

Volume 11:6

February 2018

HAS THE CITY-RURAL TAX BASE AND LAND-USE BALANCE CHANGED IN ALBERTA? EXPLORATIONS INTO THE DISTRIBUTION OF EQUALIZED PROPERTY ASSESSMENTS AMONG MUNICIPALITY CLASSES

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SUMMARY

Alberta ended its regional planning commissions in 1996. They were replaced by voluntary inter-municipal negotiation, but this has raised concerns about adverse effects on land use. Pressure to terminate the commissions came largely from the rural municipalities. Some of them felt the commissions retarded their economic development. They believed that in a less restrictive planning environment, they would be able to attract a greater share of development, especially business. This study assesses the consequences of that change. Alberta's rapid growth over much of the post-1995 period affords an exceptional opportunity to search for noticeable changes in the urban-rural tax base and land-use patterns and balance.

Municipal tax base is measured, and land use reflected, by property values. Those values are taken to be the provincially determined equalized assessments used for property tax purposes. Fortunately, these provide a reliable and consistent measure of property values across municipalities and over time for properties of different kinds. For the types of properties of prime interest for this analysis, residential and unregulated business property, equalized assessments approximate 100 per cent of market value. Residential property represents over 60 per cent of total provincial equalized assessments and business property about 20 per cent. In cities, the percentages are 70 per cent and 24 per cent; residential and business properties represent almost all the taxable property. The focus of the analysis is whether, during the past two decades, the shares of residential and/or business property have shifted from cities to rural municipalities.

The possibility of shifting city-rural tax base/land-use patterns is explored from four perspectives. This report examines trends in the distribution of residential and business equalized assessments among the types of municipalities in

the province. To obtain a better perspective in specific cases, the city-rural split of assessments is reported for the Edmonton and Calgary metropolitan areas and nine cities between 1997 and 2014. Examining the movements in the ratios of business to residential assessments of 31 city and rural municipalities provides further insight. The final approach is to simply review changes in the location of population and dwellings between cities and rural areas.

There has been no notable or general shift of land development away from cities and to rural areas. Despite the rapid growth and the devolved planning environment, the city-versus-rural distribution of tax base and land use has, overall, been remarkably constant although development was definitely not uniform across Alberta cities. If anything, the cities' shares of residential development may have increased while their shares of business development have been more uneven. For both types of property, however, the development patterns have varied across both city and rural municipalities. Concern that the changed planning environment might have shifted property development towards the rural municipalities does not appear to have been justified. Whether this development met other planning criteria is not explored here. This analysis encourages more detailed investigations using alternative indicators.

INTRODUCTION

Alberta's population has grown dramatically over the past two decades. Accommodating that growth has put exceptional pressures on provincial and local governments and on the private sector. Nowhere are the growth pressures more obvious than in land use as people, business and industry require space. The escalating pressures on land, especially in the major urban regions, have raised concern that land is perhaps not being used in society's best interests (Beesley, 2010; Masuda and Garvin, 2008).¹ Recent developments in Alberta are particularly interesting because the institutional environment for land-use decision-making changed. Regional planning commissions were terminated as of 1996 and replaced by largely voluntary inter-municipal consultations and negotiations. Did that institutional transformation result in a change in the pattern of development and, especially, in the land-use allocation between urban and rural municipalities? Rural municipalities, in particular, felt the regional planning commissions unduly constraining. Rapid growth and the abolishing of the regional planning commissions created an exceptional opportunity for those municipalities inclined to pursue land development in a more autonomous environment. Did the change in planning institutions lead to a change in the rural-urban land-use balance? This paper is an effort to provide some evidence and insight into the matter. Alberta's rapid growth affords an especially fertile environment to search for possible consequences, although potential reasons for any observed shifts (or lack thereof) must be viewed with caution.

The analysis here is undertaken from four major, but all highly aggregated, perspectives. The conclusion in each case and in sum is that despite the institutional change and rapid growth, the city-versus-rural distribution of residential and business property has been remarkably constant although not necessarily uniform across Alberta cities. That is, in an environment with autonomous planning and voluntary collaboration plus rapid growth, there does not appear to have been a notable or uniform shift of land development away from cities to the surrounding rural areas. Thus, concern that the end of the regional planning commissions led to a relative expansion in the development of rural land and transformed the pattern and balance of land development does not seem warranted. Yet, whether the development that occurred was as orderly or as conservational as it might have been had planning commissions been in place is not addressed. Further, more detailed and intensive investigations (especially using alternative indicators) could expand the perspective, add insight and possibly come to different conclusions.

The paper is organized as follows. Next, some historical background and context are outlined. Then, because the analysis is based on property values as measured by property tax assessments, equalized assessments are explained. This is followed by an overview of those assessments in Alberta considering the distribution by class of property, distribution among types of municipalities and their growth. With that background, the analysis begins by looking at trends in the distribution of residential and of business equalized assessments (property) among the types of municipalities in the province. That is followed by examinations of the city-rural split of assessments for 11 cases (i.e., the Edmonton and Calgary metropolitan areas and nine individual cities) in 1997 and 2014 and in two sub-periods. Because of the appeal of business property, movements in the ratios of business to residential assessments are reviewed for an expanded group of cities and their neighbouring municipalities. The final analysis explores changes in the location of population and dwellings between cities and rural areas. A short conclusion completes the paper.

¹ In addition to the widespread discussion in the media, witness the establishment of the Alberta Land Institute at the University of Alberta and its recent popular land-use conferences.

HISTORY AND CONTEXT²

Regional planning in Alberta emerged from the population and economic boom that followed the 1947 Leduc oil discovery. In 1950, legislation established provincial-municipal district planning commissions.^{3,4} Municipal membership in those commissions was voluntary. The province and the municipalities contributed equally to the costs. The districts' role was initially largely advisory, but through successive legislation and amendments, the expectation of them developing preliminary and then complete regional plans was strengthened. In 1963, under the new *Planning Act*, the districts were transformed into regional planning commissions. Membership in the regional commissions became mandatory and limited to council members. The authority to approve subdivision plans was extended (from the Calgary and Edmonton districts under 1953 legislation) to all regional planning commissions and the provincial share of the funding was increased to 60 per cent. In 1971, to strengthen regional commissions' planning capacities, the province established a provincial planning fund to which all municipalities were required to contribute the municipal portion (still 40 per cent) through dedicated provincially determined mill rates. In the midst of an energy boom, 1977 saw a major rewrite of the *Planning Act*. Under it, in a renewed effort to expand regional planning in the province, all regional planning commissions were to prepare a plan within five years. Those years may have marked an apex for regional planning in Alberta.

