1 Article

# 2 Using Urban Planners to Increase City Sustainability through the Development

3 Process

4 5

# Jacob Adejare Babarinde 1\*

Department of Surveying and Land Studies, Papua New Guinea University of Technology, Private Mail Bag
Lae, Morobe Province, Papua New Guinea; e-mail: jacob.babarinde@pnguot.ac.pg

\* Correspondence: jacob.babarinde@pnguot.ac.pg; Tel.: +675-7380-7154

### 10 Abstract

This paper presents an experimental scenario aimed at bridging the gap between the cities we have and the cities we need, not only in the 21st century but also beyond, using the integrated tools of *development control* and *holistic land development model* to achieve a planner-led vision of city sustainability. Due to scathing criticisms against the development control system, the paper contends that planners as development approving officers and public interest specialists are better positioned than allied professionals to increase city sustainability through a holistic development process that benefits from the concept of *strong sustainability* posited by ecological economists. The paper adopts a seven-stage, 56-cell land development matrix (model) to simulate the development of the typical high-rise residential condominium in Ontario, supported with secondary data and the author's ground experience as a planner and realtor with condominium customer service experience across Toronto and Mississauga cities between 2008 and 2017. Findings reveal that planners can seize the opportunity of being leaders of the development team to synergize the risks and value creation in land development that are key drivers of *strong sustainability*. The paper suggests some policy implications for averting disasters like fire hazards and terror attacks in high-rise residential buildings.

**Keywords:** development process, high-rise, condominium, development control, city sustainability, Planning Authority, planner.

# 1. Introduction

This paper is essentially an experimental scenario aimed at exploring the possibility of using urban planners to increase city sustainability through the development process, an argument that is closely related to the discourse on crime prevention through environmental design (CPTED) [1]. Urban planners can achieve the goal of sustainable building projects for cities as they uniquely hold the key to approving or rejecting development applications. Although the conventional development control system has been used by planning authorities for centuries to regulate the development and use of land [2], there are strong complaints that the complexity of development control is excessively costly and that its sluggish nature stifles initiative [3]. As the role of the state expanded, the definition of the 'environment' subject to planning control has changed over time as it now embraces the social and economic consequences of development [4]. Development control on its own has proved incapable of meeting additional demands [3]. For example, the veracity of fire disasters and terror attacks involving high-rise condos in recent history makes it compelling for members of the development team, including planners as public interest specialists [5] [6] [7], to have to re-evaluate their contributions to

city sustainability. The pains of New York's 9/11 terror attack and London's Grenfell Tower fire of 14 June, 2017, *inter alia*, must not be in vain.

Conceptually, the paper gleans from the theoretical lenses of *strong sustainability* as posited by ecological economists, e.g. [6]. Supporters of *strong sustainability*, e.g. [8], *as opposed to weak sustainability supporters*, e.g. [9], argue that natural resources and ecological functions are non-renewable once exhausted or destroyed. Therefore, public policy regarding land development owes a fiduciary duty, including duty of care, to the wider ecological world. Land development, strong sustainability and the case study used in this paper are related. The development process can be used as a pedagogical tool to assist planners in understanding the process, risks, and value creation in land development that are key drivers of *strong sustainability*. The paper attempts to answer the following research question:

What are the key features of the 'land development process' that may be embedded in the existing 'development control system' for high-rise residential buildings to facilitate the latter's social, economic and environmental relevance in promoting city sustainability?

The paper is divided into five sections. Section 1 presents the research problem and its conceptual underpinning, while Section 2 presents the method. The findings and discussion are presented in Sections 3 and 4 respectively, while the concluding section outlines the major policy implications of the paper.

#### 2. Method

The paper adopts the real estate development model [10] to simulate the land development process for high-rise blocks of apartments (condominiums) (Figure 1) that planners should lead in protecting lives and property from fire disasters and terror attacks. The paper uses a combination of secondary data and author's first-hand site observations as a planner and realtor with customer service experience in ten condominiums across Toronto and Mississauga in Ontario, Canada, between 2008 and 2017, and as an Ontario resident in three different condos between 2006 and 2017. The case study used is the typical high-rise *Standard Residential Condominium* in Ontario, a form of ownership where the title to a unit is held together by a share in the rest of the property, which is common to all of the owners [11].

