

Strategic Project Choice in a Context of Limited Resources

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Municipal Debt Financing and Investment Planning, Opportunities and Challenges

Growing decentralization of government responsibilities gives municipalities a larger role in the provision of services to the population and enterprises. The institutional mechanisms they use to identify, design, and execute investment projects, are one of the key determinants of their capacity to provide these services. These institutional practices are strongly influenced by the type of financing available. This is the case, for instance, with conditional transfers from higher tiers of government that can only be used for the purposes intended by the donor. Own resources and debt are the sources of funding that give municipalities more freedom of choice. Most municipalities in developing countries, however, manage only meager resources, which never account for a major portion of their investment portfolio. The case of borrowing poses a different problem. Long term debt financing is becoming available to local governments confronting them with new challenges when selecting investment projects. They must ensure that the loans are used for investments with long payoff periods and that the investment decisions will not be challenged by subsequent administrations. Committing the municipality to repay relatively large loans over 10 to 15 years forces them to use more structured methodologies to choose projects. They need to move from the ad-hoc, short-term criteria used to select projects financed with their own resources or transfers to more structured procedures ensuring that selected projects will make long lasting and strategic contributions to local development and are supported by a wide range of stakeholders.

Contrary to the small short-term investments usually financed with their own resources, and the predetermined projects funded by conditional transfers, long-term loans allow municipal decision makers greater latitude to finance large and more complex projects. Repayment of the debt, however, will tie up part of the municipalities' future income for a long period of time (anything from 5 to 20 years) thus becoming a liability for future administrations. This puts a heavy burden on the current administration's investment choices that need to be more than just affordable by the municipality. As stated they must be a widely shared community priority, have long-term payoffs, and bring significant social and economic benefits.

Project selection and appraisal methodologies need to move beyond current practices based mostly on the short-term government program priorities of the current municipal administration and a simple analysis of municipal finances to ensure affordability with available resources. Also the process cannot fully rely on the municipal Master Plan, which merely focuses on long-term land uses and environmental preservation restrictions. Furthermore, this planning instrument does not encompass all dimensions of local development and usually does not define investment priorities. The simple combination of information coming from both instruments is often of little help as it does not automatically ensure that projects selected for debt financing fulfill the requirements described above. Municipalities need a decision-making instrument that gives them greater assurance that projects selected are strategic and supported by the community. A well-prepared Master Plan should encompass these management dimensions. The present document discusses recent experiences of mid-sized municipalities in Brazil that

struggled with these issues while applying for long term financing from the Inter American Development Bank and outlines a project identification process that can fulfill these needs.

Debt Financing for Urban Development Projects in Brazil. Advances and New Requirements

Brazil is one of the most urbanized countries in the world. With 80% of the population living in settlements of 2.000 inhabitants or more, municipalities are facing a significant challenge in securing financing to provide infrastructures and services in fast growing cities. In the 1940's only 20% of the country population lived in cities. The following 30 years this relation changed dramatically and 70% of the population was already urban in 1980. The fast urbanization process undergone by the country was strongly polarized in the metropolitan regions. In the last three decades the country's population doubled, from 70 millions to 146.2 millions, while the population living in metropolitan regions it has almost tripled.

In 2008 there are 5,564 municipalities in Brazil, 14 exceed 1 million inhabitants, 648 have between 50 thousand and a million, and the great majority (4,916) has less than 50 thousand. Thirty percent of the population lives in 27 metropolitan areas encompassing 450 municipalities. In those agglomerations urban and environmental problems are more acute and complex with 25% of inhabitants living in poverty and 31% lacking infrastructure (water and sewage). Metropolitan regions that presented faster rates of population growth include Fortaleza, Salvador and Curitiba (above 3% per year) mostly in the municipalities of the periphery. In all metropolitan areas peripheral population growth rates (3% a year on average) is faster than in the metropolitan core (1.4% on average)

Figure1. Urban population distribution in Brazil



In the last two decades Brazil underwent a profound process of local government decentralization and democratization. The 1986 democratic election of mayors was followed by a new Constitution (in 1988) that established the municipalities as an autonomous tier of government (States and Federation being the others) with responsibility for most local development issues and managing their own resources from taxes and a formula-based upper tier transfers. The 1988 Constitution requires Municipalities with population above 50.000 inhabitants and for those that are part of metropolitan areas, to have a Master Plan. Approximately 25% of all municipalities in the country are required to have such plans. The Master Plan, however, only regulates land use and buildings and does not identify and set priorities for structural and strategic investments and programs. Some municipalities have Strategic Plans that identifying key investments and programs, but they are not always translated into a multi-annual investment program. As a result, more often than not, investments are assigned priorities without an integrated and long-term perspective of municipal development needs. The decision making process tend to be disarticulated and fragmented and prone to be co-opted by clienteles or strong willed leaders. In other words, in the absence of a technical and institutional framework for the selection and setting of priorities, investment programs are vulnerable to arbitrary decisions, often of a political or partisans nature.