The collapse of oil prices and the economic downturn of the 1980s created havoc with those plans. With slow growth and diminished resources, planning as a priority waned. Municipal and provincial money for the provincial planning fund declined dramatically and planning staff were severely reduced. The prolonged economic doldrums heightened animosities among members of the planning commissions, notably between the rural and urban municipalities. The rural municipalities expressed the severest criticisms as they felt disadvantaged by regional planning commissions. In particular, it was widely felt that as the planning commissions gained power, their decisions eroded local autonomy and diminished the rural municipalities' abilities to pursue land-use policies enabling them to cope with their problems (i.e., notably developments to expand their tax bases).⁵ This lingering and gnawing issue, perhaps highlighted by the conflicts between the Calgary Regional Planning Commission and Rocky View County that escalated during the early 1990s, found a sympathetic ear in the caucus of the provincial government (especially the rural portion). The view emerged that regional planning commissions were ineffective, costly and an unnecessary layer of government. Effective in 1995, as part of a major revision of the *Municipal Government Act*, the province abolished the provincial planning fund, the existing regional plans and the regional planning commissions, and left planning up to the municipalities (in consultation with their neighbours) or through voluntary inter-municipal organizations. Regional planning in Alberta, if not terminated, was dramatically debilitated.

² Papers providing an overview of the development of regional planning in Alberta include Alberta Professional Planners Institute (2014), Ghitter and Smart (2009) and Taylor, Burchfield and Kramer (2014). More lengthy analyses include Climenhaga (1997), Dragushan (1979) and Masson and LeSage (1994). These papers also provide many valuable references.

³ Urban planning dates back to the *Town Planning Act* of 1913.

⁴ Initially, the district commissions were comprised of municipal and provincial representatives.

⁵ The origins of the rural discontent may be traced back to the 1956 report of the Royal Commission on Metropolitan Development in Edmonton and Calgary (the McNally Commission). That report recommended strong regional planning, even a uni-city model, and supported city annexation of urbanizing areas. Many of the report's recommendations found their way into the 1957 and subsequent legislation.

The institutional arrangements governing land-use planning and development in Alberta changed considerably as of 1995. LeSage and McMillan (2010,15) describe the dissolution of regional planning commissions into voluntary intergovernmental co-operation and some of the consequences as follows:

“Some of the most significant local regional institutions – regional and metropolitan planning commissions, which placed most of the province under an orderly regional planning regime – were eliminated as a result of 1995 reforms to the *Municipal Government Act*. These commissions exercised considerable authority over land use and development control, and in ways that rural authorities often complained were to their disadvantage.⁶ Tensions between urban and rural authorities in the Edmonton region were especially pronounced, but there were additional ‘cleavages’ including those between the central city and the suburbs. Other regions experienced similar cleavages, and for these reasons and others that were putatively defensible during a spasm of neo-conservative re-engineering and downsizing, the commissions were abandoned. Alberta was left with what amounted to a voluntary regional planning regime. This arrangement, which included requirements for inter-municipal consultation and elective provisions for establishing inter-municipal development plans, was serviceable to greater or lesser degrees across the province during the remainder of the 1990s. However, these voluntary provisions quickly became strained in several regions with the dramatic economic escalation of the new century. Early in 2007, the Minister’s Council on Municipal Sustainability (MCMS) recommended the creation of some form of new regional planning agency in the province’s metropolitan and high growth areas.⁷ The Stelmach government accepted the recommendation to establish some form of regional planning body in the metropolitan regions but reserved judgment on the merits of providing taxation authority to regional service delivery agencies as recommended by the Council.”

The Stelmach government ultimately imposed a Capital Region Board on the Edmonton metropolitan area but little else changed. The board was established in 2008 with 24 member municipalities. Its primary responsibility was to create an integrated regional land-use plan to manage growth over the next 50 years. To balance the interests of large and small municipalities, decisions are made on the basis of a double majority; that is, a majority of the population and a majority (17) of the municipalities must be in favour (Capital Region Board).⁸ No such board was introduced in Calgary. The Calgary region continues to operate (since 2000) under a voluntary Calgary Regional Partnership (Calgary Regional Partnership Overview). The partnership currently has 14 members. Notably, having withdrawn, no rural municipalities in the region are members.

Elsewhere in the province, inter-municipal co-ordination of land-use policies and practices essentially remain as enabled by the *Municipal Government Act* of 1995. That is, a system of voluntary co-operation is relied upon (Alberta Municipal Affairs-Land Use Policies). The province’s Municipal Governance Board hears disagreements that negotiation or mediation have

⁶ See Masson, 1994, Chapter 12 for a complete discussion of municipal land-use and regional planning in Alberta up to 1994, with particular attention to pp. 421-425.

⁷ The MCMS did not recommend that regional planning authorities be established in areas of the province where municipalities continue to demonstrate the ability to effectively manage inter-municipal relationships, or where the intractable planning issues affected a small number of municipalities. In these instances, the preferred strategy is to require municipalities to negotiate an inter-municipal development plan that addresses key issues (regional planning, land use, cost sharing and/or revenue sharing), and to use final offer arbitration where the negotiating municipalities reach an impasse. The province accepted these recommendations but placed a caveat that its ongoing land use framework consultation may affect the implementation of these recommendations.

⁸ Note that the Capital Region Board is to transition to a smaller 13-member Edmonton Metropolitan Regional Board when the new *Municipal Government Act* and its regulations become effective.

failed to resolve. With the advent of the *Alberta Land Stewardship Act* in 2009, the province required that municipal land-use plans comply with those regional plans (Alberta Municipal Affairs-The Legislative Framework).

The changes in the legislation governing regional planning and, subsequently, in the institutional arrangements for planning and inter-municipal co-ordination, pose an interesting question especially in the context of the political motivations and consequences that relaxed the constraints on individual municipal initiatives (or at least freed them from the authority of regional planning commissions). Have these changes affected land use and, in particular, the land use in municipalities of different types? The perspective on this question here is that of economic development. As summarized by Climenhaga (1997) in his abstract, “The change was a victory for rural politicians disillusioned with regional planning, which they saw as a way for urban officials to block development of business – and the taxes they bring – in rural areas.” So, of particular interest here is whether the end of regional planning commissions realized the benefits the rural politicians sought. Did land development – and especially business – shift towards rural municipalities (McMillan and Dahlby, 2014)?⁹

The rapid growth in Alberta, especially since the turn of the century, provides a particularly good opportunity to make an assessment of this kind. But, even in the absence of legislative/institutional change, rapid growth might be expected to affect land use. Hence, it may be difficult to associate land-use change to one factor or the other, let alone make attribution. Therefore, conclusions are tentative.

This study relies upon a narrow and quite limited perspective on land use. The analysis considers only land use as indicated by patterns and trends in the values by type of property (as measured by equalized property tax assessments) among classes of municipalities (particularly cities and rural municipalities). Other, and what many would rank as more important, considerations of land use are set aside. For example, there is no attempt to assess whether land development might be more or less orderly or efficient since 1995. Also not considered are other possible indicators of land use such as changes in land-use fragmentation, leap-frog development or land-use decision-making processes (Alberta Land Institute; Haarsma and Qiu, 2017).¹⁰ Hence, the simple analysis here makes no effort to assess whether the legislative/institutional changes were positive or negative. That would require a much broader and deeper investigation. Again, this study looks only at trends and patterns in the amounts and type (particularly residential and business) of land use in cities and their neighbouring rural municipalities.

