

# ALTERNATIVE GUIDELINES AND PRACTICES FOR MUNICIPAL PLANNING AND DEVELOPMENT

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### BACKGROUND

In recent years, conventional urban planning and development has come under increasing scrutiny from a variety of social, economic and environmental perspectives. In particular, the conventional post-war suburb has been critiqued for its land consumptive, car-dependent, single-use, energy inefficient, costly, and homogeneous pattern of development. On a general level, many of these critiques fall under the rubric of sustainable development, an issue given international political prominence by the work of the United Nations Commission on Environment and Development in 1987 (also known as the Brundtland Commission).

Since the Brundtland Commission published *Our Common Future* in 1987, a plethora of policy statements, public consultations, and action plans related to sustainable development have been developed in various sectors, professions and at various levels of government. In the planning field, there is now a growing body of literature detailing ways to support more sustainable urban development. These “alternative” approaches tend to foster or encourage a greater degree of environmental sustainability, economic efficiency and/or social diversity through the adoption and implementation of a variety of plans, guidelines, policies and practices.

The following collection of documents presents a number of guidelines and practices for municipalities interested in exploring alternative planning and development options that are generally consistent with more sustainable forms of urban development. These documents are organised and presented under the following subject categories:

- transit-supportive land-use planning;
- planning for more sustainable suburbs;
- alternative development standards;
- planning for reurbanisation.

### ORGANISATION

This document pulls together a selection of existing resources on alternative guidelines and practices in municipal planning and development available through the ICURR library collection. In selecting publications for inclusion in this document, the following criteria were considered: currency, Canadian content or relevance, and the potential for practical application by municipalities. Related topics such as infill development and intensification are not included in this document as they have been the subject of other recent ICURR publications (see *The Compact Metropolis: Growth Management and Intensification in Vancouver, Toronto and Montreal*, ICURR Press, 1997). Entries are presented in chronological order, beginning with the most recent works in each section. While this review of alternative planning resources is wide-ranging, it is by no means exhaustive.

## ICURR LITERATURE SUMMARIES

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## OTHER ICURR LITERATURE SUMMARIES

July 1998      *Healthy Cities, Healthy Communities*  
 July 1998      *Performance Measurement and Program Delivery*  
 August 1998   *Remediation and Redevelopment of Former Industrial Sites*

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## TRANSIT-SUPPORTIVE LAND-USE PLANNING

**Morris, Marya (ed.). 1996. *Creating Transit-Supportive Land-Use Regulations*. Planning Advisory Services Report Number 468. Chicago: American Planning Association. (72 pages, bibliography, ICURR Doc. PAS 468, English)**

### ***Purpose***

To assist public officials, planners, transit operators, developers and designers and others in implementing transit-supportive transportation and growth management goals and policies.

### ***Key Definition(s)***

The goal of a *balanced transportation system* is to offer community residents a variety of travel choices (p. 1). *Transit-supportive communities and sites* are generally synonymous with pedestrian and bicycle-friendly communities and sites (p. 3). *Transit-supportive mixed-use development* is characterised by land uses that are compatible, mutually supportive, located within 1/4 mile of each other, and linked by safe, direct and convenient connections between the varied uses (p. 27).

### ***Summary***

This report provides an overview of zoning regulations and implementation strategies that encourage transit-supportive land-use patterns and site development practices. While mostly American in content, the proposed ordinances allow for flexibility in designing transit-supportive regulations, and the implementation strategies are applicable to a variety of community settings. This report also details the important linkages and factors that influence the success of transit-supportive planning efforts. The report is divided into four sections, each detailing a critical component of developing a comprehensive network of transit-supportive land-use regulations. Each section provides background information, references to relevant studies, suggested areas for action, and examples of specific zoning ordinances.

### ***Key Findings, Conclusions and Recommendations***

Transit-friendly land-use regulations help to create more balanced transportation systems that offer residents more travel choices. To be successful, transit-supportive land-use regulations should address key factors such as the pedestrian environment, mixed-use development and density considerations.

Transit and pedestrian-friendly site design requirements include several inter-related areas, including: the creation of continuous, direct and convenient linkages; improvements of the pedestrian environment; and the provision of public open spaces.

Increasing the density of residential areas is integral to improving transit use and service levels, and reducing costs (Appendix A). For example, it is estimated that an average of 15 dwelling units per acre is required to support high-frequency bus service. One study showed that as this density approaches 30 dwelling units per acre, transit ridership tripled. Another study showed that a shift from car to transit use does not occur until employment densities reach 50 to 75 employees per gross acre.

The integration and mixing of compatible and complementary residential and commercial uses in various forms facilitates travel by transit, walking and bicycle and reduces the need for car travel. Land-use patterns and site development practices exert a significant effect on the efficiency, convenience, and cost effectiveness of transit, pedestrian and bicycle travel.

SECTION 1: transit and pedestrian-friendly site design requirements; SECTION 2: parking; SECTION 3: mixed-use development; SECTION 4: increasing density to support transit.

**European Conference of Ministers of Transport (ECMT) and the Organisation for Economic Co-operation and Development (OECD). 1995. *Urban Travel and Sustainable Development*. Paris: ECMT and OECD. (238 pages, bibliography, ICURR Doc. UF 008, English and French)**

### **Purpose**

To examine the role of economic incentives/disincentives, land-use planning, traffic management approaches, and the use of marketing, telematics and other innovations in reducing car travel and improving public transport.

### **Key Definition(s)**

Settlements that do not consume more than can be replaced have prospects of continuing indefinitely and may be considered *sustainable* (p. 29).

