Sustainable urbanism is challenged by a move towards austerity. An alternative approach is required for local authorities trying to do more with less while maintaining a strategic approach. Financial prudence can be balanced with strategic objectives through a bottom-up, inside-out approach, which considers internal integration as well as external leverage opportunities to set the scene for a rigorous financial strategy. This creates a virtuous economic cycle. Engaging with elected officials to promote rational decision-making is essential to this process.

1. Introduction

Douglas Farr (2007) uses the phrase ‘sustainable urbanism’ as the application of sustainability in the design of urban environments. He builds on sustainability as originally defined in the Brundtland report (Brundtland, 1987), which has subsequently evolved to incorporate the ‘triple bottom line’ concept, encompassing economic, social and environmental concerns (Elkington, 1997). ‘Culture’ has recently been added to constitute the ‘quadruple bottom line’ (Scrimgeour and Iremonger, 2004), which is helpful as the importance of cultural issues is often diminished when they are a subset of social or environmental considerations.

In addition to cross-disciplinary integration sustainable urbanism also relies on vertical integration. The famous Finnish architect Eliel Saarinen (1873–1950) understood this well ahead of his time when he said

Always design a thing by considering it in its next larger context – a chair in a room, a room in a house, a house in an environment, an environment in a city plan (Saarinen, 1956)

In the current day context it seems Saarinen’s quote can be appropriated to say

Every project’s full potential is inhibited by the next larger context: the place by the network, the network by policy, policy by council staff disconnects and council staff by political inconsistency.

One could add ‘this all coalesces in the budget!’ as integration is meaningless if the component parts are not funded, and sustainable urbanism is denied. It is therefore vital to establish and demonstrate the links between sustainable urbanism, economics and financial strategies.

However, local authorities are being challenged to deliver more with fewer resources, some while carrying considerable debt, and community expectations seem to be on the increase. Reluctant to increase rates, many local authorities are dealing with this in a top-down manner, applying across-the-board cuts, often with significant consequences for their technical capacity, corporate culture, strategic objectives and staff morale.

A single-minded focus on cost reduction can not only stifle the prospects of delivering more sustainable outcomes, but also deny the ability to develop an economic dynamic in which wealth generation improves. The following concepts and approaches are attempts to promote sustainable urbanism by finding methods to reconcile the demands for financial prudence with the need for transformational investment.

2. Virtuous economic cycle

A virtuous cycle occurs when the gains are re-invested to achieve further gains (Figure 1). For councils this means increasing their rates take and other income over time by leveraging more effectively off external entities and reducing internal costs.

3. Bottom-up and inside-out

A good process will only endure if it is technically rigorous and has ongoing support. This approach is bottom-up in that it first fully understands the place-based and community-based realities and possibilities and works upwards towards the funding implications.

It is inside-out in that it engages first with the senior management team and technical experts, then works outwards, towards engaging with elected members and ultimately the
public. All of this against a backdrop of established community views from earlier consultation.

The process is not entirely linear and has feedback loops where earlier assumptions are retested as the strategy crystallises.

The process uses limited external input and draws from (often considerable) internal experience. Local knowledge ensures proposals are ground-truthed, and the hands-on approach ensures long-term buy-in. Specialised workshop methods are employed, calculations are updated in real time, and large-format schedules and diagrams are used to ensure the wider group can engage effectively.

4. **Bottom-up process**

To ensure the process is not solely accountancy based and disconnected from on-the-ground realities, the following early considerations (Figure 2) are recommended before the hard-nosed financial discussions begin:

- how well aligned and effective the current strategies are
- the degree of internal technical integration and operational efficiencies
- the ability to leverage off external entities for a more cost-effective delivery of objectives.

5. **Understanding the ‘big picture’: place-based and community-based**

In order to devise an intelligent financial strategy the significance of each key budget item needs to be understood. Self-knowledge of the urban networks and community needs, and how they are impacted by council process and strategies is paramount. Strategies vary across authorities and could range from economic development, customer care, transport, land asset investment, arts, community, infrastructure vision, human resources, as well as adopted approaches to regional development and other territorial authorities.

They need to be understood in a place-based and community-based manner. Against this background, a quick, high-level review can be undertaken of the current strategies and how well they are aligned. Adjustments and omissions will quickly be identified. Figure 3 is an example of where diagrammatic depictions of strategies have been superimposed allowing consideration of synergies and disconnects.
6. Remedying internal disconnects (deFRAG)

In any organisation internal disconnects need to be periodically identified and remedied. While this needs to be a process of self-diagnosis, it can be difficult to facilitate from within the organisation. The deFRAG process (an analogy with cleaning up computers’ inefficiencies and disconnects) undertakes analysis of internal efficiency and integration. It is designed to assist staff and management to assess how well a council is equipped to deliver more with less, and identify adjustments and additional strategies that are required.

Council discipline managers and technical specialists are engaged in a short workshop process in which they diagrammatically represent their discipline strategies, and uncover tensions and joint opportunities with other disciplines. Disconnects are systematically diagnosed and on-the-ground outcomes are compared with vision statements. External leverage opportunities are assessed. High-level recommendations are made for improved organisational procedures, policy and organisational changes (Figure 4).

7. Increasing external effectiveness (leverage)

Leverage can increase councils’ ability to deliver more with less money. Often external entities (community and environmental groups, businesses, developers, government agencies and neighbouring authorities) are able to deliver services more cost effectively with council support.

