Catalytic Land Development Guideline
August 2018
Foreword

Cities have a limited number of levers to direct the form, function and performance of their spaces. The most powerful of these levers are decisions about land use and infrastructure. There is a body of research literature indicating that the strategic plans for cities have failed in the past as decisions about land development and infrastructure investment are not in line with strategic plans.

Since November 2014, the Cities Support Programme (CSP) has been on a journey towards developing programme management practice for Catalytic Land Development to help cities strengthen this alignment.

In 2014, the CSP hosted a workshop titled Maximising the Value of Public Real Estate: Catalysing Urban (Re)Development. The workshop was intended to assist municipal officials to conceptualise and apply lessons on leveraging private-sector investment into catalytic projects. Each city team explored how their catalytic projects responded to the workshop content. The objective was to reassess and refine the goals and objectives of each city’s catalytic projects. Following the workshop, some cities received transaction support to develop Catalytic Land Development projects.

The World Bank and CSP organised a second workshop focused on institutional and financial tools for redeveloping core urban areas in March 2016. The workshop, titled Accelerating the Preparation and Implementation of Catalytic Urban (Re)development Projects, was intended to enhance city decision-makers’ knowledge and technical capacity with a practical overview of:

- The real estate market, capital market and land economy drivers behind the development process;
- How cities can promote private investment in the urban core; and
- Global best practices in development processes, partnering and financing to help cities understand and effectively intervene in these processes.

The workshop emphasised that catalytic projects in South Africa’s metropolitan cities form the centrepiece of the country’s urban transformation agenda.

The CSP, the World Bank and the Swiss Economic Cooperation Organisation (SECO), hosted a third workshop on Catalytic Land Development Programmes in July 2017. The structure of this workshop was designed to mirror the CSP’s emerging framework on the Catalytic Land Development Life Cycle; and was structured around three thematic areas:

- Catalytic Programme Inception and Concept stages
- Catalytic Programme Pre-Feasibility and Feasibility stages
- Catalytic Programme Preparation Finalisation Stage.

I am pleased to present this Guideline as the next step in the journey of supporting metropolitan municipalities to conceptualise and implement catalytic land development programmes to achieve their strategic objectives.

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DDG: Intergovernmental Relations
16 August 2018
Introduction

1 Objectives of this Guideline

The underlying aim of the Cities Support Programme (CSP) is to improve economic growth prospects in cities and to help municipalities respond to development challenges. The Integrated Urban Development Framework (IUDF, 2016) identifies several levers that metropolitan (metros) and larger municipalities can use to direct the spatial form, function and performance of their urban footprint.

Catalytic Land Development (CLD) can bring all of these levers into play to achieve transformational impact in our cities if undertaken with rigour, discipline and integrity.

The main purpose of this Guideline is to guide metros and larger municipalities in undertaking the the Catalytic Land Development (CLD) Programme Preparation Phase.

This guidance is presented within the broader understanding of a three-phase CLD life cycle:

- Phase 1: Spatial planning and targeting
- Phase 2: CLD programme preparation
- Phase 3: Implementing projects within the catalytic programme

Diagram 0.1: Policy levers

This Guideline aims to:

- Highlight the importance of a disciplined and rigorous approach to programme preparation using the preparation stages to generate, capture value and fairly distribute benefit from land development. This must be done in accordance with the state's obligation to pursue well governed, inclusive, productive and sustainable cities.

- Unpack the elements of CLD programme preparation to empower municipal officials tasked with managing a Catalytic Land Development Programme (CLDP) or a portfolio of CLDPs, so that they are able to tackle this complexity incrementally.

- Provide municipal employees with tools for CLD preparation and direct them to further resources.

The successful preparation of a CLDP will lead to the handing over of a series of projects for implementation. Some of these projects will be implemented by the private sector. The transactions associated with bringing the private sector on board are undertaken in the CLDP Preparation Phase. This is the subject of this Guideline. Municipal-managed infrastructure projects to be implemented by the municipality in the third phase of the CLDP life cycle are governed by the Standard for Infrastructure Procurement and Delivery Management (SiPDM) as well as the Cities Infrastructure Delivery Management System (CIDMS). These fall outside of the scope of this Guideline.
2 Context and rationale for CLD

South African metros and larger municipalities are experiencing continued inequality as a result of the spatial legacy of apartheid. One way to drive a spatial restructuring agenda is to adopt an ‘urban acupuncture’ (i.e. focused and targeted) approach that enables transformative urban mixed land uses. An urban acupuncture approach is rooted in a network-based understanding of the urban structure.

This approach is promoted through the National Treasury’s Urban Network Strategy (UNS) and supporting spatial planning and urban design guidance. It is promoted to drive outcomes-based planning and transit-oriented development principles. The aim is to provide a strategic approach to restructuring the typical spatial organisation of South African towns and cities to enable economic growth. Through providing the spatial structuring elements for targeted interventions, the idea is to do more with less, thus encouraging efficiencies through investment consolidation and agglomeration.

For more information and guidance on the Urban Network Strategy (UNS), go to www.treasury.gov.za.

The urban network is an interconnected hierarchy of strategic nodes, and public transport links between and within these nodes. The UNS advocates focusing on a small number of strategically located nodes/anchors to achieve critical mass/agglomeration, especially to catalyse private-sector investment in strategic locations. It is aimed at integrated development and growth. It is designed to develop:

• A strong urban network with a hierarchy of well-connected nodes and linkages.
• Efficient flows of people, goods and information.
• Targeted public infrastructure and facilities that catalyse additional private sector investment.
• Good access to jobs and amenities.

This urban network is articulated in municipalities’ Municipal Spatial Development Frameworks (MSDFs) and for metros, in their Built Environment Performance Plans (BEPPs). This, in turn, forms the basis for spatial targeting to create a built environment value chain. The key output of this is Catalytic Land Development.

It is important to note that this Guideline is not intended to be prescriptive to the finest level of detail. The nature of CLDP preparation is contextually specific and very often, municipalities may not be starting from scratch. While the Guideline aims to be as comprehensive a resource as possible for practitioners, the intent is that it is used as a guide - while municipalities should be disciplined and thorough for the reasons set out in this guideline, they should also be smart and apply their minds to what a particular CLDP requires in the interests of progress and gaining momentum. It is recognised that conditions will rarely be perfect and that municipalities should not be hindered from taking responsible initiative and action, being accountable for this and learning from it.
CLD is an exercise in integration, coordination, leverage and inclusion. It is a complex interdisciplinary, multi-stakeholder process that takes place within a myriad of laws and regulations in the context of shifting economies, property market demand and considerable social obligation and expectation, and limited resources. The preparation of a collection of projects to achieve CLD relies on a holistic view. This ensures that the parts (the many projects over the medium to long term required to achieve the envisaged change; including municipal projects, other inter-governmental projects, as well as a variety of private sector-related projects) will add up to the whole (the precinct level development objectives). Careful consideration of inter-dependencies, timing, resourcing and risks necessitates managing this process as a programme. It also requires thoughtful and disciplined preparation and the management of corporate decision-making processes to ensure benefit realisation that is aligned with the original intended outcomes.
3 Definition of CLD and the scope of this Guideline

In this Guideline, we use the BEPP definition of a CLDP. It is a requirement of BEPPs that metros identify CLDPs. CLDPs are specifically defined as programmes that:

- Enable integration, that is, mixed and intensified land uses where the residential land use caters for people across various income bands and at increased densities that better support the viability of public transport systems.
- Are game-changers in that the nature and scope of the projects are likely to have significant impact on spatial form and unlock economic activity.
- Involve major infrastructure investment.
- Require a blend of finance, where a mix of public funds leverage private-sector investment and unlock household investment.
- Require specific skills across a number of professions and have multiple stakeholders.

(National Treasury, 2017)

CLDPs are an ensemble of all related projects. These may include public municipal, public non-municipal, public-private partnerships and private development projects needing to be implemented within a priority precinct of a specific spatial targeted area. It is not assumed that a municipality owns part of the land, or all of it, in a CLD. The information and tools in this Guideline can support a municipality that plays an enabling role for a CLDP on land it does not own.

This Guideline acknowledges that municipalities may choose to define and identify CLDPs differently in terms of their own strategic objectives and programmes, and in these cases, this document will offer general value.

The requirement for BEPPs and CLDPs is presently limited to metros. However, there is significant overlap in the content expectations for BEPPs and MSDFs in terms of the Spatial Planning and Land Use Management Act, Act No.16 of 2013 (SPLUMA). BEPPs also present emerging best practice that other urban municipalities may choose to follow. For this reason, this Guideline has been written so that the information presented is not only limited to metro municipalities.

The CLD life cycle presents a methodical approach to CLD through a number of phases, and stages in the case of the second phase. The focus of this Guideline is on Phase 2 of the CLD life cycle. This is the phase that specifically addresses CLD programme preparation. However, this Guideline will make reference to important links to Phase 1 (Spatial planning and targeting) and Phase 3 (Implementing municipal-managed projects within a CLDP).

4 Structure of this Guideline

Chapter 1

This chapter sets out a value-creation approach to preparing CLDPs. The approach is based on the concept that land is an asset with a latent value and that the CLD life cycle approach is a tool that seeks to unlock, leverage and secure this value. It is a way of mitigating the ever-present risk of this value being unrealised, lost, stolen or diluted to ensure that public resources generate public value in the particular South African urban context.
This chapter explores the value-creation opportunities in CLDPs; the objectives and concept of CLD; how to capture and share value in CLDPs; and the need for integrity within the CLDP preparation process as integral to value creation.

Chapter 2
This chapter presents a broad system of good governance and a specific institutional framework that supports successful CLD programme preparation.

Chapter 3
This chapter describes the financial, regulatory and business model instruments that can be used to achieve benefit realisation in CLDPs.

Chapter 4
This chapter identifies what should happen in each stage of the Preparation Phase of the CLDP life cycle. A detailed description of the stages of Phase 2 is provided, and specific actions/requirements are linked to ethical standards, governance, financial, institutional and regulatory aspects of development preparation.

Chapter 5
This chapter offers tools and additional resources. It includes, for example, the basic principles of how to conduct a whole-life financial analysis.

Each chapter starts with a list of abbreviations and key terms used in the chapter.

Throughout the Guideline there are different icons to point the reader to resources.

- Indicates a link to an online resource or reference to further information.
- Indicates information to note.
- Indicates Guideline assumptions.

5 Editorial process for this Guideline

The work done by the Cities Support Programme Unit and Dr Johan Coetzee formed the basis for this Guideline. MCA Urban and Environmental Planners was responsible for the production of this guideline. The team of content specialists who contributed included Catherine Stone, Greg Daniels, Mark Napier and Megan Govender. The Editorial Committee consisted of Yondela Silimela, Leila McKenna, Will Bautista, Kecia Rust, Sharon Lewis, Samantha Naidoo, and David Savage. The Guideline was peer reviewed by Ivan Turok. The Managing Editor was Gill Cullinan, supported by Bev Hawthorne. Design was by Liesl van Rensburg from Dogstar Design Studio.

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CREATING, REALISING AND SHARING VALUE THROUGH CATALYTIC LAND DEVELOPMENT (CLD)
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Abbreviations used in this chapter

BEPP Built Environment Performance Plan
CLD Catalytic Land Development
CLDP Catalytic Land Development Programme
IDP Integrated Development Plan
IUDF Integrated Urban Development Framework
MSDF Municipal Spatial Development Framework
NDP National Development Plan
PPCCA Prevention and Combating of Corrupt Activities Act
PPP Public Private Partnership
SPLUMA Spatial Planning and Land Use Management Act
TOD Transit-Oriented Development

Terms used in this chapter

Bankable: Where a programme or project has ‘sufficient collateral, future cashflow, and high probability of success, to be acceptable to institutional lenders for financing’. (www.businessdictionary.com/definition/bankable.html).

Fiscal: of or relating to taxation, public revenues, or public debt

Outcomes-led: An activity defined and shaped in its purpose and process by what the ultimate intended desired result or impact is or the need the activity is seeking to address.

Positive feedback loop: A positive feedback loop is a situation where two events are mutually reinforcing. With this situation a small change in one input can cause a bigger final increase in both the initial input and the secondary effect. (Pettinger, 2016)

Public value: Benefit derived for the general public, current and future, good.
Real estate: Property consisting of land and buildings.

Spatial transformation: The legacy of apartheid – communities segregated from one another based on race (and class) – as well as the impacts of the legacy of the modernist trend of city building based on the automobile and functional separation of land use - have left South Africa with cities that are inefficient, inequitably developed and expensive – environmentally, socially and fiscally - to live in and to manage. The NDP states that a national focus on the spatial transformation of our cities should, by 2030, ensure that a larger proportion of the population should live closer to places of work and travel distances and costs should be reduced, especially for poor households. Urban systems – hard (physical structures and networks) and soft (such governance systems including urban management and land use management) that facilitate and enable compact cities and transformed urban spaces of social and economic inclusion on an equitable basis are key levers to overcome the debilitating impact of distance and separation on the fortunes of the individual, household, business and the state, as well as the environment and the resilience of the system as a whole. The equitable redistribution of resources within cities, as well as building systems that facilitate affordable and safe access to the full ambit of resources that makes urban living productive are critical to spatial transformation.

Spatial targeting: A built environment investment prioritisation approach where specific areas are prioritised for investment at a range of geographic scales, within an urban system, to achieve particular development outcomes.

Transit-oriented Development (TOD): TOD is a planning concept that directs public and private investment to areas of maximum public transport access in a city, doing it in a way that creates liveable environments. TOD is designed to maximise access to rapid/frequent public transport, encourage public transport ridership and walkable precincts. The symbiotic relationship between land use, built form and public transport lies at its core. From a transport perspective TOD is focussed on promoting sustainable public transport while minimising the travel mode share of private motor vehicles and the negative externalities of this mode including reduced rates of private car parking and carbon emissions. From a spatial development perspective the focus is on creating an inclusive network of well-designed precincts of mixed land use and increased residential densities in an improved public environment (high quality public spaces and streets, which are pedestrian and cyclist friendly) with high pedestrian accessibility within 500 – 800 metres of transit stations.

Value proposition: The value a proposed activity intends to realise and contribute towards a specific interest or objective.

Urban management: The day-to-day operations in a precinct, such as cleaning, waste removal, traffic, transport, land use management, informal trader management and security services. It can extend to place-making, marketing and social services. The management of localised public transport operations and facilities is also an important urban management function.
Introduction

Land is a finite resource and an asset that is leveraged through development by many in different ways, for many different reasons. The challenge for South African municipalities is how to use the development of property as an instrument to leverage particular public value outcomes identified inter alia in the National Development Plan (NDP), Integrated Urban Development Framework (IUDF) and Built Environment Performance Plan (BEPP) guidelines. The key to achieving this is to understand what drives the property development sector, the extent of control and/or influence municipalities have over property development and by implication, real estate value and then to get a handle on the tools they have at their disposal to start the value creation process towards a particular purpose, in this context, spatial transformation, working in partnership with property development actors.

Municipalities are encouraged to identify and prepare land or property (greenfields and/or brownfields) development opportunities that can generate public value. On the basis that value creation has a positive feedback loop (UN HABITAT & Urban Morphology and Complex Systems Institute, 2017).

This value can be secured, captured and shared in support of built environment performance outcomes – using the central role municipalities have in this process.

The logic underpinning this Guideline is that there are five key factors for successfully generating value and achieving these outcomes through Catalytic Land Development (CLD). Municipalities must be:

- Be clear on what kind of social, economic and financial value they are seeking to create.
- Be rigorous in how they identify CLD opportunities that match the value sought with market demand.
- Be robust in their understanding of what drives property development in their municipality market demand (need and preference), private sector returns.
- Be deliberate in their approach to the preparation of a land development programme that builds value.
- Work in partnership with the private sector.

These five factors will determine how effectively municipalities realise, capture and appropriately distribute financial, social and economic value to catalyse a new spatial form in our cities that is sustainable, productive and inclusive. In other words, successfully building a ‘transformative’ spatial form that stimulates economic growth and reduces poverty and inequality.

If the roleplayers in a property development opportunity are not clear on the outcomes it should achieve and the preparation process is not steered accordingly, value can leak, be unrealised, lost or captured towards the wrong ends or our cities simply remain on an inequitable, inefficient and unsustainable development trajectory. This Guideline offers municipalities an approach to CLDP preparation that aims to reduces the risk of this happening.
The framework for thinking about value creation, capture and benefit sharing in CLDPs presented in this chapter is structured around four pillars:

1. Understand where the potential value in property sits/how it is created and/or enhanced.
2. Be clear on what value is to be gained from a CLDP by using an outcomes-led approach.
3. Use a preparation methodology that supports value creation, drives outcomes through evidence-led planning and identifies suitable tools to secure value in a particular CLDP. This methodology will inform what is required to be done in the stages of the preparation phase.
4. Ensure there is good governance and a supportive, capacitated institutional environment to follow the method and realise the benefits.

The diagram below sets out the approach to CLDPs adopted in this Guideline.
Why do we refer to ‘catalytic’ land development programmes?

The expectation of municipalities to initiate CLDPs is asking them to play a more deliberate role in identifying what transformative value can be gained from a particular land development programme and embarking on a concerted, yet frugal, programme to create this value. While municipalities have a great deal of influence that they can leverage to improve built environment performance, the intention is neither that municipalities do this alone nor that they resource the entire process. The intention is that municipalities do no more or less than what is required to catalyse participation of the private sector and households in the development programme. The appropriate role of a municipality in a CLDP will differ from one CLDP to another. Informed and careful programme preparation will help them to do the right thing in a particular circumstance to galvanise private investment interest and confidence and attract household participation and subscription. This will allow the development programme to gain momentum and spark responses downstream, or in a spatial sense, in surrounding areas to generate shared and inclusive growth.

1 Where are the opportunities in land development to create value?

The areas where value is created in land, and where local government plays an influential role, can be summarised into five themes: location and land use; local governance; market demand; investor confidence; and spatial targeting. Land markets build on, exploit and manipulate this value based on supply and demand driven by local and macro-economic forces and access to finance. They then capture this value, generating returns and further potential or competitive value in land or market value. It is important to note that poor performance of public sector responsibilities can destroy, lose or undermine value, creating negative value that will need to be addressed.

1.1 Location and land use

The finite and geographically fixed nature of land gives it an intrinsic value. Real estate (land and improvements) values are further shaped by a number of factors, such as access to facilities, services, infrastructure and amenities (roads, shops, places of work, schools, parks, etc.), as well as access to the natural environment (mountain, sea, rivers, open space etc.). (Rust 2018). All these factors determine what is suitable, desirable and sustainable for the land to be used for.

Access to transport networks and schools are prominent locational concerns in South African cities.

The state’s responsibility to provide services, infrastructure, amenities etc., and to protect the functioning of natural systems, means that it clearly has a significant role to play in creating value in land.

1.2 Market Demand

Value creation requires property development in partnership with the private sector, so it must secure financial and economic value as a basis for private
sector returns. The success of property development is largely driven by how effectively it responds to the needs and preferences of users of space. If there is no demand for space in a property development there is no value in this space. Understanding markets is a complex exercise - markets are dynamic, heterogenous and are further segmented (e.g. office space is graded, residential markets are segmented); developers and market intelligence sources become specialised in niche markets; market information is imperfect; markets can become distorted and government can play a role in this distortion, deliberately – because the market is not perfect, or inadvertently. Markets are also cyclical, so the timing of when a property development reaches the market is a crucial concern.

If there is demand for particular kinds of space and there is an, as thorough as possible, understanding of the needs (e.g. household size, accessibility, catchments), preferences (e.g. location or locational attributes), concerns and limitations (i.e. affordability) of these markets built into the design of a CLD and the mitigation of risk (real or perceived) in a CLD – much can be done to match demand to a particular locality and enhance the competitiveness and attractiveness of this locality (through value adding interventions such as high quality, well managed public space), which might otherwise be considered against the grain of market trends but important for spatial transformation.

The more publicly available information on economic sectors active in a municipality, their trends, needs and investment patterns, the resulting markets for space and the nuances around what kind of space is needed, the extent to which this need is being met and what the locational requirements are of these actors – the less conservative investors/ financiers and developers might be in considering locations and products that might otherwise not be considered or considered too risky. Municipalities can play a key role in sourcing this intelligence and making it widely available. The City of Cape Town’s quarterly Economic Performance Indicators for Cape Town (EPIC) reports (http://www.capetown.gov.za/work%20and%20business/doing-business-in-the-city/business-support-and-guidance/economic-resources-and-publications) and ECAMP platform (http://www.capetown.gov.za/work%20and%20business/planning-portal/online-planning-and-building-resources/ecamp) are examples of emerging practice in this regard.

1.3 Local governance

Land administration
Sound and efficient land administration systems that secure rights in land and govern the exchange of land within a clear, transparent and fair legal framework, are fundamental to creating value in land.

Service delivery
Access to services and reliable service delivery is also fundamental. If the servicing requirements of a land development, that is the provision of water, electricity and removal of wastewater and waste etc., cannot be secured, either within the urban services systems or embedded within a development within a risk management framework, the ability to create value is hindered or delayed.

Planning and regulation
Sound and efficient planning and regulation of the use of land within fair, transparent and clear systems is also critical to create certainty, manage adverse impacts of neighbouring land uses and balance stakeholder interests.
Urban management
The presence and quality of urban management – cleansing, safety and security, managing informal activities etc. – impacts on how land can be used, the perception of what it is suitable for and as a result, demand. It is a clear reference point for the market’s assessment of existing value and what further value can be created. This is evident when considering how many private developers design, implement and manage land development to control and/or supplement urban management functions going forward. The importance of urban management to the value that can be created extends beyond the site of development. The way in which urban management functions are performed in the surrounding neighbourhood is important, as are the networks linking into the broader urban systems. The opportunity here lies in the fact that municipalities have significant control and/or influence on the performance of this function; there are established mechanisms in place to secure good urban management through partnerships with residents and businesses. It is important to think about urban management pre-land development and over the long term, post-development.

Strategic asset management
A clear municipal-wide asset management strategy should locate land development opportunities and suitable objectives for each of these opportunities within a broader portfolio view, as well as within an understanding of the real estate market, market trends and supply and demand. This is important to ensure that the potential value that could be created through a land development opportunity is not cannibalised by competing opportunities, or diluted because objectives are not balanced appropriately across the portfolio. (Rust 2018) It is also important to prevent wasteful expenditure on the preparation of multiple land development programmes or projects in a downward phase of the market cycle.

A municipality holds multiple sites with development potential. The potential for, and expectation of, financial, economic and social returns should also be considered at the level of the portfolio or land asset base.

Land development preparation should take place within the frame of a land asset management strategy and programme of land release that considers the suitability and opportunities presented by municipal land assets in terms of their financial, social and economic value across the full property portfolio within the context of market demand and the property cycle.

The municipality needs to be able to balance costs and benefits of land use choices in the context of the developmental obligations placed on the state in South Africa. (Rust 2016)

This municipal portfolio also needs to be considered in the context of the broader state land portfolio in a municipality as well as in the context of state and private sector capacity. A typical case is unlikely to take less than a decade to be realised and will require dedicated and sustained capacity.
1.4 Investor confidence

Without investor confidence there will be little interest or finance to build value out of an opportunity. While investor confidence relates to broader macro-economic factors and trends, local governance plays a key role in attracting investment. More specifically, a land development opportunity can enhance investor interest by, inter alia:

- Developing a value proposition that is rooted in reality and informed by a robust understanding of land/property markets and market demand behaviours and patterns.
- Providing medium-term commitment to the objectives for the land development, thereby creating certainty/stability within a longer-term vision.
- Providing inter-governmental commitment to the objectives.
- Having consistent planning and planning decisions that prove this commitment.
- Removing or limiting risk associated with the development of land or structuring an appropriate risk-sharing arrangement.
- Ensuring fair play through a development approach that has integrity and is transparent.

1.5 Spatial targeting

Spatial targeting refers to a ‘crowding in’ investment approach. It is an approach to built environment investment prioritisation where specific areas within an urban system are highlighted for investment at a range of geographic scales to achieve particular development outcomes. Ideally, this prioritisation is shared inter-governmentally. Spatial targeting is an approach recommended by the NDP. If development roleplayers are coordinating their efforts in the same locations, value can be realised beyond that of each individual development opportunity; the result is a critical mass of activity that creates further conditions for more investment unlocking a snowball effect.

At a broader level, a driver of property developments is the strength of catchment areas, a function of the demographics and local economies. The implementation of policies that promote economic growth therefore have an important role to play in fostering private sector investor confidence and the desire to undertake property developments (McGaffin and Viruly, 2018).

The table on the following page summarises the different mechanisms available to municipalities that can influence the value of real estate, and which mechanisms a municipality might use to create value in and around a CLD. How these mechanisms are brought together into a value creation strategy (UN HABITAT & Urban Morphology & Complex Systems Institute, 2017) through the CLDP preparation process is key to realising value.
<table>
<thead>
<tr>
<th>MECHANISM</th>
<th>EXAMPLE</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and strategy</td>
<td>Spatial planning and targeting</td>
<td>MSDF</td>
</tr>
<tr>
<td></td>
<td>Municipal asset management strategy</td>
<td>BEPP</td>
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<tr>
<td></td>
<td>Inter-governmental asset management strategy</td>
<td>Precinct Plan</td>
</tr>
<tr>
<td>Land preparation/development readiness</td>
<td>Infrastructure capacity improvements and linkages</td>
<td>Bigger diameter sewer pipes or water pipes to accommodate higher densities, or a completely new connection (connecting a greenfield site back into the municipal system)</td>
</tr>
<tr>
<td></td>
<td>Market intelligence</td>
<td>Identify size of market, latent demand</td>
</tr>
<tr>
<td></td>
<td>Development rights enhancement</td>
<td>Additional bulk land use rights</td>
</tr>
<tr>
<td></td>
<td>Potential investment partners</td>
<td>Specialist funders or specialist developers (e.g. retail developer within a property development)</td>
</tr>
<tr>
<td></td>
<td>Due diligence studies</td>
<td>Geotechnical investigation to check soil conditions</td>
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<tr>
<td></td>
<td>Infrastructure implementation agreements with other providers</td>
<td>Agreement with National Roads Agency to give access from a development to a freeway</td>
</tr>
<tr>
<td>Regulation</td>
<td>Development rights</td>
<td>Rezoning from single to general residential</td>
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<tr>
<td></td>
<td>Land use rights-based obligations</td>
<td>Inclusionary housing</td>
</tr>
<tr>
<td></td>
<td>Urban design performance requirements</td>
<td>Street-level frontage</td>
</tr>
<tr>
<td>Incentives</td>
<td>Land use rights-based incentives</td>
<td>Density bonuses for inclusionary housing (positive social good)</td>
</tr>
<tr>
<td></td>
<td>Ease of investment incentives</td>
<td>Fast-track approval processes, streamline regulatory processes (e.g. land use and environmental)</td>
</tr>
<tr>
<td>Urban management</td>
<td>Local policing</td>
<td>Visible policing</td>
</tr>
<tr>
<td></td>
<td>Cleansing and maintenance</td>
<td>More regular cycles of maintenance</td>
</tr>
<tr>
<td></td>
<td>Social services</td>
<td>More active checking on public nuisance</td>
</tr>
<tr>
<td></td>
<td>Land use and building regulation enforcement</td>
<td>Control unauthorised building</td>
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<td></td>
<td>Special rating areas</td>
<td>The Cape Town Improvement District</td>
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<tr>
<td>Fiscal</td>
<td>Development contributions</td>
<td>Discounted development contributions for affordable housing</td>
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<tr>
<td></td>
<td>Tax incentives</td>
<td>Urban Development Zone</td>
</tr>
<tr>
<td>Information</td>
<td>Tracking market performance</td>
<td>Determine trends in property sales</td>
</tr>
<tr>
<td></td>
<td>Making market intelligence/data available</td>
<td>Commuter patterns</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Housing market analyses (formal and informal)</td>
</tr>
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<td></td>
<td></td>
<td>Employer and employee locations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business area performance data</td>
</tr>
</tbody>
</table>

Table 1.1: Mechanisms a municipality might use to create value in a CLD
Recommendations

A municipality should:

- Understand the full scope of value creation opportunities at its disposal.
- Understand what existing and potential value might be realised in an identified CLDP, based on a clear appreciation of:
  - The site location and characteristics.
  - The performance of the surrounding environment.
  - The planning rationale for the identification of a site for a CLDP.
  - Real estate market performance and trends – across the municipality and in the particular locale of the identified CLDP.
  - Private-sector confidence and conditions for investment.
  - The CLDP opportunity in relation to the broader asset management strategy for municipal land and public land in the municipality.

2 CLD objectives and concept

Any decision on the packaging of land development opportunities needs to be based on a clear set of objectives and a strong spatial rationale, that there are opportunities to create value that will realise benefits that may be shared fairly. As discussed in the introduction to this Guideline and in the introduction to this chapter, municipalities are asked to identify and prioritise CLDPs as a means to achieve specific outcomes (benefits) sought in the BEPP Results Framework (National Treasury, 2017) and municipal planning objectives aligned to the NDP, IUDF and Spatial Planning and Land Use Management Act (SPLUMA).

While land development opportunities that can create significant value may present themselves in many localities across the municipality, CLDPs in particular, are expected to produce inclusive transit-oriented development at strategic points on the municipality’s urban network. To assist municipalities in identifying these points of optimum potential transformative impact, the Urban Networks Strategy, BEPP guidelines and other supporting resources offer a toolkit for spatial targeting. Spatially targeted areas for CLDPs are identified in Municipal Spatial Development Frameworks (MSDFs) and, in the case of Metropolitan municipalities, also their BEPPs. These areas may be further supported by local, and precinct-level spatial planning and urban design.

Matching desired outcomes with the appropriate opportunity to realise them takes place in the first phase in the CLDP life cycle, the Spatial Planning and Targeting Phase. The spatial planning and targeting process is outcome-driven. This means it must, in identifying priority investment areas including CLDs, articulate the rationale, the vision and the objectives for implementing such an intervention. In other words, in the first phase of the CLD life cycle, the development objectives, broad concept and the possible projects that might form part of the programme to implement a CLD are identified.
In the handover from origination to preparation, the development objectives and a supporting development concept need to be further unpacked. They must be tested, developed and embedded with a clear understanding of how best the sought value can be created and the benefits shared as intended in that specific location. This must then be driven through the preparation process. In Stage 1 of the Preparation Phase (Phase 2), the Conceptual Planning Stage, these objectives and concepts are updated and/or confirmed. They become the ‘compass coordinates’ of the programme.

In Chapter 4, section 2, of this Guideline, there is advice on further content that must be developed, and the associated processes and resources that can support building a strong set of development objectives and a development concept. The objectives set out in the origination of the CLDP, and detailed in the initial Conceptualisation Stage, must direct the preparation and implementation of the programme. Furthermore, they need to guide the choices to be made in each stage for appropriate value creation and capture. The development concept will present an initial business case for the CLDP or value proposition. It will explore the delivery instruments and the likely timelines for the preparation and implementation of the programme. The development concept should also consider partnerships to leverage the CLDP’s objectives. Clear and measurable development objectives to drive the concept are key to maintaining integrity in a CLDP, as well as managing risk. They direct what value must be created and how it should be shared.

Importantly, while the development objectives identified for a CLDP must be located within a holistic spatial planning framework for the municipality, if a CLDP involves municipal or state land, it should also be located within a broader (public land) asset management strategy. This strategy should locate a CLDP’s objectives within the development objectives of the portfolio of public land. They should present a clear approach to developing and releasing land that balances development objectives across the portfolio – based on individual land parcel characteristics, land market performance and trends, and the needs and obligations of the municipality as set out in broader law, policies and plans.

**Recommendations**

A municipality should:

- Identify clear, measurable CLDP development objectives stating the nature of the value to be realised from the CLDP.
- Use these objectives to inform the substance and extent of the programme preparation process, the nature of partnerships to be built in the CLDP preparation process, the regulations triggered and, critically, the tools that the preparation process must identify and use to deliver on the programme in such a way that value is realised and benefits shared as intended.
3 How to build value: the CLD life cycle

3.1 The CLD life cycle

A process is needed that holds the CLDP objectives in sight, employs mechanisms to create the value sought by these objectives, and sets the CLDP on a solid path to achieve results. The CLD life cycle methodology for preparing CLDPs presented in this Guideline can help municipalities with such a process.

If a municipality follows this life cycle systematically, it will be in a better position to assure that the outputs of the implemented projects have an impact that collectively produce the outcomes sought (economic growth, reduced poverty and inequality). This impact will be underpinned by the accountability and integrity of the process and the municipality. Long delays, difficulties with implementation, wasteful expenditure and challenges with tracking and monitoring CLDP progress are almost always caused by deficiencies in the procedure that was followed to prepare the programme for implementation. Following this method is an important risk mitigation strategy. To build value in a CLDP, understanding the CLDP life cycle and adopting a disciplined and thorough approach to preparing and packaging the programme is critical.

The preparation of CLDPs must consider how the value sought is to be realised through the:

- Site of the development itself, its opportunities and constraints.
- Regulatory triggers and how these need to be approached to maintain focus on the intended outcomes/objectives with private sector and household participation.
- Scoping and testing of the delivery instruments available to achieve the intended outcomes.

A rigorous programme preparation method will address the key areas above, create investor confidence and maintain accountability. It is a process that will ensure that there is a clear, result-based intervention logic grounded in a practical understanding of what is, in fact, possible.

When value is generated, the risk is that it may leak, or be captured in such a way that it is at best, not in the public interest, and at worst, corrupt. Sometimes, given the complex nature of CLDPs and the multiple stakeholders involved, originators and programme managers are not aware of the value that is created or that the value that could have been created is lost. This can have broader impacts on the value of land and land markets, and the integrity of the state because public resources are being deployed. At the same time, an inter-disciplinary preparation process can enhance the potential of the process to generate multi-dimensional value. Deliberate transparency, accountability and rigour in initiating and preparing CLDPs is key to optimising value creation and building certainty and confidence that will, in turn, enhance potential value.
The CLD life cycle is presented below.

Diagram 1.2: The CLD life cycle phases and preparation stages

The CLD has three phases in its life cycle:

**PHASE 1: Spatial Planning and Targeting**

The process of spatial planning, targeting, precinct prioritisation and concept planning to determine a CLDP opportunity. Legislation and extensive guidance is in place to support municipalities in this first phase.

**PHASE 2: CLDP Preparation**

This phase involves taking the programme from inception to the point where individual projects within the programme are ready to be implemented. The CLDP preparation phase entails complex processes involving multiple projects and fields of expertise, stakeholders and agencies. Therefore, this phase can be lengthy and expensive.

To effectively manage CLDP preparation, it is useful to divide this phase into a sequence of stages. The five stages of the CLDP Preparation Phase used in this Guideline are summarised in the table on the following page.

The table highlights the core features of each stage.
<table>
<thead>
<tr>
<th>STAGE</th>
<th>OVERVIEW</th>
</tr>
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<tbody>
<tr>
<td>2.0 Catalytic Programme Inception</td>
<td>• Establishing a brief description and motivation for the CLDP with high-level articulation of objectives, as they relate to the BEPP.</td>
</tr>
<tr>
<td></td>
<td>• Establishing an overall cost indication of the intervention.</td>
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<tr>
<td></td>
<td>• Naming, numbering and registering the CLDP within City systems.</td>
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<tr>
<td></td>
<td>• Securing the go-ahead needed to formulate the CLDP concept.</td>
</tr>
<tr>
<td>2.1 Catalytic Programme Conceptualisation</td>
<td>• Defining the strategic objectives and their impact.</td>
</tr>
<tr>
<td></td>
<td>• A high-level analysis of contribution to municipal strategy, the typology of the CLDP and land use mix proposal and outline yields, with an accompanying high-level marketability report.</td>
</tr>
<tr>
<td></td>
<td>• Compiling an indication of the time frames and resources that will be needed to take the CLDP forward.</td>
</tr>
<tr>
<td>2.2 Catalytic Programme Pre-Feasibility</td>
<td>• Undertaking scoping investigations into the physical constraints, bulk services availability, land availability, market constraints, etc. to derive a high-level analysis of potential options for top structure development and for structuring the programme going forward.</td>
</tr>
<tr>
<td>(primarily for options analysis)</td>
<td>• Generating a set of development options assessing the critical risks of each option to identify a preferred option of land development that will be the focus of the Feasibility Stage.</td>
</tr>
<tr>
<td>2.3 Catalytic Programme Feasibility</td>
<td>• Clarifying the preferred development option with a detailed breakdown of the CLDP into component projects (the Master Development Schedule).</td>
</tr>
<tr>
<td></td>
<td>• Confirming the placement of the projects on the MTEF/IDP of the responsible funding authorities.</td>
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<tr>
<td></td>
<td>• A detailed risk analysis and risk mitigation plan for the programme.</td>
</tr>
<tr>
<td></td>
<td>• Programming critical steps and processes, if private-sector involvement comprises part of the preferred option.</td>
</tr>
<tr>
<td>2.4 Catalytic Programme Preparation</td>
<td>• Finalising the Master Programme and the Schedule for implementation (minor changes) of each project indicating its duration, implementation stages and the cost elements per stage.</td>
</tr>
<tr>
<td>Finalisation</td>
<td>• Preparation activities for work going forward (such as final rezoning, securing funding for municipal projects per vote, preparation for private sector-related projects, procurement of for example master developers).</td>
</tr>
<tr>
<td></td>
<td>• The mobilisation of implementing organisations (IOs) and the formulation of the implementation specifications for component projects of the CLDP and the establishment of the institutional mechanisms for the Implementation Phase.</td>
</tr>
</tbody>
</table>

Table 1.2: The five stages in the Programme Preparation Phase (Phase 2) of the CLD life cycle
All private sector-related projects within a CLDP are prepared and procured during this second phase, specifically in Stages 2.3 and 2.4, as are public private partnerships – the nature of which would impact procedures to be followed. Where applicable, such as for formal Public Private Partnerships (PPPs), relevant National Treasury guidelines must be followed during these stages.

PHASE 3: Implementation of multiple projects in a programme

All municipal-managed projects are prepared and implemented during this phase. The Standard of Infrastructure Procurement Delivery Management (SIPDM) and the Cities Infrastructure Delivery Management System will guide the implementation of these projects within the CLDP.

The sequential nature of these stages is important to manage risk, ensure scarce resources are well spent and maintain transparency and oversight in a lengthy and complex process. Nevertheless, there is an inevitable degree of reiteration between these stages to arrive at a feasible, investment-ready CLD.

The phases and stages of the CLD life cycle discussed above are schematically presented in more detail in the diagram on the following page.

The term ‘life cycle’ has different meanings in different contexts:

• The ‘CLD life cycle’ includes Phases 1 to 3, as discussed in this Guideline.
• A ‘project life cycle’ is as stated in all South African built environment profession gazettes (which are aligned). The SIPDM life cycle is also a project life cycle. This cycle focuses on the implementation of a project.
• A ‘life cycle analysis’ or ‘whole life analysis’ (which can include financial investigations) often forms part of a feasibility study and should be conducted over the whole life of the product/asset, from planning to termination.

After Phase 3 of the CLD life cycle, there is the continued operations, maintenance and management of the development/precinct to support, sustain and build on the investments made in the implementation of the CLDP. Separate guidance is available to support municipal activity in this phase at http://ndp.treasury.gov.za/About%20NDP/Forms/UNS%20Support%20Guide.aspx.

Detailed recommendations for each stage of the preparation phase of the CLD life cycle are presented in Chapter 4.

Recommendations associated with establishing good governance in support of the CLD life cycle are presented in Chapter 2.
Diagram 1.3: Phases 1 to 3 of the CLD Life Cycle

**PHASE 1:** Spatial Planning and Targeting

**Stage 1.1:** Urban Network Planning
- Existing and future (pipeline) of inter-governmental projects having an impact on spatial planning

**Stage 1.2:** Corridor/Integration Zone Spatial Planning
- Minimum preparation for SIPDM implementation of municipal projects
- Minimum preparation to implement PPP type projects
- Minimum preparation to implement SPV type projects

**Stage 1.3:** Precinct Node/Hub Spatial Planning
- Implementation: Municipal projects, SIPDM, CIDMS
- Implementation: Projects covered by PPPs
- Implementation: Projects covered by SPVs (Not currently available)
- Implementation: Private (Master) Development Projects

**PHASE 2:** Programme Preparation

**Stage 2.0:** Programme Inception (Formal Start)
- Various types of programmes: Integration Zone Programme, Precinct Programme, Catalytic Development Programme

**Stage 2.1:** Programme Conceptual Planning or Development Concepts Refinement
- Prefeed study
- Programme option

**Stage 2.2:** Programme Pre-Feasibility Study
- Programme options and preferred option

**Stage 2.3:** Programme Feasibility Study
- Programme preferred option final feasibility

**Stage 2.4:** Programme Preparation Finalisation
- Programme preparation with final effects

**PHASE 3:** Individual Project Implementation

**Stage 3.1:** Urban Spatial Layout

**Stage 3.2:** Corridor/Integration Zone Plan, Catalytic Development Identification and Development Concepts
- Minimum preparation for SIPDM implementation of municipal projects
- Minimum preparation to implement PPP type projects
- Minimum preparation to implement SPV type projects

**Stage 3.3:** Precinct Plan and Concepts
- Continuous integration of existing and future (pipeline) of other non-municipal projects as well as newly identified municipal (programme) and other inter-governmental projects

**Stage 3.4:** Private (Master) Development Projects
- Continuous coordination of other inter-governmental projects

**Stage 3.5:** Projects Ready to Be Implemented
- Transform Spatial Planning and Phasing into Projects Ready to Be Implemented

**SCHEMATIC PROCESS DIAGRAM FOR (I) URBAN, INTEGRATION ZONE & PRECINCT SPATIAL PLANNING, (II) PROGRAMME DEVELOPMENT PREPARATION FOR INTEGRATION ZONE, PRECINCT & CATALYTIC DEVELOPMENT PROGRAMMES AND (III) PROJECT IMPLEMENTATION FOR MUNICIPAL, PUBLIC-PRIVATE PARTNERSHIP, SPECIAL PURPOSE VEHICLE AND PRIVATE MASTER DEVELOPMENT PROJECTS**
CLDPs require delivery solutions that realise the benefit sought and capture benefits to be shared as intended so that the development objectives are met.

The reality is that trade-offs may need to be made to make a CLDP 'bankable'; that is, the programme must present 'sufficient collateral, future cashflow, and high probability of success, to be acceptable to institutional lenders for financing' (Business Dictionary, 2018: s.v. bankable). It is not the intention that municipalities carry the primary burden, financial and other, for implementing CLDPs. Rather, using public land and other interventions to create value discussed in section one of this chapter should be consciously applied to establish the prospect of revenue that will, in turn, attract development partners and other sources of finance and funding. This does not mean that there should be no public investment. However it must be clearly linked to a demonstrable public return that is to the transformational intentions of CLDPs, the value to be captured and shared.