### **Summary**

Concerns regarding air pollution, congestion, noise, acid rain and the risk of global warming associated with increasing automobile dependence led to the formation of the Project Group on Urban Travel and Sustainable Development, a three-year joint ECMT/OECD inquiry. This book is the summation of the inquiry's work. The Project Group was charged with the task of analysing the influence of land-use and transport policies on car travel in urban areas. The inquiry reviewed the experiences of 20 countries and 132 cities in Europe in reducing car-related congestion, accidents and air pollution. The book is divided into three parts: the first section reviews key urban trends and problems; the second explores the lessons learned from past efforts as well as the economic and environmental effects of continuing with current planning practices and policies; and the final section proposes solutions likely to achieve more transit-supportive, sustainable urban development. Complete with case studies, national-level policy summaries and references to relevant transportation studies, this book provides a comprehensive look at the challenges of urban travel and sustainable development.

### **Key Findings, Conclusions and Recommendations**

Present practices in land-use planning and transportation, along with growing urban deconcentration and car use have significant social, economic and environmental consequences. About three-quarters of the population of ECMT/OECD countries live in urban areas. Private car travel is expected to double in most of these countries within the next 30 to 40 years. The economic, social and environmental costs of car travel in OECD countries is currently estimated to be 5% of Gross Domestic Product (GDP).

Increasing urban car traffic causes congestion, air pollution, noise, acid rain and global warming risks. Finding ways to reduce car travel in suburban areas presents a particular challenge. Travel habits, lifestyles and the location of jobs will need to change to reverse current trends. Land-use planning is an essential part of transit-supportive development based on its potential to shape a more sustainable pattern of urban settlement and guide the location of major travel-generating uses.

The book recommends an integrated, coherent and comprehensive "policy package" approach to address the challenges of urban travel and sustainable development. This package requires a mix of strong policy instruments, such as traffic management, land-use planning, higher pollution standards and significantly higher charges for cars.

PART 1: background trends and problems; PART 2: policy analysis; PART 3: policies for the 1990s and beyond.

**Cervero, Robert. 1993. *Transit-Supportive Development in the United States: Experiences and Prospects*. Washington, DC: Federal Transit Administration. (234 pages, bibliography, ICURR Doc. TI 058, English)**

## **Purpose**

To explore the impacts of transit-supportive developments on transit demand through an examination of recent experiences with such projects in the suburbs and exurbs of large American metropolises.

## **Key Definition(s)**

*Transit-supportive site design or development* refers to places with site designs and land-use patterns that are meant to promote transit use and walking. Walking is included with transit use as all transit trips involve walking to access transit stops or stations. By definition, *transit-friendly environments* must also be pedestrian-friendly environments (p. 3).

## **Summary**

This research assesses the relationship of transit-supportive development and transit ridership at three levels: individual sites (micro-scale), neighbourhoods (intermediate scale) and communities (macro-scale). The report also examines issues of implementation, and how market and regulatory factors have influenced transit-supportive development and design. The report pays particular attention to the impact of transit-supportive site design and land-uses on transit demand. To examine evidence of this relationship, the report draws on case studies from Europe and large US metropolitan centres and comparisons between transit-supportive and auto-oriented developments.

## **Key Findings, Conclusions and Recommendations**

It is very difficult for mass transit and other non-automobile travel modes to compete with the private automobile in a landscape characterised by low densities, segregated land uses, free and extensive parking space, circuitous street lay-outs and scattered work/home origins and destinations.

At the micro-level, a national survey of US transit agencies revealed a surprisingly small number of real estate projects outside of rail corridors considered by transit officials to be transit-supportive. Most of these incorporated micro-design features (e.g. benches at bus stops) rather than macro-design features (e.g. mixed-use developments). For the most part, differences in bus-only transit-ridership were modest across such sites. The strongest predictor of transit use at such sites is commuter proximity to rail stations and rail access to work destinations.

At the intermediate level, comparisons between the commuting characteristics of transit-supportive and auto-oriented neighbourhoods in different cities revealed that the former had higher densities and a more grid-like street pattern.

At the macro-level, comparisons showed that traditional communities tended to have higher transit-ridership rates than conventional suburbs, especially when linked by rail transit to metropolitan centres and supported by neo-traditional design, better jobs-housing balance, higher densities and regional planning efforts to limit sprawl. At the macro-level, transit trips increase as an exponential function of residential and employment densities.

Densities, cost differentials between transit and car travel, structural elements of the built environment, quality of transit service and pro-active measures to reduce auto-dependency are the primary determinants of travel choice, and as such, are more significant factors in determining transit use than transit-friendly micro-design features. The impact of micro-design schemes may be rendered insignificant by the larger influence of macro-level, auto-oriented developments.

Possible benefits from transit-supportive development include the following: improved mobility and environmental conditions, increased supplies of affordable housing, increased revenues to transit agencies, more efficient urban form and other social benefits such as inner-city revitalisation and reinvestment.

CHAPTER 1: transit-supportive development in the United States - issues, opportunities and research approach; CHAPTER 2: previous research on impacts of land uses and built environments on travel demand; CHAPTER 3: design guidelines as a tool to promote transit-supportive development; CHAPTER 4: case studies of transit-supportive development at the site and activity centre levels; CHAPTER 5: evidence on travel behaviour of transit-supportive residential neighbourhoods; CHAPTER 6: community development, land-use patterns and commuting choices; CHAPTER 7: summary and conclusions.

