

# The *Long* Road Home

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## SUMMARY

Two of the most important decisions that any household will make are where to live and where to work. These two decisions commit any household to two essential and very significant costs; the cost of consuming a bundle of services that provide shelter and, the cost of transportation between the house and the place of work. For the average Canadian household these two costs consume at least half of all household expenditures. Examining these combined costs offers a very different perspective on housing affordability, and raises a number of significant issues that extend well beyond questions of consumer choice and behaviour.

At a time when real incomes are relatively flat, energy costs are rising, interest rates are slowly creeping up, and house price increases continue to outpace inflation, the share of expenditures for housing and transportation is likely to go higher, not lower. We are already at the point where households are facing some tough trade-offs in allocating their annual expenditures, and the consequences could be significant. An additional factor in this equation, the impact of which is more difficult to assess, is that of increasing traffic congestion. Congestion is part of the commuter experience for the average Canadian household, a household that relies almost exclusively on the automobile to get to and from work, and for almost every other trip originating from the house.

Overlay the costs of congestion on the rising share of expenditures for housing and transportation and a different future comes into focus. Changes in consumer behaviour are already evident in the amount of intensification underway in inner cities throughout North America. But what is really at stake is the model that has driven growth over the past 50 years, a model that relies on relatively cheap land at the fringes, use of the car, and access to a network of public roads and highways that are perceived as a “free good” by automobile users.

Faced with an increasing share of expenditures for housing and transportation, a household will have three choices: make cuts in other expenditures; adjust by changing houses or jobs; or through substitution, try to sustain their current situation. Households with high income will have the luxury of choice, whereas, those at the lower end are far more constrained. The middle class already feels the squeeze. Unfortunately, substituting a more fuel efficient car doesn't alleviate traffic congestion. Nor for many households is public transportation a viable option; it simply does not exist, or offer a comparable level of service to the car where it does exist.

There are pervasive economic forces at work that are eroding the household budget, the consequences of which will show up in consumer spending patterns and preferences. For example, there are likely to be discernable shifts in house prices given that average household travel costs systematically increase as the household's place of residence moves away from the city centre. The impact will be most severe at the fringes and this may partially explain why new home prices (real,

not nominal) at the fringes have remained relatively subdued, as they have for almost a decade. Housing within the boundaries of the prewar city may command premiums in return for lower transportation costs, as long as a healthy concentration of higher paying jobs remains in the inner core. And transit-oriented development may soon be the hottest new real estate market.

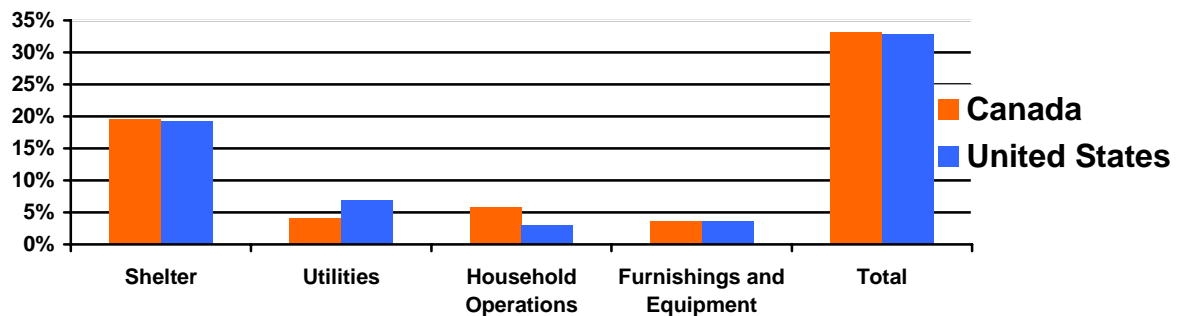
Challenges face both government and industry as they seek solutions to the future growth and economic prosperity of our cities. These solutions will not come cheap. There must be a strong commitment to a seamless regional public transportation system, with infrastructure commitments preceding and thereby influencing new development patterns. As provincial governments are already recognizing, substantial financial commitments cannot occur unless growth is managed at the regional level to better connect housing and development decisions with transportation decisions. While the pace of infill development will increase, so will local opposition within existing neighborhoods. Governments must introduce measure to ameliorate the perceived impact of urban infill, particularly along existing transportation corridors and adjacent to transit interchanges.

The next fifty years will not be like the last fifty years. In fact, what happens in the next 10 years is likely to drive home the message that things are not working as they once did. There are no major regional public transportation systems in the works that can deliver benefits in the next decade, only some marginal improvements to existing routes. But many households are not waiting. In the next decade the pace of new inner city housing will accelerate; new forms of transit-oriented housing will emerge, even at the fringes; new lifestyle demands predicated on a closer relationship between home and work will drive the search for alternative housing forms; and home builders will do what they do best – respond to emerging consumer demands as expressed by consumer behaviour and spending patterns.

The postwar model of urban growth worked for a surprisingly long period of time and benefited many households. That model required the car as the primary means of mobility. The real cost of sustaining that model is no longer viable for many households, as the shared cost of housing and transportation, combined with traffic congestion, burden two of the most precious household commodities, money and time. A new model is taking shape, one that involves massive public investment in public transportation, managed regional growth, new patterns of transit-oriented development, different housing choices and, hopefully, a commitment to ameliorate environmental degradation and reduce our dependency on non-renewable and expensive energy sources. The real beneficiaries will be the households themselves through improved quality of life, increased economic prosperity, and security of both house and job within the parameters of the household budget.

## Shared Cost of Housing and Transportation

The largest budget item for any Canadian household is the cost of shelter. This cost includes rent or mortgage payments, property taxes, maintenance, repairs and replacement (but not additions or renovations), utility costs, household operations and furnishing and equipment<sup>1</sup>. This cost was 33.2% of total annual expenditures in 2003<sup>2</sup>. This compares to 32.9% for the comparable expenditure for an average household in the U.S. for the same period<sup>3</sup>. *Figure 1* compares the breakdown of housing expenditures for Canada and the U.S., 2003.



