Federation of North Vancouver Community Associations

FONVCA AGENDA

Wednesday Mar 19th 2014

Place: DNV Hall 355 W. Queens Rd V7N 2K6
Time: 7:00-9:00pm
Chair: Peter Thompson – Edgemont & Upper Capilano Community Assoc. tel: 604-985-5961
email: peterjthompson@shaw.ca

Regrets: John Miller

1. Order/content of Agenda

a. Chair Pro-Tem Suggests:

2. Adoption of Minutes of Jan 15th

a. http://www.fonvca.org/agendas/mar2014/minutes-feb2014.pdf

b. Business arising from Minutes.

3. Roundtable on "Current Affairs"

A period of roughly 30 minutes for association members to exchange information of common concerns.

a. EUCCA

b. Blueridge C.A.

propose inviting Courtenay Fraitzl, the DNV¹s Beautification coordinator to the following FONVCA meeting in April

4. Old Business

a) Update: "Process" FONVCA Committee

b) Update: OCPIC by Corrie Kost / Dan Ellis

5. Correspondence Issues

a) Business arising from 1 regular emails:
Distributed with full package and posted on web-site

b) Non-Posted letters – 5 this period
Distributed as non-posted addenda to the full package.

6. New Business

a) Majority of Seniors live in own homes

http://www.statcan.gc.ca/daily-quotidien/140224/dq140224a-eng.pdf
http://www.fonvca.org/agendas/mar2014/news-clips/Majority%20of%20seniors%20live%20in%20their%20own%20homes.pdf

b) 2014-2018 DNV Financial Plan

http://www.dnv.org/budget2014

Discussion of CA's/DNV mtg of March 4th
http://www.fonvca.org/agendas/mar2014/2014%20Municipal%20Taxes%20on%20my%20home.pdf

BC Analysis of Municipal Property Taxes
http://www.cscd.gov.bc.ca/Lgd/library/revenue_source_review/An%20Analysis%20of%20Property%20Taxation.pdf

http://www.fonvca.org/agendas/mar2014/cities-grossly-underestimating-money-they-receive.pdf

c) Appropriate Term for Municipal Councils

As shown in the attached, most members of DNV council consistently get re-elected.

7. Any Other Business

a) Municipal Taxation

http://www.cscd.gov.bc.ca/lgd/pathfinder-finance.htm
see especially the statistics section at
http://www.cscd.gov.bc.ca/lgd/infra/statistics_index.htm
Municipalities are richer than they think:
http://www.cfib-fcei.ca/english/article/5966-municipalities-are-richer-than-they-think.html

http://dspace.library.uvic.ca:8080/bitstream/handle/1828/1909/berniaz_kate.pdf (long ! 88 pages)

b) Housing Affordability

10th (2014) Annual Demographia International Housing Affordability Survey
http://www.demographia.com/dhi.pdf (long! 68 pages)

http://housinsupply.our.dmu.ac.uk/files/2013/11/Consultation-Paper.pdf

http://www.vancouversun.com/story_print.html?id=9536387&sponsor=

8. For Your Information Items

a) Non-Legal Issues

i. News-Clips of the month Feb 2014

http://www.fonvca.org/agendas/mar2014/news-clips/
The annotated newspaper clips may be worth a read!

ii. Public Services Costs vs. Density

http://www.ncsociology.org/sociationtoday/v21/review2.htm

iii. Personal Synopsis of "Expect More"

– Demanding Better Libraries for Today's Complex World – by David Lankes

iv. Metro population-dwelling-employment projections
http://public.metrovancouver.org/planning/development/strategy/LandUseDesignationMapsJan11/TableA1-PopDwelUnitEmpProjforMVSubregMuni.pdf

vi. Inefficiency of local food

http://freakonomics.com/2011/11/14/the-inefficiency-of-local-food/

9. Chair & Date of next meeting

Wed. April 16th 2014

FONVCA Received Correspondence/Subject

17 February 2014 → 16 March 2014

LINK	SUBJECT
http://www.fonvca.org/letters/2014/17feb-to/Monica_Craver_17feb2014.pdf	"The economic future looks bare for B.C.'s ski resorts" -- A viable solution

Past Chair Pro/Tem of FONVCA (Jan 2010-present)

			Notetaker
Mar 2014	**Peter Thompson**	**Edgemont & Upper Capilano C.A.**	**To be determined**
Feb 2014	John Miller	Lower Capilano Community Residents Assoc.	Diana Belhouse
Jan 2014	Dan Ellis	Lynn Valley C.A.	John Miller
Nov 2013	Diana Belhouse	Delbrook CA & S.O.S	Eric Andersen
Oct 2013	Val Moller	Woodcroft rep.	Sharlene Hertz
Sep 2013	Eric Andersen	Blueridge C.A.	John Gilmour
Jun 2013	Peter Thompson	Edgemont & Upper Capilano C.A.	Cathy Adams
May 2013	John Miller	Lower Capilano Community Residents Assoc.	Dan Ellis
Apr 2013	Paul Tubb	Pemberton Heights C.A.	Sharlene Hertz
Mar 2013	Dan Ellis	Lynn Valley C.A.	Sharlene Hertz
Feb 2013	Diana Belhouse	Delbrook C.A. & SOS	John Miller
Jan 2013	Val Moller	Woodcroft & LGCA	Sharlene Hertz
Nov 2012	Eric Andersen	Blueridge C.A.	Cathy Adams
Oct 2012	Peter Thompson	Edgemont & Upper Capilano C.A.	Sharlene Hertz
Sep 2012	John Hunter	Seymour C.A.	Kim Belcher
Jun 2012	Paul Tubb	Pemberton Heights C.A.	Diana Belhouse
May 2012	Diana Belhouse	Delbrook C.A. & SOS	John Miller
Apr 2012	Val Moller	Lions gate C.A.	Dan Ellis
Mar 2012	Eric Andersen	Blueridge C.A.	John Hunter
Feb 2012	Dan Ellis	Lynn Valley C.A.	John Miller
Jan 2012	Brian Platts	Edgemont & Upper Capilano C.A.	Cathy Adams
Nov 2011	Paul Tubb	Pemberton Heights	Eric Andersen
Oct 2011	Diana Belhouse	Delbrook C.A. & SOS	Paul Tubb
Sep 2011	John Hunter	Seymour C.A.	Dan Ellis
Jul 2011	Cathy Adams	Lions Gate C.A.	John Hunter
Jun 2011	Eric Andersen	Blueridge C.A.	Cathy Adams
May 2011	Dan Ellis	Lynn Valley C.A.	Brian Platts/Corrie Kost
Apr 2011	Brian Platts	Edgemont & Upper Capilano C.A.	Diana Belhouse
Mar 2011	Val Moller	Lions Gate C.A.	Eric Andersen
Feb 2011	Paul Tubb	Pemberton Heights ← Special focus on 2011-2015 Financial Plan	
Jan 2011	Diana Belhouse	S.O.S.	Brenda Barrick
Dec 2010	John Hunter	Seymour C.A. ← Meeting with DNV Staff on Draft#1 OCP	None
Nov 2010	Cathy Adams	Lions Gate C.A.	John Hunter
Oct 2010	Eric Andersen	Blueridge C.A.	Paul Tubb
Sep 2010	K'nud Hille	Norgate Park C.A.	Eric Andersen
Jun 2010	Dan Ellis	Lynn Valley C.A.	Cathy Adams
May 2010	Val Moller	Lions Gate C.A.	Cathy Adams
Apr 2010	Paul Tubb	Pemberton Heights	Dan Ellis
Mar 2010	Brian Platts	Edgemont C.A.	Diana Belhouse
Feb 2010	Special		
Jan 2010	Dianna Belhouse	S.O.S	K'nud Hille

FONVCA AGENDA ITEM 2a1

FONVCA

Draft Minutes of Regular Meeting, Wednesday February 19th, 2014

Place: DNV Hall 355 W. Queens Rd V7N 2K6
Time: 7:00-9:00pm
Chair Pro-tem: John Miller – LCCRA Tel: 604-985-8594 mail:jlmmam@shaw.ca

Regrets: Dan Ellis, Cathy Adams

Attendees:

John Miller (Chair Pro-tem)	Lower Capilano Community Residents assoc.
Corrie Kost	Edgemont & Upper Capilano C.A.
Diana Belhouse (notetaker)	Delbrook Community Association
Val Moller	Woodcroft / L.G.N.A.

1. Order/content of Agenda

a) Motion for Call to Order at 7:12 pm
b) Chair Pro-Tem Suggests: as is but with addition of items
- 7(c) 2014 budget meeting by DNV staff with Community Associations
- 2(b) reference to 5(b) follow-up by John Miller

2. Adoption of Minutes of January 15th , 2014

a) http://www.fonvca.org/agendas/feb2014/minutes-jan2014.pdf
Unanimously adopted.

b. Business arising from Minutes.
- email to DNV council re: Jan 15th agenda item 5(a)
http://www.fonvca.org/agendas/feb2014/January-29-letter-to-council.pdf
- a motion passed at the Jan 15th FONVCA meeting urging Mayor & Council to follow up on Councillour Nixon's November 13th suggestion "to review the impacts of mountain biking and trail building on the North Shore" was to be updated with Dan Ellis addition "We would be grateful to hear from you as to whether such a review is being contemplated and when it might occur." The updated version was the one actually sent to M&C.

3. Roundtable on "Current Affairs"

a) EUCCA – Corrie Kost
Phase 4 of the Edgemont Village Refresh process has resulted in two informational meetings/workshops attended by about 60 persons at each event.
Two critical issues raised:
- partial 4th floor option would be considered under exceptional circumstances. This would apply to the Thifty Foods project where about 100 residential units are being proposed above the supermarket.
- removal of the boulevard in the middle of Edgemont to allow for wider sidewalks and narrowing of the roadway, thus allowing street trees on the sidewalks. A controversial move since many residents like the central boulevard, not only for its beauty but also for the safety it offers for mid-block pedestrian crossing.
A public hearing would be held if such a change is contemplated

- Regional Growth Strategy changes/amendments require a public hearing – but Metro has the final say on any approvals.

b) Blueridge Community Association
Eric Andersen of the BCA was given an Award of Honour at the Feb 3rd Council meeting. This was lauded and FONVCA members toasted Eric in his absence. Congratulations on a well deserved honour!

c) Woodcroft/Lions Gate Neighbourhood Association - Val Moller
Val reported that the presentation on the Design Directions of the Public Realm given by DNV staff at the Feb 13th public meeting at the Grouse Inn (attended by about 80 people, about 20 being staff/consultants) was largely unchanged from previous meetings – ie. 100,000 sq-ft of "commercial space" was replaced by ~125,000 sq-ft of underground public storage facility. Concern was expressed that Councillour Nixon spoke improperly against a person who questioned the Larco plan. A second meeting was to be held in Woodcroft on Feb 20th. Traffic impact/consultation on the broader community of this project on Capilano Rd have so far not taken place. McGuire will need to build sidewalks to accommodate the proposed increased traffic. In the proposals , the "transition areas" to the denser core fully removed any prospects of retaining the single family homes. Capilano river would be lined by Townhouses (with increased setback from the river). Plans did not include a public riverside park. Larco has made it clear that the ~24,000 sq-ft community centre will only be built if the proposed density guidelines are approved – and even then, not for at least 5 to 8 years. It was alleged that the Lower Capilano Larco plan does not strictly require a public hearing in order to proceed.

d) Delbrook – Diana Belhouse
Corrie reported attending a lecture at Hycroft (University Womens Club of Vancouver) by Andy Yan, Planner, Bing Thom Architects and Adjunct Professor SCARP (UBC **S**chool of **C**ommunity **a**nd **R**egional **P**lanning) where he explored the *"10 data points you should know about your City, from demographics to civic participation, to real estate ownership*". Many of these "points" apply equally well to DNV.
Diana invited interested FONVCA members to attend the March 4th lecture by Dr. Maged Senbel, assistant professor SCARP –on "*What are the Current Challenges and New Trends in Public Engagement for Neighbourhood Planning?"* For details see
http://www.uwcvancouver.ca/index.php/programs-events-events-entertainment?task=view_event&event_id=237
Four members of the Delbrook Community Association will attend. Phone 604-731-4661 to make a reservation. Cost is $10 plus tax. Meeting will be held at Hycroft, 1489 McRae Ave., Vancouver
http://www.uwcvancouver.ca/index.php/programs-events-events-entertainment?task=view_map&location_id=1&tmpl=component&format=html

4. Old Business

a) **"Process" FONVCA Committee** – the committee is to meet 2pm February 20. Little progress has been made in last months. We may need to go back to basics – and agree on a common set of fundamentals for what CA's should be.

b) **OCPIC** – meeting set for Feb 12th was cancelled – new date unknown. Committee term has effectively expired and is being reviewed by the Advisory Oversight Committee of Council in late February.

c) **Healthy Neighbourhood Fund** – DNV repaid the payment ($444) that Corrie paid for the FONVCA website (now paid up for a 3 year period).

5. Correspondence Issues

a) Business arising from 8 regular emails

- It was unanimously decided to unpost the Jan 26th letter from Doug Curran since it impugns the reputation of District appointed residents of the Marine Drive Committee.
- Thank-you letter to M&C regarding funding received by FONVCA from the Healthy Neighbourhood Fund for website costs.
- Issue of last minute addition to council agenda – without prior public notification was discussed.

b) Non-Posted letters – 0 this period

6. New Business

a) "FONVCA" anticipated amalgamation

Corrie explained how the FONVCA name was designed to be forward looking.
The Feb 3rd DNV Council motion by Doug McKay-Dunn (carried 4/3)
"THAT:
1. Council support the forming of an independent committee consisting of distinguished members of the three North Vancouver communities to examine the all possible benefits of an amalgamation and report back to Council no later than September 8, 2014;
2. Council request that North Vancouver City and the District of West Vancouver support asking the Province to provide funding to assist in any research and/or studies required on a possible amalgamation;
3. The Minister responsible for Municipal Auditor General's office be formally requested to direct the Auditor to assist in this review;
4. Both the City of North Vancouver and the District of West Vancouver be invited to participate in the selection of the members of the committee;
5. In order to ensure that the entire process is impartial and its findings are driven by evidence, politicians and staff should not directly participate except for the selection of the members of the committee and to provide any necessary support or requested information;
6. Subject to the results of the review, the question of amalgamating the three North Shore municipalities be put to our communities by way of referenda in the next municipal election; and,

THAT the referendum question be crafted in consultation with the Province in accordance with appropriate legislation and best practises.

b) Changing Landscape of Municipal Libraries: COW meeting of Feb 11

Library presentation material (from Feb 11th COW meeting) distributed at FONVCA meeting.
Meeting was attended by Library Board. Diana is one of the few remaining original residents who started the DNV Library in the 60's but was unaware of this meeting and decried the lack of publicity before such an important event.

Corrie (only member of public at COW meeting) reported that the new vision would see more programs and opportunities for community engagement in local governance. The big question: Will the room rentals be waived for community associations?
Currently Kindle support (for downloading free books) is blocked by Amazon for Canada (expected to change soon as per policy in US). However Burnaby has a 3-week limit download under trial.
Cross-Canada book purchases would reduce costs. In the 50's many libraries could purchase the ~ 20,000 new books/yr. Not so with the ~ 300,000 books published annually today!
Do libraries still have a role to play in this computer age? Emphatically YES!
http://www.dnv.org/upload/documents/Council_Agendas_Minutes/140211CW_AA.pdf

7. Any Other Business

a) Congestion and Nowhere to Go – Road pricing in Metro Vancouver
http://www.bcbc.com/content/1027/RoadPricingPaper_FINAL.pdf
Limited copies of this 53 page Oct/2013 document were distribution at meeting.
As well the dated but largely relevant publication "Road Charging. Is it fair?"
http://erf.be/media/doc/2387_icp_manifesto_v5.pdf was also distributed to attendees.
Metering of all roads is still in the far future.

b) Searching for specific information in a large collection of pdf files.
All back issues of the local newspapers have been collected in pdf format for global keyword searching. PDF Professional makes this practical. Corrie noted that many issues come up time and time again!

c) DNV 2014 Budget Meeting with Community Associations
Rick Danyluk from DNV will be giving his annual presentation of the DNV Draft Budget (presented to Council Monday March 3/2014). Corrie will email members to determine which of two dates – March 4th or March 5th is the better. [**Subsequently the best response was determined to be for 7pm Tues March 4th**]

8. For Your Information Items

a) Non-Legal Issues

i. News-Clips of the month Feb 2014
http://www.fonvca.org/agendas/feb2014/news-clips/
The annotated newspaper clips may be worth a read!.
Listing of titles of all collected articles will now be made available for future FONVCA meetings.

ii) Triple Bottom Line – What is it? How does it work?
http://www.fonvca.org/agendas/feb2014/Triple-Bottom-Line-insert.pdf

iii) DNV 2014 Assessment
2013: $30,516,638,459 2014: $30,709,475,273 ← very little change!
Tax rate comparisons (2013):
http://www.cscd.gov.bc.ca/lgd/infra/tax_rates/tax_rates2013.htm

iv) National Municipal Adaptation Project
http://www.localadaptation.ca/

For BC see http://www.localadaptation.ca/resources/NMAP%20FS%20-%20BC%20J2014.pdf

v) Vancouver Consumer Price Index for Year 2013
December 2012 to December 2013: +0.2%
Dec2002: 100.0, Dec2012: 118.3 Dec2013: 118.5
http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/cpis02a-eng.htm
Examining the DNV Budgets over the past 10 years indicates that taxes are FAR exceeding the cost of living increases. This trend is clearly not sustainable.

vi) Affordability Index – by the numbers
http://www.fonvca.org/agendas/feb2014/news-clips/Affordability-Index.pdf

vii) TRANSLINK - by the numbers/governance
http://www.fonvca.org/agendas/feb2014/news-clips/TRANSLINK-by-the-numbers.pdf
http://www.fonvca.org/agendas/feb2014/Mayors-to-have-more-control-over-transit-diagram.pdf

b) Legal Issues
i) OCP Process and Consultation
http://www.fonvca.org/agendas/feb2014/LGD_OCP_Process_and_Consultation.pdf

9. Chair & Date of next meeting

Chair: Peter Thompson –EUCCA [subsequently confirmed]
Date: Wed. March 19th 2014
Meeting Adjourned at 9:10pm

FONVCA AGENDA ITEM 5A - #1/1

Subject: Fwd: Re:"The economic future looks bare for B.C.'s ski resorts" -- A viable solution
From: Brian Platts <bplatts@shaw.ca>
Date: 17/02/2014 11:01 PM
To: Corrie Kost <corrie@kost.ca>

-------- Original Message --------
Subject: Re:"The economic future looks bare for B.C.'s ski resorts" -- A viable solution
Date: Mon, 17 Feb 2014 21:48:04 -0800
From: Monica Craver <mecraver@shaw.ca>
To: Corrie Kost <corrie@kost.ca>, Brian Platts <bplatts@shaw.ca>

A
m
--Monica--

From: Monica Craver [mailto:mecraver@shaw.ca]
Sent: February 17, 2014 5:04 PM
To: Elise Roberts
Cc: fonvca@fonvca.org; West Van Matters Carolanne R.
Subject: Fw: "The economic future looks bare for B.C.'s ski resorts" -- A viable solution

For your information.
--Monica--

From: Monica Craver
Sent: Monday, February 17, 2014 4:58 PM
To: DNVMayor and Council ; Mayor&Council (DWV)
Cc: Susan Rogers ; Graham Knell ; Gavin Joyce ; Corinne Ambor ; Andrew Banks ; Anne Mooi ; Alexandra Hejduk ; info@grousemountain.com ; info@cypressmountain.com ; snow@mountseymour.com
Subject: "The economic future looks bare for B.C.'s ski resorts" -- A viable solution

Dear Mayors and Councils:

With bad news like this, you would think that dialogue between the three North Shore Ski Resorts, NSMBA, and North Shore municipalities would have begun long ago. What merit is there allowing the ongoing mountain biking freeride in our public forests, carried on the backs of taxpayers, when our three private ski resorts are found wanting? There is no revenue in it for these three resorts as long as the mtbing freeride on our public forests below them is questionably supported by DNV and DWV. The ski resort idea works. We can see this in Whistler, and elsewhere.

What would you rather see: Three ski resorts go under for lack of snow? Or,

mountain bikers/fat tire (snow) bikers "paying to play" on them; while banning the freeride from the public forests, altogether? Why should the majority non-mountain bikers have to pay for a minority mountain bikers' self-gratification to do whatever they wish on our public forests, unabated, while abusing the natural environment and making it dangerous for any other forest user to enjoy. All that riding and trail digging four seasons a year, rain or shine, day and night is just not sustainable. Those jump structures, berms and rollercoasters built on the trails are not inclusive, and restrict the enjoyment of every other forest user, on foot or hoof. Remember, the renegade mountain bikers first came onto our public forest land to ride and build without permission, crying that there was no other places to ride. Now there is a place for them, and a very legitimate place for them...Why continue pursuing what are unsustainable and very costly solutions, when the answer is right in front of you?

It is time for the mountain bikers to pay to play, supporting our three ailing ski resorts. It only makes common sense, in light of this recent article:

http://www.theprovince.com/life/story.html?id=9510745

I urge you to seriously consider it, helping to protect what still remains of our public forests from further off-road recreation abuse, and to ensure the next generations' enjoyment of it, while leaving intact and viable forests to battle climate change naturally. Thank you.

--Monica Craver--

FONVCA AGENDA ITEM 6a1

Study: Emerging trends in living arrangements and conjugal unions for current and future seniors, 1981 to 2011

Released at 8:30 a.m. Eastern time in The Daily, Monday, February 24, 2014

Between 1981 and 2011, the share of seniors 65 years of age and older who lived with their spouse or partner increased, while the overall share of those in other living arrangements decreased. The conjugal lives of seniors also changed, as the proportion of those who were divorced or separated rose from 4% to 12% over the period.

In 2011, 92% of all seniors 65 years of age and older lived in private households and 8% lived in collective dwellings. At least half of those living in collectives were 85 years of age or older.

The proportion of those living in collectives declined between 1981 and 2011, especially among older seniors. In 2011, 35% of women 85 years of age and older lived in collectives, compared with 41% in 1981. Among men in that same age group, the proportion declined from 29% to 23% over the period.

Among seniors living in private households in 2011, 76% of men and 49% of women lived as part of a couple, either as spouses or common-law partners. This compares with 75% of men and 40% of women in 1981.

A significant portion of seniors lived alone in 2011, with 35% of women and 17% of men 65 years of age and older living in private households. In 1981, a similar portion of women lived alone (36%), but slightly fewer men did so (14%).

The remainder of those in private households, 16% of women and 7% of men, lived with others, mostly relatives. These types of arrangements declined over the period, as 23% of senior women and 11% of senior men lived with others in 1981.

Senior couples are closer in age

Two factors are related to the rise in the share of seniors living in couples. The first is an increase in life expectancy, especially among men, while the second is the growing share of senior couples that are closer in age.

In 2011, 49% of the 1.7 million senior couples in Canada (with at least one spouse or partner 65 years of age and older) had an age difference of three years or less. That is up from 40% in 1981.

Conversely, 46% of senior couples were composed of older men that were at least four years older than their spouse or partner. This compares with 52% in 1981.

For 6% of senior couples, the woman was at least four years older. In 1981, 8% of senior couples were in this situation.

More seniors are divorced or separated

In 2011, 77% of the senior population had experienced just one union, either as married spouses or common-law partners.

The transition to "unmarried" status can have consequences on the financial and emotional well-being of seniors. Many of these transitions are caused by the death of one partner, but a growing number result from divorce and separation.

Between 1981 and 2011, the proportion of those who were divorced or separated increased from 4% to 12% among seniors 65 years of age and older.

However, many seniors experienced a second union in the aftermath of a divorce or separation. In 2011, 76% of men and 55% of women who had been divorced or separated eventually became part of a second union.

About three-quarters of seniors who experienced a second union got married again, with the rest living as common-law partners.

Conjugal patterns of future seniors are even more diverse

The living arrangements of individuals who were 55 to 64 years of age, who represent the next cohort of seniors, were even more diverse than those of current seniors.

For example, the share of those who were divorced or separated was around 20% for individuals who were 55 to 64 years of age in 2011. This compares with 12% among current seniors.

Future seniors were also more likely to experience a second union after a relationship breakup. About 3 in 10 people 55 to 64 years of age experienced at least two unions during their lifetimes, compared with 19% among current seniors.

Finally, common-law relationships were more prevalent among future seniors. In 2011, 12% of individuals 55 to 64 years of age who were in a couple were common-law partners. This compares with 6% among seniors 65 years of age and older.

Note to readers

In this release, data from the 1981 to 2011 censuses of population and from the 2011 General Social Survey were used to examine the trends in living arrangements and conjugal unions of seniors, who are defined as individuals 65 years of age or older, and future seniors, who are defined as individuals 55 to 64 years of age. According to census data, there were 4.6 million seniors in private households in 2011, while future seniors numbered 4.3 million.

Definitions, data sources and methods: survey numbers 3901 and 4501.

The article "Emerging trends in living arrangements and conjugal unions for current and future seniors" is now available online in *Insights on Canadian Society* (75-006-X). The study can be accessed from the *Browse by key resource* module of our website under *Publications*.

For more information, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca).

To enquire about the concepts, methods or data quality of this release, contact Anne Milan (613-951-8236; anne.milan@statcan.gc.ca), Demography Division.

For more information on *Insights on Canadian Society*, contact Sébastien LaRochelle-Côté (613-951-0803; sebastien.larochelle-cote@statcan.gc.ca), Labour Statistics Division.

FONVCA AGENDA ITEM 6a2

Majority of seniors live in their own homes: report

Percentage of seniors living as couples also rises as men are living longer, Statistics Canada says

BY KIM PEMBERTON, VANCOUVER SUN FEBRUARY 24, 2014 true

Badur, 75, and Gillian, 69, Jaffer in their Kitsilano condo. A Statistics Canada report shows more seniors are living together as couples (since men are living longer).

Photograph by: Mark van Manen, Vancouver Sun

Badur and Gillian Jaffer recently celebrated their 40th wedding anniversary and are doing all they can to stay healthy so they can remain together in their senior years.

The Vancouver couple are typical of Canadians 65 years of age and older, the vast majority of whom live together and in private households.

A Statistics Canada report issued Monday found that 92 per cent of all seniors lived in their own homes and eight per cent lived in collective dwellings.

It also found that between 1981 and 2011, the proportion of seniors who still live with their spouse or partner had increased. In 2011, 76 per cent of men and 49 per cent of women lived as part of a couple — up from 75 per cent of men and 40 per cent of women in 1981.

“The increased share of seniors who live in a couple may be related to higher life expectancy. Although women still live longer than men, life expectancy has been increasing more rapidly for men during the past three decades,” the report noted.

Badur, 75, and Gillian, 69, live in a Kitsilano condominium and try to stay active and eat healthy in order to avoid ever having to move into a retirement home.

"Both of our parents managed to remain living in their own house and hopefully we'll be in the same situation," said Gillian Jaffer.

www.statcan.gc.ca/daily-quotidien/140224/dq140224a-eng.htm

"We hear endless stories of couples, together 40 or 50 years, and they're separated and put into different facilities. I believe it has a devastating effect and leads to an earlier departure of this earth."

According to the Statistics Canada national study, called "Emerging trends in living arrangements and conjugal unions for current and future seniors, 1981 to 2011," the proportion of seniors living in collective dwellings declined between 1981 and 2011, especially among older seniors. In 2011, 35 per cent of women 85 years of age and older lived in a collective home, compared to 41 per cent in 1981. The proportion of men age 85 and over living in a collective home also declined, to 23 per cent from 29 per cent.

Another factor in the rise of the percentage of seniors living as couples was the growing share of senior couples that are closer in age.

In 2011, of the 2.8 million Canadians aged 65 and over, 49 per cent had an age difference of three years or less — up from 40 per cent in 1981

The study also found the proportion of seniors who were divorced or separated rose from 4 per cent to 12 per cent between 1981 and 2011. That trend has been referred to as "grey divorce" and even among the population aged 85 and over, the proportion of divorce or separation had increased from 1 per cent in 1981 to 4 per cent in 2011.

"Most seniors and future seniors have experienced just one union in their lifetime ...," the report said. One way to express the longevity of unions is to examine the proportion of seniors who reached their golden anniversary — 50 years of marriage. In 2011, 21 per cent of women and 10 per cent of men aged 65 to 74 had reached this milestone, either with a current or past marriage. Not surprisingly a much larger share of seniors aged 75 and over — 74 per cent — reached this milestone, with little difference between men and women.

The study also found that of the 4.6 million seniors aged 65 and over, about 166,000 lived common-law in 2011.

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FONVCA AGENDA ITEM 6b2

2014 Municipal Taxes on my home: 2851 Colwood Dr.

Total Property Taxes		
2014	~ $6200	**Increase of 132 %**
2007	$4044	
2000	$2671	
Municipal Taxes		
2014	~ $3000	**Increase of 137 %**
2007	$2020	
2000	$1265	
Cost of Utilities		
2014	$1473	**Increase of 146 %**
2007	$ 809	
2000	$ 599	
School Taxes		
2014	~ $1950	**Increase of 74 %**
2007	$1378	
2000	$1119	
GVTA/Translink		
2014	~ $410	**Increase of 440 %**
2007	$292	
2000	$ 76	
CPI (Vancouver)		
2014	124	**Increase of 24 %**
2007	114	
2000	100	
BC Assessment(*)		
2014	$ 1,219,500	Increase of 237 %
2007	$ 792,300	
2000	$ 362,400	

(*) Overall municipal assessments have nothing to do with the overall cost of utilities, schools, roads, police protection, fire protection, etc. They are only used to set the mill rate. **Taxes are to cover the cost of services.** These costs are not related to overall assessments**.**

Municipal Taxes and Fees are out of control.

FONVCA AGENDA ITEM 6b3

Municipal Revenue Sources Review

An Analysis of Property Taxation

August, 2012

BRITISH COLUMBIA
Ministry of Community, Sport and Cultural Development

Property Tax in British Columbia

Municipalities use property taxation as their primary source of funding to provide services that have been requested by their taxpayers. Roughly half of all municipal revenue in the Province of British Columbia (Province) is collected through property taxation. The remaining half is mainly collected through user fees and developer contributions with minor revenue collected from senior government transfers.

Of total municipal property taxes, approximately 95% are collected as property value tax and grants-in-lieu of taxes. The remaining 5% is collected as parcel tax.

Property Value Tax and Grants-in-Lieu of Taxes

A property value tax (also called an ad valorem tax) is a tax levied on the assessed value of land and improvements on a property. Land means physical land, including land covered by water. Improvements are buildings, fixtures and structures placed on or in the land, excluding chattels and production machinery.

A grant-in-lieu of taxes is similar to a property value tax but is collected from provincial and federal governments and their associated agencies and Crown corporations. Since senior governments are exempt from property taxation under section 125 of the *Constitution Act*, they pay annual grants instead of property value taxes; however, the methodology is quite similar.

Property Tax Formula

The formula for determining property value tax revenue is as follows:

Tax Revenue = Taxable Assessment x Tax Rate

Taxable Assessment

Taxable assessment represents the assessed value of land and improvements on which a municipality may levy property taxes. The determination of taxable assessment is done by an independent Crown corporation called British Columbia Assessment (BCA). With some minor exceptions, appraisers with BCA must annually value the land and improvements of all property in the Province (both rural and municipal). Each individual property is referred to as a folio and assigned a unique identification code by BCA.

Valuation Approaches

The Province, like most jurisdictions across Canada and the United States, uses actual or market value as the standard method of valuing properties. The method used to determine market value varies depending on the nature of the property and sufficient availability of market evidence but is based on:

- **Sales Comparison Approach** – market value is based on the sale price of comparable properties. This valuation method works best for properties that are frequently bought and sold such as residential housing.
- **Income Approach** – market value is based on the capitalized value of current rents and leases. This valuation method works best for properties that sell less frequently but have an active rental or lease market such as commercial office space.

- **Cost Approach** – market value is based on the replacement cost of a property (taking into account depreciation of buildings and other improvements). This valuation method works best for properties that are neither sold nor rented frequently such as industrial properties.
- **Prescribed Approach** – market value is based on prescribed costs set by regulation or policy. This valuation method works best for properties that cannot easily be valued using any of the other approaches such as ski hills and linear assets like rail tracks.

It is also common practice to value land based on its highest and best use, meaning the reasonable and optimal legal use of property which is both physically possible and financially feasible. For example vacant downtown land may be valued at its development potential rather than existing use. BCA will consider many factors when determining highest and best use, including: zoning, official community plans, and recent development trends.

Classes of Property

In addition to assessing a value, BCA assigns properties (or portions of properties) to a specific class based on its type or use. Currently in British Columbia, there are nine classes of property prescribed by the Lieutenant Governor in Council. Those classes are:

- **Class 1 – Residential –** Land and improvements used for residential purposes including: single family dwellings, apartments, condominiums, and manufactured homes.
- **Class 2 – Utilities –** Land and improvements used or held for rail transport, pipelines, telecommunications, closed circuit TV and electricity.
- **Class 3 – Supportive Housing –** Special needs housing for people at risk. Each property is assessed at a nominal amount of $2.
- **Class 4 – Major Industry –** Land and improvements used for mining, processing, manufacturing, extraction, smelting, refining, and marine transport. Most properties in this class are involved in coal and mineral mining and manufacturing wood products and pulp and paper.
- **Class 5 – Light Industry –** Land and improvements used for extraction, processing, manufacturing, and transportation as well as associated storage and warehousing that is not included in Classes 2 or 4.
- **Class 6 – Business and Other –** All land and improvements not included in any of the other classes. This class is primarily made up of commercial property like office and retail space.
- **Class 7 – Managed Forest Land –** Land that is being used for the production and harvesting of timber.
- **Class 8 – Recreation/Non-Profit –** Land used for recreational activities (e.g. golf, skiing, tennis, swimming, etc.) and land and improvements used as places of public worship or for fraternal meetings.

- **Class 9 – Farm –** Land used for farming.

The critical purpose behind the different classes of property lies in the setting of tax rates. For each local government and public authority, tax rates may vary between different classes of property (e.g. between Class 1 and Class 2) but not within a class of property (e.g. all Class 2 property is taxed at the same rate). Taxes are discussed in greater detail in the second half of this paper.
The 2012 assessment roll contains entries for over 1.9 million properties valued at approximately $1.1 trillion. Approximately 87.7% of all properties contain a residential component (Class 1), equating to approximately $850 billion of the total value on the assessment roll. Class 6 properties are the next most common property type, making up 6% of all properties and $177 billion of the total roll value.

Tax Rates
Property tax rates are expressed as a rate per $1,000 of assessment.

General Municipal Taxation
Every year, each municipality in the Province must adopt a property tax bylaw. The tax bylaw must be adopted after the annual financial plan (budget) for the municipality as the financial plan determines the service level, spending and revenue requirements of a municipality for the current fiscal year. Based on the tax revenue requirements in the financial plan, the municipality will set its municipal tax rates to raise the appropriate revenue from the nine different classes of property.

Municipalities generally have very broad authority to set their tax rates. While they cannot vary tax rates within a class of property, they can vary tax rates between different classes. Setting different tax rates for different property classes is often referred to as a "variable rate" taxation system.

There are some specific restrictions on municipal taxing authority:

- **Utilities —** under section 199 of the *Community Charter*, Cabinet can make regulations prescribing limits on tax rates and the relationships between tax rates. A relationship between tax rates (also referred to as a tax ratio), is the ratio of the tax rate between two classes. For example, if the tax rate for Class 1 (Residential) is $2 per 1,000 and for Class 6 (Business and Other) is $10 per 1,000; the ratio of Class 6 to Class 1 is 10:2 (or 5:1).

  This regulatory authority is currently used to set a maximum tax rate and ratio on Class 2 (Utilities). The maximum tax rate that can be levied by any municipality is the greater of $40 per 1,000 or 2.5 times the Class 6 (Business and Other) tax rate.

- **Ports —** marine port property is a sub-category of Class 4 (Major Industry). In 2003, the Province launched the Ports Property Tax Initiative. One result of this initiative was a cap on municipal property taxes levied on port terminals. Under the *Ports Property Tax Act*, the cap was set at $27.50 per 1,000 on existing land and improvements and $22.50

per 1,000 on new investment. The Province provided affected municipalities, offsetting funding for the imposition of the cap.

- **New Municipalities or Boundary Extension** – incorporation of new municipalities or boundary extensions to existing municipalities are done through letters patent. In some cases, the letters patent will restrict the tax rate a municipality can levy on a specific property or class of property. Usually the restricted rate is based on the rural area tax rate levied under the *Taxation (Rural Area) Act*.

Taxation for Other Public Bodies

In addition to levying taxes for its own purposes, each municipality also levies taxes for other public authorities. Each year the municipality levies and collects the taxes, then remits the revenue to the appropriate public authority. The principal authorities are:

- **British Columbia Government (School Tax) —s**chool tax rates are set annually by Order-in-Council. A province-wide rate is set for each non-residential class including a nominal rate for Supportive Housing. The residential rate varies between school districts based on population and assessment base.
- **British Columbia Government (Police Tax) —** larger municipalities over 5,000 people, pay for most of their police costs. In smaller communities under 5,000 people and in rural areas, the Province sets tax rates to recover a portion of police costs. These tax rates are based on provincial tax ratios.
- **Regional District —** the regional district will annually requisition a dollar amount from member municipalities for regional services. Depending on the taxing rules for each service, which are set in the establishment bylaws, the municipality has the option of setting tax rates based on provincial tax ratios (set by regulation) or municipal ratios (based on relationship between General Municipal Taxes for different classes of property in the current year).
- **Hospital District —**in cooperation with regional health authorities, hospital districts determine the annual contributions from municipalities for health-related capital costs. Hospital districts will requisition amounts from each municipality who will then set the tax rates based on provincial tax ratios to raise the necessary revenue.
- **Translink (in Metro Vancouver only) —** Translink is the regional transportation authority in Metro Vancouver. Within the municipalities of Metro Vancouver, Translink levies two distinct property value taxes.

    1. The first tax is for core operations and capital and is levied on all property classes. This tax is based on an initial historical bylaw set by Translink and sets different rates for each class. Subsequent increases to these historical tax rates cannot exceed provincial ratios (for the increase portion only).
    2. The second tax is a special replacement tax only levied on the following classes: Residential, Utilities, Major Industry, Light Industry. Business and Other. The maximum amount of revenue this tax can generate per year is $18 million.

- **Victoria Regional Transit Commission (in the Capital Regional District (CRD) only)** — this Commission is governed under the *British Columbia Transit Act* and provides transit services within the CRD. The Commission sets tax rates based on provincially prescribed tax ratios.
- **British Columbia Assessment (BCA)** — BCA is responsible for assessing all property values in the Province. The revenue required to cover operating and capital costs of BCA is raised through a property value tax. BCA levies a province-wide tax through an annual bylaw. Cabinet can place restrictions, including limiting tax rates and ratios, on BCA's taxing authority by regulation. To date, Cabinet has imposed no such regulation.
- **Municipal Finance Authority of British Columbia (MFA)** — the MFA is the local government banker and raises long-term debt from the bond markets to finance municipal infrastructure. The revenue to cover operating and capital costs of the MFA are raised through a property value tax. The MFA levies a province-wide tax through an annual bylaw. The tax rates are restricted by provincially set ratios.

Prescribed Tax Rates and Ratios for Other Public Authorities (2011)

Class	Title	School Tax Rates	Translink Tax	Translink Replacement Tax	BCA Tax Rates	Provincial Ratios*	Victoria Transit Commission Tax Ratios
1	Residential	Variable	0.3349	0.0151	0.0621	1.0 : 1.0	1.0 : 1.0
2	Utility	14.10	2.5440	0.1632	0.5114	3.5 : 1.0	5.4 : 1.0
3	Supportive Housing	0.10	1.4527	-	0.0621	1.0 : 1.0	1.0 : 1.0
4	Major Industry	6.60	2.1027	0.1665	0.5114	3.4 : 1.0	5.4 : 1.0
5	Light Industry	6.60	1.8150	0.1476	0.1896	3.4 : 1.0	5.4 : 1.0
6	Business & Other	6.60	1.4735	0.1351	0.1896	2.45 : 1.0	5.4 : 1.0
7	Managed Forests	2.00	-	-	0.2953	3.0 : 1.0	5.4 : 1.0
8	Recreation/Non-Profit	3.40	0.3059	-	0.0621	1.0 : 1.0	1.0 : 1.0
9	Farmland	6.80	0.3543	-	0.0621	1.0 : 1.0	1.0 : 1.0

** used for regional districts, regional hospital districts, police tax, increases to the Translink Tax, and MFA tax*
***Note:** for police tax, the Supportive Housing rate (Class 3) is capped at $0.100/1000*

Tax Exemptions

Every property owner in the Province must pay property taxes unless specifically exempted by provincial statute. Statutory exemptions are listed in both the *Community Charter* and the *Taxation (Rural) Area Act*. Local governments may also grant permissive (discretionary) exemptions under the *Community Charter* and the *Local Government Act*.

Statutory Exemptions

Statutory exemptions are automatic exemptions from property tax provided by federal or provincial statute; municipalities have no discretion in this matter. In fact, statutory exemptions are assigned by BCA (not municipalities) and based on ownership and use of property. Usually these are properties that

address a broad public interest or provide a public service. Statutory exemptions are found in multiple provincial acts. Most are highly specific exemptions relevant to a small segment of properties, for example:

Exempt Property	Exempting legislation	Exempting Section
Hospitals and health facilities	*Health Authorities Act*	Section 15
Universities	*University Act*	Section 54
Colleges, BCIT, other Institutions	*College & Institute Act*	Section 58
Public Schools	*School Act*	Section 129

In addition to these specific exemptions, there are also broader statutory exemptions that apply to properties located within a municipal boundary. These exemptions are provided in the Sections 220 to 223 of the *Community Charter* and cover properties like libraries, cemeteries, places of public worship, and municipal property. There are also parallel provisions for rural properties found in the *Taxation (Rural Area) Act* (Section 15) and *Local Government Act* (Section 809(1)).

A statutory exemption triggers an exemption from all property taxes including municipal taxes and taxes for other public authorities (e.g. school, hospital, regional district, etc).

Please note that provincial and federal Crown properties are exempt under the federal Constitution but pay a grant-in-lieu of taxes.

Permissive Exemptions

Permissive exemptions are discretionary in nature and each municipality has the ability to set their own policies on what permissive exemptions they want to allow for each taxation year. Permissive exemptions are granted by municipal bylaw under sections 224 to 226 of the *Community Charter.*

1. **General Exemptions - Section 224 —-** this section provides the authority for general permissive exemptions. A municipal council may offer exemptions for periods of up to 10 years to a wide range of properties, including property owned or held by another local government, or a charitable, philanthropic or not-for-profit organization. A general permissive exemption triggers an exemption from all property taxes, including municipal taxes and taxes for other public authorities (e.g. school, hospital, regional district, etc).
2. **Partnering, Heritage, Riparian, and other Special Exemptions - Section 225** - this section provides the authority to exempt eligible property for any period set out in the exempting bylaw. Eligible property includes property under a partnering agreement plus heritage, riparian, or golf course property. Land held for a future cemetery or mausoleum may also be eligible for an exemption under this section.

   The key to these exemptions is the ability to make agreements with property owners respecting the extent of the exemption and the conditions under which it will be offered. These agreements may require owners to satisfy conditions, such as placing a restrictive covenant on the property or repaying the exemption amount under specified circumstances.

A municipal exemption in relation to heritage and riparian properties triggers an automatic exemption from taxes for other public authorities (e.g. school, hospital, regional district, etc). However, in relation to cemeteries, golf courses and partnering agreements, this type of municipal exemption does not trigger an automatic exemption from taxes for other public authorities. In order to trigger these other exemptions, a municipality must request a Cabinet regulation in accordance with the Section 131 of the *School Act*. Cabinet will weigh the individual merits of each request when making its decision about granting a broader exemption.

3. **Revitalization Tax Exemptions - Section 226 -** this section provides the authority to exempt land, improvements, or both from the municipal property value taxes for the purposes of encouraging various types of economic, social, or environmental revitalization within a community.

   Revitalization tax exemption programs may apply broadly or narrowly to different:

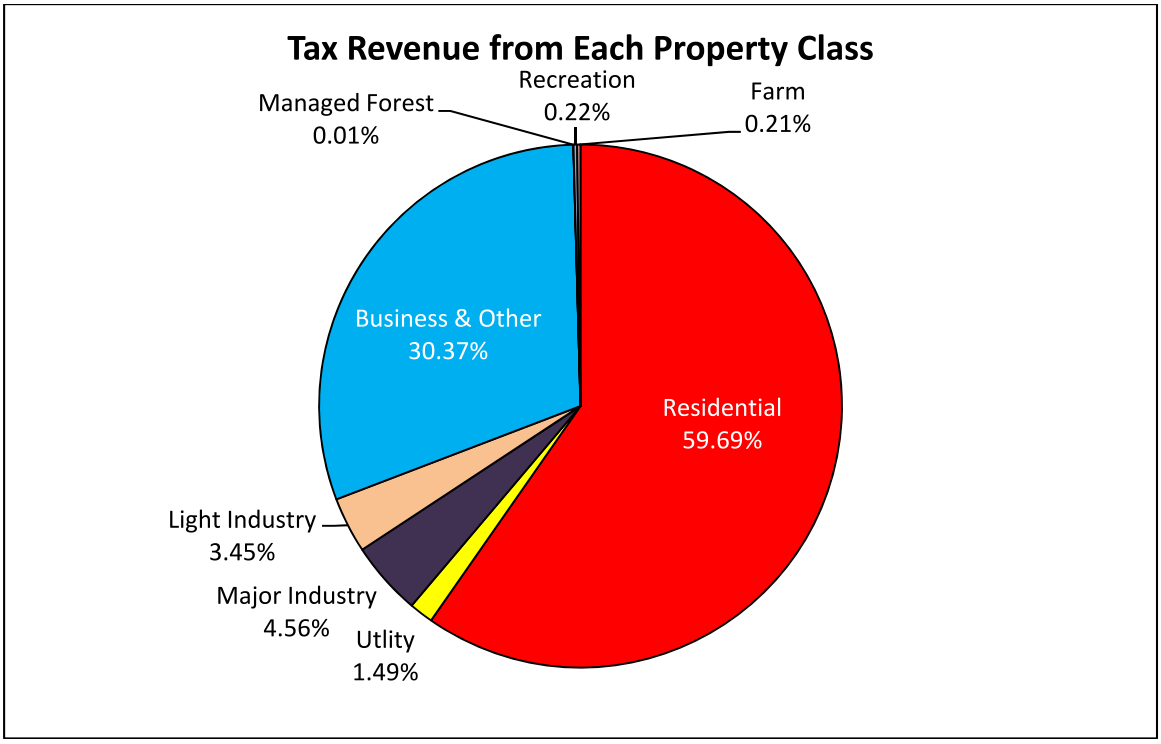
   - geographic areas;
   - types of property; or
   - activities or circumstances related to a property.

   Municipal revitalization tax exemptions do not qualify for exemptions from taxes for other public authorities (e.g. school, hospital, regional district, etc).

In addition to the above listed municipal permissive exemptions, there are parallel permissive exemptions for regional districts in sections 809 to 812 of the *Local Government Act*, which are generally applied in rural areas of the regional district.

Distribution of Tax Between Classes

In 2011, approximately 90% of all municipal property taxes in the Province were collected from Class 1 - Residential (60 %) and Class 6 – Business (30%). The remaining 10% was divided between Classes 2, 4 and 5 (Utilities, Major and Light Industry). Classes 3, 7, 8 and 9 (Supportive Housing, Managed Forests, Recreation/Non-Profit and Farm) are immaterial for most municipalities so they will not be discussed in this section.



Over the past decade there has been a trend to shift some of the municipal tax burden off the non-residential classes to the residential class. Residential has gone from representing 55% of the total municipal tax burden in 2002 to 60% in 2011, while non-residential taxes have dropped from 45% to 40%. This shift has been consistent across municipalities of all sizes and areas.

Historic Tax Issues (Residential versus Major Industry)

Several studies over the last two decades have focussed on the property tax ratio between Residential (Class 1) and Major Industry (Class 4). Often these studies indicate a growing gap in the tax rates between these two classes as Major Industry rates increase relative to Residential rates. Over the past decade the ratio of Major Industry to Residential tax rates has increased from 5.5:1 to 7.1:1, with Major Industry tax rates reaching in excess of $50 per 1,000 in 18 British Columbia municipalities.
However, other studies point out that an examination of tax rates and ratios alone is only telling half the story. As discussed earlier in this paper, tax revenue is based on the following formula:

Tax Revenue = Taxable Assessment x Tax Rate

A thorough study of tax revenue should examine both tax rates/ratios and property assessment. As discussed earlier in this paper there are multiple methods of assessing property. Residential properties are assessed on the basis of comparable sales, whereas industrial properties are assessed based on depreciated replacement costs. These replacement costs are based on industrial cost manuals

maintained by BCA called Major Industrial Properties (MIPS) Manuals. As facilities age, they depreciate. Standard depreciation rates for different types of industrial facilities are set by provincial regulation. Over the last two decades, residential properties values have increased dramatically, while industrial assessment has remained relatively static. Between 2000 and 2011 assessment for an average residential property increased by over 100% in 109 out of 154 British Columbia municipalities, including all the municipalities of Metro Vancouver and the CRD. Average residential assessments tripled in some major municipalities like Vancouver, Burnaby, Richmond and Victoria.
Between 1988 and 2011, the total size of the Major Industry assessment base for all British Columbia municipalities increased from $3.4 billion to $4.2 billon (or 25%); whereas, over that same period of time, the residential assessment base increased from $71 billion to $690 billion (or 866%). The residential increase is due to a mix of price increases and new construction, whereas the industrial increases are almost exclusively due to new construction because existing buildings and improvements all depreciate (according to regulation).

Thus, the residential assessment base is dramatically increasing and the industrial base is declining. To recover the same amount of tax revenue for a rapidly increasing assessment base, a municipality would need to reduce its tax rate. Thus, residential tax rates have been declining while the actual tax burden has not.

The opposite is true for a declining assessment base. To recover the same revenue from a declining base, a municipality would need to increase its tax rate. Thus, industrial tax rates have been increasing while the total industrial tax burden has actually been declining.
As industrial tax rates increase and residential tax rates drop, the ratio between the two tax rates will increase substantially because the tax ratio is simply the increasing industrial rate divided by the decreasing residential rate. Over the last decade, the Major Industry tax ratio increased from 5.5 to 7.1. This yields the paradox of increasing industrial tax ratios despite the tax burden falling increasingly upon the residential class. Between 2000 and 2011, the total portion of municipal taxes collected from Major Industry dropped from 7% to 4.6%, while the residential tax burden increased from 55% to 60%.

In fact, the average municipal tax rate for Major Industry has marginally dropped from approximately $31 per $1000 of assessment in 2002 to $29 per $1000 of assessment in 2011.

This is not to say there are no problems. There are pockets of extremely high tax rates in the Province; however, the general trend has been towards a declining tax burden for Major Industry.

Critical Risk to Small Resource Communities with Major Industry

There are a number of communities that have become increasingly reliant on a few industrial properties to provide a large portion of their tax revenue. This poses potential risks for the community should the industry suffer a severe economic downturn resulting in a partial or total shut down. When this occurs, it can result in two concurrent shocks: dramatic reduction in the municipal tax base and large-scale layoffs.

When a municipality is too reliant on a single industry, it can be very difficult to reallocate the lost taxes onto the other property classes as it would result in substantial tax increases to residents and business owners, many of whom have likely been economically affected by the shut down.

This problem has become quite prevalent in the last few years with the forest product industry downturn. As a result, some communities are beginning to diversify their tax base by slowly shifting the tax burden away from Major Industry and onto other classes. Although it is a very slow process, this is an effective way to mitigate some of the risks associated with potential consequences of an industry slowdown.

Recently there have been many studies that have looked at the property tax ratio between residential property and industry, often indicating that there is a growing 'gap' between the tax rates that is causing industry to be over-taxed. In order to understand why there is a 'gap' in the tax rate ratios you must first look at how the assessment structures of both the residential and industrial classes differ.

Residential properties are assessed using market value and both the number of properties and their value have been steadily growing. In 2002, total residential assessment within municipal boundaries was $250 billion representing 81% of the total tax base. In 2011, residential assessment has grown to be $689 billion, now representing 85% of the total municipal tax base. On the other hand, industrial properties only have their land value assessed at market value, while the improvements (the largest part of the assessment) are assessed at cost less a prescribed rate of depreciation of between 2% and 6% per year. Besides, when new investment occurs, industrial property assessments are always declining. In 2002, major industrial assessment within municipal boundaries was $3.5 billion representing 1.1% of the total tax base. In 2011, major industry assessments have grown to $4.2 billion, but their share of the total tax base has dropped to only 0.5%.

The difference in assessment movement between the residential and industrial class means the tax rates needed to collect the same amount of revenue from each class and also move conversely. Keeping all other factors equal, with residential assessment rising, the residential tax rate would need to decline, whereas the industrial tax rate would need to be increased yearly to compensate for the depreciating assessment. Over time, this has allowed a gap to grow between the rates, even though the amount of taxation revenue, or the portion of taxation revenue coming from each class, would remain unchanged.

This can be seen by looking at the provincial average rates and ratios from 2002 to 2011. In 2002, the average residential tax rate was $5.61 per 1,000 of assessment. By 2011, that rate had dropped to $4.01 despite the increase in the amount of tax burden residential property is paying. For major industry, the provincial average tax rate went from $30.87 in 2002 to $28.62 which is consistent with a tax shift away from non-residential. The interesting thing to note is that over the same period the tax ratios between these two classes went from 5.50 to 7.14 which is a 30% increase in the ratio 'gap' in only 10 years. This isn't to say that there is something wrong with the current assessment system, but to simply explain how the underlying factors of the current assessment and taxation system work.

Recent Events Affecting Distribution

There have been a number of communities that, over the years, have become increasingly reliant on a few industrial properties to provide a large portion of their tax revenue. This poses a high level of risk for the community in the event that industry suffers an economic downturn. When a community's main industrial taxpayer shuts down, it can cause their assessment to plummet and the municipality's ability to raise tax revenue can dramatically diminish. When a municipality is too reliant on that industry, it can be very difficult to reallocate the lost tax burden onto the other classes as it would result in very high tax increases for their citizens and business owners. This problem has become very prevalent in the last few years with the forest product industry downturn and it seems many communities have begun, or are beginning, to better diversify their tax base by slowly shifting the tax burden onto other classes. Although it is a very slow process, this is an effective way to reduce both their reliance on industry and risk.

FONVCA AGENDA ITEM 6b4

canada.com

Cities 'grossly underestimating' money they receive, report says

Free-spending city governments are crying poor even as they lowball the revenues they have at hand.

BY VANCOUVER SUN FEBRUARY 24, 2014

http://www.cfib-fcei.ca/english/article/5966-municipalities-are-richer-than-they-think.html

Free-spending city governments are crying poor even as they lowball the revenues they have at hand.

That broadside is contained in a report being released Monday by the Canadian Federation of Independent Business, with business people in B.C. expressing the most outrage in the country about increasing property tax bills.

CFIB vice-president Laura Jones contends excessive municipal spending has resulted in property taxes climbing every year and, in Vancouver, the bulk of that burden is borne by business.

Businesses in the city pay 4.3 times as much as residential homeowners; for example, the annual tax bill on a $1.37 million property results in a $2,800 hit for a homeowner, more than $12,000 for a business.

"This is a huge bill for a small business when you consider property taxes are profit insensitive, and only one of many taxes that have to be paid," Jones said.

The CFIB for several years now has highlighted what it calls "gross overspending" by municipalities, with Vancouver identified as being among the worst.

It traces the problem to plummy labour agreements, offering pay and benefits 36 per cent higher than for comparable private sector occupations, and too much staff. And it's hard to disagree with the business lobby when city budgets keep rising far faster than population and inflation. Between 2000 and 2011, Vancouver's population grew 15 per cent while inflation-adjusted spending ballooned by 50 per cent.

No wonder. Vancouver pays its city manager $330,000, its parks board manager $217,000 and its chief librarian $171,582.

Further afield, the chief administrative officer in tiny Lillooet - population 2,322 - earns $111,000.

This week, before a big-city mayors' meeting in Ottawa, the business lobby is publicizing its view that municipalities are "grossly underestimating" the cash in their coffers.

The CFIB says a long-standing assertion by city governments - including Vancouver city council in its 2014 Budget Outlook - that they receive just eight cents of every tax dollar, is false.

It overlooks revenues from transfer payments provided by the province and Ottawa, as well as cash from municipal fees like parking permits, pet licences, recreation, bus fare.

Traffic and other tickets rebate? -cjk

The CFIB contends cities more accurately receive 15 cents of every tax dollar.

"They do not have a revenue problem. They have a spending problem," Jones said. "It's one thing to ask for more money if it's needed, another to spend like it's going out of style and then cry poor."

The Business Council of British Columbia also has groused about municipal overspending, issuing a 2012 report identifying West Vancouver, New Westminster and the City of Vancouver as "the three biggest spenders in Metro." Council vice-president Jock Finlayson recommended cities start outsourcing some services, work harder to contain wage costs and boost productivity. Because cities do not generally receive the same scrutiny as more senior levels of government, their spending controls appear to be less rigorous.

Of course, cities would defend themselves by arguing they are being pressed to provide a growing list of services to more complex and demanding populations.

Let's face it, years ago, Vancouver did not have a formalized system of bike paths, regulation of streetside food trucks or a needle-exchange program.

That acknowledged, businesses do have a point. Taxes foisted on them by big-spending local governments threaten their competitiveness.

In B.C., this is an especially serious issue because businesses here already are disadvantaged by a PST requiring them to pay sales tax on business inputs. In HST jurisdictions, those inputs are salestax exempt.

Just as the provincial government worked to hold the line on spending in its budget last week, municipalities had better start doing the same.

byaffe@vancouversun.com

FONVCA AGENDA ITEM 6c1

Three or Four Year Term of Office for Municipal Council

Date (# Re-elected)	MAYOR	COUNCILLOR	COUNCILLOR	COUNCILLOR	COUNCILLOR	COUNCILLOR	COUNCILLOR
2011-14 (**7**)	Walton	Bassam	Hicks	Little	MacKay-Dunn	Muri	Nixon
2008-11 (**6**)	Walton	Bassam	Hicks	Little	MacKay-Dunn	Muri	Nixon
2005-08 (**4**)	Walton	Harris	Hicks	Little	MacKay-Dunn	Muri	Nixon
2002-05 (**4**)	Bell	Harris*	Crist	McKeon Holmes	Walton	Muri	Nixon
1999-02 (**4**)	Bell	Harris	Crist	Dunsford	MacKay-Dunn	Muri	Denault
1996-99 (**4**)	Bell	Harris	Crist	Munroe	Deering-Robb	Muri	Trevor Carolan
1993-96 (**4**)	Dykeman	Harris	Crist	Munroe	Goldsmith-Jones	Cuthbert	Bell
1990-93 (**4**)	Dykeman	Harris	Crist	Turner	Gadsby	Cuthbert	Buchols
1987-90 (**6**)	Baker	Dykeman	Crist	Clark	Gadsby	Rodgers	Buchols
1986-88 (**6**)	Baker	Dykeman	Crist	Clark	Gadsby	Rodgers	Segal
1984-86	Baker	Dykeman	Crist	Clark	Gadsby	McMinn	Segal

* 2004 By-election: Harris Mayor for ~ 1 yr, Cuthbert as councillor

Basis: Lack of council experience:

FALSE – in the last 30 years or more, at least 4 members of council were re-elected

Basis: Unable to do long range planning

FALSE: Phased Development Agreements (return of contract zoning):

Section 905.1 LGA amendment of 2007

Allows up to 10 years (20 with Minister's permission) to complete projects

Consultation with voters: Minimal

CFIB
CANADIAN FEDERATION OF INDEPENDENT BUSINESS

February 2014

Municipalities Are Richer Than They Think

Municipal Share of Taxes, Fees, and Transfers

Queenie Wong, Senior Research Analyst

Municipalities have long claimed that their revenues are inadequate to meet the needs of Canadians. For example, they often state that they receive only eight cents out of every tax dollar collected in Canada. As a result, municipalities continue to seek additional funds from the federal and provincial governments. The facts reveal that municipalities have received significantly more revenues than they claim.