#### 2.1 Model Specification

According to [10], the real estate development model is organized around a 56-cell, fuzzy stage-task matrix (Table 1), which describes the entire real estate development process in seven stages (columns) and eight tasks (rows). The model allows the developer to create value during the life cycle of a project starting from the land banking stage and ending at the land redevelopment stage. It is contended that this model is analytically superior to the conventional development control apparatus that many planners have criticized as weak.

Some tasks in the model are not done in any particular order and many are done simultaneously. A developer must *work down a column* or stage to create value in the process, while a professional (e.g. a planner) must identify his/her skills in the task

categories and then *work across the row* to determine how s/he fits or profits in the development process [10].

### 3. Findings

In this section, the research question posited in Section 2 of the paper is answered using the typical *Standard Residential Condominium* in Ontario as a case study. This approach helps us to understand how planners can get better involved in the development process, with the aim of providing project management services that are geared towards protecting high-rise residential buildings from fire disasters and terror attacks.

#### 3.1. Revised Standard Residential Condominium Status in Ontario

Due to the growth and change in Ontario's condo sector over the past 16 years, Ontario announced a review of [12] in June 2012, following a collaborative public engagement process. The review recommends, *inter alia*, that condo boards may carry out modifications to the common elements, any assets of the corporation, or services the corporation provides without notice to owners, for example, to ensure the safety or security of those in the condo property or prevent imminent damage to the property or any assets of the corporation.

The newly proposed changes "without notice" enable a condo board to authorize an addition, alteration or improvement to the common elements, a change in the assets, or a change in the service the corporation provides without consulting owners. The requirement not to give any notice to condo owners is significant as this will help forestall red tapes and fast-track urgent implementation of new condo works and repairs. The amendments also broaden the purpose of condo reserve funds to include (i) major repair to units, in addition to the common elements and any assets of the corporation, if a corporation has an obligation to repair units; and (ii) other items and projects set out in the Condo Act's regulations (e.g., energy-saving projects). In addition, the regulations have set out what constitutes a "major repair" [12].

# 3.2. A Critical Analysis of Planners' Role in the Condo Development Process

As hinted earlier, the most important analysis of the sustainable nature of a building project is made when the development is seeking various public approvals and permits prior to the construction of both horizontal (infrastructure) and vertical (building) improvements throughout its life cycle. This is why planners, plan approvals and permits are key aspects of this pursuit. A reminder of our research question:

What are the key features of the 'land development process' that may be embedded in the existing 'development control system' for high-rise residential buildings to facilitate the latter's social, economic and environmental relevance in promoting city sustainability?

This section is designed to answer the research question by critically examining how the typical planning authority and planning officials in Ontario are performing their responsibilities of issuing planning approvals and permits under each of the seven stages of

the development process. While current practices in Ontario generally compare favourably with best international experiences, there are still some loopholes that must be plugged.

### 3.2.1. Land Banking Stage

- i) The condo developer meets with staff of the City/Municipality for pre-consultation, searches for funds, secures a suitable site and then submits a complete condominium development application for approval. The developer should at this point appoint a planner as project manager, which is not the case at present.
- ii) The City/Municipality charts the coordinates of the survey plan of the site on the City's Official Plan to confirm the zoning and circulates the completed condominium application to staff and external agencies for internal and external reviews. If the reviews are confirmed as successful by the Development Services Committee (D.S.C) or local planning officials, the Draft Condominium Plan may be approved with conditions, and within 20 days referred to the Ontario Municipal Board for hearing if there is an appeal. The City then prepares the Condominium Agreement (if necessary) and clears conditions of approval. If all goes well, the City issues final release for registration of the condominium and the file is closed.

However, the City should then start seriously monitoring the approved plan through regular site inspections (development control) to ensure that the approved plan agrees with site conditions on a daily basis. If any contravention is noticed, appropriate sanctions such as "Stop Work" or "Demolition Notices" must be served on the developer. Against what may be happening in certain jurisdictions, planning authorities should always tie the legal land title to ownership of project plan(s) as a condition for granting planning permission as done in the UK, or ask for deed of transfer of land as a proof of land ownership by the developer.