PROPERTY VALUES AND EQUALIZED ASSESSMENTS

For the purposes of this study, the values of property in different uses are a useful and convenient indicator of land use within a municipality.¹¹ Fortunately, property tax assessments in Alberta provide a good measure of value for most property and particularly for the types of property of interest for this examination. Furthermore, the provincially equalized assessments ensure the

⁹ To illustrate the fiscal advantages of business (or, more accurately, non-residential) development to municipalities, in the cities of Calgary and Edmonton, non-residential property generates about one-half of the municipal property tax revenue although it represents only about one-quarter of the property tax base.

¹⁰ For studies directed towards such issues see the Alberta Land Institute; for example, <http://www.albertalandinstitute.ca/public/download/documents/10440> and <http://www.albertalandinstitute.ca/public/download/documents/34087>; and Haarsma and Qiu (2017).

¹¹ Property value is a specific type of indicator. It differs from and may not correlate well with other indicators aimed at depicting other features of land use such as fragmentation and sprawl.

comparability of assessments across municipalities. Thus, equalized assessments for property tax purposes provide a sound approximation of the values of properties. To appreciate the merits of these data, it is necessary to understand equalized assessments before considering the evidence.

Municipalities levy property taxes and assess the properties within their jurisdictions for local property tax purposes. The province also levies property taxes in the form of school taxes.^{12,13} To ensure fairness among taxpayers in different local jurisdictions in the levying of the provincial school taxes (and for certain other programs), the province must ensure that the property tax base is measured uniformly across municipalities because there is some variation among the bases as assessed by the municipalities. Therefore, the province calculates equalized assessments annually for each class of property in each municipality. The assessment of most property is based on market value but some types of property (notably linear property) require alternative assessment methods.¹⁴

Equalized assessments are a reliable index of the amounts and values of most classes of properties in individual municipalities and across the province.¹⁵ Equalized assessments are especially well suited for this research because inter-municipal competition for property tax base is expected to be a potential driver of land-use trends. The equalized assessment data are reported on in the following analyses.

EQUALIZED ASSESSMENTS AND THEIR GROWTH

Prior to examining the trends, further context is necessary. Table 1 reports the 2014 equalized assessments by municipal type and by class of property.¹⁶ As indicated in the percentage distribution, residential property makes up the majority of the equalized assessments at 62.5 per cent of the Alberta total. The next largest class is the non-regulated non-residential property (i.e., “business” as commercial and industrial beyond that otherwise identified) at 19.5 per cent. Linear property and machinery and equipment (M&E) comprise essentially all the rest at 8.9 and 8.1 per cent respectively. Farmland, railroads and co-generation facilities (combined) account for less than one per cent of the total.

¹² Although designated as education/school taxes, those taxes go into provincial general revenues and are not specifically earmarked for school purposes.

¹³ Education property taxes are about one-quarter of total property taxes.

¹⁴ For assessment purposes, property is either regulated or unregulated. Unregulated property is that (typically land and buildings) for residential and “other” non-residential (e.g., business) uses. Such properties are assessed at market value based on sales of comparable properties. Regulated property consists of linear property (e.g., pipelines, transmission lines), machinery and equipment, railroads and farmland. Linear property and related machinery and equipment are assessed by a provincially designated assessor following provincial criteria relating to cost and replacement value. Other types of property are assessed by (or for) municipalities by accredited assessors. Farmland is assessed at “productive” value which has not been changed over the period of this analysis. Farmland assessed values are typically low relative to market value and do not change from year to year. For further information on property assessment in Alberta refer to http://www.municipalaffairs.alberta.ca/documents/as/AB_GuidePtyAssmt_finrev.pdf, http://www.municipalaffairs.alberta.ca/documents/as/Guide_to_Equalized_Assessment.pdf, and http://www.municipalaffairs.alberta.ca/documents/as/01MinistersGuidelinesAssessmentFLPM_ER.pdf and updates.

¹⁵ Farmland is the main exception. The assessed values of farmland reflect the amounts but not the market value of farmland. (The market value of farmland has recently been about 10 times the regulated assessed value). Machinery and equipment are assessed at 77 per cent of market value.

¹⁶ This table is Table 1 in A Snapshot of 2014 Provincial Equalized Assessment and Education Requisition (2014) with additional information added.

TABLE 1 2014 EQUALIZED ASSESSMENTS BY MUNICIPALITY TYPE (\$MILLIONS)*

Municipality Type	Residential	Farmland	Non-residential				Machinery & Equipment	Total
			Non-regulated**	Linear Property	Railway	Co-generation***		
Calgary	172,694	10	60,030	1,844	191	0	310	235,079
Edmonton	105,171	32	36,215	1,734	10	0	965	144,126
Other Cities	63,941	55	16,862	1,133	10	10	1,926	83,938
Specialized Municipalities	31,929	78	10,794	4,363	23	0	32,226	79,413
Municipal Districts	65,668	5,673	18,878	57,016	292	4	27,302	174,833
Towns	51,582	24	11,309	906	21	1	697	64,540
Villages	2,688	2	390	92	4	0	61	3,238
Summer Villages	3,036	0	13	12	0	0	-	3,036
Improvement Districts	265	0	703	884	25	0	764	2,651
Special Areas	335	324	215	3,009	1	0	610	4,494
Provincial Total	497,319	6,198	155,410	70,992	576	15	64,862	795,372
Percentage Distribution	62.5	0.8	19.5	8.9	0.1	0.0	8.1	100.0
Growth since 1998****	4.91		4.88	3.04	n/a	n/a	4.35	4.61

* Unless indicated otherwise, equalized assessment data in this publication are official data published on November 1 of the previous year.

** Non-regulated properties refer to the non-residential properties that are not assessed using the regulated procedure-based standard. They include industrial and commercial properties.

*** Co-generating properties refer to power generating facilities that are part of manufacturing and processing plants and do not supply power into the provincial grid system. This is different from the power generation sub-class of linear property.

**** Equalized assessments from 2014 Equalized Assessment Report divided by those from the 1998 report. Residential and farmland are combined and railway and co-generation are not separate in the 1998 report.

Source: Alberta Municipal Affairs, http://www.municipalaffairs.alberta.ca/documents/as/EA_Newsletter_2014.pdf.

The distributions of assessments across municipal types show substantial differences. The value of the residential property in the cities accounts for about two-thirds of the province's total residential property assessments (68.7 per cent). That share essentially matches the cities' share of the population (67.4 per cent). In contrast, approximately 90 per cent of linear property (86.5 per cent) and machinery and equipment (91.8 per cent) are concentrated in the specialized municipalities and the municipal districts. The municipal districts are the rural municipalities. This is where the vast majority of linear property is located (notably, pipelines, oil and gas wells, and transmission lines). There are five specialized municipalities: Crowsnest Pass, Jasper, Mackenzie, Wood Buffalo and Strathcona County. The specialized municipalities are considered unique but they are individually different. For example, Jasper and the Regional Municipality of Wood Buffalo report no farmland although there is rural land. Wood Buffalo and Strathcona County contain large concentrations of industrial facilities for natural resource extraction and/or processing; together they amount to almost 96 per cent of the linear property and the machinery and equipment in the specialized municipalities and about 26 per cent of that in the province. Both also contain large urban centres (i.e., Fort McMurray and Sherwood Park, respectively).