The Federation of Canadian Municipalities (FCM) claims that municipalities only receive eight cents out of every tax dollar collected in Canada (see claimed share in Figure 1). According to President of the Federation of Canadian Municipalities, Claude Dauphin, municipalities are "...collecting just ***8 cents*** of every tax dollar...". [emphasis added] [1] This figure, however, includes only tax revenues and omits two other major sources of funding for municipalities—transfers and user fees (e.g. parking permits, pet licenses, recreation, admission to the zoo, bus fare). This is a serious oversight as transfers and user fees represent more than 40 per cent of municipal revenues[2]. As a result, the FCM is misrepresenting the facts and making municipalities appear to be poorer than they actually are.

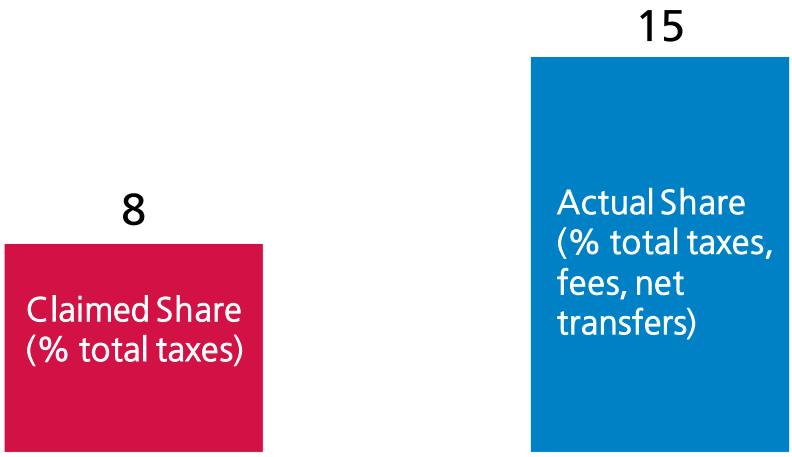
Municipalities received more money than they claim

When including transfers and user fees in addition to taxes, municipal governments actually received 15 cents out of every dollar collected in taxes[3], fees[4], and net transfers[5] (see actual share in Figure 1)[6].

In 2012, this amounted to $73 billion (2008 dollars) in funding to municipalities. This is in contrast to the $38 billion (2008 dollars) or, eight cents of every tax dollar collected, that municipalities claim they receive. In effect, the FCM has been grossly understating the amount of revenues made available to municipalities by almost half.

Figure 1:

2012 Municipal Share of Collected Revenues, Claimed[7] Share vs. Actual[8] Share (%)



Incorrect use of the eight cents figure

"Across the country municipalities are cash-strapped and get only 8 cents of every tax dollar."

— Olivia Chow, Member of Parliament for Trinity-Spadina, the NDP transport and infrastructure spokesperson, and the vice-chair of Parliament's transport committee

"For every tax dollar collected by cities in Canada, the federal government receives 60 cents, the provincial government receives 32 cents, and the city receives 8 cents.

— 2014 Vancouver Budget Outlook, 2014 budget approved by Vancouver city council

"If you look at all the taxes you pay to all three levels of government—federal, provincial and municipal—roughly 49 cents of every dollar you pay in taxes goes to the federal government, while 43 cents goes to the provincial government. This leaves only eight cents of every tax dollar you pay for the municipality and the services it provides."

— Mayor George LeBlanc, Moncton, NB

"The City of Brooks operates all the things within in the community on only 8 cents of your tax dollar. The vast majority, 92 cents of every tax dollar, is spent by the Provincial and Federal Governments."

— Mayor Martin Shields, Brooks, AB

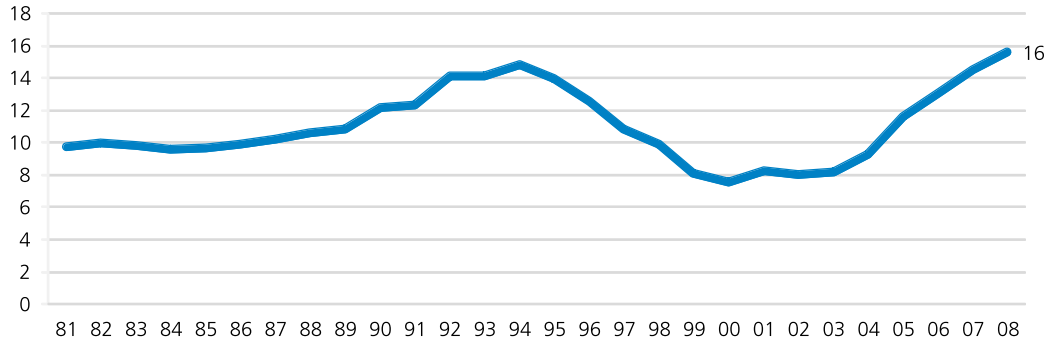
Transfers to municipalities have increased over time

According to the FCM, municipalities faced drastic cuts in transfers from the federal and provincial governments over the last few decades which has left them in poor financial state. A 2013 FCM document stated that "*during the past 20 years, as successive federal and provincial governments off- loaded responsibilities to municipal governments and* ***cut transfer payments****, municipal governments were forced to assume many new and unfunded responsibilities. This off- loading, combined with limited municipal revenue, and created a chronic fiscal shortfall, as local governments struggled to meet growing responsibilities they could not afford.*" [emphasis added] [9]

However, this claim needs to be clarified. As seen in Figure 2, net transfers to municipalities began to decline in the mid-1990s but were on the rebound starting in the early 2000s. As of 2008, net local transfers stood at an all-time high—$16 billion (in 2008 dollars).

Figure 2:

1981-2008 Total Net Federal and Provincial Transfers to Local Government, Canada (in billion 2008 dollars)[10]

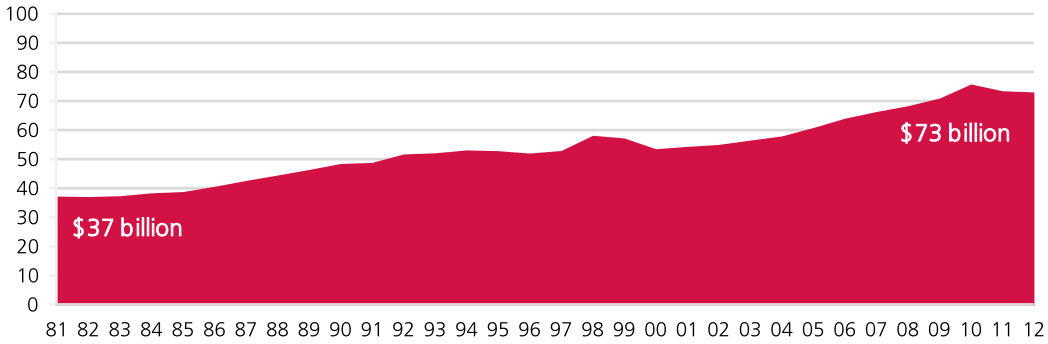


Major sources of revenue for municipalities have increased over time

Not only have transfers to municipalities been on the rise in recent years, municipalities are receiving more funds than ever—even after adjusting for inflation (see Figure 3). In fact, the amount of revenues from taxes, fees, and net transfers almost doubled for municipal governments since 1981. From 1981 to 2012, total taxes, fees, and net transfers for municipal governments increased from $37 billion to $73 billion (in 2008 dollars). This is an indication that municipalities did not suffer from cuts in transfers experienced during the 1990s. Some municipalities resorted to increases in taxes and user fees during the 1990s which helped mitigate the effect of reduced transfers.

Figure 3:

1981-2012 Major Sources of Revenue, Total Municipalities (Adjusted for Inflation, in billion 2008 dollars)[11]

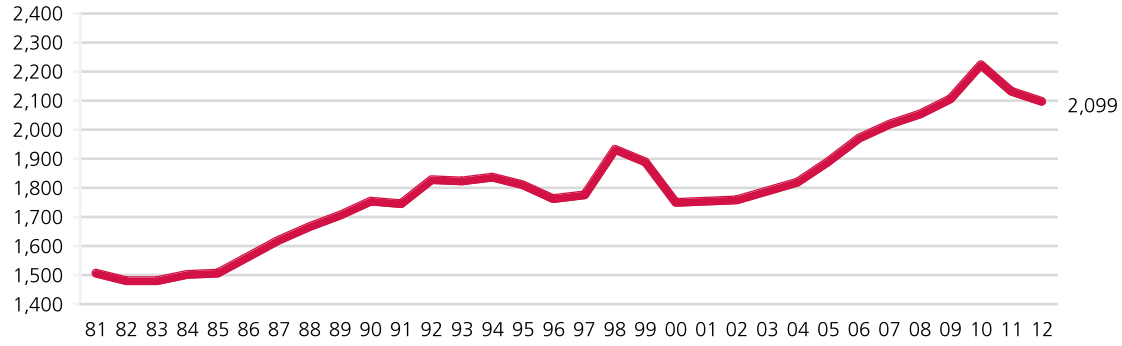


Major revenue sources for municipalities have kept pace with increases in prices and population

It is also important to assess whether the increase in revenues for municipalities has been sufficent to support the growth in population and increase in prices of goods and services. If not, then municipalities have reason to ask for additional funding. By looking at the major revenue sources (i.e. taxes, fees, net transfers) collected per capita (adjusted for inflation), it can be seen that funding has exceeded the growth in population and inflation (see Figure 4). In 2012, municipal governments collected $2,099 per capita which is considerably higher than levels experienced in the early 1980s.

Figure 4:

1981-2012 Major Sources of Revenue Per Capita, Total Municipalities (Adjusted for Inflation, in 2008 dollars)[12]



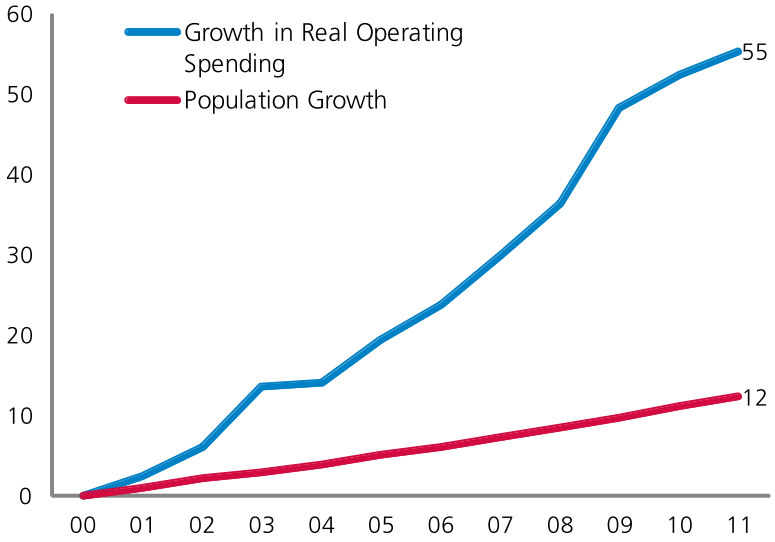
Major municipal sources of revenues have increased over time for municipalities. Yet, municipalities continue to claim that they need more money. To gain more insight into their claim, more needs to be understood about their spending patterns.

Municipalities must control operating spending

Municipalities are ignoring the obvious. They are asking for more revenues but are not controlling their current spending behaviour. Based on the latest trends, it is clear that municipal spending needs to be reigned in. Municipal operating spending growth since 2000 has been above population growth and inflation. Real operating spending grew 55 per cent while the population grew by 12 per cent (see Figure 5)[13].

Figure 5:

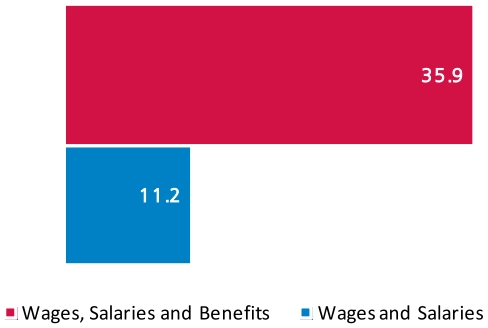
Cumulative Operating Spending Growth (Adjusted for Inflation), Total Canadian Municipalities, 2000-2011 (%)



In fact, wages and benefits for municipal workers are big contributors to local governments' operating spending. Public sector workers are paid on average 35.9 per cent more compared to their private sector counterparts when salaries, wages, and benefits are considered (see Figure 6)[14].

Figure 6:

Municipal Government Wage and Benefit Advantage, Canada (% Above Private Sector for Comparable Occupations)

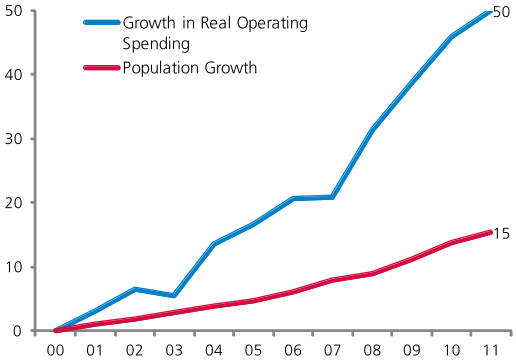


This upward spending trend is found in major cities aross Canada. Some examples of excessive spending behaviour include Vancouver, Calgary, Toronto, Ottawa, and Montreal (see Figure 7).

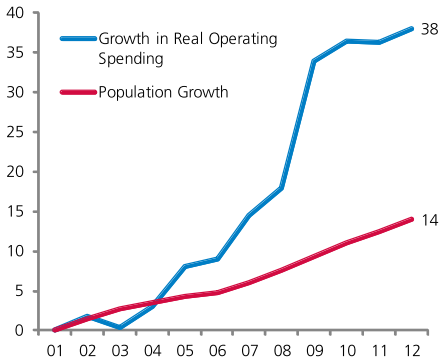
Figure 7:

Cumulative Operating Spending Growth (Adjusted for Inflation), Select Municipalities (%)[15]

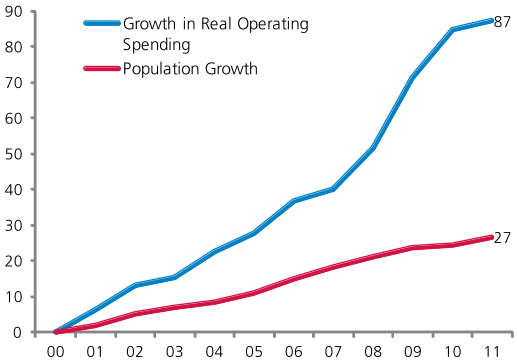
Vancouver



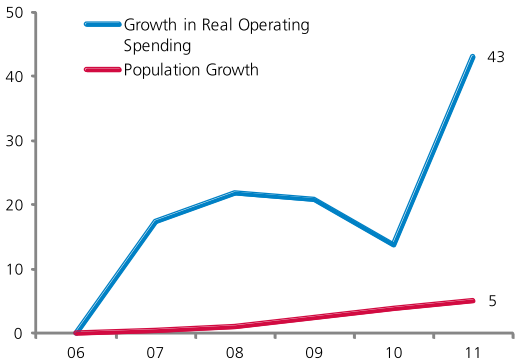
Ottawa



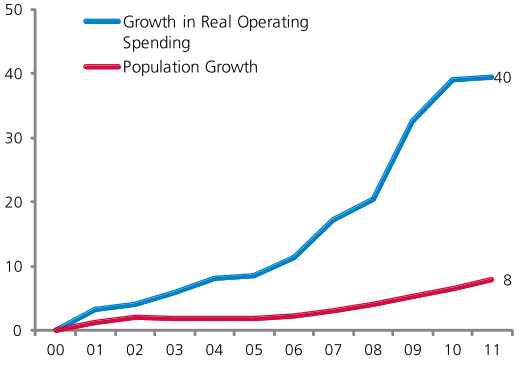
Calgary



Montreal



Toronto



Conclusions

Taking into consideration the relative responsibilities of the three levels of governments, municipalities are not as “poor” as they claim. Municipalities are not being fully transparent by stating that they only receive eight cents out of every tax dollar. In addition to taxes, user fees and net transfers must also be taken into account. When such sources of revenue are included, the municipal share jumps to 15 cents for every dollar collected.

Revenue streams have been increasing over time, meaning that municipalities have been benefitting from more funding. The reality is that municipalities do not have a revenue problem. Municipalities must recognize the inevitable: spending control is a serious problem and governments should be held more accountable. Municipalities must also be accountable for the choices made on past and future spending. If municipal spending is not controlled, funding shortfalls are imminent. Taxpayers are not prepared to pay more for services that are not optimally delivered.

Municipalities should cease using the eight cents figure. In addition, the provincial and federal governments should freeze additional funding to municipal governments until municipal governments better manage their spending (e.g. align public sector wages and benefits to private sector norms, limit operating spending within inflation and population growth).

References and notes

[1] *FCM News Release. "Canadians Most Satisfied With Municipal Order of Government." June 3, 2013. http://www.fcm.ca/home/media/news-releases/2013/canadians-most-satisfied-with-municipal-order-of-government.htm*

The FCM estimate is based on 2005 data. Based on 2011 OECD estimates (using different methodology), the municipal share of tax dollars is 10 cents.

Federation of Canadian Municipalities. Building Prosperity From the Ground Up: Restoring Municipal Fiscal Balance. June 2006. Web. 4 March 2013. http://www.fcm.ca/Documents/reports/Building_Prosperity_from_the_Ground_Up_Restoring_Muncipal_Fiscal_Balance_EN.pdf

OECD. Table C5. Tax revenue as percentage of total general government tax revenue. Web. 17 May 2013. http://www.oecd.org/ctp/federalism/oecdfiscaldecentralisationdatabase.htm#C_5

[2] *Statistics Canada. CANSIM 385-0024. Local general government revenue and expenditures, current and capital accounts, year ending December 31. Web. 3 June, 2013. http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3850024&paSer=&pattern=&stByVal=1&p1=1&p2=50&tabMode=dataTable&csid=*

[3] *Includes taxes on incomes, production, and imports.*

[4] *Includes sales of goods and services.*

[5] *Includes current and capital transfers between federal, provincial, and municipal governments.*

[6] *Provincial transfers to school boards are excluded from the municipal share of total revenues. It is estimated that on average, school boards receive 70 per cent of provincial transfers to local governments.*

Local property taxes transferred to school boards are excluded from total taxes, fees, and net transfers. CFIB estimates that on average, 25 per cent of local property taxes are transferred to school boards.

Provincial governments receive the largest portion of taxes, fees, and net transfers at 48 cents for every dollar collected while the federal government receives 29 cents for every dollar. School boards receive about eight cents from provincial transfers to local governments out of total taxes, fees, and net transfers.

Statistics Canada. CANSIM 380-0080. Revenue, expenditure and budgetary balance - General governments 1981 Q1-2012 Q4. Web. 3 June, 2013. http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3800080&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=

Statistics Canada. CANSIM 478-0010. School board revenues by direct source of funds, 2010. Web. 3 June, 2013. http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=4780010&pattern=school+board+revenues&tabMode=dataTable&srchLan=-1&p1=1&p2=-1

[7] *Claimed share is based on total federal, provincial, and municipal taxes collected in Canada.*

[8] *Actual share is based on total taxes, user fees, and net transfers collected across federal, provincial, and municipal governments in Canada. This excludes investment income, transfers from households, transfers from non-profit institutions serving households, transfers from non-residents, and contributions to social insurance plans.*

[9] *Federation of Canadian Municipalities. Policy Statement on Municipal Infrastructure and Transportation Policy. March 2013. Web. 12 August, 2013. http://www.fcm.ca/Documents/corporate-resources/policy-statements/Municipal_Infrastructure_and_Transportation_Policy_Statement_EN.pdf.*

[10] *Latest data available is from 2008.*

Statistics Canada. CANSIM Table 384-0011. Intergovernmental transfers, provincial economic accounts. Web. 3 June, 2013.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3840011&paSer=&pattern=&stByVal=1&p1=1&p2=50&tabMode=dataTable&csid=

Provincial transfers to school boards are excluded.

[11] *Includes total taxes, fees, and net transfers collected by municipal governments.*

Statistics Canada. CANSIM 380-0080. Revenue, expenditure and budgetary balance - General governments 1981 Q1-2012 Q4. Web. 3 June, 2013.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3800080&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=

Statistics Canada. CANSIM 326-0021. Consumer Price Index (CPI), 2011 basket, Canada, 1981-2012. Web. 3 June, 2013.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3260021&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=

Provincial transfers to school boards and local property taxes transferred to school boards are excluded.

[12] *Includes total taxes, fees, and net transfers collected by municipal governments.*

Statistics Canada. CANSIM 380-0080. Revenue, expenditure and budgetary balance - General governments 1981 Q1-2012 Q4. Web. 3 June, 2013.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3800080&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=

Statistics Canada. CANSIM 051-0001. Estimates of population, by age group and sex for July 1, Canada, provinces and territories. Web. 3 June, 2013.
http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=0510001&paSer=&pattern=&stByVal=1&p1=1&p2=-1&tabMode=dataTable&csid=

Provincial transfers to school boards and local property taxes transferred to school boards are excluded.

[13] *CFIB analysis of Statistics Canada, CANSIM Tables 380-0080 (expenditure) and 051-0001 (population).*

[14] *CFIB, Wage Watch, 2008, based on CFIB analysis of Census 2006 custom tabulation.*

Public-private sector differentials for wages, salaries and benefits include differences in actual hours worked and employer paid pension contributions, health benefits and other deferred wage benefits.

[15] *CFIB analysis of BC Ministry of Community, Sport & Cultural Development, Division of Local Government Statistics, Sch402 (expenses) for 2000-2011; BCStats, British Columbia Regional District and Municipal Population Estimates.*

CFIB analysis of City of Calgary financial and statistical data; Government of Alberta, Municipal Affairs, Municipal Financial and Statistical Data.

CFIB analysis of City of Toronto, Consolidated Financial Statements for 2000-2011; Statistics Canada, CANSIM Table 051-0052 (population estimates).

CFIB analysis of City of Ottawa, Consolidated Financial Statements, 2001-2012, and Statistics Canada, CANSIM Tables 326-0021 (CPI for Ottawa-Gatineau) and 051-0052 (population for Ottawa).

CFIB analysis of Ministère des Affaires municipales et de l'Occupation du territoire du Québec, Financial Statements for 2006-2011; Quebec Institute of Statistics, Municipal population estimates.
Operating spending of the City of Montreal includes an adjustment for pension liabilities.

Municipal property tax in BC: Principles and provincial strategies to shape local tax distribution policy

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Advanced Management Report

Prepared for: Ministry of Community and Rural Development

July 31, 2009

EXECUTIVE SUMMARY

Property tax is the single most important revenue source for municipalities in British Columbia, accounting for approximately 48% of their total revenue (Tilley, 2008). Since the introduction of the variable tax rate system in 1983, municipalities have enjoyed discretion in setting property tax rates across the nine property classes. Over time the provincial government has realized that this level of municipal autonomy may not be appropriate as provincial interests have not been adequately reflected in the municipal tax rates and the distribution of property taxes among the property classes. This includes evidence that non-residential property tax rates have increased significantly more than residential tax rates over the last 20 years. This paper was completed for British Columbian's Ministry of Community and Rural Development to examine the principles of property tax rate setting and distribution among the property classes and the provincial-municipal relationship in that process.

The paper provides a history of the property tax system in BC since 1974. Other research methods employed include a literature review, a jurisdictional review of Canada (with specific attention on Ontario), Australia and New Zealand, and expert interviews. The paper uses this research to outline the principles of property tax rate setting municipalities currently consider when setting property tax rates. Though limited studies are found on the subject, municipalities are currently overtly taking into account a very narrow number of principles, with primary consideration given to stability, most notably for residents. The paper then examines the principles that municipalities should consider during the property tax rate setting process. These principles include equity, accountability, and the provincial interest, and should be balanced to meet the unique economic and social circumstances of individual municipalities. Finally, the paper explores strategies for the Province to exercise its authority in municipal property tax rate setting and the distribution of property tax among the property classes. These approaches include education and information, concurrent authority, the number of property classes, and tax rate limits.

The report recommends strategies for the provincial government to consider in pursuing policy on this topic. Firstly, the Province must identify its interest in municipal property tax rates. Once defined, this interest should be clearly articulated to municipalities and should guide future policy development in this topic. Secondly, the Province should engage with municipalities to create an ongoing open dialogue to encourage a greater understanding of each other's interests. Thirdly, the Province should build on the successes of current initiatives, including municipal financial disclosure requirements and information collection. The Province should continue to develop its relationship with municipalities through Union of British Columbia Municipalities. As well, the provincial government should learn from past experience in implementing property tax policy. Fourthly, information and education is an important component of property tax policy. This includes using the information the provincial government already collects through statistics and financial disclosure to its fullest extent. This information should be formatted into more accessible graphs and other formats for municipalities to use, and share with their citizens. The Ministry should also produce an updated tax rate manual for municipalities, which should include a more extensive discussion regarding tax principles. The final recommendation is the creation of a property tax rate warning system. Through this system the provincial government would identify municipalities with tax rates that were considered unsustainable due to high non-residential rates or over reliance on one taxpayer. This system would be used to work with

individual municipalities on financial planning and revenue alternatives, communicating with municipalities and residents the value of adopting different property tax policies and objectives.

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ACKNOWLEDGEMENTS

Many individuals assisted me in the research and writing of this report, to whom I am very grateful. I would like to thank my committee for their time, attention and questions, including my supervisor, Dr. Brunet-Jailley. The Ministry of Community and Rural Development provided guidance for this research, with significant advice and encouragement from Deidre Wilson. I would also like to acknowledge the experts interviewed for this research, who gave their time and knowledge. Finally, I would like to thank my family for their ongoing support. To my parents, sisters and Ryan, thank you.

INTRODUCTION

In Canada, provincial governments have the constitutional authority to grant municipalities powers and responsibilities, including the power of taxation. Property tax is historically a central taxation power for most municipalities and a fundamental own-source revenue stream. It funds a wide range of services that benefit residents and businesses, including water, sewage, garbage and recycling, police, recreation, transportation, and others. Provincial governments have created diverse legislative structures that shape the amount of property tax revenue municipalities can collect. Still, there is a lack of understanding of the factors that influence local government decision-making in relation to finance and tax rates (Kennedy & McAllister, 2005).

In British Columbia municipalities have been granted relatively wide discretion in setting property tax rates and distributing the tax burden among property classes. The variable tax structure, introduced in 1983, gave municipalities in BC considerable more freedom in taxation matters than municipalities in most other provinces and, some would argue, North America (Kennedy, 2003; R. Bish, personal communication, April 15, 2009).

This paper will explore the property tax system in British Columbia, and specifically examine the principles of property tax rate setting and distribution of property tax among the property classes. This paper attempts to answer the following questions: 'What are the current principles of municipal property tax rate setting and distribution of tax among the property classes?'; 'What are the ideal principles of municipal property tax rate setting?'; and 'If appropriate, what options should the provincial government pursue in exercising its authority to influence or intervene in municipal property tax rate setting?'.

The issue of property taxation is vast and complex, and thus this paper will focus on the particular portion of the topic of municipal property tax setting for general municipal purposes. Still, it must be recognized that in BC municipalities are not the sole organizations that charge taxes on property. The provincial government is responsible for collecting property tax in unincorporated areas. Other agencies that directly or indirectly collect property taxes on property are regional districts and regional hospital districts, BC Assessment, and the Municipal Finance Authority.[1] In 2006 the largest collector of property taxes was the provincial government through the school tax. In that year, over two-thirds of property tax was collected for school tax (Ministry of Finance in Kozak, 2007). With the recent introduction of a 50% rebate on school tax for major and light industrial properties this portion has decreased. Still, due to the substantial revenue that is collected, it has an important impact on the topic of municipal property tax. Even though a specific analysis of school tax is outside the scope of this paper, a number of instances where school tax has played a role in the reform of the municipal property tax system are identified.

The property tax system involves a series of interconnected programs. Components of the property tax system include assessment, tax rates, exemptions, and benefit and rebate programs. This paper focuses on property tax rates and the tax distribution policy that the rates reflect. Discussions regarding assessment practices and system will be included in a minimal manner. It is necessary to describe the role of property assessment as it provides the foundation upon which

[1] Regional Districts and Regional Hospital Districts do not have the power to directly levy taxes on property. They have requisitions that are provided to taxing authorities (municipalities and the Surveyor of Taxes) who then levy the taxes.

property taxes are levied. It is also essential in understanding both the history of property taxation in BC, and some of the current challenges the system is facing.

The first section of this report will provide a history of municipal property taxation in BC beginning in 1974 with the creation of the BC Assessment Authority and intention to implement full market value property assessment. The current property tax system developed from the variable tax system introduced in 1983. This system gave municipalities wide discretion in setting property tax rates for each of the nine property classes. This history will include a review of legislation, provincial reports and commissions, as well as provincial intervention in municipal property tax rates.

The methodology section will outline the research approaches that were undertaken for the remainder of the paper. This includes a review of research methods for the literature review, the jurisdictional review and the expert interviews. This research uses a range of qualitative research methods, that when taken together, through triangulation, increases the credibility of the results and presents a holistic analysis of the subject.

The subsequent section will review literature on the subject of property tax principles. This section will draw from a range of literature, including books and articles completed by academics and practitioners in the field of property tax. First it will provide an overview of principles of taxation. It will then explore current and ideal principles of property tax rate setting. Finally, the section will explore property taxation as a part of the municipal-provincial relationship, focusing on different system characteristics and strategies the provincial governments have used or may use to intervene in municipal property tax rate setting, and therefore, municipal tax distribution policy.

There are significant differences between property tax systems in different countries, and even between provinces in Canada. Still, much can be learned from examining other jurisdictions. The jurisdictional review will begin by examining the property tax systems across Canada, with particular attention to Ontario. Ontario was chosen for specific examination because of its complex property tax system, with extensive provincial involvement in tax rate limits. Then an examination of Australia and New Zealand will provide an international perspective on principles of property tax rate setting. These countries have been identified due to their similarities to Canada's federal system and significant number of government reports on their property tax systems, including discussion of principles and considerations in property tax rate setting. In each jurisdictional review the variety of principles of property tax rate setting will be explored, as well as the numerous strategies employed by provincial or state governments to exercise their authority in this area.

The following section reviews the results of the expert interviews. Dr. Enid Slack, Dr. Robert Bish, Dr. Jon Kesselman and Mr. Vander Ploeg were interviewed for this research, and all have extensive academic experience in property taxation and familiarity with the property tax system in BC. They were interviewed for their perspective on the challenges faced by the BC property tax system, principles of property tax rate setting and the appropriate role of the provincial government in municipal property tax rate setting. These interviews provided valuable perspectives on the specific and unique property tax structure in BC. The findings and analysis highlight common themes and opinion of the experts.

The analysis section reviews the central findings from the research, including current and ideal principles of property tax rate setting and distribution of property tax among the property classes. It then reviews the role of the provincial government in exercising its authority in municipal property tax rate setting. From this analysis a number of considerations are identified that should be taken into account as the provincial government creates or reforms policy or legislation on this topic.

The final section of the paper provides recommendations of strategies for the provincial government to exercise it authority in influencing or intervening in municipal property tax rate setting. These recommendations were developed to provide the provincial government with clear direction on this topic in order to avoid reactive decisions that could be ineffective and damage its relationship with municipalities.

A variety of background documents are provided in the appendixes. This includes graphs outlining how tax rates and the distribution of property tax has changed over the last 25 years, a description of the current property tax classes, a chronology of the property assessment and tax system in BC, biographies of the experts interviewed for this research, a review of municipal financial plans and fiscal disclosure requirements, a jurisdictional review of property tax systems in Canada, and a sample municipal financial statistical information sheet.

This report was completed for the Ministry of Community and Rural Development's Policy and Research Branch. This branch is responsible for local government legislation, and research and policy development to support provincial government programming and policy for local governments in BC. The final report is expected to provide the Ministry of Community and Rural Development with a better understanding of the history of the property tax system in BC, current circumstances and future legislative and non-legislative policy options in relation to municipal property tax in BC.

CONTEXT

There is a growing interest from business and industry, municipalities, and the provincial government in the property tax system and property tax rates in BC. There are two significant factors that explain the rationale behind this project.

Firstly, lobbying from the BC Business Council, Fraser Institute, and other business organizations has highlighted the increasing ratios[2] between residential and non-residential taxes in many municipalities in BC. The Canadian Federation of Independent Business (CFIB) produced a report on property tax rates in BC, arguing that businesses pay an average of three times the amount of property taxes than that of residential property owners (CFIB, 2008). Their research found that small business owners ranked municipal property tax as the most harmful tax they paid (CFIB, 2008). These business organizations are demanding the provincial government intervene in municipal property tax rate setting to decrease the property tax rates and therefore the amount of tax paid by business (class 6) and major industry (class 4).

The forest industry has made particular demands on this subject. The forest industry is a main owner of industrial property (class 4) with one half of the assessment base for major industrial class made up of sawmills and pulp and paper facilities (Sean Grant, personal communication, July 20, 2009). For a number of years companies in the forest industry have been facing financial challenges, which have been exacerbated by the recent world-wide recession. Industry representatives have argued that the high property tax rates are crippling the industry. In particular, Catalyst Paper Inc., which has four pulp and paper mills in communities on and near Vancouver Island, has stated that property tax rates are too high ("Catalyst Paper," 2009). The company has proposed a new tax model based on a user-pay model of municipal services that would result in a significant decrease in the municipal property tax they pay. The company has also approached the provincial government to provide compensation to municipal governments for lost revenue that would result. Catalyst Paper Inc. and industry representatives argue that a reduction in municipal property tax rates for industrial property (class 4) is necessary for continual financial viability ("Catalyst Paper," 2009).[3]

Secondly, recent provincial government initiatives and decisions have increased the attention given to municipal property tax rates and distribution. The provincial government appointed *BC Competition Council* studied the economic competitiveness of the province in 2006. They identified high major industry property tax rates as a disincentive for investment and recommended reducing the number of property classes or impose ratio limits on industry and business classes (BC Competition Council, 2006). Though the

[2] In calculating ratios of property tax rates, the residential tax rate is considered 1.0.

[3] In June 2009, Catalyst Paper filed suits with the Supreme Court of British Columbia requesting a judicial review of property tax rates in the four communities where it operates pulp and paper mills ("Catalyst Paper," 2009). A key element of the suit is that the municipal property tax rates are "unreasonable". Following Catalyst's court challenge several other industrial taxpayers have commenced similar court challenges (Leyne, 2009).

provincial government did not act directly on these recommendations, measures to increase accountability in municipal property taxation were introduced. The provincial government introduced amendments to the *Community Charter* in 2007, implementing stiffer municipal requirements on financial transparency. This initiative requires municipalities to consider and describe their revenue and tax setting process and policy decisions explicitly. This included providing policies and objectives in relation to the distribution of property tax among the property classes. As well, municipalities must communicate these policies and objectives to residents and the provincial government. These financial disclosure requirements have put a greater focus on property tax rates setting policy and principles.

Other provincial action has also led to increased attention given to municipal property taxation. In November 2008 the provincial government announced a freeze on property assessments at the lower of the 2007 or 2008 values. The media and residents quickly realized that a freeze on assessment values do not necessarily result in a lower municipal property tax bill. This announcement highlighted the issue of property taxes, and brought attention to municipalities and their tax setting policies

These factors have together contributed to increasing pressure to examine the issue of property taxation and to have the provincial government take action on property tax rates. There is an increasing recognition among provincial government elected official and staff that insufficient and inconsistent attention has been given to the municipal property tax system, including tax rates, by the provincial government. The provincial government is recognizing that municipal property tax policies and practices can have an important impact on local and provincial economic competitiveness as witnessed in recent government reports and actions. It is important for the provincial government to possess a full understanding of the incidence and impact of municipal property tax rates. The current recession and the financial effect it is having on industries in BC has intensified the situation and has put more pressure on the provincial government to provide a rapid response to this issue.

Increasing non-residential tax rates

Though industry and businesses have been lobbying the government to limit non-residential property tax rates, it is important to study the validity of their claims of increasing non-residential property tax rates. Proving the soundness of these claims can be difficult due to the complexity of the property tax system. As well, though numerical differentiations between tax rates may be demonstrated, the issue of overburdening classes of taxpayers is largely subjective.

When examining municipal property tax in relation to other taxes paid by individual and businesses it is a relatively small expense. In fact, local government taxes in Canada made up 8.9% of all taxes collected in 2007 (Vander Ploeg, 2008). This share has also been steadily declining from 16.7% of taxes collected in 1961 (Vander Ploeg, 2008). Though it may form a minor part of their overall tax bill, the small sector of non-residential taxpayers[4] are increasingly vocal about the property taxes they are paying. They are recognizing how

[4] In British Columbia, 87.6 per cent of all properties are classified as Residential (Class 1) (BC Assessment, 2009a).

their property tax rates differ from other property classes due to the tax distribution decisions municipal governments are making. As well, property taxes are a fixed cost that businesses would like to reduce.

An examination of municipal property tax rates over the last 20 years demonstrates that non-residential tax rates are higher than residential tax rates. Bish (2004) found that business property classes in BC often pay higher rates than residential classes. Mezynska (2005) examined major industry property tax rates and found that the weighted average tax rate had increased over the last 20 years. As well, studies of individual municipalities have found that non-residential taxpayers pay higher property tax rates than residents (KPMG and MMK Consulting in Mezynska, 2005). The *BC Competition Council* found that the ratio of major industry property tax rate to the residential rate was "extremely high" in BC, and identified municipal taxation as the "principal social rent" affecting the pulp and paper industry (BC Competition Council, 2006, p. 32).

Appendix A provides graphs and numerical data demonstrating how tax rate multiples have changed over the last 20 years. This examination includes a review of average property tax rates across the province, as well as individual municipalities. Tax rates are compared for residential (class 1), heavy industrial (class 4), light industrial (class 5) and business/other (class 6) for a number of years to give a snapshot of tax rates since the introduction of the variable property tax rate system. The review of a sample of 16 individual BC municipalities[5] finds that those with industrial property have chosen to levy industrial property (class 4) with tax rates that are four to twelve times the rate of residential property tax rates. Still, the graphs of tax rates and tax multiples present different perspectives on this issue. While tax multiples have increased, tax rates have been decreasing, though residential rates more than non-residential rates.

An examination of tax rates and multiples does not demonstrate the whole story. The issue of higher non-residential property tax is complex for a number of reasons, including assessment, costs and benefits, and externalities. Firstly, there are different assessment procedures for different property classes. In BC, residential and non-residential properties are not all assessed in the same manner. Industrial properties (class 4) are assessed by a regulated "cost less depreciation". This approach emphasizes stability of assessment by using a proxy for market value. Conversely, reliance on assessment methods that reflect economic factors (like obsolescence) can result in dramatic swings in assessment. Though this assessment methodology provides a relatively stable industrial assessment base, municipalities face a shrinking industrial tax base over time if there is no new investment. Some municipalities, like Vancouver, have tax distribution policies in place that outline that a percentage of their property tax revenue will come from a class, regardless of the property assessment. As a result, for industrial property (class 4) which is assessed by a cost less depreciation approach, if no new investment is made the assessment value decreases. If the municipality chooses to collect the same amount of revenue from that industrial taxpayer then it must increase the tax rate to achieve this. If this practice continues year over year,

[5] To provide continuity this sample of municipalities is the same that was studied in the review of financial plans found in Appendix D.

the tax ratio increases and eventually the municipality has a high industrial tax rate that may discourage new investment.

Secondly, it is difficult to compare different property classes due to differing costs and benefits of property taxation. Some scholars have argued that property taxes on non-residential property should be evaluated differently because for business owners property taxes are tax-deductible (Ministry of Municipal Affairs, 1999). Furthermore, the direct and indirect benefits received by different properties vary greatly.

Finally, tax rates and the distribution of taxes may reflect policy that perceives taxation as compensation to the surrounding community for negative impacts, or externalities, that the industry can have on the host community (New Zealand Local Government, 2002). These negative impacts may include pollution, small or noise. These differences need to be explicitly acknowledged in any discussion regarding the comparison of property tax rates. The next section will provide a history of property tax in BC since 1974, providing an in-depth review of the variable property tax system that is currently in place.

HISTORY

This section will describe the history of municipal property tax system in BC, beginning in 1974 to the present day.[6] This history will illuminate assessment practices, provincial commissions and reports on property taxation, and provincial influence and intervention in municipal property tax rate setting.

In BC the provincial government is responsible for the legislative framework that gives municipalities the power to levy property taxes. This legislation currently provides municipalities' broad discretion in setting property tax rates among the nine property classes.[7] The evolution of the property tax system in BC has occurred simultaneously with the changing relationship between provincial and municipal governments. This relationship has developed from one characterised by a high degree of provincial control to one of increasing municipal independence and empowerment. This municipal independence is particularly evident in the realm of property taxation.

Appendix C provides a chronology of property assessment and tax system changes in BC from 1982-2009. It provides information on major changes to the property tax system and wider historical developments, building on the work of Jennifer Whybrow (Whybrow, 1993).

Before the variable tax system

The modern property tax system in BC began over 40 years ago, with the creation of the BC Assessment Authority. Before 1974, each local government was responsible for property assessment within their jurisdiction. This system involved many different assessors providing services to local governments, and resulted in disparity in property assessment values across the province, and even within municipalities.[8] These discrepancies were not problematic until the creation of large regional school districts that encompassed more than one municipality. At the time there was a direct relationship between school taxes levied on the assessment base and funding for school districts. Therefore, if the property assessments completed within a school district were not uniform it could result in one municipality contributing a larger share of school tax revenue to the school district. Another consequence was a lack of separation between assessment and taxation with the local governments involved in both activities, which undermined the property tax system (BC Assessment, 2004).

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[6] This history was compiled through interviews with Brian Walisser, Senior Advisor, Policy and Research, Ministry of Community and Rural Development and Dale Wall, Deputy Minister, Ministry of Community and Rural Development. The author is very grateful for their assistance.

[7] Appendix B provides a list and description of the nine current property tax classes.

[8] During that time, property assessment in unincorporated areas was completed by a rural surveyor of taxes. The Assessment Equalization Commission was in place to provide some continuity of assessment across the province.

The BC Assessment Authority, a crown corporation created by the provincial government in July 1974, was created to undertake standardized property assessment across BC. An all-party legislative committee recommended its creation (Continuing Legal Education Society of BC, 1990). The *Assessment Authority Act,* which created the Authority, was drafted over a weekend after the president of the Union of British Columbia Municipalities (UBCM) received a phone call from Premier Dave Barrett.[9] The creation of the Authority was intended to bring more uniformity and fairness to the property assessment system.

Before 1974, municipalities set a single municipal tax rate on properties that were assessed at a fraction of their market value. The fractional assessment differed depending on the property classification. To prevent excessive shifts in tax burden with the introduction of provincial assessment, the BC Assessment Authority[10] identified the average fractional assessment values that were being applied by municipalities before provincial assessment was introduced (Collins, 1992). These fractions were then applied to the assessment of all property. As a result, in 1978, residential properties were assessed at 15% of their actual value, business and other commercial properties at 25% and industrial properties at 30% (Ministry of Municipal Affairs, 1977).

The '*Commission of Inquiry on Property Assessment and Taxation,*' commonly referred to as the McMath Commission, was appointed in 1975. The Commission was mandated to examine the revenue sources of local and regional governments in relation to their responsibilities (McMath Commission, 1976). This included studying the property assessment system and property taxation. The Commission released a preliminary report in 1976. Among other advice, the Commission recommended a move to a property assessment system at 100% of market value. Due to a change in government the work of the Commission was terminated that year and a final report was not released. Still, the Commission's preliminary report marked the beginning of five years of consultation on the subject (Ministry of Municipal Affairs, Recreation and Culture, 1990).

Even after the creation of the BC Assessment Authority and the McMath Commission report, the move towards full market value assessment was incremental. In the late 1970s the provincial government examined the viability of implementing full value assessment but decided the transition would be too difficult. Then the provincial government attempted to have municipalities voluntarily choose full value assessment by implementing, through regulation, four assessment options. Once the BC Assessment Authority gave municipalities these assessment options, only a few municipalities chose to have the property assessed at full market value.

In 1978[11], the first full assessment roll with nine separate property classes was completed, but was initially only used for research purposes. For taxation purposes each property class

[9] The drafting of the *Assessment Authority Act* may have been accelerated due to an impending election. The New Democratic Party under Premier Dave Barrett was only in power from 1972 to 1975.
[10] The BC Assessment Authority changed its name to BC Assessment in 1994.
[11] Between 1978 and 1989 the Ministers of Finance for the province all had background in local government. This unique political situation contributed to the changes in provincial legislation and policy regarding local government finance.

continued to be assessed at a ratio of its value that was determined by the provincial government (Ministry of Municipal Affairs, Recreation and Culture, 1990). In 1980, in response to the rapid expansion of the economy and increasing residential values, the provincial government reduced the assessment ratios on residential property from 15 to 14.5% (Fleming & Anderson, 1984, p. 14). As the economy continued to grow and market values rose the provincial government again reduced assessment ratios on residential properties, in 1981 (14.5 to 11%) and in 1982 (11 to 10%) (Fleming & Anderson, 1984). Then after a tremendous boom in the economy and interest rates increasing through 1981, the market crashed in 1982. The BC Assessment Authority sent out assessment on properties that had since lost value and thus 130,000 assessment appeals were made. The volatile assessment situation and corresponding property tax increases prompted the provincial government to consider property assessment and tax reforms.

School tax on property was another contributing factor to the assessment and tax policy reforms. As mentioned previously, at the time property assessments were very important in determining how much funding a school district would receive, with local school boards setting the school tax for their district. In 1981, the large increases in property assessment coupled with school budget increases of an average of 19% resulted in pronounced increases in school taxes in certain areas and exacerbated inequalities in education funding (Fleming & Anderson, 1984). In response to public concern over school property tax levels, the provincial government appointed the "Committee to examine the effect of rapid rises in homeowner real estate values on school taxation" in 1981 (Fleming & Anderson, 1984). In the Committee's *School Taxation Report* several, mostly technical, recommendations were put forward. One recommendation was for the provincial government to take responsibility for non-residential school tax. This recommendation was ultimately accepted.[12]

In response to the economic instability of 1982, the provincial government wanted to remove itself from de facto property tax rate setting that transpired from setting assessment ratios. The government decided to stop having municipalities set uniform property tax rates on provincially determined variable property class assessments. Instead the system was reformed to have uniform full value assessments completed by the province through BC Assessment, with municipalities setting variable tax rates based on property class (Scales, 2008).

Variable tax system

In November 1982 the provincial government announced it had given approval in principle to a variable tax rate system (Collins, 1992). The variable tax system would involve all property being assessed at 100% of its actual value and would give municipalities the discretion to set tax rates for each of the nine property classes. Ken McLeod, Director of Policy at the Ministry of Municipal Affairs, and Phil Halkett, Director of Tax Policy at the Ministry of Finance were tasked with the internal process to create this new system. As well, the Ministries of Finance and Municipal Affairs held regional public meetings across the province as part of the significant consultation process (Ministry of Municipal Affairs,

[12] In 1982 the provincial government faced a deficit and moved non-residential school tax into general revenue.

Recreation and Culture, 1990 and 1990a). In 1983, the provincial government introduced the variable tax rate system formally through Bill 7 *Property Tax Reform Act (No. 1)*.

The businesses community at the time did not support the move to a variable rate system because they were concerned that businesses would face significantly higher property tax rates. The business community suggested a maximum ratio of 2:1 for business tax rates. Municipalities did not support any tax limits and in the end no limits were introduced.

Following the introduction of the variable tax rate system bill in 1983, an election was called[13] and Bill 7 died. Nevertheless, the variable tax rate system proceeded to be implemented, initially without legislation. Through letters to municipal mayors, the Province asked municipalities to set variable tax rates based on the promise that the law would be introduced in the next session.[14] When the Social Credit party was re-elected the bill was introduced again, but failed to proceed to adoption due to political upheaval over an economic restraint package initiated by the government.

Finally, in late 1983, a revised bill was passed. In the first year of the new property tax system only municipal and regional district tax rates were variable. A supplementary bill, *Bill No. 12 Property Tax Reform Act (#2)* was also passed in 1983, for implementation in 1984. This Act allowed all property tax rates, including hospital and school tax, to be included in the variable tax system.

In 1984 all property was assessed at full market value and municipalities were given the discretionary power to set property tax rates for the different property classes. The provincial government kept the right to set limits on the tax rates imposed on a specific class of property.[15] Municipalities were informed that the provincial government would be monitoring tax rates, as municipalities were required to report their tax rates to the Province on an annual basis. Officially, the Ministry of Finance was tasked with the job of monitoring tax rates for the initial years. The Ministry of Municipal Affairs was responsible for communicating with municipalities and completing field visits to every municipality in the province on an annual basis.

To assist municipalities with the new system, the Province created and distributed the guide, '*Variable tax rates: A guide for implementation*' in 1983. The guide provided an explanation of the variable property tax system, and gave both analytical and practical advice regarding the calculation of property tax rates. The guide emphasized the importance of adopting tax policies and outlined two possible objectives: stability and equity.[16] It also highlighted the importance of on-going monitoring and the creation of

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[13] The election was held on May 5, 1983.
[14] During the election campaign both the Social Credit and New Democratic parties promised that the legislation would be introduced if elected.
[15] The authority for the provincial government to limit tax rates and ratios is now found in Section 199 of the *Community Charter*.
[16] An updated guide was completed in recent years by the Ministry of Community Development's Local Government Finance department. Though unpublished, it outlines the policy objectives including tax rate stability, economic stability, fairness and equity (Ministry of Community Development, n.d.).

benchmarks to compare and evaluate the tax base, effective tax rates,[17] absolute tax share, and percentage tax share (British Columbia, 1983).

Between 1983 and 1988, the Province adjusted the variable tax rate system to respond to industry concerns on specific issues. These changes can be found in Appendix C, which provides a chronology of property tax. They include introducing the major industry property class in 1987 and changes to assessment of utility and industry property. In 1989, a wider examination of the property tax system in general was undertaken. In that year, the Ministry of Municipal Affairs collaborated with UBCM on two property tax projects. The first was a joint committee of provincial and UBCM representatives, who produced the report *Financing Local Government.* From this report, the provincial government introduced new tax measures to assist local governments in raising property tax revenue. In 1989/90, a flat tax and split tax[18] were introduced. The flat tax and split tax were both eliminated in 1992 (Whybrow, 1993). These taxes were not widely implemented by municipalities. As well, the flat tax was recognized as inherently vertically inequitable.

In 1989 the provincial government also jointly hosted the *Property Tax Forum*. It was a collaborative effort between the Ministry of Finance and Corporate Relations, Ministry of Municipal Affairs, Recreation and Culture, BC Assessment Authority and UBCM. The committee included the Ministers of Finance and Municipal Affairs, the president of UBCM and a member of the public. It held a series of 14 public forums across the province to solicit public views on property tax issues (UBCM, 2000). No notable property tax reforms resulted from this public outreach.

Property tax limits

In 1985, there was an economic downturn in the resource industry. Industrial businesses in the province were caught holding a large amount of taxable capital with high assessment values. In response, the provincial government instituted a number of measures. The first was to remove the school tax on machinery and equipment, a move that reduced industrial tax by $250 million per year. The provincial government also reduced the school tax rates for industrial properties (Ministry of Municipal Affairs, Recreation and Culture, 1990). These changes reduced the property tax protests from industry owners and lobbyists. Additional changes were made to industrial property assessment in 1987. In that year, industrial properties were split into two new classes (major and light industry), and the industrial property received a new assessment system with the introduction of the Major Industrial Properties (MIPS) manual.[19]

During the years initially following the implementation of the variable tax rate system, municipalities continued to use ratios that were very similar to those applied by the

[17] The effective property tax rate is obtained by dividing the amount paid in property tax on a property by the full actual property value and multiplying the result by 100.
[18] The flat tax allowed municipalities to replace general property tax levied based on value with an identical amount charged on each piece of residential property regardless of value. The split tax allowed municipalities to charge a different tax rate on residential land and improvements (Whybrow, 1993)
[19] The Major Industrial Property Manual (MIPS) is the valuation manual and properties assessed under it are "subject to depreciation rates that are prescribed by regulation, as well as interest during construction and the update factor, which considers inflation (Ursala, 2005, p. 17)

provincial government for rural property taxation (Bish, 2004). Over time there was a growing perception that the ratio between residential and non-residential property tax rates were increasing. According to Bish (2004), municipalities "increased the ratios of tax rates on business, industry, and utilities relative to residential tax rates, with some ratios and rates becoming not only high, but indeed the highest in North America" (p. 9). In response to rising ratios, business and industry owners lobbied the provincial government for further changes to the property tax system, including direct provincial government intervention. Subsequently the Province intervened to limit tax rates on Utilities (Class 2) and designated port terminals (part of Class 4).

Utility tax rate limits

Property tax rates on Utilities (class 2) were capped in 1996. The impetus for this tax rate limit began a decade earlier and involved a number of changes to the assessment and taxation of railway property. Initially, land values in railway corridors were assessed based on "across the fence" values, that is, at a similar assessment value to adjacent land. In 1986, to reduce railway assessment values and stabilize the property tax paid by railway companies, the provincial government introduced a standardized per kilometre assessment procedure for railway property (Whybrow, 1993). This assessment practice involved calculating the value of a rail corridor as a whole, and then evenly dividing this value across the whole corridor. As a result, rural corridor land with low assessed value saw assessment increases, while urban corridor land with high assessed value saw assessment decreases. In response, municipalities considered their tax rates for utilities (class 2). Urban municipalities tended to increase their utility tax rate to offset the decline in assessed value, while rural municipalities tended to keep their rates in place and received a large increase in revenue. As a result railway companies paid more in property taxation in both urban and rural municipalities.

This change to railway assessment practices did not achieve the intended outcome of stabilized property taxes. The government's attempt to rationalize the assessed value of railway property had been offset with higher municipal property tax rates. Railway companies saw the resulting taxes as excessive, hindering their ability to compete with railways in the United States, discouraging new investment in terminals and railway track, and ultimately threatening their economic viability (Kennedy, 2003). In 1995, there was greater pressure to resolve the utility property tax issue with the finalization of the new rail service between Mission and Vancouver with the West Coast Express. The government felt it was necessary to intervene by making a number of changes in assessment practice, mainly aimed at lowering railway taxable values, and also by limiting utility (class 2) rates to ensure that the earlier experience of offsetting rate increases was not repeated. Initially the Province tried, unsuccessfully, to negotiate with UBCM (Scales, 2008). Then the Province, invoking the equivalent legislation to the current section 199 of the *Community Charter,* limited municipalities to setting property tax rates on utility property to $40 per $1,000 of assessed value or 2.5 times the municipality's class 6 rate, whichever rate was higher (*Taxation Rate Cap for Class 2 Property Regulation,* 1996). Unsurprisingly, the resulting regulation was very contentious among municipalities.

Ports property tax rate limits

The provincial government also limited the property tax rates for designated ports property. The *Ports Property Tax Act* was introduced in 2004 after research found that BC ports were taxed at a much higher rate than their competitors (Mezynska, 2005). The legislation limited the property tax rate on port property (part of the industrial property class 4) to $27.50 per $1,000 of assessed value for five years, and limited the tax rate on new investment to $22.50 per $1,000 of assessed value for 10 years from the initial assessment. In 2008, the limit on port property tax rates was extended to 2018, and the limit on the tax rate for new investment was extended to 2019 (*Ports Property Tax Act)*.

After the strong negative municipal reaction to the tax limits on utility property (class 2) the provincial government provided monetary compensation to the municipalities affected by the ports property tax rate limits. As outlined in the legislation, each of the seven affected municipalities received between $40,000 and $1.3 million annually from the Province for years of 2004-2008 (*Ports Property Tax Act).* When the limits were renewed in 2008 the monetary compensation was extended to 2018, with increases based on inflation (*Ports Property Tax Act).*

Competition Council

In 2005 the provincial government established the *BC Competition Council* to review the province's competitive position and to recommend strategies for the private and public sector to improve British Columbia's economic competitiveness (BC Competition Council, 2006). Over a year the Council set up advisory committees, reviewed background papers on different sectors of the economy, and presented a final report with recommendations to the provincial government.

In its June 2006 final report, the Council expressed concerns about increase in the ratio of property tax rates between the major industry and the residential classes. The Council believed that in some municipalities the problem had reached a point where high ratios were having "a serious impact on the competitiveness of industry in those regions" (BC Competition Council, 2006a, p.12). While it recognized that the municipal property tax system was complex and difficult to change, the final recommendation in regards to industrial property tax rates was explicit, stating that:

> Municipalities must reduce the tax burden on the major industry sector particularly where the ratio of industry versus residential rates is high. If this is not done, the Province needs to take the lead in consulting on and implementing required changes. (BC Competition Council, 2006a, p.12).

The Council recommended possible solutions, including reducing the number of property classes to combine industry and service businesses in one class, or impose ratio limits on industry and business classes. It recognized that these changes would require provincial government financial assistance to municipalities to be able to adjust to the changes in revenue (BC Competition Council, 2006a).

The Council's report raised awareness of a broader problem of high tax ratios between industrial/commercial and residential property tax rates, but the provincial government chose not to act directly on the recommendations. Instead, Cabinet directed the Minister of

Community Services, as it was then named, to explore eliminating the *Community Charter's* prohibition of municipal assistance to business. The examination found that the removal of the prohibition would have significant trade and other implications in light of the soon to be implemented Trade, Investment and Labour Mobility Agreement (TILMA) with Alberta. In response, alternative approaches for enhancing the tax competitiveness and accountability of municipal governments were put forward. The first component was to significantly broaden the use of revitalization tax exemptions. This led to a larger discussion regarding tax policy, and strategies to increase municipal accountability through public information and requiring municipalities to develop five- year tax plans with consultation with the community. As a result, new financial disclosure requirements for municipalities were introduced. It was also recommended that a best practice guide and education program be development for municipalities regarding municipal taxation.[20]

Revitalization tax exemption

In 2007, municipalities were enabled to provide tax exemptions to encourage different forms of revitalization in their communities. These exemptions broadening the type, reason, and length of time a municipality could offer reductions in property taxes for individual properties or properties of a specific type or within a specific area. For example, a municipality could use "a tax exemption to revitalize its economic base by partially exempting the pulp mill from disproportionately high industrial taxes, thereby supporting the pulp mill's investment in the community and helping keep jobs" (Ministry of Community Development, 2007). Other examples included tax exemption for brownfield developments, affordable housing, environmentally sustainable development and downtown revitalization. Municipalities were required to justify the revitalization tax exemptions and demonstrate how the exemptions corresponded to the municipalities' overall policies and objectives.

Fiscal disclosure

In 2007, the Ministry introduced amendments to the *Community Charter*, to require municipalities to provide more detailed municipal revenue and tax policy information. Municipalities are now required to include statements in their five-year financial plans regarding the objectives and policies in relation to each of the following:

- proportion of total revenue that is proposed to come from each of their funding sources described in Section 165(7) of the *Community Charter,*[21]
- distribution of property value taxes among the property classes, and
- use of permissive tax exemptions.

These requirements were introduced in 2007 with phased-in implementation. In 2008 municipalities were required to provide general objective statements for each of the three topics. Full requirements in 2009 entail municipalities to provide more detailed policy and objective statements. The stricter financial disclosure requirements were intended to

[20] The latter recommendation is the only recommendation that was not implemented.

[21] 165(7) The proposed funding sources must set out separate amounts for each of the following as applicable: (a) revenue from property value taxes; (b) revenue from parcel taxes; (c) revenue from fees; (d) revenue from other sources; (e) proceeds from borrowing, other than borrowing under section 177 [*revenue anticipation borrowing*].

enhance municipal accountability in tax setting and support municipalities in considering their financial situation and tax setting behaviour.

Current legislation and property tax initiatives

The *Community Charter* provides the current legislative framework for municipalities and gives them the right to levy property taxes, with some specific rate restrictions. In the *Community Charter,* section 197 outlines that municipalities can introduce a property tax bylaw that may establish a different tax rate for each property class. These property taxes are levied on the full market value of the property as assessed by BC Assessment.

Though unrestricted discretion in property tax rate setting was given to municipalities in 1983, the provincial government kept the right to limit property tax rates. In the *Community Charter,* section 199 allows the Lieutenant Governor in Council to make regulations in respect to tax rates, including prescribing limits on tax rates or the relationships between tax rates.