**Ministry of Transportation and Ministry of Municipal Affairs and Housing. 1992. *Transit-Supportive Land-Use Planning Guidelines*. Toronto: Queen's Park Printer. (109 pages, bibliography, ICURR Doc. TG 154, English and French)**

### **Purpose**

To outline a set of guidelines that show how all forms of development and redevelopment can be made more accessible by public transit, and to provide ideas and guidance on planning and development practices which support the provision and use of public transit.

### **Key Definition(s)**

*Transit-supportive land-use planning* supports a pattern of development that makes transit less expensive, less circuitous, more efficient, more convenient and more agreeable to the potential transit user (p. 1).

### **Summary**

This report summarises the “state of the art” knowledge about developing transit-oriented communities. A set of guidelines outline practical ideas on planning and development practices that support the provision and use of public transit in both large and small urban centres. The guidelines are intended for use by land-use planners, transportation planners, municipal politicians, developers, transportation engineers and transit operators. These guidelines draw from experiences in Ontario, North America and abroad. Although this report focuses on *how* planning and development practices can help communities reduce automobile dependence and increase transit use, it also provides a rationale for *why* transit-supportive land-use planning is important. Each guideline is accompanied by background information and suggestions for action depending on the planning scale (e.g. site-specific, neighbourhood, municipal or regional) and the size of the community (e.g. small, medium or large). The report is organised around three subject headings: land-use, physical design and process issues and incentives.

### **Key Findings, Conclusions and Recommendations**

When all costs are considered, transit is a more effective and efficient method of transportation than the automobile. Urban structure, density and mix of uses are important determinants of transit use, convenience, revenues and costs.

Mixed-use activity nodes at transit intersection points and mixed-use activity corridors along major transit routes are important steps towards achieving transit-supportive land-use planning. A better balance between employment and residential uses may increase transit use and reduce trip lengths.

As transit-supportive planning requires a more compact, higher density development pattern, planning for transit can also produce other benefits such as cost savings in the provision of municipal infrastructure and services, more travel choices, and protection of natural areas and agricultural land.

Transit-supportive land-use planning is an important step in moving towards more sustainable urban development and an improved urban environment. In planning for transit, four major urban design principles are important to consider:

- a grid network versus a discontinuous road network to improve the potential for transit service, use and access.
- street-oriented uses along arterial roads to support pedestrian and transit-friendly environments.
- a mix of higher density uses along arterial roads to encourage transit use and reduce trip generators and travelling distances.

- increased access between arterials and neighbourhood blocks for pedestrians and transit.

Together, these components provide an integrated approach to creating more transit-oriented communities that address both planning and policy-related issues. The best approach to transit-supportive land-use planning is to implement transit-supportive development practices and design principles from the outset.

SECTION 1: introduction; SECTION 2: land-use planning, urban structure, activity nodes and corridors; SECTION 3: physical design, urban form, road networks and streetscape design; SECTION 4: process issues and incentives, planning documents, transit-priority measures, parking supply and pricing.

## PLANNING FOR MORE SUSTAINABLE SUBURBS

**Blais, Pamela. 1996. *Economics of Urban Form*. Report prepared for the Greater Toronto Area Task Force. Toronto: GTA Task Force. (56 pages, bibliography, ICURR Doc. UH 085, English)**

### ***Purpose***

To assess the relative monetary costs associated with different urban form alternatives, specifically as they apply to alternatives for accommodating anticipated growth in the Greater Toronto Area (GTA).

### ***Key Definitions***

*Sprawl* is usually defined as a pattern of discontinuous urban growth (US) or continuous, low-density urban growth (Canada) (p. 3).

### ***Summary***

Since 1945, the conventional pattern of development in the GTA has been characterised by low-density, single-use and auto-dependence. Despite significant social and economic changes, this pattern of development has become entrenched in zoning by-laws and development standards. With the population of the GTA expected to grow by 2 million residents by 2021, the Greater Toronto Area Task Force commissioned this report to assess the relative monetary costs associated with different urban forms. In assessing these costs, the report reviews a number of previous studies that have evaluated the cost of development patterns, as well as the costs associated with three growth scenarios for the GTA, termed “spread, nodal and central.” The report emphasises the need for cities to adjust their patterns of development to become more efficient, flexible, strategic in their investments, productive and responsive to social and environmental issues. Although based on the GTA, the costing of urban form alternatives holds relevance for other urban areas with concerns about managing growth and sprawl.

### ***Key Findings, Conclusions and Recommendations***

The capital, operating, maintenance and replacement costs of urban infrastructure are significant and vary considerably with urban form.

An urban form with relatively high net densities, higher gross densities, mixed land-use patterns, contiguous development and a smaller urbanised area will have lower infrastructure costs than communities with a low density, single-use, discontinuous land-use pattern.

Components of infrastructure costs that are particularly sensitive to urban form are: frontage costs, regional arterial roads, provincial highways and expressways, transit and school busing, and regional water and sewer trunk networks.

When external costs (e.g. traffic congestion, air pollution, loss of agricultural and natural areas) are included in operating and maintenance costs, the cost differences between conventional low-density development and more efficient higher-density alternatives are particularly pronounced.

Savings from more efficient development patterns would accrue to homebuyers, renters, businesses, the provincial government, local and regional municipalities and taxpayers.

The study makes recommendations for change in the following four areas:

- reduce the costs of urban infrastructure through more efficient urban forms and alternative development standards.
- remove regulatory obstacles.
- remove market distortions by adopting a cost-based, market-oriented approach to revenue-generating mechanisms such as development charges to reduce sprawl or generate the revenues to pay for it.
- adopt a consistent and co-ordinated regional approach for managing growth in the GTA.