CLDP preparation, therefore, will involve transactions – transactions on land, finance or funding, and with partners. These transactions will need to be carefully packaged and the processes undertaken will need to be thorough, transparent, accountable and ethical, if value is not to be compromised. The positive feedback loop of value creation (UN HABITAT & Urban Morphology & Complex Systems Institute, 2017) on the following page is dependent on a productive interaction between the public and private sectors in the CLDP. The CLDP’s delivery strategy must provide the basis for this. It must also establish the mechanisms that capture the value created by public and private investment and distribute it fairly, based on the original CLDP development objectives.

Project delivery times on relatively straightforward property developments are between 4 – 8 years (McGaffin, Viruly, 2018). Delivery strategies, and the institutional arrangements set up and committed to support CLDP preparation and delivery discussed further in the next section, need to give careful consideration to the medium to long term nature of a single CLDP, particularly if it is complex. Market demand studies will become outdated and programmes and project specifications will need to be flexible while keeping a close eye on the development objectives of the CLD. The municipal role in a CLDP must be thought about in this light and should be reflective of the public value to be realised and the risk to be managed. This also needs to be thought about carefully if a municipality is running multiple CLDPs. A municipality may want to consider prioritising a smaller, less complex CLD on which to apply unfamiliar regulatory frameworks, test approaches and learn, which can then be applied to larger programmes and projects at a later date.
As municipalities move through the stages of the CLDP preparation phase, delivery options will be explored and a viable delivery strategy will be developed. There are many legal, regulatory and ethical considerations to contemplate and processes to design to make delivery within a reasonable time period possible. The finance and funding required to deliver the outcomes will involve multiple stakeholders and will trigger another set of legal and regulatory provisions to be followed. Tactical decisions will need to be made on what upfront investment is required to reduce risk and attract investment. Where other spheres of government are required to invest or enable investment in their assets, agreements will need to secure such commitments. These considerations are further discussed in Chapter 3 of this Guideline.

A successful delivery strategy will be built on a solid, embedded approach to risk management. Ways to think about risk management in the context of CLDPs is discussed further in Chapter 2 of this Guideline. However, as already mentioned, remaining true to objectives, understanding what creates and what undermines value, undertaking rigorous preparation and being ethical throughout the life cycle, present important preconditions for successful CLDP delivery.
5 The need for an ethical approach to value creation, realisation and benefit sharing

5.1 Context

The policy directives driving municipalities to promote, enable and facilitate CLD expect that this is done ethically. An ethical approach is fundamental to optimising value creation opportunities.

To act ethically is to consider what is good and right for the self and for the other. In the context of organisations, ethics refers to ethical values applied to decision-making, conduct and the relationship between the organisation, its stakeholders and broader society (King IV, 2016). To be ethical and to act with integrity also implies, very importantly, honouring the spirit and principles of the developmental outcomes attached to CLDPs and associated projects.

In the context of land development in South Africa, of primary importance is that:
- The municipality be ethical and act with integrity.
- Municipal systems have integrity.
- The individuals who work within the municipality are ethical and act with integrity.

The same applies to the private sector.

All roleplayers, whether representing the public or the private sector, are legally and professionally obliged to act with integrity and for the common good. Each group of stakeholders wants to achieve their own objectives, including the profit motive that forms part of private-sector engagement. However, when dealing with land development where the state is a stakeholder, public interest should remain at the forefront.

Land, as a resource, has financial value in the market but it also has economic value (to the municipality and the country) and social value (to residents and citizens). Land is a finite resource and land development processes, including the servicing of land, are lengthy and costly. How we develop land today has a long-lasting effect on the structure, form and use of cities and towns in the future.

If all the roleplayers in CLDPs, whether individuals or organisations, act ethically and with integrity, this will inspire greater confidence in the programme. They, and other roleplayers, will be more likely to invest time, energy and money to achieve a positive outcome.

When CLDPs are well designed they create value that can be reinvested in cities and precincts for the benefit of urban residents and stakeholders. On the other hand, corrupt and unethical practices tend to undermine efficient and effective project processes and reduce investments (thus limiting value creation). This leads to mistrust between programme stakeholders, and can ultimately result in urban communities losing confidence in public institutions.
Corruption in planning processes and property related transactions happens when administrative processes are unclear, and where there is a lack of transparency. At a strategic level, the obligation to achieve developmental outcomes arises from planning legislation, such as SPLUMA. Both SPLUMA and the NDP promote spatial transformation based on the principles of spatial justice, equality, resilience, sustainability, quality, efficiency and good governance. Similarly, at the more applied level, many laws and regulations include obligations to act with integrity, not least the Prevention and Combating of Corrupt Activities Act (PCCA)(2004) and the National Anti-corruption Strategy (2017).

On the public-sector side, public-service employees are obliged to conform to high standards of lawful and ethical conduct. Public Service Regulations (2016) that apply to national and provincial government go into great detail about accountability, disclosure of interests (including owning property), and avoiding nepotism, acting for personal gain, and other specified types of conflict of interest.

For the private-sector stakeholders, the commitment to act ethically arises partly from codes of conduct or ethics. Each profession has associated sets of professional ethics and statutory councils and professional institutes to oversee conduct, and to promote good practice among their members. In addition, when it comes to integrity, private companies (and local government) are guided by the King IV Report on Corporate Governance for South Africa (2016). Going beyond professional codes, private individuals who may not be part of professional associations are duty bound as law-abiding citizens to act ethically.

Transparency International (2011) distinguishes between administrative and political corruption as follows:

*Corruption in the land sector... can vary from small-scale bribes and fraud (e.g. administrative corruption), to high-level abuse of government power and political positions (e.g. political corruption). Corruption, whether administrative or political, does not favour the establishment of long-term national or local land strategies.*

The spectrum of corrupt practices spans all the way from those that are deemed criminal activities to those that may be regarded as misconduct in South African law. Examples of criminal offences include fraud, theft, bribery, embezzlement and extortion. Examples of misconduct include maladministration, abuse of privileged information, favouritism, nepotism and conflict of interest.

The discussion in this section includes both categories of corrupt or poor practice. Based on multi-country investigations, Klitgaard et al (2000) give the following examples of unethical practices in cities:

- Bribes lead to the misallocation of subsidised housing.
- Kickbacks to procurement officers mean that city contracts often go to unworthy firms.
- Public property is used by city officials for private ends.
- Permits and licenses are facilitated by speed money, and sometimes purchased for a bribe.
- Bribery enables people to break safety, health or other rules, thereby creating grave social risks.
• City services may be unavailable without illegal side payments.
• Tax collectors extort citizens, or even more often, collude with taxpayers to abet evasion in exchange for bribes.
• Zoning decisions are influenced by corruption.

Locally, Olver (2017) outlines in detail the corrupt manipulation of the process of town planning approvals in a previous administration of the Nelson Mandela Bay Municipality for the purpose of extracting kick-backs.

The response to such practices is to put measures in place to detect, investigate and resolve instances of unethical behaviour, and to take steps to prevent it by strengthening processes and institutions.

There are many contextual factors that are important for creating a supportive environment for promoting ethics and integrity. Municipalities can consider the degree to which they have these elements in place at any given time, and whether they need to take steps to alter, or adjust them depending on the operating environment.

To promote ethics and integrity, a municipality can:
• Strengthen the (land) governance system through:
  • Clear regulatory frameworks (e.g. governing development charges, the setting of development rights etc.).
  • A level of accountability for the use of public funds.
  • A degree of public accountability to resident communities.
• An effective and transparent regulatory framework for procurement.
• Transparent and clear permissions processes.
• Build strong infrastructure through:
  • The knowledge, skills and capacity of public regulators.
  • Adequate formal remuneration of officials.
  • Effective codes of ethics for public servants.
  • A municipal integrity management framework.
• Support an engaged and competitive private sector through:
  • Formal incentives that are attractive to the private sector.
  • Acceptance of regulations to promote fair competition.
  • Effective codes of ethics.
• Consider the state of the economy and, if necessary, put in place measures to guard against undue profiteering and speculation, both in buoyant and poor economic conditions.

To illustrate the importance of these dynamics and their inter-relatedness, if the economy is performing well but public wages are low and regulatory frameworks are unclear and not transparent, there is a fair chance there will be an increase in incidences of corruption (e.g. bribery).

Programme planners need to take long- and short-term factors and trends into consideration when designing and putting positive CLDPs in place, in which opportunities for malpractice are minimised and positive incentives for good practice are maximised.
**Recommendation**

Every municipality needs to actively build the integrity of the institution and its systems, and to enhance ethical awareness. This will create an ethical culture in which all the roleplayers understand the benefits of acting ethically and the counter-productive effects of unethical behaviour.

5.2 An initial framework for CLDPs

Improving behaviour and preventing or reducing opportunities for illegal and unethical behaviour can be achieved at the level of CLDPs by:

- Applying relevant legislation
- Adopting a clear framework
- Implementing strategies and tools

These three aspects are discussed in more detail.

**Apply relevant legislation**

The first step is to ensure that the measures required by relevant legislation are effectively in place in the municipality, and that CLDPs are designed to benefit from these, and to comply with legal and good practice.

The aim of many of the regulations and processes that address the issues of ethics and integrity is to build a more ethical culture within and across organisations.

Section 195 of the Constitution requires that public administration (i.e. the public sector and local government) be governed by the democratic values and principles enshrined in the Constitution, including the promotion of a high standard of professional ethics, and efficient, economic and effective use of resources. Local government officials are bound by the Code of Conduct in the Municipal Systems Act. The framework for ethical behaviour of individuals employed in the public service is very clear and detailed.

As mentioned previously, the law that applies most specifically to corruption in the public and private sectors is the PCCA (2004). Public officials are obliged to report corrupt activities. The need for transparency in planning and implementation processes is crucial, and accountability can be exercised through the application of the Promotion of Access to Information Act (2000).

Other pertinent legislation that also extends to governing the involvement of the private sector includes the Municipal Finance Management Act, Treasury regulations on Public Private Partnerships, the 2005 Supply Chain Management Regulations, the Municipal Systems Act of 2003, the 2008 Municipal Asset Transfer Regulations, and the 2011 regulations under the Preferential Procurement Policy Framework Act.

**Adopt a clear framework**

There are many areas that need conscious oversight to ensure that ethics and integrity pervade CLDPs.

**Recommendations**

The key dimensions that need oversight, as derived from the Cities Support Programme’s City Integrity Transparency, Accountability and Technology Project (InTAcT) are in the areas of decision making. They deal with the following processes:

- **Prioritisation** refers to city processes to select, resource and prioritise particular land development and/or infrastructure projects for
inclusion in city plans and budgets. Such processes occur at citywide level, as part of IDP development, and at a more local/ neighbourhood/precinct level where local prioritisation is relevant.

- **Procurement** refers to decisions through the supply chain management system to procure land, goods and services for land development-related infrastructure projects, plus decisions to dispose of municipal land assets.

- **Permissions** refers to a city’s regulatory decision-making process, particularly decisions made via planning tribunals, planning committees and delegated authority regarding land development applications. Such processes are typically quasi-judicial in nature and need to be exercised with propriety based on clear policy and ethical judgement. Important areas include land use, infrastructure and town planning matters (such as rezoning, development contributions payable, building plan approvals and so on), the issuing of licences and permits, and the levying of penalties.

- **Performance** relates to decisions regarding the assessment of performance (who, what and how), the consequences of inadequate performance, and associated reporting on performance. (CSP, 2017)

The systems that are designed to detect and prevent unethical behaviour need to target all four of the above dimensions.

**Implement strategies and tools**

To achieve a culture of ethics and integrity that goes beyond the level of relevant laws and codes, municipalities should adhere to the principles outlined in the Local Government Anti-Corruption Strategy: Integrity Management Framework (COGTA, 2015). The Integrity Management Framework is intended to be a guideline for municipalities in implementing their initiatives to promote integrity and combat corruption. It also sets out the responsibilities of municipalities in implementing the Local Government Anti-Corruption Strategy.

**Recommendations**

This framework addresses both organisational efforts, as well as efforts to create awareness among individuals as part of the prevention measures. The measures are outlined as follows:

- **Municipal leadership should set the tone and drive good governance, organisational integrity and anti-corruption initiatives.**

- **Communities must be acknowledged as the ‘owners’ of municipalities, and initiatives must be put in place to ensure transparent and accountable governance, and community oversight.**

- **Appropriate governance structures should be in place and should ensure effective governance, oversight and the implementation of the integrity management framework. There should be sufficient capacity to implement the integrity management framework.**

- **Municipalities should institutionalise integrity management initiatives based on the four pillars of:**
  - Prevention
  - Detection
  - Investigation
  - Resolution
• Effective information management systems should be implemented and municipalities must submit reports to appropriate entities to ensure transparency through monitoring, oversight and accountability. (COGTA, 2015:2)

In terms of prevention, the Integrity Management Framework lays out how to manage corruption risks as follows:

Municipalities must identify areas of their core business that are specifically prone to corruption. Managing these risks must form a key part of the municipality’s pro-active anti-corruption initiatives. The following areas must be included in considerations:

• Supply chain management/procurement
• Financial management
• HR (e.g. appointments, promotions and creation of positions)
• Land matters (e.g. assignment of land rights, disposals etc.)
• Housing allocation (if relevant)
• Infrastructure projects (e.g. contracting; implementation etc.)
• Permits and licences (approval and inspecting) (COGTA, 2015:9)

The recommendation that municipalities identify areas of their core business that are specifically prone to corruption is a very important initial, preventative element that the managers of CLDPs should consider at both programme and project levels.

To this end, and to implement programmes that integrate ethics, it is necessary to make every effort to proactively detect, combat and prevent corruption. The table on the next page summarises examples of the kinds of behaviours to look out for, and broad actions to take to address them. This makes it possible to reduce corruption and unethical behaviour across the CLD life cycle. This summary is not exhaustive. It is worth remaining attentive to practices that may be unexpected but are likely to have negative impacts on the programme and its constituent projects.

For example, corruption may not always operate through direct personal relationships or immediate patronage networks. Undue pressure from private developers may be indirect (e.g. via provincial government or local politicians). The ‘benefit’ elicited as part of a deal may go to a political party (in the form of party funding), rather than an individual. Even more challenging to detect, is when there is personal benefit down the line, possibly in the form of a promotion or a favourable re-deployment.
<table>
<thead>
<tr>
<th>PHASE</th>
<th>FORMS OF BAD PRACTICE THAT MAY ARISE</th>
<th>ACTIONS TO MITIGATE THE RISKS</th>
</tr>
</thead>
</table>
| 1. Spatial Planning and Targeting | • Undue influence of decision-makers in the prioritisation of a CLDP over another or the approved development objectives of a CLDP  
  • Purchase of land in the path of future development using insider knowledge for the purposes of speculation  
  • Rent-seeking behaviour, where stakeholders manipulate programmes or processes, or influence early planning decisions, to create conditions where they can later extract benefits from the system  
  • Irregular or irresponsible disposal of public land                                                                                                                                                                                                 | • From inception, Code of Conduct/Ethics to be signed by all stakeholders  
  • Strengthen municipal land disposal policies and institutions  
  • Maintain transparent records of land transactions (buying and selling municipal land)                                                                                                               |
| 2. Catalytic Programme Preparation | • Procurement irregularities, such as kickbacks to procurement officers or vague qualification criteria, which enable manipulation of the adjudication process  
  • Limitation imposed on the extent of programme preparation to be concluded prior to disposal to enable preference and to limit public good gains to be obtained in implementation  
  • Manipulated land valuations and/or terms of land disposal/ acquisition agreements that favour the bidder and prejudice the public interest  
  • Collusion among bidders during the procurement process  
  • Bribery of public officials by developers or investors  
  • Misrepresenting results of pre-feasibility and feasibility studies for personal gain  
  • Undisclosed conflicts of interest when forming partnerships around joint ventures, special purpose vehicles, etc.  
  • Prioritisation of projects influenced by outside parties for political or financial gain  
  • Zoning decisions influenced by outside parties                                                                                                                                                                                                 | • Ensure and enforce adherence to procurement regulations  
  • Put measures in place for heightened disclosure of conflicts of interest  
  • Create mechanisms to monitor potential leakage of funds at all stages of the life cycle  
  • Institute measures to monitor and prevent anti-competitive behaviour  
  • Establish risk registers that are regularly updated and realistically reflect issues arising  
  • Establish a sound and transparent land value information system that assists a municipality to know the actual market value land in the municipality  
  • Establish publically accessible database of all:  
    • Tenders issued  
    • Bids received, and from whom (including shareholder lists)  
    • Bids evaluated, the basis of the evaluation, the identity of the evaluation committee, and the score given  
    • Bids awarded, for how much, to whom  
    • The use or application of the funds received                                                                                                                  |
| 3. Implementation of Multiple Projects | • Developmental objectives of project (e.g. inclusion of opportunities for middle and lower income households or SMMEs) altered by delivery agencies after procurement phase in their own favour  
  • Development charges not fairly and transparently set and levied  
  • Misallocation of housing units or other types of space  
  • Downward raiding of units targeted for lower income recipients  
  • Rent-seeking behaviour in communities to influence labour and supplier contracts                                                                                                                                                                      | • Have a clear policy in place for allocation of publically funded, targeted residential, retail, commercial and industrial space  
  • Carefully monitor (audit) project outputs delivered against original commitments at procurement stage  
  • Put in place minimum disclosure requirements for parties forming partnerships for implementation  
  • Set up citizen advisory boards made up of volunteers from communities where projects are taking place, to scrutinise the planning and implementation of the programme |

Table 1.3: Unethical practices and how to mitigate the risk of them happening
It has also been suggested that sometimes officials just give in to unrelenting pressure (from politicians, provincial government, well-resourced private-sector lobbyists) so that they can carry on with their work.

For CLDPs to work well, it is essential that there is a context of strong institutions and regulatory frameworks, and clear and transparent decision-making processes in which planning, approvals and negotiations takes place.

Partnerships are important in CLDPs. To broker partnerships and agree on specific project conditions (e.g. setting development rights) requires negotiation. The main characteristics of a fair and equitable land development negotiation would include that all parties:

- Are duly authorised to enter and conclude negotiations.
- Are acting within their mandates to advance their legitimate interests whether that be public good or for profit.
- Are only bringing to bear legitimate, fair and just bargaining chips for leverage (e.g. available municipal land or bulk, development capacity etc.).
- Are acting lawfully and according to the professional and organisational codes of conduct and ethics that they may subscribe to, as relevant to their respective professions, roles and stations in the development project or programme.
- Have arms-length relationships and are acting without undue political or other influence.
- Do not have conflicts of interest or have declared them (and they have been deemed to not be materially significant to the negotiation).
- Do not engage in uncompetitive behaviour such as collusion.
- Are capacitated and knowledgeable about the sector.
- Are privy to all deal-relevant information and with reasonably full disclosure of such information by all parties.

In addition, bid requirements and adjudication criteria should be thorough, explicit and clear up front to allow fair competition and adjudication. In the CLD process, stage-gate approvals are an especially important accountability mechanism for the programme.

Apart from adopting a pro-active approach by improving access to information and enhancing positive incentives, don’t expect to get programmes perfect the first time, but to implement measures that allow learning by doing. It is possible to use programme, project and financial information to learn where vulnerabilities have emerged, and then to take action to close these loops for the next round, thus continuously moving towards better performance. This is an important role for the function of CLD portfolio management.

Corrupt and unethical practice is ever changing. It may not be possible to anticipate all that might happen but it is possible to design dynamic systems of oversight to allow agile responses when challenges do arise.
AN INSTITUTIONAL FRAMEWORK THAT SUPPORTS VALUE CREATION AND BENEFIT REALISATION IN CATALYTIC LAND DEVELOPMENT PROGRAMMES (CLDPs)
Chapter table of contents

Introduction
1 CLD programme management
2 CLD portfolio management
3 Institutional capacity to support CLD programme and portfolio management
4 CLDP management tools
5 Managing risk in CLDPs
6 Building value in CLDP through stakeholder engagement

Abbreviations used in this chapter

BEPP  Built Environment Performance Plan
CLD  Catalytic Land Development
CLDP  Catalytic Land Development Programme
MSDF  Municipal Spatial Development Framework

Terms used in this chapter

Portfolio: A collection of assets (property or investments, etc.) held by a person or organisation typically organised into collections of assets with similar attributes.

Stakeholder mapping: The process of identifying a stakeholder and the nature and extent of interest, influence or impact of an activity on the stakeholder, or on the activity from the stakeholder, as well as identifying how this may differ across the different steps or stages of undertaking an activity.

Transversal technical management structure: An organisational committee comprised of suitably-qualified professionals from a broad spectrum of relevant and/or affected sectors or departments that exercises oversight or supervision over an initiative

Turn-key development: A design and build development project that is constructed to be sold on to a consumer as a completed product.

Value for money: In relation to a public-private partnership agreement, means that the performance of a private party in terms of the agreement will result in a net benefit to the municipality in terms of cost, price, quality, quantity, risk transfer or any combination of those factors. (Municipal PPP Regulations)

Whole-of-life costs: Costs associated with a project or programme from the inception of the programme or project right through to the ongoing operations, maintenance, holding and management of the finished product.
Introduction

A CLDP is a complex process that requires a supportive and defined institutional framework. It is necessary to establish an appropriate level of institutional capacity within a municipality to effectively govern and undertake CLDPs. This chapter offers guidance on various governance and management structures and mechanisms that can do this.

A CLDP is aimed at delivering a series of inter-dependent, mutually reinforcing or complementary built environment projects. These projects are implemented by either national, provincial, municipal or the private sector, or one or more of these parties in partnership, in an aligned, coordinated and structured manner on the same site or in the same precinct. A typical CLDP could be understood to include many types of projects in varying mixes as shown in the diagram below.

Diagram 2.1: An example of the components of a CLDP
Collective investment from the public and private sector in targeted urban spaces will play an important role in spatially transforming cities by producing mixed-use, higher density, inclusive and generative developments. To be successful this requires coordination and active management.

1 CLD programme management

CLD programme management (or sub-programme management) is the management of multiple related projects in a systematic way to obtain benefits that would not be possible if the projects were managed individually.

A programme can be a group of projects related to a single precinct development initiative, which entails a variety of multi-disciplinary projects, or a group of projects that are related to a specific discipline or sector e.g. all water-related infrastructure projects.

This Guideline focuses on CLDPs comprising a variety of multi-disciplinary projects.

In CLD programme management, objectives are defined at the level of the programme. This means that:

- The identification, selection, prioritisation and preparation of all projects in the programme are considered against the CLDP objectives or goals.
- When implemented, all the projects in the CLDP are measured against the programme objectives or goals to monitor that the intended benefits are realised.

2 CLD portfolio management

A municipality may be driving several CLDPs in parallel with one another across a number of priority precincts. These CLDPs are likely to be competing for the same resources in their preparation phases. If not well managed, these CLDPs could also find themselves competing with one another in the marketplace for investment. If these CLDPs are not going to compete with one another, with counter-productive consequences, they need to be managed as a portfolio. There are therefore two levels of management (and capacity) required of municipalities to realise CLDPs in the Preparation Phase – management at the level of a CLDP, and management of the portfolio of CLDPs. This is to allocate resources strategically and appropriately and to establish a pipeline of investment opportunities that are prepared and well-timed to attract and prime investors.

CLD portfolio management should seek to understand property markets and the impact of a CLD (or its phasing), the CLD portfolio and other land development projects on the markets of entire municipalities in order to prevent the municipality distorting the market. For example, if a CLD is to deliver office space into an over-supplied market this will reduce the value of this office space and similar office space across the municipality. This will impact on property values and in turn, the municipalities own rates revenue. This would have a detrimental impact on investor confidence.
A CLDP portfolio contains all the CLDPs identified by the municipality in its corporate integrated development and spatial planning (i.e. Phase 1 of the CLDP life cycle). The identification of CLDPs in the corporate planning processes may go so far as to prioritise this portfolio and to identify the projects that make up these programmes on a preliminary basis. In articulating the CLDP portfolio, the municipality may identify sub-portfolios to better organise the portfolio on a thematic or area basis, for example. An example of a CDLP portfolio is identified in the diagram below.

As the various sub-portfolios and CLDPs progress through the life-cycle phases and stages, more and more projects within each CLDP are identified and captured in the CLDP portfolio hierarchy. This is more clearly illustrated in the diagram on the next page. In general, CLDP portfolio management (including sub-portfolios) is management that takes place in a centralised manner within the municipality with the primary objective to maintain a stable, efficient institutional environment for the delivery of CLDPs. The specific role of CLDP portfolio management within the municipality is outlined in further detail below.

Diagram 2.2: A portfolio of CLDPs before the identification of projects
Diagram 2.3: An example of a CLD portfolio hierarchy after the identification of projects
Institutional capacity to support CLD programme and portfolio management

A municipality needs to identify, establish and mandate sufficient skilled capacity to manage each CLDP, through the three distinct phases, namely Phase 1: Spatial Planning and Targeting, Phase 2: Catalytic Land Development Programme Preparation and Phase 3: Implementation of Municipal-managed (infrastructure) Projects within the CLDP.

A municipality will have multiple existing delegated structures to take various decisions that impact on the programme; for example, land use/development planning decisions; land acquisitions and disposals; budget allocations; etc. Management structures associated with the preparation of programmes do not interfere with these. However, the CLDP approval authority must be empowered with appropriate delegations to instil credibility and confidence in the CLDP.

It is important to note that the key roleplayers during these three phases (spatial and town planners, CLD portfolio and programme managers and technical/project managers) need to be continuously and consistently involved in order to ensure an iterative, integrated process. At different phases and stages the roleplayers will play different and more or less prominent roles but these roles are always important.

The diagram below indicates the relationship between the mentioned roleplayers and the effort required per phase. Of course the primary roleplayers should not only engage with each other during the phases, but should also involve other stakeholders, whether non-municipal public or private sector, in terms of a thorough stakeholder mapping and management plan.

It is recommended that the spatial planning function is responsible for Phase 1, CLD portfolio and programme managers hold overall programme management responsibility in Phase 2 and technical managers take charge of Phase 3. During each phase, the responsible manager must ensure the inclusion and involvement of the other parties.

The following management structures are recommended and are discussed in more detail:
- CLDP Portfolio Executive Steering Committee
- CLD Programme Manager
- CLDP Management Committee
- CLDP Portfolio Manager

3.1 CLDP Portfolio Executive Steering Committee

Council approves the MSDF and, in the case of the metros, the BEPP. Council therefore approves the inception of the CLDP, including the vision and development objectives. A delegated CLDP oversight and approval structure/authority (such as a CLDP Portfolio Executive Steering Committee) is needed to monitor and take decisions to ensure that CLDPs remain true to their development objectives as they progress through the preparation stages. The primary management tools of this committee will be the stage-gate approval process, and the associated baseline management documents explained later in this chapter.
PHASE 1: Spatial Planning and Targeting

Major outputs of Phase 1:
- Municipal Spatial Development Framework
- Sub-municipal/local Development Framework
- Integrated Development Plan
- Built Environment Performance Plan

PHASE 2: Catalytic Land Development Programme Preparation

2.0 Catalytic Programme Inception
2.1 Catalytic Programme Concept
2.2 Catalytic Programme Pre-Feasibility
2.3 Catalytic Programme Feasibility
2.4 Catalytic Programme Preparation

Phase 2 is the process to manage the CLDP through its stages with the aim to meet spatial planning objectives, outcomes and impacts and to deliver ready to be implemented projects within the CLDP

PHASE 3: Implementation of Multiple Programme Projects through SIPDM and CIDMS

Linked to phases 1 and 2, this phase entails the:
- Strategic planning of infrastructure
- Individual infrastructure project planning, design and procurement
- Resource planning of municipal-managed projects

Diagram 2.4: Involvement of key municipal roleplayers during CLD life-cycle phases and stages

Note: It is clear that the above process is not a typical sequential process but an iterative process of consultancy and negotiations that requires the involvement of not only key roleplayers as mentioned above but also other stakeholders in a CLD.

SIPDM: Standard for Infrastructure Procurement and Delivery Management
CIDMS: Cities Infrastructure Delivery Management System
Recommendations

- Appointed members and leadership should be consistent at executive, administrative and political level.
- Membership may not be limited to the municipality. Not all CLDPs will be led by the municipality. Some may be led by other spheres or entities of government. Nevertheless, such CLDPs will rely heavily on municipalities for planning and other regulatory approvals, for access to infrastructure and possibly funding for infrastructure, etc. Similarly, municipal-led CLDPs will be reliant on other spheres of government or entities for other statutory approvals, such as grant funding, land, etc.
- The CLDP Portfolio Steering Committee should:
  - Review and approve stage-gate baseline management documents.
  - Receive and oversee specific reviews arising from the deliverables and baseline management documents (explained later in this chapter).
  - Oversee the portfolio of CLDPs and their progression through the life cycle.
  - Account, on a regular basis, to the City Manager/Executive Management Team, Mayoral Committee, Executive Mayor and Council to ensure that the progress made in the CLDPs is profiled and corporate buy-in to the CLD portfolio/programme is sustained. This is important to do as links may be made to different structures of the municipality at different times to secure budget, sectoral alignment, etc.

### 3.2 CLD Programme Manager

Due to the profile, size, complexity, risk and multi-disciplinary nature of CLDPs, adequate capacity must be in place with sufficient authority to prepare, transact on and implement these programmes. This is critical to achieve results and to avoid the wasteful use of resources. A municipality needs to establish and mandate sufficient skilled capacity at a corporate level to manage the portfolio of CLDPs. A CLD Programme Manager supported by a team of the necessary administrative and technical capacity is needed for each CLDP. The nature of technical capacity required will depend on what is available inhouse (directly or through secondment), and the stage at which a particular CLDP is in. Such capacity can also be procured. The extent to which the necessary capacity is available on a dedicated basis and on a sustained, consistent basis through the preparation stages is a critical success factor for making efficient and effective progress in preparing a CLDP.

Recommendations

- A CLD Programme Manager should have general integrated urban development sector skills complemented by project management skills.
- The CLD Programme Manager should:
  - See that the intended CLDP objectives are set and benefits are realised.
  - Manage the CLDP through all the stages of Phase 2. This refers to procuring all private sector related projects within a CLD and overseeing the implementation of all municipal-managed projects by the sector departments.
• Draft and submit baseline management documentation to the CLDP Portfolio Manager and CLDP Portfolio Executive Steering Committee for the stage-gate approvals.

• Set up a working CLDP Management Committee representing the sectors/departments/stakeholders who are participants in the CLDP and its constituent projects, to avoid working alone.

• Ensure that the necessary inhouse specialist technical support needed by the CLDP is on board at the right time to assist with input into scopes of work, review and quality control of deliverables and engagements with sectoral role-players. This infrastructure can also help with administrative support. Such support could be pooled at the level of the CLD Portfolio Management Unit and made available to the respective programme managers. To ensure sufficient capacity, this specialist technical support may need to be seconded on a full- or part-time basis, depending on the needs of the CLDP portfolio and individual CLDPs.

• Carefully assess whether a CLD Programme Manager is required to work full-time on a programme. All too often in municipalities, CLDPs are allocated to officials who are managing multiple activities within the municipality. This has been one of the biggest challenges to achieving progress. Either way, any general responsibilities would need to be severely curtailed to ensure sufficient capacity is in place to drive CLDP preparation.

3.3 CLDP Management Committee

Each CLDP should also be supported by an inter-departmental CLDP Management Committee. This will ensure input, alignment and coordination across those departments whose responsibilities intersect with the CLDP, and who are likely to be responsible for implementing CLDP projects.

Recommendations

The CLDP Management Committee should continue to work through the preparation, implementation and operations and maintenance phases to maintain a line of sight from the development objectives and concept to the results achieved.

3.4 CLDP Portfolio Manager

A transversal (corporate) technical management structure with the necessary authority is also needed to support, monitor and evaluate the portfolio of CLDPs and to facilitate reporting to the Executive Steering Committee. The CLDP Portfolio Manager should be the entry point for proposed CLDPs emanating from the Spatial Planning and Targeting Phase (Phase 1). This person has a key role to play in resource planning and allocation at the portfolio level. For example, a CLDP Portfolio Manager can offer critical support to CLD Programme Managers by providing technical capacity to the CLDPs in areas that will cut across all CLDPs such as legal, procurement, transactional and research.

CLD Programme Managers may work from within a centralised, corporate CLDP portfolio management unit, or from within a department of the municipality in a matrix management arrangement with the CLDP Portfolio Manager. The latter arrangement should be formalised to ensure clear lines of accountability.
Recommendations

• The municipality should:
  • Locate the position of CLDP Portfolio Manager centrally within the administration to ensure that the portfolio has a corporate presence and influence in strategic planning and budgeting (long and short term), is integrated into corporate planning systems and that the manager is empowered to work transversally.

• The CLDP Portfolio Manager must have the necessary:
  • Resources, financial and budget management.
  • Legal and procurement/contracts management.
  • Private sector engagement and partnerships (transaction advisory).

• These important specialist advisory, monitoring and corporate liaison functions are technically complex and critical for the success of a CLDP preparation process and implementation. The manner in which it is possible for these functions to be provided on a dedicated basis to the CLDP portfolio may however depend on the size of the portfolio.

• An appropriately empowered and mandated executive structure should be established to sponsor and exercise oversight over the management of the municipality’s portfolio of CLDPs.

• All development expertise that is sourced should have experience in structuring and implementing property developments in or with the private sector, because the skills of a developer are markedly different to those of a public official or leader.

• The municipal will also need to think carefully about how CLDP portfolio management at institutional level can be inclusive of intergovernmental roleplayers and tap into the knowledge of the private sector effectively.

• The CLDP Portfolio Manager should:
  • Identify or define, prioritise and authorise CLDPs (or specific CLD projects) in the CLDP portfolio so that strategic and programme specific development objectives are achieved. This may entail trading off objectives across CLDPs. Not all CLDPs may have the potential to achieve all the municipality’s strategic objectives but this may be possible across the CLDP portfolio with programmes meeting different objectives to a greater or lesser degree, depending on their inherent characteristics and potential.
  • Secure and allocate sufficient resources (human and financial) across the CLDPs and manage this.
  • Act as a corporate repository of CLDP information and progress, and a conduit for reporting externally on the CLDP portfolio.
  • Contain the CLDP portfolio within the means available to the municipality to carry the CLDPs through to implementation and maintain the priority status allocated to the respective CLDPs. Resources (human and financial) spread thinly across a multiplicity of programmes will result in slow progress for all of the CLDPs, and diminish certainty.
and confidence on the part of prospective development partners.

- Maintain discipline in the application of the method of CLDP preparation set out in this Guideline.
- Ensure effective resource allocation across CLDPs based on where they are in the CLD life cycle and, more specifically, what obstacles or acceleration opportunities they may be facing in Phase 2. This is not only with reference to budget, but also to the allocation of programme management capacity; specialist inputs/advice and sectoral representation and participation.
- Ensure long-term CLDP financing plans are built into the budgeting cycles.
- Perform a knowledge management function across the portfolio to maintain records and institutional learning and memory more broadly. This function could include:
  - Sharing networks built within CLDPs.
  - Sharing lessons learnt and best practices developed.
  - Building on the achievements of one CLDP that might benefit another.
- Facilitate procurement efficiencies and/or economies through sharing the common needs and challenges of CLDPs with supply chain practitioners. This could also take place by sharing among CLDP Managers how other CLDPs and similar programmes more broadly have successfully navigated complex procurement regimes.
- Engage with procurement administration at a management level to ensure that development objectives are not compromised, while probity is maintained.
- Unblock systemic obstacles to delivery, or communicate the consequences of systemic issues confronted by CLDPs to support institutional behavioural change oriented to more effective delivery.
- Engage with stakeholders and/or prospective investors at CLDP portfolio level to consult with, prepare and test the appetite of development partners and the likely terms of engagement.
- Undertake and disseminate regular market research and intelligence to inform CLDP preparation and the appropriate timing of delivery to achieve planned results, without negatively impacting on other CLDPs in the portfolio.
- Monitor progress through a CLDP’s life cycle to hold structures and processes accountable for alignment of the programme to the agreed objectives, and ensure that CLDPs that can’t prove viability are not pursued further in a manner that incurs wasteful expenditure.
- Support streamlined, regular executive endorsement and oversight of the CLDP portfolio.
- Measure impacts of CLDPs (or projects) against the programme’s own objectives as well as the strategic and business objectives, and measure the impact of the portfolio at a more systemic level/citywide scale.
The diagram below suggests an approach to establishing an appropriate level of institutional capacity within a municipality to effectively govern and undertake CLDPs.

Diagram 2.5: Recommended institutional structure within a municipality to effectively govern and undertake CLDPs
CLDPs can take many years to prepare and it can take decades to implement a complete programme. Continued political support for a CLDP is a critical success factor. At the same time, political changes throughout the CLD life cycle will take place and new leadership will need to be oriented and brought on board. These changes should be anticipated and planned for in terms of a clear strategy to maintain stability and momentum in the CLDP over a significant period of time. Consistent presentation of CLDs in the MSDF and subsequent reviews, BEPP and annual updates, and not least the IDP, as well as evidence of decisions taken by authorised structures at successive decision gates, will be important elements of this continuity strategy.

A municipality may have existing, well-established, functional structures that could take on the roles and functions to effectively govern and undertake CLDPs. This should be considered before creating further structures. However, such structures must have sufficient capacity to fulfill the responsibilities outlined in this chapter effectively and efficiently. Terms of appointment, reference and delegations may need to be reviewed to ensure they are sufficiently empowered to drive CLDPs.

While programme champions at the level of political office bearers can be an important part of the strategy to maintain momentum in a CLDP, care should be taken that programmes are not politically branded in a manner that puts the programme at risk should there be a change in leadership.

The City of Johannesburg learnt two important lessons when they conducted a feasibility assessment of using tax increment financing to fund infrastructure required to unlock development in its Dunkeld Precinct in 2016/17.

**LESSON ONE**
Management of complex CLDPs is not linear and the programme governance protocols must enable reconsideration and review of previous decisions made and allow for ‘better’ decisions to be made when more detailed and robust information becomes available.

**LESSON TWO**
The ability to foresee ahead is key. Both how capital costs will be financed and operational considerations will impact the design of interventions, but this can only happen if the programmes are conceptualised and designed in a multi-disciplinary manner.
4 CLDP management tools

There are a number of CLDP management tools that run across all five of the stages in the CLDP Preparation Phase (Phase 2). These tools are in place to ensure that the process is well managed and that it achieves what it set out to do with integrity. To be effective, they rely on a governance structure within the municipality to oversee the CLDPs and their progress, as discussed in the preceding section.

4.1 Master Programme and Schedule

The CLDP Master Programme and Schedule maps the programme and its constituent projects against the life cycle of the programme (phases and stages) on an estimated timeline, indicating the phasing and procurement of preparatory work and ultimately projects. Following the CLDP Feasibility Stage (Stage 2.3) the financials (budgets, costs, cash flows) are added to this plan and schedule. A more detailed description of what is contained in a Master Programme and Schedule is shown in the following table.

The following tools will be discussed in this section:
- Master Programme and Schedule
- Baseline Management Document
- Deliverables
- Stage-gate approvals
- Milestones

Chapter 4 provides further guidance on the application of these tools in the CLDP preparation stages. Chapter 5 provides supporting tools and resources.
PHASE 1: Spatial Planning and Targeting

- Catalytic Programme Management
- Management of other Catalytic Programmes

PHASE 2: Catalytic Land Development Programme Preparation

- Preparation of multiple government projects in catalytic programme as above
- Design and triggering of catalytic programme
- Management of a Portfolio of Catalytic Programmes
- Handover and close-out at catalytic programme level after completion of all projects within programme

PHASE 3: Implementation of Multiple Programme Projects

- Implementation = Pre-tender professional
- Implementation = Works
- Implementation = Documentation
- Implementation = Handover

PHASE 4: Operations and Maintenance (O&M)

- Implementation = Procurement
- Implementation = Close out

Diagram 2.6: Example of a CLDP Master Programme Plan and Schedule

Source: Cities Support Programme, National Treasury
4.2 Baseline Management Document

The Baseline Management Document is a governance tool that provides the information, on the basis of which the CLDP’s progress is monitored and measured. It is a cumulative record of the preparation of the CLDP and is critical for the CLD Programme Manager and oversight structures to review what has been done and to plan for the next stage.

This document is approved by the delegated authority in the municipality (such as the CLDP Portfolio Executive Steering Committee). It is the responsibility of the CLD Programme Manager to produce this as the primary tool to manage the CLDP through the stages of Phase 2. It is the primary routine reporting tool to the CLDP Portfolio Manager and the CLDP Portfolio Executive Steering Committee.

The Baseline Management Document is initially approved in Stage 2.0. It is then updated and approved at the conclusion of each stage/commencement of the next stage of the preparation phase. The updating and submission of the baseline management document at the end of each stage provides the basis on which the CLDP is permitted to proceed to the next stage.

The Baseline Management Document presents an important facility for CLDP risks to be highlighted and corporate intervention sought where needed, to keep the CLDP on track.

The Baseline Management Document should provide two types of information:

- The CLD programme management information.
- Information on the physical development being prepared for implementation.

CLD Programme Management Information

The Baseline Management Document should be maintained as an accurate record of the CLDP management information by including:

- The CLDP’s objectives and development concept.
- The structure set up to manage the CLDP and the structure set up/mandated to oversee the CLDP and perform the role of approval authority.
- Delivery targets and timeframes (planned and revised).
- Deliverables of each stage and milestones (e.g. report generation, agreements, authorisations etc.).
- The status of the CLDP at any given time and activities undertaken to date.
- Decisions taken/authorities given to the CLDP to move from one stage to the next.
- Any changes or deviations made, and approved, through due process to the CLDP (in terms of its concept, objectives, timeframes; etc).
- CLDP risks – governance, resourcing; regulatory; stakeholder.
- CLDP preparation resources and financials (a projection of cost estimates and tracking of expenditure).
- The CLDP’s knowledge management/data management responsibilities and protocols.
- A data library - appendices of related key reports, data sets, or other information generated to date, such as:
  - Substantive reports produced at each stage
  - Programme summary
  - Locality maps and information (spatial identification and boundaries of the CLDP)
  - Existing planning documents, studies/market research, or proposals related to the CLDP
- Any Terms of Reference drafted for roles and responsibilities.