In the 2009 throne speech the government announced a 50% rebate on school property taxes for light and heavy industrial properties, and plans to "protect provincial tax reductions" against local property tax increases. The speech specifically outlined that:

> Now more than ever, we need to maintain low taxes. New tax relief gives light and heavy industry a 50 per cent rebate on school property taxes. That will help save jobs, particularly in rural communities. Yet more needs to be done to ensure that provincial tax relief is not negated by local property tax hikes. Our government will work with the Union of British Columbia Municipalities to develop new legislation over the summer, for introduction early next year, that will protect provincial tax reductions. All levels of government must be equally disciplined to ensure that tax reductions at one level of government are not negated by tax increases at another. (British Columbia, 2009, ¶ 71)

As a result, the provincial government will be working on this subject over the coming months.

This section provided a history of property tax in BC since 1974. Through this examination a better understanding of how and why the current property tax system developed can be gained. As well, this history provides examples of past strategies that were undertaken, including those that were successful and unsuccessful to different degrees. Some of the main themes that can be identified through this history are the instances of the provincial government's radical intervention in the municipal property tax system, provincial compensation provided to municipalities for lost tax revenue, the relationship with UBCM and individual municipalities, and ongoing changes that have been made to non-residential property assessment and tax rates. Overall, the history demonstrates the complexity of the property tax system in BC. The next section reviews the methodology of the research undertaken for this paper.

METHODOLOGY

This research employs a number of research methods, including a literature review, jurisdictional review and expert interviews, to explore the topic of principles of property tax rate setting, and provincial involvement in municipal property tax rate setting. These research methods were cumulatively used to answer the following questions: 'What are the current principles of municipal property tax rate setting and distribution of tax among the property classes?'; 'What are the ideal principles of municipal property tax rate setting?'; and 'If appropriate, what options should the provincial government pursue in exercising its authority to influence or intervene in municipal property tax rate setting?'. The range of research methods used in this project contributed to a more holistic understanding of the issue.

The literature review provides background material on the subject and offers grounding in the central issues. This portion of the research process began with a review of introductory texts on local government finance. Then, provincial government publications, including committee and commission report, were reviewed. Using the bibliographies from these texts and reports numerous other publications on the property tax system and process were found. Additionally, the Policy and Research branch librarian assisted in finding more obscure Ministry publications, including historical documents. The literature included academic texts, government reports from British Columbia and other provinces, as well as reports completed by think tanks and other organizations.

The jurisdictional review offers an opportunity for comparison between systems, provides considerations for different ways of designing a property tax system, and explores strategies for state or provincial influence and intervention. Though there are limitations in examining other jurisdictions due to the diversity in system components, it is also possible to learn from some of the challenges and successes of those jurisdictions. This research also involved an examination of academic literature, government commission findings and reports, legislation, opinions of local government associations, and individual jurisdictional websites.

The jurisdictional review involved work with the Intergovernmental Committee on Urban and Regional Research (ICURR).[22] With the assistance of ICURR, a comprehensive review of provincial property tax systems in Canada was undertaken. Research questions were developed to solicit information regarding property assessment (method and frequency), the value that property tax was charged on (either full value or a fraction of the value), number and type of property classes, and municipal discretion in setting property tax rates. As well, the research examined provincial restrictions on property tax rates, provincial monitoring of property tax rates and tax setting behaviour, and other provincial government involvement

[22] The Intergovernmental Committee on Urban and Regional Research (ICURR) was created in 1967 by Canadian First Ministers for the purpose of exchanging information on urban and regional matters between all levels of government. ICURR is funded by all the provinces and territories and the Canada Mortgage and Housing Corporation.

in property tax rate setting. The questions also explored the services that were funded with general municipal property tax revenue, and the other governments and agencies that shared the property tax base. Finally, jurisdictions were asked what tools provincial governments possessed to achieve provincially desired outcomes in the property tax system. This research was complemented by literature and Internet research to further examine particular provinces and programs.

Then a more in-depth jurisdictional review of Ontario, Australia and New Zealand was undertaken. This research included reading applicable literature by academics, examining legislation, and reviewing websites of provincial and state governments, and local governments and their membership organizations.

The final research component was expert interviews. This research approach was chosen because of the limited literature on the subject, and the specific information and opinions these experts could offer on the current and unique situation of BC's tax system. These interviews involved open-ended questions regarding property tax rate principles, and provincial involvement in municipal property tax rate setting. As this research involved human participants, approval was obtained from University of Victoria Human Research Ethics Board. Therefore, the answers provided by the research subjects were protected according to the ethical standards outlined by the University of Victoria Human Research Ethics Board.

Interviews were conducted with academics or analysts in local government property taxation. The experts were identified through the literature review and recommendations from practitioners at the Ministry of Community and Rural Development. The interview pool was made up of academics and analysts who had written on municipal property tax policy and were familiar with BC's property tax system. It was quickly realized that the pool of potential interviewees was very limited because there are a small number of people working on property tax policy, and an even smaller number who are very knowledgeable of the complex BC property tax system. From the original list of individuals who were identified there was an attempt to interview each individual. Some of the individuals contacted did not participate due to non-response or conflict with other work they were currently completing for the Ministry. Though the final number of experts interviewed was small, they did offer diverse perspectives due to their backgrounds.

Interviewees were contacted by telephone and e-mail. Contact information for participants was obtained through Internet web searches and participants were only contacted through their public contact information available through the organization in which they were affiliated. Participants were invited to participate in an interview for the research project. If they agreed, an appointment was arranged and they were sent a letter of informed consent that outlined the research purpose and process and the interview questions. The interviewees demonstrated their consent by participating in the interview. They were fully aware of the interview process and very familiar with the subject matter. Participants were informed that they were free to end the interview at any point. Also, by obtaining the questions in advance of our meeting, participants were able to select which questions they wished to discuss. The interviews took place over the phone over a three-week period in April 2009. Each interview was approximately 45 minutes long.

The participants were informed that the information they provided during the interview might be included in this report. The experts were specifically asked for their consent to having their name attributed to the comments they made during the course of the interview. It was important that their responses were attributed to them and their organizations as a way of ensuring the credibility of the report and the information they provided. Participants were granted access to information concerning the research findings of this project.

The following experts were interviewed: Dr. Enid Slack, Dr. Robert Bish, Mr. Casey Vander Ploeg, and Dr. Jonathan Kesselman. Biographies of these individuals are provided in Appendix D. Each interviewee had a unique perspective based on their past work examining property tax systems and rates. Dr. Slack was a member of the *Property Tax Policy Review Commission*, an expert panel that examined the residential and non-residential property tax burden for the City of Vancouver. Dr. Bish completed research on industrial (class 4) property tax rates in BC. Mr. Vander Ploeg examined property tax as a revenue-raising tool in western Canada. Dr. Kesselman competed a study for the City of North Vancouver on property tax rates and revenue in relation to the ports property tax rate limits.

After introducing the project and confirming consent, the interviewees were asked six open-ended questions. The questions posed to the experts were:

1. Do you think there are problems with the British Columbia property tax system?

1a. If so, what do you think the primary problem with the BC property tax system is?

2. What principles do you think municipalities currently use when deciding general municipal property tax rates?
3. What principles do you think municipalities should use when deciding general municipal property tax rates?
4. Do you think a provincial government should have influence over general municipal property tax rates?
5. How do you think the BC provincial government currently influences property tax rates?
6. What tools do you think a provincial government should have to ensure "appropriate" general municipal property tax rates are achieved?

As appropriate, follow-up questions were asked to probe more deeply into ideas, clarify any responses and more fully understand the interviewees' perspective.

This section outlined the number of research methods that were used to explore the topic of property tax in BC. The use of a variety of research methods was important in providing a holistic representation and analysis of the many different issues involved in the municipal property tax system in BC. The following section will review the literature on the subject to provide a foundation for subsequent research in the rest of the paper.

LITERATURE REVIEW

This section provides an extensive review of the current literature related to property tax systems and rate setting. It begins by examining general tax principles, and then specifically the literature on current principles evident in property tax rate setting and distribution of taxes among the property classes. Subsequently a review of the literature of ideal principles that municipalities should be considering when setting property tax rates is provided. The section concludes with a discussion of strategies that provincial governments may employ to exert their authority in influencing or intervening in municipal property tax rates.

General tax principles

Due to the limited literature on principles of property tax rate setting, it is valuable to initially examine general tax principles. These general tax principles can then be applied to property tax rates setting where appropriate.

A discussion of the broad principles of taxation can begin with an examination of Adam Smith's *Canons of Taxation.* He outlined the principles of taxation to be equality, certainty, convenience of payment, and economy of collection (Woolery, 1989). A few of these principles are very evident in the modern property tax system. Property tax is largely acknowledged with having the advantages of certainty (relatively stable source of income for local governments) and being easy to administer (low collection costs due to difficulty of evasion because of immobility of property) (Vander Ploeg, 2008).

Some of these concepts are relatively easy to define, while others remain contested. Equality is the most challenging principle to define. In economics it is usually discussed as the concepts of horizontal and vertical equity (City of Vancouver, 1989). Horizontal equity is achieved when taxpayers in similar circumstances pay a similar amount of tax. Vertical equity is achieved when taxpayers in differing circumstances pay varying amounts of tax depending on how different their circumstances actually are (Vander Ploeg, 2008). These concepts can also be applied to property assessment as "residents in homes with similar assessed values pay the same tax (horizontal equity) and residents in more valuable homes pay higher taxes (vertical equity)" (Bish & Clemens, 2008, p. 193).

The Tax Foundation, a United States policy think tank, provides a more contemporary inventory of effective tax principles. They outline that a taxation system should follow Smith's principles of economy of collection and certainty. They also identify the need for informed taxpayers in a system that is simple and understandable. The Foundation outlines that tax legislation should be based on "sound procedures and careful analysis", with open hearings to allow citizens to respond to proposals (Woolery, 1989, p. 3). They posit that a tax system should aim for "neutrality in economic decision making", and be competitive with other nations and "not impede the free and fair flow of goods, services, and capital" (Woolery, 1989, p. 4).

Current Principles

A review of literature on current principles of property tax rate setting and distribution of tax among the property classes reveals that the subject has not been widely studied and is not well understood. Still, the research that has been completed finds that municipal governments have a narrow range of considerations when making tax rate decisions. The current explicit principles and system characteristics include stability and incrementalism. There are also principles underlying tax rate decisions, but they are not readily apparent or acknowledged.

In 1976, the McMath Commission identified that even though property taxes had been levied for over a century in British Columbia, there were no known explicit government statements on the philosophy behind the tax (McMath Commission, 1976). The research on current principles of property tax rate setting continues to be negligible and the influences on behaviour are poorly understood (Kennedy & McAllister, 2005). Still, there is some discussion of the issue because differential taxation can have a significant impact on municipalities and property owners.

The central principle most often discussed in relation to tax systems is equality, both based on *ability-to-pay* and *benefits received*. The principle of *ability-to-pay* refers to a tax that is equitable if it corresponds to an individual's ability to pay or income (Vander Ploeg, 2008; Hobson, 1997). The McMath Commission (1976) conceptualized the notion of *benefits received* to have two different, yet complementary, meanings. The first concept is that properties should receive the services equal to what they were paying and secondly, that the property tax charged should be equal to the cost of providing the services to the property (McMath Commission, 1976; Vander Ploeg, 2008). The *benefits received* concept can be more precisely defined requiring that the tax paid by an individual is "equal of the marginal benefit- the benefit associated with the last unit consumed- received from public sector activities" (Hobson, 1997, p. 117). The McMath Commission identified that the property tax system and rates in BC had evolved in a manner that did not relate closely to ability to pay or benefits received, but that both concepts were still relevant to municipal councils when setting tax rates (McMath Commission, 1976). That is, municipal councils would not set tax rates that are wildly unaffordable or seen as extremely incompatible with what residents felt they should pay for services (McMath Commission, 1976).[23]

Kennedy and McAllister completed the most in-depth and specific analysis on the subject of current principles of property tax rate setting in 2005. They completed a case study of three northern BC towns (Quesnel, McKenzie and Smithers) to examine policies and considerations in property tax rate setting decisions. Through interviews with municipal staff and politicians, Kennedy and McAllister (2005) found the following factors formed the basis for setting municipal tax rates:

- Local economic conditions,
- Community desires for services and facilities,
- Financial requirements of the municipality,
- Past taxation practices of the municipality,

[23] Deidre Wilson, Ministry of Community Development, referred to this practices as "goldilocks" policy making (D. Wilson, personal communication, April 23, 2009).

- Need for stability and predictability in the tax levy, and
- Taxation practices of other local governments.

In comparing tax rates to surrounding municipalities, the representatives in the case studies did not appear to change their rates for competitive reasons, but instead to stay in-line (not too high or too low) with surrounding municipalities. Furthermore, the research demonstrated that property taxes were not being used to encourage investment or development (Kennedy & McAllister, 2005). The research also found that tax rates levied by other agencies (for example, the provincial government, Municipal Finance Authority and BC Assessment) on the same tax base were not a factor in municipalities' tax rate setting decisions.

Kennedy and McAllister (2005) concluded that in contrast to previous assumptions, municipalities were not using "property tax as a policy tool to achieve certain ends" (p. 222). The researchers found that during the decision-making process municipalities did not appear to consider the principles or values that formed the foundation of their taxation policies (Kennedy & McAllister, 2005). While there may be no explicit discussions about philosophy behind property tax rate, there are competing interests and values entwined in all municipal property tax rates decisions because all taxes, but particularly property taxes, are ultimately political (McMath Commission, 1976, p. 30).

Lightbody (2005) found similar findings to Kennedy and McAllister, stating "cities (and municipalities generally) budgeting practices across the country have consistently been grounded in incrementalism" (p. 169). He outlines that this follows a larger trend of liberal democratic governments that tend to carry past commitments forward. Lightbody argued this is particularly the case in municipalities where there is rarely a significant change in ideology of government. Stability and predictability become the major determinant of tax rates due to political expediency and lack of interest from citizens or businesses (Lightbody, 2005).

The BC provincial government instituted stronger fiscal disclosure requirements for municipalities in 2007. This is a valuable tool that can be used to identify current principles of property tax rate setting. Appendix E reviews a sampling of municipal financial plan bylaws to identify principles and conditions municipalities are currently considering when setting property tax rates. The analysis focuses on the policies and objectives related to the distribution of property tax rates among the property classes. This analysis reveals common themes of current principles of property tax rate setting, including objectives to maintain stable tax rates and a proportionate tax relationship between property classes, and to reduce non-residential tax rates.

Ideal Principles

Though there is limited discussion in the literature on current tax rate setting policy, there has been larger discussions on the ideal principles municipalities should be considering. To supplement this literature there is merit in examining broader principles of an ideal property tax system that may be transferable. These principles are diverse, contentious, and may have varying levels of importance when designing and implementing a property tax system.

While all the principles may be applicable, they must be defined and operationalized in order to be useful in designing a property tax system and in setting tax rates.

The BC government report, *New Directions for Local Government Finance: Next Steps*, outlines key principles that should be followed in a property tax system. These principles are "clarity, stability, predictability, fairness, equity (both vertical and horizontal), neutrality, accountability, and ease of administration" (British Columbia, 1990, p. 39). The report specifically identifies the importance of measuring all current and proposed policy instruments against these principles.

Equity and Fairness

The most oft mentioned principle is that of equity, as it is fundamental in any discussion of tax policy (Kennedy & McAllister, 2005; British Columbia, 1990; BC Assessment, 1992b; Kitchen, 1997). Vander Ploeg (2008) outlined that there is widespread agreement that "taxes should treat everyone fairly," but recognizes that the concept of equity is complex because of the differing perceptions of fairness and multi-faceted nature of the matter (p. 42).

Vander Ploeg (2008) conceptualizes equity as either the *benefits principle* or the *ability to pay principle*. Lightbody (2005) argues that "in ideal terms, property taxation is based on a 'benefits principle' that equates the tax paid to benefits received, it is not based on an ability-to-pay standard as are income taxes" (p. 413). Others argue that property tax is more reflective of ability-to-pay, particularly in the case of residential properties. Bish and Clemens (2008) posit that "the correlation between income and assessed value of a residence is fairly high within local government" though they acknowledge this may very across BC (p. 193). In contrast, research by the ICURR (2002) found that municipal leaders believed that there is a weak relationship between property taxes and taxpayers' ability to pay and to benefit received.

The issue of equity is often raised in relation to higher effective property tax rate on non-residential property compared to residential property. Kitchen (1997) cited a study that suggested that residential property owners benefited more from local government services than the non-residential sector, identifying an inequity in benefits received. Bish and Clemens (2008) also posited that the application of tax criteria to business is more complicated "because there is no systemic relationship between taxes paid and benefits received nor between the assessed value of business (and its taxes) and its net income, there is no relation between taxes paid and ability to pay" (p. 194). As previously mentioned vertical and horizontal equity are two common ways to characterize equity (City of Vancouver, 1989). Furthermore, Bish and Clemens (2008) stated that businesses taxes would unlikely to achieve horizontal or vertical equity because they believed an equitable tax rate could not be determined.

The National League of Cities *Guiding Principles for Public Finance*, conceptualized equity into two concepts: internal equity and external or intergovernmental equity. Internal equity refers to governments imposing equitable and fair revenue burdens on individuals, corporations, communities, sectors, income classes, and generations (National League of

Cities [NLC], 2006, p. 3). The concept of external or intergovernmental equity refers to achieving fiscal parity across jurisdictions (NLC, 2006, p. 3)

Stability
The principle of stability can refer to a number of different participants in the property tax system. Most often stability refers to residential taxpayers achieving certainty in the amount they will be paying in property taxes year over year (Kennedy & McAllister, 2005; British Columbia, 1990). It can also refer to the amount of revenue a municipality can expect to receive from property taxes or a particular property class.[24] This conception of stability also makes reference to the tax base that municipalities rely on, which provides stability combined with flexibility (McMath Commission, 1976). That is, it is "desirable to have a local tax base that is both stable in times of declining local economic activity, and capable of steady growth in times of expanding local economic activity" (McMath Commission, 1976, p. 100).

Neutrality
The principle of neutrality refers to a tax that does not distort behaviour in an economic sense. That is, avoiding the provision of an incentive for an undesirable allocation of resources in society (McMath Commission, 1976). The concept is also referred to by BC Assessment and in provincial publications, though it is not defined (BC Assessment 1992b; British Columbia, 1990).

Simplicity
The principle of simplicity is important as it relates to both ease of administration for government and understandability for taxpayers (BC Assessment, 1992b). As well, simplicity of a tax system supports certainty (McMath Commission, 1976). Simplicity in ease of administration has two main components, ease of administration for the government and for taxpayers. A tax system should have administrative feasibility and collect tax in an economically efficient manner (McMath Commission, 1976). For the taxpayer, ease of administration involves a system that is simple, efficient, effective and easy to understand (BC Assessment, 1992b). In the system there should be a certainty of amount to be paid and the time and manner of payment (McMath Commission, 1976).

Accountability
The issue of accountability is central to any tax system. Accountability is defined as being able to explain and be answerable for your behaviour and decisions. With property tax it relates to the direct relationship between locally raised taxes and local expenditures (BC Assessment, 1992b; British Columbia, 1990). This concept also relates to transparency and understandability (NLC, 2006). Therefore, accountability is increased if taxpayers understand the benefits they are receiving from their taxes. Kennedy and McAllister (2005) provide another perspective on accountability, arguing that appropriate taxation policies that fit local context and taxpayer's wishes can increase support for, and legitimacy of,

[24] For example, if a municipal has received 30% of its property tax revenue from the Industrial property class (class 4) in the previous year, they may expect to receive a similar percentage of revenue in the current year regardless of any change in the property assessment of this class relative to other classes in the municipality.

municipal taxation and services. Conversely, inappropriate policies may "erode support and invite intervention in local affairs by the province" (Kennedy & McAllister, 2005, p. 210).

External considerations
The National League of Cities' *Guiding Principles for Public Finance* includes principles of responsibility and responsiveness to the broader finance system. This involves governments "weigh[ing] the effects of their decisions on other jurisdictions and levels of government" (NLC, 2006, p. 3).

Provincial government authority

The provincial government has the responsibility to create the framework under which municipalities operate, including in relation to property taxation. In order to ensure municipalities follow ideal principles in property tax rate setting, there is a continuum of opportunities for the provincial government to exert its authority. The first section reviews the guiding principles of autonomy and accountability that should guide any provincial government role in that system. The second section explores strategies identified in the literature that relate to the provincial government exercising its authority in the property tax rate system.

Guiding principles
According to the literature, provincial intervention in the municipal property tax system, including property tax rate setting and the distribution between the property classes should be governed by two guiding principles: autonomy and accountability. These principles provide the strongest justification for municipalities having control of their own revenue. Local autonomy, including having control over property tax aligns with the view that local government is a distinct sphere of government (Bell, 1999). Kennedy & McAllister (2005) suggested that with local autonomy local governments should see their role in setting property tax rates as an opportunity to directly influence the shape and direction of the local economy.

The complementary principle of accountability is also important. Bell (1999) believed that "granting local governments full control of the property tax, including rates, maximizes their flexibility and places accountability for tax decisions at the local level"(p. 15). Kennedy and McAllister (2005) emphasize the need for documentation, publicizing, and discussion regarding the property tax policy. The Canadian Federation of Independent Business (CFIB) (2008) echoes this recommendation through publicizing municipal decisions, though they see it as part of a larger role for provincial government oversight. Though CFIB recognizes that the recent legislation has increased financial disclosure requirements in BC, they believe the provincial government should assist municipalities in instituting performance measures and value-for-money analysis of municipal spending (CFIB, 2008). They envision the development of municipal performance measures, similar to those in Ontario, with oversight of a value-for-money municipal auditor general (CFIB, 2008).

Provincial government authority

In BC the provincial government has the authority to reform the property tax system through property classification and property tax rate and ratio limits. The literature identified different strategies in regards to these reforms.

Number of property classes

Reducing the number of property classes is an option that uses assessment and property classification to affect tax outcomes. Bish (2003) recommends decreasing the number of non-residential property classes because he believes this will ensure tax rate setting behaviour follows principles of equity and fairness. The option would combine the four business classes: Utility (class 2), Major industry (class 4), Light industry (class 5) & Business or other (class 6) into a single property class. This arrangement is applied in all other provinces in Canada except Ontario (Bish, 2003). The current, though limited, evidence is that with broad classification of non-residential properties the tax ratios remain "reasonable" (Bish, 2003, p. 38).

The *BC Competition Council* (2006a) recommended decreasing the number of non-residential property classes. A similar proposal was put forward in the provincial *Report of the Property Tax Forum* in 1989. Mayor Marilyn Baker of the District of North Vancouver suggested, for further discussion, the merger of Class 5 (Light industry) with Class 6 (Business or other) because the classes are "assessed in a similar way and generally attract similar tax rates" (British Columbia, 1989, p. 38). She stated that this would simplify the property tax system, but may have a financial impact on municipalities, which should be examined.

Tax limits

In many jurisdictions provincial and state governments have implemented rate and ratio limits on the tax rates municipalities can set. Limits are implemented with the intention of bringing greater equity, stability and accountability to the system, though these outcomes are contested. Most provincial or state governments have enacted limits on property tax rates, and upper (and sometimes lower) limits have been a long-standing feature of property tax systems. According to the International Association of Assessing Officers (2000) these property tax rate limits are "increasingly imaginative and sophisticated" (p. 4).

The Canadian Federation of Independent Business (CFIB) recommends that the BC government implement a limit on the difference (or ratio) between property tax rates on residential and commercial properties (CFIB, 2008). Bell (1999) also outlines that "placing an upper limit on the rate that any local government could impose on its tax base would be one way to help that broad economic targets are heeded" (p. 15). He recommends a 'cap-with-override' approach, which would allow voters to approve tax increases that are above the cap level. Bell (1999) believes this would allow the local government to operate efficiently, facilitate monitoring by higher levels of government, and strengthen local accountability.

Ranges of Fairness are another form of property tax rate limits. The Ontario provincial government has the limits that set out the ratios between residential and non-residential

classes which local governments can set tax rates within.[25] Bish (2003) recommends implementing changes similar to Ontario's tax reforms, including ranges of fairness, to bring greater equity to the system. The strategy offers municipalities more flexibility than a strict rate or ratio limit. Still, it removes significant municipal autonomy in property tax rate setting.

This section reviewed literature on property tax principles and the provincial authority in the municipal property tax system. Through the literature a limited amount of research was identified that specifically examines principles of property tax rate setting. Still, the research that has been done provides valuable information for this discussion. The review of literature on government intervention provides a connection to the history of the property tax system in BC. In this section there are examples of both changes to the number of property classes (most notably, the splitting of industry classes into two classes in 1987) and the introduction of property tax limits. The following section will provide a jurisdictional review of different property tax systems. This will take the theoretical discussions provided in the literature and provide concrete examples of the application of these concepts.

[25] Ranges of fairness are examined in greater depth in the jurisdictional review of Ontario.

JURISDICTIONAL REVIEW

This section provides a jurisdictional review for property tax systems in Canada, Australia and New Zealand.[26] A short introduction to the property tax system will be provided for each jurisdiction. Then an examination will be undertaken of the structures and resources that provincial or state governments have introduced to encourage or required certain policy directions in setting property tax rates. From this, lessons learned will be identified, both in terms of principles of property tax rate setting, and provincial/state influence and involvement in municipal property tax rates.

It is important to recognize many of the difficulties in comparing property tax rates and systems, both across Canada and around the world. These challenges include difference in:

- Assessment cycles,
- Property classification systems (particularly the number of non-residential/business classes),
- Policies for larger or smaller municipalities, and
- Range and level of services delivered by the local governments.

As well, in some jurisdictions, municipalities have the option to levy a business occupancy tax in addition to the property tax. Furthermore, some systems are in flux with reform of the assessment or local government system (Bish, 2004, pp. 13-14; Mezynska, 2005).

The differences in assessment systems include different assessment practices in subject and method of assessment. For instance, when a government chooses to change the assessment system to obtain a certain tax outcome the changes are more difficult to identify immediately. There may also be very different property exemptions (full or partial) and grants and other rebate programs.

The initial section of this analysis reviews the different property tax systems in place across Canada (excluding Prince Edward Island).[27] These jurisdictions were chosen because of their similarities within the federal system, and to provide illustrations of the diversity in property tax systems and provincial-municipal relationships across the country. An overview of all the provinces identifies similarities and differences, and possible strategies that British Columbia could explore.

Ontario was identified for in-depth analysis because of its comparability to BC's system and the extensive provincial government interventions into the municipal property tax system. Australia and New Zealand were both chosen for review because they share commonalities with the Canadian system with a Westminster parliamentary system and the

[26] This analysis does not involve a jurisdictional review of U.S. municipal tax rates because of the significant differences in property tax structures and rate limitations. For example, municipalities in many U.S. states have the ability to levy retail sales and income taxes, which has reduced their reliance on property tax revenues (Bish, 2004). As well, many U.S. states have implemented Tax and Expenditure Limits. As of 1995, 46 of 50 states had some version of these limits (Bish, 2002).

[27] Representatives from Prince Edward Island did not provide information on the province's municipal property tax system to ICURR.

high level of reliance municipalities have on property tax revenue. Within these countries, individual states are identified that have demonstrated particular interest and action on the issue of property tax rates.

Canada

A review of the property tax systems in Canadian provinces reveals many similarities and differences that can be seen in a more detailed examination of property tax principles and provincial and municipal relationships. In March 2009 the researcher formulated the research questions. The Intergovernmental Committee on Urban and Regional Research (ICURR) then completed the interviews of provincial representatives. A table in Appendix F provides the full text of the questions and responses. The table provides a simple introduction to the provincial systems, but does not explore all of the exceptions and complexities that exist in each system. Still, some general observations can be gleamed from this jurisdictional review.

The initial examination concerns the assessment system used in provinces across Canada. A general understanding of the assessment system is necessary for a greater examination of property tax rates. Currently there are diverse approaches to the assessment of real property. Concepts that are mentioned by provinces, but are undefined, include assessing property at market, fair, current, or 'real and true' value. As well, half of the provinces assess property on an annual basis, while half assesses property every three to four years. This discrepancy in the frequently of assessments can affect tax rates and ratios between the property classes.

A component of property assessment is the number of property classes. In provinces across the country there is wide divergence in the number of property classes, from three to twelve. Most provinces have a single residential property class, a general non-residential property class, and classes for farmland and utilities. Only BC and Ontario have divided the non-residential classes into many smaller delineations and differentiate types of commercial operations.

For most provinces, except Saskatchewan and Manitoba, property taxes are charged on full market value. In Manitoba residential property is taxed at 45% of the assessed value and non-residential property at 65% of the assessed value. In Saskatchewan the 'percentage of value' policy refers to the assessment of residential and non-residential property at a percentage of market value. Therefore, though property tax rates may be uniform for residential and non-residential properties, the effective tax rate could differ substantially.

Many of the provinces in the jurisdictional review outline that full discretion is given to municipalities to set property tax rates. Still, there are examples of provincial intervention in municipal property tax rate setting, including:

- limits on assessment of property,
- property tax rate and ratio limits, and
- allowing for property tax deferments.

Other exceptions to full discretion on setting property tax rates include:

- BC, with tax rate limits on Utilities (Class 2) and Port property (Class 4),
- Ontario, with ranges of fairness, and

- Quebec, where non-residential revenues may not exceed a provincially set ratio of residential revenues.

These interventions follows Bish's finding that most provincial governments set ratios between residential and non-residential property classes, either directly through ratios or indirectly by setting the percentage of assessment that is to be taxed (2004).

Most provincial governments require municipalities to submit financial bylaws or financial plans to them on an annual basis for monitoring purposes. For instance, Manitoba monitors property tax increases in municipalities and publishes a report of municipal financial and statistical information each year. This publication includes statement regarding the number of municipalities with property tax increases and the level of those increases.

Through the jurisdictional review of Canadian provinces it appears very little has been implemented to assist municipalities with the property tax rate setting process. For example, only BC and Alberta have produced guides to assist municipalities in this process.

Ontario

This section specifically reviews Ontario's property tax system. Ontario was selected for further examination because of both the similarities and differences it holds to BC's system. The similarities include a large number of classes, a market value assessment system, and the existence of tax rate limits. The most significant difference between the two systems is the timing of assessment and property tax reforms. Ontario only recently moved to a market value assessment system and with subsequent tax policy changes. The provincial government has undertaken far-reaching and diverse strategies to improve the property tax system, in an attempt to make it more equitable. This process has received extensive academic attention and has been the subject of numerous government commissions.

History

The most recent phase of Ontario's property tax system began in 1967 with the *Ontario Committee on Taxation* recommending that real property be assessed at 'actual' value (Bossons, Denny & Slack, 1981). In 1970, the provincial government took over responsibility for property assessment from municipalities and first made the commitment to adopt full market value assessment (Slack, 2000). In 1976, a provincial budget was introduced that set out reforms to the tax system that needed to be adopted before market value assessment could be implemented. These reforms were later dismissed. A decade later, in 1985, the provincial government again looked at property assessment and decided not to implement full market value (Slack, 2000).

In the mid-1990s, the city of Toronto was facing challenges in raising sufficient property tax revenue. The city's tax base was eroding due to successful assessment appeals, and there was a belief that businesses were leaving the jurisdiction due to high property taxes (Slack, 2000). The *Greater Toronto Area Task Force,* created by the provincial government, examined these concerns and recommended that actual value property assessment be implemented in the city.

In 1998 the provincial government introduced uniform property assessment based on "current value" (or market value) province-wide (Slack, 2000). It was recognized that the

implementation of current value assessment would result in large shifts in tax burden within and between classes of property. To ease the shift of burden, transition ratios were calculated on each property class to reflect the relative distribution of burden by tax class prior to the reform. The transition ratios were then used in conjunction with phase-in mechanisms and tax deferrals to address potential shifts in the tax burden (Slack, 2000).

Coinciding with the new assessment approach, tax policy changes were introduced. Prior to the reform, municipalities were required to charge residential properties a rate of 85% of the non-residential rate (Slack, 2000). After the reform municipalities were allowed to levy variable tax rates for different classes, within ranges of fairness.[28] Ranges of fairness set out the ratios between residential and other property classes within which local governments could set taxes. Depending on the property class, ranges vary from 0.6 to 1.1 of the residential rate. If a municipality has tax rates that are higher than the ratios they may continue to charge those rates, but cannot increase them further away from the range of fairness. The primary reason the ranges of fairness were introduced was to "allow municipalities to maintain the existing tax burdens between classes and reduce the impact of a reassessment" (Slack, 2000, ¶ 21).

The current property tax system in Ontario has only recently been introduced, and phase-in mechanisms for both assessment values and rates are still in place for many property classes. Therefore, it is too soon to evaluate fully how the new system will ultimately affect property tax rates and the success of the reforms. With the introduction of ranges of fairness, ratios of property taxes between the property classes cannot become any higher if they were already above the ratio range.

What can we learn from Ontario?

There are a number of important lessons the BC provincial government can learn from the Ontario experience. These relate to the provincial role in municipal finance, municipal support, satisfying all taxpayers, and balancing principles. The provincial government plays a huge role in the municipal property tax system in Ontario. This has left municipalities with very little authority in setting property tax rates that can raise revenue to meet the needs of the community. Slack, Tassoli and Bird (2007) observed that property tax policy in Ontario is "pre-eminently a provincial rather than a municipal matter not just by law but more importantly by repeated provincial assertions of its controlling role down to all but the very finest detail" (p. 34).

Municipal co-operation and support is a very important factor when the provincial government is introducing new measures in relation to property tax assessment and rate setting. The provincial government did not obtain local government support for the tax reforms (Anstett, 2002). Municipal governments in the province criticized the new property tax system because it largely removes municipal autonomy and accountability in property tax revenue raising. In this case municipal politicians dismissed the ranges of fairness, because they believed that "since municipal politician are accountable to the electorate, they should be responsible for setting tax rates without provincial constraints" (Slack, 2000, ¶ 21). As well, the provincial government did not effectively anticipate the municipal

[28] Ranges of fairness are now referred to as 'target ratios' (E. Slack, personal communication, April 20, 2009).

response to mitigation options (Anstett, 2002). Initially, municipalities did not want to participate in the optional mitigation strategies that would lessen the shifts in burden between property classes that came from the new assessment system. Municipalities did not want to appear involved in the reforms, and instead hoped the provincial government would incur the blame for the tax shifts (Anstett, 2002).

With these extensive reforms, the provincial government attempted to satisfy all taxpayers. The introduction of market value assessment implied tax shifts between property classes, and thus "those on the losing side are most likely to be unhappy" (Slack, 2000, ¶ 7). When the provincial government realized that the assessment reforms would lead to huge tax shifts between classes, they instituted mitigation measures. These measures included relief programs, phase-in schedules, assessment and rate caps and thresholds.[29] There was "incomplete or imperfect analysis and understanding of the impacts of the reform, resulting in flawed design of initial optional mitigation measures" (Anstett, 2002, p. 40). As well, all these programs led to increased complexity of the property tax system (Slack, 2000). Anstett (2002) argues that these mitigation measures compromised the purpose and outcome of the original reforms. There was a political desire to address all negative taxpayer reaction to the initial reform tax bills, to the detriment of the original purpose of the property tax system reforms (Anstett, 2002).

There are a number of lessons that can be learned from Ontario's experience, including the importance of achieving strong political commitment from the outset of the reform initiative, the importance of not losing sight of the central goals of the initiative, being prepared for stakeholder reaction, and fully thinking through any mitigation strategies that may be necessary for the reforms to continue. Finally, another important lesson that can be learned from the Ontario experience is the importance of balancing principles when designing a property tax system and setting property tax rates. In Ontario's case there was a focus on one principle, stability, at the detriment of all other principles (Slack, 2000). Due to the "focus on tax stability for each tax class, the initial goal of the reform - to achieve equity based on ability to pay- was lost completely" (Slack, 2002, p. 583).

Australia

Australia is a federal government system with six states and two territories. Similar to the Canadian system, local governments were not part of the federation process and are not mentioned in the country's constitution. States have jurisdiction over local governments, and are able to create, suspend and dismiss local governments, and dictate activities they can undertake, including functions and revenue-raising (Dollery, Crase, & Johnson, 2006). Therefore local governments in each state have different property tax systems, with corresponding levels of taxation limits and support. In Australia, local governments are very dependent on property taxation, referred to as rates, as it is the only form of local government taxation power they possess. This is unique among federated Organization for

[29] Thresholds were provincial averages for each class that require municipalities, if they are going to increase their budget, to levy the increase onto residential properties. The provincial government recognized that this requirement would result in large shifts of tax burden onto residential property and subsequently required that at least half of all budgetary increases be borne by the residential property classes.

Economic Co-operation and Development (OECD) countries, though Dollery, Crase and Johnson (2006) identify Canada's local government as the most comparable with 90% of local tax revenue acquired from property taxation.

The *Productivity Commission*, an independent body of the Australia government, undertook a research study of local government revenue in 2008. The study examined the fiscal capacity of local governments, the impact of various taxes on groups and individuals, and the outcomes of state regulatory limits (Productivity Commission, 2008). The report includes a chapter on the 'Principles of revenue raising' to assist local governments in making revenue-raising decisions. The initial discussion outlined the effectiveness of applying economic principles in guiding revenue-raising decisions for local governments because these principles are "consistent with, and indeed help support, the effective operation of the democratic and decision-making process of local governments" (Productivity Commission, 2008, p. 166). Still, the committee recognized the inherent political nature of local government, and that many social, political, institutional and governance consideration were relevant. Furthermore, they recognized the trade-offs that must take place between economic and other objectives, including equity and administrative simplicity (Productivity Commission, 2008).

The *Productivity Commission* outlined criteria for setting property tax rates, including economic efficiency, equity, administrative simplicity, and transparency and accountability (Abelson in Productivity Commission, 2008). The Commission further defined equity as "an appropriate balance between the benefit and ability to pay principles" (Productivity Commission, 2008, p. 177). They demonstrated that both parts of the principle could be achieved by setting a minimum charge on each property (to reflect benefit received) and an additional charge based on the value of the property (ad valorem component) to reflect property owners' ability to pay.

The state of New South Wales has undertaken extensive work in property tax rate setting. In the state, local governments have the authority to set 'ordinary rates' (property taxes) on four property classes: residential, farmland, mining and business (New South Wales, 2005).[30] Additionally, they may set 'special rates' for specific work or services provided by council to a certain apart of the jurisdiction.[31] Councils are able to set a rate on the assessed value of the land (ad valorem). Alternatively, they may levy a base charge on each property, with an additional percentage rate based on assessed value.

In New South Wales, the state government has restricted the revenue-raising ability of local governments through a policy of *rate pegging.* Though there is limited information on this history of rate pegging, some form of the limit has existed in the state since it was founded. The latest iteration of rate pegging was introduced in 1977, with the state government

[30] It appears that property is not a shared tax base in New South Wales, allowing municipalities exclusive access to this revenue source.

[31] Municipalities in British Columbia are also able to levy property taxes on certain areas through 'Local Service Areas.' These taxes can be levied based on property value or as a parcel tax based on a flat or frontage rate. In the past these property taxes have not been included in any of the property tax rate limits because they required a higher level of assent from the residents (50% of taxpayers who represent at least 50% of the property assessment in the area must approve the services and tax).

setting an annual limit on the percentage increases local governments can receive from property rates from all classes (Dollery, Crase & Johnson, 2006). It is usually set at a level similar to the increase in the consumer price index. For instance, in the 2009/10 fiscal year, local council are allowed to increase their rate revenue by a maximum of 3.5% (Local Government and Shires Association of New South Wales, 2009). Within this limit, local governments are able to vary the increase on each property class. Rate pegging can be particularly challenging for local governments when property assessment increase because the council may have to reduce or adjust their rates to ensure the total income does not increase more than the rate pegging limit (Wollongong City Council, n.d.).

If a council would like to increase the rates above the allowed percentage increase they may apply for Ministerial approval. These increases may be approved if the council is participating in a project of regional significance, or funding of major service or infrastructure enhancements (New South Wales, 2001). The Minister, when reviewing an application for special rate increases, considers how the rates meet the long term strategic objectives of the council, the level of consultation undertaken by council and the community's response, as well as the financial position of the council (New South Wales, 2008).

Rate pegging has been criticized for a number of reasons, including for limiting local government fiscal capacity and autonomy. The *Local Government and Shires Association of New South Wales* (2009) argues that the rate pegging limits local governments' ability to provide for the service and infrastructure needs of the local residents. It also contributes to a loss of autonomy and accountability in local government decision-making. Conversely, Abelson (2006) questions the criteria behind setting the rate limits and posits that "rate pegging tends to legitimize and encourage rate increases at the officially sanctioned maximum rate increases" (p. 7). He also identifies that there is inadequate research and analysis on rate pegging (Abelson, 2006).

The New South Wales Department of Local Government produced a *'Council Rating and Revenue Raising Manual'* to assist local governments. This manual provides in-depth information regarding the history, legislation and court decisions on sources of income for local governments. It also discusses property classes, charges for specific services, exemptions, and policy, decision and implementation processes for rates (New South Wales, 2005). The document begins by outlining the basic principles of taxation, including ability-to-pay and benefits received. These principles can also be applied to setting rates, and, like the Productivity Council, the Department recommends that rates should achieve the "best possible balance" between these two principles (New South Wales, 2005, p. 36). As well, equity and efficiency, though not defined, are identified as important principles.

The *'Council Rating and Revenue Raising Manual'* recognizes that rate levels depend on the individual community. Thus, each council has to decide for itself the combination of rates, charges and fees (and pricing policies) that is "appropriate" for its area and its community. The state government suggests that the annual statement of revenue policy that local governments are required to produce ensures that the community has access to sufficient information to enable it to judge the "appropriateness of council's proposals (i.e. is the service actually required) and to determine whether it is receiving 'value for money'

(i.e. would a less costly service produce acceptable results)" (New South Wales, 2005, p. 15).

What can we learn from Australia and New South Wales?
Through an examination of Australia, and the jurisdiction of New South Wales, principles of property tax rate setting are identified. These principles include equity, including benefit received and ability to pay, and efficiency and accountability. The strategy to achieve a balance of benefit received and ability to pay is to combine a set rate on each property with an additional charge based on the assessed value of the property. The New South Wales *'Council Rating and Revenue Raising Manual'* clearly recognizes the importance of setting tax rates that are appropriate for the community. Still, in the state the freedom to set tax rates is limited as the state government has chosen to exert its authority in municipal rate setting by implementing rate pegging. Rate pegging is criticized for limiting responsiveness, autonomy, and accountability of municipalities.

New Zealand

New Zealand is a parliamentary democracy with a centralized government. The country does not have subnational entities such as provinces or states. In 1989, the government implemented a two-tiered local government structure with regional councils and territorial authorities. Property tax[32] revenue is used to fund both levels of local government. The central government introduced the *Local Government (Rating) Act* in 2002, which was intended to modernize the property tax system and ensure local government possessed the tools to fully comply with their financial requirements (Local Government New Zealand, 2002).

Local governments can institute general rates, which are charged on all properties in the jurisdiction, or targeted rates, which are charged on particular properties in the jurisdiction to fund a specific function. Local governments have the ability to charge general rates as a percentage rate on the property value or as a uniform annual general charge, which is a fixed dollar amount on the property (Local Government New Zealand, 2002).

A guide, '*Local Government KnowHow Guide to Rating*', was created to assist local governments in applying the new legislation. This guide outlined how local governments could meet their financial management requirements using the new legislation. It provides numerous examples of different funding strategies, including setting property tax rates. The guide outlines that when making funding decisions, including property tax rates, local governments are required, through the Part VIIA of the *Local Government Act*, to complete a three-step process. These three steps are outlined in Figure 1.

[32] Property tax is referred to as rates in New Zealand.

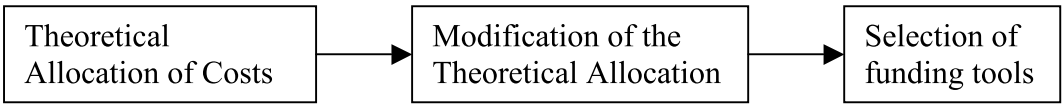

Figure 1.
The three-step process when making funding decisions
Source: Local Government New Zealand, 2002, p. 25.

The first step, *Theoretical Allocation of Costs*, involves the council allocating the "cost of particular functions to direct users, ratepayers, categories of ratepayers, and the community generally" (Local Government New Zealand, 2002, p. 25). During this step the council must recognize the following principles:

- The public good principle,
- The user/beneficiary pays principle (allocating costs among people who use the service or benefit from it),
- The inter-generational equity principle (allocating costs between current and future beneficiaries), and
- The exacerbator pays principle (if someone's actions or inaction creates a need for an expenditure that person should contribute to the cost) (Local Government New Zealand, 2002).

The second step, *Modification of the Theoretical Allocation*, involves the council refining the decisions made in step one based on a set of considerations. These considerations include 'fairness and equity', transitional impact, and any other policies of the local authority (Local Government New Zealand, 2002). Finally, the third step involves the council considering implementation and other practical issues when selecting the funding tools (Local Government New Zealand, 2002).

The guide to rating also provides principles and considerations related to the remission of rates. Remission of rates refers to reducing the tax amount owing or waiving the rates completely (Local Government New Zealand, 2002). Several of these principles may be useful to consider when setting property tax rates. When developing a remissions policy, the guide outlines that remissions should be:

- Linked to objectives of the local government as outlined in the strategic plan, long term financial strategy or annual plan,
- Complementary to the other programs provided by the local government,
- Made in an open and transparent manner at a public session of Council,
- Frequently reviewed, and
- Clear (New Zealand Local Government, 2002, p. 56).[33]

[33] These requirements are similar to the new fiscal disclosure requirements British Columbia municipalities are now required to complete on an annual basis.

What can we learn from New Zealand?

The government of New Zealand requires local governments to consider many of the same principles when setting property tax rates that are identified in the literature and in the other jurisdictions. These principles include benefit received, fairness, equity, and accountability. The jurisdictional review of New Zealand also offers some new principles. The first is the consideration for the inter-generational equity principle. This principle refers to allocating costs between current and future beneficiaries, and reflects a dimension of long-term thinking and planning. The exacerbator pays principle is more commonly described as paying for externalities. That is, property tax should or should not be paid by an individual if their actions or inaction creates a need for an expenditure. Considering both these principles when setting property tax rates can contribute to more holistic property tax system. The New Zealand property tax system also offers a thoughtful approach to how property tax rates should be set within the state-municipal relationship. The intervention by the central government is to obtain a shared understanding of the property tax issues, and provide education and opportunity for dialogue about the principles of property tax rate setting.

Conclusion

This section provided a jurisdictional review of Canadian provinces, particularly Ontario, as well as Australia and New Zealand. Though there are challenges in comparing different systems, the analysis demonstrates similar challenges in terms of differential tax rates and principles of stability and equity, as well as different strategies that have been undertaken by provincial, state or central governments to influence or intervene in municipal property tax system.

The jurisdictional review echoes some of the principles identified in the literature review. These include principles of equity (particularly benefits received), efficiency and accountability. In Australia and New Zealand there is also a recognition that tax rates should be appropriate for the individual municipality.

The jurisdictional review provides examples of provincial/state influence or intervention that follows considerations and strategies outlined in the literature review. In Ontario and New South Wales the autonomy and accountability of municipalities is limited through property tax rate limits. Still, these limits are more complex than hard caps, with ranges of fairness and rate pegging. The disparate relationships between provincial and state governments with their municipal counterparts in these jurisdictions demonstrate the need for co-operation in this area. In New Zealand a more subtle strategy of influencing municipalities is undertaken, with the use of a shared understanding towards property tax issues, along with education and dialogue. The following section will provide findings and analysis of expert interviews and highlight some of the themes evident in the literature and jurisdictional review.

INTERVIEWS

This section provides key findings from the expert interviews that were undertaken with academics and practitioners of property tax policy. The experts, Dr. Enid Slack, Dr. Robert Bish, Mr. Casey Vander Ploeg, and Dr. Jonathan Kesselman, provided insight into general consideration in regards to property tax rate setting, and specific comments on the BC property tax system.[34] An analysis of their responses is then undertaken to identify agreement and disagreement in perspectives and recommendations.

Findings

There was a general consensus among the interviewees that BC has a strong property tax system with a good reputation, especially in relation to property assessment. Still, the interviewees also identified problems with the BC property tax system. Dr. Bish, Dr. Kesselman and Dr. Slack identified the different tax rates between the property classes as one of the main problems with the system. They elaborated that business and other non-residential property classes were being taxed at a higher rate than residential properties, while those properties consumed fewer municipal services. Mr. Vander Ploeg identified the central problem with property tax in general was that it was an inelastic tax that did not respond to economic growth in a community.

The interviewees were then asked about the principles they thought municipalities currently considered when setting property tax rates. Dr. Bish thought that municipalities were not considering any principles. Dr. Slack posited that municipalities seemed more concerned about stability and predictability and less concerned with equity when setting property tax rates. Dr. Kesselman felt that municipalities were placing the heaviest burden of taxes on the least mobile property, that is, industrial properties with large capital investments. Mr. Vander Ploeg identified the role of politics in setting tax rates, expanding that municipal councils propose a property tax increase that they think will be politically acceptable. Dr. Slack and Dr. Kesselman echoed the importance of the role of voters in setting property tax rates, emphasizing that residential property owners were able to vote, while businesses were not.

When exploring ideal principles that municipalities should consider when setting property tax rates, Dr. Kesselman focused on economic principles. Dr. Slack put forward that municipalities should consider equity (which she defined as benefit received), neutrality (a tax that would not distort decision making), accountability (ensuring people know what they are getting and why they are paying that amount), as well as stability and predictability. Mr. Vander Ploeg focused on the connection between tax revenue and the local economy, stating that local governments should not divorce the tax rate from some measure of the size and strength of the local economy.

The experts interviewed had differing views on the appropriate role of the provincial government in influencing or intervening in municipal property tax rates. Dr. Bish felt

[34] Expert interviews took place on the following dates: R. Bish, April 15, 2009; E. Slack, April 22, 2009; J. Kesselman, April 28, 2009; C. Vander Ploeg, May 1, 2009.

strongly that the provincial government should directly intervene with non-residential property tax rates in order to forward provincial priorities and interests. Dr. Kesselman agreed that the provincial government should intervene, though he identified the challenge of pursuing policy in this area even though the provincial government has the legal power to do so. One option he identified was for rate or ratio limits to be phased in gradually (similar to the phasing in of the plan recommended by Vancouver's *Property Tax Policy Review Commission*[35]) or that the provincial government could provide alternative funding to make up for any shortfall (though he recognized the challenges of the current financial circumstances faced by the provincial government).

Dr. Slack did not think the provincial government should have a direct role in municipal property tax rate setting. Though she indicated she could appreciate the arguments, Dr. Slack argued that local governments were democratically elected and therefore they should have full control in setting the property tax rates. Mr. Vander Ploeg also argued that the provincial government should not influence or intervene in property tax rates, noting that municipalities already have sufficient challenges achieving local autonomy in decision-making. He acknowledged the provincial government interest in property taxes, but thought that it could be involved in other aspects of the system, such as property assessment.

The question on how the provincial government currently influences property tax rates, solicited limited responses. Dr. Bish, Dr. Kesselman and Dr. Slack mentioned the role of property tax rate limits for both the utility class and port properties. Dr. Bish also mentioned the role of the provincial government in giving the municipal governments tax room by lowering school tax rates. He felt that this was one of the reasons why overall property tax rates were so low in BC, while giving municipalities more access to increased revenue.

The final question asked experts for their opinion on what tools the provincial government should have to ensure "appropriate" property tax rates.[36] This question resulted in a diversity of responses. Dr. Bish identified the role of legislation and recommended reducing the number of property classes. He supported this suggestion by noting that Alberta did not have the excessive non-residential tax rates, a circumstance he credits with the fewer number of property classes. Dr. Bish felt that if that strategy was not successful the province should require municipalities to justify their tax rates when non-residential rates differed from residential rates. He felt that any higher rates levied on non-residential properties should be related to benefits received through municipal services. Still, he acknowledged the difficulty of the calculation in this analysis, as studies of benefits received are expensive and would be especially onerous for smaller municipalities.

Dr. Kesselman suggested a limit on rates or ratios. Dr. Slack emphasized her opinion that property tax rates were a local government responsibility. She stated that she was nervous

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[35] In 2008 the City of Vancouver accepted the recommendation of the *Property Tax Policy Review Commission* to shift the tax burden to achieve a tax levy distribution of 48% non-residential and 52% residential. This shift took place in incremental steps of 1% per year (City of Vancouver, 2008).

[36] The "appropriate" property tax rates were purposely not defined because the provincial government has not overtly identified what rates it believes is appropriate. Still, in limited circumstances the province has identified, through tax limits, what rates it thinks it too high.

about provincial intervention because it is usually uniform across the jurisdiction. Nevertheless, Dr. Slack believed that the Province could set upper limits on tax ratios for the non-residential property classes. Mr. Vander Ploeg didn't anticipate a change to property tax rates being achieved through top-down policy from the provincial government. Instead, he stated that any change in property tax rates would have to come from the municipalities themselves. With this, Mr. Vander Ploeg identified an important role for citizen education. He believed that citizens currently do not understand what percentages of their taxes are paid to different governments and agencies. He also encouraged a larger discussion beyond tax rates, to encompass expenditures and different tax strategies, such as sales and income tax.

Analysis

The interviewees offered a variety of perspectives on principles of property tax rate setting and the provincial-municipal relation in property tax in BC. This section provides an analysis for the agreements and disagreements between the interviewees, and the themes and assumptions that are evident in the responses.

The response to the first question saw agreement among three of the four interviewees that the differential rate between residential and non-residential property classes was an issue in the BC property classes. They held the perspective that property taxes should reflect benefits received. The agreement in this perspective may be, in part, from the similar work all three interviewees have completed for municipalities and businesses on differential tax rates. Still, opinions differed on the extent of the problem and strategies to deal with it. The assumptions that property tax rates should be the same for all classes or based on benefits received reflect the literature on the subject. This perspective is problematic, and discussed at greater length in the following chapter.

The interviewees identified a limited number principles they thought municipalities currently considered when setting property tax rates. When exploring ideal principles that municipalities should consider, Dr. Kesselman and Dr. Slack both identified economic principles, including equity, neutrality and stability. These principles reflect was mentioned in the literature, particularly the work of Kennedy and McAllister.

Dr. Bish and Dr. Kesselman supported provincial government intervention in non-residential tax rates. Dr. Slack and Dr. Vander Ploeg did not believe the provincial government should be involved or limit municipal decision-making in this area. Dr. Bish and Dr. Kesselman agreed that there may be a role of tax rate or ratio limits. These responses reflect the themes of municipal autonomy and provincial interest that must be balanced in an effective property tax system. Dr. Slack's perspective may reflect both her theoretical study of property tax and observations of the challenges seen in the Ontario property tax reforms.

The differing opinions on provincial intervention reflect the literature on this topic. Many argued for full municipal autonomy in setting property tax rates, while other felt provincial intervention was necessary in order to achieve equity between the property classes. The jurisdictional review demonstrated that there were more methods of provincial influence or intervention, with Ontario and New South Wales demonstrating that they felt direct

intervention was necessary, while New Zealand has chosen to pursue a strategy of influence in property tax rate setting.

When asked about how the provincial government currently influences property tax rates, the interviewees identified tax limits. The response demonstrates that the provincial government's visible influence has been strong intervention. This follows the findings in the history of property tax in BC that the provincial government has not developed strategies to influence tax rates or distribution among the property classes in an effective, yet less antagonizing approach than property tax limits.

The exploration of tools the provincial government should use to ensure "appropriate" tax rates reflected the literature and jurisdictional review. The most interesting response was Mr. Vander Ploeg who identified the need for greater citizen education. This reflects BC's strategy with the introduction of greater fiscal disclosure requirements that are shared with citizens.

Overall, the interviewees reflected three different perspectives. Dr. Bish and Dr. Kesselman agreed that higher non-residential tax rates were a problem in BC and that the province should intervene with property tax rate limits. Dr. Slack also identified different tax rates as a problem but opposed provincial intervention. Mr. Vander Ploeg spoke at length about the disadvantages of property tax as a municipal revenue source as a whole.

These perspectives developed through the work the interviewees have undertaken. Dr. Kesselman and Dr. Slack have completed work for municipalities that have struggled with high non-residential property tax rates. Dr. Bish completed research on industrial tax rates for a large company. Mr. Vander Ploeg's most recent publication was 'Problematic Property Tax,' which examined the advantages and disadvantages of the tax.

The use of expert interviews as a central research method of the paper was an attempt to obtain an external perspective of the BC property tax system and the role of the provincial government in municipal property tax. With a small pool of experts the research findings are limited, especially because of the common perspective they most held in relation to non-residential property tax rates. The interviewees did offer some interesting and useful perspectives that built on the other research and crystallized themes. Still, a more holistic and deep analysis could have been achieved by expanding the pool of potential interviews. A more fruitful strategy may have been to interview a larger number of individuals, both academics, including those from different fields, and practitioners currently working for the provincial government.

This section reviewed the responses of the experts to a number of interview questions and provided some analysis and evaluated the contribution of this research method. The next section will combine the finding from this and previous sections to provide an analysis of the central questions of the research.

ANALYSIS

This section reviews common themes and findings from the preceding research to identify considerations and strategies for the Ministry to take into account as they craft policy and legislation on this topic. This paper provides the beginning of a more purposeful focus for the Ministry on this issue of property taxes. Though one of the central impetuses for this research was businesses and industry lobbying in relation to non-residential property tax rates and the distribution of property tax among the property classes, this research provides an opportunity for the provincial government to examine the provincial-municipal relationship in the property tax system in general.

The research for the paper examined three central questions: 'What are the current principles of municipal property tax rate setting and distribution of tax among the property classes?'; 'What are the ideal principles of municipal property tax rate setting?'; and 'If appropriate, what options should the provincial government pursue in exercising its authority to influence or intervene in municipal property tax rate setting?'.

This section begins with a brief review of the research findings. It then provides a more detailed review of central principles and strategies found in the research. Following this it provides considerations that should be taken into account as the provincial government develops policies and programs on this topic.

In response to the initial research questions, it was found that only limited examinations of property tax rate setting have been undertaken. This is understandable, in part because it is difficult to identify principles from the diverse and complex process of decision-making that involves numerous players. The research that had been completed found that during the decision-making process, municipalities were not considering many principles overtly. The central principles that were identified were stability, equity (based on ability to pay or benefits received), and principles related to tolerance and political considerations. The principles that municipalities should ideally be considering when setting tax rates included equity, autonomy, and accountability. Some of these principles, such as autonomy and accountability, are inherently built in to the current property tax system in BC. The research found that municipalities should also be considering the provincial interest in its property tax decision-making process. Finally, the research found a continuum of options for the provincial government to exercise its authority in municipal property tax rate setting and presented different opinions on its appropriate role.

Principles

Equity

One of the central principles of property tax rate setting, and taxation in general, is equity, though there are complex and differing perspectives on its definition (Vander Ploeg, 2008). Lighbody (2005), Bish (2003) and Dr. Slack (personal communication, April 22, 2009) agreed that property tax equity should be based on benefit received, while others, including the Productivity Commission (2008) and New South Wales Department of Local Government (2005) conceptualized equity as an appropriate balance between benefit received and ability to pay.

Identifying property tax based on benefits received differs from the traditional view of property tax. Property tax has historically been perceived as an excise tax on land and structure, while the modern view is that it is a wealth or capital tax (L. Tedds, personal communication, July 9, 2009). Conceptualizing equity in property taxes based on benefits received is problematic for a number of reasons. First, there is a loose linkage between benefits received and taxes paid (Tassonyi in Kitchen, 1997). If property tax is conceptualized based entirely on benefits received it would be a user fee and not a tax. Property tax as a user fee based on the services consumed has been discussed for some time, developed by Tiebout and public choice theory (Tiebout, 1956). This theory posits that individuals "buy" the amount of municipal goods and services they desire by selecting the community they choose to live in based on the bundle of public services and cost for these services through property tax. This perspective has gained increased traction as Catalyst Paper Inc. and other industrial businesses have lobbied for changes to municipal property tax setting and distribution. If property tax is perceived as a user fee it is argued that is should not be related to the assessed value of the property because there is generally no relationship between the assessed value and amount of services consumed (L. Tedds, personal communication, July 9, 2009).

