

BUILDING A SUSTAINABLE TORONTO

Canadian Urban Institute, March 19, 2009

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Where do we want to be twenty-five years from now?

**Addressing this challenge is the basis of
Building a Sustainable Toronto.**

The next 25 years

In 2030, **about half of the buildings in which Americans live, work, and shop will have been built after 2000**, the majority of which will be residential space.

Nearly half of what will comprise the built environment in 2030 does not yet exist, giving the current generation a vital opportunity to reshape future development.

Urban Land Institute, 2008

Building a sustainable Toronto

Secure the **long-term economic competitiveness** of the City to compete globally for the brightest people and the best firms

Creatively **reshape the urban fabric** to accommodate new forms of growth that will be driven by a combination of demographic trends and market forces

Reduce **the carbon footprint** of the City and mitigating the environmental consequences of its growth profile,

Maintain a **range of housing choices** with particular emphasis on making housing available to those whose services are essential to the future prosperity of the City

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- **Economic competitiveness is enhanced by concentrations of firms and people and results in higher labour productivity and enhanced levels of innovation (Harris and Ionnides, 2000)**
- **Innovative businesses and activities are most likely to be urban and located in cities, whereas activities that are routine are most likely found in the suburbs (Carlino, 2001)**
- **Buildings with five or more units consume only 38 percent of the energy of households in single-family homes (Brown, Southworth and Sarzynski, 2008)**
- **Transportation generated by the typical office building use about 30 percent more energy than does the building itself (Wilson 2007)**

What the research tells us on the cost side

1. The estimated price effects for new homes have pointed to a range between **\$1.50 (US) and \$1.70 for a \$1.00 increase** in development charges
2. Development charges **do not cause price increases of similar absolute magnitudes** for expensive versus more affordable homes
3. Good public policy should be mindful of **potential problems low-income consumers may face from rising prices for the most affordable homes in the community**

What the research tells us on the production side

- **The empirical research on the relationship between development charges and housing construction is comparatively thin compared to that of the impact on house prices**
- **Most public discussions over the relative merits of development charges have been based mostly on speculation, anecdotal evidence, and what is political expedient**
- **More research is needed**

Potential impacts of policy-driven increases in the GTA (simulation exercise)

In the 2006 to 2009 period, **each \$1,000 in policy-driven price increase results in:**

- **1,137 fewer housing starts** over a four year period, or a loss of 284 housing starts per year
- **1,015 fewer jobs per year**
- **\$20.6 million less in revenues** for the three levels of government, including \$13.9 million less for the federal government, \$4.6 million less for the provincial government, and \$2.1 million less for municipalities in the GTA.

What the research tells us about being well - informed

Municipalities who do implement development charges have very **limited understanding of their policy impacts and do not rely on sound empirical evidence to guide their decision-making since it simply does not exist**

Unfortunately, there is **no research on their impacts on urban redevelopment and intensification**

This should not be a license for cities to cast aside the necessity for sound empirical evidence in such circumstances and limit their case to the need for revenues.

Current context tells us four things

This is not the time for governments to be raising costs

Given the magnitude of the turmoil, this is a time for a shared vision and cooperation

This is a time for new thinking, quick action, and strong leadership

The funding formula for Canada's cities does not work

The existing policy framework-federal and provincial

- **Federal**

- Kyoto Protocol (Green)

- Infrastructure Grants

- **Ontario**

- Provincial Policy Statement

- Places to Grow Growth Plan

- Climate Change Action Plan (Green)

- Metrolinx

The existing policy framework-local

- **City of Toronto**

Official Plan (Avenues)

Prosperity Agenda

Transit City

**Climate Change, Clean Air, and
Sustainability Energy Action Plan (Green)**

Places to Grow: Example

Density Targets and Current Density for Toronto Urban Growth Centres

Centre	Target Density	Current Density (approx)
Downtown Toronto	400 per hectare	380 per hectare
Etobicoke City Centre	400 per hectare	160 per hectare
North York Centre	400 per hectare	210 per hectare
Scarborough Centre	400 per hectare	90 per hectare