The growth of property assessments since 1998 appears relatively even across the property classes but it is less even among the types of municipalities. Total equalized assessment was 4.61 times larger in nominal dollars in 2014 than in 1998 (Table 1). Only the expansion of linear property, 3.04 times larger, is notably less. However, as shown in Table 2, assessments grew much faster in the specialized municipalities than elsewhere. Compared to 1999, the year specialized municipalities

appear in the assessment reports, equalized assessment there was 9.13 times larger by 2014 (versus 4.43 times province-wide). Again, that growth was concentrated in Wood Buffalo and Strathcona County. In contrast, the total assessment in the cities was 4.7 times greater in 2014 while those in the rural municipalities and in the other municipalities (towns, villages, etc.) were about 3.5 times larger. Assessment growth has been greatest, and notably large, in the specialized municipalities compared to that elsewhere.

TABLE 2 GROWTH IN EQUALIZED ASSESSMENT, 1999 TO 2014A

Municipal Type	Total Assessment Growth				
	Total Assessment	Residential and Farmland	Unregulated Non-residential	Linear and Machinery & Equipment	Population
Cities	4.70	4.78	5.04	1.83	1.44
Special Municipalities	9.13	8.27	9.24	9.97	1.98
Municipal Districts	3.52	3.92	4.25	2.97	1.15
Other (town, village, etc.)	3.47	4.11	2.42	2.23	1.20
Provincial Total	4.43	4.68	4.67	3.43	1.38
<hr/>					
Per Capita Assessment Growth					
Cities	3.26	3.32	3.50	1.27	
Special Municipalities	4.61	4.18	4.67	5.03	
Municipal Districts	3.06	3.41	3.69	2.58	
Other (town, village, etc.)	2.89	3.43	2.02	1.86	
Provincial Total	3.21	3.39	3.38	2.49	

Note: a) Amounts are the 2014 assessment divided by the 1999 assessment.

Source: 1999 and 2014 Equalized Assessment Reports.

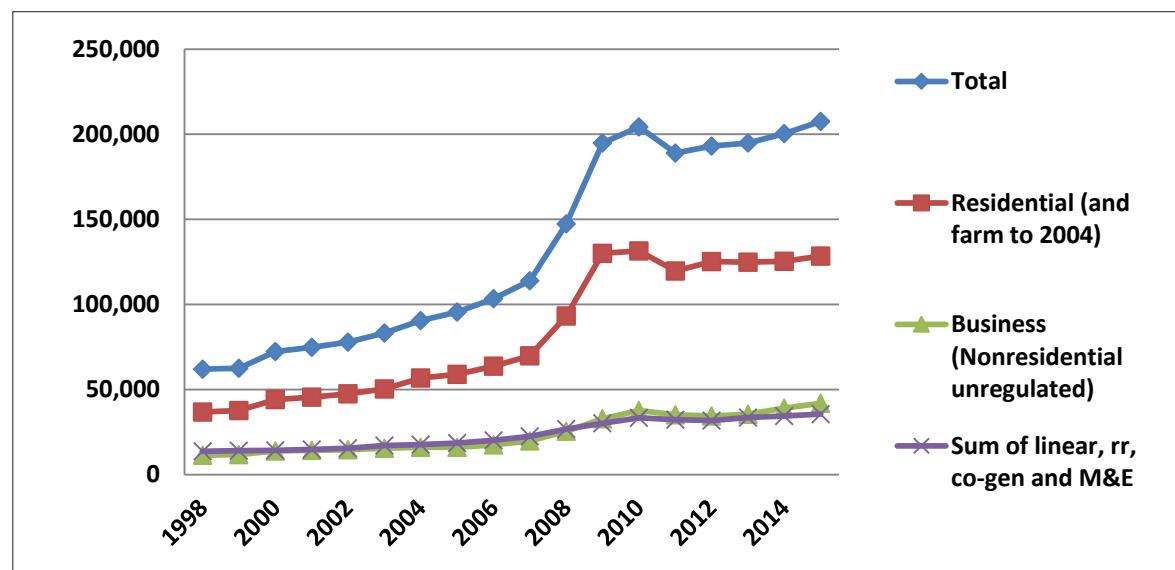
Generally similar patterns in assessment growth are found across the major property categories. The increases have been greatest for all property types in the specialized municipalities. Aside from those, the cities are the only group with above average growth in the residential and farmland and in the unregulated non-residential property types. On the other hand, the cities show the lowest growth in the assessments of linear and machinery and equipment property category.

Population growth has also been concentrated in the specialized municipalities and in the cities. Alberta's population was 1.38 times larger in 2014 compared to 1999. The populations of the specialized municipalities were 1.98 times larger and those in the cities 1.44 times greater. The rural municipal population and the population in the other municipalities rose more slowly, increasing only to 1.15 and 1.20 times their 1999 levels respectively. Accounting for population growth (the lower panel of Table 2), moderates the differences among the municipal types. For example, total assessment per capita in the specialized municipalities was 4.61 times larger in 2014 although total assessments in aggregate were 9.13 times larger. Across the property categories, the increases in residential and farmland per capita assessments are the most uniform.

The time trend of per capita equalized assessments provides another interesting perspective. The trends of the per capita assessments for the total and for the major categories are shown in Figure 1. Total equalized assessments per capita in 2015 were 3.3 times greater than in 1998. Most of that was generated by increases in residential property assessments which were 3.5 times larger in 2015. While growth in the per capita assessments of the business property and the (primarily) linear and

machinery and equipment (M&E) appears less dramatic due to the low initial levels, they increased to levels 3.7 and 2.6 times the 1998 amounts respectively. When consolidated (as in Figure 1), the linear and M&E category's growth is more modest than that of the other categories of property. A remarkable feature of the growth paths is the sharp increases in all categories of assessments from 2006 to 2010.¹⁷ Over those four years, per capita assessed values doubled for all but the linear and M&E category which increased by two-thirds. Also notable is the levelling off that occurred since.