Stability

Stability was an important theme identified throughout the research. When discussing this concept it is important to identify what component of the property tax system is or should be stable, and who is benefiting from that stability. This stability can include tax rates, tax amount and the distribution of property tax among the property classes.[37] Beneficiaries could be the local government, residents or non-residential property owners.

In the literature, stability for municipalities and residents is discussed as a central benefit of the property tax system as a whole. As well, stability is an important principle that municipalities use to currently set property tax rates (Kennedy and McAllister, 2005). Lightbody (2005) expanded on this concept, stating that stability and predictability become the major determinant of tax rates due to political expediency and lack of interest from citizens or businesses. The examination of a sample of municipal financial plans found stability was one of the common objectives in the distribution of property tax among the property classes, and thus the property tax rates charged on each class. Of the 16 sample municipalities, six identified the importance of stability in setting property tax rates.

Dr. Bish argued that the stability in property taxes did not extend to non-residential property owners, though this stability is needed. He felt stability would allow business owners to make decisions regarding locating or expanding businesses in a municipality. He saw certainty and predictability in property tax for businesses as being equally important to

[37] The City of Vancouver calculates property taxes based on a "Fixed Share" Approach –

> Distribution of tax levies among property classes is fixed, subject to non-market changes within the classes (e.g. property transfers between classes, new construction) and/or Council decisions to adjust the share for each class. This means changes in the assessed values have no impact on the tax share for each class. This approach has been in effect since 1983, and reaffirmed by Council in April 2005. (City of Vancouver, 2009, p. 3)

the tax rate. Dr. Bish cautioned that if these factors were not in place local governments would not garner new investment from industry because the companies could not trust the local governments over the long life of the investment.

Autonomy

A central theme that emerged throughout the research was the importance of municipal autonomy, of which property tax plays an important role. Autonomy in this context is the concept of a local government having unfettered control over decision-making without the interference of other governments. Kennedy and McAllister (2005) described local autonomy in relation to an opportunity for local governments to see their role in setting property tax rates as an opportunity to influence directly the shape and direction of the local economy. As well, they concluded that with the amount of discretion local governments in BC are given it is possible that a decentralized system may be more responsive to local economic circumstances and surrounding municipalities than a centralized system when establishing major industrial tax rates and tax distribution policies (Kennedy & McAllister, 2005).

Provincial legislation in BC supports the autonomy of local governments. The *Community Charter* recognizes local government as its own level of government. As well, in relations to tax rates, the provincial government has given municipalities wide discretion in setting property tax rates, thus increasing autonomy.

The experts interviewed for this research argued for different levels of local government autonomy in setting tax rates. Dr. Bish and Dr. Kesselman argued for less autonomy with the recommendation of tax rate limits. Mr. Vander Ploeg saw the need for expanded autonomy by giving local governments more tax opportunities, including sales and income tax. Dr. Slack recognized local governments as democratically elected and autonomous, and thus questioned whether the provincial government should have any influence over general municipal property tax rates.

Accountability

Closely related to autonomy is the role of accountability in property tax rate setting. One way accountability can be achieved is by keeping the property tax rate decision-making process at a local level and facilitating taxpayers engagement in the rate setting process. The provincial government has institutionalized a process that promotes accountability through 5-year financial plans with required public consultation and strengthened fiscal disclosure requirements for municipalities. Still, the level of accountability in property tax rate setting is not uniform for all property classes. Residents enjoy a higher level of accountability through opportunities for influence such as public consultation and voting. Businesses and industry, on the other hand, may not achieve this level of accountability, as some of their interests are not always reflected in the property tax system.

This theme was found in the literature. Many authors discussed that an accountable local government was one that was responsible for raising its own revenue, including setting its own tax rates (Bird, 2001 in Kitchen, 2003). This accountability comes from the close connection between decisions regarding revenue generations and expenditure decisions (Kitchen, 2003). Bell (1999) found there was wide support for local autonomy in setting

rates, which results in greater accountability at the local level. This idea is echoed in the jurisdictional review of Ontario. There, municipal politicians dismissed the ranges of fairness, because they believed that because "municipal politician are accountable to the electorate, they should be responsible for setting tax rates without provincial constraints" (Slack, 2000, ¶ 21).

Dr. Slack outlines that municipalities should consider accountability measures when setting taxes. She outlined that this includes communicating with residents about what municipal services were being provided to residents and a justification of the level of tax that is being levied. Mr. Vander Ploeg echoed this sentiment by encouraging greater transparency in the entire local government budget process, including property tax rates and expenditures.

Tolerance

Throughout the research the roles of politics and public acceptance of rates were identified. This principle can be conceptualized as a principle of tolerance. That is, property tax rates and the distribution of property taxes among the property classes are set in a political system where local elected officials are responsive, to varying extents, to citizens and voters, as well as businesses and industry. For individual taxpayers this principle relates to accountability, equity and fairness. With more accountability in the property tax system, legitimacy and tolerance for the tax rates can increase. Equity and fairness relate to a perception that other taxpayers are paying a similar share of taxes. A taxpayer may be more accepting of rates if they feel others are bearing a similar burden.

The role of political acceptance was mentioned by Mr. Vander Ploeg, Dr. Slack and Dr. Kesselman during the interviews. As well, Kennedy and McAllister (2005) found the primary concerns in setting property taxes were the local economic conditions and community desires for services and facilities. The McMath Commission (1976) found similar decision-making process with municipal council setting rates that were not too high, either because they were unaffordable or more than residents felt they should pay for the service.

Location of principles

These principles of property taxation can be identified as property tax system attributes or as considerations during the property tax rate setting process. Currently, most principles, including autonomy and accountability, are found in system attributes. Autonomy of municipalities is part of the basic structure of the variable tax rate system, while accountability has been integrated into the system through requirements such as property tax bylaws, public consultation, and fiscal disclosure requirements. Stability is also inherent in the system as property tax is not exceedingly cyclical or subject to individual discretion, and property is not movable (Mezynska, 2005). Therefore, it is important to recognize that though municipalities may not appear to be considering some principles during tax rate setting, these principles are implicit in the structure and process.

Though principles may be evident in system attributes, this research was initiated because there was a concern that these principles are not balanced. Currently, the system is skewed towards the principle of municipal autonomy. Therefore, the provincial government should

consider strategies to ensure other principles, including the provincial interest, are considered, either through system attributes or in the tax setting process.

Provincial government authority

Since giving municipalities full discretion in setting property tax rates in 1984, the Province has largely removed itself from municipal decision-making respecting property tax rate setting. When the provincial government has asserted its authority in municipal property taxation it has been through the introduction of tax rate limits in reaction to specific rates. Therefore, the provincial involvement has been inconsistent between an absence of involvement and strong intervention. As well, tax limits have concerned certain classes or parts of classes, and have not given municipalities a clear explanation of the overall provincial interest in general municipal property tax rate setting. Learning from this history, and the other research, there are a number of strategies the provincial government should consider in influencing or intervening in property tax rates.

Information and Education

Information and education regarding property tax rates and their impacts is an important strategy. Through greater visibility and understanding of the property tax rate setting decision-making process, transparency and accountability could be increased. From the research a need for greater property tax policy capacity in the provincial government was identified. This involves bringing together both financial and policy perspectives in monitoring property tax rates in an on-going and systematic manner. This action would indicate to municipalities that this topic is a priority for the provincial government. As well, it demonstrates that the provincial government is interested in the long-term financial health of municipalities.

The provincial government currently collects a large amount of tax information that it publishes on the Ministry of Community and Rural Development's website for municipalities and other interested parties to use. Still, there is an opportunity for this information to be more widely employed by putting it into more user-friendly formats, such as graphs and used to demonstrate trends over time. The information collected should be published in an accessible format that can be used by municipalities for financial and policy planning, and to communicate with residents and businesses in their communities. Other jurisdictions that provide information and education include Manitoba's annual publication of tax rates and increases, New South Wales and New Zealand's guides to revenue raising and tax setting.

Concurrent authority

Concurrent authority refers to responsibilities that require the involvement and decision-making authority of more than one agency, in this case both the municipal and provincial governments. Currently, the property tax system in BC, is designed with a form of concurrent authority because, though municipalities have great discretion in setting tax rates, the provincial government has kept the right to limit rates and ratios through section 199 of the *Community Charter.*

Section 9 of the *Community Charter* provides a different approach to concurrent authority, outlining a number of spheres of responsibilities that have a shared municipal and

provincial interest.[38] This instrument of concurrent authority does not require the involvement of either party, but gives the opportunity for participation. The provincial government can choose to introduce regulations, and for the most part these are very targeted interventions. It presents a process and discussion approach to decision making, and provides a proactive approach for the provincial interest to be articulated in those spheres. Therefore, the provincial government is able to present its interest at the beginning of the policy process.

One strategy is to incorporate property tax into section 9 concurrent authority, which would allow the provincial government to work with municipalities in a shared decision making process. Still, if this option was considered the provincial government should only interfere as modestly as possible. This is particularly the case because the Ministry of Community and Rural Development is currently attempting to remove itself from the position of approving municipal bylaws as much as possible.

Number of property classes

Though this paper focuses on municipalities setting tax rates, changes to the assessment system may also have an effect on tax rates and the distribution of property tax among the property classes. One strategy to encourage a change in tax rate setting behaviour and lower tax ratios between residential and non-residential properties is to decrease the number of non-residential property classes. This strategy could lead to greater equity between the property classes. According to Bish (2004), "it appears that when property tax classification place all business properties in the same class, as does Alberta, all businesses are taxed with reasonable ratios compared to residential" (p. 26).

Reducing the number of property classes can occur in a number of different combinations. In the report '*Financing Local Government,'* Mayor Marilyn Baker of the District of North Vancouver suggested merging light industrial and business properties (class 5 and 6, respectively) to simplify that property tax system (British Columbia, 1989). Another strategy is to eliminate the light industrial class (class 5) and combining it with the major industrial property class.[39] These arrangements would put more pressure on the differential between industry and other businesses. The BC Competition Council (2006a) also recommended combining industry and service businesses into one class. Still, more research is needed on this strategy to study the effects of decreasing the number of property classes, including on tax rates.

The recommendation of decreasing the number of property classes in a variety of schemes has been suggested by a number of different people and organizations. There is no evidence that this would change decision-making behaviour because there are other jurisdictions in comparable situations. Therefore, more research of municipal tax rates and decision-making processes is needed to provide confirmation of the relationship between the number and type of property classes and tax rates.

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[38] Currently, these spheres are public health, protection of the natural environment; wildlife; building standards; and prohibition of soil deposit or removal.

[39] When the variable property tax system was created there was originally one industrial class. In 1987, a new property class, major industry, was created (Whybrow, 1993).

Property tax limits

One of the most extreme approaches the provincial government can take in intervening in property tax rates and the tax distribution among the property classes is to implement property tax rate and ratio limits. In BC the provincial government has the right to implement these limits under section 199 of the *Community Charter.* Throughout the research there were strong arguments and evidence for and against property tax limits. This strategy could increase equity by limiting the ratios between the property classes and increase stability for businesses because they would be assured of a certain tax level.

Kitchen (2003) states that the "analytical arguments supporting property tax limits for local governments are generally weak" (p.28). He believes that locally elected councils are in the best position to determine what citizens want and need and to set comparable tax rates. Furthermore, property tax limits "curtail the decision-making power of municipal government if they reduce the municipal sector's flexibility and capacity to raise its own revenue" (Kitchen, 2003, p. 28). Research demonstrates that the "most responsible and accountable government hold the autonomy to establish their own tax rates and provide "local" services funded primarily from local revenues" (Hobson and St-Hilaire in Mezynska, 2005, p. 26). As well, Mezynska (2005) found that limiting Major Industry class tax rates would have a particularly negative impact on smaller municipalities with a non-diverse assessment base. Conversely, Bell (1999) argues that upper rate limits on property tax rates assists in ensuring broad economic targets are considered.

Businesses have requested tax limits on non-residential tax rates from the introduction of the variable tax rate system in 1983. More recently, the Canadian Federation of Independent Business (CFIB) recommends that the BC government implement a tax on the ratios between property tax rates on residential and commercial properties (CFIB, 2008). Still, where tax limits have been introduced they have been criticized. In Ontario property tax rate limits have been introduced through ranges of fairness. In New South Wales, a policy of tax limits that offers some limited flexibility to municipalities is provided through rate pegging. This approach was strongly criticized by the *Local Government and Shires Association of New South Wales* (2009), which argues that it contributes to a loss of autonomy and accountability in local government decision-making.

The experts interviewed for this research held differing views on the strategy of limiting property tax rates. Dr. Slack and Mr. Vander Ploeg argued again property tax limits, citing the importance of accountability and autonomy in decision making for local governments. Conversely, Dr. Bish and Dr. Kesselman both considered the opinion of property tax limits, but with different mitigation strategies. Dr. Bish suggested municipalities could set tax rates above the limits if they could justify the benefits received by the properties. Dr. Kesselman contemplated phased-in limits, possibly with provincial financial assistance.

Considerations

This research found a number of considerations that should be given attention as the Ministry proceeds in implementing system reforms or influencing the rate setting process. These considerations include balancing principles and municipal-provincial relations.

Within municipal-provincial relations the autonomy of municipalities (in part relating to the diversity of municipalities) must be balanced with provincial interests.

Balancing principles
An important theme that came out of the research was that of balancing principles. Many academics identified that "there are tradeoffs between the achievement of equity and other economic and social goals" (Bosson, Denny, & Slack, 1981, p. 5). The McMath Commission (1976) also stated that "no tax system for any level of government is or should be based solely on considerations of equity" (p. 98). Similarly, Layfield (1979) outlined that a financial system of local government must be accountable, fair, efficient, stable, flexible and comprehensive, but conceded that "these requirements cannot all be equally satisfied, and can be contradictory in effect" (p. 62).

The importance of balancing principles was evident in Ontario's property tax reforms. It was quickly recognized that the assessment reforms would bring large shifts in property taxes burdens. Mitigation strategies were implemented, but these policies lost focus of the need to balance principles. The focus on stability for each property class resulted in detrimental results in terms of principles of simplicity and understandability in the tax system (Slack, 2002). In Australia, there is a recognition of the importance of balancing principles, including social, political, institutional, governance and economic considerations (Productivity Commission, 2008). The Productivity Commission report acknowledges "there are invariably trade-offs between economic and other objectives, such as equity and administrative simplicity" (Productivity Commission, 2008, p. 166).

Provincial-Municipal Relations
A central theme of property tax rate setting is the relationship between provincial and municipal governments. Any influence or intervention into the municipal property tax realm by the provincial government must strongly consider the relationship that has been built between provincial and municipal governments in BC over the last 25 years.

In BC the *Community Charter* outlines principles of municipal-provincial relations, including mutual respect, harmonization of provincial and municipal enactments, policies and programs, and "foster cooperative approaches to matters of mutual interest" (*Community Charter).* Section 276 of the *Community Charter* also creates a provincial obligation to consult with local governments regarding specific legislative changes, including amendments to regulations on property tax rates.

The importance of effective provincial-municipal relations is highlighted in Ontario's experience with property tax reforms. The provincial government did not attain local government support for the recent tax reforms nor anticipate the municipal response to mitigation options (Anstett, 2002). As a result, the lack of municipal support and involvement was one of the challenges to successful implementation of the new assessment and tax policies.

Provincial and Municipal Concerns
This section examines the provincial and municipal interests in the property tax system, and specifically property tax rates and distribution of property taxes among the property classes.

This involves balancing municipal autonomy, highlighted with the diversity of municipalities, with provincial interest.

Diversity of municipalities
It is important to consider the diversity of municipalities that exists across the province when creating and implementing property tax policies and programs. This includes considering size, geography, fiscal and policy capacity, and property tax situation of the municipality. For example, there are municipalities where the high ratio of residential to non-residential tax rates has been identified, where others do not have any considerable difference between tax rates. As well, many municipalities do not possess a significant non-residential tax base. These diverse financial circumstances must be considered in making effective property tax policy.

This diversity is recognized in local government legislation in BC. In the *Community Charter* the provincial government is tasked with respecting the "various needs and conditions of different municipalities in different areas of British Columbia" (*Community Charter)*.

In the jurisdictional review, New South Wales' '*Council Rating and Revenue Raising Manual*' recognizes that rate levels depend on the individual community. It identified that each council must decide for itself what combination of rates, charges and fees (and pricing policies) are "appropriate" for its area and its community (New South Wales, 2005).

Provincial Interest
Though municipalities have been given wide discretion in setting property tax rates, it is recognized through legislation and interviews that there is a provincial interest in municipal property tax rates. In the research there is relatively little discussion on the provincial interest and even fewer examples where the Province has articulated its interests clearly. This provincial interest relates to provincial economic sustainability and development, and a shared tax base.

The *Community Charter* recognizes the role of a provincial or wider community interest in some local government decision-making. It outlines the principle that "the authority of municipalities is balanced by the responsibility of the Provincial government to consider the interests of the citizens of British Columbia" (*Community Charter)*. This principle allows the province to identify larger regional and provincial interests that may not be considered by individual municipalities.

The provincial interest in economic sustainability and development relates to equity and stability for both residential and non-residential taxpayers. Dr. Bish strongly argues that "where there is a provincial interest the Province needs to be involved in the decisions and that this applies to several of the variable tax rate classes" (personal communication, April 6, 2009). He focused on the provincial interest in economic development, noting that the scale of economic development for individual municipalities is often much smaller than that of the province.

Another unique feature of the BC property tax system is that the tax base is shared between a number of governments and agencies. Therefore a property owner as a single taxpayer who pays property tax to a number of different governments and agencies, and may face a theoretical saturation point in the amount of tax they are able or willing to pay. Provincial school tax on property makes up a large share of this shared tax base, and to collect this tax the provincial government has instituted ratios between the property classes.[40] In 2006, more than two-thirds of the amount BC municipalities collected from property taxes was for provincial school tax (Ministry of Finance in Kozak, 2007). Over time the provincial government has been reducing the rate of school tax charge on property, which has allowed municipal governments to raise more revenue from that source (Bish, personal communication, April 6, 2009). Through interviews with municipal officials, Kozak (2007) found that there was a continuing interest in the BC government reducing its school portion of the property tax to allow municipalities to draw more revenue from property tax.

The provincial interest in sharing the tax base was most recently demonstrated in the 2009 throne speech announcement. In the speech the government indicated that new legislation would be introduced to ensure that provincial tax relief that was provided through a 50% rebate on school property taxes to industrial properties was not negated by local property tax increases (British Columbia, 2009). The government stated that "all levels of government must be equally disciplined to ensure that tax reductions at one level of government are not negated by tax increases at another" (British Columbia, 2009).

This section combined the analysis from the history, literature, jurisdictional review and expert interviews. It identified common themes, including principles, strategies for provincial influence and intervention, and considerations. The following section will take this information and provide key recommendations that can be used by the provincial government in developing and implementing policy on this subject.

[40] The provincial government has implemented tax ratios for the collection of school tax across the province. Though initially the researcher considered using these ratios as a model for municipal tax rates, they are not a useful ideal. This is because the provincial government does not provide any relationship between the revenue and expenditure of the tax, as the revenue collected becomes part of provincial general revenue and does not relate to the amount of funding a school district obtains. Therefore there is no accountability for taxpayers. It is not possible for the provincial government to show leadership with reducing school tax rates (as they have recently done with class 4 and 5) because there is no connection between the revenue and expenditure.

RECOMMENDATIONS

This section provides five key recommendations to the Ministry of Community and Rural Development and provincial government as a whole in developing and implementing policy on this subject. These recommendations came from the holistic and in-depth analysis that was achieved through the number of research methods and became evident through the research and conversations with Ministry staff.

The research raised a number of considerations in relation to the provincial role in municipal property tax rate setting. These relate to the provincial government's interest, engaging with municipalities, building on success and learning from past experience, research and education, and property tax rate warnings. These recommendations relate to capacity building in both the provincial and municipal governments. As well, it is recommended that the provincial government develop strategies that mediate between past behaviour of absence from municipal property tax decision-making and the intervention of municipal property tax limits.

1. Define and communicate provincial interests

One of the most important findings from this research is the lack of defined provincial interest in municipal property taxation. It is vital that the provincial government define this interest clearly and communicate it strongly to municipalities. As the provincial government completes more research on this topic, the interests will become more evident. As well, the role of school tax and the recent throne speech announcement will contribute to defining the provincial interest in this topic. Still, the provincial interest must be put forward while respecting local government expenditure decisions.

As mentioned previously, the provincial interest includes the economic sustainability and development of municipalities and the province, and sharing the tax base. As well, there may be a provincial interest in intergovernmental equity with "achieving fiscal parity across jurisdictions" (NLC, 2006, p. 3). The mayor of Victoria, Dean Fortin, stated that he would support the provincial government making the ratio of business to residential taxes three-to-one to "even the playing field between municipalities" (Watts, 2009, p. A03). Furthermore, it is in the provincial government's interest to have municipalities consider the effect their tax rate setting decisions are having on other jurisdictions and levels of government (NLC, 2006).

Once this interest is defined, it may be integrated into the property tax system through concurrent authority or a new notification system that communicates to municipalities that the provincial government feels their tax rates are unsustainable or ill-advised. Any intervention by the Province in this manner must recognize the diversity of municipalities and their economic circumstances. This system would introduce much needed interaction between the provincial and municipal governments based on on-going discussions, rather than the current extremes of a lack of provincial involvement or strict rate limits.

2. Engage with municipalities

The Ministry should continue to engage with local governments. The provincial government currently enjoys a relatively successful relationship with local governments, both individually and through the UBCM. It is important that this relationship continues when dealing with the politically sensitive topic of property taxation.

The dialogue on property taxation must begin early in the policy process and be ongoing as each party must have ample opportunity to express mutual and differing interests. Through this discussion the Province should not concentrate on tax rates, but instead on the large financial picture of revenue sources. This discussion should focus on the unique circumstances of individual communities, and the role the provincial government could have in encouraging equitable property tax decisions.

This relationship should centre on mutual trust. In the past this trust was not always evident, in particular when the provincial government introduced tax limits on railway property. To build trust the provincial government must provide comprehensible explanations for its decisions in this realm.

3. Build on successes and learn from past experience

The Ministry can build on past work it has completed in regards to property tax rates and provincial-municipal relationship building. This includes taking full advantage of the information and programs that are at the Ministry's disposal.

The new municipal fiscal disclosure requirements provides the Ministry with an important tool and process that it can use to work with municipalities and learn about current financial policies and objectives. These requirements should be fully supported by the Ministry by providing on-going assistance to municipalities. Past work done by the Ministry developed options for more supported implementation of these requirements, including an expert panel or UBCM-provincial joint committee to explore property tax rate setting issues, policies and opinions. It is strongly encouraged that greater attention is given to these requirements to ensure they are meaningful and assist municipalities in their financial planning.

The provincial government must also learn from past experience it and other jurisdictions have had in the realm of property tax rate setting. With the history of railway assessment and taxation it was demonstrated that limiting assessment was not sufficient in stabilizing taxes. As well, after the railway limits and the resulting outrage from the municipal government, the provincial government decided to provide compensation to municipalities when implementing port property tax rates limits. The Province can also learn from the experience of the Ontario government. In Ontario the provincial government implemented changes to the property tax system without the support of municipalities. As a result, full implementation of the changes was made more difficult and mitigation strategies were found to be unacceptable to local governments.

4. Research and education

This paper highlights the need for a strong role for the provincial government in both monitoring municipal property tax rates and using statistics and information it collects to educate both provincial and municipal governments. This research can be developed in an accessible manner that can be used by many provincial ministries and municipal governments. The Ministry's statistics on "representative residential property" for each municipality is a useful example of how information can be presented to demonstrate the practical application of tax rates. Appendix G provides a further example of simple research presented in an informative manner using current statistics collected by the Ministry.

This research will enable the provincial government to respond to questions and criticisms from industry and business owners and lobby groups, and identify municipalities that may face potential challenges in revenue generation based on current tax rates and burdens among the property classes. This research could also achieve some of the outcomes of implementing a municipal auditor general. This work could contribute to citizen education, following Mr. Vander Ploeg's identification of the important role for citizen education in property tax rate setting.

The fiscal disclosure requirements that are now fully implemented provide the provincial government with a wealth of information that can be used both for research and education purposes. The Ministry should fully utilize these documents to identify best practices, as well as challenges faced by municipalities. This review would also demonstrate to municipalities the importance the Ministry is giving to the new requirements.

New Guide to Tax Rating

As part of the research and information, the Ministry should release a new guide to tax rating to provide information to municipalities on the history of the variable tax rate system, tax calculation methods, and the policy process that should occur when setting property tax rates. This manual could follow some of the content found in New South Wales' *Council rating and revenue raising manual*, and discuss a similar policy process to that undertaken by New Zealand local governments when making funding decisions. This document should identify principles that could be considered when setting property tax rates. It should also clearly articulate that the provincial government has an interest in property tax rate setting, articulating its interest in municipal and provincial economic sustainability and a shared tax base. This guide would be especially valuable to smaller municipalities.

5. Tax rate warning system

All of the previous recommendations relate to communication and cooperation between provincial and municipal governments. Though every effort may be made to work with municipalities to set reasonable tax rates and distribute taxes among the property classes in an equitable manner, there may still be municipalities that are unable or unwilling to change their tax rate setting behaviour. Some municipalities may be overly reliant on one non-residential tax payer, but see no alternative to the tax rates that have increased incrementally over many decades. In these cases, the provincial government may identify the property tax system as unsustainable.

A property tax rate warning system should be developed to work with municipalities that have unsustainable property tax rates and distributions. This notification system would communicate that the provincial government feels the rates or distribution is inappropriate, or may be detrimental to the economic sustainability of the municipalities. This system would communicate to municipalities, and particularly to residents (who would probably be burdened with a higher tax bill as a result of tax shifts), that different property tax policies and objectives should be adopted.

In the past the provincial government has chosen to intervene in situations with high property tax rates on non-residential property with strict property tax limits. This intervention has led to distrust from municipalities, and limits their autonomy in controlling their financial circumstance. As well, this strategy has not given municipalities any prior indication that their behaviour is not supported by the provincial government.

As the provincial government continues to have the right to limit property tax rates and ratios, its use should be avoided if possible. Still, the right to limit tax rates or ratios recognizes that in very specific situations the provincial interest may override the municipal interest. If tax limits are considered, alternatives to hard caps should be explored. For instance, limits could be implemented that require municipalities to tax residential properties a bulk of any tax increase. As well, the Province should learn from its mistakes mentioned earlier in relation to limits and compensation, and clearly articulate its interest, so to minimize the antagonism between the parties that may be unavoidable in this situation.

There are different forms of tax limits that could be introduced. This includes different tax limits depending on the tax base,[41] limits that require justification to the provincial government and taxpayers if rates are above the limits. Bell (1999) recommended a 'cap-with-override' approach, which would allow voters to approve a tax increase that is above the cap level through a vote. This is similar to the cap with override by Minister approval system that has been implemented in New South Wales (New South Wales, 2001). If a limit is introduced it should follow the principles and priorities of the current property tax system.

Conclusion

The development and implementation of any of the strategies and recommendation should be designed in light of the considerations outlined in the previous section. This will ensure that the issues, including property tax rate setting principles, are integrated into future property tax policy. Overall, changes to the property tax system should be minor in nature at this point. This gives the Ministry ample time to fully articulate the provincial interest in property tax rates, and a period to engage in authentic in-depth discussions with UBCM and municipalities across the province.

[41] Within its regulations the provincial government has the ability to establish classes of municipalities and set rates or ratio limits for those classes.

This section provided recommendations for the provincial government to develop policy on this topic. The following section will provide a conclusion, reviewing the findings of the research and the need for future research.

CONCLUSION

This section provides an overview of the main findings of this paper and identifies areas for further research. This paper provides an introduction to the property tax system in BC, a discussion of principles of property tax rate setting and distribution, and considerations and strategies for the provincial government to reflect on in creating policy and legislation on this topic. Through a review of the history of the property tax in BC, literature review, jurisdictional review and expert interviews, the paper provides a holistic examination of the topic for the Ministry of Community and Rural Development.

The initial research question related to principles of property tax rate setting and the distribution of tax among the property classes. Though there was significant research on property tax principles, there was limited study of the practical application of these principles. An exploration quickly revealed limited research and understanding of municipal decision-making in the areas of public finance. Building on the work of Kennedy and McAllister, more research should be undertaken to gain a greater understanding of the complex process of decision-making at the municipal level. This is a research opportunity for both academics and the provincial government.

This paper demonstrates the need for greater provincial focus on the issue of municipal property taxation. In the past the variable tax rate system in BC has emphasized the role of municipal autonomy. The current system is unbalanced and gives weight to local autonomy at the detriment to provincial interest. This is evident in some of the high non-residential tax ratios. There is a significant provincial interest in the shared tax base and provincial economic sustainability and development.

Throughout BC's history the provincial government has introduced changes to the property tax system on an ad-hoc or reactive basis. To ensure more deliberate and calculated decisions are made in the future, there is a need for the Ministry to undertake more ongoing monitoring and policy development. It is important that in the future the Province makes more holistic and deliberate decisions in relation to the property tax system. In doing so the Province and the Ministry must identify explicit outcomes it would like to see in a property tax system. Once these outcomes are identified, strategies to obtain these outcomes can be conceived and evaluated.

Property tax plays an important role in municipal finance, and the success of local governments in BC. Still, there is evidence that high non-residential property tax rates can have a detrimental effect on economic sustainability and development. The provincial government has an opportunity to use its authority appropriately to work with municipalities to ensure their continued economic success. There is also a very important municipal and provincial shared interest in the economic and social sustainability of our communities across the province. This shared interest should be emphasized in any changes to the property tax system, with a focus on building trust and increasing dialogue between provincial and municipal governments.

BIBLIOGRAPHY

Abelson, (2006). *Local government taxes and charges.* Sydney, AU: Applied Economics. Retrieved on April 16, 2009 from http://www.appliedeconomics.com.au/pubs/pdf/06_LG_taxes_and_charges.pdf

Anstett, A. (2002). Ontario: The inside story of so-called property tax reforms. *Assessment Journal, 3*, 37-47.

British Columbia Assessment Authority. (1992b). *Real property tax 101.* Victoria, BC: Author. Presented at the 1992 B.C. Assessment Authority Annual Seminar.

BC Assessment. (2004). *2004 Ports valuation workshop.* Victoria, BC: Author. Retrieved May 15, 2009 from http://www.acpa-ports.net/advocacy/pdfs/portland_assess04.pdf

BC Assessment. (2009). *Classification of property in BC.* Victoria, BC: Author. Retrieved March 18, 2009 from http://www.bcassessment.bc.ca/pdf/publications/fact_sheets/FS06_Property_Classes.pdf

BC Assessment. (2009a). *Fact sheet- Fast facts.* Victoria, BC: Author. Retrieved July 15, 2009 from http://www.bcassessment.bc.ca/pdf/publications/fact_sheets/FS31_Fast_Facts.pdf

BC Competition Council. (2006). *BC Competition Council.* Victoria, BC: Author. Accessed March 10, 2009 from http://bccompetitioncouncil.gov.bc.ca

BC Competition Council. (2006a). *Enhancing the competitiveness of British Columbia- Executive Summary.* Victoria, BC: Author. Accessed March 10, 2009 from http://bccompetitioncouncil.gov.bc.ca/Executive_Summary.pdf

Bell, M. (1999). *An optimal property tax: Concepts and practices.* A document prepared for a World Bank conference entitled Intergovernmental Fiscal Relations and Local Financial Management, held April 17-21, 2000. MEB Associations Inc. Kensington, MD. Retrieved on February 13, 2009 from http://www1.worldbank.org/wbiep/decentralization/Courses/Almaty/mbell.pdf

Bish, R. (2002). *Local government financial issues in the United States.* Local Government Institute. Victoria, BC: University of Victoria.

Bish, R. (2003). *Property taxes on business and industrial property in British Columbia: Comparisons and business climate observations.* Local Government Institute Working Paper #11. Victoria, BC: University of Victoria. Retrieved February 3, 2009 from http://nswia.com/betterway/documents/NSWIA_bish_report.pdf

Bish, R. (2004). *Property taxes on business and industrial property in British Columbia.* Vancouver, BC: Fraser Institute. Retrieved February 11, 2009 from http://www.fraserinstitute.org/commerce.web/product_files/PropertyTaxesonBusiness.pdf

Bish, R. & Clemens, E. (2008). *Local government in BC* (4th ed.). Victoria, BC: Union of British Columbia Municipalities.

Bossons, J. (1981). Property tax reform: What is desirable? in *Municipal finance reform in Ontario: Property taxes and provincial grants.* Bossons, J., Denny, M. & Slack, E. Eds. Toronto, ON: Ontario Economic Council.

Bossons, J., Denny, M. & Slack, E. (1981). *Municipal fiscal reform in Ontario: Property taxes and provincial grants.* Ontario Economic Council.

Brett, C. & Pinkse, J. (2000). The determinants of municipal tax rates in British Columbia. *Canadian Journal of Economics, 33*(3), 695-714.

British Columbia. (1989). *Property tax forum: Focus on the property tax.* Victoria, BC: Queens Printer.

British Columbia. (1990). *New directions for local government finance: The next steps.* Victoria, BC: Queens Printer.

British Columbia. (2009). *Throne Speech.* Victoria, BC: Queens Printer. Retrieved April 25, 2009 from http://www.leg.bc.ca/38th5th/4-8-38-5.htm

Canadian Federation of Independent Business [CFIB]. (2008). *Property tax fairness in BC.* Vancouver, BC: Author. Retrieved January 3, 2009, from http://www.cfib.org/research/reports/rr3074.pdf

Canadian Federation of Independent Business [CFIB]. (2003). *Property tax inequality in BC.* Vancouver, BC: Author.

Catalyst Paper takes its fight over property taxes to B.C. court. (2009, June 5). *The Prince George Citizen*. Retrieved June 7, 2009, from http://www.princegeorgecitizen.com/20090605195489/wire/business/catalyst-paper-takes-its-fight-over-property-taxes-to-b.c.-court.html

City of Vancouver. (1989). *Report of the municipal taxation review commission.* Vancouver, BC: Author.

City of Vancouver. (2006). *Property tax policy review commission: Terms of reference.* Vancouver, BC: Author. Retrieved on May 24, 2009 from http://vancouver.ca/taxcommission/objective.htm

City of Vancouver. (2008). *Council decisions: Property tax policy review commission.* Vancouver, BC: Author. Retrieved May 26, 2009, from http://vancouver.ca/taxcommission/

City of Vancouver. (2009). *2009 Property taxation: Distribution of property tax levy.* Administrative report to the Standing Committee of City Services and Budgets. Vancouver, BC: Author.

Collins, J. (1992). *Evolution of real property taxation and the assessment function in British Columbia.* Victoria, BC: British Columbia Assessment Authority. Retrieved April 29, 2008 from http://www.bcassessment.bc.ca/pdf/process/1992_paper_Evolution_of_Real_Property_Taxation_BC.pdf

Community Charter. (2003). R.S.B.C. Retrieved January 5, 2009 from http://www.bclaws.ca/Recon/document/freeside/--%20C%20--/Community%20Charter%20%20SBC%202003%20%20c.%2026/00_Act/03026_00.htm

Continuing Legal Education Society of BC. (1990). *Real property assessment manual.* Vancouver, BC: Author.

Dollery, B., Crase, L., and Johnson, A. (2006). *Australian Local Government Economics.* Sydney, Australia: University of New South Wales Press.

Fleming, J. & Anderson, B. (1984). *Financial management of education in British Columbia: Background paper.* Victoria, BC: Ministry of Education.

Hobson, P. (1997). Efficiency, equity and accountability issues in local taxation. In P. Hobson and F. St-Hilaire (Eds.), *Urban governance and finance: A question of who does what* (pp. 113-132). Montreal, QC: Institute for Research on Public Policy.

Hobson, P. and St-Hilaire, F. (Eds.). (1997). *Urban governance and finance: A question of who does what.* Montreal, QC: Institute for Research on Public Policy.

Intergovernmental Committee on Urban and Regional Research [ICURR]. (2002). *Canadian cities: Beginning a new dialogue.* Toronto, ON: Author.

International Association of Assessing Officers [IAAO]. (2000). *Property tax policies and administrative practices in Canada and the United States.* Kansas City, MO: Author.

Kennedy, W. (2003). *Determining tax rates: Are property tax rates determined on the basis of political factors, by politicians?* Unpublished master's thesis, University of Northern British Columbia, Prince George, BC, Canada.

Kennedy, W. & McAllister, M. (2005). Politics of municipal property taxes: Implications for decision making. *Canadian Public Administration 48*(2), 207-230.

Kesselman, J. (1995). *Taxation policies for British Columbia in the new economy.* Discussion Paper No.: DP-27. Centre for Research on Economic and Social Policy. Vancouver, BC: University of British Columbia.

Kitchen, H. (1992). *Property taxation in Canada.* Canadian Tax Paper #92. Toronto, ON: Canadian Tax Foundation.

Kitchen, H. (1984). *Local government financial in Canada.* Toronto, ON: Canada Tax Foundation.

Kitchen, H. (1997). Pricing of local government services. In P. Hobson and F. St-Hilaire (Eds.), *Urban governance and finance: A question of who does what* (pp. 135-168). Montreal, QC: Institute for Research on Public Policy.

Kitchen, H. (2003). *Property taxation: Issues in implementation.* Paper prepared for the Consortium for Economic Policy Research and Advice (CEPRA), Association of Universities and Colleges of Canada, Ottawa. Retrieved on January 15, 2009, from http://www.aucc.ca/_pdf/english/programs/cepra/PropertyTaxation-IssuesinImplementation.pdf

Konzak, S. (2007). *Assessing new taxation revenue: Evaluating policy alternatives for British Columbia.* Unpublished master's capstone paper. University of Simon Fraser, Burnaby, BC. Retrieved February 13, 2009, from http://www.sfu.ca/mpp/pdf_news/Capstone/sonyakonzakfulltext.pdf

Layfield, F. (1976). *Local government finance: Report of the committee of inquiry.* London, UK: Her Majesty's Stationery Office.

Leyne, L. (2009, July 16) Industry tax revolt gathers steam. *Victoria Times Colonist,* p. A12.

Lightbody, S. (2005). *City politics, Canada.* Peterborough, ON: Broadview Press.

Local Government and Shires Association of New South Wales. (2009, April 3). *Pegged rate increase consigns communities to restrict services.* Sydney, NSW: Author. Retrieved April 14, 2009, from http://www.lgsa.org.au/www/html/2898-3-april-2009---pegged-rate-increase-consigns-communities-to-restricted-services.asp?intSiteID=1

Local Government New Zealand. (2002). *Local Government KnowHow Guide to Rating.* Aukland, NZ: Author. Retrieved on March 23, 2009, from http://www.lgnz.co.nz/library/files/store_021/Rating.pdf.

McMath Commission [Commission]. (1976). *Commission of Inquiry on Property Assessment and Taxation.* Preliminary Report. Victoria, BC: Queens Printer.

Mezynska, U. (2005). *Major industry property taxation in British Columbia.* Advanced Management Report, University of Victoria.

Ministry of Community Development. (2007). *Amendments to Municipal Financial Plans and Revitalization Tax Exemptions*. Circular No. 07:14. Victoria, BC: Author. Retrieved June 9, 2009, from http://www.cd.gov.bc.ca/lgd/infra/financial_circulars/cir0714.htm

Ministry of Community Development. (n.d.). *Variable Tax Rates: A User's Guide*. Unpublished.

Ministry of Municipal Affairs. (1977). *Quarterly report.* 1(4). Victoria, BC: Queens Printer.

Ministry of Municipal Affairs. (1983). *Variable Tax Rates: A Guide for Implementation*. Victoria, BC: Queens Printer.

Ministry of Municipal Affairs. (1984). *Variable tax rates: A guide to implementation.* Victoria, BC: Queens Printer.

Ministry of Municipal Affairs. (1999). Classification of vacant land zoned for mixed use developments: A discussion paper. Victoria, BC: Queens Printer.

Ministry of Municipal Affairs, Recreation and Culture. (1990). *New directions for local government finance: The next steps. Part 1.* Victoria, BC: Queens Printer.

Ministry of Municipal Affairs, Recreation and Culture. (1990a). *New directions for local government finance: The next steps. Part 3.* Victoria, BC: Queens Printer.

National League of Cities [NLC]. (2006). *Taxing problems: Municipal and America's flawed system of public finance.* Washington, DC: Author.

New South Wales. (2001). *Application for ministerial approval for special variation to general income.* Circular to Councils. Sydney, AU: Department of Local Government. Retrieved on April 9, 2009 from http://www.dlg.nsw.gov.au/dlg/dlghome/Documents/Circulars/01-29.pdf

New South Wales. (2005). *Council rating and revenue raising manual.* Sydney, AU: Department of Local Government.

New South Wales. (2008). *Councillor Guide.* Sydney, AU: Department of Local Government. Retrieved on April 9, 2009 from http://www.dlg.nsw.gov.au/dlg/dlghome/documents/Information/CouncillorGuide.pdf

Nova Scotia. (2008). Bill 138- An Act to amend Chapter 18 of the Acts of 1998, the Municipal Government Act. Retrieved on May 17, 2009 from http://www.gov.ns.ca/legislature/legc/bills/60th_2nd/3rd_read/b138.htm

Ports Property Tax Act. (2004). R.S.B.C. http://www.bclaws.ca/Recon/document/freeside/--%20p%20-/ports%20property%20tax%20act%20%20sbc%202004%20%20c.%207/00_04007_01.xml#FOUND-NOTHING

Productivity Commission. (2008). *Assessing local government revenue raising capacity.* Canberra, AU: Government of Australia. Retrieved April 19, 2009 from www.pc.gov.au

Province of Alberta. (2009). Bill 202- Municipal Government (Municipal Auditor General) Amendment Act, 2009. Edmonton, AB: Author. Retrieved on May 17, 2009 from http://www.assembly.ab.ca/bills/2009/pdf/bill-202.pdf

Rose, R. & Karren, T. (1987). *Taxation by political inertia: Financing the growth of government in Britain.* London: Allen & Unwin.

Scales, P. (2008). *Local government history project. Research findings: 1965-1995.* Unpublished manuscript: Ministry of Community Development.

Slack, E. (2002). Property tax reform in Ontario: What have we learned? *Canadian Tax Journal. 50*(2) 576-585.

Slack, E. (2000). *Understanding the evaluation of property tax policy.* Prepared for the Canadian Property Tax Association Inc. Annual National Workshop. October 2, 2000.

Slack, E., Tassonyi, A., & Bird, R. (2007). *Reforming Ontario's property tax system: A never-ending story?* International Tax Program Paper 0706. Toronto, ON: University of Toronto.

Taxation Rate Cap for Class 2 Property Regulation [B.C. Reg. 329/96]. (1996). Retrieved January 22, 2009 from http://www.bclaws.ca/Recon/document/freeside/--%20v%20--/vancouver%20charter%20%20sbc%201953%20%20c.%2055/05_regulations/41_329_96.xml#FOUND-NOTHING

Thirsk, W. (1982). Political sensitivity versus economic sensibility: A tale of two property taxes. *Tax policy options in the 1980s.* Eds. Thirsk, W. & Whalley, J. (384-407). Toronto, ON: Canadian Tax Foundation.

Tiebout, C. M. (1956). A pure theory of local expenditures. *The Journal of Political Economy, 64*(5), 416-424.

Tilley, H. (2008). *Property tax fairness in BC.* Vancouver, BC: Canadian Federation of Independent Business.

Union of British Columbia Municipalities (UBCM). (2000). *Evaluating the stability of BC's assessment roll.* Policy paper #7. Vancouver, BC: Author. Retrieved May 17, 2009 from http://ubcm.ihostez.com/content/pdfstorage/816744507123200422718PM90088.pdf

Vander Ploeg, C. (2008). *Problematic property tax: Why the property tax fails to measure up and what to do about it.* Calgary, AB: Canada West Foundation. Retrieved January 13, 2009 from http://www.cwf.ca/V2/files/PROBLEMATIC.pdf.

Watts, R. (2009, April 25). Windfall to help keep Victoria taxes down. *Victoria Times Colonist,* p. A03.

Whybrow, J. (1993). *Property tax and assessment in British Columbia: A decade of Change.* Proceedings of the 59th International Association of Assessing Officers Annual Conference on Assessment Administration. Washington, DC; September 19-22, 1993.

Wollongong City Council. (n.d.). *Why do you pay rates? A local government fact sheet.* Author: Wollongong, AU. Retrieved July 9, 2009 from http://www.wollongong.nsw.gov.au/documents/Why_do_you_pay_rates.pdf

Woolery, A. (1989). *Property tax principle and practice.* Cambridge, MA: Lincoln Institute of Land Policy.

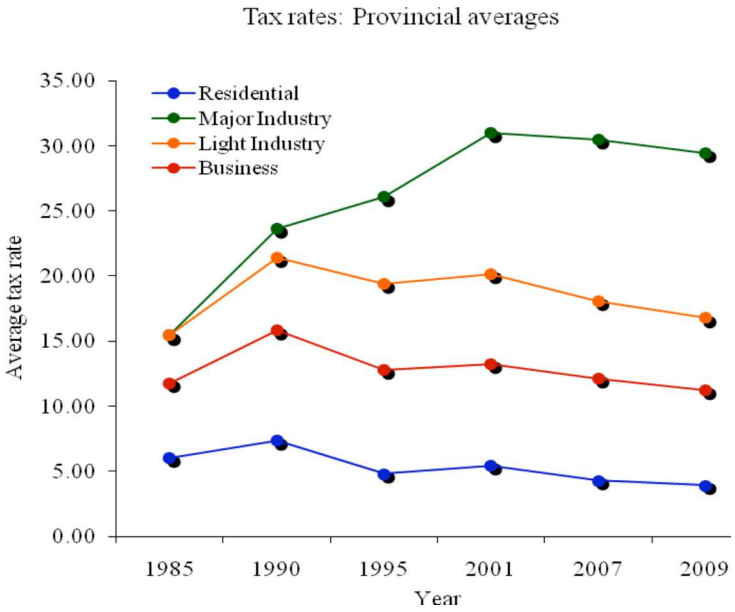
APPENDIXES

Appendix A: BC Tax Rates and Multiples

This appendix provides the following graphs of provincial average property tax rates and multiples and individual municipalities' multiples.

Average provincial property tax rates and multiples

The following graph provides average provincial tax rates for residential (class 1), Major industry (class 4), Light industry (class 5) and Business and other (class 6). Rates were obtained from Ministry of Community and Rural Development statistics. Due to the introduction of the Major Industry class in 1987, the tax rates provided for that class in 1984 reflect the Light Industrial rate, which they shared a class with at that point.

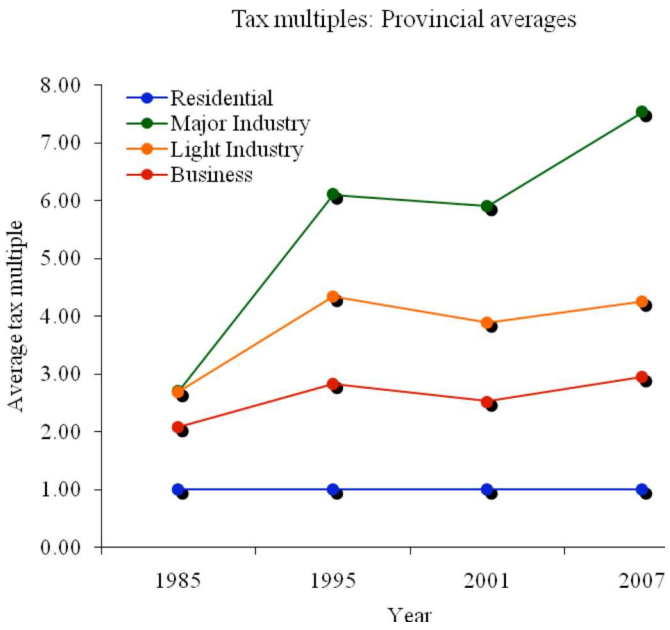


Source: Ministry of Community and Rural Development, 2009

Tax rates: Provincial averages						
Property Class	**1985**	**1990**	**1995**	**2001**	**2007**	**2009**
Residential	6.04	7.38	4.82	5.45	4.29	3.93
Major Industry	15.43	23.64	26.06	30.96	30.47	29.44
Light Industry	15.43	21.39	19.41	20.15	18.10	16.77
Business	11.76	15.80	12.77	13.23	12.10	11.21

Source: Ministry of Community and Rural Development, 2009

The following graph provides average provincial tax rate multiples for residential (class 1), Major industry (class 4), Light industry (class 5) and Business and other (class 6). Rates were obtained from Ministry of Community and Rural Development statistics. Due to the introduction of the Major Industry class in 1987, the tax rate multiples provided for that class in 1984 reflect the Light Industrial rate, which they shared a class with at that point.

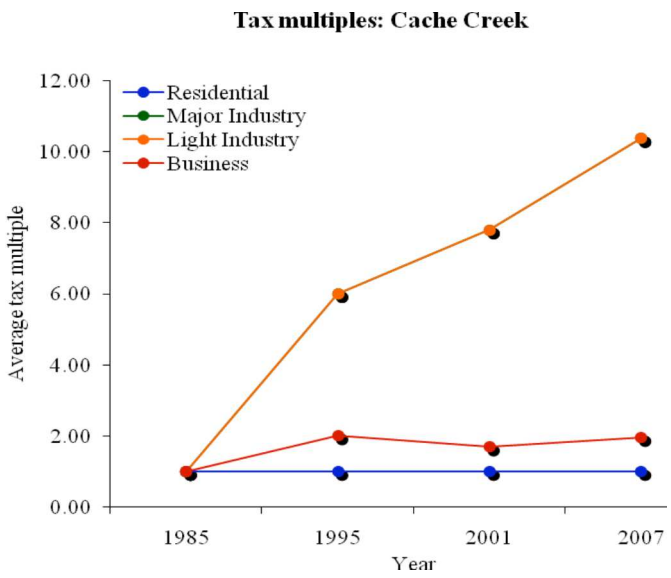


Source: Ministry of Community and Rural Development, 2009

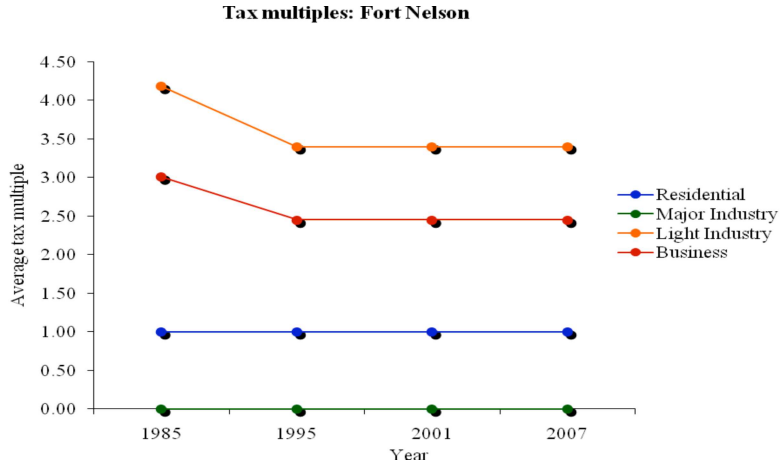
Municipalities' property tax multiples

The following graphs provide unweighted tax rate multiples for residential (class 1), Major industry (class 4), Light industry (class 5) and Business and other (class 6) for a sample of 16 BC municipalities. These municipalities were identified through the analysis of financial plans that is provided in Appendix E. Rates were obtained from Ministry of Community and Rural Development statistics.

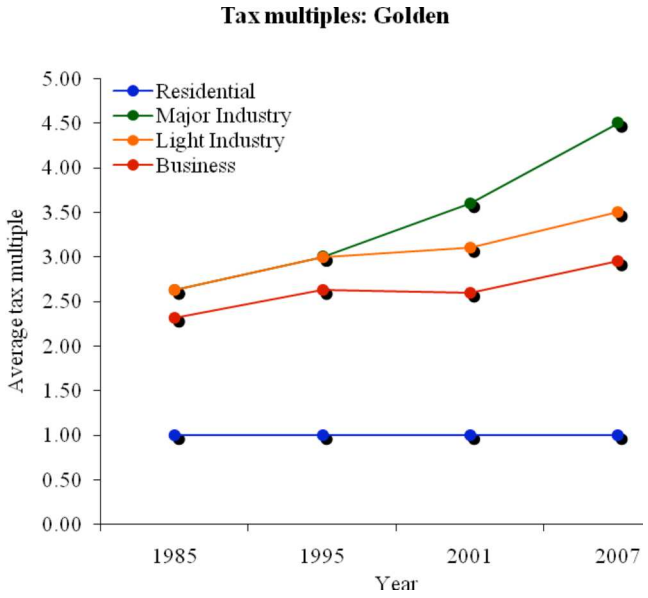
Due to the introduction of the Major Industry class in 1987, the tax rates provided for that class in 1984 reflect the Light Industrial rate, which they shared a class with at that point. As well, some municipalities do not have any property classified for industrial and have not set rates for that type of property, which thus appears as a rate of 'zero'. Furthermore, a couple of municipalities had industrial property for only a portion of the 20-year period and the rates reflect this.



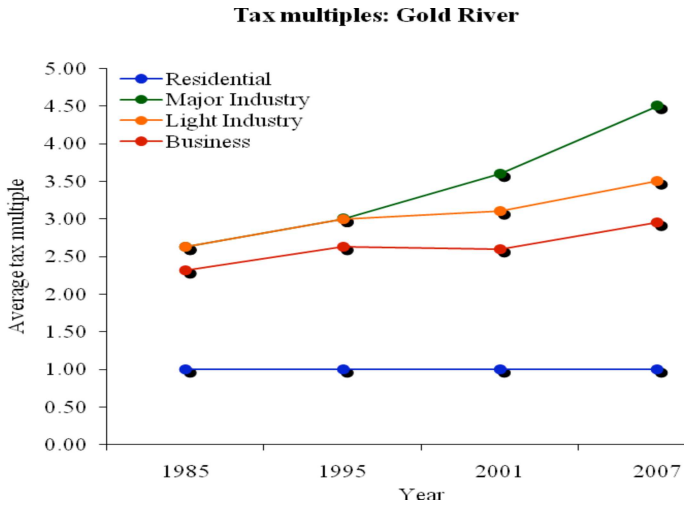
Note: Major and Light industrial tax rates are identical.
Source: Ministry of Community and Rural Development, 2009



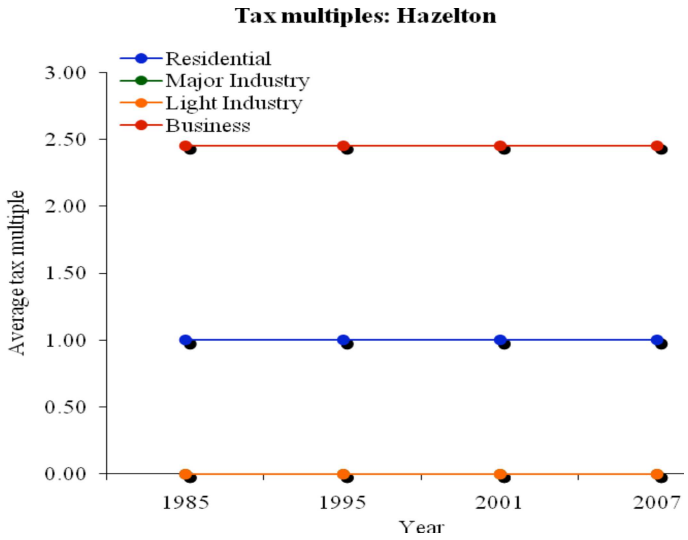
Source: Ministry of Community and Rural Development, 2009



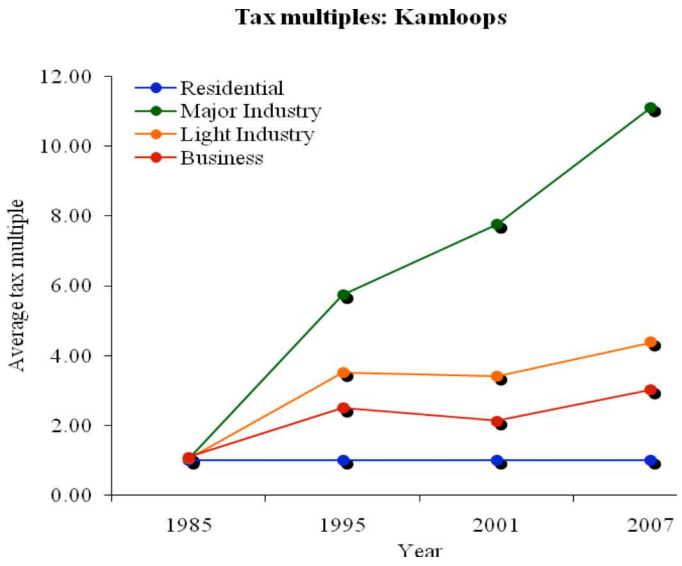
Source: Ministry of Community and Rural Development, 2009



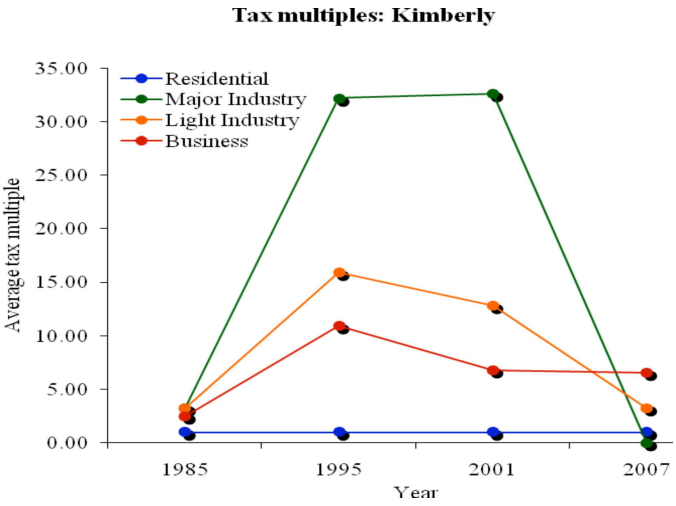
Source: Ministry of Community and Rural Development, 2009



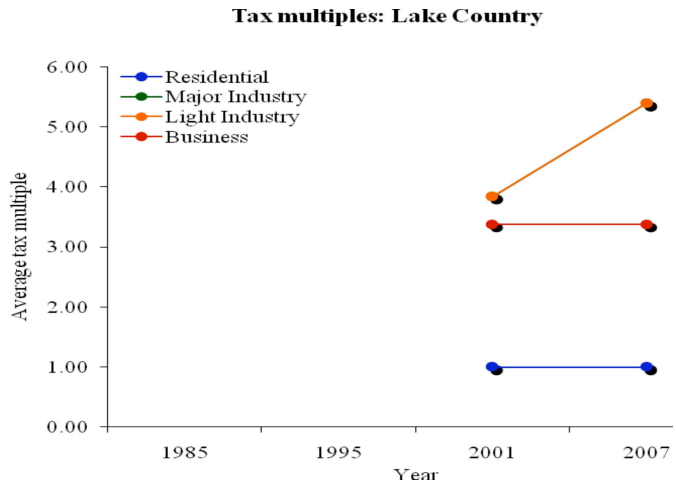
Note: Major and light industry rates are identical.
Source: Ministry of Community and Rural Development, 2009



Source: Ministry of Community and Rural Development, 2009

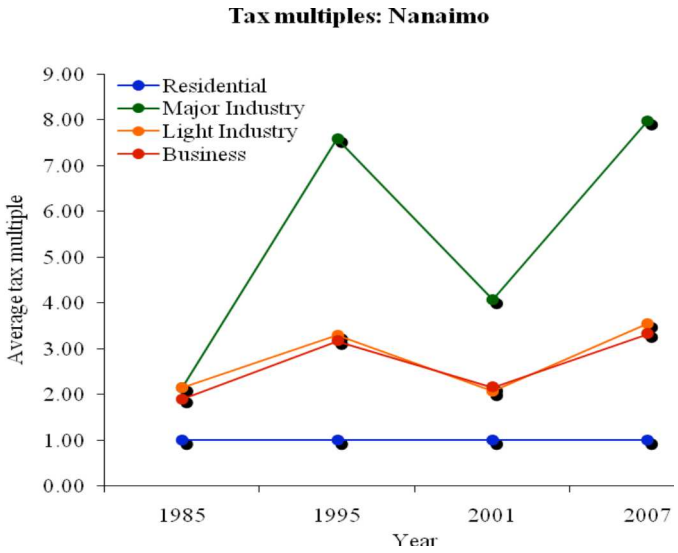


Source: Ministry of Community and Rural Development, 2009

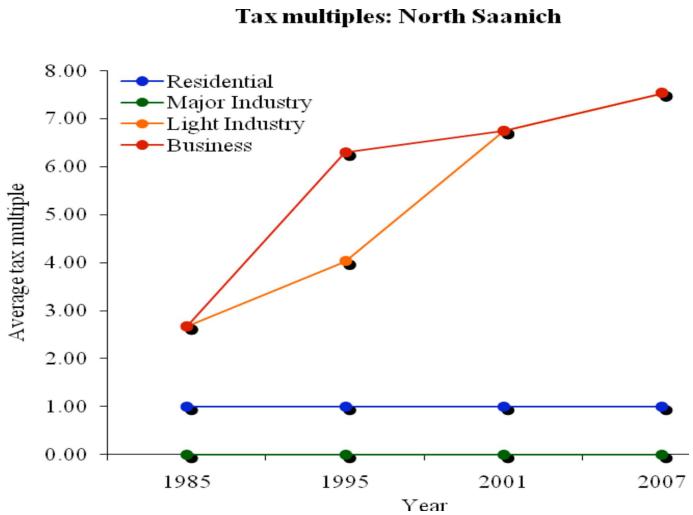


Note: Lake Country incorporated in 1995. Major and light industrial rates are identical.
Source: Ministry of Community and Rural Development, 2009

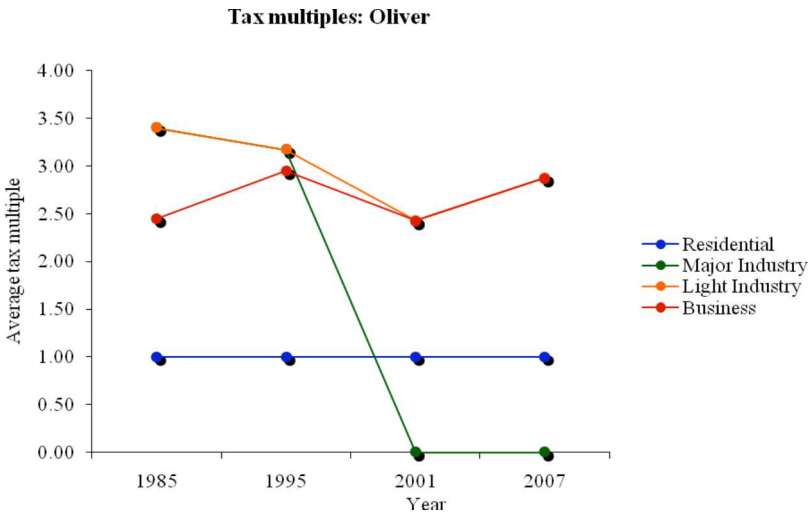
Note: Major and Light industrial tax rates are identical.
Source: Ministry of Community and Rural Development, 2009



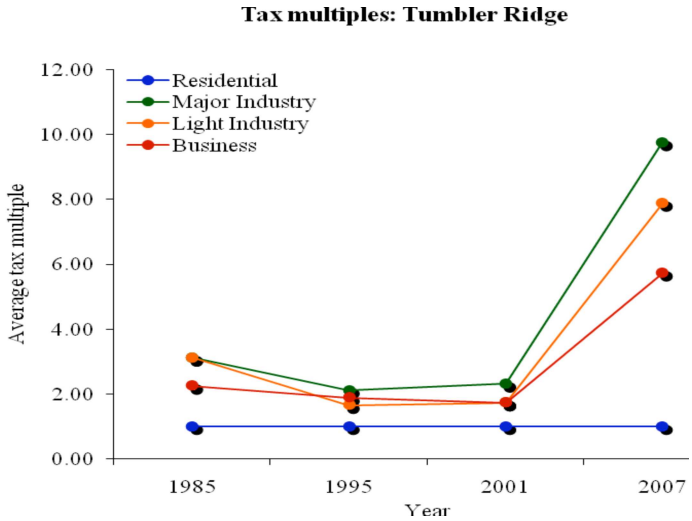
Source: Ministry of Community and Rural Development, 2009



Source: Ministry of Community and Rural Development, 2009



Source: Ministry of Community and Rural Development, 2009



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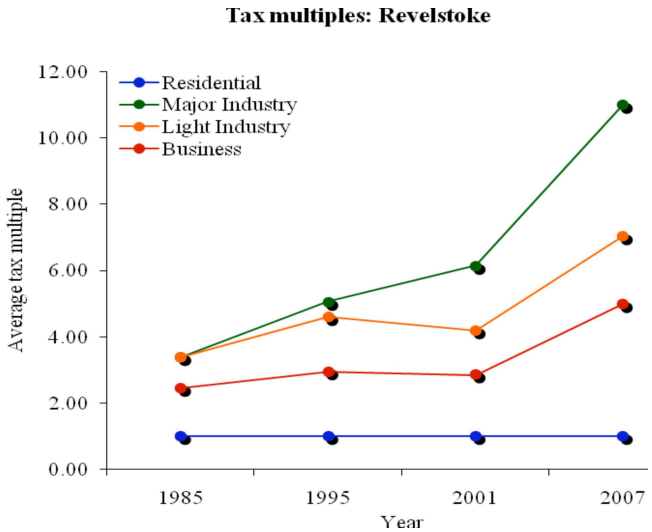
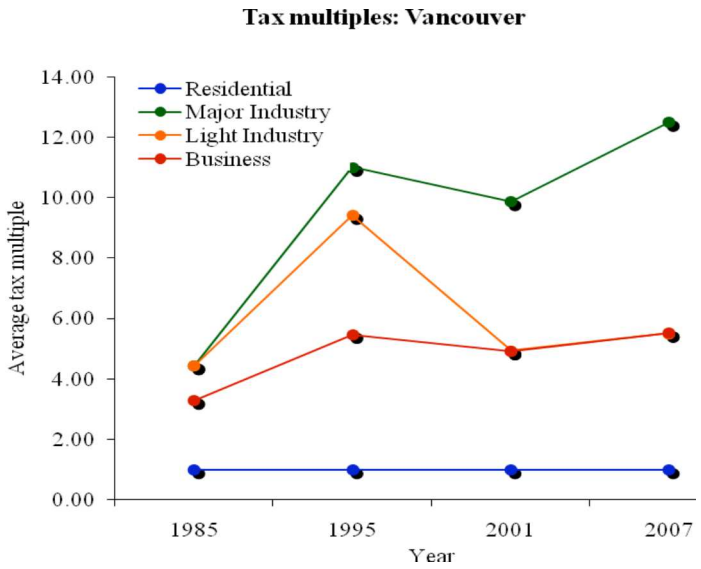


Source: Ministry of Community and Rural Development, 2009



Source: Ministry of Community and Rural Development, 2009

Appendix B: BC Property Classes

Class 1, Residential — single-family residences, multi-family residences, duplexes, apartments, condominiums, nursing homes, seasonal dwellings, manufactured homes, recreational property, some vacant land, farm buildings and daycare facilities.