Brazil acquired a stable system of municipal financing with the 1988 Constitution that set the municipal revenue sources and formula-based transfer from higher spheres. The Fiscal Responsibility Law of 2001 further strengthened the municipal fiscal structure setting limits to current expenditures and debt acquisition. This stable fiscal framework opened the possibility for strong municipalities to access long-term debt financing. A government sponsored financial institution, the Economic Chase (Caixa Economica Federal) regularly lends to municipalities. Exposure limits set by Federal regulations limits Caixa lending to municipalities to levels below their debt acquisition capacity.

To satisfy this long term financial need, the Brazilian Government negotiated with the Inter American Development Bank (IDB) a US \$ 800 million revolving lending facility PROCIDADE. –Requirements for municipalities to have access to PROCIDADE include: (i) debt acquisition capacity; (ii) projects of multi-sectorial urban nature and (iii) financial capacity to contribute 50% of the project financing with PROCIDADE lending the other 50%. Individual borrowing by a municipality is limited to US\$50 million.

Pressing Issues Affecting Cities in Brazil.

Different size municipalities in different regions face different problems. Generally they concentrate in solving the following issues: (i) shortages in waste management; (ii) natural resources management and environmental protection; (iii) land use and development management; (iv) transportation and mobility; (v) housing and land regularization; (vi) public spaces and social services; (vii) local economic development - productivity and employment; (viii) strategic and sector planning; and (ix) governance and strengthening public administration. There are, though, problems that are more recurrent in certain types of cities.

In small urban centers, with populations from 50.000 to 200.000, deficiencies in infrastructure, especially in sewage and in the provision of basic social amenities are the most pressing needs while housing and transportation issues are of minor consequence. Regional differences are significant. In cities in the more developed regions of Brazil (south and southeast) basic sanitation services (water, sewage, and garbage collection)

usually have full coverage, yet they face problems in final disposition of wastes, water treatment and deficiencies in the distribution networks. Priority interventions also include renewal or upgrading of parks and public spaces and improvements of urban management systems. Cities in poorer regions have weak management systems and lack institutional capacity, thus adding these priorities to investments in sanitation and social amenities.

Medium sized cities -with populations between 200.000 and 1 million inhabitants- face the challenges of rapid urban growth, thus the lack of sanitation, housing, land titling and the illegal occupation of risk areas are the most frequent problems. The main issue in transportation is traffic congestion. These cities also face urban decay so the rehabilitation of central areas, the redevelopment of unused central lands and the improvement of public spaces rank high in the investment agenda, as is the consolidation and expansion of social services (mainly education and health), and the improvement of their own management and administrative resources and capabilities.

In larger cities -with populations above 1 million- and in municipalities that are part of the metropolitan agglomerations, deficiencies are more acute and solutions more difficult. In cities like Brasilia, Belo Horizonte, Sao Paulo, Rio de Janeiro and Curitiba, congestion problems are so significant that radical solutions are required - like fully coordinating land use zoning and transportation planning, large investments in public transportation (exclusive bus lanes - BRT- and metro expansion), redesign of networks, congestion pricing and road space rationing (to restricting the use of individual cars). Affordable housing to the poor is commonly in short supply leading to the proliferation of informal settlements. Many cities in this range have also downtown areas facing decay and requiring public intervention to promote their rehabilitation by attract new residents, users, and private investments. The magnitude of the issues confronted by these cities requires the active cooperation of all social actors. Public-private partnerships are one of the possible institutional solutions but require strong, transparent municipal partners.

All types of cities (from small to large) face the challenge of setting priorities for investing the always scarce resources available to ensure that the most beneficial infrastructures and programs are financed. As stated, traditional decision making processes usually focus on implementing the present administration's political program, which should obviously be considered of key importance and not always take into account the synergies that exist among urban investments and their long-term impacts, the very features that make an investment of strategic relevance holding widespread community support. This is noticeable in the set of projects submitted for PROCIDADES financing.