**CLDP Information**

The Baseline Management Document should be maintained as an accurate record of CLDP information by including:

- The CLDP’s constituent built environment projects (the scope of what is intended to be implemented).
- A brief profile of these projects (owner department, regulatory triggers, status on sector plan/in sector pipeline).

Some of the preparation happens in the collective space, some in the specific project space – but both need to be tracked. Some projects within the programme may be infrastructure projects to be run by a sector, e.g. a train station or a water pipe or a road. These need to feature on the sector’s plans and programmes (and confirmed to be there in this information) as well as on the CLDP, otherwise there is no coordination and there is a risk it won’t happen.

Any major deviation from the approved Baseline Management Document should only be accepted by submitting a change request on the baseline, motivated and approved by the delegated authority overseeing the CLDP. The first approved Baseline Management Document should set out the parameters within which deviations will be considered to manage deviations. The CLDP development objectives are the primary reference point in this regard, supported by cost and planning and design parameters, for example.

The Baseline Management Document is a key knowledge management and record keeping tool that, if used consistently and maintained, will assist personnel in managing changes to CLDPs that may run over a number of years. It will also assist in managing continuity through changes in CLDP management staff.

### 4.3 Deliverables

Deliverables, such as pre-feasibility and feasibility reports, should be identified for each stage in the preparation process.

Deliverables can include:

- **Stage 2.0** – Catalytic Programme Inception Report (first iteration of the Baseline Management Document)
- **Stage 2.1** – Catalytic Programme Development Objectives and Concept Report
- **Stage 2.2** – Catalytic Programme Pre-Feasibility Report
- **Stage 2.3** – Catalytic Programme Feasibility Report
- **Stage 2.4** – Regulatory approvals/records of decision.

Various documents and reports/briefs for each municipal-managed project in the CLDP.

The deliverables for private-sector related projects in the CLDP are, for example:

- Documents to set up a PPP
- Expressions of Interest and Requests for Proposals to procure private participation

The CLDP’s Baseline Management Document is the key CLD programme management deliverable for each stage of Phase 2. The additional substantive, technical deliverables for each stage provide the evidence against which a decision to proceed with the preparation of the programme to the next stage.
can be made; i.e. whether the CLDP and/or its constituent projects are feasible or feasible to the extent that they would meet the objectives of the CLDP; or whether any changes are needed to the CLDP, in concept or objective, based on technical feasibility considerations.

These deliverables determine what can, must, and should be done in the next stage. The quality of the deliverables is a critical success factor in the preparation of a CLDP and enabling implementation.

4.4 Stage-gate approvals

Stage-gate approvals enable the progression from one stage to another in the preparation of the CLDP. They involve an explicit decision based on the evidence provided by the concluding stage’s deliverables. In the instance of moving from Stage 2.2 to 2.3, for example, the updated Baseline Management Document supported by the due diligence and preliminary information provided in the pre-feasibility study report indicates that the proposed CLDP is feasible and it is worth proceeding into a more detailed investigation and financial analysis. Each stage therefore concludes, with a decision-gate, where the deliverables produced to date must be approved by the mandated management structure overseeing the CLDP. On this basis, approval is then given to the CLDP to proceed to the next preparation stage.

Stage-gate approvals are an important accountability mechanism for the CLDP. At each stage-gate the CLD Programme Manager should review:

- The end result of a specific stage against the CLDP objectives and development concept approved in Stages 2.0 and 2.1.
- The estimated cost of works for all municipal-managed projects within the programme against previous set budgets.

Updated Baseline Management Documents can assist the review process. It is up to the CLDP Portfolio Manager and the individual CLD Programme Managers to identify required reviews during Phase 2.

Should objectives and/or the concept need to be adjusted, this should be done on an explicit, considered and justified basis, using the findings of the deliverables to support this. Consideration may also be given at these points of review, as to whether shifts in corporate strategic objectives or other broader contextual factors impact on the CLDP and the implications thereof.

A stage-gate approval authority is a mandated/delegated management structure with the authority to review and approve the baseline document and technical deliverables, review the CLDP more broadly and authorise the CLDP’s progression from one stage to another. The CLDP Portfolio Executive Steering Committee is envisaged to be this authority in this Guideline.
The diagram above illustrates the demand on municipal resources and capacity, as well as the requirement for specialist skill increases at an almost exponential rate as the CLDP progresses from one stage to the other. As a result, any ‘backtracking’ or revisions that could be required due to a key element in a prior stage being omitted or inadequately considered can result in substantial costs both financially and in terms of time lost. To prevent this occurring, stage-gate approvals are necessary at key points in the process to ensure that the CLDP is ready for the next stage of CLDP preparation.

4.5 Milestones

A milestone is a significant event in the preparation of the CLDP. The milestones as markers of progress should be identified upfront in the initiation of the preparation process. There are a minimum of three clear milestones in the governance framework:

**Milestone 2.1:** Approval to formally commence with the preparation of the CLDP.

**Milestone 2.2:** Approval of the CLDP Feasibility Report.

**Milestone 2.3:** Approval of the last key project for implementation.

A municipality may choose to identify additional milestones. These milestones are markers of progress along the life cycle, and specifically the stages of the second phase of CLDP preparation.
Recommendations

- A municipality should establish a clear CLD programme management system using the CLD programme management discussed in this second section of Chapter 2 of the Guideline.
- A CLD Programme Manager should:
  - Implement the CLD programme management system on a disciplined, consistent basis.
  - Update the Baseline Management Document at the conclusion of each stage.
  - Identify milestones at inception in the Master Programme and Schedule.
  - Thoroughly scope regulatory approvals triggered by the CLDP and coordinate the procedures required to obtain these procedures required to obtain these approvals with the support of the approval authorities.
  - Scope the extent of the approvals to be obtained in the CLDP preparation process run by the municipality and approvals best obtained by the project owner.
  - Adjust objectives and/or the concept, if necessary, on an explicit, considered and justified basis using the Baseline Management Document on the foundation of the findings of the deliverables with the permission of the oversight structures.

A stage-gate test will assess (at a level of detail appropriate to the stage) the following sets of considerations:

- **CLDP relevance and impact** – The CLDP must be reviewed to determine if the current conceptualisation will deliver on the intended objectives, and if there is confidence on critical programme health aspects, such as if there appears to be value for money, no show-stopping risks, deliverability remains likely, etc.
- **Interface with the CLDP portfolio** – A municipality will sit with a number of CLDPs representing an entire CLDP portfolio. The positioning and prioritisation of a CLDP can change as a result of any number of strategic or political shifts at this level. A check needs to be made at each stage-gate to ensure that the CLDP is still appropriately positioned within this CLDP portfolio and prioritisation.
- **Finalisation of appropriate outputs that prepare the CLDP for the next stage** – The review of CLDP outputs needs to indicate if the produced material has covered the required fields at a level of specificity sufficient to provide the required foundation for the following next stage.
- **Approvals check** – Testing whether the CLDP has gone through the appropriate processes and/or received the formal approvals from relevant bodies or committees as relevant to that stage.
5 Managing risk in CLDPs

5.1 Risk management

Property development is by nature a risky undertaking. CLDPs add further complexity and further risks to the undertaking. While municipal leadership of a CLDP can assist in better-managing common risks to property development, such as obtaining planning approvals; the private sector is likely to perceive that engaging in a development programme more closely with a municipality might bring about another set of risks, associated with compliance with legislation governing transactions with the public sector and the dynamic nature of political leadership of municipalities. It is important to be risk conscious, rather than risk averse (Yardney, 2018), and to anticipate and manage these risks as far as possible. This is particularly crucial when public resources are at stake. If not managed, risk can diminish the value that can be created or realised.

Risk needs to be dealt with at two levels:
- Risks to the CLDP preparation process.
- Risks to CLDP Implementation.

Risk analysis starts from the CLDP Conceptualisation Stage in the Preparation Phase (Stage 2.1). Documented and regularly updated risk analyses, including the identification of possible risks and mitigation measures, are part of the Baseline Management Document. It is important that risk assessments feed into the CLDP’s governance oversight structures as a crucial accountability tool and for encouraging collective ownership/responsibility for the CLDP.

It is also important to track CLDP risks at the level of portfolio to understand common risks across CLDPs that might benefit from a systemic intervention or that should be dealt with corporately. At the same time, the extent of risk presenting across CLDPs might inform the prioritisation of CLDPs against one another. However, the least risky CLDPs might not offer the same level of value creation and benefit realisation, and so risk should not be the single or most important decision-making factor.

Municipalities should have an established risk management system. CLDP Portfolio and Programme Managers should use this system to manage CLDP risks so that CLDP risk management is integrated into the institutional risk registers and management plans in the relevant departments/sectors taking responsibility for the overall CLDP, as well as for sector-specific elements of the CLDP or CLDP dependencies. If this is not done, CLDP risks may not be treated with the same
level of importance as other risks being managed in the municipality, but it is also important not to run parallel systems that create an unnecessary reporting and administration burden.

The CLDP Portfolio Manager has an important quality control role to play in the risk assessments. This is because the Portfolio Manager has a broader view and experience of what risks might be encountered based on previous experience of other programmes.

### 5.2 Risk sharing

Another important consideration in CLDPs is to look at how risk will be shared across the parties involved in a CLDP. The formal process of setting up a PPP as explained in Chapter 3, is aimed, in part, at ensuring appropriate risk sharing. An Implementation Protocol to govern an inter-governmental agreement should do the same. Risk sharing is key to ensuring that public value is optimised in the CLDP business model. At the same time, smart risk sharing will improve the bankability of a CLDP.

The questions to consider in risk sharing are:

- Which party is better able to control the occurrence of the risk (risk frequency)?
- Which party is better able to control the impact of the risk, or its ultimate cost (consequence severity)?
- Which party has a greater incentive to develop risk mitigation strategies, either to control the occurrence of the risk or its impact?
- For risks that are typically allocated to the public party, might there be innovative opportunities to reduce whole-of-life costs by allocating (even if only partially) the risk to the private party?
- Which risk allocation would result in the lowest whole-of-life costs?
- Which risk allocation incentivises preventative risk management, as opposed to reactive risk management? (Hovy, 2015)

The following risk sharing principles are useful to consider:

- Risks should be allocated to the party best able to manage them at the lowest cost.
- Risk sharing should be about managing not only occurrence, but also impact.
- Partial risk allocation may create greater incentives for the private party.
- Risk allocation should minimise transaction costs.
- Risk transfer should be informed by market conditions.
- Flexibility and ‘rules of the game’ will help deal with changes in risk. (Hovy, 2015)
- From the perspective of the public sector, it should not carry or compensate for risk that amounts to subsidising or guaranteeing private sector profit in a poorly planned intervention, or an intervention that is inefficiently implemented or operated.
Recommendations

- A high-level assessment of the key risks associated with the CLDP and the CLDP portfolio should be compiled. At the CLDP Inception Stage, this assessment should give special consideration to Phase 2 stages and the likely risks to the advancement of the CLDP through the phase. For instance, there could be capacity constraints impacting on CLD programme management. Such risks should be accompanied with mitigation strategies.
- Update the risk assessments in each stage as part of the Baseline Management Document.
- A CLDP Portfolio Risk Register should be maintained by the CLDP Portfolio Manager.
- CLDP risks must be integrated into relevant departmental/sector risk registers.
- Consider appropriate risk sharing when building a viable business model for delivering a CLDP.

While CLDP preparation will trigger legislated requirements for public participation, in terms of planning and procurement, stakeholder engagement pre-emptive of these regulated processes can enhance the efficiency with which regulated processes are undertaken. Even more importantly, they can inform the content of the preparation stages so as to ‘leave no stone unturned’. CLDPs are also, by their nature, multi-year (and multi-electoral term of office) processes – sustained engagement can support the momentum of a CLDP as the expectation of delivery becomes a matter of public accountability and credibility.

6 Building value in CLDP through stakeholder engagement

Thorough, sincere, consistent and sustained stakeholder engagement is important for transparency and accountability in the CLDP preparation and implementation process. It is also an important risk mitigation strategy for the municipality, potential investors and formal partners. Early stakeholder engagement can also support the process of building a successful delivery strategy and viable business model for a CLDP.

CLDPs will, to a greater or lesser extent, be prepared and implemented in consultation and partnership with stakeholders, *inter alia*:

- Other municipal departments and spheres or entities of government with a regulatory and/or delivery infrastructure provision role in the CLDP.
- Prospective investors and their financiers.
- Prospective users/customers – households whose preferences will determine demand for the product(s) to be developed in a CLDP.
- Neighbouring or resident households.
- The public at large that plays an oversight role in respect of municipal planning, service delivery and decisions related to the use and disposal of municipal assets.
There will be internal and external stakeholders with direct and indirect influence and importance (Markwell & Leigh-Hunt, 2016). Stakeholders may become formal partners in formal transactions or soft partnerships. All these relationships need to be scoped, expansively, through a stakeholder mapping exercise. Their actual and likely roles need to be identified along with appropriate, respective modes of engagement. Stakeholders need to be engaged at the right time in the CLD life cycle with the right information and a clear outcome in mind (Australia, 2018).

It is important that stakeholder mapping, engagement and management be guided by the CLDP objectives. For instance, if one of the objectives is to deepen participation of local partners in development opportunities, an ‘external’ partner with resources must be weighed against this objective. Empowerment is a long-term effort; while it might be tempting (and easier) to engage the big corporates with balance sheets and proven track records, an incremental approach that leverages local capital may yield more robust and sustainable development socio-economic outcomes (i.e. minimal gentrification).

Stakeholder engagement, in the broadest sense, commences in the first phase (spatial planning and targeting) of the CLD life cycle when the public is invited to contribute and comment on municipal plans (i.e. IDPs, the Budget, SDFs, etc). Engagement specific to the CLD begins in earnest in the second phase (catalytic programme preparation), and the rigour with which an inclusive stakeholder engagement plan is established and managed is a critical success factor. A stakeholder management plan should streamline multiple regulated public participation processes to ensure efficiency, consistency and continuity in communication. This plan should also consider what new stakeholders might come in during the different phases of the CLD life cycle and how they should be engaged; for example, in a turn-key development, those to whom the development is sold in whole or in part become the important stakeholders in the operations and maintenance phase of the CLD life cycle.

6.1 Private-sector participation in CLDPs

CLDPs are defined as programmes that leverage the capacity of other actors in the built environment to contribute to the stated built environment outcomes and ultimately to leverage economic development. A municipality’s role may be limited to enabling development. A CLDP should secure private-sector participation in the implementation of projects where appropriate, and to this end, may require formal partnership arrangements to be in place.

Refer to Chapter 5 for resources to assist with planning and managing stakeholder engagement.
There are a number of guiding principles that assist municipalities to consider where private-sector participation in the CLDP is appropriate: These include:

- **Potential for leverage** – Private-sector participation should only be solicited if it is viewed to deliver additionally over traditional public delivery. This should be viewed from the perspective that involvement of the private sector must offer a better combination of cost, quality, quantity, productivity and risk within the envisioned component, or alternatively leverage capacity or financial resources that could not otherwise be obtained.

- **Commercial viability** – The private sector will not be party to any engagement that they do not deem commercially viable. Private partners need to maintain healthy and profitable companies for the project to succeed and deliver value.

- **Manageability** – The relationship with the private sector must be manageable from the municipal side. The municipality should make sure any agreements and related monitoring and management procedures are clear and workable. The municipality must be sure that capacity is in place to manage the relationship and its respective obligations.

- **Acceptability** – A central responsibility of the government is to ensure fairness and protection of the public interest. For each CLDP, the municipality needs to consider whether it will be acceptable and in the public interest to deliver through a private partner. Thus, there should be clear management and justification of the transaction.

Whether private-sector participation in a CLDP would be considered to be a formal PPP in terms of legislation and regulation is determined by the development objectives, programme’s business model and a set of criteria explained in the following chapter in section 2. There will undoubtedly be a continuum of options for private-sector participation at a range of scales. Methods to be used to procure this participation are clearly set out in legislation and regulation. An overview of relevant legislative and regulatory provisions is provided in the next chapter.

Over and above this, it is important to engage with the private sector in the broadest sense as early as possible, not with the intention of deal-making, but to inform the CLDP preparation process and to input into the management of the CLDP portfolio. Such engagement must be inclusive, transparent and recorded. It should be aimed at gathering market intelligence to support the design of successful business models for the CLDPs, as well as gearing the private sector to respond to the opportunities that will be presented to them.

For the purposes of this Guideline, any non-state entity that will invest in the CLDP area is considered private sector. The private sector does not only consist of big companies – even local property owners with some equity on their properties can be viewed as a powerful ‘private sector’. It is also not limited to the for-profit sector.
Recommendations

The rigour and integrity with which stakeholder engagement processes, required by legislation, are followed is a key success factor in CLDP preparation – whether it is with consultation or eventual procurement in mind.

• Initial thinking in Stage 2.1 (CLDP Conceptualisation) on formal partnerships that may be required to achieve the development objectives and concepts is important to ensure that the preparation phase adequately investigates viable partners, partner interests, partnership arrangements and undertakes the steps required to establish such arrangements.

• From Stage 2.2 (CLDP Pre-Feasibility) onwards in the preparation phase of the CLD life cycle, a rigorous, inclusive and transparent stakeholder engagement process should be planned, followed and sustained.

• Engagement undertaken in advance of formal procurement processes to test potential partners with regards to investment appetite and viable partnership models must be done transparently, inclusively and in compliance with relevant procedures and must be recorded in detail.

• The CLDP governance structure (as discussed earlier in this chapter in section 3) should maintain regular communication on progress, findings and conclusions of the preparation phase, support the maintenance of a shared purpose and coordination, maintain discipline in terms of the CLDP’s communication strategy and maintain goodwill for the programme.

• A communication strategy should be designed that integrates regulated public participation processes within a broader engagement approach that builds goodwill, buy-in, ongoing understanding and support for the programme, while enabling a feedback loop into the ongoing preparation of the CLDP. This is an important element of the risk mitigation plan for a CLDP discussed in section 5 of this chapter.
3 CATALYTIC LAND DEVELOPMENT PROGRAMME (CLDP)
DELIVERY INSTRUMENTS FOR VALUE CAPTURE
AND BENEFIT SHARING
Chapter table of contents

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1 CLDP business models
2 Overview of legislation and regulation relevant to CLDP delivery transactions
3 Land transaction instruments
4 Funding and finance
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6 Other strategic considerations in building viable business models

Abbreviations used in this chapter

ATRs   Asset Transfer Regulations
BBBEE Act Broad Based Black Economic Empowerment Act
CID    City Improvement District
CLD    Catalytic Land Development
CLDP   Catalytic Land Development Programme
DC     Development Charges
GIAMA  Government Immovable Asset Management Act
IGFRA  Inter-governmental Fiscal Relations Act
IGRFA  Inter-governmental Relations Framework Act
JDA    City of Johannesburg’s Development Agency
JPC    City of Johannesburg’s Property Company
JV     Joint venture
LTFS   Long-term financial strategy
MATR   Municipal Asset Transfer Regulations
MFMA   Municipal Finance Management Act
MoU    Memorandum of Understanding
MSA    Municipal Systems Act
NEMA   National Environmental Management Act
NHFC   National Housing Finance Corporation
PPP Regulations Municipal Public-Private Partnership Regulations
PPPFPA Preferential Procurement Policy Framework
RF     Ring fenced/restricted function
SAD    Special Assessment District
SCM    Supply Chain Management
Terms used in this chapter

**Asset:** An asset is a resource with economic value that an individual, corporation or country owns or controls with the expectation that it will provide future benefit. Assets are reported on a company’s balance sheet, and they are bought or created to increase the value of a firm or benefit the firm’s operations. An asset can be thought of as something that in the future can generate cash flow, reduce expenses, improve sales, regardless of whether it’s a company’s manufacturing equipment or a patent on a particular technology. (Investopedia, 2018)

**Debt:** A sum of money that is owed.

**Equity:** Equity is the value of an asset less the amount of all liabilities on that asset. It can be represented with the accounting equation: Assets - Liabilities = Equity. (www.investopedia.com, 2018)

**Financing:** Financing refers to the instruments used to bring upfront capital to the project.

**Fiscal:** Of or relating to taxation, public revenues, or public debt

**Funding:** Funding refers to revenues that are brought down the line to pay back the initial investment or upfront monies paid directly to build the project.

**highest and best use:** The use of an asset that maximises its potential and that is physically possible, legally permissible and financially feasible.

**Horizontal development:** Physical development below ground (infrastructure).

**Market:** The people or organisations that might want to buy something.

**Public fiscus:** The treasury of the state or the pool of financial resources available to the state.
Transit-oriented Development (TOD): TOD is a planning concept that directs public and private investment to areas of maximum public transport access in a city, doing it in a way that creates liveable environments. TOD is designed to maximize access to rapid/frequent public transport, encourage public transport ridership and walkable precincts. The symbiotic relationship between land use, built form and public transport lies at its core. From a transport perspective TOD is focused on promoting sustainable public transport while minimising the travel mode share of private motor vehicles and the negative externalities of this mode including reduced rates of private car parking and carbon emissions. From a spatial development perspective the focus is on creating an inclusive network of well-designed precincts of mixed land use and increased residential densities in an improved public environment (high quality public spaces and streets, which are pedestrian and cyclist friendly) with high pedestrian accessibility within 500 – 800 metres of transit stations.

value for money: In relation to a public-private partnership agreement, means that the performance of a private party in terms of the agreement will result in a net benefit to the municipality in terms of cost, price, quality, quantity, risk transfer or any combination of those factors. (Municipal PPP Regulations)

Vertical development: Physical development above ground (buildings).
Introduction

CLDP preparation must, through detailed investigation and consultations, match the programme’s vision and development objectives with a practical, affordable and legally-compliant delivery strategy. The Catalytic Programme Feasibility Stage will establish feasibility at programme level by:

• Providing a robust estimate of the costs involved, possible funding sources, and funding instruments in the case of private-related projects within the programme.
• Identifying stakeholders or possible/appropriate partners.
• Identifying how the CLDP will need to be structured and objectives balanced in order to attract investors to make it happen.

The next step will be to figure out how to do the proposed development in a sustainable manner. This will be prefaced by a number of important points:

• The public fiscus (including municipalities) is constrained by poor growth revenue and limited scope for increased revenue, as well as increasing and competing expenditure demands related to basic services obligations.
• It is generally not the state or municipalities’ role to undertake commercial forms of development. Private-sector actors are capacitated, competent and better at doing this.
• Value can be created in land using a variety of mechanisms (as discussed in Chapter 1) that can be leveraged to fund development costs, through for example land-based financing (discussed further in section 4.4 of this chapter).
• The purpose of CLDPs generally is to stimulate inclusive economic growth and poverty reduction. They must therefore generate returns for both the private sector and the public good.

Therefore, funding will need to be allocated, finance raised and agreements entered into. It is likely that the control over the land will need to change hands to do this. How each of these are done impacts on the other. This is probably the most complex part of putting together a viable CLDP. It talks to the business model required to develop the CLDP; how will arrangements to fund, partner and exchange be assembled so that each party is empowered to get on with their project in the right sequence, at the right time, in a secured environment. Once the preferred business model is confirmed, and this has been through the decision stage-gate, the CLDP Preparation Finalisation Stage should conclude the necessary procurement processes, engagements and agreements with regard to private-sector participation.

There are many transaction instruments available to municipalities to assist with CLDP delivery that need to be considered in the Preparation Phase of the CLDP when designing a workable business model. Multiple instruments will likely need to be used in a mutually reinforcing manner to enable the CLDP to achieve its objectives. Each of these transactions will trigger legislative and regulatory procedures to be followed. This needs to be factored into testing the feasible options for delivery and carefully coordinated to streamline compliance, engender confidence and maintain integrity in the process. Together these instruments will build a business model for a CLDP.
For example, there would typically be four inter-related types of transactions packaged into a CLDP business model:

- **Land assembly** (enhanced rights, acquisition and disposal) – How will the land be arranged so that the development can take on the intended form and realise the intended benefit in terms of built environment performance, and each party in the CLDP can deliver their part efficiently?
- **Funding and/or finance** - How will the development costs be funded or financed? How will the associated risks be shared?
- **Partnership** – How will development partners be brought on board? How will risk be shared? How will inter-dependencies be managed?
- **Ongoing operations, maintenance and management** – How is the investment resulting from the implemented CLDP secured to achieve the desired long-term impact; for example, through adequate urban management, shared resourcing of urban management needs, shared resourcing of the operating of public facilities or services? Note that this is identified here for completeness sake but is not the focus of this Guideline.

The intention of this chapter is to provide municipalities with an overview of the options for transacting in a CLDP that are enabled by South African legislation and regulation and to present, at a high level, their advantages and disadvantages. In each CLDP, the underlying conditions, development objectives, development concept and financial parameters will be different (Johnson, 2017). The CLDP Pre-Feasibility and Feasibility Stages in the Preparation Phase will determine the preferred or required route to go; there is no ‘one size that fits all’. Depending on the nature of the funding, land ownership and relationship requirements needed to make a CLDP or particular project within a CLDP work, the financing, transaction and partnership arrangements may overlap or turn out to be one package. In other instances, they may be separate.

A broad approach to CLDP business models is provided in the next section of this chapter. An overview of the legislative and regulatory framework that governs transactions associated with CLDPs is provided. Thereafter we unpack the instruments relating to land, funding and finance, partnership-related transactions and other strategic considerations.

## 1 CLDP business models

There are typically three preconditions in a CLDP. This offers a useful starting point for guidance on business models for implementing CLDPs or their project components. These preconditions are as follows:

- The land is owned by the municipality. The objective is to develop the land for uses beyond simply public uses. This means beyond the scope of what a municipality would normally, and may, build and operate in terms of the law or would want to, or could afford to develop.
• The land is privately owned or owned by another sphere of government or state-owned entity, and redevelopment is supportive of a municipal development objective, set out in policy, but;
  • It is not feasible to fund the soft and hard infrastructure required for this redevelopment through a normal development contribution process.
  • Additional development rights are sought which are to be attached to social good conditions, such as inclusionary housing that will require assistance from the municipality.
• The vision and development concept involves both public (municipal/municipal and other public-sector actors) and private land.

There are a number of other principles that are useful to understand as a next step to resolving a viable business model for a CLDP:
• The regulatory and financial frameworks set out in this Guideline make it clear that a municipality may not use its land for commercial activities outside of what it is mandated to do in terms of the powers and functions given to it by law.
• A municipality should not participate in the economy in such a way that it competes with the private sector or distorts it, undertaking activities that are best left to the private sector.
• A municipality may not spend its money on land it does not own, except under exceptional circumstances related to constitutional obligations associated with basic service delivery. Infrastructure that will be operated and maintained by the municipality must be owned by the municipality.
• The extent to which a municipality can use its own money to fund development is dependent on rules associated with its funding sources; for example, grant funds and subsidies. Generally the municipality must consider what is affordable, equitable, in the public interest, aligned to its strategy and does not place an onerous repayment burden on future generations.

In summary, in the South African regulatory and financial context, there are ten likely options for how a municipality might approach transacting in a CLDP to bring in multiple stakeholders to participate in the programme and to share costs and risks. All of which must, in principle, be followed using a competitive process, where municipal land or resources are concerned. All of these options can be found in current practice in South Africa.

Option 1: Arm’s-length disposal - The municipality calls for bids from the private sector to acquire and develop municipal land with or without conditions (e.g. inclusive of affordable housing or other public goods).

Option 2: Municipality as master developer - The municipality completes pre-development and infrastructure work, develops a master plan and leases or disposes of land parcels, with or without top structures developed. This is the typical model used in state subsidized housing projects.

Option 3: Master development agreement with private sector - The municipality appoints a private party as a master developer who then fully develops the site, and may raise finance to do so. Ultimately, the land and improvements are transferred (to a state
subsidized housing beneficiary for example) or sold, to a private purchaser, retained by the municipality or leased. The master developer may not use the land as equity to raise finance and this model therefore favours large, established developers with strong assets elsewhere that can be leveraged to fund/finance the development.

Option 4: Public-private partnership (PPP) (as defined in the MFMA and Municipal PPP Regulations discussed further in section 2 of this Chapter)
The municipality and the private sector work in partnership to package and develop the land; for example, the municipality may provide horizontal infrastructure and the private developer completes the vertical top structures. Any lease of municipal land for commercial purposes requires a public private partnership process to be followed in terms of the legislation and supporting regulations. It is noted that the PPP procedures set out in the Municipal PPP Regulations involving private party use of municipal land for commercial purposes are different from those required in a PPP where the private sector is to perform an institutional (municipal) function.

In the Pelican Park project in Cape Town, a master developer was procured through a competitive bidding process to develop municipal land for a mix of uses and housing markets. This developer was responsible for developing the site on the basis of a Land Availability Agreement and a Development Agreement that involved the following:
• The purchase of commercial land at an assumed value for developable commercial land
• Financing, developing and selling market housing
• Developing state-subsidised housing
The developer could not use the land as collateral to obtain finance. The subdivided housing land was transferred the end user from the municipality, in the case of both the state-subsidised house and the market houses, at which point the municipality received payment for the land.

Many, if not most, of the state-owned entities that might own land falling within a CLD or its surrounding precinct (such as Transnet, Eskom, Housing Development Agency and the Passenger Rail Agency of South Africa) are subject to the same PPP provisions as municipalities (in terms of the Public Finance Management Act 1 of 1999: Regulation 16), where private party use of state or municipal property for its own (the private party’s) commercial purposes is involved.
**Option 5: A municipal-owned entity (MOE)** – The municipality sets up a dedicated institution to package and develop land. Any joint-venture arrangement between a municipality and private party would, in essence, constitute a municipal-owned entity as the municipality must own 51% or more of a joint venture entity. Municipal-owned entities have been established by municipalities inter alia to package and dispose of land, such as the Johannesburg Property Company (JPC), and to build and manage social rental housing stock, such as the Tshwane Housing Company or the Johannesburg Social Housing Company (JOSHCO). The benefit would be that the MOE can focus on the task at hand without being burdened by other service delivery obligations. It is important to note, however, that an MOE is governed by precisely the same legislation, regulations, etc. as the municipality.

**Option 6: Public auction** - The private sector purchases municipal land in a public auction-like process, where the municipality’s primary goal is to maximise positive financial return. The public auction of municipal land is not suitable when there are development objectives for the land beyond maximum financial return, which is the case in CLDPs. It may however be that a land portion within a CLDP is identified for release to the market for the highest return at a later stage, when value has been added to the land to optimise the return and little further control is required of what is developed outside of the routine forms of control held by a municipality.

**Option 7: Alternative structures** - The municipality commits to lease office space in a proposed development to enable the developer to secure financing or to anchor market demand (World Bank and CSP Report 2016:4-5). The municipality’s potential role as an anchor tenant is not to be underestimated when packaging a viable programme and, where relevant, should be considered in CLDP pre-feasibility and feasibility studies. This, however, would be dealt with in terms of an agreement related first to the sale or lease of land and should be on the basis of a competitive bidding process.

According to the World Bank and CSP Report (2016), there are two global practice types that would not generally be permissible in the South African context (and therefore they are not discussed in further detail in this Guideline):

- Where a municipality retains ownership of the land and the developer wants to cede or subcontract its rights to lenders or third parties.
- Incorporated joint ventures where a municipality or national or provincial organ of state holds 50 percent or less in the joint venture.

**Option 8: Joint initiative** - A loose partnership between the municipality and the developer governed by a Memorandum of Understanding (MoU) or Agreement in Principle, with contracts only being developed when services are rendered at arm’s length (e.g. the transfer of land or the construction of infrastructure). This is the form of the partnership undertaken for Cornubia South, Durban (World Bank, 2016, p. Memo; 37). The municipality is responsible for the costs as per the MoU and could include the provision of servicing costs and the recovery thereof from the developer through development.
contributions. This option would work well where the municipality is not the owner of the land. A similar joint initiative between the municipality and another sphere of government or state-owned entity might be formalized through an Inter-Governmental Protocol.

**Option 9: Special purpose vehicle (SPV)** - An incorporated entity, usually made up of several incorporated entities that form the SPV for a “special purpose” – i.e. carrying on an activity that each member of the SPV does not want to expose their respective balance sheets to. This could not include the municipality but may be set up by the private sector to undertake a CLD in partnership with the municipality, formally as a PPP contemplated in terms of the MFMA or more loosely, where the development of municipal land for commercial purposes is not intended. Nearly every provincial and national PPP in South Africa is “run” by an SPV which has been formed, with articles of incorporation and all other corporate structures, by the components of the winning bidder which are typically, a construction company, a facility management company and a B-BBEE company.

**Option 10: Special rating areas for the purposes of infrastructure investment supporting development of private land** - For example a separate city improvement district was set up by agreement between the existing Claremont City Improvement District (CID) and the City of Cape Town, for the purposes of raising finance (in this case from the Development Bank of South Africa) by the new CID, to build and transfer a major piece of road infrastructure to the City. The City could not fund this infrastructure at the time. Development contributions would have been insufficient or would not necessarily have been raised at a rate to allow for the construction of the infrastructure within the time it was required. The CID was set up for the duration of the loan repayment period. A Memorandum of Agreement (MoA) was signed with the City so that the City would collect the additional rates agreed to by the landowners and pay this over to the CID for the purposes of repaying the loan. This is a local example of tax increment financing.

As previously suggested, a CLDP may involve a business model deploying multiple instruments operating in parallel. For example, a site or sites within the programme may be sold to a developer with conditions; the neighbouring train station which requires upgrading may be the subject of an inter-governmental protocol; a portion of the site may be contracted under a master developer agreement for state subsidised housing; a municipal owned entity might be required to renovate and operate a redundant piece of infrastructure for alternative purposes, such as a disused power station; and a lease might be entered into to build and operate a municipal parking lot.

Table 3.1 shows how these approaches tackle three of the four types of transactions mentioned in the introduction and where certain approaches deal with multiple transactions at the same time.

When considering business model options, it may be useful for a municipality to ask itself a number of questions featured in the table below.
Characteristics of project companies SPVs:

- Separate legal incorporation.
- Costs more and takes longer to structure.
- Equity is usually privately held and concentrated in a few shareholders.
- High gearing, e.g., >50 percent debt.
- Debt usually held by banks as opposed to institutions.

- Contract extensive.
- High transaction costs: 3-5 percent of amount invested but could be 10 percent for smaller or unique projects (Switala, 2017).

It is important to note that the operations of the municipal SPV will be governed by precisely the same legislation as the municipality.

Diagram 3.1: Generic project structure

Explanation of terms used in the diagram above:

Subordinated debt: A loan (or security) that ranks below other loans (or securities) with regard to claims on assets or earnings.

Senior debt: have a higher priority claim on a firm’s dividends, interest payments, or in case of a bankruptcy, the value salvaged from a liquidation

Mezzanine finance: A hybrid of debt and equity financing that gives the lender the rights to convert to an ownership or equity interest in the company if the loan is not paid back in time and in full. It is generally subordinated to debt provided by senior lenders such as banks and venture capital companies.
### LAND ASSEMBLY

How will the land be arranged so that the development can take on the intended form and realise the intended benefit in terms of built environment performance?

### FUNDING AND FINANCING

How will the costs be met? How will they be shared?

### PARTNERSHIP

What are the roles to be played by different parties? How will risk be shared? How will interdependencies be managed?

<table>
<thead>
<tr>
<th>Joint venture/municipal-owned entity</th>
<th>Public-private partnership</th>
<th>Long-term lease</th>
<th>Special rating area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal of land with or without conditions including a Land Availability Agreement</td>
<td>Land price Development contributions</td>
<td>Memorandum of Understanding/Agreement (MoU/MoA)</td>
<td>Master Developer Agreement</td>
</tr>
<tr>
<td>Power of attorney/Land Availability Agreement</td>
<td>Grants/subsidies Land price/rental</td>
<td></td>
<td>Inter-Governmental Implementation Protocol</td>
</tr>
<tr>
<td>Transfer of land between government entities</td>
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</tr>
</tbody>
</table>

**Table 3.1: Types of transaction in CLDPs**
<table>
<thead>
<tr>
<th><strong>KEY REVIEW QUESTIONS WHEN CONSIDERING BUSINESS MODEL OPTIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alignment to mandate</strong></td>
</tr>
<tr>
<td><strong>Risk to seller/purchaser</strong></td>
</tr>
<tr>
<td><strong>Funding requirements</strong></td>
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<tr>
<td><strong>Control over developmental outcomes</strong></td>
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<tr>
<td><strong>On-going operational capacity and costs</strong></td>
</tr>
<tr>
<td><strong>Simplicity and precedent</strong></td>
</tr>
</tbody>
</table>

Table 3.2: Key questions to ask when reviewing business model options
2 Overview of legislation and regulation relevant to CLDP delivery transactions

When considering land value and the realisation, capture and distribution of such value, it is worth noting that the municipal regulatory framework was designed on the basis of general principles of good governance and to prevent municipalities disposing of their assets for short-term gains. It was not designed to promote municipal property development projects with the private sector. The nature and type of the project within a CLDP, the parties involved and the financial mechanisms, determine which municipal regulatory framework applies.

The laws that are relevant to municipal property developments with the private sector are:

- Section 217 of the Constitution of the Republic of South Africa, 1996 (the Constitution), which requires that municipal contracts for goods or services must be done in accordance with a system that is fair, equitable, transparent, competitive and cost effective;
- The Local Government: Municipal Finance Management Act (2000) (MFMA), which seeks to secure sustainable management of the financial affairs of municipalities. Regulations published under it relevant to municipal land development projects include:
  - The Municipal Public-Private Partnership Regulations (PPP Regulations)
  - The Municipal Asset Transfer Regulations (MATRs)
  - The Municipal Supply Chain Management Regulations (SCM Regulations);
- The Local Government: Municipal Systems Act (2000) (the Municipal Systems Act);
- The Preferential Procurement Policy Framework Act (2000) (PPPFA) and its Preferential Procurement Regulations; and

CLDPs may either be regulated by PPP regulations or the Asset Transfer Regulations published under the MFMA. A municipality has no discretion to choose between the two, but must comply with PPP regulations if a project meets the requirements of a PPP. CLDPs may have projects that fall within both regulatory controls.

It is generally acknowledged that the interests of a municipality are better served by a lease-based delivery strategy. However, these complex arrangements with developers where a municipality retains ownership of the land and does not sell the land but enters into a long-term lease, trigger almost all the regulatory provisions (World Bank and CSP Report 2016:9).

Of course, the CLDP may also require land use planning in terms of the Spatial Planning and Land Use Management Act (2013) (SPLUMA), environmental...
authorisations in terms of the relevant planning laws and the National Environmental Management Act (1997) (NEMA) and heritage approvals under the National Heritage Resources Act 25 of 1999.

There are a number of likely common challenges presented by the legislation that may be confronted by CLDP’s partnering with the private sector, and these should be anticipated. These are highlighted in green in the following section.

2.1 The Local Government: Municipal Finance Management Act 56 of 2003 (MFMA)

The MFMA and its regulations mentioned in the previous section regulate the financial management of municipalities and provides the general municipal regulatory framework for property development projects.

The relevant provisions of the MFMA are:

- Sections 14 and 90 that deal with the disposal of capital assets by municipalities and municipal entities.
- Section 33 that deals with contracts with future budgetary implications.
- Section 164 covering the prohibition in commercial activities and departures.
- Sections 170 and 177 that deal with exemptions.

**MFMA Section 14 – disposal of capital assets**

A municipality may not dispose of a capital asset needed to provide a minimum level of basic municipal services. However, it may dispose of capital assets that are not needed for this provided that the municipal council in an open meeting has:

- Decided that the asset is not needed to provide the minimum level of basic services.
- Considered:
  - the fair market value of the asset, and
  - the economic and community value to be received in exchange for the asset.

The transfer of ownership of the asset must be fair, equitable, transparent, competitive and consistent with the municipality’s supply chain management policy. The sale or transfer of land must be competitive, which usually means a tender process.

**MFMA Section 33 - contracts with future budgetary implications**

A municipality may enter into a contract that imposes financial obligations beyond the three years in the annual budget for that financial year but it must meet the requirements of section 33 before entering into that contract. These requirements apply in addition to the SCM and PPP regulatory requirements and, in essence, involve informing the public and relevant government departments of the municipality’s intention to enter into a contract for longer than three years.
The MFMA Sections 170 and 177 – departures and exemptions

Municipalities may approach the Minister of Finance for an exemption from this provision in terms of section 177 of the MFMA. However, they would have to motivate why practicalities impede the strict application of section 164. In other words, what practical situation makes compliance with the section difficult? Whether or not a provision applies to particular set of facts can hardly be said to be practicalities that impede a strict application of a provision. The difficulty with the provision lies in its interpretation, and not its practical application.

Differently put, the jurisdictional facts to allow the Minister of Finance to grant an exemption may not be present. However, an applicant would have to show why the provision cannot be applied in its factual circumstances.

National Treasury may approve a departure or condone non-compliance with a Treasury regulation or any condition imposed under the MFMA. However, a municipality must provide good grounds for such departure or condonation.

MFMA Sections 170 and 177 – departures and exemptions

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National Treasury may approve a departure or condone non-compliance with a Treasury regulation or any condition imposed under the MFMA. However, a municipality must provide good grounds for such departure or condonation.
Applications for departures or condonation relate to Treasury regulations and conditions imposed under the Act, not to a provision of the Act.

### 2.2 Municipal Asset Transfer Regulations (MATR)

The Municipal Asset Transfer Regulations (MATR) set out the procedure that leads to an in principle decision for the sale, lease or land availability agreement of assets. Existing encumbrances, rights or servitudes are unaffected by the transfer or grant of right to use, control or manage an asset.

Regulation 50 exempts transactions in respect of security or guarantees, transfer of moneys, certain cash deposits, security deposits and pre-payments from the regulations.


The MATR distinguish between exempted capital assets (i.e. a category of assets approved by the National Treasury for transfer to a local, national or provincial organ of state – the assets are exempted, in terms of sections 14(6) or 90(6), from the provisions of sections 14 and 19) and non-exempted assets (i.e. assets not exempted by sections 14(6) or 90(6) from sections 14 and 19). A municipality may only transfer or dispose of non-exempted assets to third parties.

Chapter 2 of the regulations deals with transfer of ownership as a result of sale or other transaction. It also deals with disposal, which includes demolition, dismantling, destruction or any other process that results in loss of ownership, other than by transfer.

Chapter 4 deals with the right to use, control or manage an asset without ceding legal ownership, which includes the lease of property.

- **Risk transfer principle** - the risk must be transferred with the asset.
- **Asset preservation principle** - prevent the indiscriminate or unsustainable transfer or disposal of municipal capital assets.

