The development of green approaches is a big issue for UK local authorities. There is a firm commitment in the UK to create sustainable solutions and to conserve energy, as well as protecting against climate change.

Sustainability is at the heart of the British approach to new developments. Some solutions arise from local needs, others from central government guidelines and legislation.

There are a number of incentives to encourage investment in renewables such as a £100bn renewable energy fund and the 'carbon challenge' – working with developers to make new buildings carbon neutral and assessing the environmental impact of developments.

Source: CLGF roundtable on Municipal Infrastructure Planning and Financing presentation by Simon Baker

Green Municipal Funds: Federal Endowment Fund through the Federation of Canadian Municipalities

The Green Municipal Fund (GMF) was established in 2000 to stimulate investment in innovative municipal infrastructure projects and feasibility studies to improve air, water, and soil quality, to reduce greenhouse gas emissions, and more recently, to finance brownfield remediation. The GMF provides low-interest loans and grants (using a competitive process), builds capacity, and shares knowledge to support municipal governments and their partners in developing communities that are more environmentally, socially, and economically sustainable.

When the GMF was first established, the Government of Canada endowed the Federation of Canadian Municipalities (FCM) with CDN \$125-million. This amount was doubled in 2001/02 to CDN \$250 million, and increased again in 2005 by CDN \$300 million. The current endowment of CDN \$550 million provides long-term funding for municipal governments and their partners.

FCM annually commits between CDN \$65 million and CDN \$90 million in grants and low-interest loans to leading examples of sustainable community plans, feasibility studies, field tests, and capital projects. GMF funding is complemented by a capacity building program which shares the knowledge and experience gained by municipal leaders through GMF-funded initiatives. Knowledge is shared through events and products, including workshops, articles, reports, and an electronic newsletter. GMF projects are profiled in case studies to enable all communities to benefit from the lessons learned through these initiatives. In this way, the funding has advantages for all communities even those that do not receive direct funding.

GMF is governed by the FCM Board of Directors which is advised by a 15-member GMF Council. Five members of the Council represent, and are appointed by, the Government of Canada; the remaining ten are appointed by FCM. Of these ten, five represent the FCM Board of Directors and five represent private industry.

There are two aspects to the GMF that are innovative in the Canadian context. First, although this is a federal government initiative, the Federation of Canadian Municipalities' Board of Directors approves project funding. The more common occurrence in Canada is for federal funding to be channelled through the provinces. Second, the use of an endowment approach to generate annual income is unique among federal and provincial/territorial grants. Federal funding does not generally take the form of an endowment but rather requires hundreds of millions of dollars of funding every year.

GMF is a conditional, non-matching transfer that has to be spent on innovative municipal infrastructure projects and studies to improve the environment. This transfer can be justified on the basis of externalities because the benefits of air, water, and soil quality, for example, cross over municipal boundaries. There are also spillover benefits from the case studies and tools provided to municipalities. The funds are not matching, however, as would be appropriate for a transfer to address spillovers. Although the funding for any individual municipality is based on an application and is therefore less predictable than funding that applies to all municipalities, the overall level of funding is stable and predictable because of the existence of the endowment.

Source: Federation of Canadian Municipalities

6 Overview in selected Commonwealth countries

■ Australia

The seven states of Australia each have slightly different systems of local government and therefore have varying rules on local government borrowing and capital financing. The sizes of local authorities vary significantly covering from a few square kilometers to tens of thousands and populations of 200 to one million.

Local government spending generally makes up about 2.5% of GDP, and is largely self-funding (83%). Most local governments have significant infrastructure responsibilities including roads, water and sewerage (in three states), drainage, community facilities, and environmental assets.

The backlog for funding infrastructure is estimated to be over \$10bn nationally in existing infrastructure renewal with a further shortfall of up to \$2bn pa for maintenance.

Government transfers and grants make up a significant part of local government infrastructure funding. Other sources of infrastructure funding include structured borrowing, levies and supplementary rates, PPS and planning gain.