FIGURE 1 GROWTH OF PER CAPITA EQUALIZED ASSESSMENTS IN ALBERTA, 1998 TO 2015



To conclude this section, linear property and machinery and equipment warrant further discussion. While the pace and location of linear and machinery and equipment property growth are interesting and important features of growth in Alberta, they are not important for this analysis. The reason is that the establishment and siting of such property are beyond the influence of municipalities; that is, they are largely exogenously determined. The extent and pace of the development of those properties within the province depends upon the waxes and wanes of the energy industry. Their location depends largely upon the location of resources, the positioning of pipelines, availability of land suitable for (typically) large industrial development often ill-suited for proximity to urban (and especially residential) areas, and the agglomeration benefits of existing similar and related activities. The location of such industry is largely determined independent of municipal boundaries.^{18,19} The focus of this investigation is upon the location of residential and the unregulated non-residential (business) activities and whether relatively rapid growth and/or changes in planning institutions might have affected their siting, municipal boundaries and, in turn, local land use as reflected in property tax bases. Thus, attention is directed to residential property and unregulated non-residential property (not toward linear property and machinery and equipment); that is, the properties making up over 80 per cent of taxable property in the province and 98 per

¹⁷ This period corresponds to the local assessments done between 2004 and 2008, the height of that energy boom. While Alberta residential prices surged over that time, the Canadian average residential price rose by only one-third. However, the Canadian average increased again by one-third between 2008 and 2013 while Alberta prices were relatively stable.

¹⁸ Also, proposals for hydrocarbon developments must be approved by the Alberta Energy Regulator (AER). The decisions of the AER are to ensure safe, efficient, orderly and environmentally responsible development. The Alberta Utilities Commission has a similar role in dealing with electricity, gas and other utility developments.

¹⁹ This is not to say that municipalities might not attempt to influence potential nearby siting or to attempt to shift boundaries to capture such facilities from another municipality.

cent of that in the cities. It is the residential and regular (i.e., unregulated) business property over which most inter-municipal competition is expected to be found and over which municipalities may have the greatest influence.

TRENDS IN THE DISTRIBUTION OF RESIDENTIAL AND BUSINESS PROPERTY AMONG MUNICIPAL CLASSES

This portion of the report presents an examination of the trends in residential and business (i.e., unregulated non-residential) properties from 1998 to 2016. The data come from the Department of Municipal Affairs' annual Equalized Assessment Reports. The reported equalized assessments lag the actual property values. Municipalities assess local property in year two based on the values in year one (the prior year). Alberta Municipal Affairs calculates equalized assessments for year three based on the municipal assessments used locally in year two. Hence, the assessments reported for 1998 reflect the property values in 1996. Recall that 1996 was the year that new land-use policies were implemented (Alberta Municipal Affairs-Land-Use Policies) so the assessments reflect the distribution of properties prior to the demise of the regional planning commissions. The question is whether there have been notable shifts in the distribution of taxable property since then that might be attributed to the change in the planning institutions and practices. In particular, has there been a shift from cities to rural municipalities or changes in the compositions (i.e., the business-residential balance)?

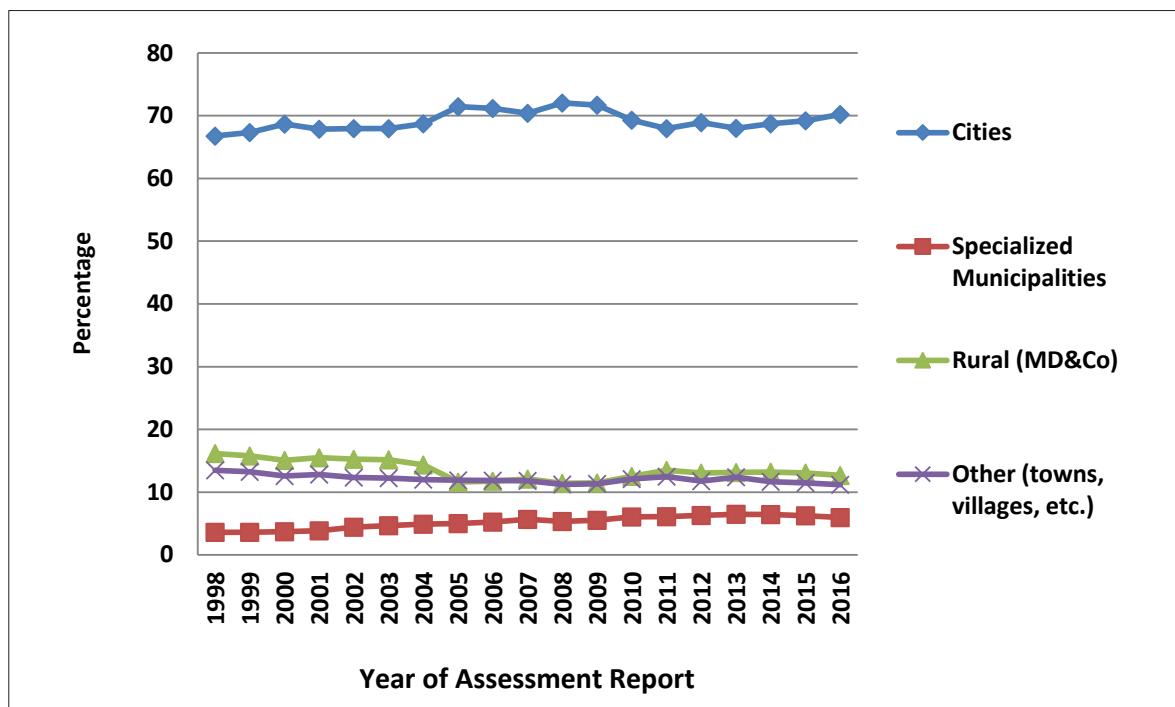
Some complications in undertaking this exercise must be noted. First, specialized municipalities are not noted in the reports until 1999. However, it is straightforward to adjust the 1998 data so that they correspond with the specialized (and, in parallel, the rural) municipalities designated in the 1999 report. A related and second factor is that some municipalities shift from one class to another over the 19-year period. Other than that just noted for the specialized/rural municipalities in 1998, no adjustment is made for those transitions. Evidence will be presented to indicate that overlooking such movements does not distort the results in any significant way. Third, prior to 2005, farmland was not separately reported in the reports but was included with residential property (i.e., residential and farmland). Because farmland is such a small portion of equalized assessments, the impact on the results at this aggregated level (as shall be seen) is minor to the point of being unimportant. Finally, it is important to recognize that equalized assessments reflect changes in market prices (and/or costs) and that those may grow/decline at different rates across property types and across municipalities.

Trends in the Distribution of Residential Property

The trends in the distribution of residential assessments among the municipal classes appear in Figure 2. The bulk of the residential assessments, about 70 per cent, are in the cities and it is the trend for the cities that is a major consideration. Notably, there is no downward trend. The cities' share of residential assessments is larger in 2016 than it was in 1998. However, the analysis is not quite so simple. Three towns converted to cities (Cold Lake appears in the 2001 report, Brooks in 2006 and Lacombe in 2012) and one (Drumheller in 1999) reverted to town status. Despite the number of municipalities involved, they represent a very small percentage of the total city assessments: 1.16 per cent in 2015.²⁰ Simply comparing the endpoints, the city share of residential assessments has increased from about 67 per cent to 70 per cent.

²⁰ Also, maintaining the data for the 2016 cities in all years results in the adjusted percentage for cities in 1998 being 67.5 per cent rather than the unadjusted percentage in Figure 2 of 66.8 per cent.