SECTION 1: introduction; SECTION 2: costing urban form; SECTION 3: the *Greater Toronto Area Urban Structure Concepts Study*; SECTION 4: conclusions; SECTION 5: policy options and actions.

**Krizek, Kevin and Joe Power. 1996. *A Planner's Guide to Sustainable Development*. Planning Advisory Service Report No. 467. Chicago: American Planning Association. (66 pages, bibliography, ICURR Doc. PAS 467, English)**

***Purpose:***

To review sustainable development theory and progress; to describe what it means to pursue sustainability at the local level; to propose strategies for local planners to implement sustainable development programs; and to provide concrete case studies and references to further action and research.

***Key Definition(s)***

*Sustainability* seeks a balance between social equity, economic prosperity, and environmental integrity and addresses four key characteristics: inter and intra-generational equity, protecting and living within the carrying capacity of the natural environment, minimisation of natural resource depletion, and satisfaction of basic human needs (p. 7). This work also refers to the definition of *sustainable development* proposed in the 1987 United Nations' World Commission on Environment and Development report, *Our Common Future*: development which meets the needs of the present without compromising the ability of future generations to meet their own needs (p. 10).

***Summary***

A summary document tailored specifically for use by planners that outlines key concepts, theories, policies and potential actions related to the realisation of sustainable development at the local level. This report reviews key landmarks in the evolution of the concept and theory of sustainable development and presents concrete case studies of local action to achieve sustainable development. Case studies include sustainable development programs in Seattle, Santa Monica, Chattanooga, Cambridge, and Olympia. While the report focuses mostly on American experience, many of the recommendations, vision statements, community-based strategies and tools proposed in the material are generally applicable to the Canadian context as well.

***Key Findings, Conclusions and Recommendations***

The planning profession in the United States has been slow to embrace the theory, tools and examples of sustainable development. Interdisciplinary approaches, public involvement, inter-sectoral and interagency co-operation are key tenets to planning for more sustainable urban development.

Many of the fundamental principles behind sustainability are consistent with the concepts now considered some of planning's "best practices" such as mixed-used development, compact urban form, and increased transit use. Sustainable development requires consideration of the interdependence between economic, social and environmental factors, and increased attention to the aggregate impact and inter-relatedness of planning decisions made in areas such as land-use, housing, and transportation (Appendix B).



It is important for planners to assume a broader role in community planning by focusing on the creation of more liveable, sustainable communities. Sustainable development programs need to be developed in the context of local realities. The report recommends a three-phase approach to developing a sustainability program model:

- *Phase I:* establish a broad-based steering committee to co-ordinate the development and monitoring of the program; conduct an inventory of existing sustainable development programs and resources; develop a vision and principles for sustainable development to guide action through community consultation.
- *Phase II:* develop partnerships in priority areas to encourage integrated approaches; promote and market the sustainable development vision to stimulate public interest; form an inter-departmental committee to foster collaboration and share information.
- *Phase III:* develop an action plan based on community priorities; develop monitoring and assessment systems; design indicators and data collection systems.

CHAPTER 1: global problems, local solutions; CHAPTER 2: sustainability - concepts and policy; CHAPTER 3: sustainability and local planning - scope of local government action and the planner's role; CHAPTER 4: sustainability at the local level - implementation and monitoring; CHAPTER 5: case studies of local sustainable development programs.

**Planning and Building Department, City of Calgary. 1995. *Sustainable Suburbs Study*. Calgary: Planning and Building Department. (99 pages, bibliography, ICURR Doc. UG 174, English)**

### ***Purpose***

To find ways to: reduce the costs of suburban development; design more liveable suburban communities that are accessible to a broad cross-section of society; provide options for housing and mobility that are adaptable to changing demographics and lifestyles; and reduce environmental impacts through community and building design.

### ***Key Definition(s)***

*Sustainability* is a term used globally to recognise the interdependence of economic development, social well-being and the natural environment (p. 2). *Sustainable suburbs* are defined as having three essential components: (1) *fiscal*: the costs of building, operating and maintaining new communities and their supportive infrastructure and services are affordable, having regard to other spending priorities and not being a burden on future generations; (2) *social*: communities are designed to be socially diverse, adaptable to changing lifestyles and to further the objective of providing all Calgarians with access to affordable housing, education, health care, essential goods, public amenities and services, such that basic needs are met; (3) *environmental*: communities are designed to minimise air, water, and soil pollution, reduce resource consumption and waste, and protect natural systems that support life (p. 3).

### ***Summary***

This study was undertaken to complement the Calgary Transportation Plan, control the costs of growth, better meet people's needs and to encourage more sustainable lifestyles. The study is the result of a collaborative planning exercise involving city departments, the development and building industry, school boards, and a number of other agencies and individuals. The study seeks to encourage developers, city departments and others to explore and implement a variety of ways to design more sustainable communities. To this end, the report reviews key terms, definitions, concepts, issues and strategies for achieving more sustainable residential communities in Calgary. This report provides a resource for other communities considering planning measures and policies to support more sustainable communities.

### ***Key Findings, Conclusions and Recommendations***

The design of communities and buildings, facilities, services can help to foster more sustainable lifestyles. General characteristics of a more sustainable community include the following:

- *fiscal*: lower costs through more compact urban form, better utilisation of services, and less infrastructure.
- *social*: vibrant community life, wide housing choice, attractive public areas, routine shopping needs met within community, some mix of uses within community, need for car reduced.
- *environmental*: more efficient use of land, reduced vehicle trips, reduced waste and increased conservation, natural areas protected and integrated into regional open space system.