Federal grants for 2008-09 comprise

■ General Purpose	\$1.3 bn
■ Roads component	\$0.57bn
■ Roads to Recovery (R2R)	\$0.4bn

The general purpose and roads component are transferred to local authorities via State Grants Commissions, R2R is paid direct. As part of the current drive to improve infrastructure, there is currently an inquiry into developing a proposed Better Regions and Community Infrastructure programmes.

Increased borrowings are essential for infrastructure investment

- Importance of maintaining/increasing local revenue base
- Property taxes will have to rise

Nationally, recognising the need for major investment to improve the country's infrastructure, the federal government is proposing a \$20bn 'Building Australia' fund. A new federal advisory body has been set up to oversee this. Of the 12 members one represents local government. The task of the unit is to identify critical issues and find innovative solutions. Following an audit of needs in 2008, the unit will identify a priority list and look at the need for regulatory reforms. Though many of the are likely to be big projects, the unit does have a cities component and there will be a small component of funding for local government.

(Source: presentation by Graham Sansom)

■ Canada

As in the case of Australia, local government differs between provinces and there are therefore a wide variety of fiscal tools for raising revenue for municipal infrastructure development. These include grants, user fees, borrowings, bonds and development charges which are increasingly being used in larger municipalities.

A unique source of funding for infrastructure development is the portion of the federal Gas Tax which local authorities receive for investment in local infrastructure. This funding is made available on a per capita basis for environmentally sustainable infrastructure projects.

Local municipalities also receive a rebate on the federal goods and services tax which municipalities can invest as they see fit.

In response to ageing infrastructure and greater demands but decreasing infrastructure investments in the 1960s and 70s, the Canadian government drew up a long-term infrastructure investment programme called Building Canada to provides long-term structure and funding for all levels of government to plan and build a modern Canada. It has allocated \$33 billion for funding public infrastructure up to 2014, with more than half of the funding (\$17.6 billion) for transfers to local governments for their infrastructure needs to address the municipal infrastructure 'gap', estimated variously at \$50-\$125 billion.

■ Ghana

Ghana has approached the issue of funding by earmarking a proportion of national development funds to local authorities through the District Assemblies Common Fund (DACF). This fund guarantees at least five per cent of the national budget is distributed to the district assemblies (local governments) for development and was recently increased to 7.5 per cent. Distribution of the funds among the assemblies is governed by a formula which is approved by parliament each year.

As well as funding through the DACF, some funds are also available from land and mineral royalties and levies and taxes. However there is still a gap in funding to meet the growing demands for infrastructure as part of the long-term planning to reduce poverty and meet the Millennium Development Goals.

Increasingly the funds are becoming performance-based, with those authorities who perform well getting better access to funds in the future. A new Finance Bill is currently going through parliament that will allow more flexibility for assemblies to borrow or raise funds through bonds for bigger infrastructure projects.

(Source: presentation by Hon Kwadwo Adjei-Darko)

6 Overview of municipal infrastructure financing in selected Commonwealth countries

■ New Zealand

Local governments in New Zealand have an increasingly broader role in promoting the economic, social and environmental well-being of their areas and have a responsibility to produce long-term community plans.

The main sources of capital for local government infrastructure developments in New Zealand are grants from central government, property rates, user charges, fees, fuel taxes, and returns on investments. Since 1988 local authorities have had rating and charging powers that have become an important source of local tax revenue. PPPs are also widely used.

■ South Africa

The constitution of the Republic of South Africa, Act 108 of 1996, identifies local government as a distinct sphere of government. Local government's economic role is to create conditions that are conducive to economic growth and facilitate overall development.

Municipalities face the challenge of ensuring a balance between the need to develop new infrastructure where none exists and the need for proper maintenance of the infrastructure that is in place.