FIGURE 2 ALBERTA RESIDENTIAL EQUALIZED ASSESSMENTS: DISTRIBUTION AMONG MUNICIPAL CLASSES, 1998-2016



The rural share shows some decline. Part of that is due to below average population growth but the noticeable drop between 2004 and 2005 is the result of separating farmland from residential property in the assessment data after 2004. That had a relatively noticeable negative impact on the rural share. That change also means that the residential assessment (including farmland) in the other three municipal types, including the cities, was overstated prior to 2005. In those three types, however, the percentage of assessments classified as farmland was small and not perceptible in Figure 2.²¹

The residential share in the specialized municipalities has increased from about 3.6 per cent to about six per cent since 1998. This is largely explained by the rapid population growth in that class of municipality. Although the number of specialized municipalities has increased, from two in 1999 to five after 2008,²² the growth is almost entirely due to that in Wood Buffalo and Strathcona County which account for 93.5 per cent of the residential assessment in that class.

The share in the other municipalities, primarily towns and villages, has declined in parallel with their declining share of the population. Their share of the residential assessment fell from 13.5 per cent to 11.2 per cent.

Overall, the distribution of the residential assessments among the different types of municipalities has been relatively stable and has paralleled population growth in the respective municipal types. In particular, trends since the end of the regional planning commissions do not seem to indicate a movement of residential developments (as measured by residential assessments) to the rural municipalities from the cities. Given the magnitude of residential assessments, it would be notable if there were evidence of a shift of residential development to the rural municipalities neighbouring

²¹ To illustrate, compare the residential and farmland assessments reported in Table 1.

²² The Regional Municipality of Wood Buffalo and Strathcona County existed in 1999 while Jasper and Mackenzie appeared in the reports in 2002 and Crowsnest Pass in 2008.

the cities. Residential development is only one part of the story, however. Residential development is not seen as financially attractive to municipalities as is the development of business properties. Perhaps it is there that more evidence of a shift will be evidenced.

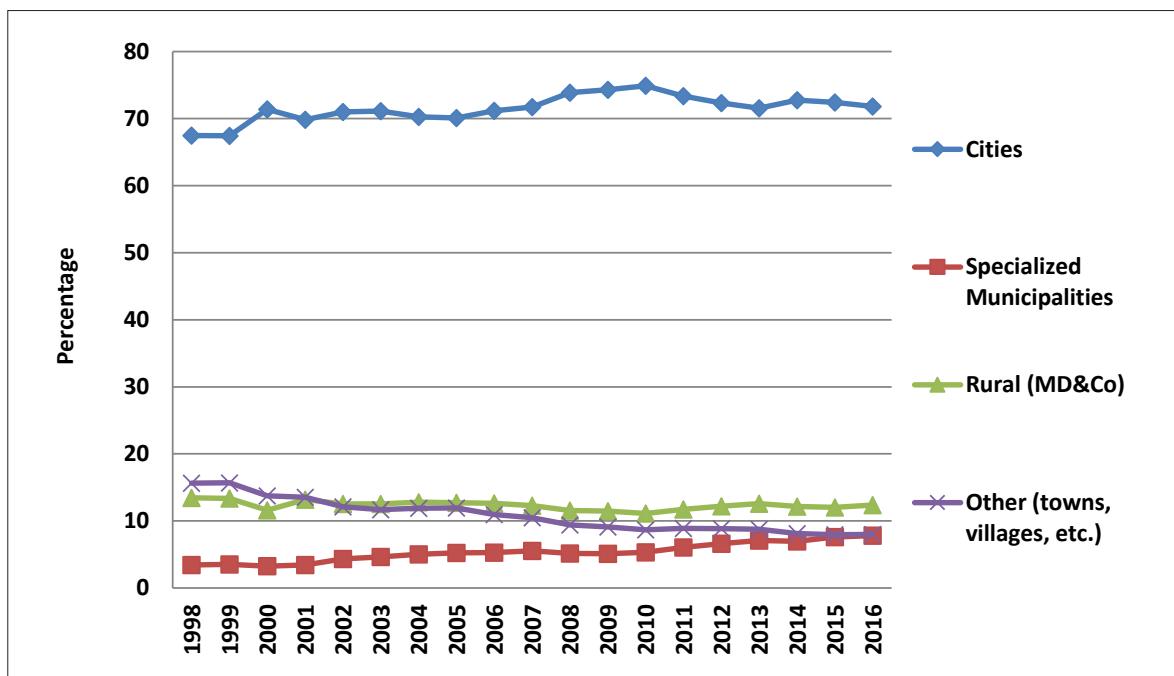
Trends in the Distribution of Business Property

Business property is typically appealing to municipalities because a disproportionate share of property tax is collected from business properties (compared to their assessments and cost of municipal services). That is, the municipal tax rate on non-residential property is usually higher than the rate on residential property.²³ Hence, there may be inter-municipal competition for business property – especially among neighbouring municipalities for businesses potentially locating near borders. Therefore, the data for this type of property may reveal shifts in property use among municipalities. Business property is used here to refer to what Alberta Municipal Affairs calls unregulated non-residential property. It encompasses commercial and certain industrial properties. As noted in Table 1, such property represents about one-fifth of total equalized assessments in the province and half of the non-residential (and non-farm) assessments. The other half is linear property and machinery and equipment for which locational choice is relatively constrained.

Figure 3 shows the distribution of business property among municipal classes since 1998. Like residential property, this type is concentrated in the urban areas with about 70 per cent in the cities. The percentage in the cities has increased somewhat from 1998 but has been quite stable after 2000 averaging 72 per cent since then. The percentage in the rural areas has been relatively steady, but at about 12 per cent most recently compared to over 13 per cent pre-2001, it has seen a slight decline. As with the residential equalized assessments, there does not appear to have been any notable shift between city and rural business assessments and particularly not a shift towards the rural areas. The comparatively large changes occurred in the specialized municipalities and in the other municipalities. The percentage of business equalized assessments more than doubled in the specialized municipalities; that is, much in parallel with their populations. In contrast, the other municipalities (i.e., towns, villages, etc.) have experienced a steady decline in their percentage share as it fell from over 15 per cent to about eight per cent.

²³ Across the five major types of municipalities, the non-residential property tax rate averages approximately 13.7 mills and the residential rate is about 7.8 mills; that is, the non-residential rate is 1.76 times the residential rate. Also, it is generally conceded that the costs of servicing non-residential property are lower than those for residential property. As John Rose, chief economist for the City of Edmonton, has commented, residential property is where the costs are and non-residential property is where the revenue is.

FIGURE 3 ALBERTA BUSINESS (UNREGULATED, NON-RESIDENTIAL) EQUALIZED ASSESSMENTS: DISTRIBUTION AMONG MUNICIPAL CLASSES, 1998-2016



Overall, these trends show increases in the shares of residential and business equalized assessment in essentially two (Wood Buffalo and Strathcona County) specialized municipalities and decline in the shares of the other (towns, villages, etc.) but little change in those of the cities or the rural municipalities. Hence, and in particular, there is no indication of a shift of residential or business assessments (property) towards rural municipalities.