**Figure 1: Comparison of total housing expenditures as a percent of total expenditures, Canada-United States, 2003.**

Source: Statistics Canada and US Department of Labor

For the U.S., this figure represents a doubling of the shelter share since 1972, a reflection of increased homeownership and the move to larger homes. It can be assumed that Canadian households reflect similar increases since household consumer behavior is similar. These figures are for the last available reporting period in both countries and do not reflect the potential impact of the substantial increases in house prices that have occurred since 2003. It should also be noted that this share varies by income level and by CMA<sup>4</sup> across the Canada. For example, the 2003 share for housing for the lowest quintile is 42.1% and for the highest quintile 31.0%. The 2003 share in Toronto is 35.6%, 35.4% for Vancouver and 29.8% for Winnipeg

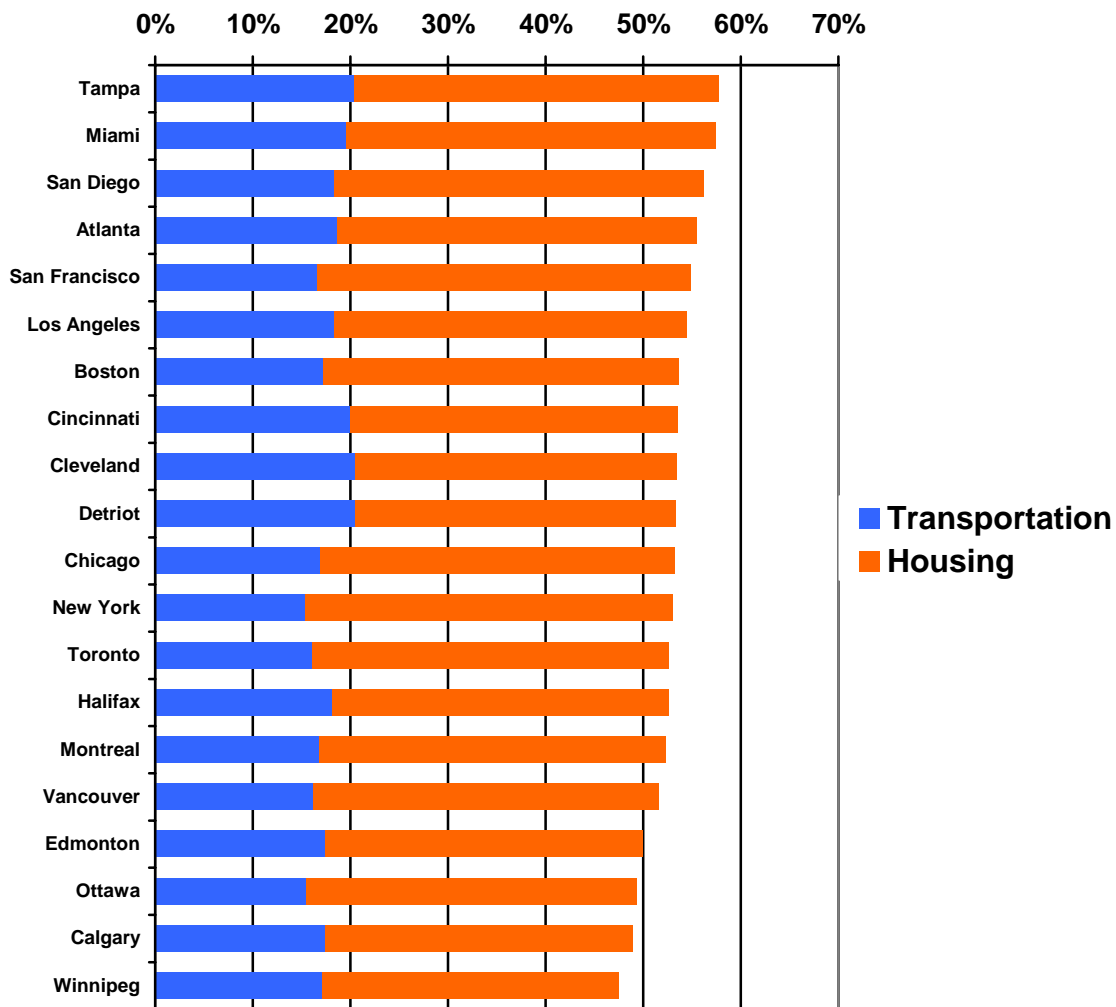
<sup>1</sup> Statistics Canada reports on Shelter expenditures to include the cost of ownership or rental, plus utilities. For the purposes of this study housing expenditures include Shelter, plus those expenditures required to directly support the house including Household Operations and Household Furnishings and Equipment as defined by Statistics Canada. This is comparable to what the US Department of Labor defines as Housing in their Consumer Expenditures reports.

<sup>2</sup> Statistics Canada, *Spending Patterns in Canada 2003*, June 2005, Catalogue no. 62-202-XIE. Total annual expenditures represent average household income minus personal income tax, or the amount available to cover all household expenditures. All expenditures include GST, provincial retail sales taxes, and other additional charges or taxes.

<sup>3</sup> US Department of Labor, US Bureau of Labor Statistics, *Consumer Expenditures in 2003*, June 2005. Report 986.

<sup>4</sup> Census Metropolitan Area as defined by Statistics Canada.

The second most significant expenditure for the average household in Canada in 2003 is transportation and this consumed 17.1% of total annual expenditures<sup>5</sup>. This compares to 19.1% for the comparable expenditure for a household in the U.S. in 2003. Again, there are significant variations by income level and CMA across Canada. For example, the 2003 share for transportation for the lowest quintile is 11.7% (1.9% of which is for public transportation) and for the highest quintile 17.7% (1.5% of which is public transportation).



**Figure 2. A comparison of the combined expenditures for housing and transportation for selected Canadian and US cities, 2003**

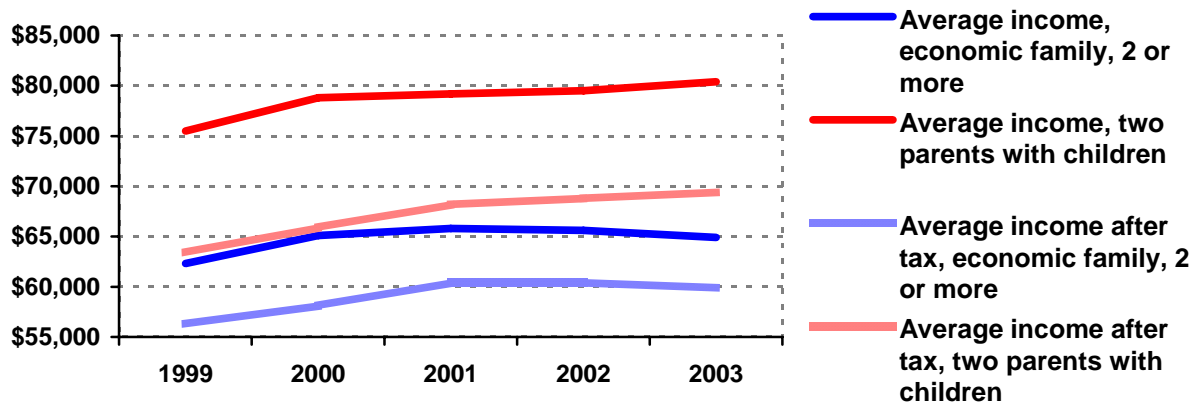
Source: Statistics Canada and US Department of Labor

<sup>5</sup> Statistics Canada, *Spending Patterns in Canada 2003*, June 2005, Catalogue no. 62-202-XIE.