A large part of the solution to building a sustainable Toronto is a commitment to urban intensification

Intensification – fact versus fiction

MYTH	FACT
<p>Higher density development overburdens public services and requires more infrastructure support systems</p>	<p>The nature of who lives in higher-density housing puts less demand on public services than low-density housing and the compact nature of higher-density development requires less extensive infrastructure to support it</p>

“Introducing higher density projects into a community will actually increase that community’s revenue without significantly increasing the infrastructure and public service burden.”

“Increasing density provides a real economic boost to the community and helps pay for the infrastructure and public services that everyone needs.”

Intensification – fact versus fiction

MYTH	FACT
<p>Higher-density development creates more regional traffic congestion and parking problems than low-density development.</p>	<p>Higher-density development generates less traffic than lower-density development per unit; it makes walking and public transit more feasible and creates opportunities for shared parking</p>

“Doubling density decreases the vehicle miles traveled by 38 percent.”

“Residents of lower-density single-family communities tend to have two or more cars per household, residents of higher-density apartments and condominiums tend to have only one care per household.”

The Two Kings: Benefits 1996 - 2002

Taxable assessment grew in the two Kings areas by over 28% over the 1996-2002 period,

Over 321,000 square meters of commercial (employment) space was created or planned

Employment activity in the two areas increased by 18% compared to the city wide rate of 11% for the same period

Transit usage by residents is high, but many residents would like to see increases in transit service

The pedestrian environment was considered to be important to residents

38% of residents do not own a car.

Source: City of Toronto, City Planning Division, 2002

What the research tells us about higher densities

**Address today's
demographic and market
changes**

**Yield direct economic and
fiscal benefits**

**Attract well paid
“knowledge workers”**

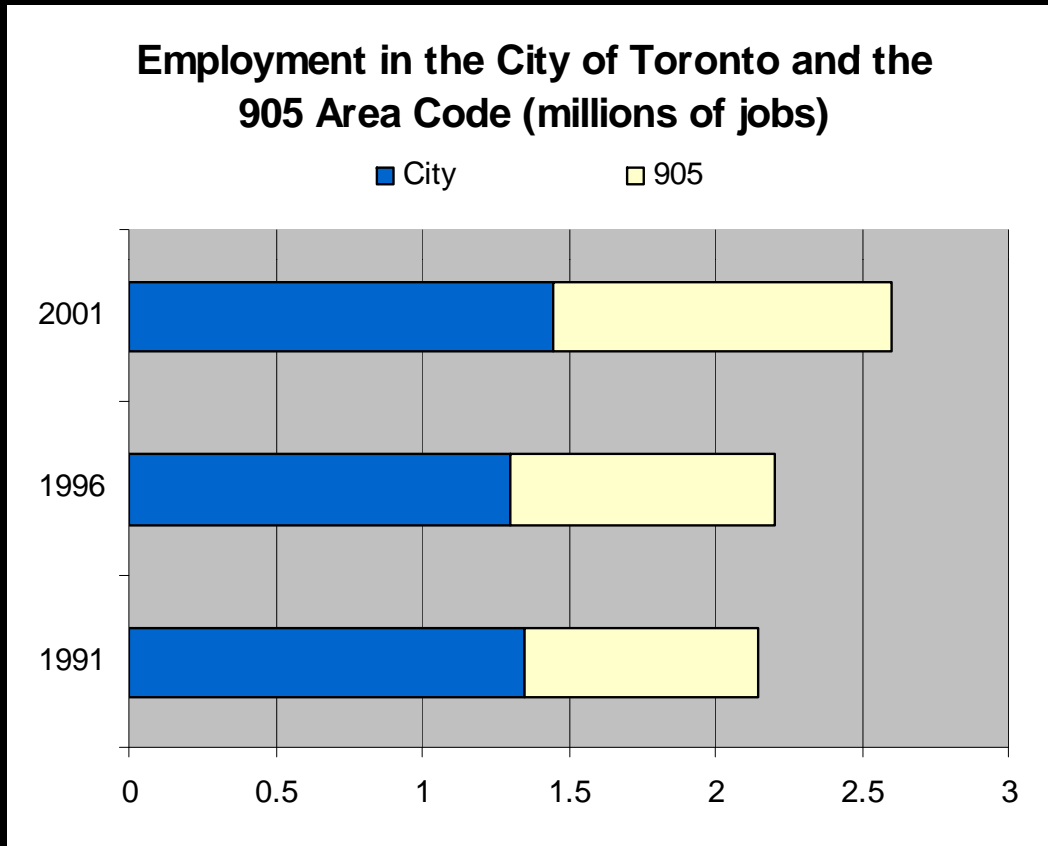
**Significantly reduce the
carbon footprint and GHG
emissions**