- iii) Ontario Ministry of Municipal Affairs and Housing should only issue certificate of occupancy after carefully verifying community's support for the project. If there are objections (e. g. by *NIMBY* groups), the applicant may appeal to Ontario Municipal Board (OMB), whose decision is final.
- iv) The Federal Government is expected to monitor land acquisitions for project development in the entire country for national security reasons. Towards this end, the Federal Lands Ministry in collaboration with the Ontario Ministry of Municipal Affairs and Housing must always perform security checks before approving the purpose of land acquisition (land banking) for project development. It is also desirable that land acquisition is tied to the national multi-purpose Land Information System (LIS) for national security reasons.

## 3.2.2. Land Packaging Stage

 The condo developer should seek further advice from the project manager (a planner) on land planning and zoning issues and from lending experts on project financing; obtain professional advice on project feasibility/viability 5 of 9

- and risk-return trade-off from real estate appraisers; and complete site environmental studies.
  - ii) It is only after completion of these investigations that the City/Municipality may approve land packaging proposals and issue occupancy permit. The city may also determine at this stage if a draft condo development application must go to the Development Services Committee (DSC) for review.
  - iii) With due respect to fairness and equity when private property rights are affected, Ontario Ministry of Municipal Affairs and Housing may review the project's zoning or rezoning status relative to other vacant lands in the city (public lands, First Nations' lands and privately-owned lands) based on the zoning by-law.
  - iv) Federal Government may approve the EIA Report and consider other federal issues related to the condominium project. EIA should always remain a federal issue for national security reasons in this era of terrorism.

# 3.2.3. Land Development Stage

- i) The condo developer must seek audience with the planning authority for plan review where site conditions compel minor alterations to the approved plan; obtain short-term bank loan(s) and agreements on restrictive covenants, easements and development charges.
- ii) The City / Municipality must continue to closely monitor site activities to ensure that the approved plan is strictly followed by the main contractor and sub-contractors.
- iii) With public participation, Ontario Ministry of Municipal Affairs and Housing may approve community transportation plans pertaining to the site; verify EIA report; and undertake project clearance for piped water, electricity, telephone and sewerage services. It is unhealthy for city residents living in some condos to be peripherally served with mass transit buses. This detracts from city sustainability.
- iv) The Federal Government may have no direct involvement in the land development stage and in the subsequent stages of the development process, except where the project is owned by it or any of its agencies operating in the province.

## 3.2.4. Building Development Stage

- i) Contrary to what happens presently, the condo developer must provide planner-led project management services and seek timely audience with the planning authority for plan review where necessary. S/he may obtain long-term bank loan(s).
- ii) The City/Municipality must ensure that the approved plan is implemented using resilient green building technology and crime/terror-proof materials; conduct frame inspections and regular site inspections; and evaluate progress on site relative to the approved plan.

- iii) Ontario Ministry of Municipal Affairs and Housing can now resolve outstanding building permit matters, including litigations. Fire Authority must issue fire certificate and disabled access clearance.
  - iv) Against current practice, the project architect's certificate of building completion cannot be issued to the condo developer until authorized by the planning authority.

### 3.2.5. Building Operations Stage

- i) Unlike current practice, condo developers must continue to provide planner-led project management services until a Condo Board takes over after reimbursing the owner the full cost of developing the condo using the proceeds of condo sales. A certificate of project's compliance with all building, planning and environmental regulations must be obtained and residents' and neighbours' complaints about the building's operations resolved to avoid litigations and disasters. Eventually, the Condo Board will take ownership of the project, but it must immediately open a Condo Reserve Funds account.
- ii) The City / Municipality must regularly revalidate fire rating approval; conduct regular site inspections; and perform regular condo performance assessments that are currently not a priority in many condos. This was one major criticism against the operators of London's Grenfell Tower.
- iii) Ontario Ministry of Municipal Affairs and Housing must revalidate the certificate of project completion issued by the architect and ensure that the developer obtains an insurance cover for the entire building. The project must be insured for the full reinstatement cost of all improvements and equipment on site, which must be regularly verified by the Ministry.