Local governments therefore must find innovative ways to finance local investments – and ensure that any borrowing used for this is not diverted to fund day-to-day budget deficits.

A variety of funding tools have been considered and implemented including grants from central government, charging, issuing of bonds and borrowing.

Conditional grants from central government. There are a variety of these grants covering infrastructure building and maintenance, improvements to public transport, Neighbourhood Development Grant (a tax incentive to property owners for investing in a specific neighbourhood or precinct), water and sanitation infrastructure and specific grants for improvements to schools and clinics (such as water, sanitation and electricity). The national transfer to local government for infrastructure is R20.6 (approx \$2 billion) for the 2008 Medium Term Expenditure Framework.

Development charges. A municipality may enter into an agreement with property owners or developers that allows it to recoup some of the cost of infrastructure development from the individual property owners who will benefit directly from the infrastructure.

Municipal bonds. Municipal Bonds are an ideal instrument for financing large capital projects. The tenure of bonds can go up to 30 years and the municipality is able to negotiate the interest rate payments. For a successful bond issue, a municipality must have a good revenue collection and revenue growth rate, as this serves as an indicator of the ability of a municipality to meet its bond repayment obligations.

Borrowing. Municipalities have a number of different financing options available:

- public sector borrowing through the Development Bank of Southern Africa (DBSA),
- borrowing from the private sector through banks, and
- the Infrastructure Finance Corporation and other financial institutions.

Lenders may offer different forms of instruments such as short and long term loans and other structured debts. The selecting an appropriate debt type involves looking at the tenure, how the capital and interest rates are to be financed and any credit enhancement required.

(Source: CLGF roundtable on Municipal Infrastructure Planning and Financing presentation presentation by Mayor Masondo)

■ India

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) is India's response to problems of financing urban infrastructure which tries to address the problem of suppliers of capital being largely wary of changing their traditional lending methods.

Launched in 2005-06, the JNNURM is a partnership between the centre, states and cities. Through adjusting the existing system of laws, rules and procedures to contemporary urban needs, it aims to augment the revenue stream of municipalities to encourage the suppliers of capital to change their ways of financing urban infrastructure.

In 2001, 285.35 million people were living in urban areas of India, approximately 28 per cent of the total population and it is estimated that this may increase to about 40 per cent of the total population by 2020-21. Thus, there are ever increasing demands to improving the urban infrastructure to provide basic civic services like water supply, sewerage, solid waste management and urban transport. Municipal institutions responsible for providing these civic services are facing acute shortage of capacity and resource.

The JNNURM was set up to encourage cities to bring about improvement in the existing civic services levels in a sustainable manner. One of the components of the JNNURM is Urban Infrastructure and Governance which includes urban renewal, water supply (including desalination plants), sanitation, sewerage and solid waste management, urban transport, development of heritage areas, preservation of water bodies, etc.

The JNNURM will support 63 cities in total. A provision of Rs. 50,000 crore (a crore is 10 million) (\$6.4 billion) has been made for central government assistance for the entire JNNURM for a seven-year period starting in 2005-06. The State Governments and urban local bodies (ULB) are also providing a corresponding amount of Rs. 50,000 crore. Funding is coordinated by the Ministry of Urban Development (MOUD) through a Mission Directorate.

Funding support for infrastructure is linked to reforms and cities must agree MoAs with the MOUD to implement urban reforms in order to access the JNNURM funds

6 Overview of municipal infrastructure financing in selected Commonwealth countries

Since the start of the JNNURM, a number of benefits are evident. There is now a better appreciation at the state level of the importance of developing and sustaining the infrastructure through appropriate user charges. Efforts are made to ensure public-private participation are used where appropriate. Many states and ULBs have also started meeting their timelines on the implementation of the reforms as this is directly linked to the approval and release of the central grant.

