

Changes to these standards have an impact on urban form and community character, and more importantly, on housing affordability and infrastructure costs.

What are the Issues?

While development standards evolved from a perceived need to ensure consistent levels of design, safety, and servicing, in many cases they have inadvertently enforced an overly rigid, “standardized” vision of community form and function. There is a consensus in the literature on the need to re-evaluate current development standards. The arguments are based primarily on demographic, economic, quality of life, and environmental concerns:

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Demographic: Current standards, developed when nuclear families were the norm, tend to produce homogeneous developments that are unresponsive to today’s demographic reality. More flexible standards that do not constrain innovative community design are now required to respond to a diversity of housing needs.

Economic: Current standards foster low-density, land-consumptive and car-dependent developments that are very expensive to service. In addition, generous engineering standards designed to reduce risk and liability are sometimes viewed as excessive when applied universally in all situations, further adding to development and housing costs.

Quality-of-Life: Conventional suburban developments are considered by many to be unattractive environments with no “sense of place.” In recent years, many planners and engineers have been exploring alternative standards that can create more cost-effective developments, more affordable housing, and more livable, pedestrian-oriented communities.

Environment: High land absorption rates, car-dependence, and impacts on air and water quality are the primary environmental issues related to today’s development patterns.

Case Studies

The paper reviews the evolution of standards and their impact on urban form and function, using examples of older urban areas and newer suburban developments in each of the following North American cities:

- Toronto/Markham, Ontario
- Calgary/Suburban Calgary, Alberta
- Portland/Suburban Portland, Oregon
- Ottawa/Kanata, Ontario

The findings are summarized in a series of matrices describing typical standards in each of the areas and the resultant urban form. Some general observations include:

- Historically, development in older urban areas significantly modified existing natural features. Major re-grading, filling of ravines, draining of wetlands and piping of major watercourses are examples of how the landscape was re-shaped to comply with imposed designs. The result is the standard, high-density urban grid so familiar today. While this pattern has some advantages (eg. improved transit accessibility), the cost was the loss of natural areas.
- The tendency in newer suburban developments has been to treat natural areas more holistically—as systems. This is a worthwhile objective; however, the practice also tends to reduce the developable yield of a parcel of land, in turn reducing suburban densities and increasing development costs. The report notes that informed tradeoffs must be made between standards in different areas in order to satisfy competing objectives.
- In each of the urban case studies, stormwater runoff was treated as a waste disposal issue. Collection systems were constructed to convey storm runoff directly to watercourses with little regard for downstream impacts. This attitude was reflected in the pre-war practice of building combined sanitary and storm sewers which overflowed during heavy rains, discharging untreated sewage, along with stormwater, directly into watercourses. In more recent years, measures for providing some quality management of stormwater have been common in many jurisdictions. Stormwater management has been advanced in the planning process through watershed and subwatershed planning.
- Parks and open spaces in older urban areas are often disconnected pieces of largely obliterated natural systems. Generally, urban open spaces are smaller, but more numerous than their suburban counterparts. There is proportionately more open space in suburban areas and a more extreme distinction between “passive” and “active” parks.
- Urban schools are generally multi-storeyed and modest in land consumption. In the suburbs, schools are rarely more than two storeys and are very land consumptive. Parking lots and bus drop-off areas are significant land-consumptive design elements of suburban schools. Suburban schools often adjoin park sites, but their uses are not integrated.
- In urban areas, the street network is a much finer grain with a greater degree of connectivity. Conversely, there are fewer—but larger—major streets in suburban areas, forcing longer and more circuitous local trips. Urban setbacks are much smaller, therefore buildings have a much closer relationship to the street. Suburban development generally turns away from arterial roads, depriving these corridors of any commercial activity or human presence.

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The Integrated Community

Drawing on the observations and lessons learned in the case studies, the paper concludes with a graphical representation of a hypothetical community, entitled the *Integrated Community*. The *Integrated Community* is a hybrid urban form that adopts successful elements from urban and suburban development patterns. Its design and function is based on principles such as:

Integration

- development standards must complement, or at least not conflict with, one another
- tradeoffs between different social, economic and environmental objectives must be explored

Flexibility

- alternative development control mechanisms such as performance zoning should be explored
- overly rigid, or over-standardized standards should be avoided (i.e. no “blanket” practices)

Diversity

- standards should encourage a diversity of buildings, land uses, design approaches and housing types
- standards should encourage adaptability

Efficiency

- standards should permit joint-use facilities (eg. school campuses/parks and schools/community centres)
- standards should permit multi-functional facilities (eg. open space/stormwater management)

The structure of the *Integrated Community* is organized around elements such as: *nodes* (i.e. accessible, higher-density

concentrations of development); *edges* (i.e. clear boundaries and transitional zones); and *connections* (i.e. built and green connections facilitating a high level of accessibility for people and wildlife).

The paper recommends a follow-up study which would use the above organizing elements and guiding principles as the basis for developing alternative regional standards.

To obtain a copy of this report, call the Canadian Housing Information Centre, (613) 748-2367. For further information, contact Mr. David D’Amour, Social and Economic Policy and Research Division, CMHC (613) 748-2325.

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