The city's recommended strategy for achieving more sustainable communities focuses on the design of an "urban village" where local shops, services and employment opportunities are available to reduce reliance on cars, regional shopping malls and commuting. To achieve more sustainable communities, the study recommends the incorporation of a number of elements into the design of new communities (Appendix C):

- a recognisable focal point and boundaries and a mixed-use public activity center to give the community a concrete identity and offer local residents services and goods to meet daily needs.
- parks, schools and shops within a comfortable walking distance of homes.
- safe, pedestrian and bicycle-friendly streets that provide direct connections between homes and community and transit facilities.
- a wide choice of housing types to meet the needs of a diverse range of households.
- a range of local employment opportunities.
- an efficient public transit system to offer a viable alternative to car use.
- protected natural areas and linked open spaces, all connected to the regional open space system.
- connections to the regional pathway system to provide safe transportation and recreation options for pedestrians and cyclists.

In terms of the planning process, the study recommends that the city adopt a more pro-active planning role in the planning of new communities to encourage these more sustainable design elements. The study calls for the development of new street design standards, a policy on affordable housing, indicators of sustainability, a review of development standards and community-based financing of local facilities.

PART 1: an opportunity for change: background, trends; PART 2: policies and process for designing more sustainable communities: policies and design guidelines, the planning process, making it happen.

**Van Vliet, David. 1994. *Sustainable Subdivision Planning and Design: Analysis, Literature Review and Annotated Bibliography*. Winnipeg: Institute of Urban Studies. (113 pages, bibliography, ICURR Doc. BA 044, English)**

### ***Purpose***

To provide an overview of issues related to more sustainable subdivision planning and design within a Canadian context.

### ***Key Definition(s)***

*Sustainable subdivision planning* refers to efforts to improve the quality of human life while striving to live within the carrying capacity of supporting ecosystems (p. 23).

### ***Summary***

This report outlines nine areas of concern for more sustainable subdivision planning and design, including community design, land and community space, housing and built forms, resource conservation, waste management, transportation, landscaping and urban greening, community-based food production, and protecting soil, air, and underground water. Each characteristic contains performance goal(s), a

description of specific projects and key features of developing more sustainable subdivisions and site development alternatives. The report also reviews the requirements for revising the planning process to support sustainable development.

### **Key Findings, Conclusions and Recommendations**

There is emerging evidence to suggest that conventional subdivision planning and development no longer meets the growing diversity of market and household needs. Furthermore, conventional development is contrary to more sustainable forms of development. Experimental pilot projects to test new procedures, technologies and planning approaches are needed to help operationalise sustainable development principles and develop indicators of sustainability. User and resident participation in demonstration projects will help to prove that market demand exists for more sustainable and affordable residential communities.

Provincial planning acts need to incorporate an explicit land-use policy for supporting local sustainable development strategies. At the municipal level, there is a need for pro-active policies and incentives to induce the housing and property development industries to develop more sustainable subdivisions.

SECTION 1: introduction; SECTION 2: subdivision planning - design, control, standards, efficiency; SECTION 3: sustainable community development - essential components, performance goals, planning process; SECTION 4: indicators of sustainability, making compromises; SECTION 5: the Canadian delivery system - municipal governance, organisation and practice.

## **ALTERNATIVE DEVELOPMENT STANDARDS**

**Berridge, Lewinberg, Greenberg, Dark, Gabor Ltd. 1996. *The Integrated Community: A Study of Alternative Land Development Standards*. Ottawa: Canadian Mortgage and Housing Corporation. (101 pages, bibliography, ICURR Doc. MA 483, English and French)**

### **Purpose**

To examine the implications of current development standards, explore the need and potential for alternative development standards (particularly at the regional level), and propose principles for the development and application of alternative development standards.

### **Key Definition(s)**

*Alternative development standards* are defined as those which encourage more affordable, compact, transit-supportive and environmentally sensitive development patterns, reduce auto-dependency and create more liveable communities (preface). This report focuses on *regional development standards* which are defined as the area in which employment and special needs are met, comprising a group of neighbourhoods linked by a road network, park system and other infrastructure elements (p. 2).

### **Summary**

This report provides an overview of the ways in which development standards have influenced the design and functioning of new communities in North America. Increasingly, the appropriateness of these standards is challenged by demographic trends, new perspectives on urban form, and concerns related to the economic and environmental costs of conventional development patterns. The report presents a strong case for developing alternative development standards through examining the implications of current development standards in four metropolitan areas (Toronto, Ottawa, Calgary, and Portland). Rather than proffering prescriptive solutions, the alternative standards proposed in this report are intended to be applicable in various locales. The report also proposes principles for the development of alternative standards that are illustrated through a hypothetical community that combines elements of suburban and urban forms.

### **Key Findings, Conclusions and Recommendations**

A complex, fragmented network of development standards has been developed by various professional groups working in isolation from each other (e.g. planners, engineers, designers). Many of these standards are outdated, inflexible, and contribute to an expensive and land consumptive pattern of development. Development standards tend to focus on safety concerns and engineering efficiency on a piece-meal basis, neglecting the overall quality of communities. Innovations tend to be implemented on a site-specific basis by private developers, or in partnership between public and private sectors.