The MATR are governed and must be implemented in accordance with these four principles:

- **Valuation principle** - the need to attach a value to the transfer or disposal of a capital asset.
- **Continuity of service principle** - the need to ensure uninterrupted continuance of a municipal service, especially when an asset is used in the provision of the minimum level of basic municipal service.
MATR Chapter 2 - transfer and permanent disposal

Chapter 2 applies to property development projects, which include the sale or exchange of land or demolition or destruction of assets as part of the project.

This Chapter does not apply to the transfer of capital assets under a PPP agreement or to the transfer of housing on municipal land and the transfer of that land for the poor to beneficiaries of such housing.

The value of the assets determines the procedures that apply for the transfer or permanent disposal of assets. Assets of a lesser value do not require a public participation process and need only one municipal council resolution. High-value assets on the other hand require a public participation process and at least two municipal council resolutions.

A similar procedure applies to the decision-making process for municipal entities.

A high-value asset is when the fair market value (i.e. the value at which a knowledgeable person would buy and sell the capital asset) exceeds any one of the following (regulation 1 of MATR – as at 14 December 2017):

- R50 million;
- 1 percent of the total value of the capital assets of the municipality;
- An amount determined by the municipality that is less than any of the above amounts; or
- The combined value of capital assets the municipality intends to transfer or dispose of in any financial year exceeds 5 percent of the total value of its assets.

MATR Chapter 4 – right to use, control or manage a capital asset

Chapter 4 deals with the right to use, control or manage a capital asset that does not amount to disposal of that asset and where Chapter 2 or Chapter 3 (which deals with the transfer of municipal capital assets to organs of state – i.e. exempted capital assets) does not apply.

Chapter 4 does not apply to the right to use, control and manage capital assets in terms of PPP agreements under section 120 of the MFMA.

A municipality may only grant the right to use, control or manage a capital asset if the municipal council has granted an approval in principle. The accounting officer must undertake a public participation process if the capital assets in respect of which the proposed right is to be granted has (regulation 35 of ATR – as at 14 December 2017) a value in excess of R10 million, and a long-term right (i.e. a right in excess of three years) is proposed.

The MATR prohibit cession and subcontracting limiting the funding mechanisms available to developers. This arises where a municipality retains ownership and the project is obviously not a PPP. Given that the prohibition is in the regulations, it is possible to apply for a departure from this provision to the National Treasury in terms of section 170 of the MFMA. Again, good grounds must be shown as to why a departure should be granted.
Importantly, the right to use, control or manage a capital asset must be dealt with as if it is a transfer and disposal of a capital asset (i.e. in terms of Chapters 2 or 3), if it:

- Is granted for an indefinite or undetermined period;
- Is granted for a period which exceeds the useful life of the capital asset or its economic usefulness and would require substantial improvement or replacement during the period for which the right is granted; or
- Confers to the right holder:
  - An option to buy or acquire ownership of the asset; or
  - The power to use, control or manage the asset as if it is the beneficial owner (but not legal owner) of the asset.

The ‘beneficial owner requirement’ creates uncertainty. The term is not defined and is open to different interpretations. However, there are two ways of dealing with it: at the outset, request a departure from this regulation from National Treasury in terms of section 170 of the MFMA, or comply with the Chapter 2 or 3 requirements (i.e. treat it as a disposal or transfer) as the case might be.

2.3 Supply Chain Management Regulations (SCM Regulations) and municipal policy

The MFMA states that each municipality and each municipal entity must:

- Have a SCM policy.
- Comply with the detailed framework and minimum conditions which includes that it must be fair, equitable, transparent, competitive and cost effective.
- Act in accordance with its policy.

SCM applies both to the procurement of goods and services as well as the disposal of goods no longer needed. Although ‘goods’ are not defined, the reference in section 110(3) of the MFMA to sections 14 and 90, which in turn refers to the disposal of capital assets, makes it clear that it applies to immovable assets as well.

The SCM Regulations are focussed on procurement rather than disposal. That is why the disposal of goods is mentioned briefly. Regulation 40 of the SCM Regulations states that a municipality must provide for an effective system of disposal management for the ‘disposal or letting of assets’.

The SCM Regulations apply irrespective of whether the asset is disposed or leased under the PPP Regulations or ATRs.

The assets must be sold or leased at market-related prices unless public interests and the plight of the poor demand otherwise.

The MATR apply to the disposal of immovable property irrespective of the method specified in the SCM policy.
A municipality is not bound by virtue of either the ATRs or the SCM Regulations to conduct a public tender process when letting municipal property. (World Bank and CSP Report, 2016)

The acquisition management system of the SCM Regulations applies if the property development project needs procurement of a developer or developer service. Parts of the general conditions of contract are not appropriate for the appointment of a property developer. (World Bank and CSP Report 2016)

For large complex projects, a two-stage bidding process is permitted. This applies as it is undesirable to prepare complicated technical specifications for projects with a duration of more than three years.

Deviation from competitive bidding is permitted if there is an emergency and the goods or services are available from a single provider, if it is special work, object or animal, or any other exceptional case where it is impractical or impossible to follow the official procurement processes.

**Contract amendments**

The municipality must enter into a public participation process if it seeks to amend a contract procured through its SCM policy, irrespective of whether the amendment is material or not.

A municipality may negotiate the final terms of the contract with the preferred bidder before the award, as long as it does not amount to a second unfair opportunity, is not detrimental to other bidders and does not lead to a higher price than previously submitted. A court will consider the facts of each matter to determine whether these criteria have been infringed.

In respect of the practical difficulties in implementing the requirement that the municipal council approve the contract exactly as it is to be executed (MFMA, s33), the use of a term sheet/draft, subject to the execution version not substantially deviating from it, might be a way around this provision. However, councillors must be aware of the prohibition on interference in contracts.

**Contracts providing for compensation based on turnover**

Regulation 51 of the MFMA’s SCM Regulations states that:

*If a service provider acts on behalf of a municipality or municipal entity to provide any service or act as a collector of fees, service charges or taxes and the compensation payable to the service provider is fixed as an agreed percentage of turnover for the service or the amount collected, the contract between the service provider and the municipality or municipal entity must stipulate —

(a) a cap on the compensation payable to the service provider; and

(b) that such compensation must be performance based.*

The cap is the upper limit of what the municipality may pay for the service; it protects the municipality financially. The performance-based requirement is to
ensure that the services are delivered at a standard acceptable to the municipality. If one of the contracts giving effect to a CLDP states that the compensation payable to the service provider is fixed as an agreed percentage of turnover or amount collected, then this provision must be included in the service contracts.

Unsolicited bids
Unsolicited bids may only be accepted in exceptional cases and in accordance with regulation 37 (2) of the SCM Regulations which include that:

- The product or service is a demonstrably or proven unique innovative concept.
- It will be exceptionally beneficial or have exceptional cost advantages for the municipality.
- The bidder is the sole provider of the product or service.
- The accounting officer holds that there are sound reasons for not going through the normal bidding processes.

There are also additional requirements in respect of consultation with National Treasury, the relevant provincial Treasury and the public.

Although this may result in proposals that are attractive to the municipality not being considered or acted on, the framework requiring that stringent requirements are met before such a proposal is considered is sensible. It means that a municipality is not inundated with unsolicited proposals, which it must consider. The restriction means a municipality can proactively consider what it needs instead of reacting to numerous unsolicited proposals.

2.4 The Preferential Procurement Policy Framework Act 5 of 2000 (PPPFA)

The PPPFA provides a framework for the implementation of the preferential procurement policy mentioned in section 217(2) of the Constitution and, in terms of the Preferential Procurement Regulations, sets out an 80/20 and a 90/10 preference point system depending on whether the value of the goods or services to be provided are estimated to be above or below R50 million. The preference point of the bidders will be based on their Broad Based Black Economic Empowerment (BBBEE) status level.

However, the PPPFA and its regulations apply to procurement and not sale or letting. The regulation assumes the lowest price is the best price and does not provide for a process where a bidder will pay the municipality. (World Bank and CSP Report, 2016)

There is also an inconsistency between the requirements of a PPP and that of the PPPFA. A PPP is treated as procurement and must comply with SCM policy, but it must also provide value for money. (World Bank and CSP Report, 2016) This includes an assessment of quality, quantity and risk transfer offered by a bidder. Whereas the PPPFA refers to “best price”.

The PPPFA and its 2017 Preferential Procurement Regulations allow a tender to be awarded to a person who did not score the highest points, provided that the objective criteria were stipulated in the tender documents in addition to section 2(1)(d) and (e).
2.5 Broad-Based Black Economic Empowerment Act 53 of 2003 (BBBEE)

An organ of state is bound by the BEE Act and must apply the relevant code of good practice which includes, among other things, developing qualification criteria for the sale of state-owned entities and developing criteria for entering into partnerships with the private sector.

These codes may apply to property development. However, the Minister may, in the Gazette, exempt an organ of state from applying the codes or allow a deviation from them if the verifiable facts and circumstances necessitate an exemption or deviation.

2.6 Government Immovable Asset Management Act 19 of 2007 (GIAMA)

GIAMA applies to organs of state, including all national and provincial government departments and public entities, but excludes municipalities. Furthermore, state-owned entities (SOEs) and the Department of Public Enterprise are of the view that GIAMA does not apply to them (Dept of Public Enterprises – SOE Non-core Property Disposal Policy, June 2008 p3). However, this view is not free from doubt (Berrisford, 2013). SoEs may be required to dispose of non-core land to municipalities at a best value for money rate that includes a socio-economic component, not just a monetary value.

GIAMA provides a uniform framework for the management of immovable assets held by national and provincial departments, ensures coordination of the use of the immovable assets with service delivery objectives of those departments and provide guidelines and minimum standards in respect of the management of immovable assets.

The owner of the land must obtain the ‘best value for money’, which is defined to include social return. When disposing of land, the owner must consider whether it can be used for government’s social development initiatives and socio-economic objectives (i.e. poverty alleviation and job creation). A department may dispose of surplus land by allocating it to another user or, subject to the State Land Disposal Act, by sale, lease, exchange or donation. It is considered possible to move publicly-owned land from one department to another without an onerous or any financial transaction taking place (South African Cities Network and the Housing Development Agency, 2014).

2.7 Municipal ordinances

The then-Transvaal Local Government Ordinance 1939 (Ordinance 17 of 1939) and Municipal Ordinance No 20 of 1974 (Eastern Cape) both have provisions relevant to municipal land disposition that overlap and are not consistent with the ATRs.

Transvaal - Ordinance 17 of 1939

This Ordinance applies to every local authority under it. The Ordinance provides an additional procedure when a municipality wishes to let, sell, exchange, alienate or dispose of land. The processes in both section 14 of the MFMA and the Ordinance must be followed. The procedures are set out in sections 79(18) to (24) of the Ordinance and relate to additional public participation before alienation occurs, the hiring or leasing of immovable property for the performance or discharge of a duty imposed on Council and the

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requirement to obtain the Premier’s (Administrators) approval before it may let, sell, alienate or dispose of immovable property at lower than its valuation.

**Eastern Cape – Ordinance No 20 of 1974**

Section 124 is a general power authorising a council to alienate, let (but prohibits subletting) or allow construction on its immovable property. However, it must undertake a notice and comment process before doing so.

The Supreme Court of Appeal has held, in respect of Oudtshoorn Municipality, that section 124 of the Ordinance has been repealed by section 179 of the MFMA (CSHELL 271 (Pty) Ltd v Oudtshoorn Municipality [2012] 3 All SA 527 (WCC). It is likely to hold that this position applies also to the Eastern Cape.

### 2.8 Inter-governmental relations

A CLDP may involve the assets or require investment on the part of another sphere of government or state-owned entity. This is quite likely considering, in particular, that CLDPs are expected to promote transit-oriented development and other spheres of government, as well as state-owned entities, are involved in the public transport function, for example. South African legislation clearly expects that different organs of state cooperate and support one another. There are legislative provisions for these organisations to enter into implementation-related agreements.

**Inter-governmental Relations Framework Act, 2005 (IGRFA)**

This act provides for necessary inter-governmental consultative and coordinating structures at national, sectoral, provincial and municipal levels. Section 35 of the IGRFA makes provision for implementation protocols that can enable a spatial contract (Treasury, 2017). To the extent that intergovernmental disputes arise, processes for the resolution of such disputes are provided for by Chapter 4 of the Act. (Harrison, 2018)

**The Inter-Governmental Fiscal Relations Act, 1997 (IGFRA)**

This Act promotes inter-sphere co-operation on fiscal, budgetary and financial matters. Section 6 of the Act prescribes consultation with the Local Government Budget Forum on any legislation, policy or financial matter affecting the local sphere of government.

### 2.9 Other land development-related legislation

There are other required approvals triggered in the CLDP preparation process that would be handled by a relevant competent/designated or delegated authority operating outside of the CLDP management structures. For example, a CLDP or project components of the programme may require land-use planning approval in terms of SPLUMA and the relevant municipal and provincial laws, environmental authorisation in terms of the National Environmental Management Act 107, heritage approval under the National Heritage Act 25 of 1999, or a Water Use Licence may be required in terms of the National Water Act 36 of 1998.
Recommendations

• All such approvals required by a CLDP should be ascertained in the CLDP Preparation Finalisation Stage 2.4, along with their substantive and procedural requirements, likely timeframes for compliance, costs, risks, etc. These can present significant risks to CLDPs if not properly scoped and planned for.

• Some of these regulatory processes require similar procedures to be followed, such as with regard to stakeholder engagement. These processes can be coordinated so that the same or similar requirements can be met in one process, provided this is endorsed upfront by the decision-making authority.

• Early engagement and regular communication with these authorities is an important risk mitigation strategy to ensure there is clarity and alignment in the understanding of regulations and regulatory processes triggered, consideration is given to how procedures (particularly public participation processes) can be streamlined with the support of the competent authority and the competent authority is given early-warning as well as a contextual understanding of the impending applications. This will ensure there is an understanding of the development objectives of the CLDP and the extent of the programme itself, to frame subsequent approval processes.

• While the respective competent authorities may not fetter their discretion by granting approvals before a mandatory process is complete, there is no prohibition on engaging the authorities, and even interested and affected parties, before submitting the official application.

• Any such meeting or participation process must be noted and the specifics and reason for the meeting must be explained, especially to interested and affected parties, to minimise the likelihood of decisions being set aside on judicial review later.

• Where projects emanating from the CLDP are not to be implemented by the municipality, careful consideration should also be given to the extent of approvals to be obtained in the CLDP preparation process run by the municipality and approvals best obtained by the project owner, be it the private sector or another party. The principle should be that the CLDP preparation phase de-risks implementation as far as possible – this increases confidence on the part of investors, can expedite implementation and optimise returns for the municipality in the case of land transactions. However, it may be that a certain level of flexibility should be retained to allow for a developer, for example, to determine detailed development parameters sought based on market demand at the time and obtain approval for these. This may also be important to avoid wasteful expenditure in the Preparation Phase.
General recommendations for CLDP delivery transactions

- A municipality must determine the nature of the parties involved in the transaction, the type of transaction and the value of the asset. These factors will determine the municipal regulatory framework that applies to the CLDP.
- A municipality must determine whether the PPP Regulations or ATRS (i.e. Chapter 2 - transfer or disposal of assets or Chapter 4 - use, control or manage a capital asset) applies.
- The parties to a CLDP transaction may be a private investor or an organ of state. If it is an organ of state, check if the asset is an exempted asset or not, as this determines which chapter of the ATRs apply.
- Municipalities in the areas of the previous Transvaal and Eastern Cape must be mindful of the provisions of the Transvaal Ordinance 17 of 1939 and Eastern Cape Ordinance 20 of 1974.
- The municipality must determine the value of the asset. This value determines the nature of the transaction permitted and the procedures that must be followed.
- The nature of the transaction determines the approach. If the call for a developer is in terms of the SCM process, then it is procurement. If the municipality wishes to dispose of surplus land, a dual process takes place under the ATRs and section 14 of the MFMA, and the actual disposal in terms of regulation 40 of the SCM Regulations.

3 Land transaction instruments

3.1 Land acquisition

Land may need to be acquired by the municipality to package a coherent CLDP that achieves the intended development concept (built form). Land may also need to be acquired or servitudes registered to enable the provision of infrastructure.

As provided for by GIAMA and discussed in section 2.6 in this chapter, if this land is owned by another sphere of government or state-owned entity, it can be exchanged directly; i.e. without a competitive process, provided the seller is willing and there is agreement on price.

A municipality may acquire privately-owned land on a ‘willing buyer-willing seller’ basis or as an expropriation governed in terms of s25(3) of the Constitution and the s5 of the Expropriation Act 63 of 1975. Expropriation is generally considered to offer a quicker but possibly more expensive approach to take. It may, however, be unavoidable.

When acquiring land, notwithstanding the intention that this may eventually be disposed of, the municipality must give due consideration to the affordability of maintaining and managing this asset in the meantime. Physically securing land, for example, can be a significant expense.
Land swaps are not possible in terms of South African legislation governing municipal assets. An exchange of land would be effected through a normal sale/purchase transaction.

Recommendations

- The municipality should conduct its own valuation as a basis for negotiation with the selling party.
- Land acquisition for the purposes of assembling a CLDP should be done within a clear and certain timeline for implementation, so as not to place an undue burden of holding cost on the municipality or present a risk of fruitless and wasteful expenditure should the CLDP preparation not have been sufficiently concluded to provide reasonable certainty that the programme will proceed to implementation.

3.2 Land disposal

Sale of the land without conditions

In this transaction, the municipality will achieve the highest possible price; and there is no municipal control over the timing, size and type of development, outside of what is provided for in terms of the normal land use planning and building regulations.

Basic conditions for the sale of municipal real estate assert that there needs to be public participation, it must be subject to a competitive bid process and it must have municipal approval.

ADVANTAGES OF LAND DISPOSAL

- Clear legislative framework that governs the sale and disposal of capital assets.
- Municipality can optimise the income from the land in terms of market conditions at the time.
- New source of rates and taxes from the development, should development be realised.
- Low financial risk to the municipality.

DISADVANTAGES OF LAND DISPOSAL

- Permanent loss of an asset (high opportunity cost).
- City gets revenue from sale of land but does not capture value from the development of the site (outside of possible enhanced rates income).
- Control over what gets developed is limited to land-use planning and building regulatory procedures and decisions. Developmental objectives, outside of highest and best use return, may not be realised (World Bank, 2017b, p. S7:57).
Recommendations

- Valuations in anticipation of the disposal should be informed by forward planning (spatial, transport and infrastructure) undertaken for the area within which the site is located.
- Consider the timing of the disposal of the land informed by property market assessments to ensure that the timing of the disposal is aimed at the right time in the property market cycle to optimise return.
- Consider what de-risking could be done and what development rights could be attained for the land by the municipality at marginal costs to increase the market value of the property.

Sale of the land with conditions

In this transaction, the municipality sells the land and the developer is legally obliged to abide by the municipality’s pre-determined development conditions. These could include, for example, a zoning code to guide the development, deed restrictions, the type of development (housing) to be built, the unit mix, the timing of the development and number of parking bays. It must be noted that the imposition of too many or too onerous conditions may decrease the attractiveness of the proposition and the price that developers are willing to pay (World Bank, 2017b, p. S7:57). On the other hand, conditions associated with inclusionary housing, for example, will temper the land value improving its affordability for social housing institutions.

Leasing of the land

In this transaction the municipality follows appropriate procurement processes to lease the land that needs to be developed. Public participation and municipal council approval is required. The municipality will need to consider what happens to the improvements to the land under lease once the term of the lease expires and make provisions for taking over the asset or re-advertising the lease.

ADVANTAGES OF MUNICIPALITY OWNING LAND, BUILDING AND SELLING BUILDINGS

- Municipality has control over the project.
- Municipality retains ownership of the land.
- New source of rates and taxes from the development.
- Higher expected returns to the municipality.

DISADVANTAGES OF MUNICIPALITY OWNING LAND, BUILDING AND SELLING BUILDINGS

- May not be permitted in terms of the MFMA.
- If it is, the transaction is likely to be legally complex with associated time and cost implications.
- Lack of expertise and experience in the municipality to undertake such an initiative.
Interim mechanisms

There are mechanisms that may be used to improve the bankability of a CLDP where risk and the cost burden of holding land, while finalising the programme for implementation, can be shared. Provision for such mechanisms must be included in the ‘package’ that is publicly participated and tendered in terms of the MATR and any MFMA requirements triggered upfront to ensure transparency and fairness in the competitive process.

**ADVANTAGES OF LEASING LAND**

- Steady stream of income.
- Municipality still retains ownership.
- Municipality will capture the value in the long term.
- Municipality can retain some level of control, depending on the terms of the lease.

**DISADVANTAGES OF LEASING LAND**

- Inability of the developer to sub-lease in terms of the MATRs.
- Developer will find it arduous to raise capital; and/or
- Limitation on what can be developed.
- Municipal capacity required to actively manage such a lease.
- Financial returns will depend on developer’s success.

- **Land availability agreements**
  A municipality may enter into a land availability agreement with a developer to enable the developer to proceed to finalise authorisations for the development. This mechanism assists to manage the risk and associated cost burden on the developer, enhancing the bankability of the programme or project. At the same time, the municipality is able to retain control of the asset and build in conditions that prevent the development opportunity from being held for too long with one party, who may not perform.

- **Deferred payment**
  CLDPs and their constituent projects can be complex and take a long time to break ground. Holding costs (finance interest payments on land purchased, and rates and taxes) are one of the most significant costs developers bear. Prospects of extended periods of holding land without being able to develop it in full (and generate return to meet finance obligations) can be a serious disincentive to investment. Deferring payment of the land by linking it to performance milestones can assist in relieving this pressure and improve the attractiveness of the programme/projects to investors.
  How this arrangement is structured must be carefully designed to maintain compliance with the MFMA and MATR and to ensure no undue benefit is accrued to the third party with whom the municipality is transacting. The impact of income deferment on the municipality’s budget would also need to be considered.
Land readjustment has not been tested in South Africa. However, it is a useful tool to consider when the existing subdivision of land prohibits a coherent and viable CLDP from being implemented, and where neither the municipality nor a developer is in the financial position to acquire all of the land (or the existing owners are not prepared to sell land).

According to the World Bank, land readjustment describes a scenario in which multiple property owners within a specific geographic area pool their properties together in order to enable spatial reconfiguration and unlock higher overall market value for the combined property. (World Bank, 2017)

Recommendations

• Consider mechanisms in municipal planning by-laws that might empower the municipality to make pro-active land use applications on behalf of, and with the permission of, landowners.

<table>
<thead>
<tr>
<th>ADVANTAGES OF LAND READJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Long-term benefit in restructuring land subdivision to achieve appropriate urban form in support of broader urban systems (eg. public transport).</td>
</tr>
<tr>
<td>• Potentially self-funding.</td>
</tr>
<tr>
<td>• Involves the original owners (and could involve tenants who may otherwise be an obstacle in the development process) and avoids expropriation or compensation claims.</td>
</tr>
<tr>
<td>• Increased tax revenues (World Bank, 2017).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISADVANTAGES OF LAND READJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Untested in South Africa and there is no regulatory framework to govern valuation for land readjustment purposes, for example.</td>
</tr>
<tr>
<td>• Difficult and time-consuming to negotiate.</td>
</tr>
<tr>
<td>• Resource intensive (World Bank, 2017).</td>
</tr>
</tbody>
</table>

The table on the next page provides an overview of the various land transaction instruments. Joint ventures and PPPs are discussed further in section 5 of this chapter.
<table>
<thead>
<tr>
<th>IMPLEMENTATION TIMING</th>
<th>LEGAL CONSEQUENCES</th>
<th>PRACTICALITY FOR IMPLEMENTATION</th>
<th>APPEAL TO PRIVATE DEVELOPERS</th>
<th>MUNICIPALITY CONTROL OVER DESIGN</th>
<th>MAXIMISING RETURNS TO THE MUNICIPALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The sale of land to the developer with/without conditions</td>
<td>Quickest option for development</td>
<td>There is legal precedent</td>
<td>Relatively easy to implement for both parties</td>
<td>High</td>
<td>Limited control but can specify conditions of sale to ensure alignment with development objectives</td>
</tr>
<tr>
<td>The municipality owns, builds and then sells the land and improvements</td>
<td>Should be similar to ‘sale to developer’ above, if master developer is appointed</td>
<td>Sales of new building could be deemed a commercial activity that is prohibited</td>
<td>Municipality will not have the experience nor expertise in property development or management</td>
<td>As a master developer, for a fee, would be attractive</td>
<td>Has full control of design</td>
</tr>
<tr>
<td>Lease of the site by the municipality to the developer</td>
<td>Could be delayed by legal and regulatory prescripts</td>
<td></td>
<td>Not high due to uncertainty</td>
<td>Some control if stipulated in the lease agreement</td>
<td>Ongoing return from rentals</td>
</tr>
<tr>
<td>Joint venture (JV) between the municipality and the developer/s</td>
<td>Finding and forming a JV can take time</td>
<td>With any JV entered into by a municipality, the municipality must have the effective control; i.e. must be the majority shareholder</td>
<td>The JV/ MOE is subject to the same regulations as the municipality; i.e. the MFMA</td>
<td>Private sector not enthusiastic as JV must be controlled by municipality entity and is subject to the same regulatory environment as a municipality</td>
<td>Significant control and influence over design</td>
</tr>
<tr>
<td>PPP</td>
<td>Long timeframes for the process and approval</td>
<td>Depends on the projects</td>
<td>There is appetite depending on the projects</td>
<td>Significant control and influence over design</td>
<td>Potential to earn ongoing revenue (costly to set up)</td>
</tr>
</tbody>
</table>

Table 3.3: Land transaction instruments

4 Funding and finance

Funding and financing are key aspects that ought to be borne in mind as early as the Conceptualisation Stage (Stages 2.1). They impact how to think practically about all aspects of CLDP preparation.

4.1 Municipal money

We have already pointed out that there are limited resources to undertake municipally-funded land development. The notional financing streams available to municipalities are:

- Current revenues:
  - Rates and taxes
  - Government transfers
  - Grants
- Borrowing:
  - Long-term loan
  - Short-term loans
- Municipal bonds

For many municipalities, these sources are already heavily exploited for routine service delivery needs. Municipalities therefore need to embrace innovative approaches to finance and implement CLDPs. They have a wide array of financial instruments that can be applied to a CLDP that will stimulate or catalyse resources to foster development. Primary among these is leveraging the land itself and other value creation mechanisms (outlined in Chapter 1) to finance CLD. This is referred to as, land value capture, or more specifically, land-based financing.

Nevertheless, it is likely that a number of sources of funding and finance mechanisms will need to be brought together to deliver a CLDP. In so far as municipal money is identified as a funding source, this should be factored into the municipality’s long-term financial strategies (LTFSs).

Bankable, spatially transformative investment programmes need to attract finance but also secure support through successive grant funding applications and budgets. A municipal LTFS needs to play an active role in enabling this. A LTFS will also consider amendments needed to municipal policies (such as rates, borrowing, asset management and human settlements policies) so that they can better support innovating financing approaches, and aligning these policies to the overall transformation strategy (Cities Support Programme, National Treasury, 2018).

Notwithstanding the innovative financing approaches to be pursued, municipalities need to be acutely aware that resources are limited. Even when there are resources, there may not be capacity to spend. Prioritisation is critical for financial probity and involves careful thinking about which CLDP has the best potential to leverage funding across a municipality’s CLDP portfolio.
4.2 Land-based financing

The National Treasury and the World Bank Group offer the following definition of land-based financing: The concept of land value capture broadly refers to a methodology through which incremental increases to property values (betterment), created through some public investment or regulatory action, are recouped or redirected by the state using various incentives, taxations, or fees.

Land-based financing (LBF) does not attempt to ‘recoup’ or ‘redirect’ these general value increases; rather it is aimed at recouping those value increases experienced by private landowners, but stimulated by public-sector action and investment.

The rationale underlying the value recoupment is a more equitable distribution of newly created value, particularly when much of that value has been created through public-sector intervention. (World Bank, 2017)

The more common land-based financing instruments used globally are discussed below.

Development Charges (DCs)

A fee that is imposed by a local government on developers of new or existing properties, usually at the point of where property is subdivided or when a development of building permit is issued, that is, in the effective change in land used rights, to pay for all or a portion of the costs of providing public services to the new development.

• Fees are imposed upfront as a one-time charge.
• Requires legislative or policy framework to be in place and staff to administer, negotiate and collect fees.

• The main objective of DCs is to contribute to the cost of additional municipal infrastructure arising from the concomitant development of land use rights.
• DCs are considered a more equitable infrastructure funding tool as the costs are not borne by all residents through an increase in rates; but rather are recovered from residents who benefit directly from the developments (National Treasury, 2008, p. 78) – corresponding with the ‘benefit’ principle of public finance, implying that those who benefit from the product or service should pay for it in proportion to the value they drive from it (National Treasury, 2011, p. 98).

Tax Increment Financing (TIF)

TIF enables local government to borrow against future anticipated incremental tax revenues to be generated within a specific geographic area as a result of construction of large-scale improvement.

• Current property tax revenues when TIF created become the baseline. Additional property tax revenues are deemed the ‘increment’ and captured into a dedicated account. Increment captured for a certain period of time – 10 years or longer – until the identified financing gap associated with the project has been satisfied.
• Typically, the City issues TIF bond, either directly to the public market or by privately placing the bonds directly to investors.
• TIF bond proceeds deposited into escrow and provided to the developer of the project at various points in time. A portion of the tax increment pledges is deposited into a collection fund, and funds are drawn upon to remit debt service payments on the TIF bond.
Special Assessment District (SAD)
Additional tax paid by property owners within a defined geographic area that is estimated to benefit from a specific public improvement.
• To obtain upfront capital, municipality typically issues bonds backed by the special assessment district’s cash flow.
• The rate and length of time the assessment is in place can vary – until funding amount is reached.
• May require consent from property owners, unless local government has the authority to set up without property owner’s consent.
• SAD bond proceeds are deposited into escrow and provided to developer at various points in time. The assessments are deposited into a collection fund, and funds drawn upon to remit debt service on the SAD bond.

Sale of Development Rights
In an area targeted for redevelopment and where the municipality would like to encourage dense development – provide density bonus (above limits of land use regulations) for a fee.
• Proceeds from sale of development rights can be used to fund construction and operational costs of infrastructure or public improvements/public good.
• Requires a well-designed framework and enforcement capacity.

Transit Orientated Development (TOD)
Redevelopment scheme in an urbanised area involves landowners and developer joining together to form one cooperative entity that consolidates multiple land parcels into a single site for redevelopment.
• Local government modifies zoning codes and increases bulk to facilitate development.
• TOD land readjustment on the urban fringe.
• Landowners pool their land together for reconfiguration and contribute a portion of their land for sale to raise funds to partially fund public infrastructure costs.
• Can be undertaken by either public or private entity.

City-owned land disposal or lease
Local government disposes of property and transfers development rights to a private developer for economic development purposes:
• Land for a fee – sale or lease
• Land as in-kind payment for infrastructure
• Land as equity for development
• Tender process
• Local government may seek to maximise fair market value of the land or maximise other policy goals (e.g. affordable housing).
• Municipality and developer negotiate the land disposition deal structure with the goal of aligning public and private interests.
Density bonus
Zoning tool that permits developers to increase height and/or bulk above those permitted in terms of the zoning scheme, in exchange for a public or social good.

- Intended to compensate the developer with additional revenue from sale of additional dwellings to make up for inclusion of below market units or unprofitable amenities.
- This tool does not generate direct revenue. It is intended as an in-kind payment in exchange for the development of a public good.

Each instrument has its own specific application. Tables 3.4 and 3.5 on the following pages provide an overview in this regard. Municipalities will need to explore, test, develop and apply mechanisms on a case-by-case basis according to their effectiveness and delivery risk in each circumstance (Infrastructure Australia, 2016). This will be a key component of the Pre-Feasibility and Feasibility stages in the CLDP Preparation Phase in working out a bankable delivery strategy.

Certain projects may require the implementation of more than one land-based financing instrument in order to achieve the required objectives. How these are combined would be determined on a case-by-case basis depending on project specific challenges and objectives.

The National Treasury, with the support of the World Bank Group, have undertaken a detailed exploration of land-based financing tools to support urban development in South Africa.

Some metropolitan municipalities are testing these land-based financing mechanisms. The results of these exercises can be found at https://csp.treasury.gov.za/.
of spatial policy goals. 

is indirect through achievement in appropriate locations in support of TOD, but value capture interest is low.

and surrounds.

3

Market demand exists but is constrained by infrastructure availability.

Catalyse appropriate private development but address financing constraints (often related to infrastructure in order to realise opportunity).

Market demand for greater density than what is currently permitted.

For new infrastructure projects that require land assemblage to build the infrastructure.

For private or city owned properties in an area where the municipality supports additional density.

For private development which requires new infrastructure or services.

Large-scale public improvements that provide a district-wide benefit.

For private or city owned properties in an area where the municipality supports additional density.

Where there is sufficient capacity in the municipality to assign a dedicated team to administer the programme.

Where there is existing demand for development.

Where the market demand for high-density development is strong but where developable land is scarce.

INSTRUMENTS: LOCAL APPLICATION

TABLE 3.4: LAND BASED FINANCING

<table>
<thead>
<tr>
<th>TOOL</th>
<th>POTENTIAL TO GENERATE CAPITAL FINANCING</th>
<th>POTENTIAL TO GENERATE OPERATIONAL FINANCING</th>
<th>POTENTIAL INCENTIVE FOR PRIVATE (RE) INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>City-owned land disposal</td>
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<td>Density bonuses</td>
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</tr>
<tr>
<td>Bulk infrastructure: Capital outlay is too large for the municipality to finance on its own.</td>
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</tr>
<tr>
<td>City-owned property no longer needed for public use</td>
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</tr>
</tbody>
</table>

Note the meanings of the following symbols in this table:

* Potential to generate capital financing

** Potential to generate operational financing

*** Potential incentive for private (re) investment

City of Cape Town, 2015
<table>
<thead>
<tr>
<th>Focus areas</th>
<th>Sale of development rights</th>
<th>Development charges (Do)</th>
<th>Tax increment financing (TIF)</th>
<th>Urban re-development scheme</th>
<th>Land re-adjustment</th>
<th>Public land disposal</th>
<th>Density bonus</th>
<th>Property tax abatement</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOD; District-serving improvements</td>
<td>Revitalising areas (include TOD). Largely vacant area near active dense commercial district</td>
<td>Greenfield areas that lack infrastructure/services</td>
<td>Blighted community Brownfields Excess government property (large projects only)</td>
<td>TOD Around existing rail transit station or new station that is planned to be built</td>
<td>TOD Urban fringe areas along future railway lines</td>
<td>Revitalising areas. Infill development</td>
<td>Urban centres. Expensive land markets</td>
<td>TOD Areas where development is encouraged, but market demand is weak (may be TOD)</td>
</tr>
<tr>
<td>Goal</td>
<td>Pay for infrastructure Promote economic development</td>
<td>Dense urban regeneration Revenue to pay for public improvements</td>
<td>Pay for actual construction costs of infrastructure/cover debt service costs of funds borrowed to install infrastructure</td>
<td>Catalyse private investment. Urban regeneration Debt finance for improvement related to large projects</td>
<td>Dense urban regeneration If surplus floor area left after property rights of existing land owners are moved to new building, municipality can sell</td>
<td>Acquire land to build public infrastructure using minimal public funds Sale of surplus public land as a result of readjustment can be used to defray costs of building new infrastructure</td>
<td>Dispose of property no longer needed for a public purpose Promote economic development (and possibly other policy goals)</td>
<td>Encourage affordable housing development in targeted areas Incentivise development of public amenities Entice development to specific areas (e.g. TOD) Stipulate private market-rate or below market development (such as affordable housing)</td>
</tr>
</tbody>
</table>

Table 3.5: The context for and purpose of land-based financing instruments

Source: City of Cape Town, 2015
Legislation, regulation and land-based financing

This Guideline sets out the framework for leveraging municipal real estate in detail.

Development Charges (DCs)
The use of DCs by municipalities is a well-established practice in South Africa and is governed by policy at national and municipal levels. Legislation on DCs is imminent. National Treasury has provided a framework that defines the principles for charging DCs.

These are:

- **Equity and Fairness**
  DCs should be reasonable, balanced and practical so as to be equitable to all stakeholders.

- **Predictability**
  DCs should be a predictable, legally certain and reliable source of revenue to the municipality for providing the necessary infrastructure.

- **Spatial and economic neutrality**
  A primary role of a system of DCs is to ensure the timely, sustainable financing of required urban infrastructure. They should be determined on identifiable and measurable costs.

- **Administrative ease and uniformity**
  The determination, calculation and operation of DCs should be administratively simple and transparent (National Treasury, 2016a, p. 9).

Tax Increment Financing (TIF)
There are no limitations in South African law in implementing a TIF district. Notwithstanding the other pre-conditions that need to be satisfied for a TIF district, an independent financial feasibility study needs to be conducted that demonstrates that the incremental taxes generated from the TIF support the issuance of TIF bonds to finance the project. At the minimum, the research should show a projection of anticipated taxes that will be generated by the TIF district and the ratios of the projected annual debt services on the TIF bonds as compared to the projected annual incremental taxes (ENS africa, 2016a, p. AxA; 4).
It is important to remember that land use or development rights are inextricably linked to building a viable business model for implementing a CLDP or projects. It is these rights that enable returns to be earned to repay the finance, whether in the profits earned by a private developer or the resulting enhanced land values that increase rates paid to the municipality. The City of Johannesburg’s feasibility investigation into employing the TIF tool illustrates this well.

The City of Johannesburg compiled and approved a precinct plan to guide the future development of Dunkeld. This precinct plan envisaged a mixed-use area with a bias towards commercial, retail and residential. There was a bulk infrastructure shortfall of circa R288 million (2016/7 assessment) that needed to be invested to unlock this development potential. So the municipality explored alternative ways of financing this; to minimise pressure on its balance sheet.

When these development proposals were tested against market demand it was established that land-use budget provided for in the precinct plan was not optimal to be able to carry the investment required to fund bulk infrastructure. Ultimately Scenario 3 was found to be more feasible, both in terms of envisaged development outcomes (mixed use) as well as market assessment.

Had the concept not been modelled in terms of the returns each kind of development would yield in consultation with the private sector, the precinct plan approval would have cleared the requisite gates and the project would be moved on to subsequent phases, yet the land-use budget would not have carried the investment requirements of the R288 million infrastructure shortfall.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Office</th>
<th>Residential</th>
<th>Retail</th>
<th>Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>183,690</td>
<td>107,146</td>
<td>30,603</td>
<td>321,439</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>321,439</td>
<td></td>
<td></td>
<td>321,439</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>40,439</td>
<td>261,000</td>
<td>20,000</td>
<td>321,439</td>
</tr>
</tbody>
</table>
**Special Assessment Districts (SADs)**

In South Africa, Section 22 of the Municipal Property Rates Act (Act No. 6 of 2004), provides the regulatory authority to establish a Special Rate Area (SRA) which is very similar to a SAD but in practice, bar one exception, has been limited to support operation services rather than capital improvements. The SRA boundary and the improvements within must first be consulted with and received the consent of the majority of the members of the local community who will be liable for paying the additional rate. Moreover, the determination of a SRA must not reinforce inequalities (ENS africa, 2016a, p. 8).

An 'internal service district' which is contemplated in terms of the Municipal Systems Act (Act No. 32 of 2000), could serve as an alternate mechanism available to create an excess levy for a specific area (World Bank, 2017, p. 27).

SRAs for capital expenditure have not taken off in South Africa primarily for two reasons. Firstly, while SRAs are permitted through a national regulatory framework for municipalities, local by-laws are required to administer and govern SRAs. The variability in the frameworks may or may not empower SRAs to apply their funds to capital improvements. Secondly, SRAs have a typical life span of three to five years, which is too short to structure debt which can be used for capital improvements (World Bank, 2017, p. 28).

There is a South African precedent of an SRA being used to facilitate a capital investment into new public infrastructure.

In Claremont CBD in Cape Town, an established City Improvement District was in place performing urban management functions. However, a significant improvement to the road network, a bypass, was needed to alleviate traffic pressure on the CBD. At the time this was beyond the capacity of the City of Cape Town to fund or finance. A separate CID was set up for the purposes of constructing the Claremont Bypass, in terms of s22 of the MPRA, with the business component of the CBD only. A MOA was entered into between this CID and the City of Cape Town. In terms of this MOA, the CID obtained finance from the Development Bank of South Africa (DBSA) to fund the construction of the road and had the road built, to the specification and approval of the City, and handed over to the City on completion. The lifespan of this CID was limited to that of the repayment period for the bypass. The City collected an additional cent in the rand which was paid over to the CID to repay the DBSA.
4.3 Private money

For land-based financing to work, the vertical development in a CLDP must result in enhanced land value and thus increased rates income to the municipality. This will enable the municipality to repay the finance obtained to install the infrastructure that enabled the land development. There will therefore be sub-programmes or projects within the CLDP that should generate a return and therefore attract private-sector investment.

As with the public sector, the profit and non-profit driven sectors may invest their own capital or borrow money (debt financing) from private banks and other finance institutions. The for-profit sector can also use equity financing. Debt and equity financing may come from public (i.e. listed, for example, Real Estate Investment Trusts) or private sources (McGaffin, 2018).

In the profit-driven sector, the focus could be on turn-key developers who leverage shorter term finance to develop buildings and sell on to a range of businesses and/or households, or institutional investors who retain the building stock in their ownership. Institutional investors may prove to be easier partners in the context of a land-based financing approach. They are able to undertake development over a longer time period and can take on operating and maintenance or broader urban management functions more efficiently than say, a disparate collection of owners and tenants.

Some non-profit actors have access to state subsidies and specialist finance sources. For example, social housing institutions accredited with the Social Housing Regulatory Authority (SHRA) have access to a capital grant and finance via the National Housing Finance Corporation (NHFC), as well as private banks.

It is important to understand what banks/finance institutions look for when financing a development. This will inform how a successful business model should be structured to enable private-sector participation. It is therefore critical to include financiers in stakeholder consultations in the early stages of CLDP preparation, not just developers.

Chapter 5 provides a guide to basic financial concepts used in life cycle analyses undertaken in feasibility studies for these types of programmes/projects. These are key tools used by financiers to consider whether to invest or not.

One such concept, is that the net annual cash flows assessed over the whole life of an asset, should result into a positive net present value or an acceptable real (excluding inflation) or nominal (including inflation) internal rate of return, i.e. revenue streams should exceed the expenditure streams including capital outlays.
Recommendations

Municipalities need to execute specific actions to select the optimal funding and financing solution for a CLDP. They should:

- Commence with a comprehensive property market analysis. The primary purpose of a market analysis is to ascertain if there is sufficient threshold (effective demand) within the context of current supply to generate the sufficient returns to justify the expenditure (McGaffin, 2017a, p. 5). The analysis will examine, inter alia, market size, activity and performance, types of transactions and investments currently being made in the area, by whom, the level of mortgage financing and other investment, the trajectory of land prices and estimated values. This property market analysis must be augmented with an analysis of other development interventions in the area which will impact on a particular precinct.