**Reduce infrastructure
costs and support
alternative solutions**

**Reduce reliance on the
automobile**

**offer opportunities for
affordable housing**

Clear investment choice was away from the downtown



Source: Conference Board of Canada

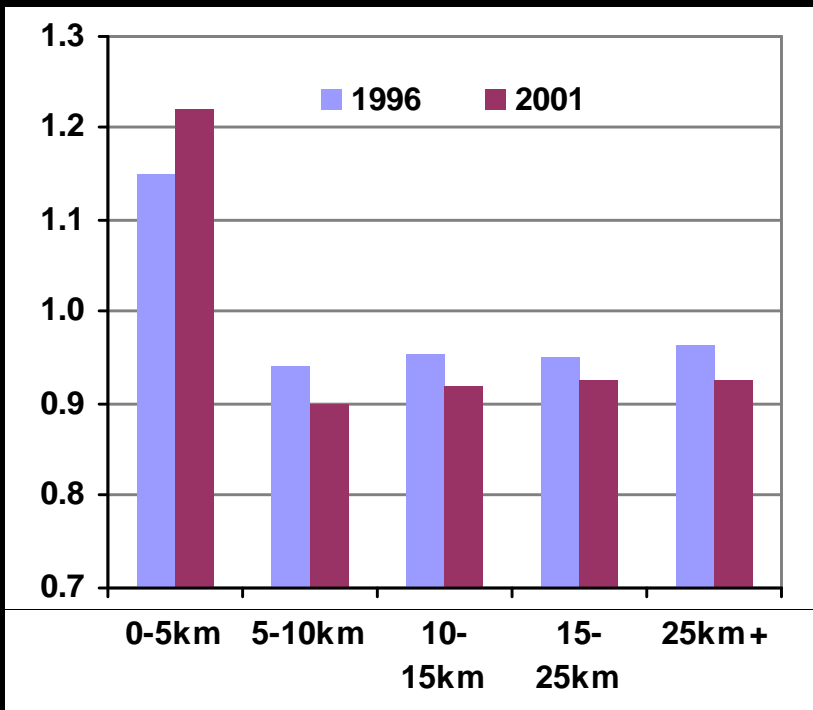
In the period from 1991-2001, employment growth in the 905 area including Mississauga, Pickering, Oakville, Markham and others outpaced that of the city proper **by a factor of 10**.

That is now changing and, given that **jobs follow people**, intensification should deliver some significant employment benefits.

Downtowns have the highest skilled workers and among the best paid

Average annual earnings by distance from the city centre (kilometers), Toronto 1996-2001

Source: Statistics Canada, Working and Commuting in Census Metropolitan Areas, 1996 to 2001.