Existing development standards need to be critically examined as part of a broad, regulatory review and reform process to develop and implement less prescriptive alternatives on more than a site-specific basis. The unilateral, piece-meal and disintegrated manner in which standards are currently developed needs to be revamped to reduce compartmentalisation and fragmentation and to increase co-ordination between professional disciplines and perspectives. The report proposes the following principles for developing alternative development standards:

- adopt an integrated, inter-disciplinary decision-making approach.
- establish a framework for community planning that remains responsive to context and change and avoids prescriptive, overly standardised approaches.
- promote a diversity of building, uses, design approaches and housing types within a spectrum of standards and in conjunction with an incremental or modular approach.
- utilise economies of integration that capitalise on the benefits presented by compatible, shared uses such as schools and parks.

SECTION 1: introduction - what are alternative development standards and why are they needed ?; SECTION 2: current status - literature review, case studies, progress and problems; SECTION 3: moving towards the integrated community - principles, elements, directions for alternative development standards, future research.

**Ministry of Housing and Municipal Affairs. 1995. *Alternative Development Standards: Making Choices*. Toronto: Queen's Park Printer. (145 pages, bibliography, ICURR Doc. MA 063, English and French)**

### ***Purpose***

To review alternative development standards for residential developments.

### ***Key Definition(s)***

*Development standards* are the rules that municipalities establish to guide the design and development of new communities. *Alternative development standards* refer to a more flexible approach to developing land, one which includes ideas that permit communities to better meet current needs than existing development standards (p. i).

### ***Summary***

This well-illustrated report presents a range of possible alternative development standards for residential subdivisions. For planners, this document provides a tool that can be used to review and redesign municipal policies governing development approvals and applications. The document focuses on design and servicing issues related to streets within new areas of residential development. Of particular relevance for planners, this report emphasises the need to embrace, where appropriate, performance standards over prescriptive codes. The report also emphasises the importance of integrating urban design and engineering issues. Some of the alternative standards proposed in this report include those that apply to the provision of public utilities, tree planting patterns, road design and street right-of-ways, on-street parking, house set-backs, and the introduction of rear lanes. Options for each of these areas are presented with varying specifications along a continuum ranging from more to less urban.

### ***Key Findings, Conclusions and Recommendations***

Post-war conventional suburban development is characterised by single-family detached dwellings on large lots, the separation of land uses and housing forms, increasing reliance on the automobile and standardised road networks designed to accommodate the automobile.

More recently, economic conditions, environmental concerns and changing demographic trends have raised doubts about the appropriateness of conventional development, resulting in greater consideration of alternative development standards.

To meet changing community needs, old development rules need to be questioned and challenged as potential barriers to change. While comprehensive change usually takes time, many development standards require only some adjustment in practice.

Alternative development standards do not automatically imply a reduction in construction standards or in level of service. Local conditions should be carefully considered in developing new standards.

The development standards included in this document are evaluated on the basis of the following criteria:

- enhancing the liveability of communities.
- improving cost efficiency.
- supporting environmental sustainability.
- allowing adaptability and flexibility.
- ensuring health and safety and ease of implementation.

CHAPTER 1: background to the guidelines; CHAPTER 2: rationale for alternative development standards; CHAPTER 3: alternative development standards from an urban design perspective - street hierarchies and types, house-to-street relationships, building scale and types, lot frontages, parking, sidewalks, and rear lanes for two neighbourhood types; CHAPTER 4: alternative development standards from an engineering perspective - road design, sidewalks, snow clearing, underground services, rear lanes, trees, private/public boundary, lot grading, and alternative boulevard sections; CHAPTER 5: detailed alternative engineering concepts.

## PLANNING FOR REURBANISATION

**Urban Development Services. 1998. *Tracking the Kings: A Monitor Statement on the King-Parliament and King-Spadina Reinvestment Initiative*. Toronto: City of Toronto Urban Development Services. (22 pages, ICURR Doc. UI 205, English)**

### **Purpose**

To monitor the effects of a new deregulated zoning regime in two downtown districts of Toronto.

### **Key Definition(s)**

The new, *deregulated zoning scheme* for these two downtown areas of Toronto allows for residential, live/work, commercial and light industrial uses and lower parking standards. It also restricts noxious uses, enforces noise standards, and places controls on built form. As such, the new approach focuses more on the reuse and appearance of existing buildings, rather than on numerical density or separation of uses.

### **Summary**

This report tracks the demographic, economic and development impacts of a new planning approach introduced in the King-Parliament and King-Spadina areas, two districts bordering the city's downtown financial core. In April 1996, Toronto declared these two central-city areas "reinvestment areas" and relaxed land-use and development controls by permitting "as-of-right" mixed-use development.

The new planning and development approach for these districts, known as “the Kings,” is designed to stimulate private investment and create new residential opportunities. The city’s reinvestment strategy has been heralded for its policy-based planning approach that responds to the evolving needs of a particular area, instead of sticking to standardised land-use controls formulated under a different set of economic and social conditions. The resulting development appears to be contributing to the reurbanisation of former or under-utilised industrial areas of downtown Toronto.

### **Key Findings, Conclusions and Recommendations**

Until the mid-1980s, these districts contained a substantial number of manufacturing jobs and firms. By 1990, a significant number of these firms had relocated to the suburbs or other countries, leaving behind vacant buildings, many of historic value.

While land-use controls continued to zone for the separation of industrial and residential uses in these districts, the emergence of an increasing number of live/work units and “clean” new media industries highlighted the lag between the fluidity of economic and social change in parts of the city, and the static nature of conventional land-use planning tools.