- Conduct an analysis of the financial implications of the CLDP. An options analysis must be undertaken and should be guided by the following principles:
  - All feasible options should be evaluated.
  - The preferred option should achieve value for money.
  - The preferred option should achieve the objectives of the CLDP.
  - The preferred option should be affordable to the municipality.
  - The analysis should consider those options crucial to a project’s success (achievement of the development objectives and intended outcomes).
  - The analysis should include a scenario which sets out the base case (the ‘do nothing’ scenario) with operating and maintenance costs as well as the opportunity cost of investment foregone which could have been utilised to create value (National Treasury, 2017c, p. 6).

- Test private-sector interest. The primary purpose of engagement with the potential developers is to essentially determine:
  - Private-sector interest in the development.
  - Private-sector opinion on the various options that are being proposed.
  - Private developers’ recommendations regarding:
    - The best use of the site.
    - Viable urban form - sustainable and TOD.
    - The preferred business model (financial and institutional) to develop the site.

- Select the preferred option and cost it. The main cost drivers that need to be identified relate to:
  - External bulk services
  - Building works
  - Preliminaries, contingencies and escalation
  - Professional fees
  - Development costs
  - Finance costs
  - Land (can be assumed to be zero as it is under the control of the municipality based on a public good return, the land should be priced in the case of its development for commercial purposes). (World Bank, 2017b, p. S6; 52)
• Identify the potential sources of funding and the financing mechanism. These could, *inter alia*, include:
  • Municipal’s own revenue;
  • Borrowing;
  • Land value capture mechanisms, such as:
    - DCs
    - TIFs
    - SADs and SRAs; and
    - Leveraging the value of municipal real estate.

Once the most suitable financial option, based on price, risk and alignment with development objectives is selected, the municipality needs to feed this into building the optimal business model for CLDP delivery.

5 Partnerships

5.1 Joint venture between the municipality and the developer (municipal entity)

Municipalities may establish private companies but in any joint venture (JV) corporate entity between a private investor and a municipality, the municipality or municipalities must have effective control (i.e. must hold 51% or more of the equity, hold the power to appoint or remove at least the majority of the board of directors or to control at least the majority of the voting rights at a general meeting) (Section 86B and C of the Municipal Systems Act).

The Municipal Systems Act (MSA) makes it clear that a municipality may not hold an interest in a corporate body unless it is a private company, service utility, multi-jurisdictional service utility or fund for the benefit of its employees. It may hold or acquire a lesser interest in a private company only if the other interests are held by a national, provincial or local organ of state.

Chapters 4 and 5 of this Guideline provide further assistance regarding property market analyses, testing, private-sector interest, financial life-cycle analysis and option selection. Municipalities may lack capacity and expertise to undertake a comprehensive financial analysis and will need to procure external consultants to conduct independent and impartial analyses. Nevertheless, municipalities need to adequately budget for this exercise; as it is a critical component of a CLDP. The financial analysis is not done in isolation of the work of the town planners/urban designers in particular, as the relationship between land use and financial viability is an iterative one, as illustrated by the Dunkeld Precinct example.

Unlike the MFMA, the MSA does not provide for exemption from any of its provisions. This means that there is no exemption from the requirement that the municipality must exercise effective control over a private company in which it holds an interest.

Where an investor other than another municipality or a national or provincial organ of state has an interest in a private company, then a municipality may acquire or hold an interest in that company only if ‘effective control’ vests in a municipality.
Such a JV is automatically a municipal entity in terms of the MSA and the MFMA, since it is a private company in which a municipality has acquired or holds effective control. It must restrict its activities to the purpose for which it is used by the parent municipality and has no competence to perform an activity that falls outside the functions and powers of its parent municipality.

A municipality may only establish a private company (municipal entity) or acquire an interest in it, to use it to assist in the performance of its functions or powers, if the municipality can demonstrate that:

- There is a need to perform that power or function as a business practice to achieve the strategic objectives more effectively
- The company would benefit the local community
- The conditions that may be prescribed have been met

Municipal entities are regulated under Chapter 10 of the MFMA, which is similar to the provisions for municipalities. Since municipal entities are the only permitted JV company that a private party and municipality may establish, they are subject to the same legislative framework as municipalities and other organs of state. In other words, the advantages and flexibility that a private company have are non-existent in a municipal corporate JV scenario, as such ventures must comply with the requirements for municipal entities.

JVs are frowned upon by developers as a viable option given the effective control of the municipality that may translate into political control, and the burden of compliance with public sector legislation. The Companies Act (Act No. 71 of 2008) stipulates that these entities’ names must be accompanied by the letters ‘RF’ that can be interpreted as ‘ring fenced’ or ‘restricted function’. For example, the EThekwini Municipality wholly owns and operates uShaka Marine World through the Durban Marine Theme Park SOC LTD (RF).

### ADVANTAGES OF JVS BETWEEN A MUNICIPALITY AND DEVELOPER:

- The municipality has direct influence of what gets developed on site.

### DISADVANTAGES OF JVS BETWEEN A MUNICIPALITY AND DEVELOPER:

- Inability of the developer to sub-lease in terms of the MATR:
  - Developer will find it arduous to raise capital; and
  - Limitation on what can be developed.
- Municipality may not have capacity to manage such a lease (World Bank, 2017b, p. S7:60).
- The JV is subject to the same legal and regulatory framework as the municipality.

#### 5.2 Public Private Partnerships (PPPs)

A Public Private Partnership (PPP) is defined as per the municipal PPP regulations as a commercial transaction between a municipality and a private party in terms of which the private party:

- Performs a municipal function for or on behalf of a municipality, or acquires the management or use of municipal property (1) for its own commercial purpose; (2) both performs a municipality and acquires the management
or use of municipal property for its own commercial purposes.

- Assumes substantial financial, technical and operational risks in connection with the performance of the municipal function, the management or use of the municipal property; or (3) both.

- Receives a benefit from performing the municipal function, or from using the municipal property or both, by (1) consideration to be paid or given by the municipality or a municipal entity under the sole or shared control of the municipality; (2) charges or fees to be collected by the private party from users or customers of a service provided to them; or (3) a combination of the above. (World Bank, 2016, p. Memo; 35).

There are various types of PPPs that involve different risk-sharing profiles between the municipality and the partners. A typical municipal PPP is shown in the diagram below.

![Diagram 3.2: Typical PPP structure](source: Ailelo, 2017)

PPPs allow municipalities to leverage off the private sector experience and expertise and eases the pressure on the municipality’s budget. The partner is often better placed to raise debt and equity to finance a project (National Treasury, 2008, p. 78). A PPP can be considered to share the development risk between the parties. PPPs confront several complexities. All parties to the deal must be in place from beginning. The PPP approval process is considered to be tedious, costly and difficult. Contributing in part to the long delays (World Bank, 2017b, p. S7:61).
**PPP regulations**

A municipality must comply with the PPP regime if a project meets the requirements for a PPP. The PPP process requires a municipality to conduct a comprehensive feasibility study, solicit the views and recommendations of National Treasury and the relevant provincial treasury on four separate occasions and conduct at least two public participation processes.

### ADVANTAGES OF PPPs:

- Sharing risks between the private and public sector.

### DISADVANTAGES OF PPPs:

- Long timelines for the approval process.
- Municipal officials are averse to using the Municipal PPP regulations as they find these cumbersome and difficult to implement. (World Bank, 2016, p. Memo; 35)

It is not always clear when and if the PPP regime applies to property development projects. In most development projects, the municipality does not pay the developer unless the municipality were to lease a portion of the development property. The issue arises with rental payments made to a developer and whether it amounts to 'charges or fees' from 'users or customers for a service provided to them'. The uncertainty affects the type of developments that municipalities are prepared to develop. (World Bank and CSP Report 2016). The National Treasury is of the view that such arrangements fall within the meaning of a PPP.

A transaction between a municipality and organ of state can never be a PPP as there is no private party. Such a transaction, if it is a transfer or use of an asset with another organ of state must take place either in terms of Chapter 3 (transfer of exempted capital assets) or Chapter 4 (granting of rights to use, control or manage capital assets) of the ATRs or sections 14 or 90 of the MFMA. The SCM provisions and section 33 of the MFMA apply to PPP agreements.

The PPP agreement must provide value for money, be affordable and transfer technical, operational and financial risk to the private party. Bidders must be selected in line with the SCM policy and the procedure for future budgetary commitments must be complied with.

Methodologies, manuals, guidelines, case studies and training opportunities on PPPs can be found at: www.gtac.gov.za Programmes/Transaction Advisory Services.
The recommendations and views of National Treasury and provincial treasury must be considered. The agreement must meet the basic requirements which include effective monitoring of the contract and transparent financial management. The accounting officer is authorised to sign the agreement but may only do so after section 33 of the MFMA has been complied with.

**MFMA Section 120**

Section 120 of the MFMA sets out the conditions and process for PPPs, including the requirement for a feasibility study and the content thereof, assistance available from National Treasury to conduct such a study and what must be done with the study. An extract of this section is provided in section 3 of Chapter 5.

**Recommendations**

- The criteria to determine whether a project within a CLDP is a PPP include:
  - It must be a commercial transaction between a municipality and a private party.
  - The private party must perform a municipal function for or on behalf of a municipality, or acquire the management or use of municipal property for the private party’s own commercial purposes, or both.
  - The private party must assume substantial financial, technical and operational risks in connection with performance of the municipal function or the management or use of the municipal property.
  - The private party must receive a benefit from performing the municipal function or from utilising the municipal property, by way of:
    - consideration paid or given by the municipality (or municipal entity),
    - charges or fees to be collected by the private party from users or customers of a service provided to them, or
    - a combination of the above.
- A municipality must use the PPP Regulations if the CLDP meets all of the above criteria.
- The MATR, more specifically, Chapters 2 or 4, only apply if the CLDP does not meet all of the above criteria.
- A PPP is treated as procurement and must comply with SCM Policy but there is an inconsistency between the Preferential Procurement Policy Framework Act and the PPP Regulations. A PPP must provide a net benefit to a municipality in terms of cost, price, quality, quantity, risk transfer – i.e. the ‘value for money’ proposition. Under the Preferential Procurement Policy the lowest price is considered to be the best price and ‘value for money’ is generally not considered. The 2017 PPP Regulations state that objective criteria other than the highest points may be considered provided that this is set out in the tender document. This means that the value for money requirement under the PPP regime may be considered, provided it is set out in the tender document.
6 Other strategic considerations in building viable business models

6.1 Phasing

Phasing is a tactical concern in devising the CLDP delivery strategy. Decisions on phasing will be integral to designing the business model.

On the one hand, the required phasing will be self-evident in terms of the characteristics of the site, what is intended to be built on it and what infrastructure is required to unlock the use of the land. On the other hand, a phasing plan can be tactical. The following are examples of what may inform decisions on phasing within a CLDP:

- Projects within the CLDP will unlock confidence and create value; e.g. residential use will create thresholds and footfall to support retail land uses; social housing might improve the appeal of the site as a residential location and increase safety on site.

- As the implementation of the CLDP unfolds, land will increase in value. If revenue generation is a development objective of the CLDP, revenue can be maximised by capitalising on the most financially accretive uses. Therefore phasing these further down the line in the implementation of the CLDP may make sense. (HR&A, 2016)

- Certain projects within a CLDP will be able to unlock funding sources needed to contribute towards larger investments required to unlock the site from a services perspective.

Phasing will also be key to feasibility. Market demand, how a CLD intends to respond to this demand, and market take-up will influence how a CLDP is phased. Phasing can also be used to manage risk, particularly over a long term development programme exposed to market cycles.

6.2 Incentives

A CLDP’s development objectives may require incentives to be in place to enhance the viability of private sector participation and the CLDP’s attractiveness for investment. Incentives may also be required to compensate for costs associated with public goods sought from the programme and to be funded or cross-subsidised in the programme. The diagram on the next page identifies the range of incentives available to municipalities.
Incentives

- Direct (on-budget)
  - Financial
    - Operational grants
    - Capital grants
  - Fiscal (tax)
    - UDZ
  - Monetary (risk-sharing)
    - Financial instruments
- Indirect (off-budget)
  - Non-Monetary
    - Technical assistance
    - Institutional/CIDs
    - Facilitation
    - Policy
    - Regulatory infrastructure
    - Dedicated infrastructure

Diagram 3.3: Different types of incentives

Source: Robe, 2017
Incentives could include rates holidays, deferred rates and preferential rates that are evaluated on an ad hoc basis. Consideration should also be given to existing incentives that may be applicable such as the South African Revenue Services’ Urban Development Zones (UDZ) tax incentive.

The Ethekwini Municipality permitted deferred rates for 10 years for the Point Development and granted a further deferment due to poor sale of land (Kumar, 2016).

Respondents to the King Edward precinct study in Ethekwini also suggested the following basket of support that the municipality could provide:

- Relaxing bulk services contributions in order to reduce the development costs, e.g. 50 percent reduction in municipal service contribution cost.
- Providing municipal property rates rebates or exemptions – this could be provided on a sliding scale for an initial three-year period i.e. 30 percent for the first year, 20 percent for the second year and 10 percent for the third year.
- Providing rebate adjustments based on the value of improvement to the neighbourhood as a result of the project which could be based on the following indicators:
  - BEE contribution of the project
  - Job creation potential
  - Local business stimulation
- Waiving the costs associated with planning approvals.
- Upgrading the neighbouring public park (World Bank, 2017b, p. S4; 24).

Incentives should be carefully considered by a municipality because they represent a ‘discount’, or waived cost that remains a cost that will have to be resourced from elsewhere on the municipality’s budget; i.e. incentives will need to be budgeted for and therefore affordable, and therefore will need to be costed in the Feasibility Study (Stage 2.4). It is also critical that any incentives that may be offered are made explicit in the procurement or asset transfer process to ensure transparency and fair competition on equal terms.
4 CATALYTIC LAND DEVELOPMENT PROGRAMME (CLDP) PREPARATION
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2 CLDP Conceptualisation Stage (Stage 2.1)
3 CLDP Pre-Feasibility Stage (Stage 2.2)
4 CLDP Feasibility Stage (Stage 2.3)
5 CLDP Preparation Finalisation Stage (Stage 2.4)

Abbreviations used in this chapter

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BBBEE</td>
<td>Broad Based Black Economic Empowerment</td>
</tr>
<tr>
<td>BEPP</td>
<td>Built Environment Performance Plan</td>
</tr>
<tr>
<td>CLD</td>
<td>Catalytic Land Development</td>
</tr>
<tr>
<td>CLDP</td>
<td>Catalytic Land Development Programme</td>
</tr>
<tr>
<td>ESCBA</td>
<td>Economic and Social Cost Benefit Analysis</td>
</tr>
<tr>
<td>FAR</td>
<td>Floor area ratio</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
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<td>Integrated Development Plan</td>
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<td>Internal Rate of Return</td>
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<td>MFMA</td>
<td>Municipal Finance Management Act</td>
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<td>Net Present Value</td>
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<tr>
<td>PFMA</td>
<td>Public Finance Management Act</td>
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</table>
Terms used in this chapter

**Cadastral-focused analysis:** An analysis limited to a geographically defined space.

**Desktop review:** A research exercise undertaken on the basis of existing available data or documentation; i.e. no original primary research (such as surveys, audits, fieldwork, ground-truthing, etc.) is undertaken.

**Fiscal:** of or relating to taxation, public revenues, or public debt

**highest and best use:** The use of an asset that maximises its potential and that is physically possible, legally permissible and financially feasible.

**Market demand:** Market demand is the ‘aggregate of the demands of all potential customers (market participants) for a specific product over a specific period in a specific market’ (Business Dictionary, 2018: s.v. market demand.) In the context of land development, the location of the product is also a key factor for demand. Drivers of demand can be understood to include the number, income, tastes and preferences of consumers; expenditure allocation of consumers; the availability of credit to consumers and the price of substitutes (alternatives) (McGaffin, 2017). McGaffin (2017) also points out that demand is strongly driven by the size and nature of the catchment area, which is influenced by:

- distance
- transportation
- physical barriers
- psychological/cultural barriers (safety perceptions)
- household spending patterns (age, etc.)
- household densities
- household incomes

**Multi-variate tools:** Tools used to undertake options assessment using multiple variables; such as economic, social, environmental and financial variables.

**Time-based demand forecasts:** A projection of demand based on a series of time intervals or for a specific time period.

**value for money:** In relation to a public-private partnership agreement, means that the performance of a private party in terms of the agreement will result in a net benefit to the municipality in terms of cost, price, quality, quantity, risk transfer or any combination of those factors. (Municipal PPP Regulations)
Introduction

This chapter presents the stages that make up the CLDP Preparation Phase in more detail. It offers guidelines for the main activities that should be undertaken in each stage before proceeding through the stage-gates that lead from one CLDP preparation stage to the next. Chapter 1 explained the importance of following these steps. Chapter 2 explained stage-gate approvals and their importance.

Tools and resources are identified for each stage and provided in Chapter 5. A set of self-review questions to assist municipalities to review the product of each stage and whether each stage has been adequately dealt with before proceeding to the next, is also suggested.

1 CLDP Inception Stage (Stage 2.0)

1.1 Introduction and objectives of the Inception Stage

The CLDP Inception Stage is the bridge between phases 1 and 2 in the CLD life cycle, that is, the spatial planning, targeting and CLDP identification and the commencement of CLDP preparation in earnest. Too often, municipalities allow initiatives to develop in an ad-hoc manner, originating from various line departments or political committees, without clear, widely understood purpose and priority. The CLDP Inception Stage aims to ensure that there is formal rigour, structure and authorisation at the beginning of the CLDP preparation process.

This stage lays the foundation for CLDP preparation. It:

- Beds down the vision for, and objectives of, the CLDP that enables all participants to understand its purpose.
- Confirms the motivation for the CLDP, establishing its strategic rationale within the greater context of municipal development and socio-economic imperatives.
- Identifies the full known scope of the CLDP.
- Identifies key roleplayers.
- Identifies required resources (including a preliminary budget for CLDP preparation activities and efforts), resources available, resources needed and possible sources.
- Outlines the institutional arrangements required to govern the CLDP preparation process.
- Identifies risks with a particular focus on the risks to proceeding and completing all of the stages in the Preparation Phase.

These outputs are synthesised into a short Inception Report that is submitted to the relevant decision-making structure(s) (as discussed in Chapter 2) for approval and an allocation of the resources needed to take the CLDP through to the next stage.

1.2 Activities in the Inception Stage

Activity 1: Check against Spatial Planning and Targeting Phase and formulate the CLDP outline, objectives and rationale

The commencement of the CLDP Inception Stage should entail a review of all information that has been put together on the CLDP in the Spatial Planning and Targeting Phase, to locate the CLDP within the broader set of city strategies, programmes and plans and to be clear on the CLDP’s objectives. This
serves to establish the context and initial motivation for the CLDP. In the first, spatial planning and targeting phase, the CLDP is typically identified and motivated in the metropolitan municipality’s BEPP and/or the MSDF, IDP, Strategic Asset Management Plan. A succinct synthesis describing how the CLDP fits within, and contributes to, these strategies and plans should emanate from this exercise.

In addition, a high-level outline of the spatial development vision and concept should be assembled to give decision-makers a sense of the scale/yields of the proposed CLDP.

**Activity 2: Identify CLDP governance, roles and responsibilities**

An effective governance system needs to encompass the principles of accountability, direction and control. The life span of a CLDP is longer term and will require significant resources and expertise over its life cycle. Beginning to identify and map the relationships and structures for approvals, as well as defining responsibilities, are all critical to ensure the CLDP can reach the point of implementation.

In the CLDP Inception Stage, it is necessary to identify (in broad terms) the governance and management arrangements including the identification of key internal roleplayers, institutional roles and responsibilities, required members of the CLDP technical management committee, and confirm the programme oversight arrangements, within the context of the CLDP portfolio management oversight structures. Mandates and delegations required to execute the Preparation Phase should be identified. Initial engagement with the relevant key internal stakeholders is needed at this stage.

**Activity 3: Compile Inception Report**

The findings and outcomes of the above should be synthesised into an Inception Report providing decision-makers with clarity on the following:

**The CLD concept**
- Initial motivation from Phase 1 – a description of the background to the identification of the CLDP and its rationale in terms of how it will contribute to the achievement of city strategies and plans.
- Objectives – a statement of the development objectives of the CLDP identified in the CLDP and further refined.
- Description - a high-level outline of the key CLDP dimensions (general locality, vision, spatial development concept, greater context) drawn from work done in Phase 1.

**Governance and accountability**

A clear identification of key coordination, accountability and authorisation relationships and structures (management committees, steering committees, protocols, etc.) with coordination, accountability and approval bodies.

**Roles and responsibilities**

Identification of the roles and responsibilities, accounting channels and tasks for CLDP preparation. This should include clarity on:
- Resource requirements (people and skills).
- Where the capacity to run the CLDP will sit with reference to the CLDP Portfolio Management Unit (see Chapter 2).
- Constraints for further developing the CLDP, as well as proposed solutions. For example, an institutional capacitation plan might be needed,
• depending on the available skills within the municipality and the complexity of the CLDP.

Costs of CLDP preparation
A clear outline of proposed CLDP preparation costs to be expected within all remaining stages of Phase 2: CLDP Preparation (Conceptualisation, Pre-Feasibility, Feasibility, Preparation Finalisation).

Institutional prioritisation
The position of the CLDP within the municipality’s asset management strategy and CLDP portfolio should be confirmed.

Risks and mitigation
A high-level assessment of the key risks associated with the CLDP should be compiled, focussing particularly on CLD programme management, funding and integrity risks with an accompanied mitigation strategy. Special consideration should be given to Phase 2 stages and the likely risks to the advancement of the CLDP through the phase. For instance, there could be capacity constraints impacting on (CLD) programme management.

Activity 4: Prepare for next stage
The CLDP Inception Stage will not be complete until the proper documentation has been compiled and the municipality indicates readiness for the CLDP Conceptualisation Stage as denoted by the approval of the CLDP Inception Report. This will serve as the original Baseline Management Document for this stage and will be updated during subsequent stages. The Baseline Management Document focuses on objectives and governance and serves to bridge stages, guide management, provide cost estimations, keep track of activities and milestones to date, and act as the data library through each stage of the CLDP development. Refer to Chapter 2 for guidance on the content of a Baseline Management Document.

Tools for the Inception stage
• An outline of the content of the Baseline Management Document is provided in section 4 of Chapter 2.
• An example of a CLDP information document is provided in section 2 of Chapter 5.

Activity 5: Stage-gate approval
The formal adoption of the Inception Report by Council is an important authorisation for the CLDP preparation to commence and assignment of roles, responsibilities and mandates. It is the first formal accountability mechanism established in the CLDP preparation process.

The following table is a guide to assess the readiness of the CLDP to move to the next stage, the CLDP Conceptualisation Stage (Stage 2.1).

| Review of outputs | • Has a CLD concept been prepared as derived from Phase 1?
| • Has the CLDP Inception Report (with all the components described above) been produced to a sufficient level of clarity and detail to serve as the Baseline Management Document for this stage? |
| Approvals | • Has the CLDP Inception Report been formally adopted and approved by Council? |
2 CLDP Conceptualisation Stage (Stage 2.1)

2.1 Introduction and objectives of the Conceptualisation Stage
This stage serves as the concept confirmation, update or development component of the CLDP formulation process. It provides the CLDP with a fully clarified conceptualisation that establishes the scope for the pre-feasibility and feasibility studies by articulating objectives and refining the parameters of the CLDP.

2.2 Activities in the Conceptualisation Stage

**Activity 1: Define the development objectives of the CLDP**
In this stage, the intended results (objectives) of the CLDP must be clearly set out as they relate to the Built Environment Performance Plan’s (BEPPs) definition of CLDPs and the localised objectives of the municipality’s IDP, the SDF, Asset Management Strategy, etc.

These objectives must be refined such that the CLDP can be measured against them through all stages going forward. It is important to constantly check alignment with objectives at every stage and continue to verify assumptions and ongoing validity. It is recommended that the following should be considered when confirming objectives at this stage:

**Objective delineation**
The BEPP identifies certain objectives embedded within the CLDP definition, but often when applied to CLDPs or projects, these multiple objectives become muddled. Moreover, they can start to act at cross-purposes and, with no prioritisation, many fall by the wayside.

The suggested approach is to provide a clear motivation for each objective and the logic for impact. For example, reference to ‘game-changing’ as part of BEPP definition should be accompanied with a clear definition, as well as anticipated routes to impact.

Objectives should be in order of priority.

Objectives must be articulated in such a way as to be measurable; for example, if a CLDP is to be inclusive of affordable housing – a definition of what is meant by affordable housing should be provided so that the target market is clear and the relevant delivery options can be explored accordingly; an indication of the extent of affordable housing to be provided in the CLD should also be provided, even if this is within a range.

**Underpinning assumptions**
Where objectives are predicated on assumptions, these should be underpinned with analysis. For example, if the objective is to address social need, then it is critical that there is demonstrable evidence of the need. Or, if there is an assumption of market demand, evidence of this demand should be provided.

**Thresholds**
Has the CLDP Inception Report been formally adopted and approved by Council?
Activity 2: Conduct preliminary investigations

Existing information sources and municipal departments should be engaged to undertake a preliminary due diligence and to gain an understanding of opportunities and constraints – to do a ‘reality check’ of the idea and the objectives. More specifically, the assessment should consider the following categories of information:

Land and legal
Overview scan of land ownership, existing contracts and land assembly/alienation requirements/impediments anticipated (e.g. title deed restrictions, land claims), as well as environmental showstoppers. A valuation of the entire property should be done as a basis for determining value for money.

Bulk engineering services
Establish potential availability of transportation, bulk water, waste water, electricity infrastructure for the CLDP.

Social infrastructure capacity
Desktop review of social infrastructure availability and capacity in, and accessible to, the CLDP area.

Transportation networks
Desktop review of the transportation networks relating to the CLDP and the extent to which these enable accessibility and integration into the urban form.

Socio political context assessment
This assessment is multi-fold and would relate to a number of streams, including:

- A review of the relevant policy or contextual constraints that might impact the CLDP as conceptualised.
- Identifying constituencies with substantial interests in the CLDP and its environs along with a general understanding of the key interests these constituencies may have. This is a first round of stakeholder mapping discussed in Chapter 2 of this Guideline.

- Top priorities in political administrations as well as key policy mandates (objective alignment opportunities).

Demographic and market analysis
Scan to establish whether there is a need or market and to obtain an understanding of what this comprises.

Authorisations
Scan to establish key legal authorisations that will be required prior to implementation and key constraints, timelines, expenses anticipated.

The collation of the above information might require some consultation with officials and departments, but it is not envisioned as a prolonged engagement process. This collation should take the form of a narrative synthesis and a conclusion setting out opportunities and constraints to the CLDP as envisaged.

Activity 3: Develop the CLDP Concept

The initial investigations outlined above provide the supporting inputs that can be used to produce a more robust iteration of the CLD Concept that was captured in the CLDP Inception Stage. This CLD Concept needs to provide clarity on the following:

Definition and intervention logic
Unpack the strategic rationale of the programme, what are the contextual elements that present opportunities? What are the critical economic and market analytics? How will the programme further the
strategic objectives of the municipality? The key motivation should be extracted from Activity 2 such as:

**Articulation of strategic objectives**
With the intervention logic in mind, clarify and refine the objectives of the programme through the process of identifying outcomes. Outcomes are the intended results that must be achieved. Performance indicators can be used to guide subsequent stages of effort and check to ensure a focus on outcomes remains throughout the process. Chapter 1 discusses CLDP development objectives in more detail.

**Physical development concept**
This is a description of the scope and output of the proposed development, planned land use types, housing typologies, indicative yields, target income groups. A basic outline of the CLDP’s main linkages (locating the CLDP within the existing and planned transportation network), linked to anticipated transport modes.

**Need and demand factors**
This is an outline of demographic and economic needs and trends that provide motivation for the key land-use categories provided for in the physical development concept.

**Expected socio-economic and/or environmental benefits**
This is an itemisation of anticipated benefits expected to be derived from the CLDP including BBBEE in the delivery process and downstream of implementation.

**Delivery strategy concept**
Factors of Production – what are the land, capital and human resources required to implement the CLDP? Provide a preliminary examination of the likely source of funds for the CLDP implementation and estimation of overall costs for development (broken down into categories such as bulk infrastructure and top structures). This should include indication of subsidies and origination of subsidies.

What are the anticipated transactions required to implement the CLDP? Outline initial thinking on options for delivery and possible partners (delivery strategy).

What are the anticipated timelines for implementation?

**Considerations for Private-Sector Involvement**
Even at the CLDP Conceptualisation Stage, if the CLDP envisions some component of private-sector involvement, in addition to the points made previously, it is critical to address the following:

- **Understand alignment to policy**
  How does strategic or development policy documentation speak to private-sector involvement and does the CLDP, as conceptualised, fall in alignment with these considerations?

- **Private-sector trends and activities**
  Has an analysis of trends and developments within the sector been conducted to understand if expectation of private-sector appetite and involvement is even possible? Is there market-related data critical for answering this question?

- **Envisaged private-sector involvement**
  Has there been some articulation of how the private sector would be involved in the CLDP (What gap would it fill? What revenues will it seek?) Also, include some initial understanding or clarification of benefit potential from private-sector involvement. Has there been an
assessment of expectation of the private sector in this CLDP in relation to other CLDPs in the municipality’s portfolio, and collectively are the expectations realistic?

Underlying assumptions
These are the main assumptions that underpin the CLDP concept. For instance, likely appetite for retail in coming years, etc.

High level budget and timelines
High-level resourcing plan and timeline for subsequent Phase 2 activities in stages 2.2-2.4, presenting clear understanding of necessary studies, processes, and requirements. To include:

• Municipal resourcing commitments
• Anticipated timelines for procurement (of advisory services if required in remaining Phase 2 stages)
• Consultation plan of key stakeholders

Stakeholder map
This includes scoping all of internal and external stakeholders with direct and indirect influence.

Activity 4: Identify key risks
The CLDP manager should further develop the articulation of key risks linked to the desired outcomes of the CLDP and the mitigation thereof towards the development of a risk management plan at a later stage. At this stage the risks should be identified, described, categorised (for example, procedural, financial, stakeholder related) and linked to the CLDP development objectives. This will undergo further iterations in subsequent stages. It is important that these risks be segmented into those that impact Phase 2 activities (preparation) and those related to Phase 3 (implementation). Refer to Chapter 2 for more background on managing risk in CLDPs, likely risks and their categorisation.

Chapter 1 also provides insight into risks to the integrity of a CLDP that should be anticipated and managed. In Chapter 5 an example of a Risk Matrix is provided that could be used in this activity.

Activity 5: CLDP governance and administration
The governance and accountability, roles and responsibilities and management arrangements and costs set out in the CLDP Inception Report should be reviewed and confirmed. Members of the Technical Management Committee should be appointed at this stage to oversee, enable and support the CLDP preparation in this stage and should be party to the finalisation of the CLDP Conceptualisation Stage. The resources (people, skills and funding) required to proceed with the preparation of the CLDP through the next stages should be identified at this point, and where these are to be sourced inhouse, such arrangements should be confirmed.

Where financial resources are required to appoint external service providers, these budgets should be secured and scopes of work drafted for the services required.
Activity 6: Prepare for next stage

The stage will not be complete until the proper documentation has been compiled and the municipality indicates readiness for the next stage as denoted by the approval of the Stage 2.1 Baseline Management Document, which includes the CLDP Conceptualisation Report.

Activity 7: Stage-gate approval

The following table is a guide to assess the readiness of the CLDP to move to the Pre-Feasibility Stage (Stage 2.2).

<table>
<thead>
<tr>
<th>Review of outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Has the CLDP Concept been developed sufficiently (all components robust and clearly detailed)?</td>
</tr>
<tr>
<td>• Has relevant information been compiled into a Baseline Management Document, which is the CLDP Conceptualisation Report?</td>
</tr>
<tr>
<td>• Has a risk management plan (risk identification and mitigation) been prepared?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Has the CLDP Executive Steering Committee, or equivalent, approved the CLDP Concept?</td>
</tr>
<tr>
<td>• Has the CLDP been itemised on the IDP and BEPP?</td>
</tr>
<tr>
<td>Note: This is primarily top structure elements.</td>
</tr>
<tr>
<td>• Has the relevant Baseline Management Document (CLDP Conceptualisation Report) been compiled and approved?</td>
</tr>
</tbody>
</table>

Tools and resources for the Conceptualisation Stage

Chapter 5 offers resources that may assist with planning stakeholder engagement. It also provides a list of typical risks that a CLDP might encounter.

Chapter 2 provides more background on risk management. It also includes checklists for the content that should be covered in a Market Demand Study, and Environmental Analyses.
## Key review questions and tests for stage viability

The indicative review questions for the review of the CLDP Conceptualisation Stage outputs are outlined below.

<table>
<thead>
<tr>
<th>Key Review Questions for the Conceptualisation Stage</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Articulation of strategic objective** | Are strategic objectives clearly identified, with motivation, indicators, and success measures?  
Is the intervention logic coherent and feasible? |
| **Underlying assumptions** | Are the assumptions clearly articulated, supported with evidence and itemised? |
| **Policy or contextual constraints** | Has the national, regional, and local policy context been sufficiently addressed? |
| **Check against other non-municipal BEPP intergovernmental pipeline** | Have the other non-municipal inter-governmental projects, to the extent to which they are relevant to the CLDP, been identified and as such mapped to be integrated with the CLDP planning? |
| **Physical development concept** | Is there a sufficient level of detail on planned types and uses?  
Are the approximations of yield sufficiently realistic in terms of market demand (as appropriate for the stage)?  
Are settlement, housing and infrastructure typologies consistent with and appropriate to development objectives? |
| **Expected socio-economic and/or environmental benefits** | Have the expected socio-economic and/or environmental benefit requirements been stated? |
| **Financial and funding concept** | Have the probable/assumed sources of funding and financing been identified at least at a high-level?  
Are estimated public-sector costs realistic and fiscally feasible? Consider high-level and indicative nature only). Note: Private-sector financing |
| **Key risks** | Are key risks indicated, well-clarified, and presented with mitigation strategies?  
Are there any regulatory or site-specific flaws that render the concept inert?  
Are there potential risks sitting in the positioning of the CLDP within the CLDP Portfolio and the broader municipal Asset Management Strategy and those of other spheres or entities of government where it relates to land development? |
| **Private-sector involvement** | Has an initial scoping and understanding of the market been undertaken? |
| **CLDP governance and administration** | Have the key actors that need to be mobilised to implement the CLDP concept been thoroughly and realistically identified? See Chapter 2, section 6 on stakeholder engagement for more guidance. |
3 CLDP Pre-Feasibility Stage (Stage 2.2)

3.1 Introduction and objectives of the Pre-Feasibility Stage

The CLDP Pre-Feasibility Stage represents the first stage where significant municipal resources and capacity is needed beyond that of the CLD Programme Owner/Manager. This is a challenging stage for the CLDP to enter as, from this point forward, there will be a requirement of serious resource commitment and oversight to ensure the CLDP progresses. It is not uncommon for any programme (or major project) to experience setbacks or face realities otherwise unconsidered at this stage, but focused and dedicated capacity provides the foundation to surmount such hurdles.

The main purpose of this stage is to cultivate a set of development (top structure) options and then select a preferred option. Additionally, it serves to identify the critical issues and risks of the preferred option to be resolved during the next stage, full CLDP feasibility. The CLDP Pre-Feasibility Study requires more attention and activity than most municipalities anticipate. This is because the process of taking CLDP from a conceptualisation standpoint, to that of a fully articulated programme of related projects is a significant step. Conceptual formulation of objectives must be transformed into actual CLDP options and each must be assessed with a view to selecting a preferred option for further development in the Feasibility Stage. Ultimately, the CLDP Pre-Feasibility Study must scope technical, social and financial factors to identify options and identify delivery or business models relevant to these options (Aiello & McGaffin, 2015). These options must then be appraised based on a clear set of criteria to select a preferred option. The risks and unknowns associated with this preferred option should be identified to inform the next stage in the CLDP preparation to arrive at a feasible development option to deliver on the objectives of the CLDP.

3.2 Activities in the Pre-Feasibility Stage

Activity 1: Procure/mobilise required capacity

It is possible that the municipality will not have the requisite skills inhouse to conduct the CLDP Pre-Feasibility in a comprehensive and timely manner. The Terms of Reference that will enable the procurement of technical advisory services and the mobilisation of the team that will execute the pre-feasibility activities is the first step during this stage. Municipal procurement processes can take a long time. Careful consideration should be given to how services are procured in such a way as to maintain continuity across the stages of the CLDP Preparation Phase. Consideration should also be given to what parallel activities can take place to prevent the preparation process from coming to a halt. Assembling the information required to conduct the Pre-Feasibility Study is one way to save time and costs as this can be a lengthy process.
Activity 2: Further due diligence - identify development parameters
The CLDP Pre-Feasibility is aimed at constructing evidence-based options from the basis established by the CLDP Objectives and Concept and testing the preliminary feasibility of these options. The following areas of work set the parameters for different options to be identified:

Refined Intervention logic, articulation of objectives, and underlying assumptions
The CLDP Pre-Feasibility should examine the intervention logic and objectives of the CLDP with an additional analytical focus on the specific context and more robust socio-economic and market data. The underlying assumptions should be substantially motivated with such data and supported with analytical tools.

Policy or contextual constraints
The policy context analysis needs to clearly identify points of mis-alignment and whether there are strategies for remedy (e.g. these could include policies related to densification).

Physical development parameters
A cadastral-focused analysis of the site should be undertaken with an indication of physical constraints, buffer zones, and high-level geotechnical considerations; and legal constraints; i.e. title deed restrictions, servitudes, leases, land claims, etc. This will result in a more refined description of the planned land use types, housing typologies, indicative yields, and target income groups matched to land availability.

A preliminary, desktop environmental and heritage screening should also identify parameters to development. A preliminary review of any climate change vulnerability documentation available should also be undertaken to understand site-based implications.

Movement/linkage analysis
This includes a basic outline of the CLDP’s main linkages (locating the CLDP within the existing and planned transportation network), linked to anticipated transport modes - what transport infrastructure and public transport services investment would be required. Thresholds for the application of different modes should be identified; i.e. public transport services will require a certain density of potential passengers.

Infrastructure analysis
A robust analysis of current infrastructure condition and capacities and analysis of needs and associated costs would include: water and waste water, electricity, transport, roads, ICT infrastructure, and solid waste management. It is also essential that the analysis considers the need to move towards more sustainable approaches to service provision and how these resources will be utilised by end consumers.

Market/demand assessment
If a market demand and supply analysis was not conducted during the CLDP Conceptualisation Stage (as such a study will direct development concepts), then it should be conducted at the beginning of this stage. This comprises a market analysis to determine both current context and future trends specific to the local and regional context. For example, if
industrial land use is envisioned, there should be a robust analysis of the industrial market. A full marketability study goes beyond simple property market analytics, focused on analysing the four factors that create value - utility, scarcity, desire and effective purchasing power. The interaction of these four factors can determine the marketability of a property. See Chapter 5 for the typical questions addressed in a Market Demand Study and market intelligence resources.

**Regulatory triggers/legal assessment**

Legal land ownership and the authority of land owners to enter into land agreements should be assessed and confirmed. An investigation of statutory/legal requirements and processes that will be required prior to implementation of the CLDP. This will inform the options analysis and provide greater clarity on implementation timelines (for example, an environmental issue triggers the need for an Environmental Impact Assessment). Regulatory processes are likely to be required in terms of environmental, heritage, land use planning and municipal asset transfer regulations and legislation. Water use license requirements are commonly triggered, depending on the locality of the site relative to water resources, and there may be regulations governing utility infrastructure and their buffer areas. Any specialist studies or investigations that might be required in support of such applications should be identified and costed, including transport/traffic impact assessments.

The site-based triggers for environmental and/or heritage assessment in terms of National Environmental Management Act (NEMA) and/or the Heritage Resources Act (HRA) should be identified and confirmed with the competent authority. The competent authority should also be asked to confirm the procedures to be followed and approve any streamlined (combined) procedures to be followed so that one process can be run and meet the regulatory requirements of several pieces of legislation, particularly regarding to public participation.

**Activity 3: Identify options and analysis**

On the basis of the parameters identified, development options should be identified. Various top structure development options (or scenarios) need to be considered to determine financial viability (financial viability is inextricably linked to land use).

This will very likely be an interactive process with Activity 2. The CLDP Pre-Feasibility should give robust consideration to the range of potential options. These options might differ on only certain components (for example, procurement modalities) but can generate cumulative differences in impact.
**High Level Business case**

A business case is needed for each option and would broadly entail:
- Problem statement
- Goals and objectives
- Activities to be undertaken
- Infrastructure required
- Land use programme
- Demand articulation
- Sector analysis
- Benefits (economic and social)

A preliminary articulation of the preparation activities; including procedural and compliance-related requirements, that each option would trigger going forward, should also be identified.

**Financial and funding requirements**

Financial viability should be investigated at a high level (development costs vs potential capacity of entity responsible for cost) as part of the options development.

At this stage the CLDP Pre-Feasibility Study needs to consider various parameters such as total investment value, yields, bulk, floor area ratio (FAR), facilities, infrastructure, and capacity. It should also take into consideration, for example, sales prices and rental incomes.

It should also assess budget implications for the municipality (current budget vs new).

Preliminary financial aspects that need to be addressed in the options analysis are:
- High-level annual expenditure and revenue projections for each asset in an option, i.e. whole-life assessments with the aim to determine the economic and financial implication of each development option (scenario).
- The economic and financial implications for each development option are then compared in order to select the best feasible option.
- More emphasis is given to top structure costing and return on investment than the cost of infrastructure as the latter is almost seen as a constant for each option. Preliminary costs for infrastructure procurement must nevertheless be estimated.

A more detailed guide on financial analysis concepts to be used going forward from this stage is presented in Chapter 5 of this Guideline.

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**Activity 4: Options Appraisal and Selection**

All options identified should be viable based on the Pre-Feasibility assessment. A clear set of criteria should be identified by the municipality upfront and made explicit, against which each option will be appraised to select a preferred option.