Case Studies

Case study taken from cities in the different size classes discussed before (small, medium and large) allows insight to the decision-making process leading to the selection of strategic projects. A cursory review of the cities and their urban planning situations – indicating their main problems and the choices they have made to promote development– provides the background for discussing the way choices are made concerning priority investments.

The discussion will focus on the following questions: How to identify those areas and themes that are a priority for municipalities? How to identify those actions that might be structural to municipal development? What connection do they have with other actions or

themes that are also structural? What connection should they have with Local Municipal or Master Plans? How to select those that have higher priority? How to evaluate their sustainability? and How to measure or quantify development benefits?

Small urban center – Toledo

Located in the western part of the Parana State in southern Brazil, the municipality of Toledo has a population of 108.000 inhabitants. The city has been growing at a fast pace since its separation from the municipality of Foz do Iguacu in 1961, at an average of 7.8% per year. It is a municipality with good quality of life, high social indicators (health, education and security), and its Human Development Index rank in the top 3% of Brazil, with excellent employment levels and good social equity. The Master Plan, recently reviewed in 2006, aims at maintaining and improving the city's quality of life and economic competitiveness. The Plan identifies three main lines of action: (i) offer urban and community services, and public transportation adequate to population needs and characteristics; (ii) integrate rural and urban economic activities; and (iii) protect, conserve and rehabilitate natural and built environment, and historical and archeological heritage.

Priority projects and programs to be financed under PROCIDADES facility attempt at implementing those three directives.

Table 1. TOLEDO Cost and Financing (US\$ Million)

Categories	IDB/OC	Local	Total	%
1. Direct Investment	7.0	5.4	12.4	84
Social Facilities (Schools and Sport Facilities)	2.4	1.2	3.6	23
Parks and Squares	1.2	0.8	2	13
Mobility and Transport	3.4	3.3	6.7	50
2. Institutional Strengthening	3.3	3.2	6.5	4

Although clearly all selected investments projects are relevant and follow Master Plan directives there is no hard evidence that they all will make long-term strategic contributions to local development. In the absence of an investment plan that could guide development decisions as to which project to select in order to have long term structural territorial impacts and incorporating linkages among projects, investments have been had-oc selected so as to respond to four main objectives: (i) expand and improve educational, health, cultural, social assistance, sports and recreational services and facilities; (ii) rehabilitate public spaces and create new urban amenities directed to protect natural environment and to provide spaces for social interaction; and (iii) improve transportation infrastructure from areas of rural production to city center and among production areas, and (iv) improve municipal administrative efficiency. Synergies among projects and potential benefits from an efficient investments sequencing were not incorporated into the decision making process.

Medium size urban areas – Campo Grande

The Municipality of Campo Grande is the capital of Mato Grosso do Sul State located in the Centre-eastern part of Brazil. The municipality, with 99% of the population living in

urban areas, houses 1/3 of the State population (765.000 inhabitants). Population has been growing in the last decades and has increased five times between 1970 and 2000.

It is a municipality with a thriving economy and healthy municipal finances. As a result of sustained high levels of municipal investments in infrastructure and service provision they currently reach all city dwellings. Due to efficient squatter settlements urbanization policy, combined with actions to prevent illegal occupation of new areas and the provision of low income housing, the city has managed in the last ten years, to regularize all 140 squatter settlements and built 13,000 new housing units. For that reason it is known in Brazil as the first state capital free of squatter settlements (favelas).

The city, nevertheless, faces problems of urban decay on its historic centre. Considered as the town commercial, residential and cultural heart, the deterioration of the area represents a serious threat to its economic and social sustainability. This process started in the early 80's with loss of central vitality and social mix, and transference of uses and activities to other city areas. It is manifested by under-used infrastructure, lack of safety, building decay (some of heritage value) and high incidence of informal street vending. Since the early 90's, local authorities have been fighting this process by implementing specific, though isolated, actions.