# 3.2.6. Building Renovation Stage

- i) Some condo owners tend to downplay the reality that renovation will ultimately become necessary at the end of a building's economic life due to depreciation. Planning authorities should issue red alerts for timely renovation works for which necessary approvals and permits must be obtained and enforced.
- ii) The City / Municipality must exercise due diligence in issuing planning consent for renovation; conduct frame inspection; issue occupancy permits; conduct regular site inspections during and after the renovation; and perform periodic condo performance measurements. All residents' and neighbours' complaints about the condo's past operations must be resolved to avoid litigations and possible disasters.
- iii) Ontario Ministry of Municipal Affairs and Housing may extend or renew the building lease if the old one is deemed to have expired; revalidate the survey plan to confirm that there are no land disputes; and issue planning consent authorizing the renovation, which must comply with all fire and crime (terror) prevention regulations.

### 3.2.7. Site Redevelopment Stage

The site redevelopment stage is essentially a repeat of Stage 1 (above) as the project is now a new development that must pass all the previous tests for approval all over again. No assumptions should be made regarding the suitability and legality of the land and building(s) to be redeveloped on the same site as many elements of the old condo project may have changed over time.

#### 4. Discussion

Successful real life adaptation of the condo development model simulated in this paper depends on the efficiency of the legal framework for urban planning in Ontario, under the aegis of the Ministry of Municipal Affairs and Housing. The vision of the Ministry is to ensure that towns and cities in Ontario Province become place-making centres with well-designed, well-planned and smart communities that are capable of attracting jobs and sustainable investment opportunities where municipalities are given responsibilities for making cost-effective land use planning decisions. Towards this end, the Ministry takes full responsibility for identifying and protecting provincial interests and promoting sound infrastructure planning, environmental protection, economic development and safe communities [13].

However, following series of public criticisms against the planning system in the province, including some of the challenges identified in this paper, the Provincial Government approved a new legislation in 2017 tagged, "The Building Better Communities and Conserving Watersheds Act, 2017; to overhaul Ontario's land use planning and appeal system by creating the Local Planning Appeal Tribunal, which now replaces the Ontario Municipal Board (OMB). This Act was a sequel to a review of the scope and effectiveness of the Ontario Municipal Board (OMB) launched by the Ontario Government in June 2016.

The review, which included extensive public consultations across various communities in the province, resulted in significant changes to Ontario's land use planning and appeal system that also have implications for the Ontario *Condominium Act*, 2012 already examined in this paper. The guiding principles, which helped in framing the OMB Review included: protection of long-term public interests; maintenance or enhancement of access to dispute resolution; provision of transparency in hearing appeal processes and decision-making; and minimization of adverse impacts of the review on the court system [13]. Without the OMB review, the purpose of this paper focusing on how urban planners may be used to increase city sustainability through the development process would be an illusion.

# 5. Conclusion

The central thesis of this paper is that, as an experimental scenario, the holistic real estate development process [10] can be used to synergize development control and advance a role for planners as chief promoters of *strong sustainability* in cities. As planners hold the key to approving or rejecting development applications during the development process, they can perform two major roles. First, they can guide any city in averting disasters in high-rise residential buildings through careful approval of design and construction techniques for sustainable development and green buildings. These are best appreciated by society in the

context of the life-cycle of the building, rather than at the beginning of building construction or renovation as conventional development control does. Second, and as a sequel to the first, planners can proactively lead other members of the development team in planned prevention of fire disasters and terror attacks in buildings.

The paper uses the *Standard Ontario Residential Condo* as a case study, in addition to answering a research question, to demonstrate critically how planners and planning authorities can increase city sustainability by providing leadership in the seven-stage land development process. It is contended that this conceptual approach, if thoughtfully applied, has a great potential for facilitating development control's social, economic and environmental relevance as a tool for achieving city sustainability. The key policy implications of the paper are as follows:

### i) Holistic Involvement of Planners in the Development Process

Planning Authorities will have to overhaul the current development control system, which only focuses on a few stages of the development process. Instead, planners must play a leading role in a new-style development control that spans the entire life cycle of buildings.

# ii) Power Balance and Dispute Resolution

Effective post-development management of high-rise residential (condo) properties depends on power balance between condo boards and owners/tenants. The good news is that the Act [12] has corrected the old imbalance by providing a faster, more effective, less expensive and fairer dispute resolution process. Planners must play a strong role in this amended policy.