A ‘do-nothing’ scenario is not necessarily a low-cost or no-cost scenario – the opportunity cost of doing nothing (such as foregone revenue or benefits) needs to be considered alongside the ongoing costs of holding, securing and maintaining the property.
At a high level, key considerations for options appraisal could involve:

- Alignment or consistency with municipal and CLDP development objectives identified and refined in Stage 1.2 of the CLDP Preparation Phase.
- Compatibility with broader policies, strategies and economic conditions.
- Feasibility
- Cost
- Benefit or advantage (include BBBEE)
- Timing
- Complexity and Institutional Capacity to deliver

(adapted in part from https://www.nationalcollege.org.uk/ transfer/open/dsbm-phase-3-module-3-planning-strategic-initiatives-in-schools/options-appraisal/dsbm-p3m3-s2-t1.html).

There are a number of multi-variate tools available for cost benefit analysis from an economic and social perspective that a municipality could use and/or adapt.

Should an Environmental Impact Assessment be triggered in the CLDP, option identification and assessment is required as part of the application process – consider how to streamline these options identification and assessment processes so that work is not duplicated.

When the preferred option is selected, the preparation activities required to take this option forward should be unpacked in detail to inform the scope for the next preparation stage.

Considerations for private-sector involvement

At the CLDP Pre-Feasibility Stage, there should be a realistic assessment of private-sector potential. This potential could range from engagement in a partnership (formal PPP or not) to private-sector activities in any other manner. The CLDP Pre-Feasibility must demonstrate a clear understanding of size and depth of the market and what conditions stimulate interest. Refer to Chapter 3 for more background.

If private-sector involvement is envisioned, at a programme or only a component project level, the options assessment should consider the nature of the transactions that would be involved, the preparation activities required as a result that will need to be picked up in the next stage. This is integral to the process of identifying a preferred option.

In pursuit of testing private-sector appetite for any of the above, the CLDP Pre-Feasibility Stage may need to include formal initial engagement with the private sector. This should be done in such a manner as to be inclusive and transparent – all should be given a fair opportunity to participate in such engagement while at the same time the municipality may proactively reach out to possible investors, developers and banks. The requirements of the MATR may be triggered at this point and should be followed in such a way as to coordinate and complement other regulatory procedures to be followed.
Activity 5: Stakeholder Management Plan
The stakeholder map should be updated and a Stakeholder Management Plan should be prepared in response to the assessment of regulatory triggers undertaken and an understanding of the procedures this will expect the CLDP to follow; the other due diligence activities undertaken; and the options identified.

Activity 6: Identify and assess risk
A formal risk assessment should be prepared for each option. This will support the final decision on the preferred option.

Activity 7: Prepare for the next stage
After key approvals are obtained, the stage will not be complete until the proper documentation has been compiled and the municipality indicates readiness for the next stage as denoted by the approval of the updated Baseline Management Document, including the CLDP Pre-Feasibility Report.

Activity 8: Stage-gate approval
The following table is a guide to assess the readiness of the CLDP to move to the Feasibility Stage (Stage 2.3).

<table>
<thead>
<tr>
<th>Review of outputs</th>
<th>Tools and resources for the Pre-Feasibility Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Has the Pre-Feasibility clearly identified and assessed options to a level of sufficiency?</td>
<td>• Key considerations for a Market Demand Study (if not completed in Stage 2.1) and resources</td>
</tr>
<tr>
<td>• Are the criteria used to select the preferred option clear and consistent with the CLD development objectives?</td>
<td>• Options Analysis Template</td>
</tr>
<tr>
<td>• Have Terms of Reference been developed for procurement of additional expertise during this stage, if deemed necessary?</td>
<td>• Environmental Analysis Checklist</td>
</tr>
<tr>
<td>• Has relevant information been compiled into a Stage 2.2 Baseline Management Document?</td>
<td>• Risk Matrix</td>
</tr>
<tr>
<td>• Is the preferred option clearly defined in terms of scope and development output?</td>
<td>• Risk Allocation Matrix</td>
</tr>
<tr>
<td>Approvals</td>
<td>• Method for undertaking stakeholder mapping and management</td>
</tr>
<tr>
<td>• Has the CLDP Pre-Feasibility Report been considered and approved by CLDP Executive Steering Committee, or equivalent?</td>
<td></td>
</tr>
<tr>
<td>• Are solutions committing the municipality to the CLDP in place, subject to key feasibility issues being secured?</td>
<td></td>
</tr>
</tbody>
</table>
### KEY REVIEW QUESTIONS FOR THE OPTIONS FORMULATION AND ANALYSIS IN THE PRE-FEASIBILITY STAGE

**EACH OPTION SHOULD BE CONSIDERED AGAINST EACH OF THESE QUESTIONS**

<table>
<thead>
<tr>
<th><strong>Planning</strong></th>
<th><strong>Land</strong></th>
<th><strong>Institutional mobilisation</strong></th>
<th><strong>Funding and financing</strong></th>
<th><strong>Approvals and licensing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the approximations of yield and impact sufficiently realistic for this stage of CLDP preparation? Are they realistic in terms of market demand?</td>
<td>Is the land articulation strategy and programme realistic?</td>
<td>Are the actors identified in the CLDP willing and able to perform their allocated function?</td>
<td>Is the funding and financing set up realistic in respect of the forecast expenditure and revenue in the short, medium and long term?</td>
<td>Have the legal constraints and regulatory constraints to this CLDP been identified and factored into the pre-feasibility study?</td>
</tr>
<tr>
<td>Are settlement, housing and infrastructure typologies consistent with and appropriate to the development objectives?</td>
<td>Is it achievable within the parameters of the MFMA and PFMA and allied regulations?</td>
<td>Is the conceived role of the private sector appropriate and viable?</td>
<td>Does the requisite demand exist to support private-sector projects given time-based demand forecasts?</td>
<td>Are the timeframes allocated to securing approvals and licenses (for example, water use licences) in the phasing realistic?</td>
</tr>
<tr>
<td>Are the land uses proposed in the plan compatible with one another (types/quantities/spatial arrangement and sequencing)?</td>
<td>Are the timeframes allowed for this aspect realistic?</td>
<td>Are the procurement requirements needed to appoint these actors achievable?</td>
<td>Have these timeframes been factored into the indicative implementation plan and the CLDP master programme and schedule (if prepared during the CLDP Pre-Feasibility Stage)?</td>
<td>Have these timeframes been factored into the indicative implementation plan and the CLDP master programme and schedule (if prepared during the CLDP Pre-Feasibility Stage)?</td>
</tr>
<tr>
<td>Is the proposed phasing plausible in terms of demand – development logic and marketability considerations?</td>
<td>Have the key land owners committed ‘in principle’ to the CLDP? What approvals/authorisations are required for the land to be made available?</td>
<td>Are the envisaged institutional arrangements viable?</td>
<td>Has a risk assessment been conducted and risks mitigated?</td>
<td>Has a risk assessment been conducted and risks mitigated?</td>
</tr>
<tr>
<td>Has there been sufficient consideration of integration of the CLDP to ensure access to social and economic amenity within the plan and the city as a whole and have the relevant coordinating departments been informed and are they in alignment?</td>
<td></td>
<td>Have the key operators been identified and committed in principle?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4 CLDP Feasibility Stage (Stage 2.3)

4.1 Introduction and objectives of the Feasibility Stage

This is one of the most important stages for preparing a successful CLDP. It is the stage where the municipality develops a deep understanding of the preferred option selected in the Pre-Feasibility Stage and develops it into a robust and feasible development offering.

The CLDP Feasibility Stage involves a set of detailed investigations into the range of factors (including the technical, legal, economic, financial, environmental, social, and affordability dimensions) that determine the feasibility, impact, and risks associated with the preferred CLDP option.

Towards the end of the CLDP Feasibility Stage, the results of the component investigations and tests are synthesised into a report that describes:

- The recommended CLDP offering.
- The findings relating to the CLDP’s feasibility of the recommended offering (together with the associated risks).
- The ‘bankability’ of a CLDP; i.e. will lenders be willing to finance certain selected projects within the CLDP and/or will funders be willing to fund projects within the CLDP.
- A recommended delivery strategy and, more specifically, business model for the elements of the CLDP to be implemented in partnership with private parties. Confirmation that the result aligns to the CLDP development objectives and what, if any, trade-offs have been made and the impact of these trade-offs on meeting the original intent of the CLD.

4.2 Activities in the Feasibility Stage

Activity 1: Procure/mobilise required capacity

In the event that the municipality does not have the requisite skills inhouse to conduct the full feasibility, skills and capacity need to be procured to proceed with the feasibility studies.

Activity 2: Feasibility investigations

There are several investigations that typically need to be undertaken during the CLDP Feasibility Stage to serve as informants to the refinement of the CLDP preferred option and to test its feasibility or scope viable business models for implementation. These investigations need to focus on the CLDP as a whole, but should also take into consideration the main component CLDP projects identified and articulated.

In general, the studies undertaken as part of the CLDP Feasibility Stage will cover several facets, including the following:

Demand forecasting and user projections

This is a critical aspect of the CLDP Feasibility Study, especially if private-sector involvement is envisioned, as the level of demand is a direct driver of each CLDP project’s financial and economic revenues, investment requirements and operational costs. Demand forecasts are by nature uncertain and usually have a big impact on the viability of the project, hence the necessity to
not only establish a base but also elaborate upside and downside scenarios, so as to test the sensitivity of the business models.

The methods employed to carry out the demand forecasting and user projections vary radically depending on the CLDP. In some instances, it can be a simplistic set of supply and demand assumptions with regard to certain CLDP components (for example, a private sector provision of energy). In others, it can be a complex assignment requiring specialised skills and necessitating a combination of economic studies, onsite counting, preference surveys, and even focus group discussions.

The demand study is often directly linked to issues of cost, cost apportionment and affordability, turning the sizing of the project into a difficult optimisation exercise.

**Site Enablement Analysis**

The CLDP Feasibility Study should cover any aspects related to the enablement of the site(s) of the CLDP which can include:

- Land requirements
- Land valuation
- Land availability and title deed endorsements.
- Zoning rights
- Resettlement needs, if applicable
- Relocation of utilities

**Legal Analysis**

During the CLDP Feasibility Study, all key legal aspects related to the proposed CLDP should be reviewed and determined, including:

- Ownership, use and user rights
- The authority of the municipality to enter into any agreements
- Relevant financial laws and regulations
- Relevant environmental and heritage laws, if applicable
- Tax legislations
- Procurement legislation and requirements
- Zoning rights and land use regulations
- List of likely project agreements and covenants. Dispute settlement mechanism and legal jurisdiction

The purpose of this exercise is to ensure that there is a solid legal basis for the project, and that any relevant legal issues, constraints or parameters are identified.

**CLDP and individual project life-cycle costs**

This component comprises quantifying estimates of both investment costs and operational costs during the whole lifetime of assets procured during the CLDP and rolled up to the CLD programme level. The costing should represent as accurately as possible the actual investments and operational expenses to be incurred by the party in charge. A few specific elements to consider are:

- The timing of investment expenses is important.
- The timing and duration of the construction period of each project in the CLDP and the timing of initial investments can make a big difference on the bankability of the business case.

Based on the timing of these expenses, each cost should be presented in current (nominal) money terms (inflation taken into account), per project and rolled up into financial years and into the CLDP.
Funding and Financial Analysis and Viability

A major part of the CLDP Feasibility Study will be the financial analysis of the CLDP, supported by a robust financial model or models. This should include a determination of individual project cash flows and the calculation of an Internal Rate of Return (IRR) or Net Present Value (NPV) of each project and for the CLDP as a whole.

If private-sector involvement is envisioned, this could include the identification of available financing instruments, elaboration of the possible financing structure, calculation of debt coverage ratios and consideration of the financial return to shareholders.

A Feasibility Study should therefore consider, inter alia:
- Project resourcing needs - administration, oversight, advisory, procurement/transaction, implementation and life-cycle costs and resources required
- Project funding and financing sources and availability
- Revenue requirements
- Revenue sources
- Affordability analysis
- Value for money assessment

Chapter 5 offers a basic guide to key financial terms and calculations used in life-cycle analysis.

Financial, Economic and Socio-Economic Cost Benefit Analysis

The CLDP Feasibility Study should verify that there is a sound financial, economic and socio-economic basis for undertaking the CLDP. This assessment should have been conducted at a high level during the CLDP Pre-Feasibility Stage and should be further refined during this stage. A Financial, Economic and Socio-Economic Cost Benefit Analysis (ESCBA) should be prepared for the CLDP as a whole, and for each project. The financial feasibility study determines whether a project would meet financial benchmarks. The economic feasibility study, on the other hand, determines the role that a project would have on employment, rates and taxes and the local economy. The objective cost benefit analysis is to verify that the projects make financial and economic sense and have a positive impact on society as a whole. The ESCBA takes into account

It is important to remember that CLDPs and their projects require capacity within a municipality to undertake procurement processes, to contract and administer contracts in the preparation, implementation and operations and maintenance phases of a CLDP. Advisory services may also be needed. Dedicated capacity may be needed to run complex, extensive technical processes such as development permissions. This is a critical success factor for a CLDP. The feasibility stage must identify these requirements and how they are to be resourced over the whole life of the programme which could run over a decade.
not only the financial cash flows generated by each project, but also the associated direct and indirect economic costs and benefits. As much as possible those economic costs and benefits should be quantified, however it is not always possible to put a value on each driver of economic return; the quantified analysis can then be complemented by a qualitative description of costs and benefits which were not possible to quantify. Section 2 of Chapter 5 provides further detail on this method of cost-benefit analysis and the difference between financial and economic analysis.

**Activity 3: Refine preferred option, develop content and delivery strategy**

The CLDP Feasibility Stage should continue to refine and elaborate on the preferred option in an interactive process with the above-mentioned feasibility investigations.

Content development activities in this stage typically need to span the following areas and should be undertaken with a view to preparing and packaging the required applications for regulatory authorisation, as well as packaging the programme or projects for procurement and transaction.

**Land use plan**

The environmental assessment, traffic and transport study, bulk services assessment, urban design and other necessary various studies would inform the proposed estimated land uses, densities and yields. The proposed plan would then inform the various disciplines (environment, transport and infrastructure) as to what is required which can be costed to input into the CLDP Feasibility Analysis.

**Transportation/traffic plan**

This involves outlining the movement system to be implemented, envisaged standards, phasing and costs associated therewith.

**Engineering infrastructure**

This involves examining requirements, phasing, standards and financial obligations associated therewith.

**Land acquisition and release plan**

This would involve outlining how the various land parcels comprising the CLDP are to be acquired (if applicable), consolidated, subdivided and released and the phasing associated therewith.

**Social and economic amenities**

This involves outlining what social and economic amenities are required within the CLDP and which can be accessed externally. This should include specifying what agreements are required with relevant departments.

**Identification of CLDP component projects**

This entails a breakdown of the CLDP into the envisaged set of component project elements to be implemented by differing implementing organisations. This exercise will need to outline the contents and yields of each component project, financing mechanisms, their scheduling within the overall sequence of CLDP implementation and critical interdependencies between component projects. This includes the identification of PPPs and private development projects.
Phasing Plan
This requires identifying the phasing of the CLDP that addresses considerations set out in section 6.1 of Chapter 3 of this Guideline.

Benefit Realisation
This involves a clear articulation of how the CLDP will meet the development objectives – how the intended benefits will be realised both in terms of the output of the land development, BBBEE intentions in terms of procurement, transactions and downstream benefits (as well as any measures required or project design adaptations made to achieve inclusion) and any other social and economic benefits to be attained.

The preparation of the Master Programme and Schedule
On the basis of the identification of the CLDP component projects, a master schedule of CLDP projects to be implemented over time will be prepared. Chapter 2, section 4 explains the Master Programme and Schedule in greater detail.

The financing and funding arrangement
Financial and funding strategy to be utilised to implement the CLDP and operate it thereafter based on the CLDP Master Programme and Schedule.

Delivery Strategy & Business Model: Institutional, partnership and transaction and procurement arrangements
Description of the envisaged delivery strategy for the programme identifying the institutional and procurement arrangements for the CLDP and its projects, specifying which Implementing Agencies[c1] are envisaged to execute which component CLDP project, what procurement mode is be utilised and the envisaged programme associated therewith, including a phasing strategy.

The business model for transacting with the private sector in the programme or on projects within the programme should be identified (Refer to Chapter 3 for more guidance in this regard).

An updated stakeholder management plan should be provided aligned to the delivery strategy. A stakeholder management plan to be used in the implementation phase is needed, recognising that the implementation phase may involve different stakeholders and/or the roles of different stakeholders will change or change in emphasis (refer to Chapter 2 for more guidance in this regard).
A Procurement Plan in respect of partnership-based transactions should include:

- A project timetable for key milestones and all required approvals or if the procurement process has commenced what actions remain and are required in terms of applicable procurement legislation;
- Confirmation that sufficient funds are available in the municipality’s budget to take the project into contract implementation;
- A list of potential challenges and a discussion on how they will be addressed;
- The procurement practices and procedures that will or have been implemented;
- The municipality’s governance processes to be used in the management of the procurement, especially regarding decision-making, bid evaluation processes and teams;
- The project team with assigned functions; and
- Categories of information to be made available to bidders and how such information will be developed;
- A list of required approvals from within and outside the municipality;
- Contingency plans for dealing with deviations from the timetable and budgets;
- An appropriate quality assurance process for procurement documentation;
- The means for establishing and maintaining an appropriate audit trail of the procurement process; and
- Appropriate security and confidentiality systems, including confidentiality agreements, anti-corruption mechanisms and conflict of interest forms to be signed by all project team members. (Source: Feasibility Study Elements – Use of Municipal Land for Commercial Purposes, National Treasury 2007)
Considerations for private-sector involvement

**Public Private Partnerships (PPPs)**
If the CLDP entails a PPP, National Treasury’s PPP Project Life Cycle should be followed and synchronised with the CLDP Master Programme and Schedule.

If so, the CLDP needs to embed within Stage 2.3: CLDP Feasibility, the necessary preparation activities to ready itself for the Inception of the PPP Project Cycle.

Within the PPP Project Cycle, the Inception Stage requires:
- Registering with the relevant treasury.
- Appointing a project officer.
- Appointing a transaction advisory.

The relationship between this work and the activities of Stage 2.3: CLDP Feasibility, will require outputs from Stage 2.3 to be sufficient for the relevant stage of the PPP Project Cycle. Section 5.2 of Chapter 3 explains PPPs in more detail.

**Other private related projects within CLDP**
If other non-PPP private-related projects are envisioned, the following parameters should be considered:
- A whole life cycle analysis of each envisioned private-sector project with the aim to provide prospective bidders with project information that will enable them to plan, bid and to secure funding from lenders.
- The procurement plan for the private-sector project based on the CLDP Master Programme and Schedule.
- The availability and capacity of bulk infrastructure related to the private project.
- Preliminary special conditions that should form part of the tender documentation.
- Transaction advice.
- Any risks associated with project and risk management plan.
- How this private project meets/supports the development objectives of the CLDP.

**Activity 4: Risk management**
The CLDP Risk Management Plan should be updated based on the information gathered in this stage. Having identified all risks and determined the optimal allocation of each risk, the Risk Management Plan can be completed. The Risk Management Plan is a clear summary that lists all the risks, describes each risk, and proposes whether it is transferred, shared or retained and how the risks should be mitigated.

**Activity 5: Prepare final Feasibility Report**
The CLDP Feasibility Report should be a concise report that can speak to various audiences, from technical to political. The goal is to ensure that the CLDP Feasibility Report can be used in the necessary forums that will be required to advance the CLDP to the next stage of Programme Preparation Finalisation and illustrate the CLDP viability so that the municipality, can with confidence, proceed towards the Implementation Phase.

**Activity 6: Prepare for next stage**
After key approvals are obtained, the stage will not be complete until the proper documentation has been compiled and the municipality indicates readiness for the next stage as denoted by the approval of the Baseline Management Document, which includes the CLDP Feasibility Study Report.
**Activity 7: Stage-gate approval**

The table below is a guide to assess the readiness of the CLDP to move to the Preparation Finalisation Stage (Stage 2.4).

<table>
<thead>
<tr>
<th>Review of outputs</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Has the CLDP Feasibility provided sufficient detail and motivation for the preferred option?</td>
<td></td>
</tr>
<tr>
<td>• Has the Implementation Programme (CLDP Master Programme and Schedule) been prepared or updated with a list of action items and key needs for the Preparation Finalisation Stage?</td>
<td></td>
</tr>
<tr>
<td>• Has relevant information been compiled into a Baseline Management Document, which is the CLDP Feasibility Report?</td>
<td></td>
</tr>
<tr>
<td>• Is there a Delivery Strategy and Procurement Plan?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Approvals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Has the CLDP Feasibility Study Report been considered and approved by City (Exco and full council), and entailed public-sector departments/SOEs?</td>
<td></td>
</tr>
<tr>
<td>• Have required transactions been approved by the delegated municipal authority?</td>
<td></td>
</tr>
<tr>
<td>• Have necessary institutional arrangements identified in the CLDP Feasibility Study been approved (in principle)?</td>
<td></td>
</tr>
<tr>
<td>• If there is a private-sector role envisioned at programme level in the form of a PPP, has the documentation for National Treasury approval been submitted and the necessary public participation process has been followed?</td>
<td></td>
</tr>
<tr>
<td>• Have implementation budgets been approved and appear in the annual budgets of the relevant departments?</td>
<td></td>
</tr>
<tr>
<td>• Has the CLDP Master Programme and Schedule for all component projects been compiled and approved?</td>
<td></td>
</tr>
</tbody>
</table>

**Tools and resources for the Feasibility stage**

Chapter 5 provides:

- An overview of cost-benefit analysis methodologies
- A guide to the basic concepts of life cycle analysis
- A CLD marketing plan
- Extracts of relevant sections of the MFMA and MATR pertaining to transactions
### 4.3 Key review questions and tests for stage viability

A list of indicative questions for the review of the CLDP Feasibility Stage outputs are listed in the table below.

<table>
<thead>
<tr>
<th><strong>Key Review Questions for the Feasibility Stage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning</strong></td>
</tr>
<tr>
<td>Does the final development design framework align to the SDF objectives and policies of the municipality?</td>
</tr>
<tr>
<td>Do the various inputs (transport, economic, infrastructure, and environment) indicate that the development is viable?</td>
</tr>
<tr>
<td>Is the calculation of yield of the various land use elements in line with the market analysis?</td>
</tr>
<tr>
<td>Are settlement, housing and infrastructure typologies realistic and match the affordability of the target group. Do they match the development objectives?</td>
</tr>
<tr>
<td>Is there a draft work plan that indicates phasing, capacity and resource allocation to prepare the land for development?</td>
</tr>
<tr>
<td><strong>Phasing</strong></td>
</tr>
<tr>
<td>Is the development sequence plausible in terms of land availability, legal authorisations, bulk services, and development logic and marketability considerations?</td>
</tr>
<tr>
<td>Is there a development sequence in place for supporting social and economic amenities and transportation linkages if required?</td>
</tr>
<tr>
<td><strong>Land</strong></td>
</tr>
<tr>
<td>Is the land articulation plan and programme realistic?</td>
</tr>
<tr>
<td>Is it achievable within the parameters of the MFMA and PFMA and allied regulations?</td>
</tr>
<tr>
<td>Are the timeframes allowed for this aspect realistic?</td>
</tr>
<tr>
<td>Have the key land owners committed their holdings to the CLDP? Are the key approvals/authorisations required secured?</td>
</tr>
<tr>
<td><strong>Land release and transaction structuring</strong></td>
</tr>
<tr>
<td>Alignment to Mandate: Does the proposed option align with desired City municipal objectives?</td>
</tr>
<tr>
<td>Risk to Seller or Purchaser: Does the proposed option create undue financial or other risk exposure to the City Municipality that is out of alignment with the developmental outcomes sought from the land?</td>
</tr>
<tr>
<td>Funding Requirements: Does the proposed option require a significant funding commitment that cannot be obtained from existing sources to make the transaction viable that is not justifiable or not readily available from existing land financing sources or instruments?</td>
</tr>
<tr>
<td>Control over Developmental Outcomes: Does the proposed option give the Municipality sufficient ability to control the nature of development outcomes from the development, and the rate of development?</td>
</tr>
<tr>
<td>On-going Operational Capacity and Costs: Does the instrument require a substantial on-going commitment from seller or purchaser (money and resources) to manage over time that is not in line with their core mandates?</td>
</tr>
<tr>
<td>Simplicity and Precedent: Is the instrument well understood, easy to implement and routinely applied to property disposal transactions in South Africa? Are the procurement requirements needed to appoint these actors achievable?</td>
</tr>
<tr>
<td><strong>Institutional mobilisation</strong></td>
</tr>
<tr>
<td>Do the implementing agencies identified in CLDP Plan have the capacity to perform their allocated function?</td>
</tr>
<tr>
<td>Are the envisaged institutional arrangements viable?</td>
</tr>
<tr>
<td>Have the key public-sector operators been identified and committed in principle?</td>
</tr>
<tr>
<td>Is the conceived role of private sector appropriate and viable?</td>
</tr>
<tr>
<td><strong>Funding and financing</strong></td>
</tr>
<tr>
<td>Does the requisite demand exist to support private-sector projects given time-based demand forecasts?</td>
</tr>
<tr>
<td>Has a whole life analysis been conducted for each asset in the CLDP and have the results been rolled up into the programme level?</td>
</tr>
<tr>
<td>Is the ESCBA sound? Does it justify the implementation of the CLDP as formulated?</td>
</tr>
<tr>
<td>Is the funding and financial analysis sound?</td>
</tr>
<tr>
<td>Has the full spectrum of possible public sector offering (grants and incentives) been adequately considered and investigated?</td>
</tr>
<tr>
<td><strong>Authorisations</strong></td>
</tr>
<tr>
<td>Have the outstanding legal constraints and regulatory constraints to CLDP authorisation and implementation been identified?</td>
</tr>
<tr>
<td>Are the timeframes allocated to securing these licenses (for example, water use licences) in the phasing realistic?</td>
</tr>
<tr>
<td>Have these timeframes been factored into the indicative implementation programme and schedule?</td>
</tr>
<tr>
<td><strong>Risk assessment</strong></td>
</tr>
<tr>
<td>Are CLDP and associated project risks identified and well understood?</td>
</tr>
<tr>
<td>Are the mitigation measured proposed reasonable and achievable?</td>
</tr>
</tbody>
</table>
5 CLDP Preparation Finalisation Stage (Stage 2.4)

5.1 Introduction and objectives of the Preparation Finalisation Stage

This section outlines the key elements of the final stage of the CLDP Preparation Phase and prepares the component projects falling within the CLDP into an integrated set of projects that are ready for implementation within the relevant regulatory frameworks and procedures.

The stage involves the final preparations for CLDP implementation through its component development projects. It will typically comprise the following work streams:

1. Site development plan finalisation and securing the statutory approvals needed to allow implementation of the CLDP to proceed.
2. Finalisation of the CLDP Master Programme and Schedule of both municipal-managed projects and private-related projects within the CLDP.
3. Project briefs for municipal-managed projects to be handed over to departments for implementation according to the Standard for Infrastructure Procurement and Delivery Management and Cities Infrastructure Delivery Management System.
4. Implementation preparation and contracting for PPPs and private development projects.
5. CLDP Implementation Phase management arrangements and agreements with departments.

The CLDP Preparation Finalisation Stage can represent a significant level of effort and time, particularly if the private sector is envisioned to be involved. This is because the client municipality would have to conclude all necessary private-sector market solicitation, negotiation and contracting activities within this stage. Activities within this stage are described more fully below.

5.2 Activities in the Preparation Finalisation Stage

Activity 1: Finalise Site Development Plan(s) and secure the statutory approvals needed to allow implementation of the CLDP to proceed

This activity area focuses on finalising CLDP spatial, land use planning and urban design and obtaining the programme level statutory authorisations needed to allow the implementation of the CLDP to proceed.

The site development plan (which could be at the scale of a precinct) typically needs to be taken to the point where the specific positioning of all the component CLDP elements/projects (e.g. bulk and collector infrastructure, and the cadastral boundaries of the component projects) is resolved and finalised so that the implementing agencies can proceed with project design. Elements such as detailed layout and securing municipal approval for bulk and parking within a component project may be undertaken by the implementing agency during the Implementation Phase. However, it is important to consider the level of approval that may be obtained in this stage that will de-risk the project and enhance certainty and investment attractiveness.
Detailed approvals may be best left to the implementing organisation to allow for flexibility.

The statutory approvals needed to allow CLDP implementation to proceed, such as a National Environmental Management Act (NEMA) authorisation, are also finalised during this stage. Note that the statutory approvals that need to be secured at the level of the component projects, for example, municipal approval of the design of engineering services, or building plan approvals, will apply during the Implementation Phase.

**Activity 2: Finalise the CLDP Master Programme and Schedule both municipal-managed projects and private-related projects within the CLDP**

This activity entails the refinement and finalisation of the CLDP master programme and schedule. Such a Master Programme and Schedule will need to specify and finalise, the full set of component CLDP projects, the scheduling of the component projects (and key project stages therein), and the identification of the key scheduling dependencies between component projects.

**Activity 3: Project briefs for municipal-related projects**

This activity entails the synthesis of the results of the previous activities and stages into the definition of the specifications and briefs for the component CLDP projects to be provided to implementing municipal departments or their agencies. These CLDP municipal-managed project briefs will typically cover the following aspects in order to hand over the project from Phase 2 to the departments to proceed with the implementation of each CLDP project:

- Spatial planning parameters and objectives.
- Type of project, location, and project life cycle stage duration and cost estimate information.
- Agreements between CLDPM and departments.
- Information as per CLDP Master Programme and Schedule.
- Identified risks.

Based on the final CLDP Master Programme and Schedule, the total annual financial requirements should be presented in current/nominal (inflation included) per project and for the CLDP as a whole. Although the Master Programme and Schedule runs over multi-years (even 20 years), the short and medium term information can be used for annual budgeting purposes. The CLDP Master Programme and Schedule and its associated financials should be reviewed and updated annually once the programme is in the Implementation Phase.
Activity 4: Implement, prepare and contract PPPs and private development projects

This activity involves the preparation of all specifications and agreements to procure PPPs or private developers to deliver private-related projects as specified.

Adjudication criteria for the selection of PPPs or private developers must be determined and articulated so as to be in alignment with the objectives and conceptualisation of the CLDP and sufficiently informed by the Feasibility Study. The adjudication panel should, in addition to compliance with the relevant regulations, be commensurate with the profile and significance of the potential impact of the CLDP.

Activity 5: Finalise institutional arrangements with departments or implementing agencies

This activity area entails the establishment, resourcing and commissioning of the institutional arrangements between the CLDP management and that of other municipal departments or implementing agencies. This will include the arrangements for information exchange mechanisms, monitoring and coordinating, and the mechanisms through which the component projects will be synchronised, and unanticipated problems resolved, in a timeous and coordinated manner.

Activity 6: Finalise long term urban management arrangements

This activity area requires that urban management arrangements over the whole life of the CLD are put in place; where required activities and standards are identified; responsibilities are allocated within the municipality and across partners and confirmed; budgetary implications are identified, quantified and accounted for (both in terms of expenditure and revenue); and any institutional legal procedures to be followed are identified and a plan put in place for implementation.

Activity 7: Update the Risk Management Plan

The CLDP’s Risk Management Plan should be updated and maintained throughout the Implementation Phase.
**Activity 8: Stage-gate approval**

The table below is a guide to assess the readiness of the CLDP to move to the Implementation Phase.

<table>
<thead>
<tr>
<th>Review of outputs</th>
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<tbody>
<tr>
<td>• Are all the requisite planning, land legal and authorisation requirements needed for commencement of the component projects in place?</td>
<td></td>
</tr>
<tr>
<td>• Have the project briefs for all municipal-managed projects been well formulated and approved by the relevant municipal departments, implementing agencies, funders, land owners, the future operational and maintenance authorities? Do they address the key feasibility factors addressed in the Feasibility Study?</td>
<td></td>
</tr>
<tr>
<td>• Are contracts/appointments with other municipal departments or implementing agencies for the component projects sound and comprehensive?</td>
<td></td>
</tr>
<tr>
<td>• Is the Implementation Master Programme and Schedule comprehensive, realistic, approved and accepted by the municipality (including implementing agencies), land owners, funders and future operators?</td>
<td></td>
</tr>
<tr>
<td>• Are the institutional arrangements needed to oversee the implementation of the component projects feasible?</td>
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<tr>
<th>Approvals</th>
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<tbody>
<tr>
<td>• Has the CLDP Master Programme and Schedule been approved?</td>
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<tr>
<td>• Has the land availability/sale/supply contracts identified in the feasibility study secured?</td>
<td></td>
</tr>
<tr>
<td>• Have the statutory approvals identified in the feasibility study been secured?</td>
<td></td>
</tr>
<tr>
<td>• Are the funding agreements with funders of component CLDP projects in place?</td>
<td></td>
</tr>
<tr>
<td>• Have the project briefs been formulated and approved by funders, regulators, land owner and procurement authorities?</td>
<td></td>
</tr>
<tr>
<td>• Have the contracts with project implementers been approved?</td>
<td></td>
</tr>
<tr>
<td>• Has the Implementation Master Programme and Schedule been agreed with municipality, funders, land owners and project implementers?</td>
<td></td>
</tr>
<tr>
<td>• Have the institutional arrangements for the Implementation Phase been approved and contracted between key implementing organisations, funders and land owners?</td>
<td></td>
</tr>
</tbody>
</table>
5.3 Key review questions and tests for stage viability

Indicative review questions for the review of the CLDP Finalisation Stage outputs are as follows:

<table>
<thead>
<tr>
<th>KEY REVIEW QUESTIONS FOR THE FINALISATION STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
</tr>
<tr>
<td>Do the settlement, housing and infrastructure typologies remain realistic and match the availability of finance/subsidy and affordability of the target group?</td>
</tr>
</tbody>
</table>

| Land                                          |
| Have the land commitment and legal constraint clearing requirements identified during the Feasibility Study been achieved? |
| Is the land release programme envisaged by the CLDP Master Programme and Schedule realistic? |

| Institutional mobilisation                    |
| Have the operating and maintenance authorities identified in the Feasibility Study agreed to take over completed projects and approved the specifications contained in the project briefs (for municipal managed projects)? |
| Have the implementing departments or implementing agencies been contracted? |
| Do they have the capacity to perform their allocated function? |
| Are the institutional arrangements needed to coordinate the implementation of the component projects feasible, have the requisite mandate and authority been provided, is the structure resourced with the required level of competence, have the individual municipal project implementers committed to working within this structure? |

| Funding, budgeting and financing               |
| Is the requisite funding accurately estimated, cash flowed and budgeted? |
| Are funding agreements/contracts in place? |

| Approvals and licensing                        |
| Have the legal requirements identified in the Feasibility Study been secured? |
| Have the authorisation/licencing requirements (if any) for each project within the CLDP been specified in the project briefs for municipal-managed projects and in the specifications for private-related projects? |
| Have these timeframes been factored into the Implementation Master Programme and Schedule? |

| Risk management                               |
| Do the project briefs and contracts with the municipal project implementers translate risk and risk mitigation measures into the risk management requirements at project level? |
| Are risk monitoring mechanisms and reporting arrangements factored into the project agreements? |
| Are the institutional arrangements for the Implementation Phase able to monitor and respond to the risks identified in the Feasibility Study? |
| Is the CLDP Master Programme and Schedule responsive to the key programme risks identified in the Feasibility Study? |
5

CATALYTIC LAND DEVELOPMENT PROGRAMME (CLDP)
PREPARATION TOOLS AND RESOURCES
Chapter table of contents

Introduction
1  CLDP preparation resources
2  CLDP preparation tools
3  CLDP delivery instruments: further information
4  CLDP Feasibility: Basic terms and principles used in life-cycle analysis

Abbreviations used in this chapter

ATR  Asset Transfer Regulations
BCR  Benefit-Cost Ratio
CBA  Cost Benefit Analysis
CEA  Cost Effective Analysis
CLD  Catalytic Land Development
CLDP  Catalytic Land Development Programme
CoW  Cost of Works
CPI  Consumer Price Index
EIA  Environmental Impact Assessment
ENPV  Economic Net Present Value
EoI  Expression of Interest
IDMS  Infrastructure Delivery Management Strategy
IRR  Internal Rate of Return
MFMA  Municipal Finance Management Act
NDR  Nominal Discount Rate
NPV  Net Present Value
O&M  Operations & Maintenance
PPP  Public- Private Partnership
RFP  Request for Proposals
SCM  Supply Chain Management
WACC  Weighted average cost of capital
Introduction

This chapter contains four sections. The first section presents a consolidated table of all of the resources provided throughout this Guideline. The second section provides tools in support of CLDP preparation. Section 3 offers further information on the delivery instruments discussed in Chapter 3. The final section provides resources specifically aimed at Chapter 3 and is divided into sub-sections relating to the financial and legal detail.

1 CLDP preparation resources

<table>
<thead>
<tr>
<th>GUIDELINE CHAPTERS</th>
<th>TOPIC</th>
<th>RESOURCE LINK/HOW TO ACCESS THE RESOURCE</th>
</tr>
</thead>
</table>
Urban LandMark: Case Studies  
Creating and capturing value around transport nodes  
http://www.urbanlandmark.org.za/research/x52.php  
Urban LandMark: Reports  
Value capture from transit-oriented development and other transport interchanges  
http://www.urbanlandmark.org.za/research/x58.php |
|                      | Land value capture | |
| Chapter 2: An institutional framework that supports value creation and benefit realisation in CLDPs | Stakeholder engagement | Identifying and managing internal and stakeholder interests  
(Markwell, 2010, Leigh-Hunt 2016)  
https://www.healthknowledge.org.uk/public-health-textbook/organisation-management/5b-understanding-ofs/managing-internal-external-stakeholders  
Stakeholder Engagement Handbook (UNEP)  
http://web.unep.org/about/majorgroups/stakeholder-engagement-handbook  
Video Lecture Series on Identifying and working with stakeholders; Effective Stakeholder Consultation; Communicating with the Public  
Reforming Urban Laws in Africa: A Practical Guide (Berrisford, 2018)  
https://www.youtube.com/watch?v=dB1NFt4EaAc |

Table: 5.1 Consolidated resources
<table>
<thead>
<tr>
<th>Chapter 3: Catalytic Land Development Programme (CLDP) delivery instruments for value capture and benefit sharing</th>
<th>Legislation and regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land-based financing</td>
<td>Land-Based Financing Tools To Support Urban Development In South Africa (World Bank, 2017)</td>
</tr>
<tr>
<td>Urban LandMark: Reports</td>
<td>Legislative and policy context for the application of value capture mechanisms by municipalities</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.urbanlandmark.org.za/research/x58.php">http://www.urbanlandmark.org.za/research/x58.php</a></td>
</tr>
<tr>
<td>Urban LandMark: Training for Township Renewal Initiative: Sourcebook Modules 2, 3 and 4: Unlocking township markets; Restructuring the township physical environment; Packaging township development projects</td>
<td><a href="http://www.urbanlandmark.org.za/research/x22.php">http://www.urbanlandmark.org.za/research/x22.php</a></td>
</tr>
<tr>
<td>Public Private Partnerships</td>
<td>Public Private Partnerships: Training, Methodologies, Manuals and Guidelines, Case Studies (GTAC)</td>
</tr>
</tbody>
</table>
### Chapter 4: Catalytic Land Development Programme (CLDP) Preparation

<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Source</th>
</tr>
</thead>
</table>

*This model is not a comprehensive example but it provides a practical approach how to develop a financial model in the field of a single property development.* | |

### OTHER

| Implementation | Local government procurement | Standard for Infrastructure Procurement and Delivery Management (SIPDM) |

2 CLDP preparation tools

This section offers various tools that may be used to support CLD preparation, including the following:

- CLDP information document
- Risk management
- Due diligence studies
- Marketing CLDs
- Options assessments

2.1 CLDP information document

The CLDP information featured below was used by the Nelson Mandela Bay Metro Municipality. It is a useful template for recording programme information and stakeholders in the Inception and Conceptualisation Stages.

Diagram 5.1: Example of relationships between programmes and sub projects/programmes

Source: Nelson Mandela Bay Municipality
<table>
<thead>
<tr>
<th><strong>EXAMPLE CATALYTIC PROGRAMME/PROJECT MATRIX</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project/programme</strong></td>
</tr>
<tr>
<td><strong>Programme manager/driver</strong></td>
</tr>
<tr>
<td><strong>Political champion/reporting</strong></td>
</tr>
<tr>
<td><strong>Programme objectives</strong></td>
</tr>
<tr>
<td><strong>Programme components yield (e.g. housing units, POS, job opportunities)</strong></td>
</tr>
<tr>
<td><strong>Spatial extent of programme to fit urban network strategy</strong></td>
</tr>
</tbody>
</table>

**SECTORAL INPUTS – INTERNAL**

- **Electricity and Energy**
  Potential involvement in implementation of additional electrification and renewable energy applications
- **Roads and Stormwater**
  Improvement of road conditions
- **Economic Development**
  Participation in development of LED and formal economic development interventions
- **Parks**
  Development of open space and recreational facilities
- **Environment**
  Involvement in environmental management issues; particular conservation areas
- **Transportation**
  Linkage; connectivity with Integrated Public Transport Network (existing or future)
- **Housing**
  Development of affordable, rental, bonded and other housing typologies
- **Informal Settlements**
  Relocation of informal settlements currently in the way of the Chatty link road
- **Land Use Planning**
  In place; Unauthorised use; Unauthorised construction
- **Development and Support**
  Infrastructure development
- **Safety and Security**
  Policing; safety and security; enforcement in relation to unauthorised use
- **Implementing agencies**
  Collaboration with MBDA where applicable; possible involvement as implementation agent in certain aspects
- **Other**
  To be determined as may be required
## SECTORAL INPUTS – EXTERNAL

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRASA</td>
<td>Confirmation whether the Kwanobuhle Rail Corridor will be required</td>
</tr>
<tr>
<td>Transnet</td>
<td>To be considered as need may arise</td>
</tr>
<tr>
<td>NMMU</td>
<td>No particular interest yet, however may identify need for participation</td>
</tr>
<tr>
<td>Business Chamber</td>
<td>Possible participation in identification of development opportunities</td>
</tr>
<tr>
<td>ACSA</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Dept. Arts and Culture</td>
<td>Recreational facilities and amenities</td>
</tr>
<tr>
<td>SANRAL</td>
<td>Possible collaboration in respect of Standford road extension; Western Arterial Linkage</td>
</tr>
<tr>
<td>Dept. of Forestry</td>
<td>Not applicable at this stage</td>
</tr>
<tr>
<td>DEDEA</td>
<td>Environmental Assessment if applicable</td>
</tr>
<tr>
<td>Public Works</td>
<td>Possible land ownership/land development issues</td>
</tr>
<tr>
<td>Human Settlements</td>
<td>Spatial Planning; Housing Development; Social Housing Development; Land Management (Property Management); Land Planning Approvals</td>
</tr>
<tr>
<td>HDA</td>
<td>Possible involvement as implementation agent - National Department of Human Settlements</td>
</tr>
<tr>
<td>Heritage</td>
<td>Heritage Impact Assessment; Heritage resources</td>
</tr>
<tr>
<td>Other</td>
<td>To be determined</td>
</tr>
</tbody>
</table>

### Community interests

### Budget and source

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/18</td>
<td>R300 000.00 – Precinct Planning ICDG</td>
</tr>
<tr>
<td>2018/19</td>
<td>R488 000.00 – Precinct Planning ICDG</td>
</tr>
<tr>
<td>2019/20</td>
<td>R488 000.00 If not funded from ICDG</td>
</tr>
</tbody>
</table>

### Projected implementation period

Precinct Planning anticipated to be completed in 18 months from final adjudication and acceptance of tender

### IDP/BEPP linkage/alignment

<table>
<thead>
<tr>
<th>Linkages with other existing or future projects</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Arterial</td>
<td></td>
</tr>
<tr>
<td>German Peer-to-Peer Project</td>
<td></td>
</tr>
<tr>
<td>Zanembula Catalytic Project (Human Settlement)</td>
<td></td>
</tr>
<tr>
<td>Jachtvlakte Phase 1</td>
<td></td>
</tr>
</tbody>
</table>

### Challenges

Project development: Delays in procurement processes have significantly delayed commencement of precinct planning.