Since the introduction of this new approach, both districts have experienced significant development activity. As of September 1997, more than \$54 million worth of construction has taken place in the King-Spadina area, and almost \$18 million worth of construction has been initiated in the King-Parliament district. In addition, the number of business occupancies and full-time employment positions has increased in both districts, while falling in other parts of the city.

The introduction of a new, deregulated zoning framework has stimulated investment and redevelopment efforts in these former industrial areas of the downtown core. Both areas are poised for further growth. At the same time, the introduction of built form controls has facilitated the restoration of many older buildings of architectural and historical importance.

SECTION 1: context for monitoring; SECTION 2: development trends; SECTION 3: employment trends; SECTION 4: business profile of King-Spadina; SECTION 5: demographic trends; SECTION 6: resident issues and needs; SECTION 7: prospects for growth.

**Berridge Lewinberg Greenberg Ltd. 1991. *Guidelines for the Reurbanisation of Metropolitan Toronto*. Toronto: Municipality of Metropolitan Toronto. (64 pages, ICURR Doc. UG 117, English)**

### **Purpose**

To develop a framework to guide the process of reurbanisation in Toronto.

### **Key Definition(s)**

*Reurbanisation* is a comprehensive process of large-scale redevelopment of already urbanised areas in accordance with environmental, economic, built form and social goals. These goals may include the following: reduction of sprawl and auto dependence, preservation of farmlands and natural features, the creation of a high-quality, liveable urban environment, and the promotion of a diversity of housing types and choices (p. 3-4).

### **Summary**

The Municipality of Metropolitan Toronto aims to accommodate a minimum of 300,000 new residents and 400,000 new jobs over the next 20 to 30 years. As most of Toronto is already urbanised, much of this growth will need to be accommodated within the existing urban fabric. In 1991, Toronto commissioned this study to develop guidelines to direct and guide this process of “reurbanisation.” These guidelines are intended for use by local developers, planners, and politicians, as well as planners and politicians in other municipal jurisdictions. A fundamental component of the guidelines is the integration of land-use

planning with transit networks at key locations with appropriate densities, and the creation of mixed land-use developments that seek to establish a more balanced jobs/housing ratio.

### ***Key Findings, Conclusions and Recommendations***

The structure of a city has important implications for commuting, transit use, sense of community and access to employment, services and housing. If current low density development continues at Toronto's suburban fringe, 233,000 acres of greenfield land (equal to 1.5 times the size of Metro Toronto) will be urbanised in the Greater Toronto Area (GTA) in the next 30 years.

Not all areas of the city are appropriate for reurbanisation. Many past redevelopment projects have resulted in buildings that are out of context with their local surroundings. High-rise structures along waterfronts and park ravines limit public access.

The treatment of parking can detract from the quality of the urban environment and inhibit walking and transit use. Mixed-use, higher densities combined with accessible, continuous and convenient walkways promote walking as a viable form of urban transportation.

This report presents 90 guidelines for the reurbanisation process, some of which are presented below:

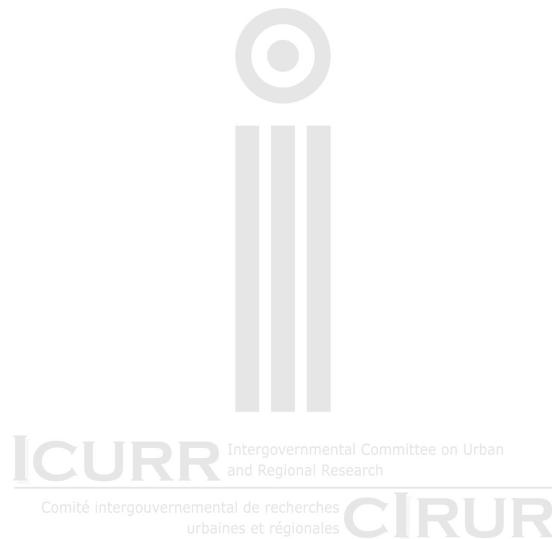
- reurbanisation should be targeted in four types of areas: major Metro centres, centres, corridors and infill areas, each of which should have its own set of reurbanisation guidelines and density specifications. To support transit, a minimum density of 80 residents and workers per hectare should be the target for reurbanised areas.
- mixed-use development should be promoted as an integral land-use principle. Each reurbanised area should generally move towards the local resident/employment target ratio of 1.5 residents per job, rather than away from it.
- existing natural areas, open spaces and parks should be protected and enhanced in the process of reurbanisation. When existing developments in natural areas, ravines or valleys become obsolete, they should be restored to their natural state.
- the reurbanisation of under-utilised industrial lands should be decided in the context of a broader policy on industrial lands.
- every reurbanised area of land should be planned in the context of its location and the overall structure of the metropolitan region.

SECTION 1: introduction - anticipated growth, basis and use of the guidelines; SECTION 2: urban structure and transit; SECTION 3: guidelines - areas for reurbanisation, types of reurbanisation, mix of uses, density levels, urban design plan, public realm, site-specific densities, pedestrian environment, parking, fit, transition and special features; SECTION 4: applying the guidelines - medium and low density corridors.