The average Canadian household spends exactly half of the household budget on the cost of shelter and transportation (50.3%), and their US counterparts slightly more (52.0%). *Figure 2* indicates that U.S. households in some cities are allocating a slightly bigger share of expenditures to housing, as compared to their Canadian counterparts, perhaps as a result of higher price appreciation in most U.S. housing markets and their desire for the larger home on the large lot<sup>6</sup>.

Cities like New York, Chicago and Boston have relatively high expenditures for housing, but their combined share due to lower transportation costs, places them below several southern cities such as Tampa, San Diego, or Atlanta. Not surprisingly, the percent of no-auto work trips for New York, Chicago and Boston are 31%, 16% and 14% respectively, versus 5% for Tampa or 6% for Atlanta<sup>7</sup>. In Canada, Halifax comes out ahead of Vancouver in terms of the combined share, but not on the basis of house price. Perhaps house price alone is not the most accurate indication of the most expensive cities to live in.

To give some indication of the consequences of high transportation costs, if Houston households spent the national average on transportation (19.4% instead of 20.9%) they would have saved \$2 billion on transportation costs<sup>8</sup>. It is estimated that Los Angeles households each lost \$316 from the 2003-2004 rise in gasoline prices, or \$1 billion in total, and this number will be significant higher given recent gasoline price hikes.



**Figure 3. Average incomes for Canada, before and after tax, 1999-2003**

Source: Statistics Canada, Catalogue no. 75-202-XIE

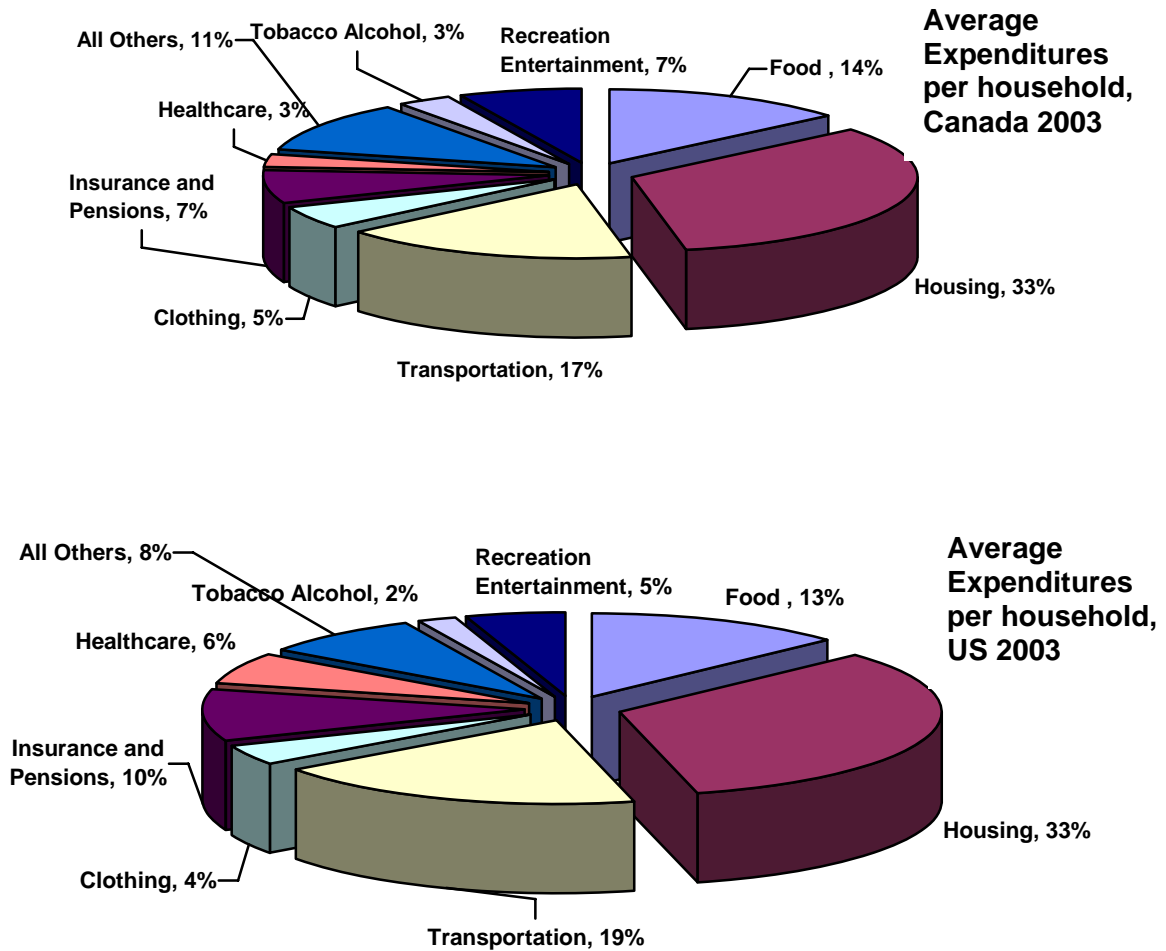
With upward pressure on energy costs, the prospects for higher interest rates, and double digit increases in annual house prices over the past several years, the share

<sup>6</sup> In 2005, the average new home in the US is 2,400 square feet, up from 1,500 square feet in 1970, with an average lot size of 8,000 square feet.

<sup>7</sup> Center for Neighborhood Technology. *Driven to Spend: Pumping Dollars out of Our Households and Communities*. June 2005.

<sup>8</sup> Ibid.

of expenditures for housing and transportation is likely to go higher, not lower<sup>9</sup>. Any increase beyond the current figure must also be viewed against relatively flat incomes (*Figure 3*), the increasing burden of health care costs including prescription drugs, and the search by lower tier governments to garner more income from taxes, fees and levies<sup>10</sup>. Pressures are also being felt by many households to save for retirement, address elder care requirements of parents, fund college education for their children, and address a whole set of new expenditures that were not significant just a decade ago from cell phone and internet service to health and fitness clubs.