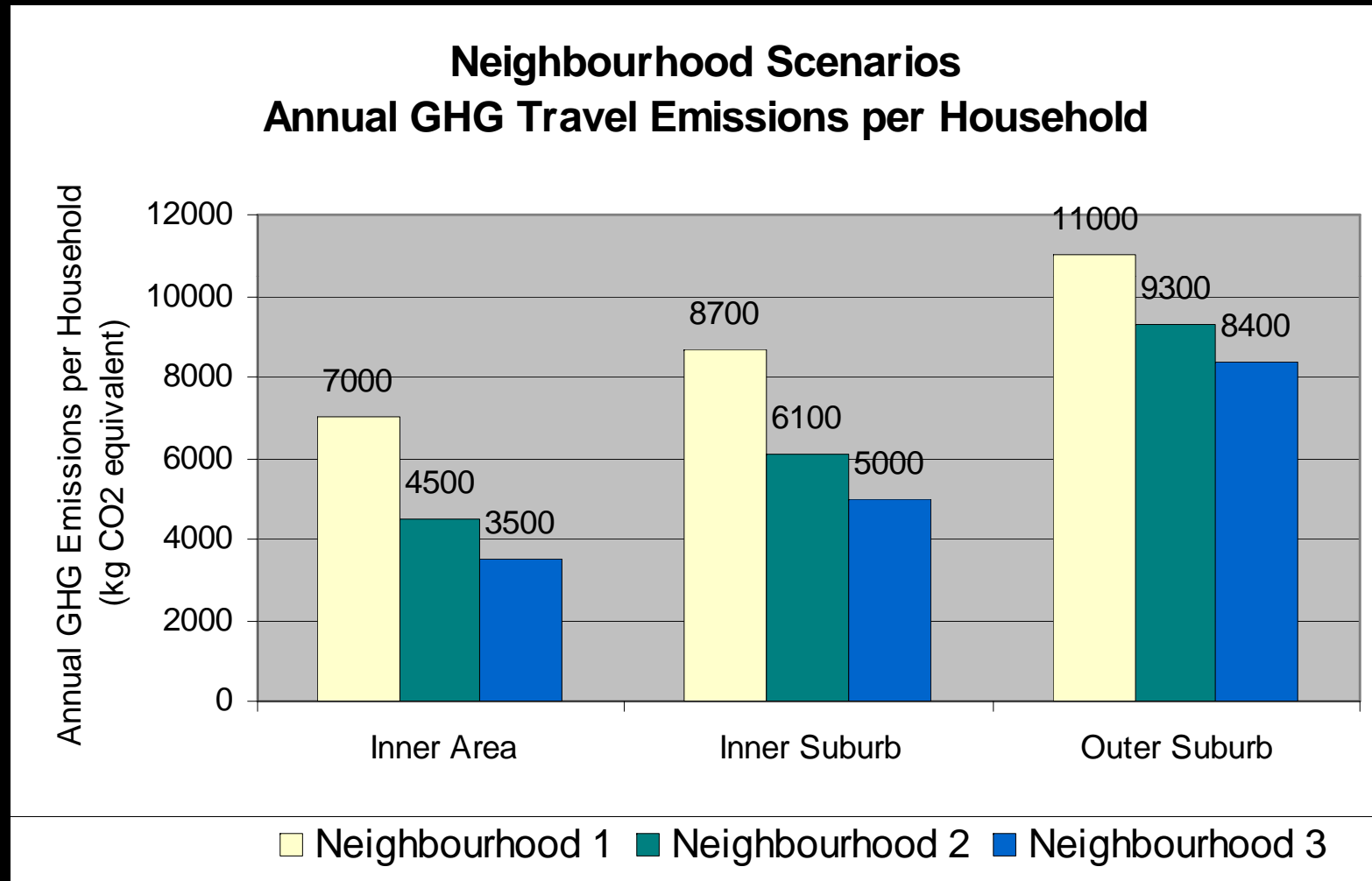
Jobs in the city center are among the 25% best paid jobs in the city.