CHANGES IN THE DISTRIBUTION OF RESIDENTIAL AND BUSINESS PROPERTY BETWEEN SPECIFIC CITIES AND THEIR NEIGHBOURING RURAL MUNICIPALITIES

The aggregated analysis presented above may mask a variety of different land-use developments at the level of the individual cities just as averages do not reveal dispersions in the data. Also, due to their absolute size, the metropolitan data dominate the aggregate city measures. Hence, in this section, the experiences of individual cities between 1997 and 2014 are examined to assess the shifts in land use between neighbouring urban and rural municipalities. The focus is on changes in the cities' shares of residential and business (i.e., unregulated non-residential) equalized assessments. Province-wide, residential property represents 70 per cent of city assessments and business property 24 per cent; that is, the two together account for almost all of cities' property assessments. It is the city-rural distribution of these two types of property that seems most flexible and, for land-use planning, the most debated.

Alberta's Equalized Assessment Reports listed 17 cities in 2014. Several of those, however, are in metropolitan areas encompassing multiple cities and multiple rural (among other types of) municipalities. Because metro rural municipalities interface with more than one city, one cannot analyze the experiences individually (at least with these data). Therefore, in those cases, the rural municipal data are combined and city municipal data are combined and are analyzed as if the region were one city surrounded by a single rural municipality. Seven cities are within the Calgary and Edmonton metro areas. Beyond those two metro areas, there are nine cities that are

each surrounded by a single rural municipality. Each of those is considered separately. The City of Lloydminster is omitted because of its unique situation being located on the Alberta-Saskatchewan border. Also, to be manageable, the analysis is restricted to cities and their neighbouring rural municipalities and ignores towns and villages.

The analysis begins by looking at the metro regions. It starts with Edmonton, the most complex of the cases examined.

The Edmonton Metro Region

The Edmonton region encompasses five cities surrounded by three rural municipalities and a special municipality. The five cities are Edmonton, Fort Saskatchewan, Leduc, Spruce Grove and St. Albert. The rural municipalities are Leduc County, Parkland County and Sturgeon County. Also included with the rural municipalities, at least initially, is the special municipality of Strathcona County. Strathcona County complicates an already complex case because, in addition to its large rural area, it includes the urban area of Sherwood Park. Sherwood Park has a population of about 68,500 (over 70 per cent of the county's population) – a population which exceeds that of any of the cities in the region except Edmonton. Because of its rural area and because the data are available only at the county level, Strathcona County is grouped initially with the rural municipalities. However, because of its large and dominant urban population, the data are also analyzed treating Strathcona County as an urban/city municipality.

The analysis needs a summary indicator to reveal shifts in the distribution of property use between cities and their rural neighbours. The indicator used here is the ratio of a city's share (of the combined city and rural) of equalized assessment in 2014 to that in 1997.²⁴ If that ratio exceeds 1.0, the city's share has increased relative to that of its rural neighbour, and if the ratio is less than 1.0, equalized assessments in the rural area have increased more than those in the city, and the rural share has increased. This indicator is calculated for residential, business and total assessments. Looking only at the situation at two points in time is simplistic. While doing so indicates the direction and degree of change, it reveals nothing of the intervening movement and the developments that contributed to the transition. Although omitting vast and interesting elements of the process of change and possible variations over the period, this approach does have the advantage of starkly demonstrating the end result (at least at that point in time). Here it reveals the city-rural shifts in major tax bases and land uses over an almost 20-year period.

In the case of the Edmonton region, the cities contained a slightly smaller share of property assessments in 2014 than in 1997. That is, there has been some city to rural shift in intensive land use. This change is indicated in the first line of Table 3. Looking at residential assessments, the residential assessment share of the five cities within the Edmonton region in 2014 was 97.38 per cent of that share in 1997. The cities' actual percentages of the combined residential assessments declined from 84.5 per cent to 82.3 per cent. The cities' share of business property declined somewhat more with a 2014 ratio of 0.9358. Despite that, total equalized assessments, while a smaller share in 2014, essentially paralleled the residential decline.

²⁴ The data for this analysis come from the equalized assessments as reported in Alberta Municipal Affairs' municipal financial statistics. These data conveniently allow looking further back into the data preceding the termination of the regional planning commissions – in this case, one year further back (to 1997 which is based on 1995 property values).

TABLE 3 RATIO OF 2014 TO 1997 CITY EQUALIZED ASSESSMENT SHARES^A

	Residential	Business	Total
Edmonton Metro (A)	0.9738	0.9358	0.9743
Edmonton Metro (B) ^b	1.0141	0.9911	1.0311
Calgary Metro	0.9858	0.9841	0.9948
Brooks	1.0785	0.7878	0.8729
Camrose	1.0753	1.0030	1.0439
Cold Lake	1.2790	1.4639	1.6515
Grande Prairie	0.9455	0.8474	0.9958
Lacombe	1.1721	0.8916	1.2007
Lethbridge	1.0512	1.0407	1.0298
Medicine Hat	1.0235	1.0864	1.0281
Red Deer	1.0288	0.8912	1.0255
Wetaskiwin	0.8604	0.8445	0.9095

Source: Calculated from equalized assessments as reported in the annual financial statistics of municipalities of Municipal Affairs; http://www.municipalaffairs.alberta.ca/municipal_financial_statistical_data

Notes: a) The numbers are the city share of city plus rural assessment in 2014 relative to that share in 1997. Values above 1.0 indicate growth in the city share, values less than 1.0 indicate a smaller city share (i.e., a city to rural shift).

b) For Edmonton Metro (B), Strathcona County is included with the cities rather than with the rural municipalities (as in Metro (A)).

It is interesting to reflect briefly on some of the developments within the Edmonton region. Between 1997 and 2014, residential assessments grew somewhat more in the rural municipalities than in the cities. However, while the rural growth rates were comparable among the rural municipalities, the growth in the cities was notably larger in Fort Saskatchewan, Leduc and Spruce Grove. On the other hand, business assessments grew an average of 7.1 times in the rural areas compared to 4.5 times in the cities over those years. Sturgeon County, however, lagged among the rurals. Leduc and Spruce Grove excelled among the cities while Fort Saskatchewan lagged.²⁵ Total assessments (all classes combined) grew approximately 5.1 times in the region but above average only in Leduc (7.8), Spruce Grove (7.3) and Strathcona County (5.8). The growth in Strathcona County was assisted by the strong growth in machinery and equipment (reflecting the energy industry base there). The low growth of machinery and equipment assessments in the other rural areas (and of linear property in all municipalities)²⁶ retarded total assessment growth in the three regular counties. Thus, there is much more going on than what is reflected in the overall cities and rural averages.²⁷ Growth is not evenly dispersed among the cities or among the rural municipalities and knowledgeable persons could add much detail and insight as to the contributing factors.