The 1995 Master Plan, revised in 2007, declared downtown as an area of Special Cultural Interest and proposed the development of a Local Plan. This Plan had to be designed with a holistic and integral view of the problem and should give priority to three aspects: heritage preservation, urban public spaces revitalization and economic activities improvement. The IDB investment program is financing the following actions:

Categories	IDB/OC	Local	Total	%
2. Direct Investment	16.7	16.0	32.7	84
2.1 Centre Revitalization	4.0	1.0	5.0	13
2.2 Urban Mobility	12.0	14.3	26.3	68
2.2 Institutional Strengthening	0.7	0.7	1.4	4

Those projects have been ad-hoc selected to consolidate the Master Plan long term guidelines in the following domains: (i) improve mobility, in particular in downtown and surrounding areas; (ii) preserve built heritage through conservation and rehabilitation of historical sites and buildings; and (iii) strengthen and improve efficiency of local administration. The expected program benefits are a better city connectivity and mobility, specially in downtown, expressed in a reduction of travel time and costs by different transportation modes, in the different urban areas and crossing the city centre, and by an increase on the extension of cycle routes. X Revitalization of downtown area is also expected with increased commercial activity, rehabilitated public spaces (street furniture, landscape, paving, etc) and increasing number of investment projects. The municipality expects also improvements on administrative efficiency measured by the reduction on internal communication costs and on the time expends issuing building licenses.

Despite the significant benefits that those investments will bring to the city, Campo Grande lacks a broader long-term vision as a city of regional importance. A vision

confined to its municipal boundaries has directly influenced projects composition and timing proposed for financing. A city with such good levels of services and facing what can be considered “second generation problems” in a middle income country, would benefit from a well structured mid term investment program well anchored on a shared vision of its future role as a economic and service hub of a growing region. Such a plan will enable the city to choose investments and sequence them in the most efficient way to materialize its potential regional role.

Large Urban Centre and Metropolitan Pole – Curitiba

The municipality of Curitiba is the capital of Parana State located in southern part of Brazil. It has a totally urban population of 1.8 million inhabitants. It is a city with a very high quality of life and it is considered one of the three municipalities with best infrastructure in the country. Its Human Development Index, according to PNUD, is similar to the two best-positioned countries in Latina America - Argentina and Chile.

Curitiba is the pole of a metropolitan region formed by 26 municipalities with over 3 million inhabitants. The city is part of an urban continuum covering also the territory of eight other municipalities and containing 2,9 millions inhabitants, (87,7% of the metropolitan region total number of inhabitants).

The municipality of Curitiba adopts a metropolitan strategy in many of its planning activities and service provision. Its planning system is widely known in particular by the way it has dealt with issues of land use, public transport, environment, social assistance, education, health and culture. The Master plan, revised in 2004, has as its main aims: (i) continuous improvement of quality of life and urban environment, (ii) promotion of social inclusion, and (iii) to maintain high levels of service in the public transport system. Despite its exceptional situation, in 2002 there were 40,5 thousand (7,5%) households living in squatter settlement located in risk areas or in environmental protected sites (APAs), often without any social services.

One of the city priorities is the extension of the Social Assistance Centers (CRAs) network to those vulnerable groups. Those facilities give special attention to risk groups and are responsible for the implementation of programs directed to poverty eradication and income generation. Other municipality-defined priorities are the urbanization of squatter settlements and the improvement of city mobility to reduce traveling times and costs. In transport the resources will primarily finance re-pavement of urban streets, when clearly there is a need to mitigate acute traffic congestion and to upgrade its world famous integrated public transportation system. To target those priorities the investment program submitted for financing by the PROCIDADE facility include the following projects:

Table 3. CURITIBA Cost and Financing (US\$ Million)

Categories	IDB/OC	Local	Total	%
1. Direct Investment	45.0	36.0	81.0	81
1.1 Squatter Settlements Urbanization	8.7	21.3	30.0	30
1.2 Mobility and Transport	27.0	9.0	36.0	36
1.3 Social Development (social infrastructure)	9.0	6.0	15.0	15
2. Institutional strengthening	1.3	.4	1.7	1.7

The implementation of such actions should allow for the following benefits: (i) improvement of the quality of life index (IQVC) and the public management index (IDGP) – both indicators developed locally to track progress in infrastructure and service provision to the population; (ii) valorization of property prices on the urbanized areas in informal settlements; and (iii) reduction of the social vulnerability of families living in the intervened areas. Other indirect benefits are: reduction of air contamination levels; reduction of car accidents costs, expanding the use of bicycle routes for transport and leisure, improvement of universal accessibility, and improvement of overall city competitiveness.