The need to strengthen capacity building through experience sharing has been recognised and a Peer Experience and Reflective Learning (PEARL) programme has been launched. The objective of the PEARL programme is to create networks between JNNURM cities for cross learning and knowledge sharing on urban reforms and city governance so that the objectives of the mission are successfully achieved to make cities more livable, economically vibrant and environmentally sustainable.

However, the resource gap remains large and ongoing programmes of both the central and state governments may not be adequate. In addition, therefore, the Government has created the Pooled Finance Development Fund (PFDF) to provide credit enhancement to urban local bodies to access market borrowings based on their creditworthiness through a state-level pooled finance mechanism. PFDF will ensure availability of resources to urban local bodies to improve urban infrastructure, service delivery and ultimately to self-sustainability.

The City Development Plans (CDP) submitted for the 63 mission cities show that urban transport makes up 51% of investment, water supply 14%, sewerage 13% per cent, drainage 8% and solid waste management 3%.

For small towns the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), was launched in December 2005 for a period of seven years with the same objective and to provide financial assistance/grants for urban infrastructure development activities to the cities/towns not covered under JNNURM.

Source: Anuya Kuwar, CLGF Project Officer, India

■ United Kingdom

Local councils in the UK also use a mixture of funding tools. However, there is much greater reliance on PPPs rather than borrowing or bonds. The UK government recently announced plans to scrap plans to introduce a planning gain supplement, but instead is considering proposals to give local councils the powers to levy charges on developments to help improve nearby infrastructure.

Councils are also looking at introducing levies or other charges that can bring in extra revenue to support new infrastructure development. London's congestion charge has helped to bring in new revenues and reduce traffic in the capital; other cities in England are now considering introducing similar charges.

Appendix 1 Programme

3 September 2008

Opening Session: International roundtable on municipal infrastructure planning and financing: programme

Moderator: Lois E Jackson, Chair, Metro Vancouver Board of Directors *Traditional Welcome by Robert Howard Baker, Elder, Squamish Nation*

Opening remarks by:

- Basil Morrison, Chairperson, CLGF
- Cllr Kim Capril, Deputy Mayor, City of Vancouver
- Berry Vrbanovic, Vice-President, FCM

Welcome addresses:

- Hon Blair Lekstrom, Minister of Community Development, British Columbia
- Brian Jean MP, Parliamentary Secretary to Minister of Transport, Infrastructure and Communities, Canada

Session 1: Infrastructure funding for local governments and fiscal tools: domestic and international innovations

Moderator: Berry Vrbanovic, Vice-President, FCM

Presentations by:

- John Forster, Assistant Deputy Minister, Infrastructure Canada
- Glen Brown, Assistant Director, Infrastructure and Engineering Branch, Ministry of Community Development, BC
- Graham Sansom, Director, Centre for Local Government, University of Technology, Sydney
- Mayor Amos Masondo, Mayor of Johannesburg and President, South African Local Government Association

Response by:

- Mayor Don Maclean, City of Pitt Meadows and, Metro Vancouver Director

Discussion

Session 2: Public- private partnerships: New models of municipal financing

Moderator: John Forster, Assistant Deputy Minister, Infrastructure Canada

Presentations by:

- Sue-Ann Fimrite and Johnathan Huggett, Partnerships BC
- Cllr David Wilcox, Local Government Association, England and Wales
- Landiwe Mahlangu, Development Bank of Southern Africa

Discussion

Session 3: Infrastructure financing: planning for local economic development

Moderator: Dale Wall, Deputy Minister of Community Development, British Columbia

Presentations by:

- Nola-Kate Seymoar, President and CEO, and Jane McRae, Director, International Centre for Sustainable Cities
- Hon Hope Mwesigye, Minister of State for Local Government, Uganda
- Hon Kwadwo Adjei-Darko, Minister of Local Government, Rural Development and Environment, Ghana

Discussion

Session 4: Cleaner environment and climate change: promoting green infrastructure and green technologies

Moderator: Hon Dr James Burty-David, Minister for Local Government, Mauritius and vice-chairperson, CLGF