## Appendix A

### Residential Types and Densities

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*Source: Morris, Marya. 1996. Creating Transit-Supportive Land-Use Regulations, p. 41.*



## Appendix B

### Connections for Planners to Consider in Moving Towards Sustainable Development

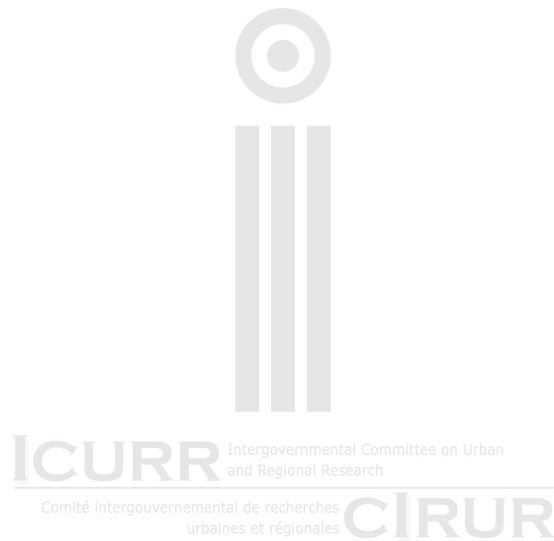
	Land Use	Housing	Transportation	Environment
Economic Development	employment location land cost/availability cost of public services type of housing jobs/housing balance	property tax rate jobs/housing balance variety of jobs variety of housing prices	accessibility location of infrastructure viability of transit location of employment density of employment full cost impacts demand for parking business environment	open space carrying capacity land availability brownfields infill
Environment	open space network suitability of developmt air quality water quality carrying capacity stormwater managment solid waste disposal	site design access to open space use of solar energy natural system protection air quality water demand	habitat fragmentation air quality water quality open space	
Transportation	vehicle miles travelled viability of transit viability of pedestrian and bike travel jobs/housing balance location of services density of development demand for parking	viability of transit density accessibility to open space housing affordability demand for parking location of services		
Housing	housing mix density jobs/housing balance type of employment housing location access to open space			

*Source: From Sustainable Seattle (1995) as cited in Krizek, Kevin. 1996. A Planners Guide to Sustainable Development, p. 20.*

## Appendix C

### Elements of a More Sustainable Community

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*Source: Planning and Building Department, City of Calgary. 1995. Sustainable Suburbs Study, p. v.*

## Appendix D

### Characteristics in Planning and Designing for a More Sustainable Residential Community and 9 Performance Propositions

<p><b>1. COMMUNITY DESIGN:</b></p> <p>Social fabric consciousness, developmental spirit and concrete objectives, stewardship roles defined and evolved, high group sensitivity to residents' satisfactions.</p> <ul style="list-style-type: none"><li>• attend to community design in concert with land use and housing design.</li></ul>
<p><b>2. LAND AND COMMUNITY SPACE:</b></p> <p>Trade-offs from private space expectations to community spaces in earliest planning phases, early attention to urban design-spatial composition to achieve agreeable community spaces, ground linkages and networks.</p> <ul style="list-style-type: none"><li>• develop community management commitments, beginning with user-participant planning and design at the initial stages of a project.</li></ul>
<p><b>3. HOUSING AND OTHER BUILT FORMS:</b></p> <p>Land-use allocation/plan-making and design of housing forms proceed in concert with each other.</p> <ul style="list-style-type: none"><li>• use building materials that optimise ecological soundness or “returns” (design, production, transport and construction), includes programs and considerations for achieving useful life, re-use and retrofit of existing buildings, and re-use or selective disposal of materials in post-demolition or post-construction contexts.</li></ul>
<p><b>4. RESOURCE CONSERVATION:</b></p> <p>Resource conservation in all aspects of design and housing technologies, procedures and routines for household practices and community education programming.</p> <ul style="list-style-type: none"><li>• minimise energy consumption, use renewable energy, minimise water consumption, and minimise waste.</li></ul>
<p><b>5. WASTE MANAGEMENT:</b></p> <p>Disposal, recycling and re-use programs, and local organisation.</p> <ul style="list-style-type: none"><li>• minimise and control waste (from households and businesses, and from production processes of enterprises, including environment and landscape clean-ups, and regulation of waste disposal and pollution discharges on the community site) and establish local re-use and recycling programs and facilities.</li></ul>
<p><b>6. TRANSPORTATION:</b></p> <p>“Calm” traffic systems and street sizing, emphasis on pleasurable street environments and person mobility.</p> <ul style="list-style-type: none"><li>• minimise both the on-site generation of vehicle trips and the nefarious impacts of transport on community life and environment.</li></ul>
<p><b>7. LANDSCAPING AND URBAN GREENING:</b></p> <p>Fit built forms and open space preservation to the land ecology of the site, “greening” (plantations) as a gesture to global environmental redress.</p> <ul style="list-style-type: none"><li>• land uses and built forms are planned, designed and developed integrally such as to support and/or regenerate vegetation and to nurture wildlife.</li></ul>
<p><b>8. COMMUNITY-BASED FOOD PRODUCTION:</b></p> <ul style="list-style-type: none"><li>• provide area for private gardens, allotments, greenhouse production units, and/or contractual associations for community purchases from nearby farm producers.</li></ul>
<p><b>9. PROTECTING SOIL, AIR AND UNDERGROUND WATER:</b></p> <p>Grey water recycling and irrigation, restoration of topsoils, sensitivities to cut/fill operations and replacements of plant materials.</p> <ul style="list-style-type: none"><li>• discharges to be of sufficient quality not to impair beneficial uses, inhibit indigenous biota or produce adverse impacts.</li></ul>

Source: Van Vliet, David. 1994. *Sustainable Subdivision Planning and Design: Analysis, Literature Review and Annotated Bibliography*, p. 26.

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