### Next step

Infrastructure development
Informal settlement relocation
Business plan development – Jachtvlakte and Zanemvula
Strategic Land Release
Development of urban regeneration programme

### Risks

- Risk: Community resistance. Mitigation: Participative Planning (Community involvement through Ward Structures and other relevant instruments)
- Risk: Refusal of informal settlement to relocation. Mitigation: Community Involvement.
- Risk: Acceptance of alternative development (housing) options. Mitigation: Community education.

*Planning and Mapping/Footprint to be attached. Table used with permission. Source: Nelson Mandela Bay Municipality*
2.2 Risk management

The importance of risk management in CLDP preparation is explained in Chapter 2 of this Guideline. Risk management activities required in each stage of the Preparation Phase are further outlined in Chapter 4 of this Guideline. The following two templates will assist CLDP Programme Managers to undertake risk management activities.

Risk matrix

There is a range of risks that a programme and/or a project within a programme could encounter. The Pre-Feasibility and Feasibility Stages of the preparation process need to identify likely risks, rate their likelihood, identify their likely impact and identify appropriate responses to mitigate the risk or mitigate the impact of it occurring on the programme and/or project. Risks can occur across the preparation, implementation and operations and maintenance phases of the CLD life cycle.

To assist the risk identification and management process, the following table serves to identify the range of possible risks that might occur in a CLDP and/or its constituent projects. It includes a description of the nature of the risk and when one might experience such a risk in the CLD life cycle.

These lists should not be considered comprehensive. The municipality needs to give thorough consideration to all of the other possible risks that might occur in the context of a particular programme or project.
<table>
<thead>
<tr>
<th>FINANCIAL RISKS</th>
<th>DESCRIPTION</th>
<th>PREPARATION</th>
<th>IMPLEMENTATION</th>
<th>OPERATIONS &amp; MAINTENANCE</th>
<th>MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance costs</td>
<td>Risk that financing costs are higher than expected due to unanticipated changes of interest rates, exchange rates. Risk that when debt and/or equity is required by the private party for a project it is not available</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inflation</td>
<td>Risk that inflation changes more than is anticipated, affecting costs and revenues in a project</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Interest rate</td>
<td>Risk that interest rate changes beyond what is anticipated affect the cost of financing</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Payment</td>
<td>Risk that a partner does not meet its payment obligations (should be assessed during CLDP preparation phase)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Exchange rate</td>
<td>Possibility that exchange rate fluctuations will impact on the envisaged finance costs and/or costs of imported inputs required for the construction or operations phase of a project in the CLDP</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Cost overrun</td>
<td>Risk that design, construction, maintenance or operating costs are higher than expected</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Residual value</td>
<td>Risk that the value of assets at the end of their useful life are not as anticipated</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariff</td>
<td>Risk that a tariff cannot be adjusted as required</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Tax rate, policy, incentives</td>
<td>Risk of tax rate, policy or incentive changes beyond what is anticipated</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Revenue collection</td>
<td>Risk that user fees cannot be collected from users as anticipated</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>GOVERNANCE RISKS</td>
<td>DESCRIPTION</td>
<td>PREPARATION</td>
<td>IMPLEMENTATION</td>
<td>OPERATIONS &amp; MAINTENANCE</td>
<td>MITIGATION</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------------</td>
<td>--------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Regulatory</td>
<td>Risk of a change in legislation/policy that could not be anticipated and that has adverse cost consequences for the programme, projects and/or partners</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authorisation</td>
<td>Risk that necessary approvals (planning, environment, heritage or other) may not be obtained or may be obtained only subject to unanticipated conditions which have adverse cost consequences or cause prolonged delay</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractual/legal</td>
<td>Risk of mistakes in the contracts related to a project</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOCIAL RISKS</th>
<th>DESCRIPTION</th>
<th>PREPARATION</th>
<th>IMPLEMENTATION</th>
<th>OPERATIONS &amp; MAINTENANCE</th>
<th>MITIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td>Risk that political changes or political decisions impact on the CLDP and associated projects</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Public Participation</td>
<td>Risk that the engagement with the public is not well constructed, given sufficient time, or not sufficiently targeted resulting in public backlash</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Social resistance</td>
<td>Risk of social resistance or other similar impacts on the CLDP and its projects</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Socio-economic</td>
<td>Risk that the CLDP can have an adverse or negative impact on surrounding communities or local markets</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>OTHER RISKS</td>
<td>DESCRIPTION</td>
<td>PREPARATION</td>
<td>IMPLEMENTATION</td>
<td>OPERATIONS &amp; MAINTENANCE</td>
<td>MITIGATION</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>----------------</td>
<td>--------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Opportunity cost</td>
<td>Identifying the opportunity cost of not undertaking the CLD</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>Risk that a project as designed does not meet the output specification and/or does not function as intended</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Risk that events occur during construction which prevent the facility being delivered on time and on cost (similar to completion risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion</td>
<td>Risk that the construction of any project in the CLDP is not completed on time and could have a knock on impact on other projects and service commencement</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>Risk of environmental damage or other claims/ liability for losses arising from construction and/or operations</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land/asset availability</td>
<td>Risk that land or assets required for a project are not available when required</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Force majeure</td>
<td>Risk of an incident beyond the control of all partners impacts on a project (e.g. flooding, fire, an earthquake)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-contractor</td>
<td>Risk that a sub-contractor does not perform</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Risk that the chosen technology does not perform as anticipated</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market demand</td>
<td>Risk related to miscalculation within the market (e.g. demand, trends, etc. Risk that the demand for the output of a project within the CLDP is lower than expected, resulting in a shortfall of revenues. Demand risk has both external causes (general economic downturn, uncertainty about traffic volume) and causes that are under the control of the development partner (e.g. sufficient marketing and pricing)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defect</td>
<td>Risk that assets and/or equipment do not work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insolvency</td>
<td>Risk that a partner or stakeholder in a project becomes insolvent and is unable to continue to function</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>Risk that assets cannot be maintained or maintained at the cost as anticipated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td>Risk that the development does not operate as expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X indicates that the risk is relevant in the respective phase.
Example: Risk allocation matrix

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK ALLOCATION</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public entity</td>
<td>Shared</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PREPARATION PHASE**

1. Professional services procurement over successive stages
   - X
   - Funding secured for 3 years
   - S33 Complied with to provide for possibility of required extension

2. Environmental authorisations
   - X
   - Environmental triggers confirmed with Competent Authority
   - Scope for EIA confirmed
   - Oversight of EAP established through CLDP Management Committee

3. ...

**IMPLEMENTATION PHASE**

1. Local labour dispute
   - X
   - Municipality to remain at arms’ length.
   - Local labour expectations clear. Local councillors to be briefed.

2. ...

3. ...

**OPERATION PHASE**

1. Urban management
   - X
   - Institutional arrangements for high quality urban management to be explored in Feasibility Stage and confirmed/ signed off in Preparation Finalisation Stage.
   - Ensure incorporation into procurement documentation.

2. Tenancing of publicly owned space
   - X
   - Vacant spaces enhance insecurity and reduce confidence for private investors.
   - Tenancing strategy and plan for publicly owned space to be included in Preparation Finalisation Stage.

3. ...
2.3 Due diligence studies

A number of due diligence studies are required. These start in the Conceptualisation Stage and are further elaborated on in successive stages.

Environmental analysis checklist
A high level environmental checklist is provided below. Checklists should not be considered comprehensive. It is particularly important that where due diligence studies are required to fulfil authorisation requirements, the required content is confirmed with the authorising authority. Authorising authorities often have their own checklists which should be referred to.

THE FOLLOWING ENVIRONMENTAL ISSUES NEED TO BE CONSIDERED:

- State of the Environment Reports/Strategic Environmental Assessments/Environmental Management Frameworks
- Relevant by-laws
- A review of environmental sensitivity databases – biodiversity, conservation areas, protected areas, drainage, land cover, geology types, soil types, general climatic data, important bird areas, wetlands, heritage areas and assets
- General data sets to consider (cadastral, topographical, Eskom transmission lines, census data, administrative boundaries, urban edge, contours, infrastructure and services datasets)
- Environmental Impact Assessment (EIA) related legislation (in addition to National Environmental Management Act 107 of 1998 and associated general notices that could impact) include:
  - The National Water Act 36 of 1998
  - The Marine Living Resources Act 18 of 1998
  - The Mineral and Petroleum Resources Development Act 28 of 2002
  - The National Heritage Resources Act 25 of 1999
  - The National Environmental Management: Air Quality Act 39 of 2004
- National Climate Change Response White Paper (and specific municipal climate change response plans)
- Disaster management plans (and any feedback associated with incidents – i.e. rain events, fire, etc.)
- City vulnerability assessment plans (if available)
- Energy, water and other resource efficiency guidelines/policies/frameworks
2.4 Market demand studies

Market demand is the aggregate of the demands of all potential customers (market participants) for a specific product over a specific period in a specific market. (Business Dictionary, 2018: s.v. market demand). In the context of land development, the location of the product is also a key factor for demand. Drivers of demand can be understood to include the number, income, tastes and preferences of consumers; expenditure allocation of consumers; the availability of credit to consumers and the price of substitutes (alternatives) (McGaffin, 2017). McGaffin (2017) also points out that demand is strongly driven by the size and nature of the catchment area, which is influenced by:

- distance
- transportation
- physical barriers
- psychological / cultural barriers (safety perceptions)
- household spending patterns (age, etc)
- household densities
- household incomes.

A starting point to assess market demand would be to undertake a study that answers the key questions highlighted below.

Market demand study checklist

<table>
<thead>
<tr>
<th>MARKET DEMAND STUDIES FOCUS ON THE FOLLOWING QUESTIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Who will the end users be?</td>
</tr>
<tr>
<td>• What are the characteristics of the expected end users (for example: age, family size, typical space needs, preferences of facility type and amenities)?</td>
</tr>
<tr>
<td>• Does the utility of the improvements, either proposed or existing, satisfy the requirements of the intended market?</td>
</tr>
<tr>
<td>• What demand can be reported?</td>
</tr>
<tr>
<td>• Is there an analysis of effective purchasing power?</td>
</tr>
<tr>
<td>• What share of demand is likely to be captured (capture rate)?</td>
</tr>
<tr>
<td>• What is the supply of competitive properties that will be marketed?</td>
</tr>
<tr>
<td>• How many competitive units currently exist? How many competitive units are under construction? How many competitive units are planned?</td>
</tr>
<tr>
<td>• What is the estimated rate of absorption (sale) of units constructed?</td>
</tr>
<tr>
<td>• Are there alternative uses for the property that would provide a higher return on investment?</td>
</tr>
<tr>
<td>• What are the relative risks associated with alternative uses?</td>
</tr>
</tbody>
</table>
### Market demand study resources

A number of commercial, residential and other resources are available to assist a municipality and its service providers to gather intelligence on the real estate market from the point of view of understanding, at the CLDP Conceptualisation Stage (Stage 2.1) and through the subsequent Pre-Feasibility and Feasibility Stages (stages 2.2 & 2.3), what land uses are likely to be viable based on demand, trends and forecasts.

<table>
<thead>
<tr>
<th>COMMERCIAL RESOURCES</th>
<th>RESOURCE LINK</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rode's Report on the South African Property Market</td>
<td><a href="http://rode.co.za/rodes-report-south-african-property-market">http://rode.co.za/rodes-report-south-african-property-market</a></td>
<td>Colloquially known as The Rode Report, this quarterly report analyses and reports on most sectors of the property market in the major, and some secondary, cities in South Africa. It covers, inter alia, trends and levels of rentals and standard capitalisation rates by property type, grade, node/township, the listed real estate market, and building construction costs and building activity. Note that it doesn’t include a study of retail property market.</td>
</tr>
<tr>
<td>IPD (Investment Property Databank) Real Estate Index</td>
<td><a href="https://www.msci.com/real-estate">https://www.msci.com/real-estate</a></td>
<td>This resource produces indexes for both privately held real estate portfolios, as well as publicly listed organisations. It holds the privately held real estate information of hundreds of institutional investors’ real estate portfolios - a unique database of almost 80,000 searchable properties, valued at approximately USD 1.7 trillion and located in 32 countries. The information provides a long-performance history (25 or more years for many markets) that is generally appraised quarterly.</td>
</tr>
<tr>
<td>South African Property Owners Association</td>
<td><a href="http://www.sapoa.org.za">www.sapoa.org.za</a></td>
<td>SAPOA conducts research on a regular and ad hoc basis, and compiles reports providing information on, inter alia, retail trends, office vacancies, operating costs, capitalisation and discount rate and industrial vacancies.</td>
</tr>
<tr>
<td>Lightstone Property</td>
<td><a href="http://www.lightstoneproperty.co.za/">http://www.lightstoneproperty.co.za/</a></td>
<td>Lightstone provides information, valuations and market intelligence on properties in South Africa. It provides insight into the commercial property market and assists by offering various property and nodal reports as well as in-depth market intelligence and analytical studies. Many other property related reports source data from Lightstone.</td>
</tr>
<tr>
<td><strong>RESIDENTIAL RESOURCES</strong></td>
<td><strong>RESOURCE LINK</strong></td>
<td><strong>EXPLANATION</strong></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Social Housing</td>
<td><a href="http://www.shra.org.za">www.shra.org.za</a></td>
<td>The Social Housing Regulatory Authority publishes a State of the Sector Report on an annual basis providing information on the sector and trends.</td>
</tr>
<tr>
<td><strong>National Association of Social Housing Organisations (NASHO)</strong></td>
<td><a href="http://www.nasho.org.za">www.nasho.org.za</a></td>
<td>NASHO is also a resource for the sector and a useful entry point to engaging with the residential sector.</td>
</tr>
<tr>
<td>Centre for Affordable Housing Finance in Africa/ Citymark</td>
<td><a href="http://www.housingfinanceafrica.org">www.housingfinanceafrica.org</a></td>
<td>CAHF brings information to the market place to enable stakeholders in the public and private sector to make policy and investment decisions in favour of improved access to affordable housing. The emphasis is on the role that finance plays in realising this, and they champion market intelligence—data, market analytics and research—to stimulate investor interest and to support better policy. CAHF is highly networked and engages with stakeholders at the local, national, regional, continental and global levels to support the realisation of investment towards affordable housing in Africa. CAHF has recently prepared residential property market reports for each of South Africa’s metropolitan cities as well as a number of priority mining towns. This research includes a rental index.</td>
</tr>
<tr>
<td>Affordable Land and Housing Data Centre</td>
<td><a href="http://www.alhdc.org.za/">http://www.alhdc.org.za/</a></td>
<td>CAHF also hosts the ALHDC that focuses on the lower segment of South Africa’s property market by providing information on all neighbourhoods where the average property price is less than R500,000. ALHDC is a partnership initiative between FinMark Trust and Urban LandMark, with support from Lightstone Property Services and Eighty20.</td>
</tr>
<tr>
<td>Lightstone Property</td>
<td><a href="http://www.lightstoneproperty.co.za/">http://www.lightstoneproperty.co.za/</a></td>
<td>Lightstone also provides information, valuations and market intelligence on properties in South Africa. Its property toolkit gives subscribers access to a set of tailored residential property reports</td>
</tr>
<tr>
<td>OTHER RESOURCES</td>
<td>RESOURCE LINK</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Urban Real Estate Research Unit</td>
<td><a href="http://www.ureru.uct.ac.za/">http://www.ureru.uct.ac.za/</a></td>
<td>The main aim of this research unit is to provide a unique interdisciplinary research platform for academia that promotes the identification of issues and seeks solutions to urban real estate investment, finance, economics and management problems in Africa.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The key issues facing urban real estate include sustainability, inclusivity, globalisation, rapid technological change, economic sectoral change, urban management, fiscal sustainability, urban growth management and infrastructure provision. Hence the unit focuses on the following four main areas of research:   • Urban Real Estate Markets, Dynamics and Trends • Urban Real Estate Investment and Finance • Urban Land Economics and Management • African Urban Real Estate Markets  URERU also provides quarterly indicators for the South African Commercial Real Estate Market Cycle.</td>
</tr>
<tr>
<td>Urban LandMark</td>
<td><a href="http://www.urbanlandmark.org.za/">http://www.urbanlandmark.org.za/</a></td>
<td>Urban Landmark, the Urban Land Markets Programme, has undertaken extensive research into urban land markets in the African context, particularly from the perspective of access by the poor. Resources available on their website can assist with a general understanding of urban land markets in South Africa.</td>
</tr>
</tbody>
</table>
2.5 Marketing CLDs and/or creating awareness of component projects

The municipality will have started the process of building market awareness in earlier CLDP preparation stages, primarily by conducting market soundings and consultations. This will have alerted the market of the upcoming development and increased the potential level of response from investors. As part of the CLDP preparation, the municipality should, with the transaction advisor in the case of a PPP, prepare a clear and concrete marketing plan for the development and relevant individual projects. This plan should set out to whom any project within the CLDP should be marketed, how, when and by whom.

The marketing plan is a key part of building private sector awareness and interest in CLDP projects that will later translate into sufficient bidding by suitably-qualified and capable firms. The marketing plan sets out the promotional and awareness raising work that will be done prior to the formal notification procedures during the procurement – such as the formal advertising of Expression of Interests (EoIs) or Request for Proposals (RFPs), and so on.

The market and private companies need time to identify individual projects within a CLDP, to explore partnership options or form the required consortia of firms with the expertise required, to decide whether to respond to the opportunity or not, to put together their qualification requests, and so on. For a consortium, this requires getting many certified documents together for the companies, negotiating and making inter-company agreements, and arranging working relationships. If the consortium goes on to submit a proposal, they will need to conduct substantial technical, financial and legal work on the project to form their proposals. They may also need to engage with other investors and debt providers to secure financing. This is a substantial investment of time, resources and money by these consortia and firms. The municipality must appreciate that this kind of coordination and preparatory work by private companies takes time and incurs significant cost at risk on the part of the private sector. The municipality’s credibility will be at stake if the whole process is not properly undertaken as proposed in this Guideline and there may be broader ramifications for the investor confidence in the local economy.

Various means are available to create awareness of the CLDP or component projects on the market. The marketing actions can be more passive, in the form of publication and informal market sounding, or more active with the organisation of investor forums. It is important that this is not done in isolation of a broader stakeholder engagement process that acknowledges any prior engagement with prospective investors and acknowledges participatory processes followed with the general public in anticipation of, and as part of, compliance with regulatory procedures. This is to ensure that the municipality is acting consistently and in good faith with stakeholders of a CLDP.
### INFORMAL/PASSIVE COMMUNICATION TOOLS

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications on professional news sites and news feed</td>
<td>Private contractors often gather their information from news services. These offer cost-efficient solutions with a very large and targeted outreach to private sponsors, contractors and developers active in the infrastructure industry in general.</td>
</tr>
<tr>
<td>Publications in the press</td>
<td>Projects are commonly published in the local/national press. While relevant, the outreach of such channels is also limited, in particular for international parties.</td>
</tr>
<tr>
<td>Networking through the transaction advisor</td>
<td>Transaction advisors often have a good network of contacts in the industry, on the basis of recently closed transactions or portfolios of clients. They can informally contact private companies to point towards the upcoming publication of a CLDP or project.</td>
</tr>
<tr>
<td>Information on the municipal or a government website</td>
<td>An announcement can be published on any governmental website, with a link to a downloadable short teaser (1-2 pages) and a rough indication of the next steps.</td>
</tr>
<tr>
<td>Mailing lists</td>
<td>Agencies maintain a list of contacts from previous projects. Sending a mailing lists to these contacts is an efficient way of raising awareness by direct communication.</td>
</tr>
<tr>
<td>Online media</td>
<td>Online social media have gained a substantial interest and provide a free solution to reach out to a wider community.</td>
</tr>
</tbody>
</table>

### ACTIVE COMMUNICATION TOOLS

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal or formal market soundings</td>
<td>The municipality invites private companies to attend a workshop or conference to present the prospective CLDP and constituent projects that are anticipated to be implemented by the private sector and provide high-level information. At the workshop the municipality can also test the potential level of response and invite qualified parties to suggest ideas or elements relevant for the project. Informal market soundings can also be carried out by conference call, for practicality or a higher level of response in a short time frame.</td>
</tr>
<tr>
<td>Road shows</td>
<td>The municipality carries out multiple investor forums in selected places, typically cities at the centre of a large infrastructure market or easily reachable by a large audience.</td>
</tr>
<tr>
<td>Media promotion</td>
<td>Use the media by placing advertising or articles in the press (regular or professional publication) or staging interviews with television news channels or similar.</td>
</tr>
<tr>
<td>Investors or industry conference</td>
<td>Professional conferences are regularly held globally, often organised by specialised events organisers. These cover either a given market, sector, industry or a financial topic. Such events can be used to present the project to a large, targeted professional audience. Events organisers are often open to such suggestions to better fill their event programmes.</td>
</tr>
</tbody>
</table>
Relevant marketing materials

To support any communication and promotion effort, relevant marketing material should be prepared with the transaction advisor in the case of a PPP. These would include the following:

- **Official letter and advertisement:** an official letter announcing the CLDP or project and the intention of the government; this letter should be in the name of a senior official.

- **Official press release:** a concise press release (2-3 paragraphs) that can be easily provided to news websites and online publications. As these parties have to verify the authenticity of the information, the press release should always include the specific contact person details to obtain further information or confirmation.

- **Project teaser:** a 1-2 page fact sheet presenting the main elements of the CLDP or project and indicating the upcoming procedure, with an optional indicative calendar.

- **Project information memorandum (PIM) of a specific project within the CLDP:** the PIM is an elaborated teaser, which contains more detailed information than the teaser. It is also longer, 10 or 20 pages. It is largely elaborated on the basis of feasibility study reports.

- **Summary or edited version of feasibility studies:** selected sections or condensed versions (such as executive summaries) of feasibility study reports may also be made available for distribution. However, as feasibility reports can contain critical or confidential information, not all their content should be disclosed to the public. For example, selected technical feasibility reports or market studies are useful for parties to form a general idea of the size or relevance of the project, but financial feasibility reports should not be distributed, as they provide too much insight on the authority’s position for the subsequent bid.

- **Panels and brochures:** if the municipality is planning a roadshow or to attend an international conference, printed material should be prepared for distribution to the audience. These include brochures, leaflets or binders containing useful information on the economic environment of the country and on the CLDP itself (similar to the teaser). Also, panels or large prints are useful for keynote presentation and can be easily carried around (such as foldable panels), creating an attractive visual layout for a staged presentation of the project to a physical audience.

- **Slide presentations:** a standard (MS PowerPoint® or equivalent application) presentation is prepared to be used in forums, workshops and conferences, and can also be made available for download together with other material such as teasers or PIM. Presentation should summarise the main points of the project and be reusable by parties to promote the project. For example, professional conferences organisers will always require that slide presentations of keynote speakers are provided in advance to plan their logistics and timing.
2.6 Options assessment

Example: Pre-Feasibility Options Analysis template

<table>
<thead>
<tr>
<th>CATEGORY (INDICATIVE)</th>
<th>OPTIONS (CLDP AS A WHOLE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of each option at CLDP level</td>
<td></td>
</tr>
<tr>
<td>Rating of achievement of CLDP and strategic objectives</td>
<td></td>
</tr>
<tr>
<td>Cost/revenue analysis</td>
<td></td>
</tr>
<tr>
<td>Economic benefits</td>
<td></td>
</tr>
<tr>
<td>Whole life cost (maintenance, operations, etc)</td>
<td></td>
</tr>
<tr>
<td>Legislative requirements and regulatory issues</td>
<td></td>
</tr>
<tr>
<td>Relevant government policy issues/government priorities</td>
<td></td>
</tr>
<tr>
<td>Procurement strategies</td>
<td></td>
</tr>
<tr>
<td>Environmental/cultural heritage</td>
<td></td>
</tr>
<tr>
<td>Social benefits and their distribution</td>
<td></td>
</tr>
<tr>
<td>Key assumptions and/or risks</td>
<td></td>
</tr>
<tr>
<td>Timing and sequencing of each individual project delivery of the CLDP</td>
<td></td>
</tr>
</tbody>
</table>
Overview of cost-benefit analysis methodologies

Financial and Economic Analysis
Thorough financial and economic finance analysis is critical to the attainment of the economic objectives and sustainable outcomes of a project. The primary object of financial analysis is to calculate the financial returns to the project participants (beneficiaries, project entity, institutions and governments) in order to demonstrate that all actors have enough financial incentive to participate. The primary objective of economic analysis is to assess project’s efficiency in terms of its net contribution to the national economic and social welfare (Food and Agriculture Organisation of the United Nations (FAO), 2018a). That is, economic analyses investigates the social and economic welfare improvements due to a CLDP. Economic analysis (sometimes referred to social cost benefit analysis) evaluates investment decisions from the perspective of society as a whole. Economic dimensions relate to Gross Domestic Product (GDP) per capita, employment, skills development and small, medium and micro enterprises (SMME) promotion. Social aspects pertain to the provision of housing, education, health, transport and crime. The table below denotes the main difference between financial analysis and economic analysis.

Cost Benefit Analysis (CBA)
The CBA determines the economic costs and benefits which are discounted to their present value using a social discount rate (National Treasury, 2017c, p. 10). Social discount rate is the economic opportunity cost of capital required to discount future cash flows and it is used when estimating the economic NPV of capital projects financed by government funds (National Treasury, 2017, p,10). Each option is subject to this type of analysis and compared with the base option of a ‘do-nothing’ approach and the subsequent ranking in terms of the net welfare impact on society. The CBA can be expressed as either a Benefit-Cost Ratio (BCR) [ratio of benefits to costs] or the Economic Net Present Value (ENPV) [benefits minus costs]. A project is deemed beneficial to society is if the BCR > 1 or ENPV > 0.
### Table 5.2: Differentiation between financial and economic analysis

<table>
<thead>
<tr>
<th>FINANCIAL</th>
<th>ECONOMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertaken from the individual’s/project agency’s perspective</td>
<td>Undertaken from society’s perspectives</td>
</tr>
<tr>
<td>Consider only benefits and costs faced by production/decision making units</td>
<td>Costs: Opportunity Cost/Welfare Losses</td>
</tr>
<tr>
<td>Benefits and costs are evaluated using existing market prices</td>
<td>Benefits: Welfare Gains/Resource savings</td>
</tr>
<tr>
<td>Measures the project’s profitability for its participants</td>
<td>Convert financial to economic benefits/costs</td>
</tr>
<tr>
<td>Narrow focus on direct benefit/cost of project participants</td>
<td>Shadow Pricing: Financial prices of costs and benefits must be adjusted to allow for effects of:</td>
</tr>
<tr>
<td></td>
<td>• Government intervention (taxes, subsidies, controls, quotas, etc.) opportunity costs of resource use</td>
</tr>
<tr>
<td></td>
<td>• Market distortions (trade taxes and controls, labour market distortions)</td>
</tr>
<tr>
<td></td>
<td>• Externalities (largely environmental)</td>
</tr>
</tbody>
</table>

Source: (ADB, 2013)

It is notable that CBA can be employed to undertake the Financial Analysis (F-CBA) and Economic Analysis (E-CBA) (FAO, 2018b). The primary characteristics are denoted in the table below.
<table>
<thead>
<tr>
<th><strong>F-CBA</strong></th>
<th><strong>E-CBA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Use cash flow forecasts of the project to estimate the financial suitability of a programme or project. It includes the calculations of the financial internal rate of return (F-IRR) and financial net present value (F-NPV)</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td>Evaluates whether the project generates sufficient financial returns to meet the corresponding investment and operating costs. It is performed from the perspective of the investor. It uses market prices</td>
</tr>
<tr>
<td><strong>Costs and benefits</strong></td>
<td>Includes effective monetary costs and benefits</td>
</tr>
<tr>
<td><strong>Discount Rate</strong></td>
<td>Market discount rate which is reflective of opportunity cost of capital on the financial market</td>
</tr>
<tr>
<td><strong>Prices</strong></td>
<td>Market prices, i.e. the purchase/sale price of goods or services on the market</td>
</tr>
</tbody>
</table>

Table 5.3: Characteristics of F-CBA and E-CBA

Source: (FAO, 2018b)
The CBA determines the economic costs and benefits which are discounted to their present value using a social discount rate (National Treasury, 2017c, p. 10). A social discount rate is the economic opportunity cost of capital required to discount future cash flows and it is used when estimating the economic NPV of capital projects financed by government funds (National Treasury, 2017, p.10). Each option is subject to this type of analysis and compared with the base option of a ‘do-nothing’ approach and the subsequent ranking in terms of the net welfare impact on society. The CBA can be expressed as either a Benefit-Cost Ratio (BCR) [ratio of benefits to costs] or the Economic Net Present Value (ENPV) [benefits minus costs]. A project is deemed beneficial to society is if the BCR > 1 or ENPV > 0.

Cost Effective Analysis (CEA)
The CEA is used when monetising outcome/benefits is arduous. Consequently, CEA measures results in units. The focus is on determining the solution that is most efficient in realising the desired project outputs and the result of the studies are therefore expressed as a ratio (cost per ‘unit’ of benefit). The benefits are expressed in non-monetised manner such as the ‘number of lives saved per year’ whilst the cost is per unit of benefits e.g. 1 life saved (National Treasury, 2017c, p. 10). The project with the best ratio is the one that utilises resources most efficiently. CEA allows institutions to evaluate and compare projects without having to monetise the social benefits; and is mostly utilised within the health sector.

CBA (and CEA) is a function of several variables such as include demand options analysis and financial analysis; and is often a complex exercise.

The reader is directed the European Commission Guide to Cost-Benefit Analysis of Investment Projects. See consolidated resource table in Chapter 5.

Notwithstanding, an actualisation of a CBA, the preferred option (of a project within the CLDP) can only be selected after engagement with developers to gauge their interest and willingness to render the development a viable option.

(Residential) Land Release Assessment Model: tool and case studies

Urban LandMark developed this tool to assist in the assessment of costs and benefits of different residential land uses (such as market driven housing, GAP and state subsidised housing) resulting from public land release programmes. The tool is explained on their website as follows:

*The assessment framework consists of three components made up of a preliminary assessment framework and a qualitative and quantitative framework. The preliminary assessment framework can be used to quickly assess the suitability of a particular residential land use on a specific site. The qualitative framework can be used to identify and rank the importance of those costs and benefits resulting from a particular residential land use that cannot easily be quantified. The quantitative framework is an excel-based financial model which undertakes a cost/benefit analysis from the perspectives of the state, developer and resident households.* (Urban Landmark, 2011)
3 CLDP delivery instruments: further information

3.1 Relevant legislation/regulation extracts

In Chapter 3, the provisions to determine if a CLDP or a constituent CLDP project falls within a PPP or under the ATRs were identified.

A broad overview of the relevant provisions and procedures is extracted for ease of reference below.

Municipal Finance Management Act:
Section 120

Conditions and process for public-private partnerships

Section 120 of the MFMA states that:
(1) A municipality may enter into a public-private partnership agreement, but only if the municipality can demonstrate that the agreement will:
(a) provide value for money to the municipality;
(b) be affordable for the municipality; and
(c) transfer appropriate technical, operational and financial risk to the private party.

(2) A public-private partnership agreement must comply with any prescribed regulatory framework for public-private partnerships.

(3) If the public-private partnership involves the provision of a municipal service, Chapter 8 of the Municipal Systems Act must also be complied with.

(4) Before a public-private partnership is concluded, the municipality must conduct a feasibility study that:
(a) explains the strategic and operational benefits of the public-private partnership for the municipality in terms of its objectives;
(b) describes in specific terms:
   (i) the nature of the private party’s role in the public-private partnership;
   (ii) the extent to which this role, both legally and by nature, can be performed by a private party; and
   (iii) how the proposed agreement will:
      (aa) provide value for money to the municipality;
      (bb) be affordable for the municipality;
      (cc) transfer appropriate technical, operational and financial risks to the private party; and
      (dd) impact on the municipality’s revenue flows and its current and future budgets;
(c) takes into account all relevant information; and
(d) explains the capacity of the municipality to effectively monitor, manage and enforce the agreement.

(5) The national government may assist municipalities in carrying out and assessing feasibility studies referred to in subsection (4).

The National Treasury provides guidelines on Municipal Service Delivery and PPPs, as well as the Municipal Asset Transfer Regulations at https://www.gtac.gov.za/Publications/1090-Municipal%20Service%20Delivery%20and%20PPP%20Guidelines%20new.pdf
(6) When a feasibility study has been completed, the accounting officer of the municipality must:
(a) submit the report on the feasibility study together with all other relevant documents to the council for a decision, in principle, on whether the municipality should continue with the proposed public-private partnership;
(b) at least 60 days prior to the meeting of the council at which the matter is to be considered, in accordance with section 21A of the Municipal Systems Act:
   (i) make public particulars of the proposed public-private partnership, including the report on the feasibility study; and
   (ii) invite the local community and other interested persons to submit to the municipality comments or representations in respect of the proposed public-private partnership; and
(c) solicit the views and recommendations of:
   (i) the National Treasury;
   (ii) the national department responsible for local government;
   (iii) if the public-private partnership involves the provision of water, sanitation, electricity or any other service as may be prescribed, the responsible national department; and
   (iv) any other national or provincial organ of state as may be prescribed.
(7) Part 1 of this Chapter [supply chain management] applies to the procurement of public-private partnership agreements. Section 33 also applies if the agreement will have multi-year budgetary implications for the municipality within the meaning of that section.

Municipal Asset Transfer Regulations (MATR)

Asset Transfer Regulations - procedure to transfer or dispose of a high value asset

Part 4 of the Guide to the Municipal Asset Transfer Regulations provides the following detailed procedural steps to be followed when transferring or disposing of high value assets.

- Request to municipal council for authorisation of public participation process must be accompanied by an information statement setting out the:
  - Valuation of the capital assets to be transferred or disposed and the method of valuation used.
  - Reasons for the transfer or disposal.
  - Expected benefits that may result.
  - Proceeds to be received.
  - Any expected gain or loss.
- A municipal council must authorise the accounting officer to conduct a public participation process so that the municipal council may determine:
  - Whether the asset is not needed to provide the minimum level of basic municipal services.
  - The fair market value of the asset and the economic and community value to be received in exchange.
- The accounting officer must at least 60 days before the council meets to consider whether the asset is not needed and its fair market value (i.e. before the in principle approval decision):
  - In accordance with section 21A of the Municipal Systems Act -
    - make public the proposal to transfer or dispose of the capital asset together with the information statement; and
- invite comments or representations from the public.
  • Obtain the views of National Treasury and the relevant provincial treasury.
  • The municipal council must in considering whether to grant in principle approval for the proposed transfer or disposal of a capital asset (i.e. deciding whether it is not needed, the fair market value of the asset and its economic and community value), take into account the regulation 7 factors.

**Regulation 7 of the ATR under the MFMA states that:**

7. Consideration of proposals to transfer or dispose of non-exempted capital assets.—The municipal council must, when considering any proposed transfer or disposal of a non-exempted capital asset in terms of regulation 5 (1) (b) (i) and (ii), take into account:
   a. whether the capital asset may be required for the municipality’s own use at a later date;
   b. the expected loss or gain that is expected to result from the proposed transfer or disposal;
   c. the extent to which any compensation to be received in respect of the proposed transfer or disposal will result in a significant economic or financial cost or benefit to the municipality;
   d. the risks and rewards associated with the operation or control of the capital asset that is to be transferred or disposed of in relation to the municipality’s interests;
   e. the effect that the proposed transfer or disposal will have on the credit rating of the municipality, its ability to raise long-term or short-term borrowings in the future and its financial position and cash flow;
   f. any limitations or conditions attached to the capital asset or the transfer or disposal of the asset, and the consequences of any potential non-compliance with those conditions;
   g. the estimated cost of the proposed transfer or disposal;
   h. the transfer of any liabilities and reserve funds associated with the capital asset;
   i. any comments or representations on the proposed transfer or disposal received from the local community and other interested persons;
   j. any written views and recommendations on the proposed transfer or disposal by the National Treasury and the relevant provincial treasury;
   k. (k) the interests of any affected organ of state, the municipality’s own strategic, legal and economic interests and the interests of the local community; and
   l. compliance with the legislative regime applicable to the proposed transfer or disposal.

- The municipal council may grant an in principle approval subject to any conditions, including:
  • The manner in which the capital asset is to be sold or disposed.
  • Floor price or minimum compensation.
  • If the capital asset may be transferred or disposed of for less than its fair market value, the municipal council must first consider the regulation 13 (2) criteria.
  • The framework within which the negotiations must be conducted if transfer or disposal of the asset is subject to direct negotiations.
• The municipality may commence the process for the transfer or disposal of the asset and negotiate directly with the selected service provider only once approval has been given in principle that the capital asset may be transferred or disposed.
  • The municipality must consider the gain or loss that will result from the transfer or disposal and be recorded in the accounting records of the municipality.
• The transfer or disposal of capital assets must be in accordance with the disposal management system (i.e. SCM Regulations- regulation 40 (2)) irrespective of:
  • Its value; or
  • Whether its transferred to a private party or organ of state.

A municipality’s SCM system does not apply to the transfer of capital assets where the transfer is an integral component of the performance of a municipal service or commercial service, is subject to a competitive bidding process and, in respect of municipal services, is part of a chapter 8 Municipal Systems Act municipal service delivery mechanism review.

• The compensation payable must be consistent with the criteria applicable to compensation in the disposal management system of the municipality. The municipality may transfer a capital asset for less than its market value on account of the public interest especially the plight of the poor, but must consider:
  • The interest of the state and the local community.
  • The strategic and economic interests of the municipality, including the long-term effect of the decision and the municipality.
  • The constitutional rights and legal interests of all affected parties.
  • Whether the interests of the parties to the transfer should carry more weight than the interest of the local community, and how the individual interest is weighed against the collective interest.
  • Whether the community is better served if the capital asset is transferred at less than its fair market value, as opposed to a transfer of the asset at fair market value.
• The municipality may only transfer capital assets by way of a written transfer agreement which sets out the terms and conditions, including, as a minimum:
  • a sufficient description of the assets being transferred.
  • particulars of any subsidiary assets that are transferred.
  • particulars of any subsidiary assets that are transferred.
  • particulars of any liabilities transferred.
  • amount of compensation payable to the municipality for the transfer and the terms and conditions of payment effective date from which risk and accountability for the asset is transferred to the other party.
Asset Transfer Regulations - procedure to use, control or manage an asset with a value in excess of R10m and for longer than three years (regulation 35 of ATR – as at 14 December 2017)

Chapter 3 of this Guideline sets out when the right to use, control or manage a capital asset must be dealt with as if it is a transfer or disposal of a capital asset. Part 6 in the Guide to the Municipal Asset Transfer Regulations provides the detailed steps to be followed in dealing with the granting of rights to use, control or manage capital assets. The following is a broad overview of the procedure to use, control or manage an asset with a value in excess of R10 million and for longer than three years:

• Request to municipal council for authorisation of public participation process must be accompanied by an information statement stating:
  • The reasons for the proposal to grant a long-term right to use, control or manage the relevant capital asset.
  • Any expected benefits to the municipality;
  • Any expected proceeds.
  • Any expected gain or loss.

• A municipal council may authorise the accounting officer to conduct a public participation process.

The municipal council may delegate its power to grant in principle approval but not if it is for long-term rights to use, control and manage capital assets of a value in excess of R10 million.

• The accounting officer must at least 60 days before the council meets to consider whether to grant in principle approval:
  • In accordance with section 21A of the Municipal Systems Act:
    - Make public the proposal to grant the relevant right together with the information statement.
    - Invite comments or representations from the public.
  • Obtain the views of National Treasury and the relevant provincial treasury.

• The municipal council must in considering whether to grant in principle approval take into account the regulation 36 factors of the Asset Transfer Regulations.

Regulation 36 of the ATR under the MFMA states that:

36. Consideration of proposals to grant rights to use, control or manage municipal capital assets.—The municipal council must, when considering in terms of regulation 34 (1) (b) approval for any proposed granting of a right to use, control or manage a capital asset, take into account:

a. whether the capital asset may be required for the municipality’s own use during the period for which the right is to be granted;

b. the extent to which any compensation to be received for the right together with the estimated value of any improvements or enhancements to the capital asset that the private sector party or organ of state to whom the right is granted will be required to make, will result in a significant economic or financial benefit to the municipality;

c. the risks and rewards associated with the use, control or management of the capital asset in relation to the municipality’s interests;
d. any comments or representations on the proposed granting of the right received from the local community and other interested persons;

e. any written views and recommendations on the proposed granting of the right by the National Treasury and the relevant provincial treasury;

f. the interests of any affected organ of state, the municipality’s own strategic, legal and economic interests and the interests of the local community; and

g. compliance with the legislative regime applicable to the proposed granting of the right.

• The municipal council may grant an in principle approval subject to any conditions, including:
  • The type of right, period and way it is to be granted;
  • The minimum compensation to be paid;
  • The framework within which the negotiations must be conducted if transfer or disposal of the asset is subject to direct negotiations.