The selected projects, undoubtedly, will have a positive impact on the overall life quality of Curitiba. It is not all clear, however, the type of impact they will have on the overall metropolitan area development. Informal settlement regularization within the territory of Curitiba municipality, for instance, may induce more settlers to move informal settlements in the city from settlements to peripheral municipalities that do not regularize them at the same speed. In the formal housing sector, saturation of available lands and strict land use controls within municipal territory are boosting housing prices displacing low income households to peripheral municipalities, exacerbating intra metropolitan income and access to services disparities. There is a need for an investment planning and coordination mechanism to provide a mid-term perspective for municipal investments undertaken by different municipalities comprising Curitiba Metropolitan Area. Its absence prevents decision makers from incorporating potential synergies among projects when setting priorities, and is creating tension among municipalities when selected projects have conflicting goals and impacts. One example of that is the urbanization of aquifer recharge areas located in municipalities in the metropolitan periphery. These investments benefit the municipalities that increase their revenue with the land and service taxes charged but represent a problem for the metropolitan area water supply, and particularly for Curitiba municipality.

Bridging Planning Methodologies to Ensure Relevance and Sustained Support for Investment Decisions

The Identification of the Project Set for Loan Financing

The case studies presented here pinpointed a structural disconnection between long-term planning required to lead urban development into a socially shared vision, and the short-term budgeting decision-making process used to contract long-term debt for financing investments. The well-rounded and complex technical and political process leading to Master Plan formulation and validation ends up having only a limited impact on the process of selecting the set of projects to be financed with long-term debt. Even though all the projects selected have beneficial impacts on development –as attested by technical, economic, financial, environmental and institutional analysis performed during loan evaluation by the IDB– there is still a lingering doubt about whether they are the projects with the most significant long term structural impacts, thus the ones that probably will continue receiving full support by future administrations. There is a need to improve the project selection and evaluation process to ensure these outcomes. Some simple steps linking long term plans with short term budgeting can significantly improve the process. These steps must ensure that decision makers: (i) evaluate integrated sets of projects and not individual proposals; (ii) incorporate long-term sector and territorial

impacts of the sets of projects considered; and (iii) account for synergies and linkages that exist among projects.

The process logically begins with the identification of the desired investments. They should be taken from the full set of development initiatives available independent of the funding source considered. Investment initiatives can originate in: the Master Plan, the Strategic Plan (when available), sector development proposals, community sponsored projects, and current administration's government programs. They should also consider the existing investment plan, (if any) with its different founding sources (federal, state and municipal). A simple Municipal Development Proposal Table organized by the planning documents strategic objective(s), and identifying the linkages that exist among projects, can go a long way to pointing out the projects with the largest strategic impact. More linkages to other projects early in the timeframe are some of the characteristics of structural projects. Linkages also help building sets of interrelated investment initiatives.

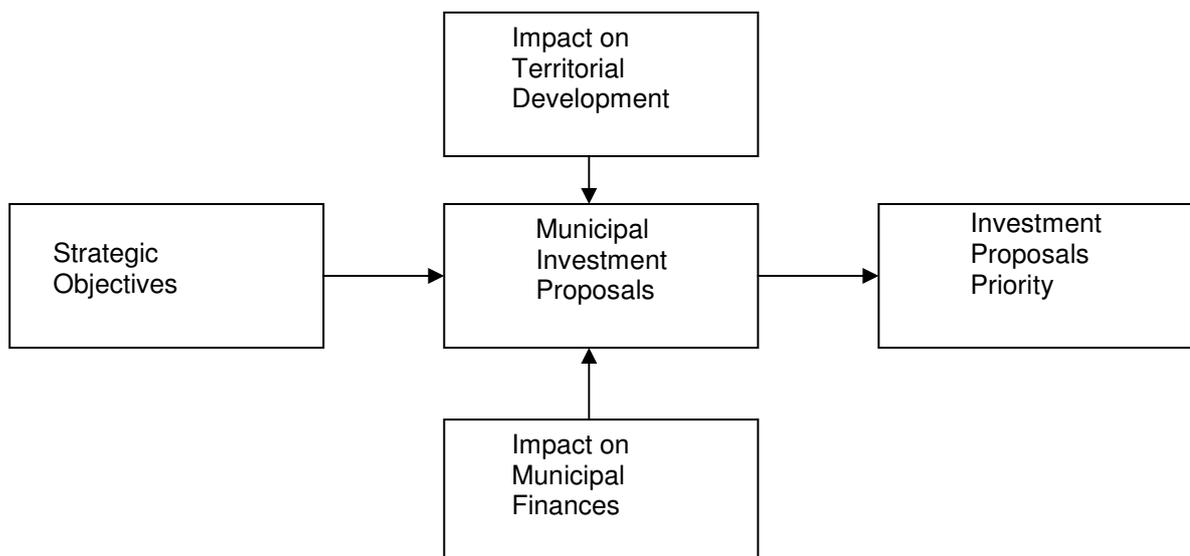
Table 4 Municipal Investment Proposals Table

Strategic objective	Project	Specific goals	Description	Linkages with other projects										Cost		
				Type of linkage	Timeframe (years)											
					1	2	3	4	5	6	7	8	9		10	

Evaluating the Strategic Set

Usually implementing the set of investment proposals with strategic impacts will require more resources than those available from own resources, transfers and capacity to contract debt. The setting of priorities needs to be based on the impact on development objectives and not on expediency of financing. To this end, a simple review of impacts is helpful. Three sets of impacts are significant: impacts on strategic objectives, on territorial development and on municipal finances.