**Figure 4. Comparing Canadian and U.S. average household expenditures**

Source: Statistics Canada and US Department of Labour

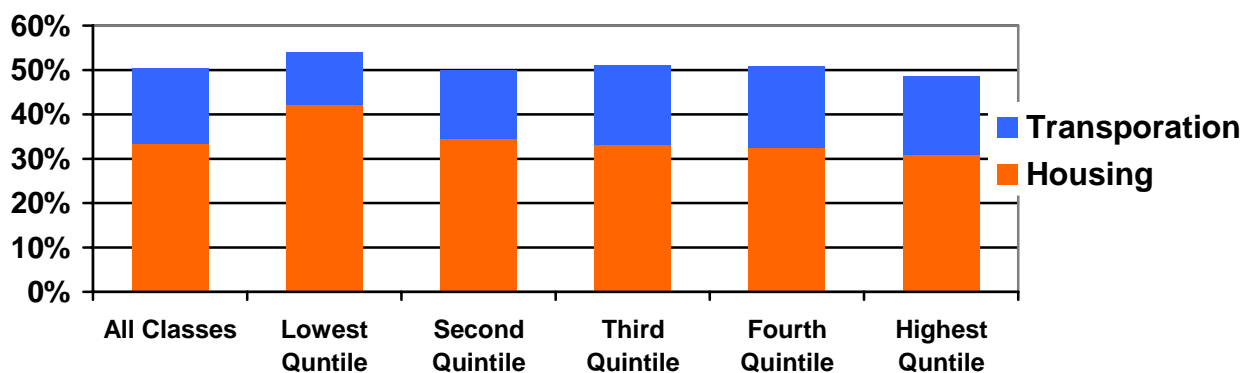
We are already at the point where households are facing some tough trade-offs in how they allocate their budgets and the consequences could be significant. One

<sup>9</sup> Statistics Canada, *The Daily*, December 12, 2005. Average household spending on transportation in 2004 was up 3% from 2003 while average spending on public transportation increased 13%. Average spending on housing increased 5% compared to a CPI increase of 1.9% in this period.

<sup>10</sup> Statistics Canada, *The Daily*, December 12, 2005. Average household spending on health care in 2004 increased by 6% from 2003 and average spending on education rose by 6% in the same period.

such consequence is the recent and remarkable shift toward intensification and particularly downtown condominium development. Toronto is indicative of a trend that is sweeping many North American cities including Los Angeles where there are 122 development projects underway in the downtown and some 10,000 housing units in the pipeline<sup>11</sup>.

Jeffrey Simpson in his article “*A perfect storm is set to hit Ontario’s middle-class wallets*” reflects these same sentiments when he addresses the prospects for those with a mortgage, a car and a family. In his estimation, these households are “about to get poorer, perhaps much poorer, in terms of disposable income”<sup>12</sup>. Let us hope he is wrong.



**Figure 5: Average expenditures for housing and transportation by household income quintile, Canada 2003.**

Source: Statistics Canada. *Spending Patterns in Canada, 2003*

Those hardest hit will be the lowest income quintile and particularly those in the large urban centres where housing costs are higher. The lowest quintile averages 53.8% for housing and transportation costs in contrast to the highest quintile that averages 48.7% (Figure 5). Households in Toronto and Vancouver average 51.7% and 51.6% respectively, whereas Winnipeg households average 46.5%.

The media continues to report on rising house prices with a fascination reminiscent of the heady days of the stock market. From a national and provincial perspective, affordable housing is essential and this is still a topic of much public concern and debate, as it should be. But transportation costs do not seem to garner the same attention from either the media or politicians, beyond anecdotal reporting on the price of a fill-up at the local station. It goes unnoticed that the two are inextricably linked.

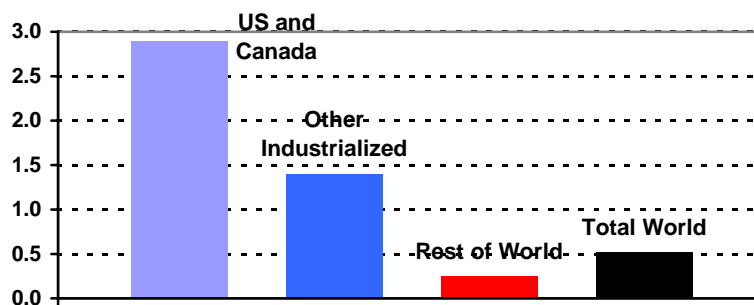
<sup>11</sup> “Untangling the Transportation Matrix”. *Urban Land*. September 2005. p140.

<sup>12</sup> *Globe & Mail*, October 7, 2005.

## Roads and Cars

Understanding where households live, where they work, and how they connect the two locations is fundamental to any understanding of urban economics, the spatial pattern of cities, and house prices. The choices where to live and where to work essentially determine the pattern of trips to work, to shopping, to almost everywhere else that household occupants must travel that are beyond walking distance of the home. Transportation is an obligatory expense for any household and mobility is essential to preserve a pattern of urban growth and a lifestyle that has prevailed since the postwar era.

Mobility for the vast majority of Canadian and U.S. households depends almost exclusively on the automobile. Canada and the U.S. stand apart in the world in their consumption of oil per capita, see *Figure 6*. For instance, oil consumption in the United States and Canada equals almost 3 gallons per day per capita. The difference is explained by their respective transportation sectors and the dependence on private vehicles to travel relatively long distances. The United States and Canada use more oil for transportation than for heat and power, but the opposite pattern holds for the rest of the world. Oil consumption in the rest of the OECD equals 1.4 gallons per day per capita. Outside of the OECD, oil consumption equals 0.2 gallons per day per capita.



**Figure 6: Global consumption of oil per capita, 2001**

Source: *International Energy Annual*

A study of travel and housing costs in the Greater Toronto Area (GTA) noted that over 95% of GTA household expenditures on intra-urban travel are auto-based and even in the City Of Toronto with its extensive transit system, well over 90% of travel costs are auto related<sup>13</sup>. The question is whether rising energy prices will threaten the level of mobility that households have enjoyed throughout much of the postwar era. The automobile has conveyed an unprecedented level of freedom and choice for households. The car has spurred first-time home buyers to travel to the fringes in search of affordable accommodation, giving rise to the adage “drive-‘till-you-qualify”.

<sup>13</sup> Miller, E. M. Roorda, M. Haider, and A. Mohammadian. *An Empirical Analysis of Travel and Housing Costs in the Greater Toronto Area*. A paper submitted to the Transportation Research Board (TRB). July 2003.

It has allowed the vast majority of new jobs to migrate to the suburbs, and beyond, and shaped the multi-nuclear city.

The model of the postwar North American city is predicated on three things: easy access to relatively inexpensive raw land; high rates of automobile ownership; and a network of public roads and highways that are perceived as a “free good” by most automobile users. In contrast, the prewar city was characterized by limited access to raw land; the influence of rail lines as a primary means of moving people and goods, and a public transportation system based on a user-pay principle. The contrast between the two models is evident in housing densities, employment patterns, and the distribution of land uses from industrial and commercial through retail and institutional in the postwar versus the prewar city.

In the prewar model, public transportation connected jobs in the center to concentric rings of housing. Most “line-haul” transportation corridors radiated out from the center and these corridors remain today as the backbone of most public transit systems. The public transit systems in Canada’s largest urban areas are highly city-centre oriented. In the 8 largest Canadian CMAs, from one quarter to one-half of commutes by public transit were destined from city centre locations<sup>14</sup>. Street car lines, many now gone, created an overlay of local shopping streets that were within walking distance of adjacent residential neighbourhoods.