Class 2, Utilities — structures and land used by railways, pipelines, electrical generation or transmission utilities, or telecommunications transmitters. This does not include offices or sales outlets.

Class 3, Supportive Housing —funded and identified by the provincial government, a property which combines on-site support services with housing for persons who were previously homeless, at risk of homelessness, have mental or physical disabilities, or who are recovering from drug or alcohol addictions

Class 4, Major Industry — land and improvements (buildings) of major industrial properties, including lumber and pulp mills, mines, smelters, large manufacturers of specified products, ship building and loading terminals for sea-going ships.

Class 5, Light Industry — property used or held for extracting, manufacturing or transporting products, including ancillary storage. Scrap metal yards, wineries and boat-building operations fall within this category. Exceptions include properties used for the production of food and non-alcoholic beverages, which fall into Class 6.

Class 6, Business Other — Property used for offices, retail, warehousing, hotels and motels all fall within this category. This also includes properties that do not fall into other classes.

Class 7, Managed Forest Land — privately-owned, forest land property for which an acceptable forest management commitment has been made that is approved and complies with the *Private Managed Forest Land Act*.

Class 8, Recreational Property, Non-profit Organization — includes two very different categories:

- Land used solely as an outdoor recreational facility for activities such as golf, skiing, tennis, public swimming pools, waterslides, amusement parks, marinas and hang gliding. Improvements on the land (such as a clubhouse) fall into Class 6.
- Property used for at least 150 days per year as a place of public worship or as a meeting hall by a non-profit, fraternal organization.

Class 9, Farm Land — Farmland must produce a prescribed amount of qualifying primary agricultural products for sale such as crops or livestock.

(BC Assessment, 2009)

Appendix C: A Chronology of Major Property Tax and Assessment Changes in British Columbia, 1982-2009

This table presents a chronology of the major property tax and assessment changes from 1982 to the present, and identifies some of the contemporary developments. Omitted from the 1982-1993 analysis are specific detailed changed to property tax policies (e.g. changes to exemptions), and to the assessment legislation (e.g. definition of industrial improvements).

Year	Tax Changes	Assessment Changes	Developments and Activities
1982	• School boards lose non-residential tax powers and *de facto* lose residential through budget controls		• General fiscal restraints introduced • Provincial limits on municipal and school budgets
1983	• Legislation introduces variable tax rate system for municipalities to begin in 1983	• As a restraint measure, annual roll eliminated in favour of biennial roll	
1984	• All property taxes switched to variable tax rates on full market value assessments		• Report, *Taxation and Economic Development;* public meetings held on high level of fixed taxes on industry and financial impact of taxes on business during the recession
1985	• School tax rates on non-residential property reduced across the board	• Machinery and equipment to be removed from assessment in 86-87 reducing property taxes on business by approx. $200 million	• In 1985 provincial budget substantial reductions to fixed taxes on business were introduced
1986	• School boards get residential tax returned	• Utility property assessment revised; review of industrial methodology	• Municipalities concerned about industrial assessment appeals
1987		• *Assessment Amendment Act, 1987* establishes Class 4- Major Industry to provide more stable industrial tax base • Major Industrial Properties (MIPS) Manual introduced to guide the assessment of Class 4 properties	
1988			• Union of British Columbia Municipalities (UBCM) asks government to undertake joint review of municipal finance; known as *Financial Local Government Study* • The 1989 roll (values based on July 1, 1988) shows 17% increase in response to economic revival • In Vancouver, average roll increase is 35%; City establishes a property tax review committee (*Leckie Commission)*

Year	Tax Changes	Assessment Changes	Developments and Activities
1989	• Bill 17, the *Residential Property Tax Increase Limitation Act,* allows municipalities to cap assessments of residential land; used only by the City of Vancouver; later the government approved a City of Vancouver bylaw that capped commercial property taxes	• In November, responsibility for the British Columbia Assessment Authority is transferred from the Ministry of Finance to the Ministry of Municipal Affairs Housing	• *Leckie Commission* reports in March that market value was the appropriate base for assessment, but "equity" had been violated by the extreme increases on some properties; recommends tax capping and return to annual roll • *Financing Local Government* report recommends assessment averaging or phasing, an annual roll and municipal flat tax • Ministers of Municipal Affairs and Finance announce the *Property Tax Forum;* a panel tours the province in August and September to hear taxpayer concerns; many demand that school taxes be removed from property tax base; some call for a Thatcher-type toll tax
1990	• Vancouver is given the power to cap commercial taxes for 1990 • *Assessment and Property Tax Reform Act, 1990* allows municipalities to levy a flat tax on residential property (5 use this) and to use a split tax to levy different tax rates on residential land and improvements (only 1 municipality applies it) • *School Act* amendments remove residential taxing powers from local boards except by referendum • A new Supplemental Home Owners Grant increases tax relief for higher valued homes		• In September, Ministry of Municipal Affairs publishes 3 white papers on local finance, *New Directions for Local Government Finance* • UBCM and municipalities continue to press for assessment averaging and phasing
1991	• Vancouver is given the power to cap residential and commercial taxes for 1991	• Working group begins study of property tax stabilization measures including assessment averaging and phasing	• In October, the Social Credit government is defeated by the New Democratic party in the provincial election
1992	• Vancouver is given the power to cap residential and commercial taxes for 1992 • The *Assessment and Property Tax Reform Act, 1992* repeals the flat tax/split rates options • Supplemental Home Owner Grant is eliminated as being regressive	• *Assessment and Property Tax Reform Act, 1992* allows municipalities to average or phase in assessed values of land; annual roll returns	

Year	Tax Changes	Assessment Changes	Developments and Activities
1993	• 13 municipalities express early interest in averaging or phasing but only Vancouver chooses this option • The 1993 budget announces a phase-out of Home Owner Grants beginning at homes valued at $400,000; a school surtax is to be applied to homes over $500,000 but public outcry results in withdrawal of this measure	• A committee is struck to evaluate municipal decisions to use/not use assessment averaging or phasing	• In early summer, commercial taxpayers in Vancouver protest against large increases in property taxes as the cap is eliminated
1994		• Name change to "BC Assessment"	
1995	• Increase Home Ownership Grant threshold to $475,000 before grant may be reduced		• Peace River agreement that sets rural rates at a different level for class 2, 4, and 5 to capture revenue from oil and gas operations. The Province gives $12 million in revenue to the municipalities and regional districts
1996	• BC Regulation 329/96 imposes limits on the tax rate which applies to Class 2 (Utilities) property for general municipal purposes. The limit (in most circumstances) is the greater of $40 per $1000 of taxable assessment, or 2.5 times the municipality's Class 6 (Business) rate for that same taxation year. As well, for municipal purposes utilities are exempt. Instead municipalities receive 1% of revenue earned within the boundaries of the municipality from the last 2 years. • Freeze on the average residential gross taxes payable to the provincial government under the *School Act* and *Taxation (Rural Area) Act* from 1996-2000 (Tax and Consumer Rate Freeze Act)		

Year	Tax Changes	Assessment Changes	Developments and Activities
1997	• Permissive property tax exemptions for eligible riparian property • Amendment to the *Municipal Act* to authorize regional districts to establish variable tax rate systems for local services, but only in relation to property classes 2, 4, and 5 and only for the result of ratios between tax rates for those properties and the tax rate for property class 1 that are lower than the applicable ratio established the provincial government (s. 842)		
1998			• Changes to the appeal structure
1999		• s. 20.1 to the *Assessment Act* requiring dams, power plants and substations to be valued according to legislated cost manuals and depreciation schedules	
2000			
2001			• NDP defeated; Liberal government takes power
2002			
2003			• *Community Charter* introduced; Part 7 sets out the ways in which a municipality might financially support its activities: property value tax; parcel tax; local service tax; and fees. This Part sets out a new simplified process to tax in relation to local area services, and clarifies the process for updating the parcel tax roll. In addition, this Part establishes statutory and permissive tax exemptions, including broadened authority for municipalities to provide tax exemptions in relation to property owned by non-profit organizations.

Year	Tax Changes	Assessment Changes	Developments and Activities
2004	• *Ports Property Tax Act* established property tax limits for the principal port terminals in BC. Tax limit set at $27.50 per $1000 of assessed value for 5 years and $22.50 per $1000 assessed value on new investment for 10 years from the date of the initial investment • Increase Home Owner Grant threshold increased to $585,000 before grant may be reduced		
2005		• Class 3 (unmanaged forest) is eliminated and properties are moved to other classes	• Provincial election; Liberals re-elected • Municipal election
2006			• *Taskforce on Community Opportunities* reports that "local governments may not always consider business and economic interests and the impact of their taxation and programming decisions" • Rapidly rising housing prices, particularly in Vancouver, Victoria and the Okanagan
2007	• Police tax is introduced. For towns under 5,000 people or rural area residents are charged to cover 50% of the policing costs • Home Owners Grant threshold has increased, with those who may be eligible to receive the full grant will be $950,000 in assessed property value, up from $780,000; low income tax grant supplement introduced • *Hotel Room Tax Act* introduced to provide revenue sharing with designated resort municipalities. • Broader revitalization tax exemption authority introduced • The British Columbia Property Tax Deferment Program is lowered to include people who are 55 years or older • Reduction of school taxes for class 4 to a level equal to class 6 (therefore in 2009, Class 4, 5, and 6 will be equal)	• Changes to how strata hotel units, major ski hills and ports are assessed • Strata accommodation can be classed as either: Class 1 (residential) or Class 6 (business). Under the new model individual strata units will be assessed based on a split of actual use • Changes the way in which designated ski hills are assessed is in s. 20.2 of the *Assessment Act* • The *Assessment Act*, s. 20.3 introduces special valuation rules for eligible designated port land	• Stiffer financial disclosure requirements introduced for municipal financial plans • Rapidly rising housing prices, particularly in Vancouver, Victoria and the Okanagan

Year	Tax Changes	Assessment Changes	Developments and Activities
2008	• 50% rebate of school tax for industrial property (class 4 & 5) • Port tax limit renewed • Home Owners Grant threshold is increased, with the basic grant is eliminated on homes assessed at $1,164,000 or more, and the additional grant is eliminated on homes of $1,219,000 or more	• Property assessment freeze (2007 or 2008 value, whichever is lower). • Class 3.1 (Supportive Housing) is introduced. All properties in the class are assessed at $1 for land and $1 for improvements.	• Economic downturn • Municipal election
2009	• In light of recent global economic events, the Land Tax Deferment Act is amended to create a new temporary program which will allow eligible homeowners facing financial hardship, and who have at least 15 per cent equity in their homes, to defer their 2009 and 2010 property taxes		• BC Assessment moves from Ministry for Small Business and Revenue to Ministry of Community Development • Economic downturn • Provincial election

(This chronology builds on Jennifer Whybrow 1982-1993 timeline of events; Whybrow, 1993, p. 12)

Appendix D: Expert Interviewees

Dr. Enid Slack has been working in the field of municipal finance for over 25 years and is respected nationally and internationally for her research on property taxes and other aspects of municipal finance. Dr. Slack is an Adjunct Professor at the University of Toronto teaching a graduate course in urban public finance to planning students and is affiliated faculty at the School of Public Policy and Governance. She is also a Senior Research Associate at the University of Toronto Cities Centre. In 2006-07, she was a Commissioner on *the Property Tax Policy Review Commission* for the City of Vancouver.

Dr. Robert L. Bish is Professor Emeritus, University of Victoria, where he was Professor of Public Administration and Economics from 1981 through 1998. He was also Co-director of the Local Government Institute from its establishment in 1995 through 2002.

Dr. Jonathan Kesselman joined Simon Fraser University's Public Policy Program in 2004, where he is a professor and holds the Canada Research Chair in Public Finance. From 1972 to 2003 he was a professor of economics at the University of British Columbia, and from 1992 to 2003 he served as director of the UBC Centre for Research on Economic and Social Policy. He was director and principal investigator of the SSHRC/MCRI project on "Equality/Security/Community." He has a B.A. (Hon.) from Oberlin College and a Ph.D. from M.I.T.

Mr. Casey Vander Ploeg is a senior policy analyst with the Canada West Foundation. He has a BA in Political Science from the University of Lethbridge. Prior to joining the Foundation, Casey worked as a journalist. Casey has been with the Canada West Foundation since 1991 and has authored or co-authored over 50 research reports. He most recent publication is 'Problematic Property Tax: Why the Property Tax fails to measure up and what to do about it' was published in November 2008. His work on urban finance and infrastructure has established him as one of Canada's foremost experts in the area.

Appendix E: Review of Municipal Financial Plans

This section reviews a sampling of municipal financial plan bylaws to identify principles and other factors municipalities are currently considering when setting property tax rates. This analysis is possible due to the stiffer provincial revenue and tax policy disclosure requirements introduced in 2007. The analysis focuses on the requirement for policies and objectives related to the distribution of property tax rates among the property classes. This analysis reveals common themes, including objectives to maintain stable tax rates and a proportionate tax relationship between property classes, and to reduce non-residential tax rates. Overall, the analysis reveals a moderate level of compliance and sophistication in financial planning.

In 2007, the Ministry introduced amendments to the Community Charter, which were intended to enhance municipal accountability with the addition of more detailed municipal revenue and tax policy disclosure in municipalities' 5-year financial plans. Municipalities are now required to include statements in their 5-year financial plans regarding the objectives and policies in relation to each of the following:

- proportion of total revenue that is proposed to come from each of their funding sources described in Section 165(7) of the Community Charter,[42]
- distribution of property value taxes among the property classes, and
- use of permissive tax exemptions.

The long-term objectives of these new requirements are to:

- increase municipal financial accountability,
- support municipalities in considering their financial situation and tax setting behaviour, and
- encourage municipalities to decrease industrial and business property tax rates.

These requirements were introduced in 2007 with phased-in implementation. In 2008 municipalities were required to provide a general objective statements for each of the three topics. Full requirements in 2009 entail more detailed policy and objective statements to be provided in the financial plans.

Methodology:
The financial plans for a selected group of municipalities were chosen for content analysis. Municipalities for this subsample were chosen from the financial plans that included statements in relation to the distribution of property taxes among the property classes. From that group, 16 municipalities were then selected based on a diversity of population size and geographic location.

The municipalities' financial plans that were examined were:

- Cities of Vancouver, Kamloops, Kimberly, Revelstoke, and Nanaimo;
- Towns of Fort Nelson, Golden, and Oliver;
- Villages of Cache Creek, Lions Bay, Hazelton, and Gold River; and
- Districts of North Saanich, Tumbler Ridge, and Lake Country.

[42] *Community Charter,* Section165(7) The proposed funding sources must set out separate amounts for each of the following as applicable: (a) revenue from property value taxes; (b) revenue from parcel taxes; (c) revenue from fees; (d) revenue from other sources; (e) proceeds from borrowing, other than borrowing under section 177 [*revenue anticipation borrowing*].

The municipalities' financial plans were analyzed to identify common principles or considerations made in relation to the distribution of property tax among the property classes, and thus the property tax rates charged to each class. Therefore, summaries of statements made in the financial plans are identified under the themes of economic competitiveness, stability, comparison, equity, benefit received, ability to pay, and other.

The table below presents the findings of this analysis. It is recognized that 2008 was a transitional year and obligations in relation to financial disclosure were for broader, more general statements on financial decisions.

Conclusions:
Common policies and considerations include stability (focusing on tax rate stability for residents), economic development, comparison to other municipalities (both neighbours and others in BC), and equity, particularly benefits received. A content analysis of the 16 municipalities found these recurring themes:

- Stability (7)
- Proportionate relationship between property classes (7)
- Reduce non-residential tax (7)
- Comparison of tax rates to neighbouring/BC/similar municipalities (6)
- Relationship between pay and use (3)
- Other themes: encourage investment, affordable, competitive, equity, responsiveness to economic goals, and role of non-tax revenue.

Of the 152 financial plans received, 26 (or 17.1%) specified an objective to decrease industrial and/or business property taxes and shift responsibility to residential properties.

Overall, it is difficult to identify accurately the policies and objectives of the municipalities because a number of plans included language that directly repeated the financial plan example posted on CivicInfo. Of the 16 financial plans, six appear to have copied language from the City of Armstrong's financial plan.

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http://www.demographia.com/dhi.pdf

DEMOGRAPHIA

10th Annual Demographia International Housing Affordability Survey: 2014

Ratings for Metropolitan Markets

Australia • Canada • Hong Kong • Ireland
Japan • New Zealand • Singapore
United Kingdom • United States

With an Introduction by

Alain Bertaud, Urbanist
Stern School of Business, New York University
Former Principal Planner-The World Bank

Data for 3rd Quarter 2013

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10th Annual Demographia International Housing Affordability Survey

Introduction

URBAN PLANNING AND HOUSING AFFORDABILITY

By Alain Bertaud, Urbanist,
Senior Research Scholar, Stern School of Business, New York University
Former Principal Planner - The World Bank
http://alainbertaud.com/

This year, Demographia is publishing its 10th Annual International Housing Affordability Survey. It ranks 360 metropolitan markets in nine countries.

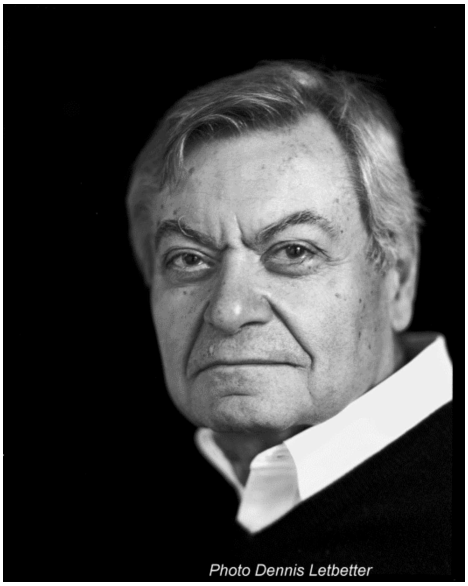


Photo Dennis Letbetter

Are planners in the worst performing cities paying any attention? And are they drawing any conclusions on how to improve the situation? Or do local governments conclude that the best way to increase the supply of affordable housing is to impose new regulations that will mandate developers to build housing units at prices, standards, and in locations selected by the government? The last approach, under the name of inclusionary zoning is unfortunately the most common response, as recently seen, for instance, in New York and Mexico City.

Urban planners have been inventing all sorts of abstractly worded objectives to justify their plans for our future cities – smart growth, livability, sustainability, are among the most recent fads.

There is nothing wrong, of course, for a city to try to be smart, liveable, or sustainable.

But for some reasons these vague and benign sounding objectives usually become a proxy for imposing planning regulations that severely limit the supply of buildable land and the number of housing units built, resulting in ever higher housing prices. In the name of smart growth or sustainability, planners decide that densities should be lower in some places and higher in others. Population densities are not a design parameter whose value depends on the whim of planners but are consumption indicators which are set by markets.

Even the Communist Party of China recently declared that resource allocation is best achieved through markets; why can't urban planners in so-called market economies reach the same conclusions and let markets decide how much land and floor space households and firms will consume in different locations?

It is time for planners to abandon abstract objectives and to focus their efforts on two measurable outcomes that have always mattered since the growth of large cities during the 19th century's industrial revolution: workers' spatial mobility and housing affordability.

As a city develops, nothing is more important than maintaining mobility and housing affordability.

Mobility takes two forms: first, the ability to travel in less than an hour from one part of a city to another; and second, the ability to trade dwellings easily with low transactions costs.

Housing mobility allows households to move to the location that best maximize their welfare. Affordability is the ability for any urban household to be able to rent a dwelling for less than a 25% of its monthly income, or to buy one for less than about three time its yearly income.

The mobility and affordability objectives are tightly related. A residential location that only allows access to only a small segment of the job market in less than an hour commuting time has not much value to households, even if it is theoretically affordable.

For instance, the government of South Africa has been building several million units of heavily subsidized "affordable" housing in areas that require long and expensive commute – transport costs representing in some cases more than 50% of a worker salary. In this case, affordability without mobility is only a poverty trap. Affordability and spatial mobility are therefore inseparable objectives.

Urban planners should routinely monitor land and housing prices and rents by location in the metropolitan area in which they work. Monitoring the market supply side should be one of their main tasks. They should also monitor the changes in households' income distribution, the demand side. That way, they may learn how markets work.

How many urban planning departments publish annually variations in land and housing prices? If they did, they would be obliged to provide their own diagnostic to explain real estate price variations and propose remedial action when housing affordability decrease in an unacceptable manner.

Land use regulations and the availability of trunk infrastructure heavily constrain the supply of developable land. Planners, therefore, have a key role to play in ensuring an elastic supply of land by auditing land use regulations and by planning new trunk infrastructure that would allow the development of new areas or faster travel time to already built-up areas.

A periodic regulatory audit should weed out obsolete regulations to allow an elastic land supply and to increase households' ability to consume the amount of land and floor space that would maximize their welfare in the location of their choice. Part of the audit should concern the regulations, taxes, and administrative practices that unnecessarily increase transaction costs when building new housing units or selling or buying existing ones.

The twin objectives of maintaining mobility and housing affordability should drive the design, financing, and construction of trunk infrastructure.

Because the building of trunk infrastructure often requires the use of eminent domain, governments have a monopoly on its design and construction. Here is a new simple job description for urban planners: plan the development of trunk infrastructure to maintain a steady supply of developable land for future development, but leave land and floor consumption per dwelling to the market.

10th Annual Demographia International Housing Affordability Survey (2013: 3rd Quarter)

There is no silver bullet to increase the supply of affordable housing. But if planners abandoned abstracts and unmeasurable objectives like smart growth, liveability and sustainability to focus on what really matters – mobility and affordability – we could see a rapidly improving situation in many cities. I am not implying that planners should not be concerned with urban environmental issues. To the contrary, those issues are extremely important, but they should be considered a constraint to be solved not an end in itself.

Urban development should remain the main objective of urban planning.

Until now, Demographia has focused its annual affordability survey on a limited number of OECD countries. This is understandable as the data collection task is difficult enough in advanced economies. In many cities, the scarcity of credible data on affordability further demonstrates how little interest the planning profession has in the issue.

However, the housing affordability problem is even worse in emerging economies than the ones in the OECD cities covered by the Demographia survey. In emerging economies, rapidly increasing households income combined with severe constraints on the supply of developable land are putting an enormous pressure on housing prices.

The constraints on land supply are usually due to obsolete regulations, overzealous and predatory bureaucracies - and in deficiencies in timely trunk infrastructure investments.

In Mumbai, for instance, in spite of a spectacular increase in real households' income through the last twenty years, the number of people living in slums has increased and includes now more than half of the population. Paradoxically, a large part of the Mumbai population that has recently reached middle class status is now living in slums![1]

In the case of Mumbai, the severe housing deficiencies are not due to poverty, but to political and bureaucratic inertia.

It is hoped that the clear quantitative approach demonstrated by the Demographia survey would incite local think tanks in India, Brazil and China to develop the data base and the methodology to analyse the affordability problem and find a market solution to solve it.

Alain Bertaud
Urbanist & Senior Research Scholar
Stern School of Business
New York University
Former Principal Urban Planner – World Bank
http://alainbertaud.com/

Biographical information follows....

[1] Patricia Clarke Annez, Alain Bertaud, Bimal Patel and V. K. Phatak, *Working with the market: a new approach to reducing urban slums in India*, The World Bank Elibrary, November 2010. http://elibrary.worldbank.org/doi/book/10.1596/1813-9450-5475

About Alain Bertaud …

Alain Bertaud is a senior research scholar at the NYU Stern Urbanization Project. At the moment, he is writing a book about urban planning that is tentatively titled *Order Without Design*. Bertaud previously held the position of principal urban planner at the World Bank. After retiring from the Bank in 1999, he worked as an independent consultant.

Prior to joining the World Bank he worked as a resident urban planner in a number of cities around the world: Bangkok, San Salvador (El Salvador), Port au Prince (Haiti), Sana'a (Yemen), New York, Paris, Tlemcen (Algeria), and Chandigarh (India).

Bertaud's research, conducted in collaboration with his wife Marie-Agnès, aims to bridge the gap between operational urban planning and urban economics. Their work focuses primarily on the interaction between urban forms, real estate markets and regulations.

Bertaud earned the Architecte DPLG diploma from the Ecole Nationale Supérieure des Beaux-Arts in Paris in 1967.

Highlights from Previous Introductions to the *Demographia International Housing Affordability Survey*

Hon. Bill English, Deputy Prime Minister, New Zealand
(#9: 2013)

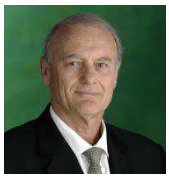
Housing affordability is complex in the detail – governments intervene in many ways – but is conceptually simple. It costs too much and takes too long to build a house in New Zealand. Land has been made artificially scarce by regulation that locks up land for development. This regulation has made land supply unresponsive to demand.

#9: 2012: Robert Bruegmann, PhD, University of Illinois, Chicago
(#8: 2012)

I think it is fair to say that a growing number of people who have looked at the figures have tended to agree that a good many well-meaning policies involving housing may be pushing up prices to such an extent that the negative side-effects are more harmful than the problems the policies were intended to correct.

Joel Kotkin, Chapman University
(#7: 2011)

Although usually thought of as "progressive" in the English speaking world, the addiction to "smart growth" can more readily be seen as socially "regressive". In contrast to the traditional policies of left of center governments that promoted the expansion of ownership and access to the suburban "dream" for the middle class, today regressive "progressives" actually advocate the closing off of such options for potential homeowners.



Dr. Tony Recsei, Save Our Suburbs, Sydney
(#6: 2010)

During the 18th century, especially after the industrial revolution, rural dwellers desperate to make a living streamed into the cities, converting many areas into overcrowded slums. However, as the new economic order began to generate wealth, standards of living improved, allowing an increase in personal living space.

Unless we are vigilant, high-density zealots will do their best to reverse centuries of gains and drive us back towards a Dickensian gloom.

Dr. Shlomo Angel, New York University
(#5: 2009)

For cities to expand outward at their current pace — to accommodate their growing populations or the increased demand for space resulting from higher incomes — the supply of land must not be artificially constrained.

The more stringent the restrictions, the less is the housing market able to respond to increased demand, and the more likely house prices are to increase. And when residential land is very difficult to come by, housing becomes unaffordable.

Dr. Donald Brash, Former Governor, Reserve Bank of New Zealand
(#4: 2008)

...the affordability of housing is overwhelmingly a function of just one thing, the extent to which governments place artificial restrictions on the supply of residential land.

Australia is perhaps the least densely populated major country in the world, but state governments there have contrived to drive land prices in major urban areas to very high levels, with the result that in that country housing in major state capitals has become severely unaffordable...

2007: 3rd Edition 2006: 2nd Edition 2005: 1st Edition

From the Authors
Demographia International Housing Affordability Survey

We are pleased to present this *10th Annual Demographia Housing Affordability Survey*. Over the last decade, the *Demographia Surveys* have brought attention to the public policy driven deterioration of housing affordability, and thus the cost of living, to public attention around the world. Indeed, there is no more compelling domestic public purpose than to maintain and improve the standard of living and minimize poverty.

The proliferation of large cities is a less than two-century old phenomenon. The largest cities have emerged only over the past century. The rise of cities, along with technologies and ubiquitous mobility have transformed a world of poverty into a one with better lives for nearly all, and where nearly all aspire to a higher standard of living. This requires an affordable cost of living, which requires housing affordability.

Yet, the dominant strain of planning, urban containment, *increases* the cost of living. This would be fine in a world of Maslow's "self-actualizers," for whom "making ends meet" is at most a memory. Unacceptably, it condemns a much larger number to lower standards of living, and relegates more to poverty. *The first principle of livability is affordability.* There is an urgent need to facilitate the competitive land markets on which housing affordability depends.

The *Demographia Surveys* seek to fill the void created by the general failure of governments to monitor housing affordability, which is a prerequisite to the steps necessary to maintain and restore it.

The Economist may have best stated the imperative for reform: *the alternative is worse: a nation of renters and rentiers, where only the rich own houses.*

Wendell Cox

The purpose of the *Demographia Surveys* is to alert the public and policy-makers if housing exceeds 3.0 times annual household incomes, that there is institutional failure at the local level. The political and regulatory impediments with respect to land supply and infrastructure provision must be dealt with.

Indeed – the United Nations within its 2007 World Population Report is very forthright when it states –

"Once policymakers and civil society understand and accept the demographic and social composition of urban growth, some basic approaches and initiatives suggest themselves."

"These could have a huge impact on the fate of poor people and the viability of the cities themselves. "

"Throughout the report, the message is clear. Urban and national governments, together with civil society and supported by international organizations, can take steps that make a huge difference for the social, economic and environmental living conditions of a majority of the world's population."

" Three policy initiatives stand out in this connection."

"First, preparing for an urban future requires at a minimum, respecting the rights of the poor to the city. As Chapter 3 shows, many policymakers continue to try to prevent urban growth by discouraging rural – urban migration……."

"These attempts to prevent migration are futile, counterproductive and wrong – a violation of people's rights."

Hugh Pavletich

10th Annual Demographia International Housing Affordability Survey

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10th Annual Demographia International Housing Affordability Survey

By Wendell Cox (Demographia) & Hugh Pavletich (Performance Urban Planning)

The *10th Annual Demographia International Housing Affordability Survey* covers 360 metropolitan markets in nine geographies (Australia, Canada, Hong Kong, Ireland, Japan, New Zealand, Singapore, the United Kingdom and the United States). A total of 85 major metropolitan markets --- with more than 1,000,000 population --- are included, including five of the six largest metropolitan areas in the high income world (Tokyo-Yokohama, New York, Osaka-Kobe-Kyoto, Los Angeles, and London).

1. Rating Housing Affordability

The *Demographia International Housing Affordability Survey* rates housing affordability using the "Median Multiple" in the analysis of Australia, Canada, Hong Kong, Ireland, New Zealand, Singapore, the United Kingdom and the United States. The Median Multiple is widely used for evaluating urban markets, and has been recommended by the World Bank and the United Nations and is used by the Harvard University Joint Center on Housing.

Average multiple data (average house price divided by average household income) is used in Japan, where data for estimating medians is not readily available.

More elaborate indicators, which mix housing affordability and mortgage affordability can mask the structural elements of house pricing are often not well understood outside the financial sector. Moreover, they provide only a "snapshot," because interest rates can vary over the term of a mortgage; however the price paid for the house does not. The reality is that, if house prices double or triple relative to incomes, as has occurred in many severely unaffordable markets, the sum total of mortgage payments will also rise substantially.

Historically, the Median Multiple has been remarkably similar in Australia, Canada, Ireland, New Zealand, the United Kingdom and the United States, with median house prices having generally been from 2.0 to 3.0 times median household incomes. The Average Multiple reached as low 3.5 and 3.9 in the major metropolitan areas of Japan within the last decade, though further historical data has not been identified.

The historic affordability relationship continues in many housing markets of the United States and Canada. However, housing affordability has deteriorated sharply in the past decade in Australia, Ireland, New Zealand, and the United Kingdom and in some markets of Canada and the United States (evidenced by sharply higher. Median Multiples). In every market where there has been a sustained and significant increase in the Median Multiple, more restrictive land use policies have been implemented. These policies are referred to in this *Survey* as "urban containment" (also called as "smart growth," "urban consolidation," "compact city policy," "growth management," "densification policy," etc.).

Regrettably, virtually no government administering urban containment policy effectively monitors housing affordability. However, encouraging developments have been implemented at higher levels of government in New Zealand and Florida, and there are signs of potential reform elsewhere.

Typically, land use policy authorities fail to compare credible measures of housing affordability with historical standards. Moreover, when faced with the reality house cost rises disproportionately high relative to incomes, seek to identify virtually any cause except for the principal cause itself: the destruction of the competitive market for land.

The *Demographia International Housing Affordability Survey* is produced to fill the gap left by urban planning policies that have largely failed to meaningfully monitor housing affordability in the areas under their jurisdiction. This is an important endeavor. Virtually all of the geographies covered in the *Survey* are facing more uncertain economic futures than in the past. As is always the case in such situations, younger people and lower income people tend to be at greater risk. In this environment, securing a standard of living for younger people that at least equals that of their parents and facilitates upward mobility for all must be a principal policy priority – – – certainly one that is higher of greater importance than urban form, how people travel or miniscule environmental gains.

Demographia uses the following housing affordability ratings (Table ES-1).

Table ES-1
Demographia International Housing Affordability Survey
Housing Affordability Rating Categories

Rating	Median Multiple
Severely Unaffordable	5.1 & Over
Seriously Unaffordable	4.1 to 5.0
Moderately Unaffordable	3.1 to 4.0
Affordable	3.0 & Under

2. Housing Affordability in 2013

Housing affordability deteriorated somewhat in the major metropolitan markets. The most affordable major metropolitan markets were in the United States, Ireland and Japan, each of which had a moderately unaffordable rating (between 3.1 and 4.0). Canada was rated "seriously unaffordable," with a Median Multiple of 4.5, along with the United Kingdom, at 4.7. Singapore had a Median Multiple of 5.1, for a severely unaffordable rating. Other severely unaffordable geographies included Australia (6.3), New Zealand (8.0), and Hong Kong (14.9). (Table ES-2).

The most affordable major metropolitan markets (Figure ES-1) were in the United States (Figure ES-1), led by Pittsburgh (2.3) and including burgeoning Atlanta (2.7) and growing Indianapolis (2.7). Hong Kong's Median Multiple of 14.9 is the highest recorded (least affordable) in the 10 years of the *Demographia International Housing Affordability Survey*. Again, Vancouver was second only to Hong Kong, with a Median Multiple of 10.3 Perhaps the most important development is a return to housing unaffordability in coastal California that rivals the levels leading to the housing bust, in San Francisco (9.2), San Jose (8.7), San Diego (7.9) and Los Angeles (7.9) Sydney (9.0) was the fourth least affordable major market. Highly elevated Median Multiples were also recorded in Melbourne (8.4), Auckland (8.0) and London (7.3).

Table ES-2 Housing Affordability Ratings by Nation: Major Markets (Over 1,000,000 Population)						
Nation	Affordable (3.0 & Under)	Moderately Unaffordable (3.1-4.0)	Seriously Unaffordable (4.1-5.0)	Severely Unaffordable (5.1 & Over)	Total	Median Market
Australia	0	0	0	5	5	6.3
Canada	0	2	2	2	6	4.5
China SAR	0	0	0	1	1	14.9
Ireland	0	1	0	0	1	3.7
Japan	0	1	1	0	2	4.0
New Zealand	0	0	0	1	1	8.0
Singapore	0	0	0	1	1	5.1
United Kingdom	0	1	9	6	16	4.7
United States	14	24	6	8	52	3.5
TOTAL	14	29	18	24	85	4.0

All Markets: Among all 360 markets in the principal analysis, there were 95 affordable markets, 84 in the United States, seven in Canada and four in Ireland. There were 122 moderately unaffordable markets, 100 in the United States, 17 in Canada, three in the United Kingdom and one each in Japan and Ireland. There were 67 seriously unaffordable markets and 76 severely unaffordable markets. Australia had 25 severely unaffordable markets, followed by the United States with 23 and the United Kingdom with 15. New Zealand had five severely unaffordable markets, while Canada had five (Table ES-3).

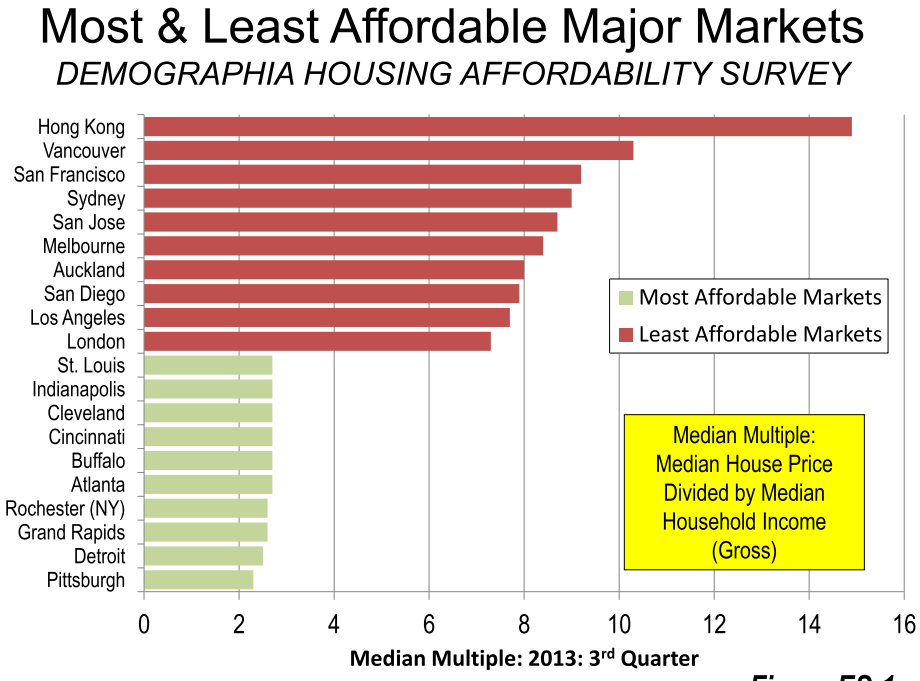

Figure ES-1

Table ES-3 Housing Affordability Ratings by Nation: All Markets						
Nation	Affordable (3.0 & Under)	Moderately Unaffordable (3.1-4.0)	Seriously Unaffordable (4.1-5.0)	Severely Unaffordable (5.1 & Over)	Total	Median Market
Australia	0	0	14	25	39	5.5
Canada	7	17	6	5	35	3.9
China SAR (Hong Kong)	0	0	0	1	1	14.9
Ireland	4	1	0	0	5	2.8
Japan	0	1	1	0	2	4.0
New Zealand	0	0	2	6	8	5.5
Singapore	0	0	0	1	1	5.1
United Kingdom	0	3	15	15	33	4.9
United States	84	100	29	23	236	3.4
TOTAL	95	122	67	76	360	3.7

3. House Size and the Standard of Living

Housing affordability is an important determinant of the standard of living, because higher cost housing leaves less in discretionary incomes. There is an important irony between the geographies in the *Demographia Survey*. The smallest houses are in the most expensive market (Hong Kong), while the largest houses are in the United States, which has the best major market housing affordability (Ireland has the best overall housing affordability). Other things being equal, living space is an important component of the standard of living. On this score, those who pay the most get the least, while those who pay the least get the most.

4. The Market Relationship: House Prices and Household Incomes

In recent decades, there has been a fundamental decoupling of house prices from household incomes in some metropolitan markets from the maximum 3.0 affordability standard. House prices have risen at much greater trajectories than household incomes in many markets This has invariably been associated with urban containment policy and is most evident in Australia, New Zealand and United Kingdom and some markets of Canada and the United States. All markets rated severely unaffordable (Median Multiple over 5.0) have more restrictive land use (principally urban containment) policies, which means than no markets rated severely affordable have liberal land use policy. The same has been true over the entire decade of *Demographia Surveys*.

Severely unaffordable markets are also more attractive to buyers seeking extraordinary returns on investment. short term profits. This further raises prices in markets where urban fringe development is largely prohibited by urban containment's land rationing policies. Substantial international investor activity has been reported in London, Vancouver, the US West Coast markets of Vancouver, Seattle, the San Francisco Bay Area, Los Angeles and San Diego and others. These price increases make such metropolitan areas less livable for average and lower income households.

The key to preserving housing affordability is a "competitive land supply," which appears to be incompatible with urban containment policy both in economic theory and practice. Further, out-of-control house price escalation destabilizes economies, retarding metropolitan area economic growth and job creation.

Concerns have often been voiced in the United Kingdom, the birthplace of urban containment. In 1971, Sir Peter Hall characterized the outcomes of Britain's land use policy as being inconsistent "with the objective of providing cheap owner occupied housing." More recently, John Muellbaur of Oxford University noted its "resource misallocations that can only be described as grotesque."

5. Prospects for a Better Standard of Living

Much of the high income world still mired in laggard economic growth. Household incomes have stagnated or are even declining in real terms. The cost of housing could become an even greater burden for households when artificially low mortgage interest rates rise to historic norms.

The prospects are mixed among the severely unaffordable markets. All of Australia's major markets and Canada's larger major markets are severely unaffordable and thus at particular risk. Failure to jettison the Dublin area's destructive regulations could set Ireland up for a replay of is recent financial nightmare.

Yet there are regions of hope. The central government of New Zealand has recognized the problem and is pursuing strategies to open up land supply and reduce housing costs. Both political parties in the United Kingdom are committed to reforms to improve housing affordability. Singapore's well-designed regulatory structure, with its emphasis on sufficient supply and affordability is capable of restoring housing affordability.

There is even hope in Canada and the United States, where substantial areas of liberal land use policy remain, which permit residents to move to areas with lower costs of living. This is most evident in the United States, where the urban containment markets of coastal California (least affordable in the nation), long renowned for their attractiveness to domestic migrants, lost more than a 2,000,000 net domestic migrants to other parts of the nation during the 2000s. For many, especially young households, the "California" dream requires moving to Texas, Indiana or Georgia.

6. Planning for People

Urban containment policy has rested on various justifications through its long life. Now, urban containment's principal justification is its purported potential to reduce greenhouse gas emissions. However, urban containment policy is ineffective in reducing greenhouse gas emissions. Its reductions are miniscule , while its costs are far beyond any rational level. The European Conference of Ministers of Transport noted the importance of achieving greenhouse gas emissions "at the lowest overall cost to avoid damaging welfare and economic growth."

The Role of Cities: Throughout history, people have moved to cities for better lives, responding to the much greater and more focused economic opportunities they provided. Cities, in combination with the technological and transport advances of the last two centuries have facilitated unparalleled affluence in many nations and have replaced universal poverty with far better lives virtually everywhere. Former World Bank principal urban planner Alain Bertaud (2004) noted that: *Large labor markets are the only raison d'être of large cities.*

Most governments place the highest priority on achieving a ***higher standard of living and less poverty***. Yet, these principal objectives are subverted by urban planning policies that place the urban form or means of transport above the betterment of people. There is a need to reorient planning to achieve more fundamental purposes.

10th Annual Demographia International Housing Affordability Survey

Wendell Cox (Demographia) & Hugh Pavletich (Performance Urban Planning)

1. RATING HOUSING AFFORDABILITY

The *10th Annual Demographia International Housing Affordability Survey* covers 85 major metropolitan markets (more than 1,000,000 population) in Australia, Canada, Hong Kong, Ireland, Japan, New Zealand, Singapore, the United Kingdom and the United States. These include five of the six largest metropolitan areas in the high income world (Tokyo-Yokohama, New York, Osaka-Kobe-Kyoto, Los Angeles, and London).[1] House price data is obtained from house price indexes or developed from statistical databases that account for the vast majority of existing dwellings sold in each of the geographies.

The *Demographia International Housing Affordability Survey* is unique in providing standardized comparisons of housing affordability[2] between international housing markets. The *10th Annual Demographia International Housing Affordability Survey* includes estimates from the September quarter (third quarter) of 2013.

Many housing affordability reviews focus only on national data, masking significant differences between metropolitan markets. Yet metropolitan real estate markets can vary significantly in house price trends, as the experience in the United States indicated during the unprecedented house price increases that developed between 2000 and 2007.[3] In contrast, the *Demographia International Housing Affordability Survey* assesses housing affordability within nations, at the metropolitan market level. This approach not only compares housing affordability within nations, but also permits comparisons between international markets where historical similarities are indicated between housing affordability indices.

Historically, the Median Multiple has been remarkably similar among the nations surveyed, with median house prices generally being 3.0 or less times median household income.

[1] The sixth is Seoul.

[2] Housing affordability is considered in the *Demographia Survey* at the middle of the market, and thus uses median house prices and median household incomes. This is to be contrasted with "affordable housing," which often refers to low-income housing or social housing. Affordable housing is important and is exacerbated by the same restrictive land use policies that have destroyed the historic relationship between house prices and incomes. Housing policy requires a strong focusing on affordable housing, but it also requires a broader focus relating to the entire population. The consequences, among others are slower economic growth, less job creation and greater poverty.

[3] In the United States, housing became seriously unaffordable or severely unaffordable in a number of metropolitan markets (all of them with urban containment regulation). Yet in many other metropolitan markets, housing remained affordable. The national average trend in housing affordability does not reflect these differences. Details on this divergence in affordability by market in the United States is covered in a Heritage Foundation policy report.

1.1 The Standard: The Median Multiple

The *Demographia International Housing Affordability Survey* uses the "Median Multiple"[4] (median house price divided by gross annual median household income[5]) to assess housing affordability. The Median Multiple is widely used for evaluating urban markets, and has been recommended by the World Bank[6] and the United Nations and is used by the Harvard University Joint Center on Housing.[7]

More elaborate indicators, which often mix housing affordability and mortgage affordability can mask the structural elements of house pricing, are often not well understood outside the financial sector. The mixed indicators provide only a "snapshot," because interest rates can vary over the term of a mortgage; however the price paid for the house does not.

The Median Multiple is a reliable, easily understood and essential structural indicator for measuring the health of residential markets and facilitates meaningful and transparent comparisons of housing affordability. Further to this, the Median Multiple provides a solid foundation for the consideration of structural policy options for restoring and maintaining housing affordability in local markets.

1.2 The Median Multiple: Historical International Consistency

Historically, the Median Multiple has been remarkably similar among six of the nations surveyed for the stock of homes included in principal national reports. Reserve Bank of Australia research has shown that the price-to-income ratio was at or below 3.0 in Australia, Canada, Ireland, New Zealand, the United Kingdom and the United States until the late 1980s or late 1990s, depending on the nation (See Section 4). This historic affordability relationship of a Median Multiple in the range of from 2.0 to 3.0, with 3.0 as the outer bound of affordability continues in many housing markets of the United States and Canada.[8] The 3.0 standard was noted in research by Arthur C. Grimes, of Motu Economics and Policy Research and Chair of the Board of the Reserve Bank of New Zealand.

This makes comparisons between these nations, such as those made by international organizations (such as by the International Monetary, the Organization for Economic Cooperation and Development and the World Bank), central banks and other analysts especially appropriate.

In recent decades, housing affordability has deteriorated materially across Australia, Ireland, New Zealand[9] and the United Kingdom, virtually without regard to market size or demand. There has also been substantial housing affordability deterioration in some markets of Canada and the United States. Severe losses in housing affordability have occurred in Hong Kong.

The causes of deteriorating housing affordability are not a mystery. As long-time Governor of the Reserve Bank of New Zealand Donald Brash put it in his introduction to the *4th Annual Demographia International Housing Affordability Survey:*

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[4] Also called a price-to-income ratio.
[5] This is to be contrasted with median "family" income, which is higher and would produce a *lower* multiple.
[6] *The Housing Indicators Program,* http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1169578899171/rd-hs7.htm. Also see Shlomo Angel, *Housing Policy Matters: A Global Analysis.* Oxford University Press, 2000.
[7] *Indicators of Sustainable Development: House Price-to-income Ratio*: http://esl.jrc.it/envind/un_meths/UN_ME050.htm.
[8] A value below 2.0 is affordable, but may indicate depressed economic conditions.
[9] Interest.co.nz also provides housing affordability data using a Median Multiple measure. Interest.co.nz uses a standardized household, rather than the median income household (see: http://www.interest.co.nz/HLA/house_price_to_income_ratio.asp)

...the affordability of housing is overwhelmingly a function of just one thing, the extent to which governments place artificial restrictions on the supply of residential land.

Operating at cross-purposes, many governments have adopted urban containment land regulations (also referred to as "densification," "compact development," "urban consolidation," "growth management," "smart growth," or "livability" policies). that ration land for development. Urban containment severely rations land for development, leading to materially higher land prices, which makes houses more expensive, just as rationing oil increases the price of petrol (Table 1).

Table 1
LAND USE REGULATION CLASSIFICATIONS

The land use regulation categories used in the *Demographia International Housing Affordability Survey* are as follows:

Urban Containment (More Restrictive Land Use Regulation) relies on intrusive land use regulation, and includes markets where residential development (new construction) is strongly controlled by comprehensive plans or development limits. Generally, it is an urban planning objective to make urban containment the *only* legal regulatory structure. There is a strong campaign to make the principal alternative, liberal regulation (below), illegal.

Urban containment[10] may also be characterized by terms such as "densification policy," "compact development", "urban consolidation", "growth management" "and " smart growth." Generally, urban containment regulation is "plan-driven," as planning departments and governments determine where new housing is allowed to be built. There is a "negative presumption," with new development generally prohibited, except in limited areas where it is permitted by government plans.

By severely limiting or even prohibiting development on the urban fringe, urban containment eliminates the "supply vent" of urban fringe development, by not allowing the supply of housing to keep up with demand, except at prices elevated well above historic norms. In addition to higher costly housing costs relative to incomes, the higher densities in urban containment markets are associated with greater traffic congestion and longer average work trip journey times.

Urban containment policies are normally accompanied by costly development impact fee regimes that disproportionately charge the cost of the necessary infrastructure for growth on new house buyers. There is particular concern about the cost increasing impacts of these fees and levies, especially in Australia, Canada (Canada Mortgage and Housing Corporation), New Zealand (New Zealand Productivity Commission) and California.

Liberal Land Use Policy (Less Restrictive Markets) applies in markets not classified as "urban containment." In these markets, residential development is allowed to occur based upon consumer preferences, subject to reasonable environmental regulation.[11] Generally, liberal land use regulation is "demand-driven" There is a presumption allowing land to be developed, except in limited areas, such as parks and environmentally sensitive areas. By allowing development on the urban fringe, liberal land use regulation allows the "supply vent" to operate, which keeps house prices affordable. Less restrictive regulation can also be called *traditional* or *liberal* regulation. In addition to lower costly housing costs relative to incomes, lower population densities in liberal markets are associated with less intense traffic congestion and shorter average work trip journey times.

Classification of Major Markets: The classification of major markets (metropolitan areas with more than 1,000,000 population) is described in the Annex and in Figure 3.

[10] The term "urban containment" is used throughout the *Survey* to denote more restrictive land use regulation.
[11] Liberal land use policy may vary widely, from the near deregulation in some areas of Texas to the "light-handed" zoning based regulations operating throughout much of the rest of the United States.

Regrettably, virtually no government administering urban containment policy effectively monitors housing affordability. However, encouraging developments have been implemented at higher levels of government in New Zealand and Florida, and there are signs of potential reform elsewhere.
Typically, land use policy authorities fail to compare credible measures of housing affordability with historical standards (above). Moreover, when faced with the reality house cost rises disproportionately high relative to incomes, seek to identify virtually any cause except for the principal cause itself: the destruction of the competitive market for land.

The *Demographia International Housing Affordability Survey* is produced to fill the gap left by urban planning policies that have largely failed to meaningfully monitor housing affordability in the areas under their jurisdiction. This is important information that should have been routinely made available by implementing governments through the decades of urban containment policy. Virtually all of the geographies covered in the *Survey* are facing more uncertain economic futures than in the past. As is always the case in such situations, younger people and lower income people tend to be at greater risk. In this environment, securing a standard of living for younger people that at least equals that of their parents and facilitates upward mobility for all must be a principal policy priority – – – certainly one that is higher of greater importance than urban form, motive transport or miniscule environmental gains.

Housing Affordability Ratings: The *10th Annual Demographia International Housing Affordability Survey* uses existing house sales transaction data to rate housing affordability in the 360 markets. Housing affordability ratings are assigned using the Median Multiple (Table 2).

Table 2
Demographia Housing Affordability Rating Categories

Rating	Median Multiple
Severely Unaffordable	5.1 & Over
Seriously Unaffordable	4.1 to 5.0
Moderately Unaffordable	3.1 to 4.0
Affordable	3.0 & Under

2. HOUSING AFFORDABILITY IN 2013

2.1 International Summary

The distribution of housing affordability in the 85 major metropolitan markets[12] (those with more than 1,000,000 residents) has deteriorated over the past year (Figure 1 and Table 3). Hong Kong remains the least affordable, with a Median Multiple of 14.9, while Vancouver is second least affordable, 1t 10.3. The most important development, however, is a return to Median Multiples reminiscent of ratios at the peak of the housing crisis in California, especially in San Francisco (9.2), San Jose (8.7), San Diego (7.9) and Los Angeles (7.7). Across the major markets of California, the Median Multiple has increased at more than three times the national rate, following the trough of 2009. Melbourne deteriorated to a Median Multiple of 8.4, while Auckland was at 8.0 and London at 7.3 (Figure 2).

[12] Grand Rapids, Michigan, in the United States was added as a major metropolitan market in 2013.