Figure 2. Identification of Priority Investments



Simple criteria and ranking rules may be used to identify priorities. Examples of criteria and rankings are shown in Table 2. They are just examples of possible criteria and ranks. Each case will have to develop its own set to fit specific circumstances. The definitions of criteria and ranking rules used by the planning team, however, need to be explicitly stated and consistently applied. This information is of critical importance for process validation, which should involve a wider set of referees outside the planning team.

Table 5. Ranking Criteria for Selecting Strategic Investments

Strategic Objectives	
Value	Criteria
5	Contribute to attain more than 1 strategic objective and have linkages with other projects contributing to the attainment of another strategic objectives
4	Contribute to attain of more than 1 strategic objective and have linkages with other projects
3	Contribute to attain 1 strategic objective
2	Are complementary to other strategic investments
1	Have linkages with other investments
Impact on Territorial Development	
Value	Criteria
5	Key investment to attain municipal territorial development objectives. Pre condition for other public or private investments. Trigger of private investment.
4	Pre condition for public or private investments of importance for attaining municipal territorial development objectives
3	Necessary investment to attain a territorial development objective. Cannot be postponed
2	Useful investment. Can be postponed with limited negative impact
1	Limited impact on territorial development
Impact on Municipal Finances	
Value	Criteria
5	Generate cash flows that cover additional operation and maintenance and full debt payments
4	Have a positive increment on land values in its area of influence. Additional tax receipts cover debt payment and generate surplus
3	Generate cash flow or land valorization that partially cover debt payment and additional operation and maintenance costs
2	Have no fiscal impacts
1	Require municipal funding to cover additional operation and maintenance and debt payment obligations

The judicious application of identification and evaluation criteria by a planning team will lead to priority investment identification. Part of this set can be financed by debt while own resources or transfers may better finance other parts. The final step in the priority setting exercise is to identify the projects that are worth financing with a loan. Projects that generate a long-term economic and social benefits stream are best candidates for this type of financing, as it is equitable and efficient to do so. It is more equitable, because future generations contribute to finance investments that will directly benefit them. It is more efficient, because the well being of the present generation will be enhanced with the availability of an expanded set of goods and services that could not be financed with current revenues alone.

Before final decision on implementation, each project must be individually evaluated following accepted methodologies for social cost benefit analysis. The effectiveness of this evaluation as a decision making tool is enhanced by the more structured project selection and priority setting process proposed in this paper.

Validation of the Priority Investment Proposals, the Municipal Investment Program

The priority investment set identified by the planning team requires support from a wide variety of social actors so as not to face objections in the future. The support of community, trade associations, and civil society organizations, with permanent interest in the affairs of the city, provides better assurances of future support. This is of particular importance given the rapidly changing landscape of local politics. Central to reaching this consensus is agreement on criteria and rankings used in selecting priority investments. This can be attained through a consultation process that promotes reaching consensus among a selected group of leaders and activists.

On Closing

A good Master Plan, formed by a shared vision about long-term development objectives for the territory under the jurisdiction of a municipality is a necessary but not sufficient condition for selecting strategic investments to be financed by borrowing. Political support is of key importance but selecting these investments based solely on short-term political considerations does not ensure selection of the most beneficial set, nor the sustained support for their implementation. A simple methodology like the one suggested in this paper can build a bridge between these two sources of information and investment ideas. The critical factor, however, continues to be that the proposed set of investments represents the interests of the various segments of the local society. Only investments so validated will gather the long term support and commitment required to allocate substantial portions of municipal savings for servicing the debt contracted for its financing, commitment that precludes, at least in the short term, future administrations to expand investments by acquiring more debt.

Endnotes

PNUD, Human Development Report, 2007.

IQVC and IDGP are both indicators built by the Curitiba municipality and currently used by them to monitor improvement on quality of life and public administration