In the postwar era, public transportation gave way to road building and the automobile permitted the rapid dispersal of housing and employment that marked a radical departure from the traditional concentric city. Today, trips by car and truck crisscross the city, punctuated by limited accesses highways that attempt to bring some order to this apparent chaos. The legacy of the postwar model is a pattern of housing and workplace that is no longer conducive to public transportation; a continual stretching of the home to work trip itself, and a rising cost of overcoming distance both in real costs and the opportunity cost of lost time due to traffic congestion.

The good news is that, unlike their U.S. counterparts, Canadian CMAs continue to be characterized by a strong concentration of jobs in the downtown core. In 2001, 38.3% of all jobs in the CMAs were located within 5 km of city hall, with the smaller centres having a much higher concentration (*Figure 7*). This may explain why public transit systems in Canada’s major cities are highly city-centred oriented. In the 8 largest CMAs from one-quarter to more than one-half of commuters on public transit were destined for city centre locations, with the remainder commuting to relatively dispersed locations. However, employment grew faster in the suburbs of Canada’s largest metropolitan areas than in the city centres between 1996 and 2001. The bad news is that the commute to this growing employment base in suburban locations is almost exclusively by car. This is driving congestion, air pollution and the demand

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<sup>14</sup> Statistics Canada, *Working and Commuting in Census Metropolitan Areas, 1996 to 2001*. June 2005

for more roads. Despite the increase in suburban traffic, the share of commuters taking public transit remained steady in 1996 through 2001 in most large CMAs.

Automobile dependency rises as household income rises, while public transit use falls. The tendency to commute by car also increases as a function of increasing distance from the city centre<sup>15</sup>. For example, Toronto experienced an additional 208,300 workers commuting to locations more than 20 km from the city centre in 2001 than in 1996, of which nearly 90% commuted by car. In this period, the number of car commutes grew by 12% and number of commuters destined for locations more than 20km from the city centre by 25%. The rate of increase in auto-based commutes far exceeds the rates of population growth for Canada's major CMAs. Continuation of this trend has implications in terms of congestion, the future viability of public transportation, and the prospects to effectively invest in urban infrastructure in the future.

	0-5km	5-10km	10-15km	15-20km	20-25km	25km	Employment
Toronto	23.1	10.2	11.8	13.2	15.6	26.2	2,461,700
Montreal	28.1	24.3	19.2	10.3	7.5	10.6	1,699,900
Vancouver	30.8	24.0	12.9	6.5	13.2	12.7	922,900
Edmonton	34.2	34.9	17.3	1.7	0.5	11.4	462,800
Ottawa/Hull	45.6	29.1	9.0	10.5	1.7	4.1	573,000
Winnipeg	52.8	36.1	8.5	1.0	0.9	0.7	345,500
Calgary	56.4	23.7	14.6	2.0	0.5	2.8	496,700
Halifax	69.0	11.0	9.1	5.4	0.5	5.0	186,100
Regina	90.7	6.4	0.0	1.4	0.0	1.5	99,600
<b>All CMAs</b>	<b>38.3</b>	<b>21.3</b>	<b>12.8</b>	<b>8.6</b>	<b>7.4</b>	<b>11.6</b>	<b>9,566,500</b>

**Figure 7: Number and percentage distribution of CMA workers by distance of job from the city centre, 2001**

Source: Statistics Canada, *Working and Commuting in Census Metropolitan Areas, 1996 to 2001*. June 2005

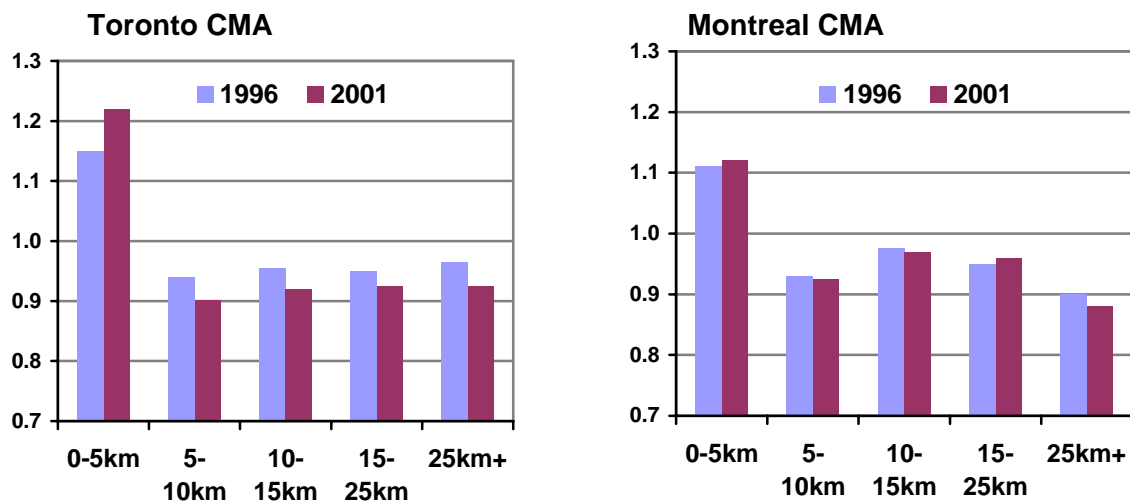
## Jobs and Income

Just as housing preferences differ by location, so do the characteristics of jobs according to their locations. These differences provide insight into the propensity of households to spend on housing and transportation, and the housing choices they may make. It is clear that job characteristics are polarized by location with both a skills and an earnings gradient extending downward from the city centre to the suburbs. Average earnings tend to be higher for city centre jobs and lower for jobs

<sup>15</sup> Statistics Canada, *Working and Commuting in Census Metropolitan Areas, 1996 to 2001*. June 2005

located away from the city centre. Relatively few jobs in the city centre are low paying compared to those in the suburbs, and more are highly paid.

Jobs in the city center are most likely to be in the producer services, having high skill requirements, and an average higher pay. These jobs are also more likely to be among the 25% best paid jobs in the city. For example, in Toronto, where 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 (*Figure 8*). At the same time, workers located outside of the city centre earned less, and their relative earnings declined.