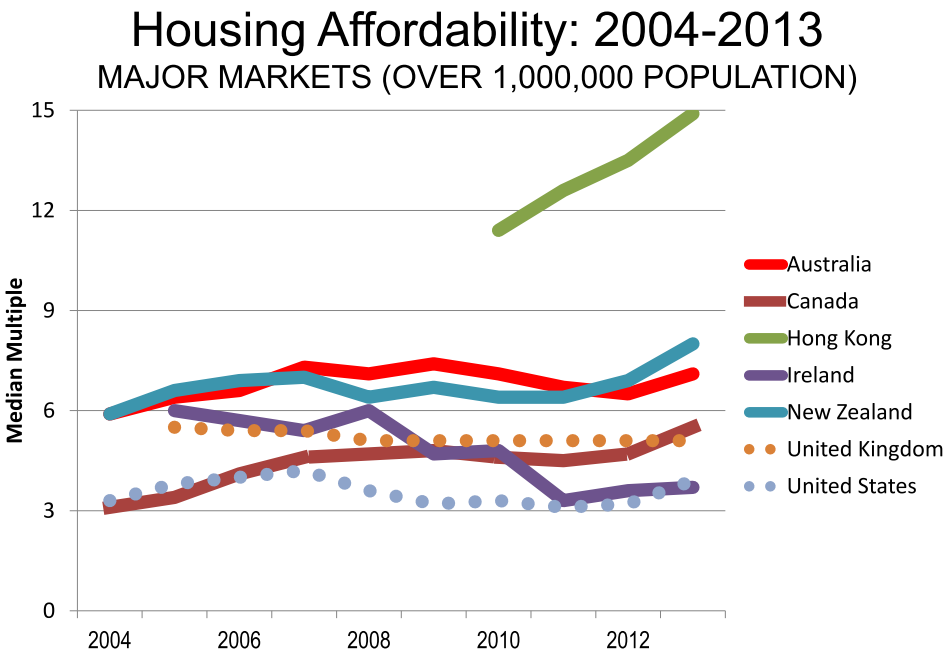


Figure 1

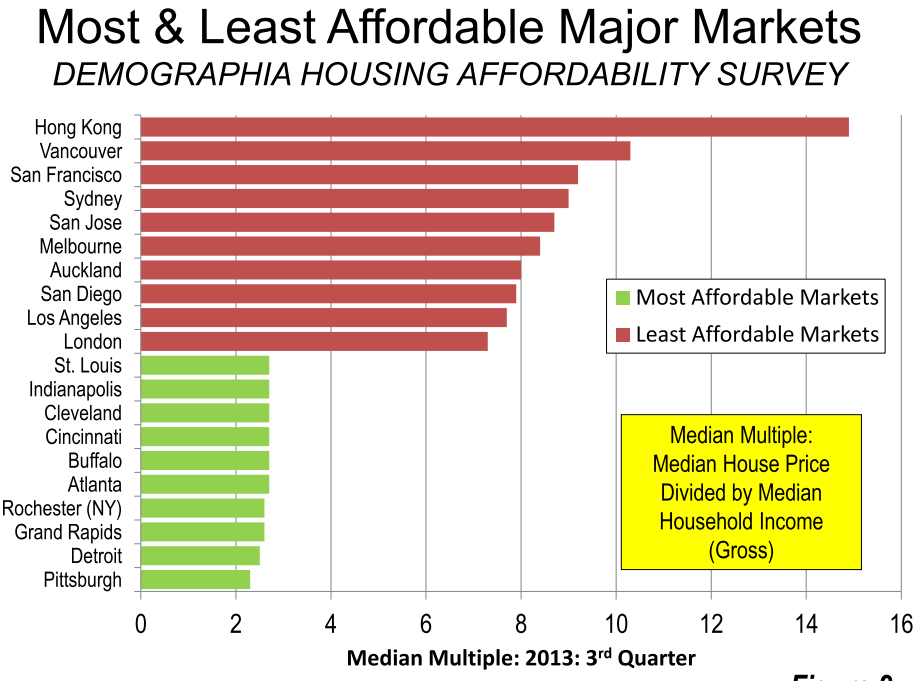


Figure 2

The number of affordable markets dropped to 14 from 20, while there was an increase in the number of moderately unaffordable markets (from 23 to 29). The number of seriously unaffordable markets increased from 14 to 18, while the number of severely unaffordable markets rose by one to 24.

Table 3 Distribution of Markets by Housing Affordability Rating Category			
Rating	Median Multiple	Major Markets (Number)	All Markets (Number)
Affordable	3.0 or Less	14	95
Moderately Unaffordable	3.1 to 4.0	29	122
Seriously Unaffordable	4.1 to 5.0	18	67
Severely Unaffordable	5.1 & Over	24	76
TOTAL		85	360

All 14 of the affordable major markets were in the United States. Among the 29 moderately unaffordable markets, 24 were in the United States, two in were in Canada, one each was in Ireland, the United Kingdom and Japan. All of the major markets of Australia, New Zealand, Hong Kong and Singapore were severely unaffordable. Nearly one-third of the major markets in the United Kingdom and one-third of the major markets in Canada were severely unaffordable. Eight of the 52 major US markets were severely unaffordable (Table 4).

Table 4 Housing Affordability Ratings by Nation: Major Markets (Over 1,000,000 Population)						
Nation	Affordable (3.0 & Under)	Moderately Unaffordable (3.1-4.0)	Seriously Unaffordable (4.1-5.0)	Severely Unaffordable (5.1 & Over)	Total	Median Market
Australia	0	0	0	5	5	6.3
Canada	0	2	2	2	6	4.5
China SAR	0	0	0	1	1	14.9
Ireland	0	1	0	0	1	3.7
Japan	0	1	1	0	2	4.0
New Zealand	0	0	0	1	1	8.0
Singapore	0	0	0	1	1	5.1
United Kingdom	0	1	9	6	16	4.7
United States	14	24	6	8	52	3.5
TOTAL	14	29	18	24	85	4.0

The most affordable major market was Pittsburgh (2.3), followed by Detroit (2.5), Grand Rapids and Rochester (2.6). Fast-growing Atlanta had a Median Multiple of 2.7. There were 29 moderately unaffordable major markets. These were distributed between four geographies, the United States (25), Canada (2), Ireland (1), and Japan, where megacity Osaka-Kobe-Kyoto had an Average Multiple of 3.5. There were 18 seriously unaffordable major markets.

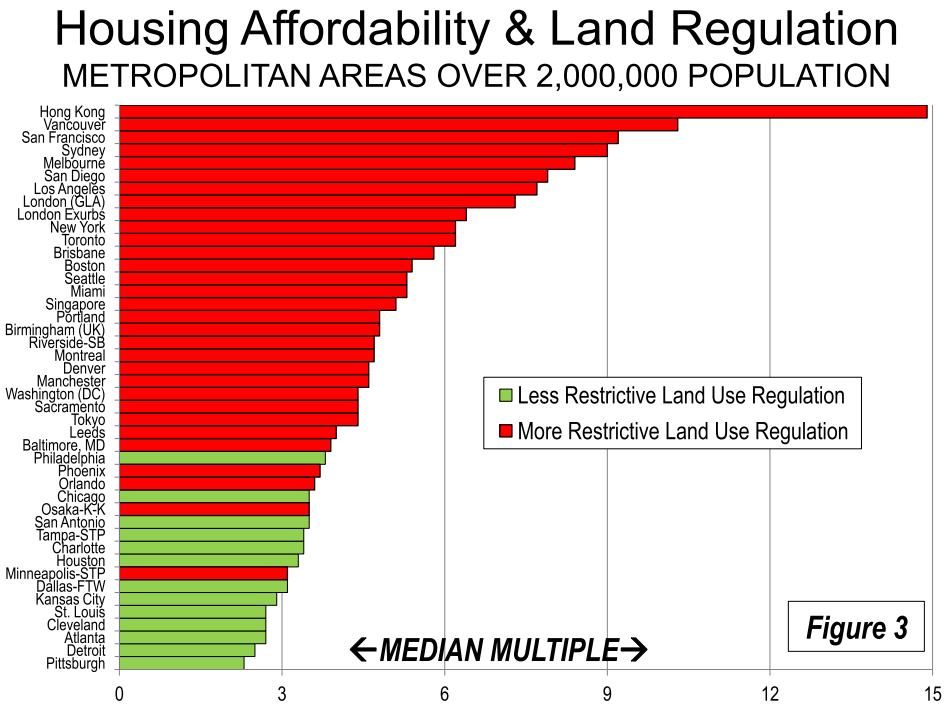
Hong Kong, Vancouver San Francisco, Sydney, Melbourne and Auckland were the most unaffordable major markets...

There were also 24 severely unaffordable markets. Hong Kong had most unaffordable housing , with a Median Multiple of 14.9. This was the fourth year in a row that Hong Kong was the least affordable. Vancouver (10.3) was the second most unaffordable.

This was the sixth year in a row that Vancouver ranked as one of the three least affordable major markets in the *Survey*. Third ranking San Francisco's housing affordability deteriorated markedly, from 7.8 to 9.2. Sydney ranked fourth most unaffordable of the major markets, at 9.0, followed by San Jose (8.7), Melbourne (8.4) and Auckland (8.0).

As in the past, each of seriously unaffordable and severely unaffordable markets were characterized by urban containment regulation. At the same time, the affordable markets are generally characterized by liberal land use regulation, which is associated with greater housing affordability (Table 1, above and Figure 3).

All Markets: Among the 360 metropolitan markets, Ireland's were most affordable, with a Median Multiple of 2.8 (Figure 4). This is the most affordable national rating in the 10 years of the *Survey*. The United States was the second most affordable, at 3.4, followed by Canada (3.9) and Japan (4.0). The least affordable markets were in Hong Kong (14.9), Australia (5.5) and New Zealand (5.5), Singapore (5.1) and the United Kingdom (4.9).



Among all markets, 95 were affordable (Median Multiple of 3.0 or less). There were 122 moderately unaffordable markets (Median Multiple of 3.1 to 4.0) and 67 seriously unaffordable markets (Median Multiple of 4.1 to 5.0). A total of 76 markets were severely unaffordable markets (Median Multiple of 5.1 or higher). Overall, the Median Multiple was 3.7 (Table 4).

The 360 markets are ranked by housing affordability in Schedule 3. All of the 95 affordable markets (having a Median Multiple of 3.0 or below) were in Ireland (4), Canada (7) and the United States (84). Of the 17 most affordable markets, 16 were in the United States and one was in Ireland. There were no affordable markets in Australia, Hong Kong, Japan, New Zealand, Singapore or the United Kingdom.

The 122 moderately unaffordable markets were divided between the United States (100 and), Canada (17), the United Kingdom (3), Ireland (1) and Japan (1). There were no moderately unaffordable markets in Australia Hong Kong, New Zealand or Singapore (Table 5).

The 76 severely unaffordable markets were divided between Australia (25), the United States (23), the United Kingdom (15), New Zealand (6), Canada (5), Hong Kong (1) and Singapore (1).

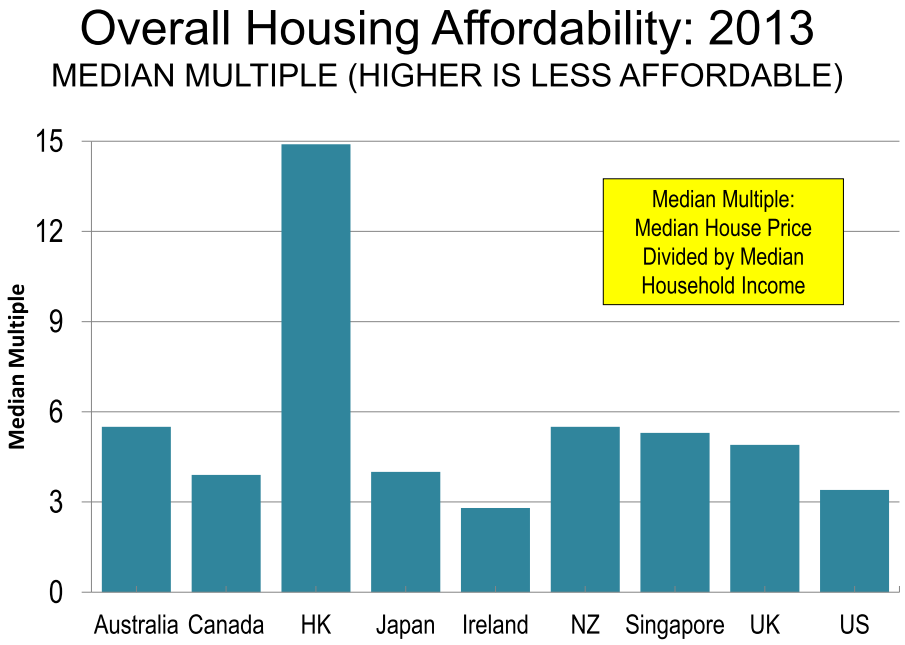


Figure 4

Table 5
Housing Affordability Ratings by Nation: All Markets

Nation	Affordable (3.0 & Under)	Moderately Unaffordable (3.1-4.0)	Seriously Unaffordable (4.1-5.0)	Severely Unaffordable (5.1 & Over)	Total	Median Market
Australia	0	0	14	25	39	5.5
Canada	7	17	6	5	35	3.9
China SAR (Hong Kong)	0	0	0	1	1	14.9
Ireland	4	1	0	0	5	2.8
Japan	0	1	1	0	2	4.0
New Zealand	0	0	2	6	8	5.5
Singapore	0	0	0	1	1	5.1
United Kingdom	0	3	15	15	33	4.9
United States	84	100	29	23	236	3.4
TOTAL	95	122	67	76	360	3.7

2.2 Summary by Geography

The housing affordability situation is summarized by nation below. Major metropolitan area details are provided in Schedules 1 and 2.

Australia: Each of the five major markets continues of Australia continues to be severely unaffordable (Table 6).[13] Moreover, each of Australia's major markets has been severely unaffordable for all 10 years of the *Survey* (a distinction shared only with New Zealand, with its single major market, Auckland). Each of Australia's major markets, with the exception of Sydney had housing affordability within the 3.0 Median Multiple norm during the 1980s, before the widespread adoption of urban containment policies, which is referred to as "urban consolidation" in Australia (Figure 4).

The overall Median Multiple was 6.3 among the major metropolitan markets. Housing affordability deteriorated markedly in Sydney, from a Median Multiple of 8.3 to 9.0 in 2013. Melbourne also experienced a substantial loss in housing affordability, from a Median Multiple of 7.5 in 2012 to 8.4 in 2013. Adelaide (6.3), Perth (6.0) and Brisbane (5.8) were little changed from last year.

... each of Australia's major markets has been severely unaffordable for all 10 years of the "Demographia Survey"

Among all markets, Australia's Median Multiple remained at a severely unaffordable 5.8. After major markets Sydney (9.0) and Melbourne (8.4). Port Macquarie (NSW) was third most unaffordable, at 8.1, followed by the Sunshine Coast (QLD), at 8.0 and the Gold Coast (QLD) at 7.7.

None of Australia's markets was rated either affordable or moderately unaffordable. The land rich Pilbara mining region of Western Australia was generally more affordable than the rest of Australia, but both markets were seriously unaffordable. Karratha had a Median Multiple of 4.1, Australia's best, while Port Hedland had a Median Multiple of 5.0.

Other seriously unaffordable markets included Gladstone (QLD) with a median multiple of 4.2, Townsville (QLD) and Mildura (VIC) with a Median Multiple of 4.5 and nine others.

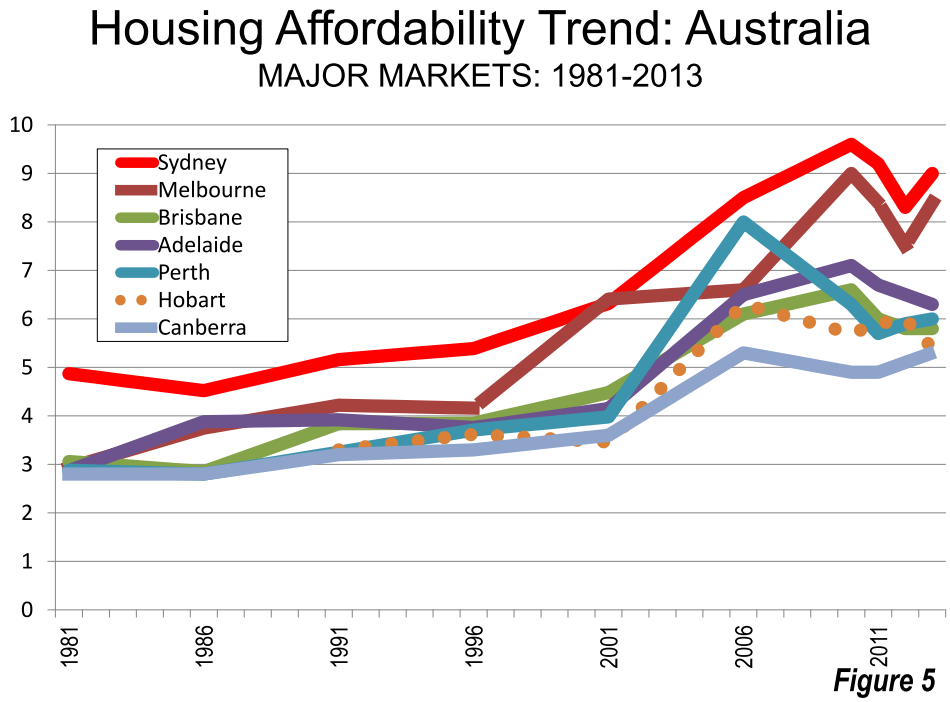


Figure 5

[13] House price data for Australia is from multiple sources, the most important being the Real Estate Industry Association of Queensland, the Real Estate Institute of Victoria, the Real Estate Institute of South Australia, the Real Estate Institute of Western Australia, Australian Property Monitors, the Real Estate Institute of Australia and various real estate internet web sites. Data for some smaller markets is for the year ended September 2013.

Table 6 AUSTRALIA MAJOR METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY		
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over	
NONE	Adelaide, SA Brisbane, QLD Melbourne, VIC	Perth, WA Sydney, NSW

Canada: Housing affordability worsened in Canada's major metropolitan markets, which have an overall rating of severely unaffordable, at a Median Multiple of 4.5 (Table 7).[14] A recent Deutsch Bank report rated Canada's housing as the most overvalued among 20 OECD nations. The housing affordability losses were concentrated in Vancouver, which continues to be the most unaffordable metropolitan area except for Hong Kong (10.3) and Toronto, which now has a Median Multiple of 6.2, its highest in history (Figure 6).

A recent Deutsch Bank report rated Canada's housing as the most overvalued among 20 OECD nations.

Among all markets, housing in Canada is moderately unaffordable with a Median Multiple of 3.9, somewhat worse than last year's 3.6. Housing had been affordable overall in Canada as late as 2000.

Canada's most affordable market was Moncton (NB), with Median Multiple of 2.3. Saint John (NB) had a Median Multiple of 2.5, followed by Fredericton (NB) with a Median Multiple of 2.6 and Windsor (ON), at 2.7. Thunder Bay (ON), Charlottetown (PEI), and Trois-Rivieres (QC) were also rated affordable.

In addition to Vancouver, the three most unaffordable metropolitan markets were in British

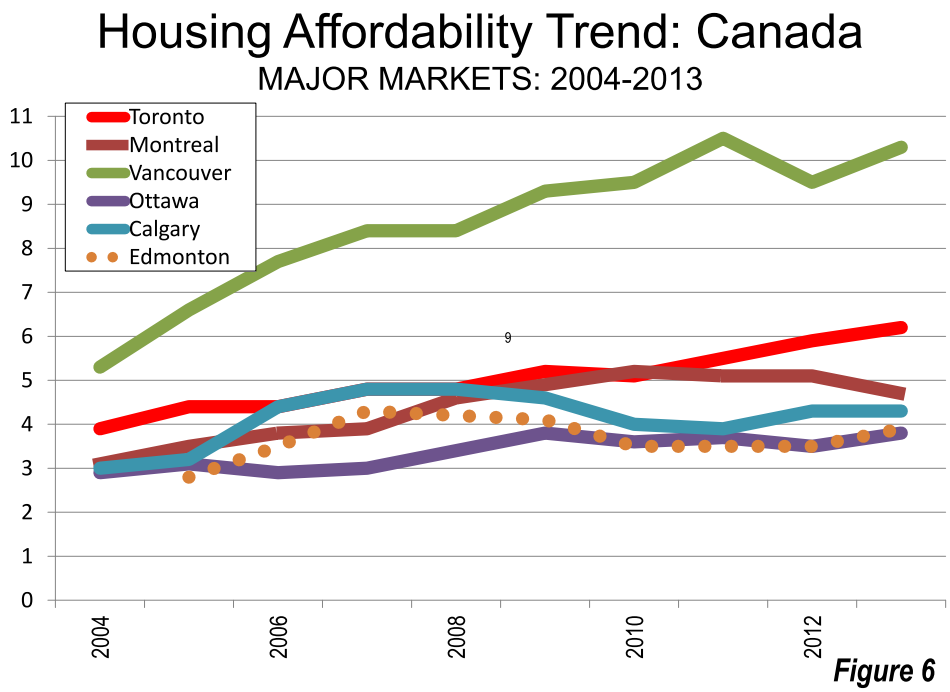


Figure 6

[14] House price data for Canada is based on data from the Canadian Mortgage and Housing Corporation, the Toronto Real Estate Board, Fédération des chambres immobilières du Québec, Chambre immobilière du Grand Montréal, the Calgary Real Estate Board, the Edmonton Real Estate Board, the Canadian Real Estate Association and the Realtors Association of Hamilton-Burlington.

Columbia, including Victoria (6.9), Kelowna (5.9) and the Fraser Valley (5.9). Like Vancouver, house prices in these markets have been driven extraordinarily higher relative to incomes by urban containment regulations.

Table 7 CANADA MAJOR METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY	
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	Toronto, ON Vancouver, BC

Hong Kong (Special Administrative Region, China):, Hong Kong, had the most unaffordable housing in the *Survey* for the fourth straight year, with a Median Multiple of 14.9[15] (Table 8). Hong Kong has the most unaffordable Median Multiple in the history of the *Demographia International Housing Affordability Survey* (Los Angeles reached 11.5 in 2007, at the height of the California-led US housing crisis, which precipitated the world-wide Great Financial Crisis).

Hong Kong, had the most unaffordable housing in the Survey for the fourth straight year, with a Median Multiple of 14.9

Hong Kong's housing affordability has declined materially in recent years. The Chinese University of Hong Kong's' Quality of Life Index indicated that its house price to household income ratio had risen more than 170 percent in 2002. Further, academic research has demonstrated that house prices have been driven considerably higher by land-use restrictions in Hong Kong.[16]

Moreover, the Hong Kong Median Multiple is nearly three times that of Singapore, which has a broadly similar housing stock. It is more than three times the Average Multiples of megacities Tokyo-Yokohama and Osaka-Kobe-Kyoto, which have substantial higher rise multi-family owned housing stock, similar to that in Hong Kong. Housing affordability in Hong Kong is rated as severely unaffordable.

Ireland has the distinction of having earned the most favorable Median Multiple in the history of the "Demographia Survey," at 2.8

Savill's which rates housing affordability for luxury residential space rates Hong Kong as the most expensive city in the world, a title Hong Kong has held for the past five years.

Table 8 HONG KONG: MAJOR METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY	
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	Hong Kong

[15] House price developed from the Land Registry data.
[16] Hui, C. M. & F. K. Wong (n.d.), "Dynamic Impact of Land Supply on Population Mobility with Evidence from Hong Kong," http://www.prres.net/Papers/Hui_Dynamic_impact_of_land_supply_on_population_mobility.pdf.

Ireland: Ireland house prices have now nearly returned to normal affordability as a result of the housing bust. Ireland has the distinction of having earned the most favorable Median Multiple in the history of the *Demographia Survey,* at 2.8.[17] Dublin, the only major metropolitan market, was the least affordable with a Median Multiple of 3.7 (Table 9). Waterford (2.0) was rated as the most affordable in Ireland and fourth most affordable out of the 360 metropolitan areas in the *Survey*. All of Ireland's other markets (Cork, Galway and Limerick were also rated affordable).

Table 9 IRELAND: MAJOR METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY	
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	NONE

Japan: Data is available for only two of Japan's two major metropolitan markets, Tokyo-Yokohama[18] and Osaka-Kobe-Kyoto.[19] Tokyo-Yokohama is the world's largest urban area (37 million), and the metropolitan areas covers all or part of four prefectures, Tokyo (called the "Tokyo metropolis," though only part of the metropolitan area),[20] as well as largely suburban Kanagawa, Saitama and Chiba. Osaka-Kobe-Kyoto ranks as the 14th largest urban area in the world (17 million) and covers all or part of Osaka, Hyogo, Kyoto and Nara prefectures.

... Japan has the most affordable housing of any megacities (over 10,000,000 residents) in the "Demographia Survey."

Housing is seriously unaffordable in Tokyo-Yokohama, with a 4.4 Average Multiple (average house price divided by average household income).[21] Osaka-Kobe-Kyoto has an Average Multiple of 3.5 and is thus rated as moderately unaffordable (Table 10).[22] Despite these ratings, Japan has the most affordable housing of any megacities (over 10,000,000 residents) in the *Demographia Survey.*

Table 10 JAPAN: MAJOR TWO LARGEST METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY	
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	NONE

[17] House prices calculated from the Residential Property Price Register of the Property Services Regulatory Authority.
[18] The Tokyo metropolitan area is principally located in the prefectures of Tokyo, Chiba, Kanagawa and Saitama. It is not to be confused with the "Tokyo metropolis," which is another name for the prefecture of Tokyo.
[19] The Osaka-Kobe-Kyoto metropolitan area is largely contained in the prefectures of Osaka, Hyogo, Kyoto and Nara.
[20] This popularly used term ("metropolis") is misleading, because it does not apply to the metropolitan area. The failure to understand this distinction has resulted in invalid demographic analyses from time to time.
[21] The Average Multiple is used because there is insufficient data from which to estimate a Median Multiple. The Average Multiple tracks closely with the Median Multiple, where such comparisons can be made. For example, in both Canada and the United States, the Average Multiple was 0.2 lower than the Median Multiple in 2010 (Calculated from Statistics Canada National Household Survey: 2011 data and National Association of Realtors data in the United States). The ratings are considered provisional because the Median Multiple and Average Multiple may not be strictly comparable.
[22] House prices are estimated from The Land Institute of Japan data (http://www.lij.jp/english/).

New Zealand: New Zealand's only major metropolitan market, Auckland, is severely unaffordable, with a Median Multiple of 8.0 (Table 11). Auckland ranks as the seventh most unaffordable among the 85 existing major markets. Auckland, like Australia's five major metropolitan markets, has been rated severely unaffordable in all 10 *Demographia International Housing Affordability Surveys.*

Overall, housing in New Zealand was severely unaffordable, with a Median Multiple of 5.5.[23] Six of New Zealand's markets were severely unaffordable, while two markets were seriously unaffordable. Outside of Auckland, Tauranga-Western Bay of Plenty was the most unaffordable, with a Median Multiple of 6.6. The second and third largest markets were severely unaffordable, with Christchurch at 5.8, and Wellington at 5.4. Two markets were seriously unaffordable, Palmerston North-Manawatu, at 4.5 and Hamilton-Waikato, at 4.8

Table 11
NEW ZEALAND: MAJOR METROPOLITAN MARKETS
AFFORDABILITY AND SEVERE UNAFFORDABILITY

AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	Auckland

Singapore: The Median Multiple in Singapore was estimated at 5.1 in the third quarter of 2013,[24] for a rating of severely unaffordable (Table 12). Singapore has perhaps the most land constrained geography of any major metropolitan area in the world, both by virtue of its being an island and having no mainland periphery. As a result, there is virtually no potential for greenfield development.[25]

In Singapore, publicly sponsored but privately owned housing (under the aegis of the Housing and Development Board (HDB) represents nearly 90 percent of the owned market. Singapore has an overall 88 percent rate of home ownership, the highest of any geography in the *Survey*. Buyers are free to sell their own houses, without any further intervention by HDB. Further, there are restrictions on foreign ownership, which may have shielded Singapore from the heightened cost escalation that may be occurring from globalization of the real estate market in places like Vancouver, coastal California, Hong Kong and London.

Singapore's housing is three times as affordable as Hong Kong's, though less affordable than Tokyo and Osaka-Kobe-Kyoto

With severely unaffordable housing, Singapore has not been as successful as might have been hoped. In some years insufficient supply was produced, which resulted in the now elevated costs. But, by comparison to metropolitan areas that have followed the British urban containment model, Singapore's results have been stellar. Housing affordability has virtually spiraled out of control in places like Hong Kong, Vancouver, San Francisco, San Jose, Sydney, Melbourne, Auckland and London, reaching levels of 7.0 to nearly 15.0.

Part of the of the reason Singapore has not experienced the catastrophic housing affordability of Hong Kong, Vancouver, San Francisco and Sydney is that its regulation is focused on maintaining an adequate supply of affordable housing. This is virtually the opposite of urban containment regulatory regimes, which to severely limit land supply and to virtually ignore the housing affordability impacts.

[23] Part of the variation in New Zealand Median Multiples since last year was due to recalibration of income data based on the 2013 Census (which had been delayed from 2011 due to the Christchurch earthquakes)
[24] Median house price from the Singapore Real Estate Exchange.
[25] Faced with a similar situation, treaties between Switzerland, France and Germany effectively create international metropolitan areas (labor markets) by the use of cross border commuting permits in the Basel and Geneva areas.

It is notable that Singapore has a housing stock generally similar to that of Hong Kong, less developable land, larger houses and a Median Multiple approximately two-thirds lower.

Table 12 SINGAPORE: MAJOR METROPOLITAN MARKETS AFFORDABILITY AND SEVERE UNAFFORDABILITY	
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over
NONE	Singapore

United Kingdom: Among the major markets, housing is seriously unaffordable in the major markets, with a Median Multiple of 4.7 (Table 13). London (the Greater London Authority) was the least affordable market, with a median multiple of 7.3. The next least affordable major markets were Plymouth & Devon, at 7.0 and the London Exurbs (East and Southeast England, virtually all outside the London greenbelt) at 6.4. Three other major markets, Bristol – Bath, Liverpool & Merseyside, and Stoke-on-Trent & Staffordshire were severely unaffordable. There were no moderately unaffordable nor any affordable major markets.[26]

Among all markets, the United Kingdom has a Median Multiple of 4.9, slightly improved from last year's 5.1. Falkirk had the best housing affordability, with a Median Multiple of 3.5, followed by Belfast, at 3.6. Each of these markets was rated moderately unaffordable. There are no affordable markets in the United Kingdom Bournemouth & Dorsett was the most unaffordable of all UK markets, with a Median Multiple of 8.6.

Table 13 UNITED KINGDOM: MAJOR METROPOLITAN MARKET AFFORDABILITY AND SEVERE UNAFFORDABILITY		
AFFORDABLE Median Multiple: 3.0 & Under	***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over	
NONE	Bristol-Bath Liverpool & Merseyside London (GLA)	London Exurbs (E & SE England) Plymouth & Devon Stoke-on-Trent & Staffordshire

United States: Housing affordability deteriorated in the major markets[27] of the United States from a Market Median of 3.2 to 3.5.[28] This year, 14 major markets are rated as affordable, down from 20 last year (Table 14). There are 24 moderately unaffordable major markets, six seriously unaffordable markets and eight severely unaffordable markets (Figure 7).

The most affordable major markets are Pittsburgh (2.3), Detroit (2.5), Grand Rapids (2.6), Rochester (2.6) with six additional markets having a Median Multiple of 2.7. This includes Atlanta, which has been among the fastest-growing large metropolitan areas in the high income world for three decades.

[26] Median house prices are calculated from the Land Registry of England and Wales, the Registers of Scotland and the University of Ulster data.
[27] Grand Rapids, Michigan has been added by the United States Census Bureau as the 52nd metropolitan area with more than 1,000,000 population.
[28] House prices derived from the National Association of Realtors, the National Home Builders Association, Realcomp (Detroit), the Clarksville (Tennessee) Association of Realtors, the Coastal Carolinas Association of Realtors and the Arkansas Realtors Association.

Houston, which has virtually always been rated affordable is now moderately unaffordable, with a Median Multiple of 3.3. This increase has been attributed to the rapid increase in demand for housing, which strained local land developers in the delivery of finished lots.[29] This is likely to be a temporary situation.

The least affordable markets were San Francisco (9.2) and San Jose (8.7). They were joined by two other California metropolitan areas, San Diego (7.9) and Los Angeles (7.7). New York was the fifth most unaffordable with a median multiple of 6.2, followed by Boston (5.4), Seattle (5.3), Miami (5.3) and Portland (4.8).

The 10 year history of housing affordability in the 10 largest metropolitan areas of the United States indicate that four are now severely unaffordable (Los Angeles, New York, Boston and Miami), all of which have more restrictive land use regulation (Table 1). The recent serious deterioration of housing affordable in Los Angeles is particularly evident. Washington, also with more restrictive land use regulation, is seriously unaffordable. Philadelphia, Chicago, Dallas-Fort Worth, Houston and Atlanta, which straddle the maximum affordability Median Multiple of 3.0 (Figure 6), with the most liberal regulation in the latter three.

Soon-to-be major metropolitan area Honolulu was the least affordable in the US... at 9.4.

Among all US markets, 36 markets were rated affordable. The most affordable markets were Rockford, Illinois and Utica, New York (both 1.7). Warner Robbins, Georgia had a median multiple of 1.9 while four metropolitan areas, Appleton, Wisconsin, Decatur, Illinois, Lansing, Michigan and Toledo, Ohio had Median Multiples of 2.0.

Soon-to-be major metropolitan area[30] Honolulu was the least affordable in the US, which at 9.4. In the international rankings Honolulu trailed only Hong Kong and Vancouver. Santa Barbara was second least affordable (9.3) San Francisco (9.2) ranked third, with nearby Santa Cruz as third fourth least affordable, at 9.0. San Jose was the fifth least affordable market (8.7). Eleven of the twelve most unaffordable markets in the United

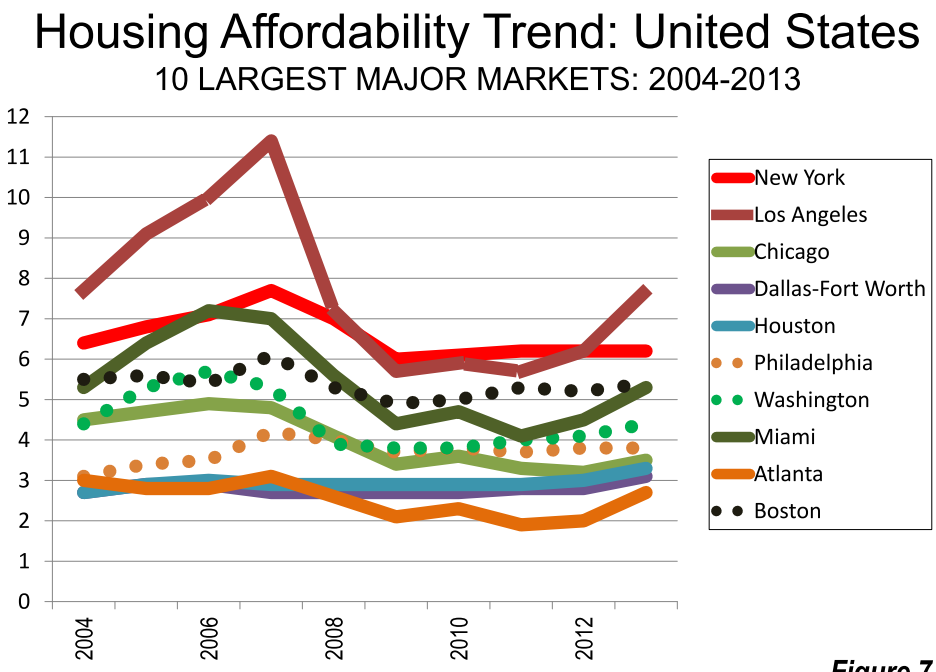


Figure 7

[29] David Wessell and Kris Hudson (August 19, 2013), "Houston Hits Housing Hurdle," The Wall Street Journal, http://online.wsj.com/news/articles/SB10001424127887323455104579017182650412434.
[30] At the present growth rate, Honolulu will exceed 1,000 residents by 2015.

States were in California, including five in the San Francisco Bay area (San Francisco, San Jose, Santa Cruz, Napa and Santa Rosa).

There are indications of a substantial worsening housing affordability situation in California, which was the core of the US housing bust of the last decade that precipitated the Great Financial Crisis. House prices in the six major markets of California have risen nearly 40% relative to incomes since bottoming out in 2009. Even at the 2009 low point, however, four of the six markets had Median Multiples well above historic norms. By comparison, in the other 46 major markets, house price increases have averaged only 12%, less than one-third that of the California markets. The Median Multiple has been returned to near peak pre-bust levels in San Francisco (9.2) and San Jose (8.7), while San Diego (7.9) and Los Angeles (7.7) are close behind.
The largest increases have been in Riverside San Bernardino, which has risen 57% to 4.4 and Sacramento, which has risen 42% to 3.8. California's draconian urban containment law seems likely to drive these prices even higher.

Overall, the US Median Multiple was 3.4 (moderately unaffordable). The United States had 84 affordable markets, 100 and moderately unaffordable markets, 29 seriously unaffordable markets and 23 severely unaffordable markets.

Table 14
UNITED STATES: MAJOR METROPOLITAN MARKETS
AFFORDABILITY AND SEVERE UNAFFORDABILITY

AFFORDABLE Median Multiple: 3.0 & Under		***SEVERELY UNAFFORDABLE*** Median Multiple 5.1 & Over	
Atlanta, GA	Indianapolis. IN	Boston, MA-NH	New York, NY-NJ-PA
Buffalo, NY	Kansas City, MO-KS	Los Angeles, CA	San Francisco-Oakland, CA
Cincinnati, OH-KY-IN	Louisville, KY-IN	Miami, FL	San Jose, CA
Cleveland, OH	Memphis, TN-MS-AR	San Diego, CA	Seattle, WA
Columbus, OH	Pittsburgh, PA		
Detroit, MI	Rochester, NY		
Grand Rapids, MI	St. Louis,, MO-IL		

4. HOUSE SIZE AND THE STANDARD OF LIVING

But housing affordability differences identified in the *Demographia International Housing Affordability Survey* go much deeper than simple housing affordability. House sizes vary even more than housing affordability among the nine geographies[31] (Figure 8). Other things being equal, living space is an important component of the standard of living.

In living space those who pay the most get the least, while those who pay the least get the most.

Housing affordability is approximately four times better in the major metropolitan markets of Ireland and the United States than in the most unaffordable market, Hong Kong. However, the difference in relative cost per square meter or square foot approach 20 times as high in Hong Kong as in the United States.

[31] Third quarter 2013 data for the United States indicates that average and median sized houses have increased further in size, reach all time records in both indicators (data from the US Census Bureau).

The differences between the United States (with the least costly major markets) and other geographies are smaller, with cost per square meter or square foot estimated at. 1.5 times as high in Canada, 1.8 times as high in Australia and Japan, 2.5 times as high in Ireland and New Zealand and 3.5 times as high in Singapore and the United Kingdom (Figure 9).[32] In living space those who pay the most get the least, while those who pay the least get the most.

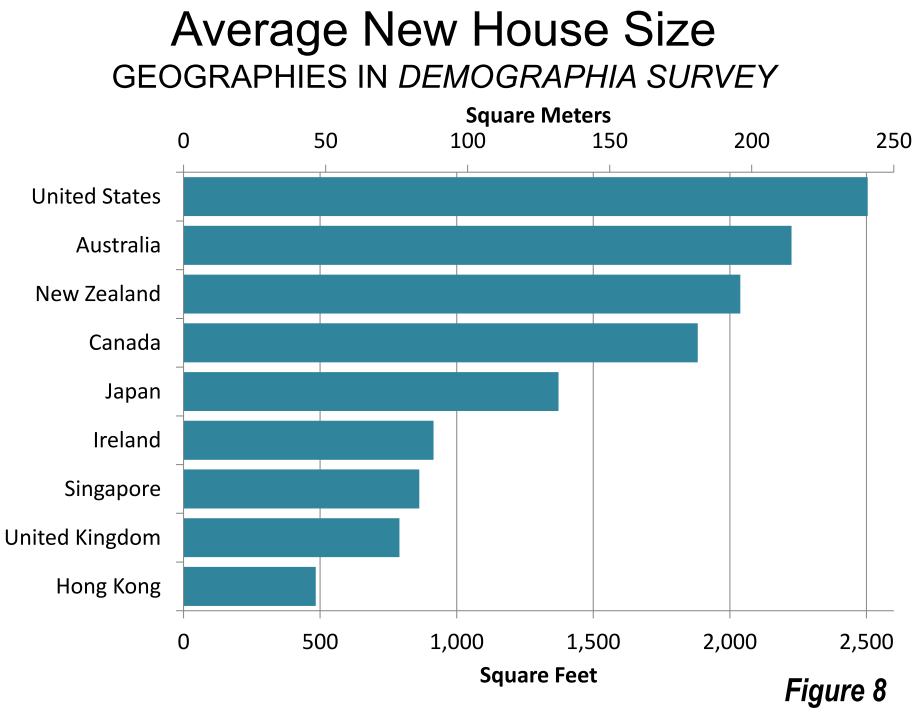


Figure 8

In this regard, Roy Thomas pointed out in *The Containment of Urban England* that "the economical use of land has not made construction of dwellings cheaper." [33] The combination of unaffordability and reduced house size in these markets directly refute claims that affordability can be maintained by trade-offs between land consumption and household space."

4. THE MARKET RELATIONSHIP: HOUSE PRICES AND HOUSEHOLD INCOMES

As noted above, there has been a fundamental relationship between house prices and household incomes, where regulatory systems permit consumer preference to operate (as has been noted above). National price-to-income ratios were at 3.0 or below in Australia, Canada, Ireland, New Zealand, the United Kingdom and the United States until the late 1980s or late 1990s (Figure 9).[34] This historic Median Multiple affordability range of 2.0 to 3.0 continues in markets of the United States, Canada and Ireland (Table 15).[35]

Decoupling of House Prices from Household Incomes

In recent decades, there has been a fundamental decoupling of house prices from household incomes in some metropolitan markets. House prices have risen at much greater trajectories than household incomes in many

[32] Using the housing affordability relationships identified in this *Demographia Survey.*
[33] P. Hall, R. Thomas, H Gracey and R. Drewett (1973), *The Containment of Urban England*, George Allen & Unwin.
[34] Anthony Richards, *Some Observations on the Cost of Housing in Australia,* Address to 2008 Economic and Social Outlook Conference The Melbourne Institute, 27 March 2008 http://www.rba.gov.au/speeches/2008/sp-so-270308.html. This research included all nations covered in the *Demographia International Housing Affordability Survey* except for Ireland. The Richards research is also illustrated in the of the National Housing Council of Australia, http://www.fahcsia.gov.au/sa/housing/pubs/housing/national_housing_supply/Documents/default.htm (Figure 1.1).
[35] A value below 2.0 is affordable, but may indicate depressed economic conditions.

markets This has invariably been associated with urban containment policy and is most evident in Australia, New Zealand and United Kingdom and some markets of Canada and the United States. The obvious impact of this supply rationing, indicated by economic theory, is higher house prices, other things being equal. In recent years, it has been typical for the most rigidly regulated urban containment markets to have Median Multiples from 1.5 to four times (or more) the 3.0 standard.

Table 15
AFFORDABLE HOUSING MARKETS: DEFINITION

For metropolitan areas to rate as 'affordable' and ensure that housing bubbles are not triggered, housing prices should not exceed three times gross annual household earnings. To allow this to occur, new starter housing of an acceptable quality to the purchasers, with associated commercial and industrial development, must be allowed to be provided on the urban fringes at 2.5 times the gross annual median household income of that urban market.

The critically important Development Ratios[36] for this new fringe starter housing, should be 17 - 23% serviced lot / section cost - the balance the actual housing construction.

Ideally through a normal building cycle, the Median Multiple should move from a Floor Multiple of 2.3, through a Swing Multiple of 2.5 to a Ceiling Multiple of 2.7 - to ensure maximum stability and optimal medium and long term performance of the residential construction sector.

-Hugh Pavletich
Performance Urban Planning

Housing has become severely unaffordable in many of the markets covered by *Demographia International Housing Affordability Survey*, most obviously Australia, New Zealand and United Kingdom, including both vibrant and depressed markets. At the same time, in markets that have averted wide ranging urban containment policies, housing has remained far more affordable.

In fact, over the 10 years of the *Demographia International Housing Affordability Survey*, all metropolitan areas that have reached severe housing affordability (a Median Multiple of more than 5.0) have had restrictive land-use regulation, especially urban containment policy. On the other hand, no liberally regulated metropolitan area has reached severe housing affordability. An examination of longer historical data (available in Australia, Canada, New Zealand, the United Kingdom and the United States) confirms this for earlier years.

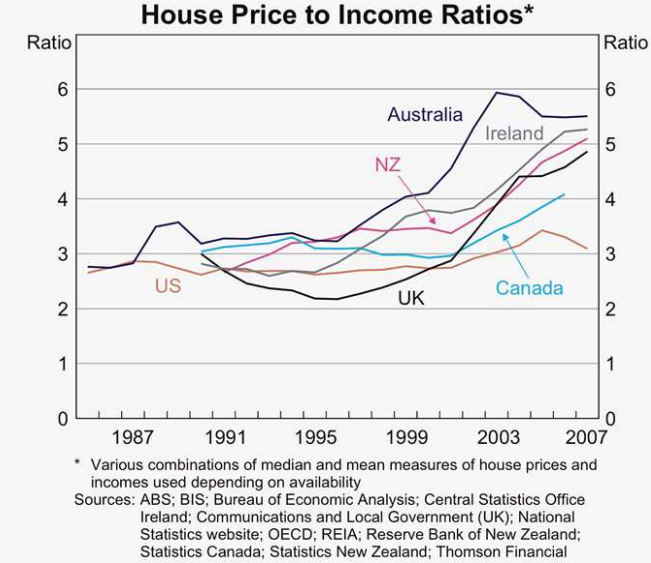


Figure 9

[36] The development ratio is the cost of the finished land (underlying infrastructure complete) divided by the house construction cost plus the finished land. This issue is extensively discussed with respect to the United States market in the *Demographia Residential Land & Regulation Cost Index*.

From Homes to Global Investment Portfolios

Until recently, metropolitan area housing markets were largely relatively local in scope and catered principally to households seeking primary residences. There was always some investment activity, even where Median Multiples were in the affordable range, as investors sought normal returns on investment.

However, the extraordinary returns arising from the rigged markets of urban containment have, understandably, attracted additional investors (pejoratively called "speculators"). This has been noted in research on the US housing crisis.[37] Moreover, economic research has associated urban containment with greater price volatility and more intense speculation.[38] Further evidence provided in research finding that, among 247 US metropolitan areas in the US housing boom and bust, those with more restrictive regulation were significantly more vulnerable to greater house price volatility than those with more liberal regulation.[39]

...with greater access to local real estate market conditions around the world, metropolitan housing markets with urban containment policies are becoming more attractive to global investors, seeking extraordinary investment returns.

Now, with greater access to local real estate market conditions around the world, metropolitan housing markets with urban containment policies are becoming more attractive to global investors, seeking extraordinary investment returns. Substantial international investor activity has been reported in London, Vancouver, the US West Coast markets of Vancouver, Seattle, the San Francisco Bay Area, Los Angeles and San Diego and others.

This intensifies the need to respond with policies that right the balance between supply and demand, facilitating not only better housing for local residents, but also greater economic stability.

Metropolitan Competitiveness Impaired by Urban Containment Policy

At the same time, research in the United States, the United Kingdom and the Netherlands associates slower economic growth and job creation with strict land use policies, such as urban containment.

... research in the United States, the United Kingdom and the Netherlands associates slower economic growth and job creation with strict land use policies, such as urban containment.

Raven Saks (US Federal Reserve Board) found that where housing supply is more constrained by regulations, employment growth is generally lower than expected. [40] Vermeulen (Netherlands Bureau of Economic Analysis) and Van Ommeren (VU University) associated slower employment growth in the Randstad, with its

[37] A. D. Haughwout, J. Tracy & W. van der Klaauw (2011), "Real Estate Investors, the Leverage Cycle and the Housing Market Crisis," Federal Reserve Bank of New York.
[38] E. L. Glaeser, & J. Gyourko (2008), Rethinking Federal Housing Policy: How to Make Housing Plentiful and Affordable, American Enterprise Institute.
[39] A. H. Anundsen & Christian Heeboll, "Supply restrictions, subprime lending and regional US housing prices," http://www.dallasfed.org/assets/documents/research/events/2013/13housing_heeboll.pdf
[40] R. E. Saks (2005), *Job Creation and Housing Construction: Constraints on Metropolitan Area Employment Growth,* Federal Reserve Board.

more stringent housing supply limitations.[41] Urban containment policy has also been associated with higher commercial development costs[42] and higher retail prices,[43]

Economists Brian Jensen and urban economist Edwin Mills concluded that restrictive land use regulations played a negatively decisive role in the Great Financial Crisis:

> "Indeed, it is difficult to imagine another plausible cause of the 2008–2009 financial crisis. Popular accounts simply refer to a speculative housing price bubble. But productivity growth in housing construction is faster than in the economy as a whole and the US has an aggressive and competitive housing construction sector. In the absence of excessive controls, housing construction would quickly deflate a speculative housing price bubble."[44]

There is a considerable literature on the economic consequences of urban containment policy.

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The key to preserving housing affordability is a "competitive land supply," according to Brookings Institution economist Anthony Downs.[45] This requires continual attention to land costs. A sufficient supply of land cannot be reliably measured by administrative attempts to match projections of supply with demand (such as a "20 year land supply") are not fundamentally rooted in the price of land. There is a simple measure of land supply: there is enough if raw land prices permit development of new housing at historic price ratios to incomes.[46]

There is a simple measure of land supply: there is enough if raw land prices permit development of new housing at historic price ratios to incomes

These are not new concerns. In 1973, Sir Peter Hall, Ray Thomas, Harry Gracey and Roy Drewett published a two-volume evaluation of the impacts of the 1947 Town and Country Planning Act. They characterized the results as being inconsistent "with the objective of providing cheap owner occupied housing" and further found that that the greatest burdens had been placed on lower income households. [47]

Paul Cheshire and Stephen Sheppard of the London School of Economics conclude that "over time controlling land supply by fiat has generated price distortions on a par with those observed in Soviet bloc

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[41] W. Vermeulen and J.Van Ommeren (2008), "Does Land Use Planning shape Regional Economies?" Tinbergen Institute, http://www.tinbergen.nl/discussionpapers/08004.pdf

[42] P. C. Cheshire, & C. Hilber (2008), Office Space Supply Restrictions in Britain: *The Political Economy of Market Revenge*, London School of Economics, http://www2.lse.ac.uk/geographyandenvironment/pdf/office per cent20space per cent20supply per cent20restrictions per cent20in per cent20britain.pdf

[43] B. Lewis, M. Ballek, C. Craig, V. Harris, B. Levi, H. Mullings, I. Osborne, S. Anthoy, D. Bugrov, J. Kondo, V. Palmade, J. Rames, S. Fidler, N. Lovegrove & M. Baily (1998), *Driving productivity and growth in the UK economy*, McKinsey Global Institute, http://www.mckinsey.com/insights/mgi/research/productivity_competitiveness_and_growth/driving_productivity_and_growth_in_the_uk_economy

[44] Brian N. Jansen, Edwin S. Mills (2011), Distortions Resulting from Residential Land Use Controls in Metropolitan Areas, J Real Estate Finan Econ (2013) 46:193–202 http://download.springer.com/static/pdf/168/art%253A10.1007%252Fs11146-011-9310-7.pdf?auth66=1389980141_f43aadde1fe3e4d2aaec56499c5e152c&ext=.pdf

[45] Downs, Anthony. *New Visions for Metropolitan America* (Brookings Institution Press, 1994).

[46] Research on the association between urban containment policy and higher housing costs relative to incomes is summarized at "The Association between Prescriptive Land Use Regulation and Higher House Prices.

[47] P. Hall, R. Thomas, H Gracey and R. Drewett (1973), *The Containment of Urban England*, George Allen & Unwin.

countries during the 1970s and 1980s. They further contend that the major aim of restrictive land use policy is "to constrain space consumptions irrespective of any price effects…"[48] John Muellbaur of Oxford University characterizes the United Kingdom's restrictive land use system as leading "to resource misallocations that can only be described as grotesque."[49]

5. PROSPECTS FOR A BETTER STANDARD OF LIVING

Much of the high income world still mired in laggard economic growth. In some nations, such as the United States, real incomes have fallen, while income growth has been modest, at best, elsewhere. The cost of housing could rise even more in the years to come as the artificially low interest rates of recent years become a thing of the past.

In most nations, housing is the most significant element of the household budget. As a result, housing costs are an important determinant of the standard of living. Within nations, income adjusted housing prices (measured by the Median Multiple) tend to vary more than other household expenditures between metropolitan areas. Maintaining and restoring housing affordability, therefore, is important to maximizing the standard of living and minimizing poverty.

Summary

The prospects are mixed among the severely unaffordable markets. All of Australia's major markets and Canada's larger major markets are severely unaffordable and thus at particular risk. Failure to jettison the Dublin area's destructive regulations could set Ireland up for a replay of is recent financial nightmare.

Yet there are regions of hope. The central government of New Zealand has recognized the problem and is pursuing strategies to open up land supply and reduce housing costs. Both political parties in the United Kingdom are committed to reforms to improve housing affordability. Singapore's well-designed regulatory structure, with its emphasis on sufficient supply and affordability is capable of restoring housing affordability.

For many ... the "California" dream requires moving to Texas, Indiana or Georgia.

There is even hope in Canada and the United States, where substantial areas of liberal land use policy remain, which permit residents to move to areas with lower costs of living. This is most evident in the United States, where the urban containment markets of coastal California (least affordable in the nation), long renowned for their attractiveness to domestic migrants, lost more than a 2,000,000 net domestic migrants to other parts of the nation during the 2000s. For many, especially young households, the "California" dream requires moving to Texas, Indiana or Georgia.

More Detailed Prospects

Australia: As the data cited above indicates, house prices have been decoupled from their historic nexus with household incomes in Australia. There have been hopeful signs in New South Wales and Western Australia, but there is much more to be done.

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[48] Paul Cheshire & Stephan Sheppard (2006), "The Introduction of price signals into land-use planning decision making: a proposal," London School of Economics, http://eprints.lse.ac.uk/568/1/Price_Signals_Planning_DecisionsSept6.pdf

[49] John Muellbauer (2005), "Property Taxation and the Economy after the Barker Review," *The Economic Journal*, 115 (March), http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.149.8037&rep=rep1&type=pdf

The greatest price is paid by young households. As *The Guardian* put it, the biggest burden is " The increase in prices across the board – but especially at the lower to median level – means that for many young people the great Australian dream of home ownership will forever remain a dream."

Canada: Until recently, Canada had favorable housing affordability. The exception was Vancouver, where housing affordability has deteriorated markedly for decades under its strong urban containment policies. The Royal Bank of Canada reports that detached housing, which is preferred in Canada, now requires more than 80 percent of the median household income for mortgage payments in the Vancouver area. This is more than 2.5 times the 32 percent guideline of the Canada Mortgage and Housing Corporation for mortgage eligibility.

The future for the household standard of living in Canada could be grim. In recent years, the province of Ontario has adopted strong urban containment policies to apply to the Toronto metropolitan area. House prices have risen well above incomes, consistent with expectations (and the principles of economics). Montréal has adopted urban containment policy that may be as strict as those in Vancouver and Toronto. Similar policies have also been adopted in Calgary. Montréal and Calgary have also experienced substantial increases in house prices relative to incomes.

The Royal Bank of Canada reports that detached housing, which is preferred in Canada, now requires more than 80 percent of the median household income for mortgage payments in the Vancouver area.

Without reform, Median Multiples in Toronto, Montréal, and Calgary could trend a housing affordability crisis approaching that of Vancouver, the second most unaffordable metropolitan area (after Hong Kong) in this year's *Demographia International Housing Affordability Survey*. Meanwhile, with virtually no political prospect of land use liberalization in Vancouver, housing affordability could deteriorate even further there.

housing accords have been reached with the city of Auckland that will loosen regulation for new greenfield and infill housing. ***Hong Kong:*** Hong Kong's unprecedented housing unaffordability has been the focus of political demonstrations, as well as attention by the government. In his 2014 annual policy address Chief Executive C. Y. Leung noted that: "a housing supply shortage is the major cause of the upsurge in property and rental prices." He committed the government to increasing land supply and measures that would curb property speculation, which like higher house prices typifies urban containment markets. The challenges may be overwhelming, but at least Hong Kong's political leadership understands the economics and recognizes the problem, unlike in the urban containment markets of Australia, Canada, Ireland and the United States.

Ireland: Probably no geography covered in the *Demographia International Housing Affordability Survey* suffered more from the housing bust than Ireland.

Yet, important policy reforms that could prevent a recurrence remain to be implemented. As economist Colm McCarthy of University College Dublin has indicated, the rising demand for housing in the Dublin area could lead to substantial house price escalation unless the overly restrictive land use regulations are reformed. McCarthy has called for repeal of Ireland's urban containment land use policies that were fashioned after the British Town and Country Planning Act of 1947.

The reforms that Colm McCarthy recommends may be crucial, to avoiding a repeat of Ireland's recent financial distress.

Ireland's challenges could be great. The national statistics bureau, the Central Office of Statistics (CSO) recently projected that the Dublin metropolitan area will experience population growth of 22 percent between

2011 and 2031. The high projected population growth seems could lead to house price increases that could equal those of the last decade. The reforms that Colm McCarthy recommends may be crucial, to avoiding a repeat of Ireland's recent financial distress.

New Zealand: The progress noted in last year's *Demographia Survey* continues. The central government has undertaken significant reforms of land markets, which were outlined by Deputy Prime Minister Bill English in his introduction to the *9th Annual Demographia International Housing Affordability Survey*. As a result of recently enacted legislation, housing accords have been reached with the city of Auckland that will loosen regulation for new greenfield and infill housing. Cooperation between the central government and local authorities is leading to important expansion of the land supply on the fringes of other major centers as well.

United Kingdom: There is considerable discussion of the means by which to improve housing affordability in the United Kingdom, which was the cradle of restrictive land-use regulation beginning with the Town and Country Planning Act of 1947.

... housing accords have been reached with the city of Auckland that will loosen regulation for new greenfield and infill housing.

The Conservative – Liberal Democrat coalition government has proposed liberalization of the regulations. Planning Minister Nick Boles Minister Boles called Britain's lack of housing affordability "the biggest social justice crisis we have (see last year's *Demographia Survey*).

The Labour Party opposition has promised that, if elected in 2015, steps will be taken to increase land supply and housing affordability, so that "working people and their children" have the "decent homes they deserve."

Noting the heightened level of public discourse on Britain's planning laws, *The Economist* commented:

> "Building on fields in a country that is as crowded as England will always rile some people, however well-designed the system. But the alternative is worse: a nation of renters and rentiers, where only the rich own houses."

The British electorate may finally witness a land-use policy debate that would have been overdue four decades ago.

The British electorate may finally witness a land-use policy debate that would have been overdue four decades ago.

United States: The United States continues to be home to some of the most productive land use regulation in the world, which has resulted in its superior housing affordability (for example, Atlanta, Dallas-Fort Worth, Houston and Indianapolis). The United States is also home to some of the most counter-productive land use regulation,[50] which is evidenced by severely unaffordable housing (for example, San Francisco, San Jose, Los Angeles, San Diego, New York and soon-to-be major metropolitan area, Honolulu[51]).

William Fischel of Dartmouth University cites the housing affordability losses from urban containment policies in the United Kingdom and Korea and notes that: "American planners seem unaware of this evidence."

There are both hopeful and worrisome signs. In a positive development, Florida repealed its statewide urban containment legislation and housing affordability has remained near historic norms, except in Miami where strict local urban containment regulations continue. Yet, there is a continuing effort by the urban

[50] Because of its negative effect on housing affordability, which leads to a lower standard of living and greater poverty.
[51] Honolulu could exceed 1,000,000 in population by 2015, at the current growth rate.

planning community, with support from the federal government, to extend urban containment policy to other metropolitan areas.

At a minimum, the problem in the United States results from a failure to sufficiently consider economics. William Fischel of Dartmouth University cites the housing affordability losses from urban containment policies in the United Kingdom and Korea and notes that: "American planners seem unaware of this evidence." [52]

6. PLANNING FOR PEOPLE

Much of the current justification for urban containment policy rests on an expectation of its potential to reduce greenhouse gas emissions. However, ***urban containment policy is not an effective strategy for reducing greenhouse gas emissions***. Its strategies provide minimal reductions, at best, and a costs much greater than other alternatives.

Spending more than necessary to reduce greenhouse gas emissions is inherently anti-economic and would lead to lower standards of living and greater poverty. The was emphasized by the European Conference of Ministers of Transport:

> "It is important to achieve the required emissions reductions at the lowest overall cost to avoid damaging welfare and economic growth."