In Toronto, the pattern is most striking; workers whose jobs are located within 5km of the city centre earned 1.15 times that of the average Toronto worker in 1996, but 1.24 times the average in 2001.

At the same time, workers located outside of the city centre earned less, and their relative earnings declined.

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Neighborhoods located far from the CBD produces about 3x more annual emissions per household than the mixed-use, compact neighborhoods near the CBD (CHMC 2000)



Source: IBI Group, "Greenhouse Gas Emissions from Urban Travel: Tool for Evaluating Neighbourhood Sustainability," Research Report: Healthy Housing and Communities Series (CMHC, February 2000)

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Building Operations

Building operations for low-density development are **2x as energy and GHG emissions intensive** as high-density development per capita.

Transportation

Transportation accounts for 40-60% of life-cycle GHG emissions in residential development.

Transportation requirements for low density suburban development are nearly **4x as energy and GHG emission intensive** as high density urban core development per capita.

Transportation requirements for low density suburban development are **2x as energy and GHG emission intensive** as high density urban core development per unit of living space.

Comparison of high and low urban density

Low density suburban development is **2-2.5x as energy and GHG emission intensive** as high density urban core development per capita.

Low density suburban development is **1-1.5x as energy and GHG emission intensive** as high density urban core development per unit of living space.

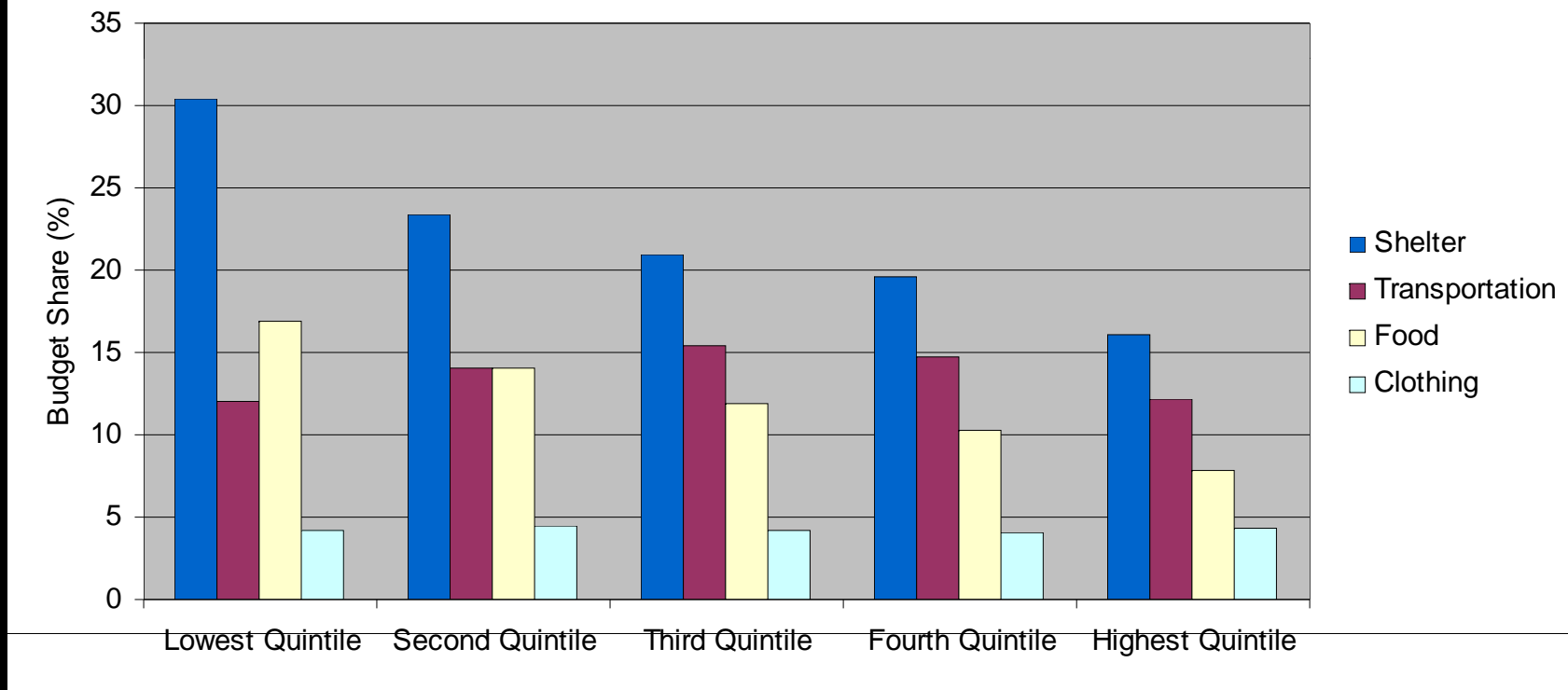
Jonathan Norman, Heather L. McLean, M.ASCE and Christopher A Kennedy, "Comparing High and Low Residential Density: Life-Cycle Analysis of Energy Use and Greenhouse Gas Emissions"