**Figure 8: Average annual earnings by distance from the city centre (kilometers), Toronto and Montreal CMAs, 1996-2001**

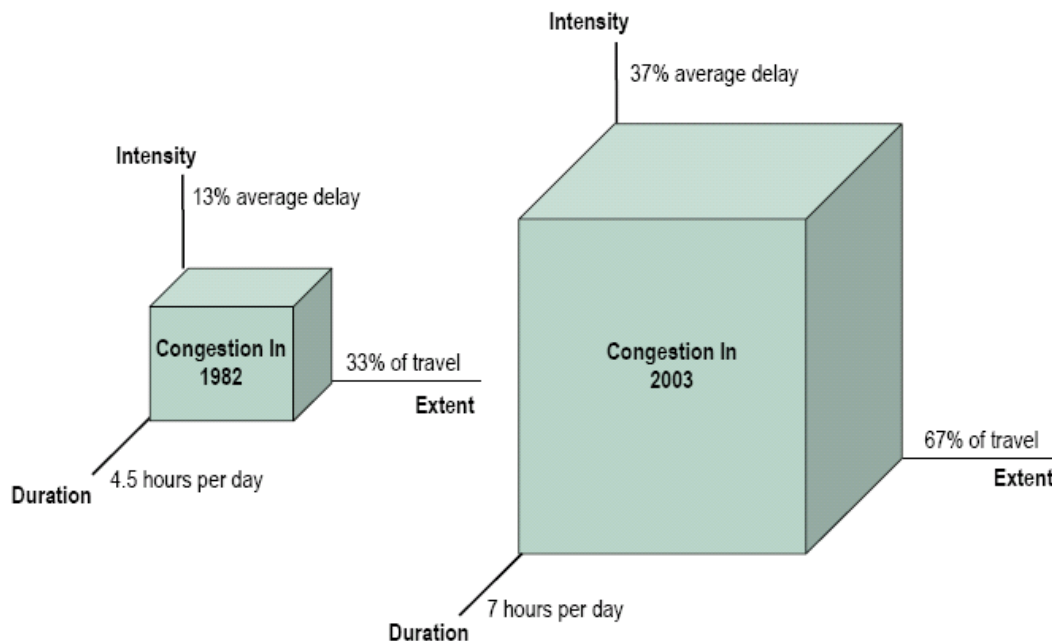
Source: Statistics Canada, *Working and Commuting in Census Metropolitan Areas, 1996 to 2001*.

Those households who are attracted to downtown living are likely to represent the highest skills workers and among the best paid. In Toronto, 33.4% of workers employed within 5km of the city centre had top quintile earnings. However, there are exceptions; earnings were higher in the Highway 404-401 cluster with 35.9% of workers in the top quintile of earnings, but other clusters in the Toronto CMA were less likely to have workers in the top quintile of earnings.

Downtowns appear to have pulling power in the new era. They are already well anchored with a sound base of highly skilled, well paying jobs, offer the option of public transportation that connect to some suburban locations, and are typically surrounded by well established neighbourhoods in close proximity to jobs. The construction of downtown housing projects on infill and Brownfield sites, as well as former industrial and commercial lands, reinforces the appeal.

## Congestion and the Car

The media are quick to assess rising costs with reports on the jump in gasoline prices, auto insurance, and housing, but seldom does the cost of congestion get factored into the cost equation. Congestion is very costly. It introduces significant “friction” in a regional economy and represents massive opportunity costs. Yet, congestion is pervasive everywhere, in cities of all sizes, during all periods of the day, and delaying more travelers and goods than ever before. A recent study in the U.S. indicates that the annual delay per peak traveler, in hours, has grown from 16 hours in 1982 to 47 hours in 2003<sup>16</sup> (Figure 9). In this period the estimate of wasted fuel in the US has increased from 0.4 billion barrels to 2.3 billion barrels and the cost of congestion has increased from \$12.5 billion in 1982 to \$63.1 billion in 2003. Congested periods have increased from 4.5 hours per day in 1992 to 7.1 hours in 2003 for US cities. Unfortunately, there are no comparable statistics for Canada, but the consequences must be proportional to those in the U.S. given our similar propensity to drive.



Source: Analysis of data used in 2005 *Urban Mobility Report*, Texas Transportation Institute.

**Figure 9: More Congestion, More Times of the Day, US Major Cities 1982-2003**

There are obvious signs that the postwar model is no longer viable, particularly when faced with the increment of growth that is forecast for some of Canada’s major cities. The forecast for the Toronto region is for 1.75 million new households and 1.71

<sup>16</sup> David Schrank and Tim Lomax. *The 2005 Urban Mobility Report*. Texas Transportation Institute, Texas A&M University System, September 2005.

million new jobs in the GGH<sup>17</sup> in the period 2001-2031. This forecast translates into more than 1 million more cars on the road, not to mention trucks and other service vehicles. Many of these vehicles, out of necessity, will be relegated to existing roads and highways, in addition to the many new routes that will be required.

The most urgent need is for massive investment in public infrastructure to address decades of deferred maintenance and accommodate future growth<sup>18</sup>. The source of these funds is still in question, although initiatives have already been taken to tap the capital markets and approach institutional investors such as pension funds. How these will affect the combined cost of housing and transportation for the average Canadian household is still the question. There is not sufficient evidence yet that governments fully understand the inextricable link between housing and transportation costs from a policy perspective.

## Facing the Challenges

In facing the challenges ahead households have some tough choices:

1. *Cut expenditures in other categories* - consuming less in some other categories to maintain a rising share of housing and transportation costs will have implications for other industries and service providers, and could impact a quality of life that households have come to expect. What is the tolerance level beyond which households will adjust their combined housing and transportation costs? Are we close to that threshold in 2005 as a result of the energy situation?
2. *Adjust by changing houses or changing jobs* - consumers tend to vote with their feet and shifts will inevitably show up in the census data. Where might households move to? What job options are available? Might households move closer to jobs, or visa a versa, to reduce transportation costs?
3. *Substitute to maintain current house preferences and place of work*. This option is predicated on substitutions being available, the most notable of which is public transportation. Unfortunately, for most suburban households, this is still a remote possibility. For some, forfeiting the SUV for a hybrid or more fuel efficient car is a possibility, but this still leaves the problem of increasing congestion. What substitutes are viable?

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<sup>17</sup> The Greater Golden Horseshoe Forecast Committee, *The Growth Outlook for the Greater Golden Horseshoe* (Toronto: Hemson Consulting Ltd. January 2005).

<sup>18</sup> The Government of Ontario, through the Ministry of Public Infrastructure Renewal (PIR), estimates Ontario's infrastructure deficit to exceed \$100 billion. The Ontario government admits that it simply does not have the resources required to finance and build large public infrastructure, such as hospitals and courthouses, as quickly and readily as everyone would like. It has committed \$30 billion over the next 5 years to address part of this problem.

Households at the lower income levels who must adjust to the new reality of increased transportation and rising housing costs will have the fewest choices – they must cut back. These are the households already spending a disproportionate share of their expenditures on housing. In many cases, this housing is less than ideal from an efficiency perspective. The majority live in apartments (57%) almost half (45%) of which were built prior to 1970. Some 41% of these households depend on electricity for their source of heating.

On a limited household budget, a sustained increase in energy prices could be crippling to those in this quintile. These are the households with limited earnings, likely to drive older inefficient vehicles, and often work at more than one job to make ends meet. These households have little choice but to do with less, despite the fact that they already consume less than most households in almost every category. For this group public transit would be a cost-effective alternative if it did connect to the work place. However, this is unlikely given where new jobs are migrating to (the suburbs) in relations to where those in the lowest quintile are apt to live. For this group, the call for affordable housing must be pared with a call to lower their transportation costs or price escalation will drive them deeper into debt. These are the households subject to serious erosion of their current living standards, standards which are already far below the norm.