The Intergovernmental Panel on Climate Change (IPCC) has found that sufficient greenhouse gas emissions reductions can be achieved for a range of from $20 to $50 per tonne. Urban containment strategies cost much more. Figures of $1,000 per tonne have been estimated for mass transit approaches, while house price increases could escalate the cost to many times that. A US report by McKinsey and the Conference Board concluded that substantial and cost effective GHG emission reductions were possible, "while maintaining comparable levels of consumer utility," which was defined as "no change in thermostat settings or appliance use, no downsizing of vehicles, home or commercial space and traveling the same mileage." In other words, there is no need to interfere with people's lives or preferences

The Role of Cities

Throughout history, people have moved to cities for better lives, responding to the much greater and more focused economic opportunities they provided. In 1800 there was only one urban area with more than 1,000,000 residents (Beijing) and the world's urban population was on the order of 10 percent. By 1900 there were 16 urban areas with more than 1,000,000 residents. Now there are approximately 475 urban areas with more than 1,000,000 population, and the world is more than one-half urban. The largest urban area, Tokyo-Yokohama, is six times as large as 1900 London, which was the largest at that time.

Cities, in combination with the technological and transport advances of the last two centuries have facilitated unparalleled affluence in many nations and have replaced universal poverty with far better lives virtually everywhere. Cities have grown because of the economic aspirations that they are able to turn into reality.

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[52] William A. Fischel, *Comment* on "The Link Between Growth Management and Housing Affordability: The Academic Evidence," in Anthony Downs, editor (2004), *Growth Management and Affordable Housing: Do They Conflict?,* Brookings Institution Press,

Former World Bank principal urban planner Alain Bertaud (2004) noted that: *Large labor markets are the only raison d'être of large cities.*[53]

Most governments place the highest priority on achieving a ***higher standard of living and less poverty***.[54] Yet, these principal objectives are subverted by urban containment policy, which places the urban form how people travel over the betterment of people. Urban planning should be refocused on more fundamental purposes.

[53] Alain Bertaud, "The Spatial Organization of Cities: Deliberate Outcome or Unforeseen Consequence?" *World Development Report 2003: Dynamic Development in a Sustainable World: Background Paper,* http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2004/02/13/000265513_20040213120824/Rendered/INDEX/wdr27864.txt

[54] Wendell Cox (2012), *Toward More Prosperous Cities,* http://demographia.com/towardmoreprosperous.pdf.

SCHEDULE 1
MAJOR MARKETS RANKED BY AFFORDABILITY: Most Affordable to Least Affordable
(Markets over 1,000,000 Population)
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
18	1	17	U.S.	Pittsburgh, PA	2.3	$116,000	$51,400
27	2	24	U.S.	Detroit, MI	2.5	$130,000	$51,200
36	3	32	U.S.	Grand Rapids	2.6	$135,700	$51,600
36	3	32	U.S.	Rochester, NY	2.6	$132,100	$51,600
41	5	36	U.S.	Atlanta, GA	2.7	$152,300	$55,600
41	5	36	U.S.	Buffalo, NY	2.7	$137,100	$51,200
41	5	36	U.S.	Cincinnati, OH-KY-IN	2.7	$142,100	$53,400
41	5	36	U.S.	Cleveland, OH	2.7	$127,000	$47,800
41	5	36	U.S.	Indianapolis. IN	2.7	$143,500	$52,800
41	5	36	U.S.	St. Louis,, MO-IL	2.7	$143,700	$53,200
58	11	52	U.S.	Columbus, OH	2.8	$152,100	$54,700
68	12	61	U.S.	Kansas City, MO-KS	2.9	$162,300	$55,500
68	12	61	U.S.	Louisville, KY-IN	2.9	$145,100	$49,800
80	14	72	U.S.	Memphis, TN-MS-AR	3.0	$137,500	$46,500
96	15	85	U.S.	Dallas-Fort Worth, TX	3.1	$181,300	$58,000
96	15	85	U.S.	Minneapolis-St. Paul, MN-WI	3.1	$208,000	$67,500
117	17	105	U.S.	Houston, TX	3.3	$186,600	$57,000
117	17	105	U.S.	Oklahoma City, OK	3.3	$161,100	$49,500
117	17	105	U.S.	Raleigh, NC	3.3	$202,700	$61,400
117	17	105	U.S.	San Antonio, TX	3.3	$175,000	$52,400
130	21	117	U.S.	Charlotte, NC-SC	3.4	$183,800	$53,500
130	21	117	U.S.	Nashville, TN	3.4	$177,300	$52,500
130	21	117	U.S.	Tampa-St. Petersburg, FL	3.4	$151,800	$45,200
142	24	1	Japan	Osaka-Kobe-Kyoto*	3.5	¥18,380,000	¥5,200,000
142	24	129	U.S.	Chicago, IL-IN-WI	3.5	$209,000	$60,400
142	24	129	U.S.	Hartford, CT	3.5	$238,500	$68,000
142	24	129	U.S.	Jacksonville, FL	3.5	$170,600	$49,000
142	24	129	U.S.	Richmond, VA	3.5	$205,000	$57,800
142	24	129	U.S.	Virginia Beach-Norfolk, VA-NC	3.5	$200,500	$57,000
161	30	144	U.S.	Birmingham, AL	3.6	$173,700	$47,600
161	30	144	U.S.	Las Vegas, NV	3.6	$181,900	$50,500
161	30	144	U.S.	New Orleans. LA	3.6	$162,500	$45,200
161	30	144	U.S.	Orlando, FL	3.6	$167,800	$46,900
171	34	5	Ireland	Dublin	3.7	€215,000	€58,000
171	34	152	U.S.	Austin, TX	3.7	$225,300	$60,500
171	34	152	U.S.	Phoenix, AZ	3.7	$191,700	$52,300
184	37	15	Canada	Ottawa ON-QC	3.8	$303,900	$79,400
184	37	162	U.S.	Philadelphia, PA-NJ-DE-MD	3.8	$231,600	$61,200
184	37	162	U.S.	Salt Lake City, UT	3.8	$235,000	$61,200
198	40	18	Canada	Edmonton, AB	3.9	$336,000	$87,200
198	40	173	U.S.	Baltimore, MD	3.9	$266,500	$68,200
211	42	3	U.K.	Leeds & West Yorkshire	4.0	£130,000	£32,700
211	42	181	U.S.	Milwaukee, WI	4.0	$211,800	$53,600
224	44	4	U.K.	Glasgow	4.2	£117,400	£28,200

SCHEDULE 1
MAJOR MARKETS RANKED BY AFFORDABILITY: Most Affordable to Least Affordable
(Markets over 1,000,000 Population)
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
232	45	28	Canada	Calgary, AB	4.3	$392,400	$91,800
232	45	5	U.K.	Derby & Derbyshire	4.3	£136,000	£31,300
232	45	5	U.K.	Nottingham & Nottinghamshire	4.3	£126,300	£29,700
240	48	2	Japan	Tokyo-Yokohama*	4.4	¥28,040,000	¥6,360,000
240	48	198	U.S.	Providence, RI-MA	4.4	$241,400	$55,300
240	48	198	U.S.	Sacramento, CA	4.4	$255,900	$57,900
240	48	198	U.S.	Washington, DC-VA-MD-WV	4.4	$392,500	$89,900
248	52	8	U.K.	Blackpool & Lancashire	4.5	£125,000	£27,700
257	53	9	U.K.	Hull & Humber	4.6	£133,800	£29,300
257	53	9	U.K.	Manchester & Greater Manchester	4.6	£128,000	£28,100
257	53	9	U.K.	Sheffield & South Yorkshire	4.6	£120,000	£25,900
257	53	209	U.S.	Denver, CO	4.6	$286,900	$62,600
264	57	29	Canada	Montreal, QC	4.7	$264,000	$56,300
264	57	211	U.S.	Riverside-San Bernardino, CA	4.7	$249,100	$52,700
268	59	13	U.K.	Birmingham & West Midlands	4.8	£134,100	£28,000
268	59	13	U.K.	Newcastle & Tyneside	4.8	£128,200	£26,500
268	59	212	U.S.	Portland, OR-WA	4.8	$276,200	$58,000
285	62	1	Singapore	Singapore	5.1	$438,000	$86,000
285	62	19	U.K.	Stoke on Trent & Staffordshire	5.1	£141,000	£27,500
289	64	21	U.K.	Liverpool & Merseyside	5.3	£125,000	£23,500
289	64	214	U.S.	Miami, FL	5.3	$252,200	$47,500
289	64	214	U.S.	Seattle, WA	5.3	$354,700	$66,900
297	67	23	U.K.	Bristol-Bath	5.4	£192,000	£35,600
297	67	217	U.S.	Boston, MA-NH	5.4	$393,700	$73,100
312	69	23	Australia	Brisbane, QLD	5.8	$442,100	$75,900
319	70	25	Australia	Perth, WA	6.0	$508,000	$84,800
323	71	33	Canada	Toronto, ON	6.2	$453,900	$73,100
323	71	222	U.S.	New York, NY-NJ-PA	6.2	$405,400	$65,200
327	73	28	Australia	Adelaide, SA	6.3	$392,000	$61,800
328	74	29	U.K.	London Exurbs (E & SE England)	6.4	£225,000	£34,900
336	75	31	U.K.	Plymouth & Devon	7.0	£183,600	£26,300
339	76	32	U.K.	London (GLA)	7.3	£326,000	£44,800
344	77	229	U.S.	Los Angeles, CA	7.7	$448,900	$58,300
346	78	230	U.S.	San Diego, CA	7.9	$485,000	$61,500
347	79	8	N.Z.	Auckland	8.0	$561,700	$70,600
351	80	38	Australia	Melbourne, VIC	8.4	$595,500	$70,800
353	81	232	U.S.	San Jose, CA	8.7	$805,000	$92,400
354	82	39	Australia	Sydney, NSW	9.0	$722,700	$80,500
356	83	234	U.S.	San Francisco-Oakland, CA	9.2	$705,000	$76,300
359	84	35	Canada	Vancouver, BC	10.3	$670,300	$65,000
360	85	1	China SAR	Hong Kong	14.9	$4,024,000	$270,000

Financial data in local currency.
*Average Multiple (Japan)

SCHEDULE 2
MAJOR MARKETS BY GEOGRAPHY (Over 1,000,000 Population)
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
327	73	28	Australia	Adelaide, SA	6.3	$392,000	$61,800
312	69	23	Australia	Brisbane, QLD	5.8	$442,100	$75,900
351	80	38	Australia	Melbourne, VIC	8.4	$595,500	$70,800
319	70	25	Australia	Perth, WA	6.0	$508,000	$84,800
354	82	39	Australia	Sydney, NSW	9.0	$722,700	$80,500
232	45	28	Canada	Calgary, AB	4.3	$392,400	$91,800
198	40	18	Canada	Edmonton, AB	3.9	$336,000	$87,200
264	57	29	Canada	Montreal, QC	4.7	$264,000	$56,300
184	37	15	Canada	Ottawa ON-QC	3.8	$303,900	$79,400
323	71	33	Canada	Toronto, ON	6.2	$453,900	$73,100
359	84	35	Canada	Vancouver, BC	10.3	$670,300	$65,000
360	85	1	China SAR	Hong Kong	14.9	$4,024,000	$270,000
171	34	5	Ireland	Dublin	3.7	€215,000	€58,000
142	24	1	Japan	Osaka-Kobe-Kyoto*	3.5	¥18,380,000	¥5,200,000
240	48	2	Japan	Tokyo-Yokohama*	4.4	¥28,040,000	¥6,360,000
347	79	8	N.Z.	Auckland	8.0	$561,700	$70,600
285	62	1	Singapore	Singapore	5.1	$438,000	$86,000
268	59	13	U.K.	Birmingham & West Midlands	4.8	£134,100	£28,000
248	52	8	U.K.	Blackpool & Lancashire	4.5	£125,000	£27,700
297	67	23	U.K.	Bristol-Bath	5.4	£192,000	£35,600
232	45	5	U.K.	Derby & Derbyshire	4.3	£136,000	£31,300
224	44	4	U.K.	Glasgow	4.2	£117,400	£28,200
257	53	9	U.K.	Hull & Humber	4.6	£133,800	£29,300
211	42	3	U.K.	Leeds & West Yorkshire	4.0	£130,000	£32,700
289	64	21	U.K.	Liverpool & Merseyside	5.3	£125,000	£23,500
339	76	32	U.K.	London (GLA)	7.3	£326,000	£44,800
328	74	29	U.K.	London Exurbs (E & SE England)	6.4	£225,000	£34,900
257	53	9	U.K.	Manchester & Greater Manchester	4.6	£128,000	£28,100
268	59	13	U.K.	Newcastle & Tyneside	4.8	£128,200	£26,500
232	45	5	U.K.	Nottingham & Nottinghamshire	4.3	£126,300	£29,700
336	75	31	U.K.	Plymouth & Devon	7.0	£183,600	£26,300
257	53	9	U.K.	Sheffield & South Yorkshire	4.6	£120,000	£25,900
285	62	19	U.K.	Stoke on Trent & Staffordshire	5.1	£141,000	£27,500
41	5	36	U.S.	Atlanta, GA	2.7	$152,300	$55,600
171	34	152	U.S.	Austin, TX	3.7	$225,300	$60,500
198	40	173	U.S.	Baltimore, MD	3.9	$266,500	$68,200
161	30	144	U.S.	Birmingham, AL	3.6	$173,700	$47,600
297	67	217	U.S.	Boston, MA-NH	5.4	$393,700	$73,100
41	5	36	U.S.	Buffalo, NY	2.7	$137,100	$51,200
130	21	117	U.S.	Charlotte, NC-SC	3.4	$183,800	$53,500
142	24	129	U.S.	Chicago, IL-IN-WI	3.5	$209,000	$60,400
41	5	36	U.S.	Cincinnati, OH-KY-IN	2.7	$142,100	$53,400
41	5	36	U.S.	Cleveland, OH	2.7	$127,000	$47,800

SCHEDULE 2
MAJOR MARKETS BY GEOGRAPHY (Over 1,000,000 Population)
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
58	11	52	U.S.	Columbus, OH	2.8	$152,100	$54,700
96	15	85	U.S.	Dallas-Fort Worth, TX	3.1	$181,300	$58,000
257	53	209	U.S.	Denver, CO	4.6	$286,900	$62,600
27	2	24	U.S.	Detroit, MI	2.5	$130,000	$51,200
36	3	32	U.S.	Grand Rapids	2.6	$135,700	$51,600
142	24	129	U.S.	Hartford, CT	3.5	$238,500	$68,000
117	17	105	U.S.	Houston, TX	3.3	$186,600	$57,000
41	5	36	U.S.	Indianapolis. IN	2.7	$143,500	$52,800
142	24	129	U.S.	Jacksonville, FL	3.5	$170,600	$49,000
68	12	61	U.S.	Kansas City, MO-KS	2.9	$162,300	$55,500
161	30	144	U.S.	Las Vegas, NV	3.6	$181,900	$50,500
344	77	229	U.S.	Los Angeles, CA	7.7	$448,900	$58,300
68	12	61	U.S.	Louisville, KY-IN	2.9	$145,100	$49,800
80	14	72	U.S.	Memphis, TN-MS-AR	3.0	$137,500	$46,500
289	64	214	U.S.	Miami, FL	5.3	$252,200	$47,500
211	42	181	U.S.	Milwaukee, WI	4.0	$211,800	$53,600
96	15	85	U.S.	Minneapolis-St. Paul, MN-WI	3.1	$208,000	$67,500
130	21	117	U.S.	Nashville, TN	3.4	$177,300	$52,500
161	30	144	U.S.	New Orleans. LA	3.6	$162,500	$45,200
323	71	222	U.S.	New York, NY-NJ-PA	6.2	$405,400	$65,200
117	17	105	U.S.	Oklahoma City, OK	3.3	$161,100	$49,500
161	30	144	U.S.	Orlando, FL	3.6	$167,800	$46,900
184	37	162	U.S.	Philadelphia, PA-NJ-DE-MD	3.8	$231,600	$61,200
171	34	152	U.S.	Phoenix, AZ	3.7	$191,700	$52,300
18	1	17	U.S.	Pittsburgh, PA	2.3	$116,000	$51,400
268	59	212	U.S.	Portland, OR-WA	4.8	$276,200	$58,000
240	48	198	U.S.	Providence, RI-MA	4.4	$241,400	$55,300
117	17	105	U.S.	Raleigh, NC	3.3	$202,700	$61,400
142	24	129	U.S.	Richmond, VA	3.5	$205,000	$57,800
264	57	211	U.S.	Riverside-San Bernardino, CA	4.7	$249,100	$52,700
36	3	32	U.S.	Rochester, NY	2.6	$132,100	$51,600
240	48	198	U.S.	Sacramento, CA	4.4	$255,900	$57,900
184	37	162	U.S.	Salt Lake City, UT	3.8	$235,000	$61,200
117	17	105	U.S.	San Antonio, TX	3.3	$175,000	$52,400
346	78	230	U.S.	San Diego, CA	7.9	$485,000	$61,500
356	83	234	U.S.	San Francisco-Oakland, CA	9.2	$705,000	$76,300
353	81	232	U.S.	San Jose, CA	8.7	$805,000	$92,400
289	64	214	U.S.	Seattle, WA	5.3	$354,700	$66,900
41	5	36	U.S.	St. Louis,, MO-IL	2.7	$143,700	$53,200
130	21	117	U.S.	Tampa-St. Petersburg, FL	3.4	$151,800	$45,200
142	24	129	U.S.	Virginia Beach-Norfolk, VA-NC	3.5	$200,500	$57,000
240	48	198	U.S.	Washington, DC-VA-MD-WV	4.4	$392,500	$89,900

Financial data in local currency.
*Average Multiple (Japan)

SCHEDULE 3
ALL MARKETS RANKED BY AFFORDABILITY: Most Affordable to Least Affordable
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
1		1	U.S.	Rockford, IL	1.7	$88,900	$51,600
1		1	U.S.	Utica, NY	1.7	$80,000	$47,500
3		3	U.S.	Warner Robbins, GA	1.9	$103,900	$55,500
4		1	Ireland	Waterford	2.0	€92,500	€46,900
4		4	U.S.	Appleton, WI	2.0	$124,600	$61,300
4		4	U.S.	Decatur, IL	2.0	$91,000	$45,400
4		4	U.S.	Lansing, MI	2.0	$100,000	$49,500
4		4	U.S.	Toledo, OH	2.0	$87,500	$44,100
9		8	U.S.	Springfield, IL	2.1	$120,600	$56,700
9		8	U.S.	Youngstown, OH-PA	2.1	$85,000	$41,400
11		10	U.S.	Augusta, GA	2.2	$99,800	$45,600
11		10	U.S.	Davenport-Moline, IA-IL	2.2	$114,300	$52,600
11		10	U.S.	Flint, MI	2.2	$92,000	$41,100
11		10	U.S.	Kankakee, IL	2.2	$115,200	$52,700
11		10	U.S.	Peoria, IL	2.2	$120,000	$54,500
11		10	U.S.	Saginaw, MI	2.2	$90,000	$41,100
11		10	U.S.	Topeka, KS	2.2	$106,900	$49,400
18		1	Canada	Moncton, NB	2.3	$141,800	$62,300
18		17	U.S.	Canton, OH	2.3	$107,000	$46,000
18		17	U.S.	Ft. Wayne, IN	2.3	$116,700	$50,200
18		17	U.S.	Lansing, MI	2.3	$112,700	$49,500
18	1	17	U.S.	Pittsburgh, PA	2.3	$116,000	$51,400
23		2	Ireland	Galway	2.4	€119,600	€50,400
23		21	U.S.	Binghamton, NY	2.4	$117,500	$49,000
23		21	U.S.	Dayton, OH	2.4	$111,100	$46,400
23		21	U.S.	South Bend, IN	2.4	$108,600	$45,600
27		2	Canada	Saint John, NB	2.5	$154,400	$62,200
27		24	U.S.	Akron, OH	2.5	$125,300	$50,700
27		24	U.S.	Bloomington, IL	2.5	$156,500	$63,300
27	2	24	U.S.	Detroit, MI	2.5	$130,000	$51,200
27		24	U.S.	Elmira, NY	2.5	$116,100	$46,800
27		24	U.S.	Erie, PA	2.5	$119,600	$47,400
27		24	U.S.	Syracuse, NY	2.5	$130,700	$52,200
27		24	U.S.	Waterloo, IA	2.5	$130,800	$51,700
27		24	U.S.	Wichita, KS	2.5	$125,600	$49,400
36		3	Canada	Fredericton, NB	2.6	$165,700	$64,600
36		32	U.S.	Elkhart, IN	2.6	$122,000	$46,200
36	3	32	U.S.	Grand Rapids	2.6	$135,700	$51,600
36		32	U.S.	Harrisburg, PA	2.6	$146,000	$55,800
36	3	32	U.S.	Rochester, NY	2.6	$132,100	$51,600
41		4	Canada	Windsor, ON	2.7	$160,200	$60,200

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41	5	36	U.S.	Atlanta, GA	2.7	$152,300	$55,600
41	5	36	U.S.	Buffalo, NY	2.7	$137,100	$51,200
41		36	U.S.	Cedar Rapids, IA	2.7	$160,100	$58,300
41	5	36	U.S.	Cincinnati, OH-KY-IN	2.7	$142,100	$53,400
41	5	36	U.S.	Cleveland, OH	2.7	$127,000	$47,800
41		36	U.S.	Decatur, AL	2.7	$114,900	$42,900
41		36	U.S.	Duluth, MN	2.7	$130,000	$47,700
41		36	U.S.	Green Bay, WI	2.7	$138,400	$51,700
41		36	U.S.	Houma, LA	2.7	$132,300	$49,800
41	5	36	U.S.	Indianapolis. IN	2.7	$143,500	$52,800
41		36	U.S.	Ocala, FL	2.7	$103,600	$37,800
41		36	U.S.	Omaha, NE-IA	2.7	$149,500	$55,200
41		36	U.S.	Palm Bay-Melbourne, FL	2.7	$125,800	$47,000
41		36	U.S.	Scranton-Wilkes Barre, PA	2.7	$117,000	$43,700
41	5	36	U.S.	St. Louis,, MO-IL	2.7	$143,700	$53,200
41		36	U.S.	York, PA	2.7	$155,800	$56,700
58		3	Ireland	Cork	2.8	€144,000	€50,900
58		52	U.S.	Columbus, GA-AL	2.8	$122,200	$43,800
58	11	52	U.S.	Columbus, OH	2.8	$152,100	$54,700
58		52	U.S.	Gulfport-Biloxi, MS	2.8	$116,800	$42,000
58		52	U.S.	Kalamazoo, MI	2.8	$127,000	$45,200
58		52	U.S.	Killeen , TX	2.8	$138,000	$49,500
58		52	U.S.	Lincoln, NE	2.8	$144,900	$51,600
58		52	U.S.	Little Rock, AR	2.8	$138,700	$48,700
58		52	U.S.	Mobile, AL	2.8	$114,800	$40,400
58		52	U.S.	Salisbury, MD	2.8	$140,000	$50,300
68		4	Ireland	Limerick	2.9	€144,000	€50,000
68		61	U.S.	Charleston, WV	2.9	$140,200	$48,500
68		61	U.S.	Clarksville, TN	2.9	$132,500	$45,200
68		61	U.S.	Deltona-Daytona Beach, FL	2.9	$120,400	$40,900
68		61	U.S.	Des Moines, IA	2.9	$177,600	$60,300
68		61	U.S.	Hickory, NC	2.9	$109,500	$38,100
68	12	61	U.S.	Kansas City, MO-KS	2.9	$162,300	$55,500
68		61	U.S.	Lakeland, FL	2.9	$123,800	$42,100
68	12	61	U.S.	Louisville, KY-IN	2.9	$145,100	$49,800
68		61	U.S.	McAllen, TX	2.9	$100,000	$34,400
68		61	U.S.	Reading, PA	2.9	$153,700	$53,000
68		61	U.S.	Springfield, MO	2.9	$123,500	$43,100
80		5	Canada	Charlottetown, PEI	3.0	$187,300	$63,200
80		5	Canada	Thunder Bay, ON	3.0	$187,500	$61,800
80		5	Canada	Trois-Rivieres, QC	3.0	$145,500	$48,700
80		72	U.S.	Champaign-Urbana, IL	3.0	$147,900	$48,500
80		72	U.S.	Columbia, SC	3.0	$148,100	$49,700
80		72	U.S.	Cumberland, MD-WV	3.0	$109,900	$36,300
80		72	U.S.	Glens Falls, NY	3.0	$162,400	$54,400
80		72	U.S.	Greenville, NC	3.0	$115,800	$38,500
80		72	U.S.	Hagerstown-Martinsburg, MD-WV	3.0	$158,700	$52,300

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80		72	U.S.	Lancaster, PA	3.0	$170,000	$55,800
80		72	U.S.	Lexington, KY	3.0	$147,000	$48,800
80	14	72	U.S.	Memphis, TN-MS-AR	3.0	$137,500	$46,500
80		72	U.S.	Roanoke, VA	3.0	$145,000	$47,900
80		72	U.S.	Sioux Falls, SD	3.0	$158,100	$52,700
80		72	U.S.	Tulsa, OK	3.0	$146,500	$48,900
80		72	U.S.	Winston-Salem, NC	3.0	$131,000	$43,000
96		8	Canada	Saguenay, QC	3.1	$173,000	$56,100
96		85	U.S.	Abilene, TX	3.1	$139,000	$44,200
96		85	U.S.	Amarillo, TX	3.1	$145,900	$47,300
96		85	U.S.	Beaumont, TX	3.1	$139,200	$44,200
96		85	U.S.	Chattanooga, TN-GA	3.1	$139,500	$44,300
96	15	85	U.S.	Dallas-Fort Worth, TX	3.1	$181,300	$58,000
96		85	U.S.	Fargo, ND-MN	3.1	$165,200	$52,500
96	15	85	U.S.	Minneapolis-St. Paul, MN-WI	3.1	$208,000	$67,500
96		85	U.S.	Montgomery, AL	3.1	$141,600	$45,500
96		85	U.S.	Ogden, UT	3.1	$198,000	$63,000
96		85	U.S.	Pensacola, FL	3.1	$159,800	$50,800
96		85	U.S.	Yuma, AZ	3.1	$125,000	$40,200
108		96	U.S.	Corpus Christi, TX	3.2	$160,000	$50,000
108		96	U.S.	Fayetteville, AR-MO	3.2	$147,100	$46,500
108		96	U.S.	Florence, SC	3.2	$122,700	$38,900
108		96	U.S.	Greensboro-High Point, NC	3.2	$136,100	$42,500
108		96	U.S.	Huntsville, AL	3.2	$178,500	$55,600
108		96	U.S.	Kingston, NY	3.2	$187,000	$58,600
108		96	U.S.	Norwich-New London, CT	3.2	$215,300	$67,800
108		96	U.S.	Punta Gorda, FL	3.2	$147,900	$46,100
108		96	U.S.	Spartanburg, SC	3.2	$133,900	$41,600
117		9	Canada	Sudbury, ON	3.3	$216,300	$64,900
117		105	U.S.	Albany-Schenectady, NY	3.3	$205,800	$61,800
117		105	U.S.	Ann Arbor, MI	3.3	$190,000	$57,400
117		105	U.S.	Brownsville, TX	3.3	$103,000	$31,500
117		105	U.S.	El Centro, CA	3.3	$135,000	$41,000
117	17	105	U.S.	Houston, TX	3.3	$186,600	$57,000
117		105	U.S.	Kennewick-Richland, WA	3.3	$189,600	$58,300
117		105	U.S.	Lafayette, LA	3.3	$157,000	$47,700
117	17	105	U.S.	Oklahoma City, OK	3.3	$161,100	$49,500
117		105	U.S.	Port St. Lucie, FL	3.3	$143,900	$43,100
117	17	105	U.S.	Raleigh, NC	3.3	$202,700	$61,400
117	17	105	U.S.	San Antonio, TX	3.3	$175,000	$52,400
117		105	U.S.	Tyler, TX	3.3	$157,000	$47,200
130		117	U.S.	Baton Rouge, LA	3.4	$173,200	$51,200
130		117	U.S.	Bismarck, ND	3.4	$217,500	$63,200
130		117	U.S.	Boise City, ID	3.4	$168,400	$49,900
130	21	117	U.S.	Charlotte, NC-SC	3.4	$183,800	$53,500
130		117	U.S.	Dover, DE	3.4	$185,400	$53,900
130		117	U.S.	Fayetteville, NC	3.4	$154,700	$45,700

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130		117	U.S.	Gainesville, GA	3.4	$173,000	$50,700
130		117	U.S.	Knoxville, TN	3.4	$152,900	$45,600
130		117	U.S.	Longview, TX	3.4	$145,800	$43,300
130		117	U.S.	Manchester-Nashua, NH	3.4	$241,800	$70,400
130	21	117	U.S.	Nashville, TN	3.4	$177,300	$52,500
130	21	117	U.S.	Tampa-St. Petersburg, FL	3.4	$151,800	$45,200
142		10	Canada	Kingston, ON	3.5	$231,800	$66,100
142		10	Canada	St. Catherines-Niagara, ON	3.5	$210,800	$60,600
142	24	1	Japan	Osaka-Kobe-Kyoto*	3.5	¥18,380,000	¥5,200,000
142		1	U.K.	Falkirk	3.5	£98,000	£27,900
142		129	U.S.	Allentown-Bethlehem, PA-NJ	3.5	$197,400	$56,800
142		129	U.S.	Athens, GA	3.5	$137,200	$38,700
142		129	U.S.	Cape Coral-Fort Myers, FL	3.5	$164,500	$47,100
142	24	129	U.S.	Chicago, IL-IN-WI	3.5	$209,000	$60,400
142		129	U.S.	Dover, DE	3.5	$187,000	$53,900
142		129	U.S.	El Paso, TX	3.5	$143,600	$41,100
142	24	129	U.S.	Hartford, CT	3.5	$238,500	$68,000
142		129	U.S.	Jackson, MS	3.5	$153,300	$43,400
142	24	129	U.S.	Jacksonville, FL	3.5	$170,600	$49,000
142		129	U.S.	Palm Coast, FL	3.5	$151,100	$43,700
142		129	U.S.	Panama City, FL	3.5	$164,500	$46,900
142		129	U.S.	Poughkeepsie, NY	3.5	$238,000	$67,900
142	24	129	U.S.	Richmond, VA	3.5	$205,000	$57,800
142	24	129	U.S.	Virginia Beach-Norfolk, VA-NC	3.5	$200,500	$57,000
142		129	U.S.	Waco, TX	3.5	$143,000	$41,400
161		12	Canada	Regina, SK	3.6	$286,600	$79,000
161		2	U.K.	Belfast	3.6	£104,400	£29,200
161	30	144	U.S.	Birmingham, AL	3.6	$173,700	$47,600
161		144	U.S.	Columbia, MO	3.6	$157,400	$44,000
161		144	U.S.	Greeley, CO	3.6	$205,000	$56,400
161		144	U.S.	Lake Havasu City, AZ	3.6	$125,000	$35,100
161	30	144	U.S.	Las Vegas, NV	3.6	$181,900	$50,500
161	30	144	U.S.	New Orleans. LA	3.6	$162,500	$45,200
161	30	144	U.S.	Orlando, FL	3.6	$167,800	$46,900
161		144	U.S.	Wilmington, NC	3.6	$185,300	$50,900
171		13	Canada	Halifax, NS	3.7	$243,300	$65,700
171		13	Canada	London, ON	3.7	$222,100	$60,700
171	34	5	Ireland	Dublin	3.7	€215,000	€58,000
171	34	152	U.S.	Austin, TX	3.7	$225,300	$60,500
171		152	U.S.	Crestview-Fort Walton Beach, FL	3.7	$196,800	$53,800
171		152	U.S.	Durham, NC	3.7	$191,600	$51,200
171		152	U.S.	Greenville, SC	3.7	$165,500	$44,500
171		152	U.S.	Hanford, CA	3.7	$175,300	$46,800
171		152	U.S.	Merced, CA	3.7	$165,800	$44,400
171		152	U.S.	Olympia, WA	3.7	$220,000	$59,300
171	34	152	U.S.	Phoenix, AZ	3.7	$191,700	$52,300

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171		152	U.S.	Spokane, WA	3.7	$181,600	$48,500
171		152	U.S.	Yakima, WA	3.7	$164,100	$44,800
184		15	Canada	Brantford, ON	3.8	$237,100	$62,000
184	37	15	Canada	Ottawa ON-QC	3.8	$303,900	$79,400
184		15	Canada	St. John's, NL	3.8	$281,000	$74,100
184		162	U.S.	Albuquerque, NM	3.8	$180,700	$47,600
184		162	U.S.	Bremerton, WA	3.8	$230,000	$60,200
184		162	U.S.	Farmington, NM	3.8	$178,300	$47,300
184		162	U.S.	Kingston, NY	3.8	$220,700	$58,600
184		162	U.S.	Madison, WI	3.8	$229,200	$60,000
184	37	162	U.S.	Philadelphia, PA-NJ-DE-MD	3.8	$231,600	$61,200
184	37	162	U.S.	Salt Lake City, UT	3.8	$235,000	$61,200
184		162	U.S.	Shreveport, LA	3.8	$170,500	$44,900
184		162	U.S.	Springfield, MA	3.8	$201,400	$52,500
184		162	U.S.	Tucson, AZ	3.8	$172,400	$45,600
184		162	U.S.	Worcester, MA	3.8	$241,800	$63,700
198	40	18	Canada	Edmonton, AB	3.9	$336,000	$87,200
198		18	Canada	Guelph, ON	3.9	$288,800	$74,400
198		18	Canada	Kitchener, ON	3.9	$282,700	$71,600
198		18	Canada	Quebec, QC	3.9	$231,900	$60,000
198		18	Canada	Winnipeg, MB	3.9	$244,700	$63,400
198		173	U.S.	Anchorage, AK	3.9	$283,000	$72,800
198	40	173	U.S.	Baltimore, MD	3.9	$266,500	$68,200
198		173	U.S.	Colorado Springs, CO	3.9	$222,100	$56,400
198		173	U.S.	Laredo, TX	3.9	$145,800	$37,300
198		173	U.S.	Prescott, AZ	3.9	$175,000	$44,900
198		173	U.S.	Sebastian-Vero Beach, FL	3.9	$160,300	$41,200
198		173	U.S.	Tallahassee, FL	3.9	$176,500	$45,600
198		173	U.S.	Visalia, CA	3.9	$159,700	$41,100
211		23	Canada	Saskatoon, SK	4.0	$304,600	$75,700
211		23	Canada	Sherbrooke, QC	4.0	$195,300	$49,100
211	42	3	U.K.	Leeds & West Yorkshire	4.0	£130,000	£32,700
211		181	U.S.	College Station, TX	4.0	$166,000	$41,100
211		181	U.S.	Gainesville, FL	4.0	$167,800	$42,000
211	42	181	U.S.	Milwaukee, WI	4.0	$211,800	$53,600
211		181	U.S.	Salem, OR	4.0	$184,900	$46,500
218		1	Australia	Karratha, WA	4.1	$679,000	$166,800
218		25	Canada	Barrie, ON	4.1	$299,000	$73,500
218		25	Canada	Peterborough, ON	4.1	$247,300	$60,600
218		185	U.S.	New Haven, CT	4.1	$247,800	$60,400
218		185	U.S.	Pittsfield, MA	4.1	$194,200	$47,400
218		185	U.S.	Provo, UT	4.1	$241,000	$59,300
224		2	Australia	Gladstone, QLD	4.2	$400,000	$94,200
224		27	Canada	Oshawa, ON	4.2	$335,300	$79,800
224	44	4	U.K.	Glasgow	4.2	£117,400	£28,200
224		188	U.S.	Atlantic City, NJ	4.2	$216,700	$52,100
224		188	U.S.	Bakersfield, CA	4.2	$196,500	$46,800

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224		188	U.S.	Madera, CA	4.2	$178,600	$42,800
224		188	U.S.	Modesto, CA	4.2	$197,300	$47,300
224		188	U.S.	Yuba City, CA	4.2	$193,100	$46,500
232	45	28	Canada	Calgary, AB	4.3	$392,400	$91,800
232	45	5	U.K.	Derby & Derbyshire	4.3	£136,000	£31,300
232	45	5	U.K.	Nottingham & Nottinghamshire	4.3	£126,300	£29,700
232		193	U.S.	Fort Collins, CO	4.3	$247,000	$56,900
232		193	U.S.	Fresno, CA	4.3	$184,400	$42,400
232		193	U.S.	Portland, ME	4.3	$236,000	$54,700
232		193	U.S.	Redding, CA	4.3	$198,500	$46,300
232		193	U.S.	Trenton, NJ	4.3	$298,900	$69,300
240	48	2	Japan	Tokyo-Yokohama*	4.4	¥28,040,000	¥6,360,000
240		7	U.K.	Dundee	4.4	£122,800	£28,200
240		198	U.S.	Asheville, NC	4.4	$195,000	$44,000
240		198	U.S.	Myrtle Beach, SC	4.4	$181,800	$41,100
240	48	198	U.S.	Providence, RI-MA	4.4	$241,400	$55,300
240	48	198	U.S.	Sacramento, CA	4.4	$255,900	$57,900
240		198	U.S.	Sarasota-Bradenton, FL	4.4	$213,500	$48,700
240	48	198	U.S.	Washington, DC-VA-MD-WV	4.4	$392,500	$89,900
248		3	Australia	Mildura, VIC	4.5	$213,000	$46,900
248		3	Australia	Townsville, QLD	4.5	$346,000	$76,400
248		1	N.Z.	Palmerston North-Manawatu	4.5	$231,100	$50,900
248	52	8	U.K.	Blackpool & Lancashire	4.5	£125,000	£27,700
248		204	U.S.	Burlington, VT	4.5	$279,900	$62,000
248		204	U.S.	Charleston, SC	4.5	$227,700	$51,000
248		204	U.S.	Reno-Sparks, NV	4.5	$224,800	$50,000
248		204	U.S.	Stockton, CA	4.5	$232,900	$51,700
248		204	U.S.	Vallejo, CA	4.5	$287,100	$63,200
257		5	Australia	Shepparton, VIC	4.6	$237,000	$51,400
257		9	U.K.	Edinburgh	4.6	£152,900	£33,400
257	53	9	U.K.	Hull & Humber	4.6	£133,800	£29,300
257	53	9	U.K.	Manchester & Greater Manchester	4.6	£128,000	£28,100
257	53	9	U.K.	Sheffield & South Yorkshire	4.6	£120,000	£25,900
257		209	U.S.	Bellingham, WA	4.6	$240,000	$52,400
257	53	209	U.S.	Denver, CO	4.6	$286,900	$62,600
264		6	Australia	Launceston, TAS	4.7	$250,000	$53,200
264		29	Canada	Hamilton, ON	4.7	$323,000	$68,400
264	57	29	Canada	Montreal, QC	4.7	$264,000	$56,300
264	57	211	U.S.	Riverside-San Bernardino, CA	4.7	$249,100	$52,700
268		7	Australia	Alice Springs, NT	4.8	$469,500	$97,100
268		7	Australia	Rockhampton, QLD	4.8	$318,300	$66,600
268		7	Australia	Tamworth, NSW	4.8	$260,000	$54,500
268		2	N.Z.	Hamilton-Waikato	4.8	$303,400	$62,800
268	59	13	U.K.	Birmingham & West Midlands	4.8	£134,100	£28,000
268		13	U.K.	Middlesborough & Durham	4.8	£118,000	£24,600
268	59	13	U.K.	Newcastle & Tyneside	4.8	£128,200	£26,500
268		13	U.K.	Northampton & Northamptonshire	4.8	£155,000	£32,300

SCHEDULE 3
ALL MARKETS RANKED BY AFFORDABILITY: Most Affordable to Least Affordable
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
268	59	212	U.S.	Portland, OR-WA	4.8	$276,200	$58,000
277		10	Australia	Bunbury, WA	4.9	$380,000	$77,200
277		10	Australia	Mackay, QLD	4.9	$420,000	$86,300
277		10	Australia	Orange, NSW	4.9	$317,000	$64,600
277		17	U.K.	Perth	4.9	£158,800	£32,300
277		213	U.S.	Eugene, OR	4.9	$204,000	$41,400
282		13	Australia	Bathurst, NSW	5.0	$313,300	$63,200
282		13	Australia	Port Hedland, WA	5.0	$818,000	$163,700
282		18	U.K.	Leicester & Leicestershire	5.0	£151,000	£30,400
285	62	1	Singapore	Singapore	5.1	$438,000	$86,000
285		19	U.K.	Newport	5.1	£150,000	£29,500
285	62	19	U.K.	Stoke on Trent & Staffordshire	5.1	£141,000	£27,500
288		3	N.Z.	Dunedin	5.2	$263,500	$51,100
289		15	Australia	Canberra, ACT	5.3	$562,200	$106,400
289		15	Australia	Geraldton, WA	5.3	$379,000	$71,500
289		15	Australia	Wagga Wagga, NSW	5.3	$333,700	$63,500
289	64	21	U.K.	Liverpool & Merseyside	5.3	£125,000	£23,500
289		21	U.K.	Warwickshire	5.3	£186,000	£35,200
289	64	214	U.S.	Miami, FL	5.3	$252,200	$47,500
289		214	U.S.	Naples, FL	5.3	$290,800	$55,100
289	64	214	U.S.	Seattle, WA	5.3	$354,700	$66,900
297		18	Australia	Hobart, TAS	5.4	$322,800	$59,500
297		18	Australia	Toowoomba, QLD	5.4	$309,000	$57,500
297		4	N.Z.	Napier-Hastings	5.4	$290,500	$54,200
297		23	U.K.	Aberdeen	5.4	£187,800	£34,600
297	67	23	U.K.	Bristol-Bath	5.4	£192,000	£35,600
297		23	U.K.	Swansea	5.4	£120,000	£22,300
297		23	U.K.	Warrington & Cheshire	5.4	£170,000	£31,300
297	67	217	U.S.	Boston, MA-NH	5.4	$393,700	$73,100
297		217	U.S.	Bridgeport, CT	5.4	$439,000	$81,300
306		20	Australia	Ballarat, VIC	5.5	$290,000	$52,500
306		20	Australia	Cairns, QLD	5.5	$351,500	$63,600
306		5	N.Z.	Wellington	5.5	$386,700	$70,400
309		27	U.K.	Cardiff	5.6	£145,000	£26,100
310		22	Australia	Bundaberg, QLD	5.7	$265,000	$46,100
310		219	U.S.	Barnstable Town, MA	5.7	$346,800	$60,600
312		23	Australia	Albury-Wodonga, NSW-VIC	5.8	$320,000	$55,200
312	69	23	Australia	Brisbane, QLD	5.8	$442,100	$75,900
312		6	N.Z.	Christchurch	5.8	$388,200	$66,500
312		220	U.S.	Hilo, HI	5.8	$296,700	$51,200
316		31	Canada	Fraser Valley, BC	5.9	$425,400	$71,700
316		31	Canada	Kelowna, BC	5.9	$372,200	$62,900
316		28	U.K.	Telford & Shropshire	5.9	£161,800	£27,200
319		25	Australia	Bendigo, VIC	6.0	$315,000	$52,700
319		25	Australia	Newcastle-Maitland, NSW	6.0	$385,700	$64,800
319	70	25	Australia	Perth, WA	6.0	$508,000	$84,800
319		221	U.S.	Boulder, CO	6.0	$410,900	$68,200

SCHEDULE 3
ALL MARKETS RANKED BY AFFORDABILITY: Most Affordable to Least Affordable
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
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International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
323	71	33	Canada	Toronto, ON	6.2	$453,900	$73,100
323		222	U.S.	Chico, CA	6.2	$257,000	$41,700
323		222	U.S.	Eureka, CA	6.2	$257,000	$41,400
323	71	222	U.S.	New York, NY-NJ-PA	6.2	$405,400	$65,200
327	73	28	Australia	Adelaide, SA	6.3	$392,000	$61,800
328	74	29	U.K.	London Exurbs (E & SE England)	6.4	£225,000	£34,900
329		29	Australia	Darwin, NT	6.5	$673,500	$103,600
329		30	U.K.	Swindon & Wiltshire	6.5	£185,000	£28,600
331		7	N.Z.	Taraunga-Western Bay of Plenty	6.6	$364,800	$55,000
332		30	Australia	Fraser Coast, QLD	6.8	$290,000	$42,600
332		30	Australia	Mandurah, WA	6.8	$390,000	$57,600
334		32	Australia	Wollongong, NSW	6.9	$430,000	$61,900
334		34	Canada	Victoria, BC	6.9	$446,800	$65,100
336	75	31	U.K.	Plymouth & Devon	7.0	£183,600	£26,300
336		225	U.S.	Salinas-Monterey, CA	7.0	$412,800	$59,200
338		33	Australia	Coff's Harbour, NSW	7.1	$355,000	$50,000
339		34	Australia	Geelong, VIC	7.3	$405,000	$55,700
339	76	32	U.K.	London (GLA)	7.3	£326,000	£44,800
341		226	U.S.	Napa, CA	7.4	$518,400	$69,800
342		227	U.S.	Santa Rosa, CA	7.5	$461,100	$61,100
343		228	U.S.	Oxnard, CA	7.6	$550,400	$72,900
344		35	Australia	Gold Coast, QLD	7.7	$472,100	$61,500
344	77	229	U.S.	Los Angeles, CA	7.7	$448,900	$58,300
346	78	230	U.S.	San Diego, CA	7.9	$485,000	$61,500
347		36	Australia	Sunshine Coast, QLD	8.0	$440,000	$55,300
347	79	8	N.Z.	Auckland	8.0	$561,700	$70,600
347		231	U.S.	San Luis Obispo, CA	8.0	$488,300	$61,400
350		37	Australia	Port Macquarie, NSW	8.1	$378,000	$46,600
351	80	38	Australia	Melbourne, VIC	8.4	$595,500	$70,800
352		33	U.K.	Bournemouth & Dorsett	8.6	£223,000	£25,800
353	81	232	U.S.	San Jose, CA	8.7	$805,000	$92,400
354	82	39	Australia	Sydney, NSW	9.0	$722,700	$80,500
354		233	U.S.	Santa Cruz, CA	9.0	$621,200	$69,000
356	83	234	U.S.	San Francisco-Oakland, CA	9.2	$705,000	$76,300
357		235	U.S.	Santa Barbara, CA	9.3	$638,900	$69,000
358		236	U.S.	Honolulu, HI	9.4	$679,800	$72,700
359	84	35	Canada	Vancouver, BC	10.3	$670,300	$65,000
360	85	1	China SAR	Hong Kong	14.9	$4,024,000	$270,000

Financial data in local currency.
*Average Multiple (Japan)

SCHEDULE 4
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International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
327	73	28	Australia	Adelaide, SA	6.3	$392,000	$61,800
312		23	Australia	Albury-Wodonga, NSW-VIC	5.8	$320,000	$55,200
268		7	Australia	Alice Springs, NT	4.8	$469,500	$97,100
306		20	Australia	Ballarat, VIC	5.5	$290,000	$52,500
282		13	Australia	Bathurst, NSW	5.0	$313,300	$63,200
319		25	Australia	Bendigo, VIC	6.0	$315,000	$52,700
312	69	23	Australia	Brisbane, QLD	5.8	$442,100	$75,900
277		10	Australia	Bunbury, WA	4.9	$380,000	$77,200
310		22	Australia	Bundaberg, QLD	5.7	$265,000	$46,100
306		20	Australia	Cairns, QLD	5.5	$351,500	$63,600
289		15	Australia	Canberra, ACT	5.3	$562,200	$106,400
338		33	Australia	Coff's Harbour, NSW	7.1	$355,000	$50,000
329		29	Australia	Darwin, NT	6.5	$673,500	$103,600
332		30	Australia	Fraser Coast, QLD	6.8	$290,000	$42,600
339		34	Australia	Geelong, VIC	7.3	$405,000	$55,700
289		15	Australia	Geraldton, WA	5.3	$379,000	$71,500
224		2	Australia	Gladstone, QLD	4.2	$400,000	$94,200
344		35	Australia	Gold Coast, QLD	7.7	$472,100	$61,500
297		18	Australia	Hobart, TAS	5.4	$322,800	$59,500
218		1	Australia	Karratha, WA	4.1	$679,000	$166,800
264		6	Australia	Launceston, TAS	4.7	$250,000	$53,200
277		10	Australia	Mackay, QLD	4.9	$420,000	$86,300
332		30	Australia	Mandurah, WA	6.8	$390,000	$57,600
351	80	38	Australia	Melbourne, VIC	8.4	$595,500	$70,800
248		3	Australia	Mildura, VIC	4.5	$213,000	$46,900
319		25	Australia	Newcastle-Maitland, NSW	6.0	$385,700	$64,800
277		10	Australia	Orange, NSW	4.9	$317,000	$64,600
319	70	25	Australia	Perth, WA	6.0	$508,000	$84,800
282		13	Australia	Port Hedland, WA	5.0	$818,000	$163,700
350		37	Australia	Port Macquarie, NSW	8.1	$378,000	$46,600
268		7	Australia	Rockhampton, QLD	4.8	$318,300	$66,600
257		5	Australia	Shepparton, VIC	4.6	$237,000	$51,400
347		36	Australia	Sunshine Coast, QLD	8.0	$440,000	$55,300
354	82	39	Australia	Sydney, NSW	9.0	$722,700	$80,500
268		7	Australia	Tamworth, NSW	4.8	$260,000	$54,500
297		18	Australia	Toowoomba, QLD	5.4	$309,000	$57,500
248		3	Australia	Townsville, QLD	4.5	$346,000	$76,400
289		15	Australia	Wagga Wagga, NSW	5.3	$333,700	$63,500
334		32	Australia	Wollongong, NSW	6.9	$430,000	$61,900
				Median Market	5.5		
218		25	Canada	Barrie, ON	4.1	$299,000	$73,500
184		15	Canada	Brantford, ON	3.8	$237,100	$62,000

SCHEDULE 4
ALL MARKETS BY GEOGRAPHY
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
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International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
232	45	28	Canada	Calgary, AB	4.3	$392,400	$91,800
80		5	Canada	Charlottetown, PEI	3.0	$187,300	$63,200
198	40	18	Canada	Edmonton, AB	3.9	$336,000	$87,200
316		31	Canada	Fraser Valley, BC	5.9	$425,400	$71,700
36		3	Canada	Fredericton, NB	2.6	$165,700	$64,600
198		18	Canada	Guelph, ON	3.9	$288,800	$74,400
171		13	Canada	Halifax, NS	3.7	$243,300	$65,700
264		29	Canada	Hamilton, ON	4.7	$323,000	$68,400
316		31	Canada	Kelowna, BC	5.9	$372,200	$62,900
142		10	Canada	Kingston, ON	3.5	$231,800	$66,100
198		18	Canada	Kitchener, ON	3.9	$282,700	$71,600
171		13	Canada	London, ON	3.7	$222,100	$60,700
18		1	Canada	Moncton, NB	2.3	$141,800	$62,300
264	57	29	Canada	Montreal, QC	4.7	$264,000	$56,300
224		27	Canada	Oshawa, ON	4.2	$335,300	$79,800
184	37	15	Canada	Ottawa ON-QC	3.8	$303,900	$79,400
218		25	Canada	Peterborough, ON	4.1	$247,300	$60,600
198		18	Canada	Quebec, QC	3.9	$231,900	$60,000
161		12	Canada	Regina, SK	3.6	$286,600	$79,000
96		8	Canada	Saguenay, QC	3.1	$173,000	$56,100
27		2	Canada	Saint John, NB	2.5	$154,400	$62,200
211		23	Canada	Saskatoon, SK	4.0	$304,600	$75,700
211		23	Canada	Sherbrooke, QC	4.0	$195,300	$49,100
142		10	Canada	St. Catherines-Niagara, ON	3.5	$210,800	$60,600
184		15	Canada	St. John's, NL	3.8	$281,000	$74,100
117		9	Canada	Sudbury, ON	3.3	$216,300	$64,900
80		5	Canada	Thunder Bay, ON	3.0	$187,500	$61,800
323	71	33	Canada	Toronto, ON	6.2	$453,900	$73,100
80		5	Canada	Trois-Rivieres, QC	3.0	$145,500	$48,700
359	84	35	Canada	Vancouver, BC	10.3	$670,300	$65,000
334		34	Canada	Victoria, BC	6.9	$446,800	$65,100
41		4	Canada	Windsor, ON	2.7	$160,200	$60,200
198		18	Canada	Winnipeg, MB	3.9	$244,700	$63,400
				Median Market	3.9		
360	85	1	China SAR	Hong Kong	14.9	$4,024,000	$270,000
58		3	Ireland	Cork	2.8	€144,000	€50,900
171	34	5	Ireland	Dublin	3.7	€215,000	€58,000
23		2	Ireland	Galway	2.4	€119,600	€50,400
68		4	Ireland	Limerick	2.9	€144,000	€50,000
4		1	Ireland	Waterford	2.0	€92,500	€46,900
				Median Market	2.8		
240	48	2	Japan	Tokyo-Yokohama*	4.4	¥28,040,000	¥6,360,000
142	24	1	Japan	Osaka-Kobe-Kyoto*	3.5	¥18,380,000	¥5,200,000
				Median Market*	4.0		

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347	79	8	N.Z.	Auckland	8.0	$561,700	$70,600
312		6	N.Z.	Christchurch	5.8	$388,200	$66,500
288		3	N.Z.	Dunedin	5.2	$263,500	$51,100
268		2	N.Z.	Hamilton-Waikato	4.8	$303,400	$62,800
297		4	N.Z.	Napier-Hastings	5.4	$290,500	$54,200
248		1	N.Z.	Palmerston North-Manawatu	4.5	$231,100	$50,900
331		7	N.Z.	Taraunga-Western Bay of Plenty	6.6	$364,800	$55,000
306		5	N.Z.	Wellington	5.5	$386,700	$70,400
				Median Market	5.5		
285	62	1	Singapore	Singapore	5.1	$438,000	$86,000
297		23	U.K.	Aberdeen	5.4	£187,800	£34,600
161		2	U.K.	Belfast	3.6	£104,400	£29,200
268	59	13	U.K.	Birmingham & West Midlands	4.8	£134,100	£28,000
248	52	8	U.K.	Blackpool & Lancashire	4.5	£125,000	£27,700
352		33	U.K.	Bournemouth & Dorsett	8.6	£223,000	£25,800
297	67	23	U.K.	Bristol-Bath	5.4	£192,000	£35,600
309		27	U.K.	Cardiff	5.6	£145,000	£26,100
232	45	5	U.K.	Derby & Derbyshire	4.3	£136,000	£31,300
240		7	U.K.	Dundee	4.4	£122,800	£28,200
257		9	U.K.	Edinburgh	4.6	£152,900	£33,400
142		1	U.K.	Falkirk	3.5	£98,000	£27,900
224	44	4	U.K.	Glasgow	4.2	£117,400	£28,200
257	53	9	U.K.	Hull & Humber	4.6	£133,800	£29,300
211	42	3	U.K.	Leeds & West Yorkshire	4.0	£130,000	£32,700
282		18	U.K.	Leicester & Leicestershire	5.0	£151,000	£30,400
289	64	21	U.K.	Liverpool & Merseyside	5.3	£125,000	£23,500
339	76	32	U.K.	London (GLA)	7.3	£326,000	£44,800
328	74	29	U.K.	London Exurbs (E & SE England)	6.4	£225,000	£34,900
257	53	9	U.K.	Manchester & Greater Manchester	4.6	£128,000	£28,100
268		13	U.K.	Middlesborough & Durham	4.8	£118,000	£24,600
268	59	13	U.K.	Newcastle & Tyneside	4.8	£128,200	£26,500
285		19	U.K.	Newport	5.1	£150,000	£29,500
268		13	U.K.	Northampton & Northamptonshire	4.8	£155,000	£32,300
232	45	5	U.K.	Nottingham & Nottinghamshire	4.3	£126,300	£29,700
277		17	U.K.	Perth	4.9	£158,800	£32,300
336	75	31	U.K.	Plymouth & Devon	7.0	£183,600	£26,300
257	53	9	U.K.	Sheffield & South Yorkshire	4.6	£120,000	£25,900
285	62	19	U.K.	Stoke on Trent & Staffordshire	5.1	£141,000	£27,500
297		23	U.K.	Swansea	5.4	£120,000	£22,300
329		30	U.K.	Swindon & Wiltshire	6.5	£185,000	£28,600
316		28	U.K.	Telford & Shropshire	5.9	£161,800	£27,200
297		23	U.K.	Warrington & Cheshire	5.4	£170,000	£31,300
289		21	U.K.	Warwickshire	5.3	£186,000	£35,200
				Median Market	4.9		

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96		85	U.S.	Abilene, TX	3.1	$139,000	$44,200
27		24	U.S.	Akron, OH	2.5	$125,300	$50,700
117		105	U.S.	Albany-Schenectady, NY	3.3	$205,800	$61,800
184		162	U.S.	Albuquerque, NM	3.8	$180,700	$47,600
142		129	U.S.	Allentown-Bethlehem, PA-NJ	3.5	$197,400	$56,800
96		85	U.S.	Amarillo, TX	3.1	$145,900	$47,300
198		173	U.S.	Anchorage, AK	3.9	$283,000	$72,800
117		105	U.S.	Ann Arbor, MI	3.3	$190,000	$57,400
4		4	U.S.	Appleton, WI	2.0	$124,600	$61,300
240		198	U.S.	Asheville, NC	4.4	$195,000	$44,000
142		129	U.S.	Athens, GA	3.5	$137,200	$38,700
41	5	36	U.S.	Atlanta, GA	2.7	$152,300	$55,600
224		188	U.S.	Atlantic City, NJ	4.2	$216,700	$52,100
11		10	U.S.	Augusta, GA	2.2	$99,800	$45,600
171	34	152	U.S.	Austin, TX	3.7	$225,300	$60,500
224		188	U.S.	Bakersfield, CA	4.2	$196,500	$46,800
198	40	173	U.S.	Baltimore, MD	3.9	$266,500	$68,200
310		219	U.S.	Barnstable Town, MA	5.7	$346,800	$60,600
130		117	U.S.	Baton Rouge, LA	3.4	$173,200	$51,200
96		85	U.S.	Beaumont, TX	3.1	$139,200	$44,200
257		209	U.S.	Bellingham, WA	4.6	$240,000	$52,400
23		21	U.S.	Binghamton, NY	2.4	$117,500	$49,000
161	30	144	U.S.	Birmingham, AL	3.6	$173,700	$47,600
130		117	U.S.	Bismarck, ND	3.4	$217,500	$63,200
27		24	U.S.	Bloomington, IL	2.5	$156,500	$63,300
130		117	U.S.	Boise City, ID	3.4	$168,400	$49,900
297	67	217	U.S.	Boston, MA-NH	5.4	$393,700	$73,100
319		221	U.S.	Boulder, CO	6.0	$410,900	$68,200
184		162	U.S.	Bremerton, WA	3.8	$230,000	$60,200
297		217	U.S.	Bridgeport, CT	5.4	$439,000	$81,300
117		105	U.S.	Brownsville, TX	3.3	$103,000	$31,500
41	5	36	U.S.	Buffalo, NY	2.7	$137,100	$51,200
248		204	U.S.	Burlington, VT	4.5	$279,900	$62,000
18		17	U.S.	Canton, OH	2.3	$107,000	$46,000
142		129	U.S.	Cape Coral-Fort Myers, FL	3.5	$164,500	$47,100
41		36	U.S.	Cedar Rapids, IA	2.7	$160,100	$58,300
80		72	U.S.	Champaign-Urbana, IL	3.0	$147,900	$48,500
248		204	U.S.	Charleston, SC	4.5	$227,700	$51,000
68		61	U.S.	Charleston, WV	2.9	$140,200	$48,500
130	21	117	U.S.	Charlotte, NC-SC	3.4	$183,800	$53,500
96		85	U.S.	Chattanooga, TN-GA	3.1	$139,500	$44,300
142	24	129	U.S.	Chicago, IL-IN-WI	3.5	$209,000	$60,400
323		222	U.S.	Chico, CA	6.2	$257,000	$41,700
41	5	36	U.S.	Cincinnati, OH-KY-IN	2.7	$142,100	$53,400
68		61	U.S.	Clarksville, TN	2.9	$132,500	$45,200