• If in principle approval has been granted, the municipality may grant the right only in accordance with its disposal management system irrespective of:
  • The value of the asset;
  • The period for which the right is to be granted or
  • The parties to whom the right is to be granted.
  • unless the right to use, control and manage that capital asset
    - which has undergone a Chapter 8 of the Municipal Systems Act service delivery review, and
    - a competitive bidding process
  • is an integral component of the performance of a commercial service and the service provider has been selected through a competitive bidding process
  • is granted as part of the reorganisation of powers or functions between a parent municipality and its municipal entity
  • is granted in circumstances where a municipality contracts with another organ of state for goods or services, municipal services or with the procurement of goods and services under contract secured by that other organ of state
  • is granted to another organ of state in any other circumstance not provided under regulation 41(2) of the Asset Transfer Regulations but only if the municipality has determined by Council resolution that the asset is surplus to its requirements

• Despite the in principle approval, the municipality must be satisfied that the party to whom the right is to be granted can demonstrate the ability to adequately maintain and safeguard the assets before it grants the right to use, control or manage a capital asset.

• If the capital asset is used in connection with a municipal service, the municipality must take reasonable measures to ensure that the granting of the right to use, control or manage the asset will result in the continuation of the service at least at the same or better level than if it had not granted the right.
Despite the in principle approval, the municipality may only grant the right to use, control or manage a capital asset needed to provide the minimum level of basic municipal service on condition that:

- the granting of the right immediately lapses if the party to whom the right is granted becomes unable to render the service for which the capital asset is used, and
- the party to whom the right is granted may not grant a right to another person to use, control or manage that capital asset without the written consent of the municipality.

Before granting rights to service providers to undertake municipal or commercial services all of the assets needed for the service must be properly identified, the decision to grant the right must be taken as an integral part of the selection process of the service provider and all documents prepared for that decision must be taken into account in any feasibility study where the implications of appointing a service provider are being considered.

The right to use, control or manage a capital asset may only be granted in terms of a signed written agreement between the parties that at a minimum sets out the following terms and conditions:

- a sufficient description of the capital asset to identify it
- particulars of any subsidiary assets that are to be made available with the capital assets
- the period for which the right is granted
- the amount of compensation payable to the municipality and the terms and conditions of payment
- the requirement to maintain and safeguard the asset for its intended purpose considering its condition and estimated remaining life
- if the asset is to be shared between the municipality and public sector party, the basis of the shed arrangement as well as how the costs and benefits will be apportioned
- extent to which public sector party will be required to make improvements or enhancements to the asset and the terms and conditions for those
- a statement that the risk and accountability for the asset is transferred to the party to whom the right is granted
- the effective date from which the risk and accountability is transferred
- a clause disallowing the party to whom the right is granted from ceding or subcontracting the right to another person
- the agreement, where it relates to the performance by service provider of a municipal service or commercial service may be included into any service delivery agreement or procurement contact, but must include provisions for
  - contract termination in the case of non-or underperformance
  - dispute resolution mechanisms, and
  - periodic review of the agreement once every three years if it is longer than three years

A similar procedure is available for municipal entities when granting long-term rights for municipal capital assets in excess of R10 million, but the time periods for the public participation requirements differ.
4 CLDP Feasibility: A basic guide to key financial terms and calculations used in life-cycle analysis

4.1 Introduction to life-cycle analysis

One of the reasons that a life-cycle analysis is conducted is to determine the financial feasibility of a specific initiative over its whole life. Whole-life elements include, for example, the physical procurement of a product (asset), the operations and maintenance while it is in service and its termination. Other life-cycle interventions are to refurbish or to upgrade the product during its life span.

This section provides a basic guide to terms and principles used in conducting a life-cycle analysis. It also addresses the minimum knowledge required.

Life-cycle analyses are conducted during Stages 2.2 and 2.3. These include catalytic programme pre-feasibility and feasibility analyses at both catalytic programme and associated project levels. During Stage 2.2, the main purpose is to consider various top structure options and to select the preferred option. Each option may require a limited life-cycle analysis consisting of individual project analyses as well as for the catalytic programme as a whole. During Stage 2.3, the main purpose of the life-cycle analysis is to determine how and when the preferred option will be feasible. There are many aspects to be addressed during a feasibility analysis. This section only focusses on the basic terms and principles applied when conducting a financial feasibility analysis.

It is noteworthy that an option that is not financially viable may not necessarily be abandoned as a CLDP may be planned to provide social and economic benefits. The financial feasibility analysis will aid however in recording and managing the financial implications of this decision.

4.2 A Master Programme and Schedule as the basis for the life-cycle analysis

The Master Programme and Schedule for a catalytic programme provide the basis on which to conduct a life-cycle analysis; it cannot be conducted without it.

The Master Programme and Schedule includes a summary life cycle of each project in the programme, including information on the whole-life operations and termination. The following minimum information should be included:

- Projects should be split into the following types:
  - All municipal-managed projects;
  - All PPPs; and
  - All ‘pure’ private development projects.
- If costs or revenues are presented, state whether the values are at constant or at current money terms (this terminology is explained further in this section).
- Each project’s life cycle should show the stages of implementation, the duration of each stage as well as the expected cost of each stage.
- Operations and maintenance (O&M) should include all revenue and expenditure streams over the life span or analysis period.
For each of the assets/facilities procured, the following cash flows should be presented:
- All revenue streams.
- All intended capital refurbishment or upgrades.
- Salaries.
- Expenditure on movable assets.
- Maintenance of all assets.
- Utility costs.
- All other operational costs.

Take care when considering the termination period, as it could happen that the salvage value is fictitious or that the asset will not be disposed of.

It is important to demonstrate financial feasibility for the following types of projects within the catalytic programme:
- For the metropolitan municipality
  - By considering all relevant revenue and expenditure streams associated with the municipality and for each project.
- For each PPP.
- For each private development.

Below is a diagram showing two CLDPs in the portfolio of CLDPs. Each CLDP is broken down into the programme projects showing the CLD life-cycle phases and individual project stages.

At this level, the duration as well as the net cash flows (either in constant or in current money terms) should be demonstrating the financial feasibility of each project or for the programme as a whole if certain projects are cross-subsidising other projects.

Apart from the above Master Programme and Schedule, which includes the net annual cash flows per project in the CLDP, each project should be shown in more detail. See examples of single project life-cycle analyses in subsequent sections.

4.3 Modelling assumptions

Life-cycle analysis is a financial modelling exercise that utilises particular variables to aid an entity to forecast future financial viability or performance; i.e. to quantify the financial repercussions of various options. Since these models endeavour to make predictions about the future, they are underpinned by a number of financial assumptions derived through applying the basic financial life cycle analysis concepts presented in this section. These assumptions impact on the determination of the costs and the revenue. They need to be justified and realistic as well as be flexible to reflect the changes that are occurring in the programme/project environment at a point in time.

To support this life cycle analysis, a number of assumptions need to be made in respect of the proposed development.

Revenue assumptions
- Rents per m²
- Sale per m²
- Lease up period
- Occupancy rate
- Water and electricity

Development assumptions
- Construction period per each phase – the estimated time it takes to develop in each phase
Cost assumptions

- Time taken to install tenants installations
- Construction costs per m² for type of development (e.g. apartment, retail, Commercial) (World Bank, 2016b, p. 27)
- Land and associated costs
- Transfer fees or VAT
- Agents commission
- Development rights – rezoning, Environmental Impact Assessment (EIA) etc
- Site investigation
- Demolition costs
- Internal services
- Development (bulk) contributions
- Engineering services (bulk infrastructure) (McGaffin, 2017a, p. 48)

These need to be explicitly stated to test various scenarios. For example, cost increases (typical in the construction industry) in excess of the Consumer Price Index (CPI); depreciation of the currency etc. This will assist the planners in appreciating cost variation due to changes in the assumptions.

4.4 A guide to key terms used in life-cycle analysis

Nominal versus real rates

Many rates can be presented in either real or nominal terms, e.g. the interest rate a bank is paying on a fixed deposit is a nominal interest rate. A nominal rate is a rate (whether a discount rate, internal rate of return or bond interest rate) that does not take inflation into account. Basically, what you see is what you get. A real rate takes inflation into account and excludes inflation from the rate.

Residual Land Value

Residual land value is a technique for determining the value of the land in a development. It is calculated by subtracting all costs associated with the development, [including profit but excluding the cost of the land] from the total value of a development. The remaining is amount is the residual land value, or the amount the developer is able to pay for the land given the assumed value of the development, the assumed project costs, and the developer’s desired profit.


Constant versus current money terms

When you present values in constant money terms, inflation has been ‘taken out’ of the values. The date of the money terms must be stated e.g. constant at 2017 or December 2017 values. When presenting values in current money terms, it means that inflation is built into these values. In order to prevent confusion, it is allowed to state either constant (real) at a date or current (nominal) money terms. Please note that current refers to a ‘current’ account and not current as in today.

An important convention in life-cycle analysis is the way cash flows are presented (in tables), which either can be in constant (real) or current (nominal) money terms.

When conducting a life-cycle analysis in constant (real) money terms, cash flows should be presented as shown below.
When conducting a life cycle analysis in current (nominal) money terms, cash flows should be presented as shown below.

### NET ANNUAL CASH FLOWS IN CONSTANT (DECEMBER) 2017 MONEY TERMS (R’000)

<table>
<thead>
<tr>
<th>YEAR 0</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>-150,000</td>
<td>30,000</td>
<td>30,000</td>
<td>30,000</td>
<td>30,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

When you present cash flows in a table, the value of money terms should be stated as constant money terms OR current money terms.

### NET ANNUAL CASH FLOWS IN CURRENT MONEY TERMS (R’000)

<table>
<thead>
<tr>
<th>YEAR 0</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>-150,000</td>
<td>33,000</td>
<td>36,000</td>
<td>40,000</td>
<td>44,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

**Inflation**

Inflation refers to the change in price levels from one period (usually annual) to the next. It has significant impact on financial planning in relatively high inflationary environment where cost increases rise rapidly over a period. It needs to be factored in costing to obtain the real costs/prices.

**Interest rate**

An interest rate is the annual rate (a percentage) at which money is borrowed and is normally stated as a nominal interest rate, which could be compounded annually, semi-annually, quarterly, monthly or even daily. In the case, when interest is compounded more frequently than annually, the total interest paid will be more than if compounded annually. When comparing different loans with different interest rates and compounding periods, it would be better to determine the effective interest rate of each loan in order to compare costs (interest). The relationship between nominal and effective rates is

\[ i_e = \left(1 + \frac{r}{n}\right)^n - 1 \]

where

- \( i_e \) = Effective annual interest rate
- \( r \) = Nominal annual interest rate
- \( n \) = Number of compounding periods
Although there are many ways in which interest statements can be presented, for the case of this Guideline, the following basic statement will be used:

A municipality is borrowing money from a bank at a 15% annual interest rate, monthly compounded. This is a nominal interest rate. The effective interest rate can then be determined:

\[
i_e = (1 + \left( \frac{0.15}{12} \right))^{12} - 1
\]

\[
i_e = 16.075\%
\]

which is greater than the 15% annual interest rate, if annually compounded.

**Discount rate and Net Present Value (NPV)**

One definition is: The discount rate is the rate of return used in a discounted cash flow analysis to determine the present value of future cash flows. In a discounted cash flow analysis, the sum of all future cash flows (C) over some holding period (N), is discounted back to the present using a rate of return. This rate of return (r) is the discount rate. (Schmidt 2013)

The NPV can be calculated either in current (nominal) or constant (real) money terms. It is important to note that if the real discount rate is employed, then the current (nominal) cash flows also need to be deflated accordingly.

For example, a municipality constructs a toll road of R100 million with an anticipated cash flow over the next five years as shown in the table below.

<table>
<thead>
<tr>
<th>Period</th>
<th>ANTICIPATED CASH FLOW IN CONSTANT (REAL) MONEY TERMS</th>
<th>ANTICIPATED CASH FLOW IN CURRENT (NOMINAL) MONEY TERMS (5% INFLATION)</th>
<th>NET PRESENT VALUE OF REAL CASH FLOWS AT 3.81% REAL DISCOUNT RATE</th>
<th>NET PRESENT VALUE OF NOMINAL CASH FLOWS AT 9% NOMINAL DISCOUNT RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period 0</td>
<td>-R 100</td>
<td>-R 100</td>
<td>-R 100</td>
<td>-R 100</td>
</tr>
<tr>
<td>Period 1</td>
<td>R 25</td>
<td>R 26</td>
<td>R 24.10</td>
<td>R 24.10</td>
</tr>
<tr>
<td>Period 2</td>
<td>R 27</td>
<td>R 30</td>
<td>R 25.10</td>
<td>R 25.10</td>
</tr>
<tr>
<td>Period 3</td>
<td>R 26</td>
<td>R 30</td>
<td>R 23.20</td>
<td>R 23.20</td>
</tr>
<tr>
<td>Period 4</td>
<td>R 29</td>
<td>R 35</td>
<td>R 25.00</td>
<td>R 25.00</td>
</tr>
<tr>
<td>Period 5</td>
<td>R 36</td>
<td>R 46</td>
<td>R 29.90</td>
<td>R 29.90</td>
</tr>
<tr>
<td>NPV</td>
<td></td>
<td></td>
<td>R 27.20</td>
<td>R 27.20</td>
</tr>
</tbody>
</table>
The net cash flows at constant money terms inflated with an inflation rate of 5% gives the current (nominal) cash flows for the years. The net present value (NPV) at a nominal discount rate of 9% is calculated using the general formula below.

The NPV is R27.2 million. A similar result is obtained when using a real discount rate. The inflation is assumed to be 5% and the real discount rate is calculated using the Fischer equation below:

\[ \text{NPV} = -C_0 + \frac{C_1}{1 + r} + \frac{C_2}{(1 + r)^2} + \frac{C_3}{(1 + r)^3} + \ldots + \frac{C_T}{(1 + r)^T} \]

\(-C_0 = \text{Initial investment} \]
\(C = \text{Cashflow} \]
\(r = \text{Discount Rate (in decimal)} \]
\(T = \text{Time} \]

One way to determine the nominal discount rate is by means of the weighted-average cost of capital (WACC). When stating a discount rate, it must be stated as either nominal or real. If the net annual cash flow is presented in current (nominal) money terms, then the nominal discount rate should be determined and used, and vice versa for net cash flows presented in constant (real) money terms.

\[
\text{Real discount rate} = \frac{(1 + \text{nominal discount rate})}{1 + \text{inflation rate}} - 1 \\
= \text{nominal discount rate} - \text{inflation} \\
= \frac{(1 + 0.09)}{(1 + 0.05)} - 1 \\
= 3.81\% 
\]

**Capitalisation rate**

Capitalisation rate is employed as an instrument to evaluate property investments on a more comparable basis. They are reflective of the relationship between the purchase price (value) of a property and its net operating income in a one-year time frame (1st year initial yield demand).

\[
\text{Capitalisation Rate} = \frac{\text{Net operating income}}{\text{Value}} \times 100 
\]

Example: Assuming all else being equal, a R1 million building (Property A) with a NOI of R100 000 and similar neighbouring building (Property B) with a NOI of R200 000 will generate capitalisation rates of 10% and 20% respectively. In this scenario, Property B will be a better investment. It can be interpreted from the equation above that the capitalisation rate is a metric of the efficiency of the property’s (NOI) to property value. Accordingly, the capitalisation rate will vary when the NOI (proportionally) and/or the value (inverse proportionally) changes.

Furthermore, the capitalisation rate can be construed as a measure of risk (Propwise, 2014). The cap rate is an important metric when it emanate from recent market information and therefore represents the market’s assumption of presumed risk of that investment compared to alternative investments.

These risks would inter alia include:

- Macroeconomics
- Strength of the tenant (guarantee of the lease)
- Lease term remaining
- Location
- Lease type
- Rental increases
- Microeconomics (Centres Business Management (CBM), 2015)
A property’s value can therefore be influenced by external factors (e.g. interest rate) which can result in a change in the capitalisation rate regardless of a change in NOI. Properties that have a higher risk premium (poor location) will engender a lower property values and a higher capitalisation rate, assuming no change in the NOI.

### Loan term

The loan term is how the term of the loan impacts on the total amount that is payable over the period. Refer to the table below to see how the loan term impacts the total amount payable over the period.

<table>
<thead>
<tr>
<th></th>
<th>PROPERTY A</th>
<th>PROPERTY B</th>
<th>PROPERTY C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loan</strong></td>
<td>R 1 000 000</td>
<td>R 1 000 000</td>
<td>R 1 000 000</td>
</tr>
<tr>
<td><strong>Interest rate (Compounded annually)</strong></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Period (years)</strong></td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>(FV = PV (1 + r)^t)</td>
<td>(FV = R \ 1\ 000\ 000 (1 + 10%)^5)</td>
<td>(FV = R \ 1\ 000\ 000 (1 + 10%)^{10})</td>
<td>(FV = R \ 1\ 000\ 000 (1 + 10%)^{20})</td>
</tr>
<tr>
<td><strong>Total Payment</strong></td>
<td>R 1 610 510</td>
<td>R 2 593 742</td>
<td>R 6 727 499</td>
</tr>
</tbody>
</table>
Loans: Amortisation versus bullet profiles

South African banks usually structure and price loans through an amortising profile rather than a bullet (non-amortising) profile. In amortised loans, monthly repayments incorporate capital and interest until the redemption of the loan. The majority of the initial payments consist of interest and the capital (principal) will be evenly spread during the tenure of the loan.

For a loan with a bullet profile, the capital is only paid by the municipality when the loan is redeemed and interest will be paid during the tenure of the loan (National Treasury, 2008, p. 80). See below for an example of a bullet loan.

<table>
<thead>
<tr>
<th>PV</th>
<th>R 1 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>R 0</td>
</tr>
<tr>
<td>Interest Rate (compounded annually)</td>
<td>10%</td>
</tr>
<tr>
<td>Loan period (t)</td>
<td>5</td>
</tr>
<tr>
<td>Compound period per annum (n)</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 0</th>
<th>BEGINNING OF YEAR</th>
<th>INTEREST PORTION</th>
<th>PRINCIPAL PORTION</th>
<th>YEAR PAYMENT</th>
<th>BALANCE YEAR END</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 0</td>
<td>R 104.80</td>
<td>R 1 000</td>
</tr>
<tr>
<td>2</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 0</td>
<td>R 104.80</td>
<td>R 1 000</td>
</tr>
<tr>
<td>3</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 0</td>
<td>R 104.80</td>
<td>R 1 000</td>
</tr>
<tr>
<td>4</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 0</td>
<td>R 104.80</td>
<td>R 1 000</td>
</tr>
<tr>
<td>5</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 1 000</td>
<td>R 104.80</td>
<td>R 0</td>
</tr>
<tr>
<td>Total Paid</td>
<td></td>
<td></td>
<td></td>
<td>R 1 524.00</td>
<td></td>
</tr>
</tbody>
</table>
The bullet loan assumes that an individual borrowed R1 000 for a period of 5 year; and will only pay the interest of the loan for the four years and pay the full loan (‘bullet’) in the final year. Accordingly, the interest payment is calculated for the bullet loan in the following manner:

\[
IP = PV (1 + \frac{r}{n})^t
\]

\[
IP = R 1 000 (1 + \frac{0.1}{5})^5 - R 1 000
\]

\[
IP = R 104.08
\]

*IP = Annual interest payment*

*\( r \) = Annual interest rate (decimal)*

*\( n \) = Number of times that interest is compounded per year (1)*

*\( t \) = Number of years the money is invested or borrowed (5)*

The amortisation loan repayment is calculated in the following manner:

<table>
<thead>
<tr>
<th>PV</th>
<th>R 1 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Period (t)</td>
<td>5 Years</td>
</tr>
<tr>
<td>Interest Rate (compounded annually)</td>
<td>10%</td>
</tr>
<tr>
<td>Payment (P)</td>
<td>R 264</td>
</tr>
<tr>
<td>Compounding period (n)</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BEGINNING BALANCE (BB)</th>
<th>PAYMENT (P)</th>
<th>INTEREST AMOUNT (IA)</th>
<th>PRINCIPAL AMOUNT (PA)</th>
<th>ENDING BALANCE (EB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R 1 000</td>
<td>R 264</td>
<td>R 100</td>
<td>R 164</td>
<td>R 836</td>
</tr>
<tr>
<td>2</td>
<td>R 836</td>
<td>R 264</td>
<td>R 84</td>
<td>R 180</td>
<td>R 656</td>
</tr>
<tr>
<td>3</td>
<td>R 656</td>
<td>R 264</td>
<td>R 66</td>
<td>R 198</td>
<td>R 458</td>
</tr>
<tr>
<td>4</td>
<td>R 458</td>
<td>R 264</td>
<td>R 46</td>
<td>R 218</td>
<td>R 240</td>
</tr>
<tr>
<td>5</td>
<td>R 240</td>
<td>R 264</td>
<td>R 24</td>
<td>R 240</td>
<td>R 0</td>
</tr>
<tr>
<td>Total Paid</td>
<td></td>
<td></td>
<td></td>
<td>R 1 319</td>
<td></td>
</tr>
</tbody>
</table>

*Note Rounding off*
The interest portion of the payment is calculated as follows:

\[
\text{Interest Amount} = \text{Beginning Balance} \times r
\]

\[
\text{Interest Amount} = R\,1\,000 \times 0.1
\]

\[
\text{Interest Amount} = R\,100
\]

The principal component of the loan is calculated as follows:

\[
\text{Principal Amount} = \text{Payment} - \text{Interest Amount}
\]

\[
\text{Principal Amount} = R\,264 - R\,100
\]

\[
\text{Principal Amount} = R\,164
\]

The remaining balance of the loan at the end of the year is calculated as follows:

\[
\text{Ending Balance} = \text{Beginning Balance} - \text{Principal Amount}
\]

\[
\text{Ending Balance} = R\,1\,000 - R\,164
\]

\[
\text{Ending Balance} = R\,836
\]

The Ending Balance of a particular year then becomes the Beginning Balance of the next year to calculate the Payment, Interest Amount and Principal Amount.

Bullet loans result in higher borrowing costs over the period of the loan. Amortised loans result in a higher borrowing costs compared to a bond issue, since the interest is based on what the bank’s risk perception is of the municipality rather than the perception of a multitude of lenders in a functioning market (National Treasury, 2008, p. 80).
4.5  A guide to the basic principles of life-cycle analysis

Introduction
This section highlights the basic principles used when conducting a financial life-cycle analysis. Please refer to more advanced literature should you require additional information on life cycle analyses.

Professional costs and Cost of Works
Traditionally, South African built environment professional bodies issue guidelines (through gazettes) on how to determine the professional fees and costs of a built environment project if the Cost of Works (CoW) is known.

Although there could be changes in how these gazettes define and describe professional fees and costs in the future, the following definitions apply to this Guideline.

Professional fees for normal services
Professional fees are calculated as a percentage of the total CoW at the end of construction (and this will include inflation on the CoW as well as contingencies). The CoW is equivalent to the total construction cost. This percentage of the CoW is the total fee for the professional work (and it differs for each profession) on normal services for the project as a whole. This percentage fee (as an initial estimate) will be subdivided (the apportionment) among the various stages of the project. Please note that during the early stages of the project, these figures are estimates; they can only be finalised once the construction is complete and the final certificate is issued, thus requiring adjustments to the total fee.

Please refer to the relevant gazettes to obtain the latest percentage fees based on the estimated CoW and how these should be spread over the various stages of the project.

Example 1:
The CoW for a civil engineering project is estimated at R100,000,000.
The percentage fee for normal services is estimated at 4%.
The total fee for normal services is 4% x R100,000,000 = R 4,000,000.
The apportionment of this fee over the various stages is shown in the table below:

<table>
<thead>
<tr>
<th>STAGE OF SERVICE</th>
<th>TYPICAL PERCENTAGE POINTS FOR EACH STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil: Engineering Projects</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>5</td>
</tr>
<tr>
<td>Concept and Viability</td>
<td>25</td>
</tr>
<tr>
<td>Design Development</td>
<td>25</td>
</tr>
<tr>
<td>Documentation and Procurement</td>
<td>15</td>
</tr>
<tr>
<td>Contract Administration and Inspection</td>
<td>25</td>
</tr>
<tr>
<td>Close-Out</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 5.4: Example of apportionment of fees over the stages of a civil engineering project

While the above stages are not the same as those in the Standard for Infrastructure Procurement and Delivery Management System, they provide an indication of how a R4,000,000 fee for normal services should be apportioned per stage.

Professional costs for additional services
There are two types of professional costs for additional services:
- Costs for certain skills on site e.g. resident engineer.
- Costs for certain studies e.g. geotechnical and traffic studies.

These costs can only be estimated at the early stages of the project, which should be estimated at a specific date and then adjusted to account for inflation at the time when executed.

Cost estimates and base dates
Apart from fee estimates for normal professional services, all other costs are ESTIMATES determined at a BASE DATE. This means that if you need to determine the estimate today, define the cost based on today’s money value and record the date (Base Date = Today).
Should you plan the actual occurrence of this cost to take place in a year’s time, the cost estimate in a year’s time will be the base cost at base date adjusted for inflation over one year.

All costs (excluding fees for professional services) need to be determined as a base cost at a base date. Whenever the spend is planned to take place, the cost estimate should be adjusted for inflation if and only if the cash flows are presented in current (inflation adjusted) money terms.

Example 2:
On 1 January 2017, the cost of conducting a professional study is R5,000,000.
If it is expected that this study will only be conducted one year from today, and the expected inflation rate is 6% per annum, the calculation is as follows:
Cost estimate: R 5,000,000.
Base date: 1 January 2017
Expected completion of study: 1 January 2018
Inflation rate: 6% (annual)
The cost estimate in current (what you see is what you get) money terms as at 1 January 2018 is R5,000,000 x (1+6/100)^1 = R5,300,000.
It is important to specify the analysis period and to divide it into a minimum of three timeframes:

**Timeframe 1:** Professional work/planning and construction

**Timeframe 2:** Operations and management (or service period)

**Timeframe 3:** Termination (sell, demolish)

**Example 3:**
If it is expected that the professional work/planning and construction will take three years, the life span of the product/facility is 30 years and thereafter the termination period, which is one year. Therefore, the total analysis period is 34 years.

If a life-cycle analysis method is used to compare two or more options (such as a Net Present Value (NPV) analysis), then the analysis period should be equal for all options. If the options are of different life spans, then the final analysis period of all options should be the same and be repetitions of the individual life spans. This is better demonstrated by the next example.

**Example 4:**
Option 1 is a five-year period.
Option 2 is a three-year period.
The analysis period should be the shortest period in which both options can be repeated, namely 15 years.
Option 1 will be analysed over a period of 15 years with three consecutive repetitions of Option 1. Option 2 will be analysed over a period of 15 years with five consecutive repetitions of Option 2.

The above type of analyses are easier to conduct in constant (real) money terms but it should not be a problem to conduct the analyses in current (nominal) money terms, which will need all annual cash flows to be predicted in current money terms of the analysis period i.e. already inflation adjusted.

**Annual growth rates of revenue or income streams**
It is important to determine the annual growth rate at which each revenue stream will grow. There are various types of revenue streams, e.g., leases, rent, grants, property rates and service tariffs. It is possible that the annual growth rate of each revenue stream will differ from each other. It is also possible that the growth rate of the revenue streams is not equal to the Consumer Price Index (CPI).

Adopt a conservative approach when identifying a revenue stream to form part of a life-cycle analysis. Take care when conducting a life-cycle analysis in either constant (real) or current (nominal) money terms, especially if the weighted growth rate of the revenue stream is not equal to the average inflation rate for expenditure streams. If they are not the same, a constant (real) life-cycle analysis could be skewed.

**Regardless of the value of money in which costs are presented, it is good practice to always state the date on which the cost estimate is based. This will enable any user to adjust for inflation if necessary. Furthermore, if an analysis is conducted in current (nominal) money terms, it could be necessary to adjust the result to show constant money terms.**
Inflation rate for costs or expenditure streams

The weighted inflation rate for costs or expenditure streams could differ, not only from other expenditure streams, but also from the weighted growth rate. Be aware if a life-cycle analysis is conducted in constant (real) money terms if different inflation rates for different expenditures are possible.

**WARNING!**

Life-cycle analyses can be conducted in constant (real) money terms only if the weighted growth rate of the expenditure streams is equal to the weighted inflation rate of the expenditure streams.

**Weighted average cost of capital**

It is important to be able to determine the weighted average cost of capital (WACC) for an organisation. The WACC is normally used as a discount rate when net present value analyses are conducted. Below is an example of a simplistic calculation how to determine the WACC. For a municipality, this could be seen as the weighted cost to service debt.

**Example 5:**

An organisation issued bonds worth R200,000,000 (coupon value) at annual interest of 7% and borrowed money from the bank to the value of R300,000,000 at a 9% interest rate (annually compounded). What is the WACC?

The WACC is R41,000,000 x 100/ R500,000,000 = 8.20%, i.e. the total interest divided by the total value of instruments.

How is the WACC useful? When an organisation wants to decide on the preferred option, the NPV is determined for each option and the option with the highest (and positive) NPV is selected.

To conduct a NPV analysis, the discount rate is set equal to the WACC. The question is whether the above calculation of the WACC gives a nominal or a real discount rate?

<table>
<thead>
<tr>
<th>INSTRUMENT</th>
<th>VALUE</th>
<th>% INTEREST</th>
<th>INTEREST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond</td>
<td>R 200,000,000</td>
<td>7.00</td>
<td>R 14,000,000</td>
</tr>
<tr>
<td>Loan</td>
<td>R 300,000,000</td>
<td>9.00</td>
<td>R 27,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>R 500,000,000</td>
<td></td>
<td>R 41,000,000</td>
</tr>
</tbody>
</table>

The above rates are all nominal rates. If we had deducted the inflation rate from the above nominal rates, we would have come to an approximate real discount rate. Thus, the result of the WACC is a nominal discount rate.
The Fisher formula for real and nominal rate conversions

Sometimes it is necessary to convert a rate from nominal to real or vice versa, given the inflation rate. One formula used for such conversions is the Fisher formula, shown below.

\[ R_n = [1 + R_r] \times [1 + R_i] - 1 = R_r + R_i + (R_r \times R_i) \]

OR

\[ R_r = \frac{[R_n - R_i]}{[1 + R_i]} \]

where

- \( R_n \) = Nominal Rate
- \( R_i \) = Inflation Rate
- \( R_r \) = Real Rate

**Example 6:**
The WACC, which is used as the nominal discount rate, is 8.2%. This needs to be converted to a real discount rate given the inflation rate of 6.0%.

\[ R_r = \frac{[0.082 - 0.060]}{[1 + 0.060]} \]
\[ = 0.022 / 1.060 \]
\[ = 0.0208 \]

The real discount rate is 2.08%.

An approximation of real and nominal rate conversions

The nominal rate is approximately equal to a real rate PLUS the inflation rate.

**Example 7:**
The nominal discount rate is 8.2% and the inflation rate is 6.0%. What is the approximate real discount rate?

The approximate real discount rate = 8.2% - 6.0% = 2.2%, which is larger than the 2.08% as determined using the Fisher formula.

Government presentation of expenditure amounts

Government presents expenditure or budget amounts in current (nominal) money terms i.e. ‘what you see is what you get’. This poses a caution to people who conduct life-cycle analyses in constant money terms and do not convert the results to current (nominal) terms so that results could be incorporated into the government planning input.

Net present value (NPV) analysis

A NPV analysis entails the discounting of the net annual cash flows (net of inflow and expenditure) using the discount rate (either nominal or real) depending on the money terms of the annual net cash flow.

A NPV analysis is used to compare various options. The option with the highest positive NPV should be selected as the preferred option. It is possible to analyse cash flows that are only expenditure. In this case the option with the smallest negative value will be selected.

The NPV for both the real or nominal analysis should result in the same NPV at time 0.

Nominal and real internal rates of return

Another method is to determine the internal rate of return (IRR). It should be noted that this is also a ‘rate’ and that it must be either a nominal IRR or real IRR. As before, if a nominal IRR is to be determined, then the net annual cash flows must be in current (nominal) money terms and vice versa for the real IRR.

The IRR is that rate that will result in a zero NPV. If conducting an IRR analysis, at least one period in the analysis should have a negative value, which implies a net cash outflow.
Basic formulas and calculations
Apart from Excel formulas, there are two basic formulas to use:
\[ F = P \times (1 + \frac{i}{100})^n \]
and
\[ P = \frac{F}{(1 + \frac{i}{100})^n} \]
annually compounded.
(F is the future value and P the present value, i is the annual rate annually compounded and n is the number of years.)

Example 8:
The cost estimate of the works is R50,000,000 as at today’s money value. What would the estimated CoW be in three years’ time if the expected annual inflation for construction is 6%?
Future value (with inflation, thus current (nominal) value) = 50,000,000 \times (1 + 6/100)^3 = R78,044,800

Important to note: In just three years, the cost estimate of a R50,000,000 construction project has increased with R28,044,800 due to inflation!

Example 9:
What is the discounted value of the net (nominal) annual cash flow of R100,000,000 in year 3 if discounted at a nominal discount rate of 8%?
Net present value = 100,000,000/(1+8/100)^3 = R79,383,224

The impact of depreciation of assets and tax
Ensure that the IRR or NPV analysis is a net cash flow analysis and that the impacts on the cash flow due to depreciation and income tax, if applicable, are determined. Depreciation is an accounting transaction but will have an impact on the net cash flow due to tax implications.

Debt to equity
This reveals the proportion of equity and debt a developer is using to finance its asset. It is employed to measure the financial risk. A higher debt-to-equity ratio is perceived to be unfavourable as the business relies more on debt (usually at higher interest rate) which is deemed riskier.

Here follows three simple examples of life-cycle analyses.
Example 1: Real life-cycle analysis

This table demonstrates a real life-cycle analysis:

<table>
<thead>
<tr>
<th>Year</th>
<th>STAGE 1 CONCEPT</th>
<th>STAGE 2 DESIGN</th>
<th>STAGE 3 CONSTRUCT</th>
<th>STAGE 4 CONSTRUCT</th>
<th>STAGE 5 DISPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NVP 0.00</td>
<td>-1 000</td>
<td>-4 770</td>
<td>-36 404</td>
<td>15 738</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-43 412</td>
<td>15 016</td>
<td>14 323</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-4 315</td>
<td>13 035</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12 436</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19 356</td>
</tr>
</tbody>
</table>

Real Discount rate % = 4.822437%

Real IRR = 4.822437%

Net cash flow = -1 000, -5 000, -40 000, -50 000, 19 000, 19 000, 19 000, 19 000, 19 000, 31 000

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Capital</th>
<th>Operations</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility</td>
<td>-1 000</td>
<td>-5 000</td>
<td></td>
</tr>
<tr>
<td>Detail Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refurbish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salvage</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.5: Example of a real life-cycle analysis

Four typical cash flow streams are shown as follows:

Revenue: From years 4 to 9, the annual revenue is shown as R30,000,000.

Capital: Capital spend for the procurement of the asset is shown over years 0 to 3 as well as refurbishment of R25,000,000 in year 7.

Operations: Maintenance costs are estimated from year 4 to 9 while salaries and utilities are estimated from year 3 to 10.

Termination: In this case a salvage value of R40,000,000 is estimated in year 10.

The total sum of all revenue and expenditure is shown in the row called ‘Net cash flow’. For this example, the Real IRR is calculated as 4.82 %.

If the Real IRR is used as the Real Discount Rate, the NPV should be 0 for the project, as shown in the table.

Source: CPCC (Pty) Ltd
Example 2: Nominal life-cycle analysis - same growth and inflation rates for revenue and expenditure streams

Example 1, which is a real life-cycle analysis, is now transformed to illustrate a nominal life-cycle analysis. In this case, it is assumed that the growth rate of the revenue stream (to take care of inflationary revenue increases) is 5% and that the inflation rate of costs or the expenditure streams is 5%. Note that this assumption is the same for both revenue and expenditure.

### Table 5.6: Example of a nominal life-cycle analysis

<table>
<thead>
<tr>
<th>Year</th>
<th>Stage 1 CONCEPT</th>
<th>Stage 2 DESIGN</th>
<th>Stage 3 CONSTRUCT</th>
<th>Stage 4 O&amp;M</th>
<th>Stage 5 DISPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Nominal IRR = 10.06359%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>Growth % Revenue</td>
<td>Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Feasibility -1 000</td>
<td>-5 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Detail Design</td>
<td>-40 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Construct 1</td>
<td>-40 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Construct 2</td>
<td>-1 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Other Capital</td>
<td>-25 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Refurbish</td>
<td>-1 158</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Maintenance</td>
<td>-2 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Salaries</td>
<td>-4 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Utilities</td>
<td>-5 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Termination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.00</td>
<td>Salvage</td>
<td>-6 000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ R_n = (1 + R_r) \times (1 + R_i) - 1 = R_r + R_i + R_r \cdot R_i \]

\[ R_r = \frac{R_n - R_i}{1 + R_i} \]

\[ R_n = 10.06 \]

\[ R_r = 4.82 \]

Source: CP2C (Pty) Ltd
The difference to Example 1 is that the predicted cash flows are now presented in current (inflated at 5% annually; what you see is what you get) money streams. In this case, the nominal IRR is calculated as 10.06% and if this nominal IRR is used as the Nominal Discount Rate, the NPV equates to R0, which is correct.

Given that the growth rate of the revenue stream is equal to the inflation rate of the expenditure stream, then the Real and Nominal IRR obtained from a constant/real and current/nominal life-cycle analysis respectively will result in an NPV for both analysis of R0.

Further, if the Fisher formula is used, then a quick check will reveal that, if an inflation rate of 5% is used (for both revenue and expenditure streams), that a Nominal IRR is calculated as 10.06% and a real IRR as 4.82%, which are the results as shown in Examples 1 and 2.

**Example 3: Nominal life-cycle analysis – different growth and inflation rates for revenue and expenditure streams**

Things get a little more complicated when the growth rate of your revenue stream is different from the inflation rates of the various expenditure streams.

---

### NOMINAL LIFE-CYCLE ANALYSIS (AT TODAY’S DATE) BUT WITH DIFFERENT INFLATION RATES AND IN R’000

<table>
<thead>
<tr>
<th>NOMINAL ANALYSIS B2</th>
<th>STAGE 1 CONCEPT</th>
<th>STAGE 2 DESIGN</th>
<th>STAGE 3 CONSTRUCT</th>
<th>STAGE 4 O&amp;M</th>
<th>STAGE 5 DISPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yr 0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>NPV ( \times )</td>
<td>-1 000</td>
<td>-5 002</td>
<td>-39 275</td>
<td>18 821</td>
<td>18 718</td>
</tr>
<tr>
<td>Factor ( \times )</td>
<td>1.00</td>
<td>0.94</td>
<td>0.89</td>
<td>0.79</td>
<td>0.75</td>
</tr>
<tr>
<td>Nom IRR ( \times )</td>
<td>5.965202%</td>
<td>5.965202%</td>
<td>5.965202%</td>
<td>5.965202%</td>
<td>5.965202%</td>
</tr>
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**Table 5.7: Example of a nominal life-cycle analysis with different growth and inflation rates on revenue and expenditure streams**

Source: CP2C (Pty) Ltd
In this example, with different inflation rates, the nominal IRR equates to 5.97%, which is far less than the nominal IRR of 10.06% in Example 2.

The above table illustrates the importance of understanding the difference between a constant/real versus a current/nominal life-cycle analysis. If the most reliable values are not entered, then the results can differ tremendously.

If this nominal IRR of 5.97% is compared with the real IRR of 4.82% from Example 1, then the approximate inflation rate should equate to 1.15% (1.14% when using the Fisher formula), which cannot be true.

If you have conducted a constant/real life-cycle analysis, and if it is true that the inflation of your expenditure streams are relatively high, then the results of Example 1 of real IRR of 4.82% and of Example 2 of nominal IRR of 10.06% will have an over-optimistic result compared to Example 3 of a nominal IRR of 5.97%.

### Conclusion

This section covered the basic terms and principles that need to be applied when conducting a (financial) life-cycle analysis. Available literature should be consulted in order to apply more complex theories.

Whenever a life-cycle analysis is conducted, it should be stated in what money terms the cash flows are presented, e.g. either in constant (at a date) or current (inflation added) money terms. Once this has been decided, either a NPV or an IRR analysis can be conducted.

If a NPV is conducted, then the discount rate must be stated as either Real Discount Rate or a Nominal Discount Rate. The Nominal Discount Rate is derived from the WACC for the organisation, which, in the case of a municipality, is the cost of servicing debt. If an IRR analysis is conducted, then the end result should stipulate either a Real IRR or a Nominal IRR.

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If you either under- or overestimate the revenue or expenditure streams, the results could be way out.
### References

#### CHAPTER 1

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Infrastructure Australia, 2016 | Infrastructure Australia. 2016. *Capturing Value: Advice on making value capture work in Australia*, Australia: Infrastructure Australia.
McGaffin, 2018

McGaffin, R. (Senior Lecturer Urban Real Estate Research Unit) 2008. Interviewed on 16 April 2018.

National Treasury, 2008, p.78


National Treasury, 2008, p.98


National Treasury, 2016a,p.9


National Treasury, 2017


National Treasury, 2017c, p.6


South African Cities Network and the Housing Development Agency, 2014

South African Cities Network and the Housing Development Agency. 2014. Case Studies on the Acquisition of Urban Land by Municipalities from State Owned Companies and Other Organs of State, s.l.: s.n.

Switala, 2017

Switala, H. 2017. Project finance and obtaining sufficient funding for the successful completion of your project. [online] Available at: https://www.dbsa.org/EN/About-Us/Publications/Documents/Project%20finance%20and%20obtaining%20sufficient%20funding%20for%20the%20successful%20completion%20of%20your%20project.pdf [Accessed on 7 December 2017].

World Bank, 2016, p.Memo;35, 37


World Bank, 2017


World Bank, 2017b, p. S7:57 and S4:24


World Bank, 2017b, p.S6:52 and S7:61

### CHAPTER 4

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General


ENS africa. 2016b. Alternative tools to finance urban redevelopment: Tax incremental financing - Regulatory issues, Johannesburg: ENS.


https://www.ivsc.org/standards/glossary (accessed on 21 June 2018)


The illustration on the cover of this Guideline was prepared for the Johannesburg Development Agency by Ikemeleng Architects and Urban Designers in 2011. It was one of a selection of illustrations that were used in an ITDP project called *Our Cities Ourselves* for the Orlando East TOD node development in Soweto.

**Cities Support Programme (CSP):** [https://csp.treasury.gov.za](https://csp.treasury.gov.za)

**National Treasury Government Technical Advisory Centre (GTAC):** [https://www.gtac.gov.za](https://www.gtac.gov.za)