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$$\text{Affordability Index} = \frac{\text{Housing Costs} + \text{Transportation Costs}}{\text{Average Household Income}}$$

Source: *Brooking Institution, "The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice," Urban Markets Initiative (Washington D.C.: Brooking Institution, January 2006)*

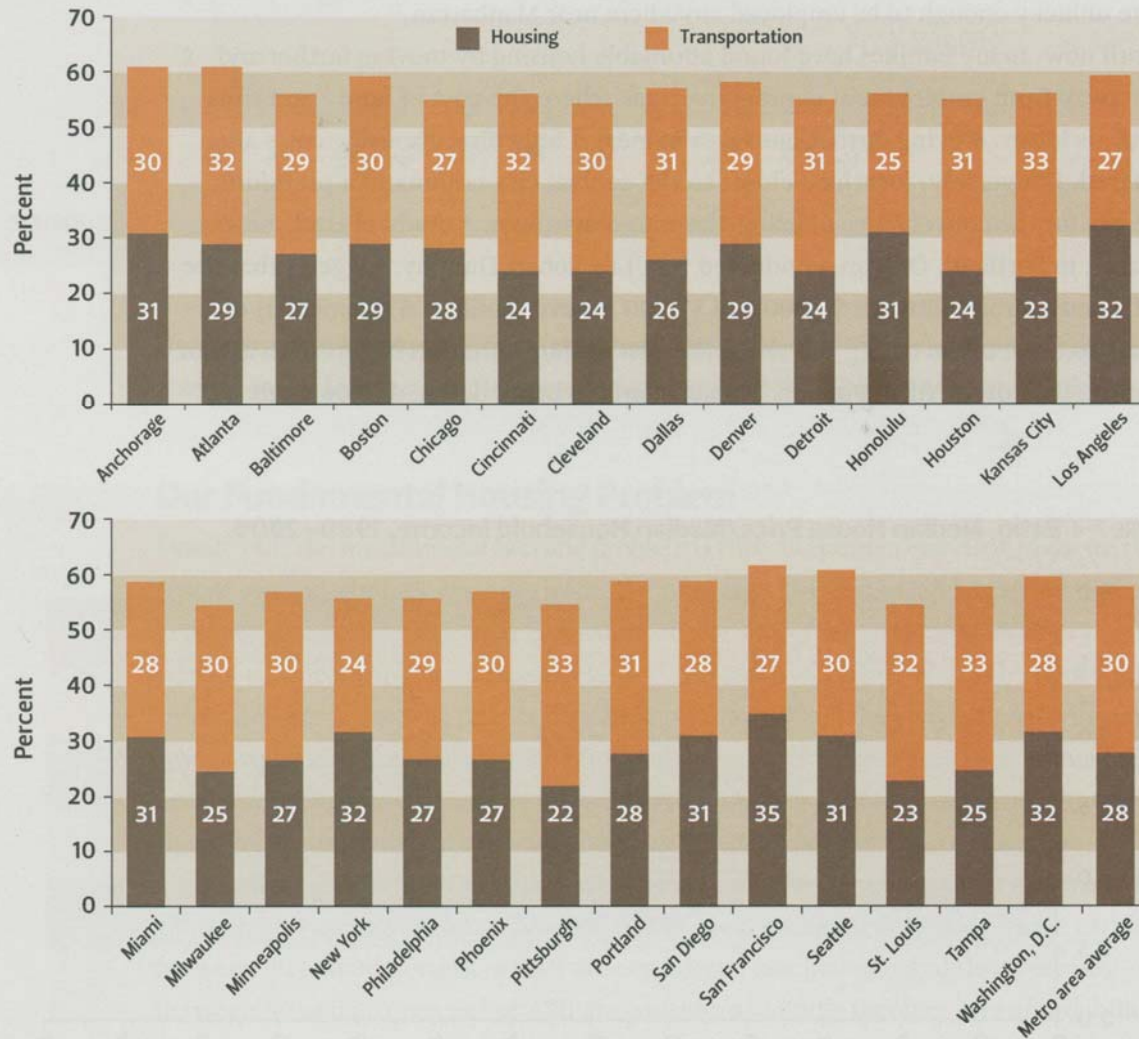
Budget Share of Major Categories by Income Quintile, 2007