The highest quintile have the luxury of choosing from among many options and at 48.7% they are still well below the 53.8% combined cost for housing and transportation for those in lowest quintile. There is room to trim in almost every expenditure category and this quintile can likely adjust without much noticeable impact on lifestyle. This quintile spends just slightly above the average percentage for the combined expenditures of health care, personal care and recreation, 12.8% versus 12.3% for the all households, but in absolute terms they spend \$11,293 for these expenses or almost 90% more then the average. They also spend \$6,673 or almost 90% more on private transportation than the average household and car ownership rates back this up. 65% of households in the highest quintile have 2 or more cars compared to 6.3% for the lowest quintile and 36% for the average household.

The highest quintile can afford to satisfy their preference for the single family detached house; 81% of this group lives in a detached house, with 93% owning the house. Almost 70% of the houses they occupy were built after 1970, and 71% of these homes have seven or more rooms and two or more bathrooms. Compare this to the average household, 57% of whom live in a single-family detached house with a 66% ownership rate.

The highest quintile has the option of some belt tightening in certain expenditure categories and the flexibility to consider moving either their residence or place of work to maintain or even enhance their lifestyle. This is even more appealing among aging households with no dependents to consider. Traffic congestion could be a big factor for this group and a move could be precipitated by a desire to shorten

work-related trips. Combining the demographic and economic profile of this group, with their desire to have the car but use it less, makes them prime candidates for the well established inner city neighbourhoods, larger acreages at the periphery if their jobs are close by, or even the option of an inner city condominium if advancing in age. This is not a quintile that is likely to suffer, although their household preferences may shift. Can be same be said for the three middle quintiles?

The impact of rising costs on these three middle quintiles, which represent Canada's middle class, is difficult to predict since they encompass such a diverse group of households and regions. The data confirms what we expect of this group. They represent 60% of all households in Canada and over 68% occupy single family detached dwellings. Around 68% are homeowners. These households aspire to owning the single family house as both ownership rates and preferences for the detached home increase with income. They are relatively mobile lot with just under half having moved in the past 5 years. Rising income seems to bring more stability. Vehicle ownership clearly reflects income levels with 54% of those in the fourth quintile owning 2 or more cars and more than half in the 2<sup>nd</sup> and 3<sup>rd</sup> quintiles having at least one car. For this group at least one car is an absolute essential to maintaining their quality of life.

The middle three quintiles represent households who may be forced to adjust if prices rise as they try to protect what they have worked so hard to achieve. They will cut back spending when prices go up with ramifications for local and provincial economies. They may react to a real or a perceived need to cut back and the results will soon track in consumer confidence polls and retail sales. A shift of expenses to cover higher fuel prices means less spending in local stores, restaurants, recreation or saving for down payment for a new home. A cut back on driving means households will also spend less going out to entertainment venues and restaurants.

### **Rising Gasoline Prices**

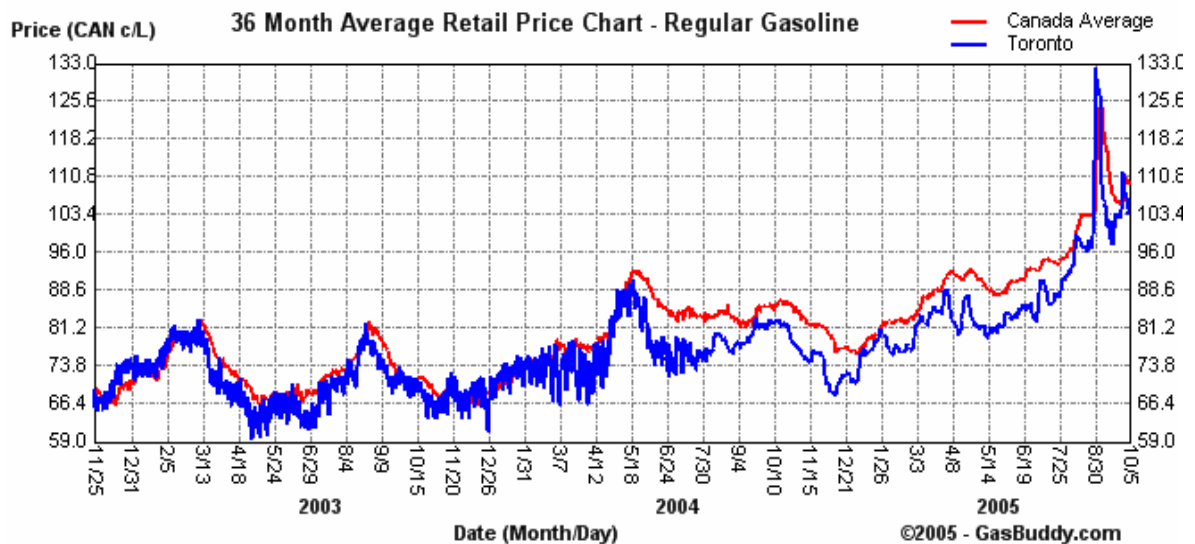
Spending on gasoline and other vehicle fuels was unchanged in 2003 from the previous year, at an average of \$2,000 per household for those that reported such purchases<sup>19</sup>. . The average price per litre in Toronto in 2003 was around 70 cents (*Figure 10*). If the price were to stabilize at \$1 per litre, this would translate roughly to an increase of \$860 per household. Finding an additional \$860 will not be an easy task for most middle income families, and almost impossible for those in the lowest quintile.

But households will be affected in other ways that are perhaps more insidious. Toronto and its 1.7 million households (2003) would be spending an additional \$1.4 billion if gasoline prices remain at the \$1 mark. To put this number in context, it exceeds the entire 2005 Capital Budget for the City of Toronto (\$1.0 billion). This

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<sup>19</sup> According to the Consumer Price Index, average gasoline prices increased by 11% in 2004

additional expenditure can be characterized as “leakage” since it conveys no direct benefits to the region as these monies largely accrue to producer regions and to upper tier governments in taxes. The implications range from decreasing productivity, possible job losses, and economic slow-down to increasing political strife among provinces and between provinces and the federal government over the spoils.



**Figure 10: The trend in gasoline prices since 2003.**

Source: Gasbuddy.com

## Some Implications

1. If we continue along the current path and remain dependent on the automobile for almost all our future transportation needs, rising costs of transportation imply that households will have less to spend in other categories. Trimming the household budget will be the first line of defense, but more substantial cuts may be required and this may affect the propensity of households to sustain the level of expenditures on housing that they do today. It could be argued that regions with lower transportation costs can sustain higher housing costs. Recent research in the U.S. confirms this phenomenon<sup>20</sup>.
2. Allocating more and more to transportation costs, at the expense of other household costs, will bring grief to more than the households themselves. Higher transportation costs drain dollars from regional and local economies, resources that would otherwise be available to bolster household spending,

<sup>20</sup> Robert T. Dunphy. “Housing and Traffic Costs”. *Urban Land*, February 2004.