Presentations by:

- Susan Gimze, President of the Union of British Columbia Municipalities
- Glen Brown, Director, Infrastructure and Engineering, Ministry of Community Development, British Columbia
- Hon Nanaia Mahuta, Minister of Local Government, New Zealand
- Simon Baker, Chief Executive, Staffordshire Moorlands DC and High Peak BC, SOLACE Representative and Treasurer of CLGF

Closing remarks

- Carl Wright, Secretary-General, CLGF
- Lois E Jackson, Chair, Metro Vancouver Board of Directors

Appendix 2 List of participants

Australia

Michael Kinnane, Director-General, Director of Local Government, Sports and Recreation, Queensland

Bahamas

Cllr April Crowther-Gow, President, Caribbean Association of Local Government Authorities

Cllr Philip McPhee, South Eluthera District Council and President, Bahamas Association of Local Authorities

Cllr Joanna Newton-Russell, Deputy Chief Councillor, Freeport City Council

Senator Katherine Smith, Office of the Prime Minister

Lady Naomi Wallace Whitfield, Office Manager, Office of the Prime Minister

Alexander Williams, Chief Administrator, Grand Bahama

Hon Byran Woodside, Minister of State for Local Government

Cameroon

Hon Emmanuel Edou, Minister Delegate for Territorial Administration and Decentralisation

Canada

Robert Howard Baker, Elder, Squamish Nation

Bill Barnatt, Chief Administrative Officer, Resort Municipality of Whistler

Thomas Beard, Assistant Director, Municipal and Community Affairs, Northwest Territories

Jean-Paul Beaulieu, Deputy Minister, Ministry of Municipal Affairs and the Regions, Quebec

Glen Brown, Assistant Director, Infrastructure and Engineering, Ministry of Community Development, British Columbia

Cllr Kim Capri, Acting Deputy Mayor, City of Vancouver and Director of Metro Vancouver

Johnny Carline, Chief Administrative Officer, Metro Vancouver

Francis Cheung, Chief Administrative Officer, City of Langley

Marylyn Chiang, Policy Analyst, Union of BC Municipalities

Cllr Derek Corrigan, Mayor of City of Barnaby and Director of Metro Vancouver

Simon Cumming, Manager, External and Intergovernmental Relations, Metro Vancouver

Jean D'Aragon, Senior Program Officer, International Development Research Centre

Sue-Ann Fimrite, Project Director, Partnerships BC

Jeff Fisher, Deputy Executive Director, UDI Canada

Catherine Foo, Executive Director, Nunavut Community Infrastructure Advisory Committee, Government of Nunavut

John Forster, Assistant Deputy Minister, Infrastructure Canada

Judy Forster, Mayor of City of White Rock and Director of Metro Vancouver

Sarah Fraser, Executive Director, Community Partnership Branch, Ministry of Community Development, British Columbia

Mike Furey, ADM for Local Government, Ministry of Community Development, British Columbia

Michael Geller, Centre for Sustainable Community Development, Simon Fraser University

Susan Gimse, President, Union of BC Municipalities

Roy Green, Director of Community Infrastructure, Government of Nanavut

Robert Gonzales, General Manager, Engineering and Public Works, City of Richmond

Greg Goodwin, Executive Director, Special Projects, Ministry of Community Development, British Columbia

Greg Halseth, Canada Research Chair in Rural and Small Town Studies, University of Northern British Columbia

Jonathan Huggett, Principal, J R Hugget Co

Lois E Jackson, Mayor of Corporation of Delta and Chair of Metro Vancouver

Brian Jean MP, Parliamentary Secretary to the Minister of Transport, Government of Canada

Tom Jensen, ADM Rural Development, Ministry of Community Development, British Columbia

Diane Johnson, Administration, Metro Vancouver

Vincent Lalonde, General Manager, Engineering, City of Surrey

Lisa Landry, General Manager, Economic Viability, Resort Municipality of Whistler