SCHEDULE 4
ALL MARKETS BY GEOGRAPHY
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
41	5	36	U.S.	Cleveland, OH	2.7	$127,000	$47,800
211		181	U.S.	College Station, TX	4.0	$166,000	$41,100
198		173	U.S.	Colorado Springs, CO	3.9	$222,100	$56,400
161		144	U.S.	Columbia, MO	3.6	$157,400	$44,000
80		72	U.S.	Columbia, SC	3.0	$148,100	$49,700
58		52	U.S.	Columbus, GA-AL	2.8	$122,200	$43,800
58	11	52	U.S.	Columbus, OH	2.8	$152,100	$54,700
108		96	U.S.	Corpus Christi, TX	3.2	$160,000	$50,000
171		152	U.S.	Crestview-Fort Walton Beach, FL	3.7	$196,800	$53,800
80		72	U.S.	Cumberland, MD-WV	3.0	$109,900	$36,300
96	15	85	U.S.	Dallas-Fort Worth, TX	3.1	$181,300	$58,000
11		10	U.S.	Davenport-Moline, IA-IL	2.2	$114,300	$52,600
23		21	U.S.	Dayton, OH	2.4	$111,100	$46,400
41		36	U.S.	Decatur, AL	2.7	$114,900	$42,900
4		4	U.S.	Decatur, IL	2.0	$91,000	$45,400
68		61	U.S.	Deltona-Daytona Beach, FL	2.9	$120,400	$40,900
257	53	209	U.S.	Denver, CO	4.6	$286,900	$62,600
68		61	U.S.	Des Moines, IA	2.9	$177,600	$60,300
27	2	24	U.S.	Detroit, MI	2.5	$130,000	$51,200
142		129	U.S.	Dover, DE	3.5	$187,000	$53,900
130		117	U.S.	Dover, DE	3.4	$185,400	$53,900
41		36	U.S.	Duluth, MN	2.7	$130,000	$47,700
171		152	U.S.	Durham, NC	3.7	$191,600	$51,200
117		105	U.S.	El Centro, CA	3.3	$135,000	$41,000
142		129	U.S.	El Paso, TX	3.5	$143,600	$41,100
36		32	U.S.	Elkhart, IN	2.6	$122,000	$46,200
27		24	U.S.	Elmira, NY	2.5	$116,100	$46,800
27		24	U.S.	Erie, PA	2.5	$119,600	$47,400
277		213	U.S.	Eugene, OR	4.9	$204,000	$41,400
323		222	U.S.	Eureka, CA	6.2	$257,000	$41,400
96		85	U.S.	Fargo, ND-MN	3.1	$165,200	$52,500
184		162	U.S.	Farmington, NM	3.8	$178,300	$47,300
108		96	U.S.	Fayetteville, AR-MO	3.2	$147,100	$46,500
130		117	U.S.	Fayetteville, NC	3.4	$154,700	$45,700
11		10	U.S.	Flint, MI	2.2	$92,000	$41,100
108		96	U.S.	Florence, SC	3.2	$122,700	$38,900
232		193	U.S.	Fort Collins, CO	4.3	$247,000	$56,900
232		193	U.S.	Fresno, CA	4.3	$184,400	$42,400
18		17	U.S.	Ft. Wayne, IN	2.3	$116,700	$50,200
211		181	U.S.	Gainesville, FL	4.0	$167,800	$42,000
130		117	U.S.	Gainesville, GA	3.4	$173,000	$50,700
80		72	U.S.	Glens Falls, NY	3.0	$162,400	$54,400
36	3	32	U.S.	Grand Rapids	2.6	$135,700	$51,600
161		144	U.S.	Greeley, CO	3.6	$205,000	$56,400
41		36	U.S.	Green Bay, WI	2.7	$138,400	$51,700
108		96	U.S.	Greensboro-High Point, NC	3.2	$136,100	$42,500
80		72	U.S.	Greenville, NC	3.0	$115,800	$38,500

SCHEDULE 4
ALL MARKETS BY GEOGRAPHY
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
171		152	U.S.	Greenville, SC	3.7	$165,500	$44,500
58		52	U.S.	Gulfport-Biloxi, MS	2.8	$116,800	$42,000
80		72	U.S.	Hagerstown-Martinsburg, MD-WV	3.0	$158,700	$52,300
171		152	U.S.	Hanford, CA	3.7	$175,300	$46,800
36		32	U.S.	Harrisburg, PA	2.6	$146,000	$55,800
142	24	129	U.S.	Hartford, CT	3.5	$238,500	$68,000
68		61	U.S.	Hickory, NC	2.9	$109,500	$38,100
312		220	U.S.	Hilo, HI	5.8	$296,700	$51,200
358		236	U.S.	Honolulu, HI	9.4	$679,800	$72,700
41		36	U.S.	Houma, LA	2.7	$132,300	$49,800
117	17	105	U.S.	Houston, TX	3.3	$186,600	$57,000
108		96	U.S.	Huntsville, AL	3.2	$178,500	$55,600
41	5	36	U.S.	Indianapolis. IN	2.7	$143,500	$52,800
142		129	U.S.	Jackson, MS	3.5	$153,300	$43,400
142	24	129	U.S.	Jacksonville, FL	3.5	$170,600	$49,000
58		52	U.S.	Kalamazoo, MI	2.8	$127,000	$45,200
11		10	U.S.	Kankakee, IL	2.2	$115,200	$52,700
68	12	61	U.S.	Kansas City, MO-KS	2.9	$162,300	$55,500
117		105	U.S.	Kennewick-Richland, WA	3.3	$189,600	$58,300
58		52	U.S.	Killeen , TX	2.8	$138,000	$49,500
184		162	U.S.	Kingston, NY	3.8	$220,700	$58,600
108		96	U.S.	Kingston, NY	3.2	$187,000	$58,600
130		117	U.S.	Knoxville, TN	3.4	$152,900	$45,600
117		105	U.S.	Lafayette, LA	3.3	$157,000	$47,700
161		144	U.S.	Lake Havasu City, AZ	3.6	$125,000	$35,100
68		61	U.S.	Lakeland, FL	2.9	$123,800	$42,100
80		72	U.S.	Lancaster, PA	3.0	$170,000	$55,800
4		4	U.S.	Lansing, MI	2.0	$100,000	$49,500
18		17	U.S.	Lansing, MI	2.3	$112,700	$49,500
198		173	U.S.	Laredo, TX	3.9	$145,800	$37,300
161	30	144	U.S.	Las Vegas, NV	3.6	$181,900	$50,500
80		72	U.S.	Lexington, KY	3.0	$147,000	$48,800
58		52	U.S.	Lincoln, NE	2.8	$144,900	$51,600
58		52	U.S.	Little Rock, AR	2.8	$138,700	$48,700
130		117	U.S.	Longview, TX	3.4	$145,800	$43,300
344	77	229	U.S.	Los Angeles, CA	7.7	$448,900	$58,300
68	12	61	U.S.	Louisville, KY-IN	2.9	$145,100	$49,800
224		188	U.S.	Madera, CA	4.2	$178,600	$42,800
184		162	U.S.	Madison, WI	3.8	$229,200	$60,000
130		117	U.S.	Manchester-Nashua, NH	3.4	$241,800	$70,400
68		61	U.S.	McAllen, TX	2.9	$100,000	$34,400
80	14	72	U.S.	Memphis, TN-MS-AR	3.0	$137,500	$46,500
171		152	U.S.	Merced, CA	3.7	$165,800	$44,400
289	64	214	U.S.	Miami, FL	5.3	$252,200	$47,500
211	42	181	U.S.	Milwaukee, WI	4.0	$211,800	$53,600
96	15	85	U.S.	Minneapolis-St. Paul, MN-WI	3.1	$208,000	$67,500
58		52	U.S.	Mobile, AL	2.8	$114,800	$40,400

SCHEDULE 4
ALL MARKETS BY GEOGRAPHY
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
224		188	U.S.	Modesto, CA	4.2	$197,300	$47,300
96		85	U.S.	Montgomery, AL	3.1	$141,600	$45,500
240		198	U.S.	Myrtle Beach, SC	4.4	$181,800	$41,100
341		226	U.S.	Napa, CA	7.4	$518,400	$69,800
289		214	U.S.	Naples, FL	5.3	$290,800	$55,100
130	21	117	U.S.	Nashville, TN	3.4	$177,300	$52,500
218		185	U.S.	New Haven, CT	4.1	$247,800	$60,400
161	30	144	U.S.	New Orleans. LA	3.6	$162,500	$45,200
323	71	222	U.S.	New York, NY-NJ-PA	6.2	$405,400	$65,200
108		96	U.S.	Norwich-New London, CT	3.2	$215,300	$67,800
41		36	U.S.	Ocala, FL	2.7	$103,600	$37,800
96		85	U.S.	Ogden, UT	3.1	$198,000	$63,000
117	17	105	U.S.	Oklahoma City, OK	3.3	$161,100	$49,500
171		152	U.S.	Olympia, WA	3.7	$220,000	$59,300
41		36	U.S.	Omaha, NE-IA	2.7	$149,500	$55,200
161	30	144	U.S.	Orlando, FL	3.6	$167,800	$46,900
343		228	U.S.	Oxnard, CA	7.6	$550,400	$72,900
41		36	U.S.	Palm Bay-Melbourne, FL	2.7	$125,800	$47,000
142		129	U.S.	Palm Coast, FL	3.5	$151,100	$43,700
142		129	U.S.	Panama City, FL	3.5	$164,500	$46,900
96		85	U.S.	Pensacola, FL	3.1	$159,800	$50,800
11		10	U.S.	Peoria, IL	2.2	$120,000	$54,500
184	37	162	U.S.	Philadelphia, PA-NJ-DE-MD	3.8	$231,600	$61,200
171	34	152	U.S.	Phoenix, AZ	3.7	$191,700	$52,300
18	1	17	U.S.	Pittsburgh, PA	2.3	$116,000	$51,400
218		185	U.S.	Pittsfield, MA	4.1	$194,200	$47,400
117		105	U.S.	Port St. Lucie, FL	3.3	$143,900	$43,100
232		193	U.S.	Portland, ME	4.3	$236,000	$54,700
268	59	212	U.S.	Portland, OR-WA	4.8	$276,200	$58,000
142		129	U.S.	Poughkeepsie, NY	3.5	$238,000	$67,900
198		173	U.S.	Prescott, AZ	3.9	$175,000	$44,900
240	48	198	U.S.	Providence, RI-MA	4.4	$241,400	$55,300
218		185	U.S.	Provo, UT	4.1	$241,000	$59,300
108		96	U.S.	Punta Gorda, FL	3.2	$147,900	$46,100
117	17	105	U.S.	Raleigh, NC	3.3	$202,700	$61,400
68		61	U.S.	Reading, PA	2.9	$153,700	$53,000
232		193	U.S.	Redding, CA	4.3	$198,500	$46,300
248		204	U.S.	Reno-Sparks, NV	4.5	$224,800	$50,000
142	24	129	U.S.	Richmond, VA	3.5	$205,000	$57,800
264	57	211	U.S.	Riverside-San Bernardino, CA	4.7	$249,100	$52,700
80		72	U.S.	Roanoke, VA	3.0	$145,000	$47,900
36	3	32	U.S.	Rochester, NY	2.6	$132,100	$51,600
1		1	U.S.	Rockford, IL	1.7	$88,900	$51,600
240	48	198	U.S.	Sacramento, CA	4.4	$255,900	$57,900
11		10	U.S.	Saginaw, MI	2.2	$90,000	$41,100
211		181	U.S.	Salem, OR	4.0	$184,900	$46,500
336		225	U.S.	Salinas-Monterey, CA	7.0	$412,800	$59,200

SCHEDULE 4
ALL MARKETS BY GEOGRAPHY
Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter
Demographia International Housing Affordability Survey

International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
58		52	U.S.	Salisbury, MD	2.8	$140,000	$50,300
184	37	162	U.S.	Salt Lake City, UT	3.8	$235,000	$61,200
117	17	105	U.S.	San Antonio, TX	3.3	$175,000	$52,400
346	78	230	U.S.	San Diego, CA	7.9	$485,000	$61,500
356	83	234	U.S.	San Francisco-Oakland, CA	9.2	$705,000	$76,300
353	81	232	U.S.	San Jose, CA	8.7	$805,000	$92,400
347		231	U.S.	San Luis Obispo, CA	8.0	$488,300	$61,400
357		235	U.S.	Santa Barbara, CA	9.3	$638,900	$69,000
354		233	U.S.	Santa Cruz, CA	9.0	$621,200	$69,000
342		227	U.S.	Santa Rosa, CA	7.5	$461,100	$61,100
240		198	U.S.	Sarasota-Bradenton, FL	4.4	$213,500	$48,700
41		36	U.S.	Scranton-Wilkes Barre, PA	2.7	$117,000	$43,700
289	64	214	U.S.	Seattle, WA	5.3	$354,700	$66,900
198		173	U.S.	Sebastian-Vero Beach, FL	3.9	$160,300	$41,200
184		162	U.S.	Shreveport, LA	3.8	$170,500	$44,900
80		72	U.S.	Sioux Falls, SD	3.0	$158,100	$52,700
23		21	U.S.	South Bend, IN	2.4	$108,600	$45,600
108		96	U.S.	Spartanburg, SC	3.2	$133,900	$41,600
171		152	U.S.	Spokane, WA	3.7	$181,600	$48,500
9		8	U.S.	Springfield, IL	2.1	$120,600	$56,700
184		162	U.S.	Springfield, MA	3.8	$201,400	$52,500
68		61	U.S.	Springfield, MO	2.9	$123,500	$43,100
41	5	36	U.S.	St. Louis,, MO-IL	2.7	$143,700	$53,200
248		204	U.S.	Stockton, CA	4.5	$232,900	$51,700
27		24	U.S.	Syracuse, NY	2.5	$130,700	$52,200
198		173	U.S.	Tallahassee, FL	3.9	$176,500	$45,600
130	21	117	U.S.	Tampa-St. Petersburg, FL	3.4	$151,800	$45,200
4		4	U.S.	Toledo, OH	2.0	$87,500	$44,100
11		10	U.S.	Topeka, KS	2.2	$106,900	$49,400
232		193	U.S.	Trenton, NJ	4.3	$298,900	$69,300
184		162	U.S.	Tucson, AZ	3.8	$172,400	$45,600
80		72	U.S.	Tulsa, OK	3.0	$146,500	$48,900
117		105	U.S.	Tyler, TX	3.3	$157,000	$47,200
1		1	U.S.	Utica, NY	1.7	$80,000	$47,500
248		204	U.S.	Vallejo, CA	4.5	$287,100	$63,200
142	24	129	U.S.	Virginia Beach-Norfolk, VA-NC	3.5	$200,500	$57,000
198		173	U.S.	Visalia, CA	3.9	$159,700	$41,100
142		129	U.S.	Waco, TX	3.5	$143,000	$41,400
3		3	U.S.	Warner Robbins, GA	1.9	$103,900	$55,500
240	48	198	U.S.	Washington, DC-VA-MD-WV	4.4	$392,500	$89,900
27		24	U.S.	Waterloo, IA	2.5	$130,800	$51,700
27		24	U.S.	Wichita, KS	2.5	$125,600	$49,400
161		144	U.S.	Wilmington, NC	3.6	$185,300	$50,900
80		72	U.S.	Winston-Salem, NC	3.0	$131,000	$43,000
184		162	U.S.	Worcester, MA	3.8	$241,800	$63,700
171		152	U.S.	Yakima, WA	3.7	$164,100	$44,800
41		36	U.S.	York, PA	2.7	$155,800	$56,700

SCHEDULE 4 ALL MARKETS BY GEOGRAPHY Median Multiple (Median House Price/Median Household Income): 2013 – 3rd Quarter *Demographia International Housing Affordability Survey*							
International Affordability Rank	Major Market Rank	National Rank	Nation	Metropolitan Market	Median Multiple*	Median Price	Median Household Income
9		8	U.S.	Youngstown, OH-PA	2.1	$85,000	$41,400
224		188	U.S.	Yuba City, CA	4.2	$193,100	$46,500
96		85	U.S.	Yuma, AZ	3.1	$125,000	$40,200
				Median Market	3.4		
Financial data in local currency. *Average Multiple (Japan)							

ANNEX: USES, METHODS AND SOURCES

Most international housing affordability sources and "city" rating sources focus on higher end housing that would be demanded by executives who might transfer from one nation to another. The *Demographia International Housing Affordability Survey* is unique in focusing on the middle of the market --- housing affordability for average households.

Further, the focus is on metropolitan markets, rather than higher-cost inner areas or expensive neighborhoods. This is an important distinction. The data in the *Demographia International Housing Affordability Survey* does not relate, for example to Belgravia in London, New York's Upper East Side or Beverly Hills in Los Angeles. It rather encompasses entire metropolitan markets, which for example, in the New York metropolitan area includes 25 counties in the states of New York, New Jersey and Pennsylvania[55] (where included housing can be 75 miles [120 kilometers] or more from the upscale areas of the urban core, where prices are the highest).

Price-to-income Ratios: Uses and Misuses: The use of house price-to-income multiples has become more popular in recent years. While the Median Multiple has been most frequently used, other price-to-income multiples have been developed. This is appropriate, so long as parallel and consistently calculated indices are provided. This has not always been the case.

In Australia, price-to-income ratios have been published that use *average* household incomes and *median* house prices. To make valid comparisons between international markets, it would be necessary to also calculate these "average/median" multiples for the markets outside Australia to which comparisons are made (and to provide historical data). However, "average/median" multiples have been inappropriately compared to *Median Multiples*. For example, Australian housing affordability has been portrayed more favorably than the reality, in sources using *average* household incomes (which are materially higher than *median* household incomes) and *median* household incomes.

Coverage:. The nine nations and corresponding metropolitan markets that are included in the *10th Annual Demographia International Housing Affordability Survey* have sufficient current sources of house prices and household income data to estimate housing affordability using the Median Multiple (the similar "Average Multiple is used in Japan).

Demographia receives periodic requests to expand its coverage to other nations. The addition of continental European nations, mainland China and India has been most frequently requested. *Demographia* would be pleased to add other nations and will do so wherever consistent data of sufficient quality can be identified. Readers are encouraged to contact the authors with any such information.

House Characteristics: The indexes and data on which the *Survey* is based reflect the overwhelming majority of existing housing in the markets. At the same time, there are differences in house types, housing characteristics and lot size between the geographies covered. The *Demographia International Housing Affordability Survey* does not adjust the Median Multiples to reflect these differences. For example, the average size of housing, particularly new housing, is abnormally small by New World standards, the United Kingdom and Hong Kong.[56]

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[55] As defined by the United States Bureau of Management and the Budget.
[56] See *2nd Annual Demographia International Housing Affordability Survey*, Pages 16-18.

Methods: Median house price information is obtained from the leading national reporting agencies and includes the housing stock as reported upon. Where only average house prices are available, median house prices are estimated from historic conversion factors, except in Japan. The principal sources are generally real estate industry time series that have become established as authoritative, national transaction registries and other government sources.

Median household income data is estimated using national census data or surveys for each metropolitan market, where such data is available (such as the 2011 census in Australia, the 2011 National Household Survey in Canada , the 2013 New Zealand census, the annual American Community Survey in the United States and the annual Census and Statistics Department data in Hong Kong). Alternative government data is used to estimate incomes in Ireland and the United Kingdom, where comparable census data has not been identified. The income base is then adjusted to account for changes to produce an up-to-date estimate, using the best available indicators of median income growth.

Median house price estimates are provided for the 3rd quarter of 2012 (September quarter), or for the month of September where September quarter data is not available. In a few smaller markets, the latest available house prices are from the 2nd quarter of 2012.

Caution is urged in time-series comparisons in individual markets. Changes in data sources, base year income information, housing data sources and geographical definitions make precise year to year comparisons less reliable. Comparisons should be generally limited to the housing affordability rating categories of "affordable," moderately unaffordable," "seriously unaffordable" and "severely unaffordable."[57]

Sources: The following principal sources have been consulted:

Arkansas Realtors Association
Australian Bureau of Statistics
Australian Property Monitors
Bank of Canada
Bank of England
Bank of Ireland
Calgary Real Estate Board
Canada Mortgage and Housing Corporation
Canadian Home Builders Association
Canadian Real Estate Association
Census and Statistical Office: Government of Hong Kong
Central Statistics Office, Ireland
Chambre immobilière du Grand Montréal
Clarksville (Tennessee) Association of Realtors
Coastal Carolinas Association of Realtors
Communities and Local Government (Ministry), United Kingdom
Daft.ie
Department of the Environment, Heritage and Local Government (Ireland)
Edmonton Real Estate Board

[57] Demographia attempts to use the most reliable available data at the time of report preparation. This necessitates adopting more representative sources as they become available, including new sources and updates.

Federal Reserve System (United States)
Fédération des chambres immobilières du Québec
Harvard University Joint Center on Housing
Hawaii Information Service
Housing Industry Association (Australia)
Ireland Environment, Heritage and Local Government
Japan Statistics Bureau
John Burns Real Estate Consulting
The Land Institute of Japan
Land Registry of England and Wales
The Land Registry (Hong Kong)
Louisiana Realtors
National Association of Home Builders (USA)
National Association of Realtors (USA)
National Statistics (United Kingdom)
North Carolina Association of Realtors
Northern Ireland Research and Statistics Agency
Notaires de France
Realcomp (Detroit)
Real Estate Board of Winnipeg
Real Estate Center, Texas A&M University
Real Estate Institute of Australia
Real Estate Institute of New South Wales
Real Estate Institute of New Zealand
Real Estate Institute of Northern Territory
Real Estate Institute of Queensland
Real Estate Institute of Tasmania
Real Estate Institute of Victoria
Real Estate Institute of Western Australia
Realtors Association of Hamilton-Burlington
Registers of Scotland
Reserve Bank of Australia
Reserve Bank of New Zealand
Residential Property Price Register of the Property Services Regulatory Authority (Ireland)
RP Data (realestate.com.au)
Singapore Department of Statistics
Singapore Real Estate Exchange (SRX)
Statistics Canada
Statistics New Zealand
Toronto Real Estate Board
United Kingdom Department of Communities and Local Government
United States Department of Commerce: Bureau of Economic Analysis
United States Department of Commerce: Bureau of the Census
United States Department of Housing and Urban Development
University of Ulster
Urban Development Institute of Australia
Zillow.com

Notes on Figures:

Figure 1: Housing Affordability: 2004-2013: From data in *Demographia Surveys.*

Figure 2: Most and Least Affordable Markets: From data in the *Demographia Survey.*

Figure 3: Housing Affordability & Land Regulation: In the United States, more restrictive regulation markets (Table 1) include those classified as "growth management," "growth control," "containment" and "contain-lite" in *From Traditional to Reformed A Review of the Land Use Regulations in the Nation's 50 largest Metropolitan Areas* (Brookings Institution, 2006) as well as markets Demographia has determined to have significant land rationing (urban containment) and rural zoning (large lot zoning) restrictions (New York, Chicago, Minneapolis-St. Paul, and Washington). Outside the United States, urban containment metropolitan markets are identified based upon their widespread use urban containment. This includes all of the United Kingdom (under the Town and Country Planning Act), Ireland (under the National Spatial Strategy), Hong Kong and all of the markets of Australia and New Zealand. In Canada, urban containment policy has been adopted in Toronto, Montréal, Vancouver, Ottawa and Calgary. Markets not classified as "urban containment" are classified as liberal.

Figure 4: Overall Housing Affordability: From data in the *Demographia Survey.*

Figure 5: Housing Affordability Trend: Australia: From data in the *Demographia Surveys.*

Figure 6: Housing Affordability Trend: Canada: From data in the *Demographia Surveys.*

Figure 7: Housing Affordability Trend: United States: From data in the *Demographia Surveys.*

Figure 8: Average New House Size: Data from US Census Bureau, housepricecrash.com, stproperty.sg, shrinkthatfootprint.com.

Figure 9: House Price-to-income Ratios: Reserve Bank of Australia.

Table 16
Metropolitan Market Selection Criteria

Nation	Markets Included (Where Complete Data is Available)
Australia	Metropolitan markets corresponding to urban centres over 50,000 population & Pilbara
Canada	Metropolitan markets (CMAs) over 100,000 population
China (S.A.R)	Hong Kong
Ireland	Metropolitan markets over 50,000 population
Japan	Two largest markets (only markets available)
New Zealand	Markets corresponding to urban areas over 75,000 population
Singapore	Singapore
United Kingdom	Markets corresponding to urban areas over 150,000 population and London Exurbs (E & SE England).
United States	Metropolitan markets (MSAs) over 200,000 population
Selected additional markets.	

Footer Illustrations: New Houses (Left to Right):

Suburban Kansas City, United States
Suburban Montréal, Canada
East of England (London Exurbs), United Kingdom
Suburban Tseung Kwan O (Hong Kong)
Suburban Dublin, Ireland
Suburban Auckland, New Zealand
Suburban Adelaide, Australia

BIOGRAPHIES

Wendell Cox

Wendell Cox is co-author of the *Demographia International Housing Affordability Survey*. He is a public policy consultant and principal of Demographia, an international public policy firm. He has also served as a visiting professor at the Conservatoire National des Arts et Metiers in Paris (a national university) from 2002. He is vice-president of CODATU, a Lyon (France) based international research organization dedicated to improving transport in developing world urban areas. He is a contributing editor at newgeography.com and author of the *Evolving Urban Form* series, which provides development profiles of individual world urban areas. Among his most recent policy reports were *Improving the Competitiveness of Metropolitan Areas* and *Evaluation of Plan Bay Area* and a "framing essay" entitled *Toward More Prosperous Cities*.

He is also associated with various public policy organizations, such as the Heritage Foundation (Washington), the Frontier Centre (Winnipeg), the Pacific Research Institute (San Francisco), the Texas Public Policy Foundation, the Independence Institute (Denver), Institut économique de Montréal, the National Center for Policy Analysis (Dallas), Georgia the Public Policy Foundation, the Virginia Institute for Public Policy and the Maryland Public Policy Institute.

Wendell Cox has lectured widely, including a month long tour to all Australian state and territorial capitals and university lectures in the United Kingdom, France, China, Egypt and Australia. He has completed projects in the United States, Western Europe, Canada, Australia and New Zealand in urban policy, demographics and transport.

He was appointed to three terms on the Los Angeles County Transportation Commission by Mayor Tom Bradley and to the Amtrak Reform Council by Speaker of the U. S. House of Representatives Newt Gingrich.

Demographia annually publishes *Demographia World Urban Areas*, the only annual list of world urban areas (agglomerations) over 500,000 population with coordinate urban land area, population and population density estimates. Demographia sponsors three internet web sites, including demographia.com, www.publicpurpose.com and www.rentalcartours.net. The www.publicpurpose.com website has been twice honored by the *National Journal* as one of the nation's top internet transport sites. He is also author of the *Demographia Residential Land and Regulation Cost Index*.

In 2004 he teamed with Hugh Pavletich of Performance Urban Planning to develop the *Demographia International Housing Affordability Survey*.

Hugh Pavletich

Hugh Pavletich, the co-author of the *Demographia International Housing Affordability Survey,* resides in "severely unaffordable" (5.8 Median Multiple) Christchurch, New Zealand, which since 4 September 2010 has experienced in excess of 13,000 earthquakes. He has written extensively on these issues.

He operates the archival website Performance Urban Planning and is the Managing Director of Pavletich Properties Ltd, a commercial property development and investment company.

He commenced his working life as a farm worker and wool classer (wool classifier) in 1967 and moved to Christchurch in 1980, where he started developing small factory units and has developed commercial and industrial property on freehold and Maori leasehold land in other centers of the South Island as well.

His industry involvement commenced when elected President of the South Island Division of the Property Council of New Zealand (then the Building Owners & Managers Association – BOMA) soon after its inception in 1991, which he led for four years.

He has had extensive involvement with public policy issues of local authority financial management, land use regulation and heritage. In 2004, he was elected a fellow of the Urban Development Institute of Australia (UDIA) for services to the industry.

He felt there was a need for an international measure of housing affordability and teamed up with Wendell Cox in 2004, to develop the annual *Demographia International Housing Affordability Survey*.

Alain Bertaud: See Introduction

DEMOGRAPHIA

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Consultation Paper

Boosting the supply of affordable rented housing: learning from other countries

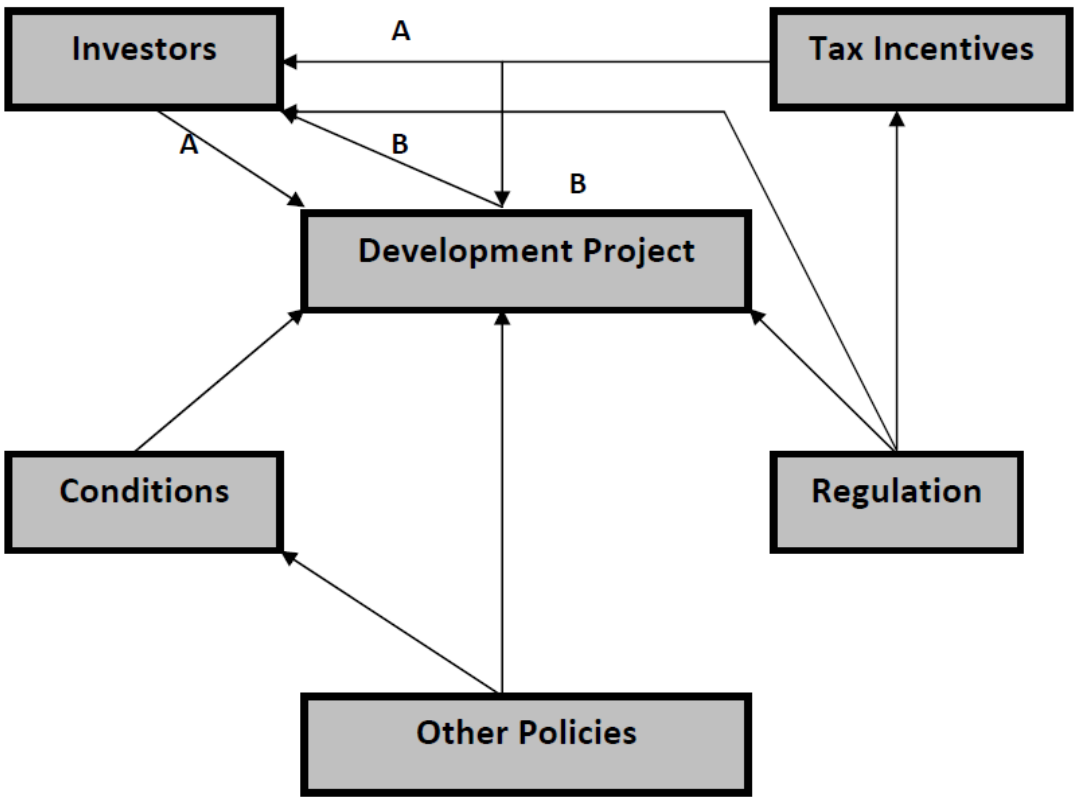
1. Overall Proposal

Our approach for consultation centres on six issues:

- Development project;
- Investors;
- Tax incentives;
- Conditions;
- Regulation; and
- Relationship with other policies.

Each of these has a subset of issues – see below

Diagrammatically, the overall approach is:



The key points are:

- The development project would take account of tax incentives, investors, conditions, regulation and other policies.
- Tax incentives could be development (routes B) or investor led (route A). In the case of the former, the development would attract tax incentives that would be marketed to investors. In relation to the latter, investors would decide what to invest in (or even to invest in affordable housing at all).
- Regulation of tax incentives, investors and projects would be required.
- Other policies (for example, the 'green' agenda) could either be linked to conditions or applied directly to projects.
- Other policies are crucial in achieving the localism agenda, if there is no local influence on conditions.
- This overall approach would need to be EU 'proofed' to take account of areas such as state aid and competition policy

Discussion and Questions

1. **Is the problem specified correctly?**
2. **Is this overall approach appropriate?**
3. **What are your views on the tax incentives routes?**
4. **Should other policies be part of the conditions or a direct requirement for each project?**
5. **Where should the localism agenda be built in – conditions or other policies?**
6. **We believe that EU proofing ought not to be a major issue, but is this the case?**
7. **What are the main constraints to a change of policy that will result in an increase on the supply of affordable rented housing?**

2. Development Project

An organisation puts together a project for affordable housing based on conditional object subsidies through tax incentives.

- Define 'organisation'
  - *Public, private or third sector?*
  - *Partnerships such as a local asset backed vehicles?*

- Clarify 'project'
  - *Funding, development and management of completed schemes?*

- *Would it also involve market rent and owner-occupation (so as to achieve mixed tenure)?*
- *What about rehab as well as new build?*
- *Would it be a project covering a number of sites in a wide geographical area?*
- *What would be the relationship with other object subsidies e.g. land at nil value?*

3. Investors

There are a number of issues and questions:

- *Investment in the 'organisation' or the project or a fund comprising many projects e.g. a venture capital trust?*
- *Corporate or individual investors or both?*
- *How is the risk of this new type of investment addressed in the early years?*
  - *Some sort of government guarantee?*

4. Tax incentives

An important starting point is to agree the terminology:

- *Should we use the term tax incentive as the generic basis for our proposal or should we use the UK term of tax relief? In other words, what term is most understandable?*

There are, then, a series of specific questions on 'tax incentives':

- *What forms of tax relief would be available?*
- *What scale of tax relief per project would be needed to make it attractive to investors?*
- *How long would the tax relief apply?*
- *What would be the annual global sum of tax relief if any?*
- *Would we wish to move to tradable tax credits (relief) as in the USA?*

5. Conditions

These focus on the 'conditions' so that the output is high quality affordable housing for a specific time period:

- *Who would be the target group(s) in terms of income and rent ratio?*
- *Would there be other target groups e.g. vulnerable households?*
- *What would be the nature of the tenancy agreement?*
- *Would there be limits on annual rent increases?*
- *What would be the quality standard?*
- *How long would the conditions apply?*

6. Regulation

As pointed out above, there would need to be regulation of tax incentives, investors and projects:

- *Who would monitor the project outputs? Homes & Communities Agency? But what about London and the devolved administrations?*
- *Who would oversee, monitor and regulate investors and tax incentives? HMRC?*

7. Relationship with Other Policies

This is likely to be a crucial part of the approach in order to enable projects to take account of local requirements.

- *To what extent would projects be required to meet other policy requirements (for example, the green agenda, regeneration, jobs and training for local people etc)?*
- *Would this be decided at regional, city-region or local authority levels?*

Notes:

1. Further information about the project is available online from http://housingsupply.our.dmu.ac.uk.

12 November 2013

FONVCA AGENDA ITEM 7b3

Groundbreaking initiative focuses on increasing housing supply

Affordability crisis: Greater Vancouver Home Builder's Association says the answer is to build more dwellings

BY BOB RANSFORD, VANCOUVER SUN FEBRUARY 21, 2014

PAUL J. RICHARDS/AFP/Getty Images

Photograph by: PAUL J. RICHARDS, AFP/Getty Images

One of the world's leading voices on sustainability and the future of the planet recently sounded an alarm bell, warning that the shortage of housing supply in cities across the globe is threatening quality of life.

In an article in Britain's Guardian newspaper, Alex Steffen, a San Francisco-based urban futurist, argued there is a huge gulf between available housing and demand for homes in growing cities across the globe. He contends this housing shortage is causing an affordability crisis that undermines the quality of life for the hardworking middle class, worsens inequality and threatens the future of the

planet.

Steffen contends that to make housing affordable again, most cities need to catch up to decades-worth of unmet demand over the next few years: “In many cities, this means goals measured in the tens of thousands of new homes; in the fastest-growing cities, it means hundreds of thousands. Build enough housing and (economists and experience both tell us) prices should at least stabilize. Want social justice? Build a lot more housing.”

In order to build this magnitude of housing, Steffen argues that new efforts are needed — efforts not only in scale, but in approach. That challenge, he believes, demands that local governments need to be willing and able to plan and permit the kind of widespread change that will be needed to accommodate this wave of new housing supply over the next few decades.

News of this global housing shortage crisis comes as no comfort to those of us in Metro Vancouver who experience every day the life-altering pressures of housing costs stretching our means. It’s interesting that we’re part of a global trend, but not in any way reassuring to know this.

We know that our regional population is growing at a rate of 3,000 new residents per month. By 2041, the Metro Vancouver region will need a half-million new homes to house a million new residents.

Some are beginning to realize that to combat the housing affordability crisis in Metro Vancouver, we are going to have to seriously figure out how we can close the gulf between supply and demand.

Some extraordinary measures will be needed to accomplish this and some very ordinary measures — small innovations — also will help.

One way of improving the ability of the market to respond with housing supply is to ensure that municipalities and developers are working effectively together to plan and approve new housing projects.

The Greater Vancouver Home Builders’ Association recently launched an initiative to figure out how to get new housing development projects to the groundbreaking stage, recognizing that we do have a housing shortage and supply is required.

Getting to Groundbreaking — or G2G — is a comprehensive program that will look at the costs, the charge structures, the processes and the policies that go into the processing and eventual approval of new housing development applications in municipalities throughout the region. An annual G2G survey will gather data from both municipalities and developers to benchmark application costs, approval times and management practices. Working with local governments, GVHBA will conduct background research on housing policy regulations and their impacts, hoping to identify innovative ways in which municipalities and developers are already working together to meet housing demand or new innovations where they can work more effectively together.

This initiative promises to be a rigorous one, based on credible research methods. Simon Fraser University’s Urban Studies Program researchers are partners in the project with the GVHBA, and they will be guided by an advisory group that includes members of local governments, the Urban Development Institute, the BC Non-profit Housing Association and Toronto’s Ryerson University.

It is intended to be a long-term initiative, with the promise of an annual report on the benchmarks, highlights on best practices and case studies.

GVHBA hopes the Getting to Groundbreaking initiative will provide some workable ideas on addressing the pressing housing needs in the region.

What's most encouraging about this initiative is that it focuses on supply as the answer to the affordability challenge.

We've been struggling with this challenge in Metro Vancouver for far too long, while we have ignored what Steffen said in his call to action: "Our only choice is to build, build, build."

Bob Ransford is a public affairs consultant with Counterpoint Communications Inc. He is a former real estate developer who specializes in urban land-use issues. Email: ransford@counterpoint.ca or Twitter:@BobRansford

Previous **Next**

Workers build walls of a new home at a housing development on April 16, 2013 in San Mateo, California. The Commerce Department reported that new home construction was up seven per cent in March from February, the biggest gain since June 2008. A surge of apartment construction led the monthly gain.

Photograph by: Justin Sullivan, Getty Images

FONVCA AGENDA ITEM 8a2

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Sociation Today ®

Volume 2, Number 1
Spring 2004

Article Review:

Population Growth, Density and the Costs of Providing Public Services

Reviewed by George H. Conklin

Background: Many journals have book reviews. However, in the sciences the most common form of communication is not books, which are out of date when published, but articles. Many books are based on articles and enlarged often beyond what is required. However, the opposite is also true: there are many important articles which address basic issues in the social sciences that have not been made into books, but perhaps should be. In order to draw attention to important articles which address basic issues which sociologists are interested in, ***Sociation Today*** *will review articles rather than books.*

Our second review article deals with the core concept of how density affects the human animal . The author of the article finds a J-curve or non-linear relationship. At very low density levels, increased population density lowers costs of providing services such as police protection. But beyond very low levels of density, as density goes up, so do costs to government. Rapid population growth also imposes costs on the local population through lower service levels.

Population Growth, Density and the Costs of Providing Public Services, by Helen F. Ladd in *Urban Studies*, Vol. 29, No. 2, 1992, pp. 273-295.

One of the oldest hypotheses in the social sciences is that population density plays a vital role in explaining human behavior. Following authors such as Louis Wirth (1938) and other work known as the Chicago School, basic theory holds that as population density increases, stress on the human animal will also increase. Manifestations of this include increased levels of social disorder compared to less dense areas. One measurement of this would be recorded crime levels.

As the population of the United States and indeed the world as a whole continues to concentrate in cities, local governments have taken a keen interest in how to pay for the urban overheads necessary to accommodate the continued concentration of the human population in urban areas. The costs of providing police services is one area of interest, as are ways of controlling the costs of urban overheads.

A starting point for Ladd (p. 273) "...is the observation that we know very little about the average effects of population growth on local public sector spending." Since the county boundaries of the USA are fixed, as population increases, so does population density. But does increased population density increase or decrease costs? Ladd (p. 274) finds there are two opposite forces at work here. "On the one hand, higher density is likely to increase per capita spending as more services, such as refuse collection, must be provided." More people might increase the harshness of the environment by increasing crime which would increase public safety costs.

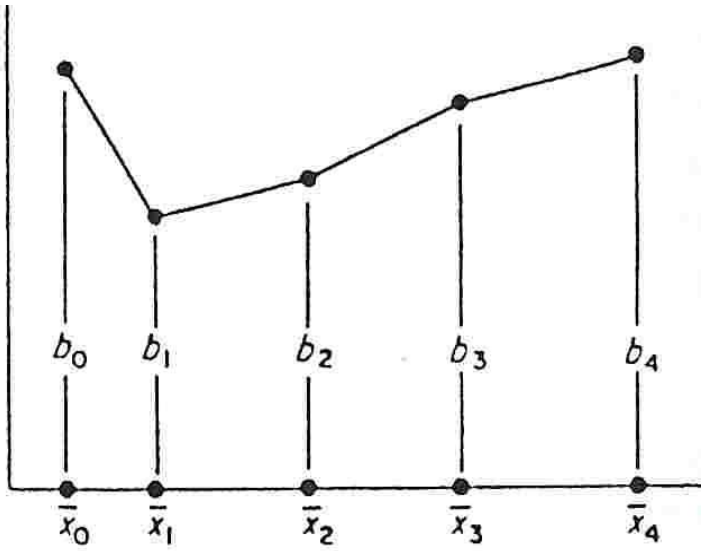
But most planners argue that increased population density is good because "there are economies of density in the production of certain services (p. 274)." High density planned development is supposed result in significant savings to government by reducing both the capital and operating costs of police, fire and solid waste collection and disposal services and storm sewers, according to The Real Estate Research Corporation (1974) and Downing and Gustely (1977). Fixed costs spread over a larger number of people, it might be argued, would lower the per capita costs of public services.

To test the actual results of population density on public services, Ladd looks at data for 247 large counties in 1985 covering 59 per cent of the population of the United States. Piecewise linear regression is used for analysis (see Figure 1). Piecewise linear regression assumes a straight line relationship

only between any two points (example b1 and b2), but does not assume that overall a relationship must be linear.

The result shown in Figure 1 is a J curve, or a non-linear relationship. Thus at very low levels of density, for example, population density (the X axis) can show a decrease in public safety spending. But at higher levels, the costs show an increase.

Figure 1



Source: Ladd, p. 277.

To avoid a simplistic analysis, Ladd uses many different measures in her article as controls. Expenditure variables include spending on current operations, per capita; spending on public safety, per capita; and capital outlays, per capita 1978. Demand cost and taste variables are: income, per capita; residential share of accessed value of property tax base, 1986; manufacturing wage rate (by state); public school enrollments, per capita; fraction of population below poverty level, 1979; manufacturing employment per resident; non-manufacturing jobs per resident; crime rate; population; percentage of population more than 12 years of education, 1980. Intergovernmental relation variables are ratio of local direct general expenditure to state and local direct general expenditure in the county's state; ratio of local spending on public safety to state and local spending on public safety in the county's state; federal aid, per capita; state aid, per capita.

Regional dummy variables are East, Midwest, South and West. Density variables are given the following cutting points of people per square mile: 0; 250; 500; 1250; 1750; 24,000; or as an alternative 750; 1000; 1500; and 24,000. Population change variables are also included.

Results

Population growth does not pay for itself. Ladd finds that "...the major stress on local public spending associated with a surge in population occurs in the capital, not the current, account budget (p. 288)." However, as density increases, capital outlays also increase.

The same is true for public safety spending. Population loss costs money, but so does growth at all levels. More interesting, population density shows a J-shaped relationship. Only at very low levels of density are costs high, and decline until population reaches about 250 persons per square mile (see Table 1). Once the population reaches 250 per square mile any increase in density results in *higher per capita* costs for public safety. (As a reference point, Ladd notes that Wake County, North Carolina, which includes Raleigh, has an average density of 414 persons per square mile.) Regionally spending on public safety is lower in the East, Midwest and South than in the West.

Table 1

Public Safety: Predicted Effects of Density (Per Capita)

Population Density Per Square Mile	Predicted Spending Relative to Base	Predicted Spending in 1982 Dollars
D125	1.17	144
D250	Base	124
D500	1.07	133
D750	1.23	152

D1250	1.38	171
D1750	1.26	156
D2400	1.52	188

Source: Adapted from Ladd 1992, p. 291

Conclusions

Although the results are non-linear, Ladd's findings are not hard to interpret. Those who feel that increasing population density will *decrease* costs to local governments are correct, but **only** at very low levels of population density. "The increasing per capita spending as the density of counties rises above 250 people per square mile provides important evidence to counter the view, which emerges from engineering and planning studies, that higher density reduces public sector costs (pp. 291-292)." For most situations, more population density equals MORE per capita costs to government.

Since population growth does result in higher costs, the public issue arises as to whether newcomers should be forced to pay extra to live in a community through impact fees. This is the normative situation in the United States. Young families buying a new house are thus forced to pay school, road and density impact fees. Ladd asks the interesting question if this is just. The article concludes with the statement about new development:

> Of course, the normative question of whether it (growth) *should* be asked to pay its way in order to hold harmless established residents is a different question, and one that is beyond the scope of this paper. One should note, however, that to the extent that the fiscal burden on established residents arises because of the higher overall density in the county, it is hard to make an economic argument for high financing burdens on new residents alone; after all, the established residents are as much a cause of the higher density as are the new residents (p. 293).

More broadly stated, the issues raised by Ladd are

important from a social justice point of view. Should new families buying their first house pay, for example, a school impact fee? Is this not just a quiet way of charging young families tuition for public education, a fee not charged to existing residents?

The 2000 census shows that more and more people in the United States are moving into a few areas of increased population concentrations as the rural economy continues its historic decline. Population *concentration*, not sprawl, will continue to be a major social factor in the coming years. And as the one industrial nation with substantial population growth, it is quite clear that increased costs of public services which happen with growth and increased population density will continue to be widely discussed.

References

Downing, P.B. and Gustley, R. D. (1977). "The Public Service Costs of Alternative Development Patterns: A Review of the Evidence." In P. B. Downing (Ed.) *Local Services Pricing Policies and Their Effect on Urban Spatial Structures.* Vancover: University of British Columbia Press.

Real Estate Research Corporation (1974). *The Costs of Sprawl: Environmental and Economic costs of Alternative Residential Development Patterns at the Urban Fringe.*. Washington, DC: USGPO.

Wirth, Louis [1938] 1969. "Urbanism as a Way of Life." In *Classic Essays on the Culture of Cities,* ed. Richard Sennett. New York: Appleton-Centry-Crofts: Pp. 67-83.

Return to Sociation Today Spring 2004

FONVCA AGENDA ITEM 8a3

Summary Points of the book "EXPECT MORE"[1]

Corrie Kost

Libraries should: [with my personal added points]

- Improve society through facilitating knowledge creation in the community
- promote community spaces, Community Association should be provided "free" spaces
- advocate on behalf of communities
- preserve our cultural heritage
- become "great" by building communities
- become more like kitchens (informal)
- become a place to create and access community
- be a place of collaboration and conversation
- provide training (classes)
- be a safe community space
- defend our privacy
- [encourage equal access]
- be "of the community" – not just for the community
- [as Einstein stated – teach by example – the only way to teach]
- [provide open access to all scholarly works]
- be a voice to improve communities
- facilitate dreams/collaborations
- be a place for knowledge creation
- [continue to have physical books play a key role]
- facilitate activism by the community
- act as the publisher of the community

[Additionally:]

- Libraries should be great community destinations by offering a broad mix of community services, fostering communication, showcasing history and information, building capacity for local businesses, becoming public gathering places, boosting local retail and public markets, offering easy access for all, enlivening the local community, featuring multiple attractions, providing quality amenities, changing with the seasons, and catalyzing community revitalization.[2]
- Libraries should cooperate with each other – across Metro Vancouver, British Columbia, and Canada - in building cost effective facilities.
- A measure of greatness is how well a library treats its most disadvantaged amongst us.

(1) Expect More – Demanding Better Libraries for Today's Complex World – by David Lankes
(2) http://www.pps.org/reference/libraryattributes/

http://public.metrovancouver.org/planning/development/strategy/LandUseDesignationMapsJan11/TableA1-PopDwelUnitEmpProjforMVSubregMuni.pdf

FONVCA AGENDA ITEM 8a4

Appendix A

TABLE A.1
Population, Dwelling Unit and Employment Projections for Metro Vancouver Subregions and Municipalities

SUBREGION	TOTAL POPULATION				TOTAL DWELLING UNITS				TOTAL EMPLOYMENT			
MUNICIPALITY	2006	2021	2031	2041	2006	2021	2031	2041	2006	2021	2031	2041
Metro Vancouver Total	**2,195,000**	**2,780,000**	**3,129,000**	**3,400,000**	**848,000**	**1,130,000**	**1,307,000**	**1,422,000**	**1,158,000**	**1,448,000**	**1,622,000**	**1,753,000**
Burnaby, New Westminster	271,000	357,000	406,000	447,000	109,150	152,100	178,600	196,300	164,000	206,000	233,000	251,000
Burnaby	210,500	277,000	314,000	345,000	81,110	115,000	136,000	149,300	136,000	169,000	189,000	203,000
New Westminster	60,500	80,000	92,000	102,000	28,040	37,100	42,600	47,000	28,000	37,000	44,000	48,000
Langley City, Langley Township	122,200	178,000	223,000	249,000	45,670	68,200	86,300	97,000	66,000	92,000	110,000	125,000
Langley City	24,900	32,000	35,000	38,000	11,160	14,500	16,000	17,100	17,000	21,000	23,000	25,000
Langley Township	97,300	146,000	188,000	211,000	34,510	53,700	70,300	79,900	49,000	71,000	87,000	100,000
Maple Ridge, Pitt Meadows	88,100	117,000	136,000	156,000	32,020	44,300	52,700	60,300	28,000	42,000	50,000	57,000
Maple Ridge	71,500	95,000	113,000	132,000	25,920	36,100	43,700	50,900	23,000	34,000	41,000	48,000
Pitt Meadows	16,600	22,000	23,000	24,000	6,100	8,200	9,000	9,400	5,000	8,000	9,000	9,000
Northeast Sector	205,400	286,600	337,500	364,400	73,690	110,770	136,830	150,000	75,390	111,810	134,160	148,470
Anmore	1,900	2,800	3,600	4,400	560	850	1,080	1,310	300	660	970	1,250
Belcarra	700	800	900	1,000	260	320	350	390	90	150	190	220
Coquitlam	119,600	176,000	213,000	224,000	42,960	67,700	86,700	94,100	46,000	70,000	86,000	94,000
Port Coquitlam	54,500	68,000	76,000	85,000	19,400	26,300	30,900	34,300	21,000	28,000	32,000	35,000
Port Moody	28,700	39,000	44,000	50,000	10,510	15,600	17,800	19,900	8,000	13,000	15,000	18,000
North Shore	181,300	206,600	224,900	244,000	72,370	84,340	93,340	100,490	77,310	91,400	100,500	109,570
North Vancouver City	47,500	56,000	62,000	68,000	22,360	25,600	28,000	30,200	29,000	34,000	37,000	40,000
North Vancouver District	87,000	98,000	105,000	114,000	31,260	37,500	41,500	45,000	27,000	33,000	36,000	40,000
West Vancouver	45,400	51,000	56,000	60,000	18,200	20,600	23,100	24,500	21,000	24,000	27,000	29,000
Lions Bay	1,400	1,600	1,900	2,000	550	640	740	790	310	400	500	570
Delta, Richmond, Tsawwassen	282,500	338,000	376,000	406,500	98,600	130,600	153,200	167,900	185,240	218,300	240,800	258,600
Delta	99,000	109,000	118,000	123,000	34,300	40,300	45,400	48,000	55,000	63,000	70,000	75,000
Richmond	182,700	225,000	252,000	275,000	64,000	88,400	104,900	115,500	130,000	154,000	169,000	181,000
Tsawwassen First Nation	800	4,000	6,000	8,500	300	1,900	2,900	4,400	240	1,300	1,800	2,600
Surrey, White Rock	431,900	601,000	693,000	767,000	146,480	222,900	268,000	298,600	150,000	226,000	269,000	301,000
Surrey	413,000	578,000	668,000	740,000	136,580	211,200	255,700	285,200	143,000	217,000	259,000	290,000
White Rock	18,900	23,000	25,000	27,000	9,900	11,700	12,300	13,400	7,000	9,000	10,000	11,000
Vancouver, Electoral Area A	612,800	697,000	734,000	770,000	269,600	317,500	338,700	353,700	412,000	461,000	485,000	503,000
Vancouver	601,200	673,000	705,000	740,000	264,500	306,700	325,400	339,500	393,000	441,000	464,000	482,000
Electoral Area A	11,600	24,000	29,000	30,000	5,100	10,800	13,300	14,200	19,000	20,000	21,000	21,000

Notes:

1. These projections are to assist in long range planning and are guidelines only.
2. Metro Vancouver growth projections are provided as guidance to member municipalities and regional agencies.
3. Figures for the year of 2006 are based on Census of Canada 2006 and include estimated Census undercount.
4. Population projections for Metro Vancouver are based on provincial and Regional District projections prepared by the Province of British Columbia (BC Stats PEOPLE 33, July 2008). Population, dwelling and employment projections for subregions and municipalities were prepared by Metro Vancouver in consultation with member municipalities.
5. All figures in this table are rounded and may include minor inconsistencies for summary totals.
6. All municipal totals include Indian Reserve or First Nation communities located within municipal boundaries, with the exception of Tsawwassen First Nation.

FONVCA AGENDA ITEM 8a6

The Inefficiency of Local Food

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Photo: empracht

Two members of Congress earlier this month introduced legislation advancing a food reform movement promising to help resolve the great environmental and nutritional problems of the early 21st century. The intent is to remake the agricultural landscape to look more like it did decades ago. But unless the most basic laws of economics cease to hold, the smallholder farming future envisioned by the local farming movement could jeopardize natural habitat and climate change mitigation efforts, while also endangering a tenuous and temporary victory in the battle against human hunger.

The "Local Farms, Food and Jobs Act" sponsored by Senator **Sherrod Brown** of Ohio and Representative **Chellie Pingree** of Maine, throws about $200 million to local farm programs. That's a rounding error in the $3.7 trillion federal budget. But the bill follows on a federal rule that gives preference to local farms in contract bidding for school lunches. It also builds on high-profile advocacy by **Michelle Obama,** who has become a leader of the food reform movement, joining the likes of **Michael Pollan**, the author of *The Omnivore's Dilemma*, and famed-chef **Alice Waters**. The bill's introduction came as the world population hit 7 billion, a milestone that provides a stark reminder of the challenge agriculture faces to feed a world population expected to grow to 9 billion by 2050. Experts estimate that in the next 50 years, the global food system likely needs to produce as much food as it did in the previous 10,000 years combined.

Amid heightened concern about global climate change, it has become almost conventional wisdom that we must return to our agricultural roots in order to contain the carbon footprint of our food by shortening the distance it travels from farm to fork, and by reducing the quantity of carbon-intensive chemicals applied to our mono-cropped fields.

But implicit in the argument that local farming is better for the environment than industrial agriculture is an assumption that a "relocalized" food system can be just as efficient as today's modern farming. That assumption is simply wrong. Today's high crop yields and low costs reflect gains from specialization and trade, as well as scale and scope economies that would be forsaken under the food system that locavores endorse.

Specialization and Trade

Economists have long recognized the welfare gains from specialization and trade. The case for specialization is perhaps nowhere stronger than in agriculture, where the costs of production depend on natural resource endowments, such as temperature, rainfall, and sunlight, as well as soil quality, pest infestations, and land costs. Different crops demand different conditions and vary in their resilience to shocks. So California, with mild winters, warm summers, and fertile soils produces all U.S.-grown almonds and 80 percent of U.S. strawberries and grapes. Idaho, on the other hand, produces 30 percent of the country's russet potatoes because warm days and cool nights during the season, combined with rich volcanic soils, make for ideal growing conditions.

In 2008, according to the USDA, Idaho averaged 383 hundredweight of potatoes per acre. Alabama, in contrast, averaged only 170 hundredweight per acre. Is it any wonder Idaho planted more acres of potatoes than Alabama?

Forsaking comparative advantage in agriculture by localizing means it will take more inputs to grow a given quantity of food, including more land and more chemicals—all of which come at a cost of carbon emissions.

Forsaking comparative advantage in agriculture by localizing means it will take more inputs to grow a given quantity of food

It is difficult to estimate the impact of a truly locavore farming system because crop production data don't exist for crops that have not historically been grown in various regions. However, we can imagine what a "pseudo-locavore" farming system would look like—one in which each state that presently produces a crop commercially must grow a share proportional to its population relative to all producers of the crop. I have estimated the costs of such a system in terms of land and chemical demand.

My conservative estimates are that under the pseudo-locavore system, corn acreage increases 27 percent or 22 million acres, and soybean acres increase 18 percent or 14 million acres. Fertilizer use would increase at least 35 percent for corn, and 54 percent for soybeans, while fuel use would climb 23 percent and 34 percent, for corn and soybeans, respectively. Chemical demand would grow 23 percent and 20 percent for the two crops, respectively.

A locavore-like production system would require an additional 60 million acres of cropland, 2.7 million tons more fertilizer, and 50 million pounds more chemicals

In order to maintain current output levels for 40 major field crops and vegetables, a locavore-like production system would require an additional 60 million acres of cropland, 2.7 million tons more fertilizer, and 50 million pounds more chemicals. The land-use changes and increases in demand for carbon-intensive inputs would have profound impacts on the carbon footprint of our food, destroy habitat and worsen environmental pollution.

It's not even clear local production reduces carbon emissions from *transportation*. The Harvard economist **Ed Glaeser** estimates that carbon emissions from transportation don't decline in a locavore future because local farms reduce population density as potential homes are displaced by community gardens. Less-dense cities mean more driving and more carbon emissions. Transportation only accounts for 11 percent of the carbon embodied in food anyway, according to a 2008 study by researchers at Carnegie Mellon; 83 percent comes from production.

Economies of Scale

A local food production system would largely upend long-term trends of growing farm size and increasing

concentration in food processing and marketing. Local "food sheds" couldn't support the scale of farming and food processing operations that exist today—and that's kind of the point. Large, monocrop farms are more dependent on synthetic fertilizers and tilling operations than small polycrop farms, and they face greater pest pressure and waste disposal problems that can lead to environmental damage.

But large operations are also more efficient at converting inputs into outputs. Agricultural economists at UC Davis, for instance, analyzed farm-level surveys from 1996-2000 and concluded that there are "significant" scale economies in modern agriculture and that small farms are "high cost" operations. Absent the efficiencies of large farms, the use of polluting inputs would rise, as would food production costs, which would lead to more expensive food.

Health Implications

A local food system would raise the cost of food by constraining the efficient allocation of resources. The monetary costs of increased input demands from forsaken gains from trade and scale economies will directly bear on consumer welfare by increasing the costs of food. And, as we try to tackle obesity, locavorism is likely to raise the cost of precisely the *wrong* foods. Grains can be grown cheaply across much of the country, but the costs of growing produce outside specific, limited regions increase quickly. Thus, nutrient-dense calories like fruits and vegetables become more expensive, while high fructose corn syrup becomes relatively cheaper.

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Finally, higher costs on certain foods may be a solution to the big health challenge in the developed world. But higher prices on any food are precisely the wrong prescription for the great health problems in the developing world, where millions remain undernourished. As the food crisis of 2007-08 revealed, winning the war on human hunger requires a constant commitment to getting more food out of less land, water, and other inputs.

From roughly 1940 to 1990, the world's farmers doubled their output to accommodate a doubling of the world population. And they did it on a shrinking base of cropland. Agricultural productivity can continue to grow, but not by turning back the clock. Local foods may have a place in the market. But they should stand on their own, and local food consumers should understand that they aren't necessarily buying something that helps the planet, and it may hurt the poor.

TAGS: *agriculture, food, locavores*