Source: *Statistics Canada, The Daily Statistics Canada, December 22, 2008*

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FIGURE 7-5 Average Percentage of Income Spent on Housing and Transportation by Working Families, Selected Cities.



SOURCE: Barbara J. Lipman, "A Heavy Load: The Combined Housing and Transportation Burdens of Working Families," October 2006, 2-3; www.nhc.org/pdf/pub_heavy_load_10_06.pdf.

NOTE: Working families are defined here as those with combined incomes ranging from \$20,000 to \$50,000.

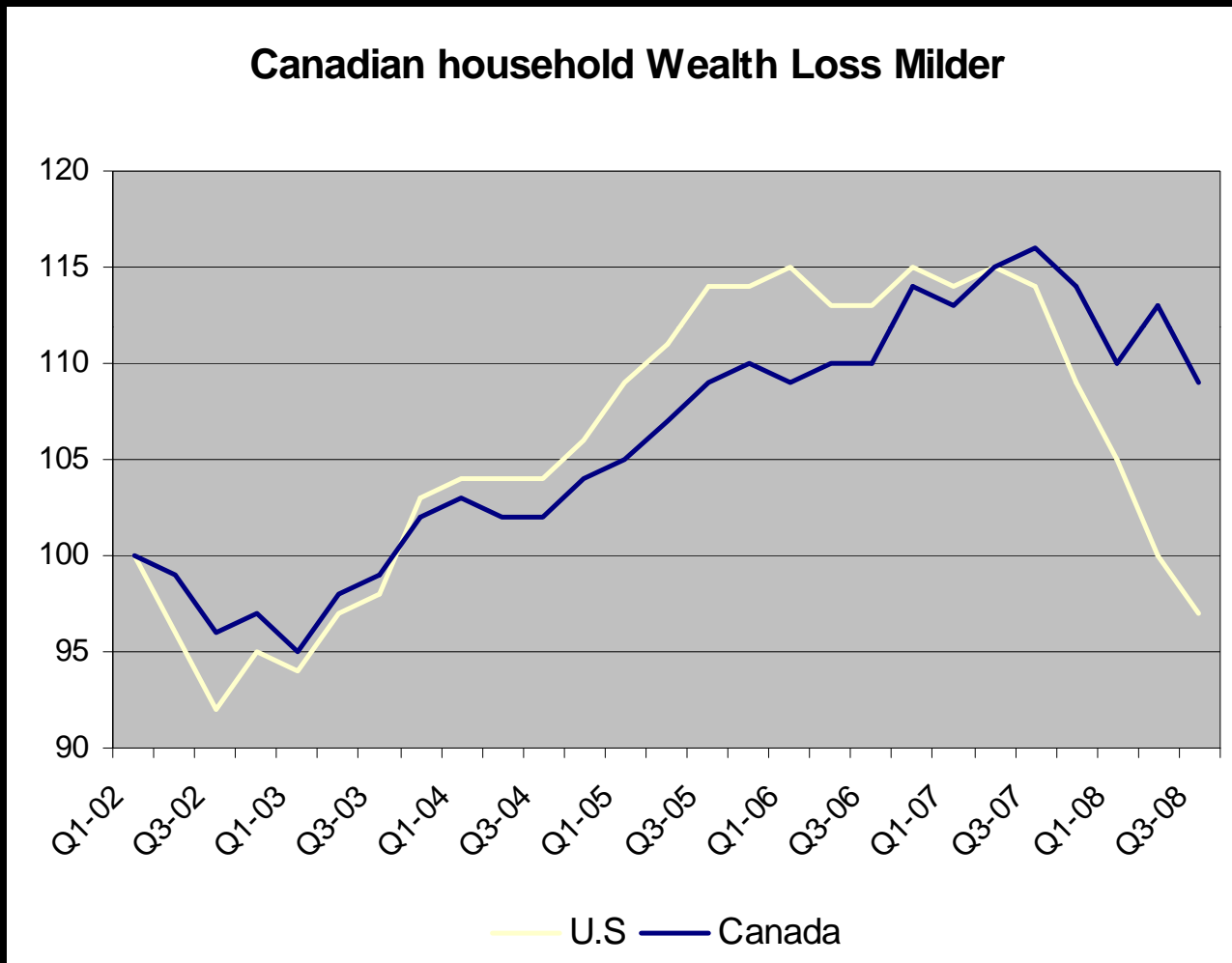
William Hudnut. 2008. Changing Metropolitan America. Urban Land Institute

In 2007, the average Canadian household spent **\$13,640 on shelter** and **\$9,400 on transportation**

To put this in another way, for every **\$1.00** spent of shelter cost, the average Canadian household spent almost **\$0.70** getting to and from the home

Source: Statistics Canada, The Daily Statistics Canada, December 22, 2008

The housing challenge



Canadians are not getting wealthier and will likely be able to afford less and not more in the future.

We are moving into a much more price sensitive environment than in the recent past

Source: Avery Shenfeld, "The Winter of Our Discontent," *StrategEcon (CIBC World Markets, December 18, 2008)*

Rationalizing development charges

The components of the development charge should be for items that are **benefiting new development**.

Development charges should reflect a **benefit charge and not a service pricing** approach

Benefit charges are determined based on payment being made to reflect the **benefits that are received**

In an urban setting, much of the requisite infrastructure is already in place - the cost of providing the services to additional units is a **marginal cost to extend or expand existing systems**

Recommendations

1. Utilize the **next two years** to lay down the foundations for Building a Sustainable Toronto
2. Move **intensification** to the forefront of the City's agenda given the broad environmental, social and economic benefits that it presents
3. Secure **strong industry support and cooperation** to address the single biggest challenge that the City faces - lack of financial resources to do what is necessary to build a Sustainable Toronto
4. Embark on a **new thinking that is commensurate with what needs to be done** - lead by example

Policy Tools to Explore

- **Graduated Density Zoning**
- **EcoDensity Policy (Vancouver)**
- **Location Efficient Mortgages**
- **LEED vs City Green Standards**

Evaluate Total Exaction Package

- **Development Charge Policy**
- **Parkland Dedication**
- **Section 37 Applications**