Christine Lattey, Director, Vancouver Agreement

Hon Blair Lekstrom, Minister of Community Development, British Columbia

Mayor Don MacLean, Mayor of City of Pitt Meadows and Director of Metro Vancouver

Leif Mailing, Associate, PPP Canada Inc

Donna Mandelkau-Krotec, Manager, Infrastructure Unit, Western Economic Diversification

Cllr Gayle Martin, City of Langley and Director of Metro Vancouver

Tom McCarthy, Treaty Implementation Manager, Tsawwassen First Nation

Linda McFadyen, Deputy Minister, Ministry of Intergovernmental Affairs

Jane McRae, Director of Programs – PLUS Network, ICSC

Stan Morgan, Representative of the Matsqui First Nation

Michelle Neilly, Director-General, Operation, Western Economic Diversification

Adam Ostry, Director-General, Infrastructure Canada

Gary Paget, Senior Executive Director, Ministry of Community Development, BC

Bob Paddon, Vice-President, Corporate Public Affairs, Translink

Anthony Perl, Director, Urban Studies Program, Simon Fraser University

Jean Perrault, President, Federation of Canadian Municipalities

Denise Philippe, External Relations Program Manager, Metro Vancouver

Tom Prendergast, CEO, Translink

Bishnu Ragoonath, Senior Lecturer, University of West Indies

Judy Robertson, Coimunicaitons Sepcialist, Metro Vancouver

Pilar Roma, Administration, Metro Vancouver

Jim Rusnak, Chief Financial Officer, Metro Vancouver

Heather Schoemaker, Manager, Corporate Relations, Metro Vancouver

Appendix 2 List of participants

Dr Nola-Kate Seymoar, President and CEO, ICSC
Richard Smith, Senior Policy and Network Analyst, Federation of Canadian Municipalities
Cllr Tim Stevenson, City of Vancouver, and Director, Metro Vancouver
Patricia Summers, Manager, Community Transition, Ministry of Community Development, British Columbia
Bill Susak, Engineering and Public Works, City of Coquitlam
Karl van Kessel, Policy Analyst, Infrastructure Canada
Berry Vrbanovic, Vice President, Federation of Canadian Municipalities
Dale Wall, Deputy Minister, Ministry of Community Development, BC
Brian Walisser, Executive Director, Caucus of senior policy officials, provincial-territorial ministries responsible for local government
Mayor Dianne L Watts, Mayor of City of Surrey and Director, Metro Vancouver
Mayor Maxine Wilson, Mayor of City of Coquitlam and Director, Metro Vancouver
Andrew Wood, Municipal Engineer, City of Maple Ridge
Cllr Michael Wright, City of Coquitlam and Director, Metro Vancouver

Cyprus

Dr Lazaros Savvides, Permanent Secretary, Ministry of Interior

Fiji

Lord Mayor Ratu Peni Volavola, Lord Mayor of Suva

Ghana

Hon Kwadwo Adjei-Darko, Minister of Local Government, Rural Development and Environment

Daniel Nyankamawu, Chief Director, Ministry of Local Government, Rural Development and Environment

Hon Kwame Owusu Bonsu, Principal Rural Planning Officer, Ministry of Local Government, Rural Development and Environment

Stella Panwun, Assistant Director, Ministry of Local Government, Rural Development and Environment

Jamaica

Calvert Thomas, Director, Revenue Enhancement and Resource Mobilisation

Malaysia

Dato Hamzah Zainuddin, Deputy Minister of Local Government

New Zealand

Hon Nanaia Mahuta, Minister of Local Government
Basil Morrison, Local Government New Zealand and Chairperson, CLGF

Nigeria

Julius Ogbuka, Deputy National President, Association of Local Governments of Nigeria

St Vincent and the Grenadines

Hon Julian Francis, Minister of Housing and Local Government

South Africa

Xolile George, Chief Executive Officer, South African Local Government Association