### iii) Green Building Construction Strategies and Disaster Prevention

Planning Authorities must proactively enforce fire-resistant and energy-saving strategies in condo development. These include safe ingress and egress routes, fire doors, green building technology and a functioning fire alarm system that is remotely connected to local fire stations for rapid consumer protection and smooth evacuation in case of danger. Every high-rise residential building must conduct periodical fire drills for all occupants, while fire systems should be inspected regularly and certified as functional.

#### iv) Long-term Site inspections by Planning Officials

Planning Authorities must obtain a register of all condos and other high-rise buildings in their areas of jurisdiction and use it to prepare a Rota for conducting long-term site inspections by building inspectors and engineers throughout the buildings' life cycles. They should collaborate with the Property Manager, the Condo Board, the residents and the Concierge of each condo for daily exchange of useful information 24/7 that can help in nipping disasters in the bud.

#### v) Due Diligence

- During and after the processing of development applications, planners and planning authorities must exercise due diligence when dealing with developers and utility agencies.
- 348 Sanctions must be applied against any development application that cannot provide
- 349 sufficient evidence of adequate facilities having been provided in building plans and on
- building sites to prevent unnatural disasters from happening.

351352

353

354

355

356

357

Finally, Planning Authorities and planners must develop a proactive approach to turn building approvals and permits into activities that permeate the whole life cycle of high-rise buildings. They must prevail on professional condo managers to avoid negligence in selection of condo owners/buyers, tenants and visitors with links to extremism. Corruption in the land development industry as a whole should be probed by the Ontario Ministry of Municipal Affairs and Housing. Above all, planners should stand up and defend their worthy mandate as public interest specialists.

358359

Acknowledgments: The author is deeply grateful to the Managers, Supervisors and Boards of the various condominiums where he acquired professional-customer service experience, for their kind support and cooperation in allowing him to learn first-hand what can hardly be learned from textbooks on condominiums. The experience spurred the author's interest in this paper.

365

366 **Conflict of Interest:** The author declares no conflict of interest.

### 367 References

- 368 1. Cozens, P. Think Crime! Using Evidence, Theory and Crime Prevention through Environmental
- 369 Design (CPTED) for Planning Safer Cities; Praxis Education: London, UK, .2015.
- 2. Amos, F. J. C. Development Control Reappraised. In: Value for Money in Development
- 371 Control, University of Birmingham, Birmingham, UK, 1980, pp. 1-4.
- 372 3. Dissanayake, L. Effectiveness of the Development Control System for the City of
- Colombo, Sri Lanka. Working Paper No. 36, Based on an MSc Dissertation, 1987.
- 4. Brundlant Report 1987. Available online:
- 375 http://www.dac.dk/en/dac-cities/sustainable-cities/historic-milestones/1987--brundtland-re
- port-our-common-future/ (accessed on 15 January, 2018).
- 5. Lennon, M. On 'the subject' of planning's public interest, Planning Theory, Epub ahead
- 378 of print 12 January 2016. DOI: 10, 1177/1473095215621773. Google Scholar.
- 6. Faber, M. How to be an ecological economist, *Ecological Economics*, 66 (1): pp. 1-7,
- 380 7. Meyerson, M. and Banfield, E. Politics, Planning, and the Public Interest: The Case of
- Public Housing in Chicago. New York: Free Press, 1955.Google Scholar.
- 382 8. Daly, H. Steady-State Economics, 2nd ed., Island Press, Washington, D.C., 1991.
- 9. Solow, R. M. Georgescu-Roegen versus Solow-Stiglitz. Ecological Economics, Science Direct,
- 384 22 (3), pp. 267-68.
- 385 10. Kohlhepp, D. B. The Real Estate Development Matrix, Proceedings of the American Real
- 386 Estate Society Meetings, St. Petersburg, Florida, USA, 21 April, 2012.
- 387 11. RECO. Course 3 Advanced, The Residential Real Estate Transaction, Real Estate Council
- 388 of Ontario: Toronto, Canada, 2011.
- 389 12. Ontario Condominium Act 2012. An outline of the changes to Ontario's condo laws.
- 390 Available online: https://www.ontario.ca/page/condominium-law-changes (accessed 8
- 391 January, 2018).
- 392 13. Ontario Ministry of Municipal Affairs and Housing: Land Use Planning. Available
- online: http://www.mah.gov.on.ca/Page186.aspx (accessed 8 January, 2018).