- improve infrastructure and support job growth and economic development. Entire region may feel threatened and this will have political implications.
3. Discernable shifts in house prices may arise, given that average household travel costs systematically increase as the household's place of residence moves away from the city centre<sup>21</sup>. It is estimated that GTA households outside of the Cities of Toronto and Hamilton on average pay 43% more for housing and transportation combined than residents of either Toronto or Hamilton<sup>22</sup>. The impact will be most severe at the fringes and this may partially explain why new home prices (real, not nominal) at the fringes have remaining relatively subdued as they have for almost a decade<sup>23</sup>. The real beneficiaries will be the inner city locations that can capitalize on existing transportation options to reduce dependency on the car. Housing within the boundaries of the prewar city may command premiums in return for lower transportation costs as long as a healthy concentration of higher paying jobs remains in the inner core<sup>24</sup>.
  4. Large suburban areas face a formidable challenge in promoting transit use to workers employed throughout the fringes. These areas have developed at residential densities that are not conducive to most forms of public transit that can connect suburb to suburb. For workers facing this predicament, congestion will be part of the work day and it will get much worse. Congestion will increasingly consume one of our most valuable resources, time, plus all of the other costs associated with traffic grid-lock.
  5. Transit-oriented development might soon be the hottest urban real estate market. The evidence is already there. The Urban Land Institute's (ULI) own *Emerging Trends in Real Estate 2005* ranked locations near transit as the No. 1 choice among investors, developers, lenders, brokers, and property companies for every development type – residential, commercial, retail, and office throughout the U.S.<sup>25</sup>.

## What to Do?

Consumers place an extraordinary value on mobility and we are still in an era where households routinely spend large sums for SUVs and associated insurance, repair bills and gasoline. To make public transportation a viable alternative to the car for many households will require major improvements in transit service and transit solutions will not come cheap. A strong commitment to regional public

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<sup>21</sup> Miller, E. M. Roorda, M. Haider, and A. Mohammadian. *An Empirical Analysis of Travel and Housing Costs in the Greater Toronto Area*. A paper submitted to the Transportation Research Board (TRB). July 2003.

<sup>22</sup> Ibid.

<sup>23</sup> Bank of Canada, *Financial Systems Review*. December 2004.

<sup>24</sup> Statistics Canada, *Work and commuting in Census Metropolitan Areas, 1996 to 2003*.

<sup>25</sup> Urban Land Institute, *Urban Land*, Washington, DC. September 2005.

transportation is an imperative for any major Canadian city that wants to ensure greater economic security for its residents and workers well into the future. Thus far, the funding for public transportation is not yet at a level commensurate with the need, although substantial public dollars are beginning to flow in this direction<sup>26</sup>.

Second, as provincial governments are increasingly recognizing, growth must be appropriately managed at the regional level to better connect housing and development decisions with transportation decisions. Governments and the housing industry have a shared responsibility to deal with this relationship between housing and transportation costs. This means designing communities that are convenient, walkable, and transit-oriented. Locational efficiency through more housing and transportation options can pay big dividends in economic growth and household savings. There are already a number of projects throughout the country that exhibit this level of understanding<sup>27</sup>.

Third, the real benefits to attracting a significant portion of future growth to infill should be recognized by local governments, not just at a policy level, but at the level of local approvals and inter-departmental coordination<sup>28</sup>. In addition to dealing with neighborhood opposition, local councils should be proactive in attracting new residential development. These governments often commiserate over a lower property tax base as commercial and industrial lands are rezoned for residential. Little do they realize that this new population base will attract jobs to the city (jobs follow people, not the reverse), balance peak transit usage (trips in both directions at peak hours), and utilize existing public transportation systems. Infill development has important economic and social benefits for cities that must be recognized in the planning equation.

Fourth, better information is required to understand the intimate connection between housing and transportation costs and to track shifts in household expenditures. This data could assist in understanding the consequences of price shocks such as the recent energy crisis on the housing sector. Information gathering can also lead to improved tools to measure the effectiveness of public investments in transportation infrastructure and the impacts that such investments may have on the regional economy<sup>29</sup>.

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<sup>26</sup> The Toronto GTA is scheduled to receive \$1.6 billion in transit funding (from a total capital commitment of \$2.1 billion) most of which is over a 5 year period. Of this total 31.3% is Federal, 25.8% is Provincial, 33.2% is Municipal and the balance is from other non-government sources.

<sup>27</sup> The Canadian Home Builders Association has catalogued a number of projects that are “innovative” from a number of standpoints. See ***A Selection of Innovative Residential Developments***, David Redmond for the CHBA. October 2005.

<sup>28</sup> Initiatives by the Waterloo Region that lies approximately 100 km to the west of Toronto are a good example.

<sup>29</sup> One such tool is the proposal for a “housing lens” put forward by the CHBA. This lens would be applied to post hoc assessment of infrastructure investments and as a basis for forecasting future macro-urban impacts.

Finally, it is in the interests of both the housing industry and government to actively support the proposition that public transportation must be in advance of population growth and new development. After so many years of inaction on the public transportation front, it will be difficult to convince households that transit is finally on the way. The most potent argument in this situation may be the old adage that “seeing is believing”. Delivery of transit systems in conjunction with new development will be the most effective strategy to influence years of reliance on the automobile.

## **Conclusion**

For the average Canadian household two essential and very significant costs, the cost of housing and the cost of getting to and from the house, consume at least half of all household expenditures. With real incomes relatively flat and the share of expenditures for housing and transportation rising, we are already at the point where households are facing some tough trade-offs in allocating their annual expenditures. The consequences could be significant. An additional factor in this equation, the impact of which is more difficult to assess, is that of increasing traffic congestion. Overlay the costs of congestion on the rising share of expenditures for housing and transportation and a different future comes into focus.

The next fifty years will not be like the last fifty years. The postwar model of urban growth worked for a surprisingly long period of time and with many benefits for the average Canadian household despite the criticisms leveled at so-called sprawl. That model required the car as the means of mobility. The real cost of sustaining that model is no longer viable for many of the same households, as well as households to come. A new model is taking shape, one that involves massive public investment in public transportation, managed regional growth, new patterns of transit-oriented development, different housing choices, and hopefully a commitment to ameliorate environmental degradation, and reduce our dependency on non-renewable and expensive energy sources. The real beneficiaries will be the households themselves through improved quality of life, increased economic prosperity, and security of both house and job within the parameters of the household budget.