Landiwe Mahlangu, Manager, Operations Unit, Development Bank of Southern Africa
Mayor Amos Masondo, Mayor of City of Johannesburg

Tanzania

Leonard Bihondo, Chairman, Association of Local Authorities of Tanzania

Trinidad and Tobago

Mayor Murchison Brown, Mayor of Port of Spain
Indra Furlonge-Kelly, Permanent Secretary, Ministry of Local Government
Hon Hazel Manning, Minister for Local Government

Uganda

Hon Hope Mwesigye, Minister of State for Local Government

United Kingdom

Simon Baker, Chief Executive, Staffordshire Moorlands and High Peak District Councils
James Beadle, International Programme Manager, Local Government Association
Cllr Dave Wilcox, Local Government Association

International organisations

Lilian Dodzo, Managing Director, United Cities and Local Government Africa
Father Smangalis Mkhathshwa, President, United Cities and Local Government Africa

CLGF Secretariat

Bernadette Dare, PA to Secretary General
Sophia Jackson, Communications Assistant
Susan Rhodes, Communications Consultant
Lucy Slack, Deputy Secretary-General
Sam Tekyi-Berto, Finance Manager
Carl Wright, Secretary-General

Appendix 3 List of papers and presentations

These papers and presentations are available through the CLGF website www.clgf.org.uk.

Municipal infrastructure finance trends, background paper for CLGF roundtable on Municipal Infrastructure Planning and Financing, prepared by Greg Clark for CLGF, September 2008.

Innovative mechanisms for fiscal transfers to municipalities- the Canadian experience in municipal financing, Federation of Municipalities, 2008

Obtaining a municipal credit rating: a brief overview, by Barry Jackson, CLGF research series, CLGF 2006.

Building Canada: the Government of Canada's long-term infrastructure plan, presentation by John Forster, Infrastructure Canada

Infrastructure funding programs for local governments, presentation by Glen Brown, Director, Infrastructure and Engineering, Ministry of Community Development, British Columbia

Municipal infrastructure financing: Australia, presentation by Graham Sansom, UTS Centre for Local Government, Sydney

Public private partnerships: new models of municipal financing, presentation by Sue-Anne Fimrite, Director, Partnerships BC and Jonathan Huggett, Principal, Huggett Co. For further information: www.partnershipsbc.ca; www.jrhuggettco.com

Municipal infrastructure and PPP: what can we learn, presentation by Landiwe Mahlangu, Development Bank of Southern Africa

Sustainable cities, presentation by Dr Nola-Kate Seymoar and Jane McRae

Infrastructure financing and long-term local planning, speech by Hon Hope Mwesigye MP, Minister of State for Local Government, Uganda

Cleaner, greener communities, presentation by Susan Gimse, President of the Union of British Columbia Municipalities. For further information contact: ubcm@civicnet.bc.ca

Promoting green infrastructure and green technologies, Glen Brown, Director, Infrastructure and Engineering, Ministry of Community Development, British Columbia

Cleaner environment and climate change: promoting green infrastructure and green technologies, Simon Baker, Chief Executive, Staffordshire Moorlands DC and High Peak BC

Other useful sources of information

Commonwealth Local Government Forum
www.clgf.org.uk
Federation of Canadian Municipalities -
www.fcm.ca

Antigua and Barbuda Jamaica St Vincent and the Grenadines Australia
 Belize Malaysia Solomon Islands Botswana Maldives
 Singapore Mozambique Tonga Cyprus Namibia South Africa Brunei Darussalam Kenya
 Malawi Canada Uganda The Gambia Nigeria United Kingdom Ghana Samoa
 Barbados Mauritius Swaziland Fiji Tuvalu Nauru Brunei Darussalam
 Lesotho Bangladesh Bangladesh Kiribati The Bahamas
 Sierra Leone Swaziland Fiji Tuvalu Nauru Brunei Darussalam



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