Good strategies can encourage community engagement in projects they prioritise, as well as helping businesses to prosper, improving rates income and reducing social negatives. The virtuous cycle (Figure 1) is created when gains are invested into a capacity to leverage more.

Leverage includes condition-making, as described by Kelvin Campbell of Smart Urbanism. It involves creating underlying conditions to stimulate new local businesses to create jobs and reduce income leakage, and allow not-for-profits organisations to flourish by removing barriers, adjusting policies and improving the physical environment. Other leverage categories include

- attract capital: secure grants and launch business attraction initiatives
- influence: encourage the private sector to deliver developments with community benefits (e.g. biodiversity links, local parks and affordable housing)
- enabling: connect, coordinate and facilitate community and business groups
- partnerships: partner with external organisations when objectives are aligned
- catalyst investment: invest in infrastructure that unlocks growth or regeneration (Figure 5).

Benefits should be calculated when possible and can often be significant (Figure 6). They can also cover a wide range of disciplines, some recent examples include
economic returns: growth strategies that unlock new jobs, increase retail spend and create significant savings through the reduction of travel costs

environmental benefits: a community-driven, council-assisted, re-vegetation project, with local people undertaking riverbank planting, enhancing biodiversity and providing quality open space that is accessible to the central business district

social initiatives: co-location of community services at a site that reflects local people, and is close to education and library services; this enhances accessibility, direct service delivery through a one-stop shop, and improves economies of scale.

Understanding the leverage possibilities before the financial process is central to the team’s ability to structure a truly strategic approach, predicated on the virtuous economic cycle.

8. Financial strategy

With a good grasp of the big picture, internal efficiencies and leverage possibilities the design of a financial strategy can start. This process is typically run through with the senior management team (assisted by technical discipline heads) and then run through again with councillors in a more condensed form. The stages are generally as follows

- set the provisional financial sustainability timeframe targets (Figure 7)
- agree the broader ‘prudent against strategic’ approach (Figure 8), the strategic re-investment option is preferred as this forces the group to give careful consideration to priorities when cutting and re-investing
- determine non-negotiable items for each discipline (legal requirements and/or core function)

Figure 5. Leveraging external opportunities (copyright: Urbanismplus)

Figure 6. Leveraging benefits (1 AUD = 0.57 GBP, 1 NZD = 0.5 GBP) (copyright: Urbanismplus)
determine three provisional cut levels – mildly painful, need local anaesthetic or cardiac arrest!
undertake a cross-disciplinary discussion and normalisation between cut levels
determine the full range of other savings, investment (budget) and debt-related items (Figure 9)
consider strategic options and check against community consultation outcomes
develop options.

The process is repeated several weeks later after all cost items have been fully verified against their budget figures as project costs are often a complex amalgamation of budget items.

As the strategy evolves and the options narrow the provisional timeframes (Figure 7) are reviewed and finally reconciled with the preferred option that is expressed in a short and long-term strategy (Figure 10).

9. The growth to austerity continuum
The process allows local authorities to establish a clear line of logic to achieving financial sustainability. A series of options are produced across a continuum of austerity to growth.

In recent applications this process achieved measurable results, including (Figure 10)

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**Considerations**

- Savings
  - Asset sales
  - Downgrade
  - Leverage
  - Increase revenue
  - Organisational productivity and personnel

- Investments
  - Strategic upgrade
  - Best-practice upgrade
  - Infrastructure for growth release

- Debt and asset renewal
  - Roads, bridges, buildings, parks etc.

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Figure 7. Setting financial sustainability targets (copyright: Urbanismplus)

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Figure 8. Prudent against strategic financial approach (copyright: Urbanismplus)

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Figure 9. Financial considerations

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- significant savings in the first year, increasing over time through strategic prioritisation of council services, internal efficiency and integration, partnerships, increasing direct income, and retired debt; rates rises may need to be considered after year 6
- investment to asset management in the first year premised on a stepped increase reaching the full amount required for asset renewal over 10 years
- investment into community-prioritised projects in the first year, dividing the savings between community and asset management priorities, which provides for sustainable urbanism in the long term.

The combined involvement of councillors and senior staff allowed all to engage in the process more effectively, producing more consistent decision-making. Sustainable urbanism objectives were achieved as opposed to pragmatic compromises.

Significantly, in contrast to top-down or outside-in processes, the final decision has buy-in from all departments and senior managers, and most councillors, making budget setting and implementation routine. The result is an ability for the local authority to implement
urban design and planning outcomes as they move from a position of debt and asset neglect to a pathway of financial sustainability in a more compassionate and strategic manner.

10. More consistent, rational decision-making
The key to promoting sustainable urbanism through these financial sustainability methods is good decision-making. Elected members will individually be balancing their constituency and philosophical bias with any objective evidence-based proposals put to them (Figure 11). This alternative approach achieves a greater degree of rational and consistent decision-making through proposals that are more rigorously justified with measurable benefits calculated.

Decision-making is set within economic and strategic frameworks ensuring projects align with the vision, are delivered in a strategic sequence, and offer a ‘return on investment’ (which could be social, cultural, environmental, as well as financial) on an ongoing basis.

11. Conclusion
Adopting a bottom-up approach that works across local authorities to remedy internal disconnects, as well as looking outwardly to understand the role external organisations can play, and using rational decision-making to bring elected members on board, has been shown to allow a financial strategy that balances financial prudence with transformational investment, promoting sustainable development in urban environments.

REFERENCES

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