Nonetheless, the indicators and the within-region analysis show that the cities in aggregate have seen their share of the assessments decline somewhat, but overall very little, between 1997 and 2014. On the other hand, if Strathcona County is treated as a city (because of its large and predominately urban population), the indicators tell a different story. The values for total and residential assessments become 1.03 and 1.01 respectively and that for business assessments 0.99.

²⁵ It may be noteworthy that the greater growth of business assessments in Leduc and Spruce Grove is accompanied by greater growth in the neighbouring Leduc and Parkland Counties (but which also are adjacent to Edmonton) and that the rates have basically paralleled each other; that is, it would appear not to have been to the advantage of the cities or the counties.

²⁶ Those two property types account for about 30 per cent of total assessments in the four counties overall.

²⁷ For further insight into growth and development in both the Edmonton and Calgary metro regions, see Conger, Dahlby and McMillan (2016), especially Section 4. Also see Taylor, Burchfield and Kramer (2014). Also see Table 6 below and the related discussion.

Those numbers suggest that the rural (versus special) municipalities did not expand their shares of the residential and business assessments post-1996.

The Calgary Metro Region

The Calgary region is less complex than the Edmonton area. There are two cities under consideration, Calgary and Airdrie. The Municipal District of Foothills and Rocky View County encompasses the cities. In 2014, the two cities account for 91.8 per cent (89.1 per cent by Calgary) of the total combined equalized assessments. Rocky View holds 5.5 per cent and Foothills 2.7 per cent. The Calgary metro region has grown rapidly, from 860,000 in 1997 to over 1.4 million in 2014.²⁸ During that time, and unlike the City of Edmonton, both Calgary and Airdrie benefited from annexations.

The cities in the Calgary region have experienced little change in their share of the combined city and rural assessments. For total assessments, the indicator in Table 3 is less than 1.0 but, at 0.9948, barely so. The cities' share slipped from 92.25 to 91.78 per cent of the total. The reduction was slightly larger for both residential and business property for which the indicator values are approximately 0.985.²⁹ Thus, over almost two decades, the cities' shares of property assessments have changed (diminished) only marginally and, in aggregate, are almost unchanged.³⁰

As in the Edmonton metro area, the pace of assessment growth was not even among the Calgary metro municipalities. Airdrie grew quite quickly and the rate of its business assessment growth paralleled that of its residential assessment. The City of Calgary's residential assessments increased 5.23 times and its business assessments 5.96 times. The rate of residential assessment growth was somewhat greater in the two rural municipalities but only the increase in Rocky View County, 14.2 times, exceeded that in Calgary.

Brooks

Brooks is a city of almost 14,000 surrounded by the County of Newell. It has not experienced annexations since 1997. Since then, the city's share of the combined city and county residential assessments expanded by almost eight per cent. Note the indicator value of 1.0785 in Table 3. In contrast, its share of business property assessments declined substantially, from almost 60 per cent to 47 per cent. This is reflected too in the decline in the city's share of the combined total assessment as indicated by the 0.8729 indicator value. Hence, while Brooks has seen an expansion in the city's share of residential assessments, it now has a smaller share of the business property and total assessment.

Camrose

Camrose is a city of 18,000 surrounded by Camrose County. It has annexed land in 2001 and 2010. The city's share of city plus county total, residential and business assessments has increased since 1997 as indicated by the ratios in Table 3 – 1.044, 1.075 and 1.003 respectively.

²⁸ This growth is somewhat faster than that in the Edmonton metro region which grew from 900,000 in 1997 to 1.36 million in 2014.

²⁹ The decline for business property is noticeably less for the Calgary than for the Edmonton region.

³⁰ It would be difficult to assess how much annexations affected these ratios. However, to the extent that city annexations added residential and business properties, the cities would have been successful in defending themselves from rural absorption of urban land uses.

Cold Lake

Like Camrose, the City of Cold Lake, population 15,700, has also experienced increases in its share of the combined city-rural assessments. All of the increases are quite substantial with the city's total assessment share 65 per cent to 1.6515, the residential share to 1.279 and the business share to 1.464. These changes are not impacted by the amalgamation of Cold Lake with the town of Grand Centre in 1996. The Municipal District of Bonnyville surrounds Cold Lake.

Grande Prairie

Grande Prairie is a city of 55,000 encompassed by the County of Grande Prairie. It has undertaken several annexations since 1995. The city's share of total city and county assessments has remained almost stable compared to 1997 with an indicator value of 0.9958. However, the share of residential assessment has declined somewhat (with a value of 0.9455) and the business share has declined more substantially as indicated by the value of 0.8474.

Lacombe

Lacombe became a city in 2010. It is encircled by Lacombe County. Since 1997, the town's and then city's share of the combined total assessments increased by 20 per cent (indicator value of 1.2007). That increase was associated mostly with the growth in its share of residential assessments (1.1721) because the share of business assessments declined (0.8916). Lacombe's population in 2014 was 12,700.

Lethbridge

Lethbridge County surrounds the City of Lethbridge which has a population of 93,000. There are no annexations reported over the past 20 years. The city's share of total, residential and business equalized assessments has increased somewhat since 1997. The indicator values range from 1.03 to 1.05.

Medicine Hat

Like Lethbridge, the City of Medicine Hat, population 61,200, has also experienced some increase in its share of the combined city-county equalized assessments. In this case the business share (at 1.0864) increased somewhat more than the total or the residential shares. Cypress County is the neighbouring rural municipality.

Red Deer

With a population of 98,500, Red Deer is the third largest Alberta city. Red Deer County is the neighbouring rural municipality. From 1997 to 2014, the city's shares of total and residential assessments have grown somewhat (with indicators of 1.0255 and 1.0288) but its share of the business assessments has, with an indicator value of 0.8912, declined notably.

Wetaskiwin

The City of Wetaskiwin, population 12,600, is surrounded by Wetaskiwin County. Despite a number of annexations, the city's shares of all categories of the combined assessments have declined a considerable degree. The indicator for the total assessment is 0.9095 while those for the residential and business are 0.8604 and 0.8445.

Summary and Further Observations

Changes in land use and especially shifts between the cities and their urban neighbours have not been uniform across Alberta cities. Over the 11 cities/metro areas and the three assessment classes, in about half the cases the city share of (the city-rural combined) equalized assessments has increased and in about half it has decreased between 1997 and 2014.³¹ (The highlighting of those observations with growth, values greater than 1.0 in Table 3, facilitates the comparison). In most cases, the change in the share is comparatively small but there are exceptions. Also, the larger changes in the shares (both increases and decreases) occur in the business assessments. There too, the declines in the city shares dominate the increases (seven declines versus four increases). Perhaps this is to be expected as the business properties are fiscally most appealing to municipalities and the ones that rural municipalities could be expected to pursue. Also, in many cases, business developments may be most suited to fringe areas.

The simple comparison of the situations in 1997 and 2014 ignores many possible movements during the intervening years. Constraints prevent pursuing the analysis in detail but, as a nod to the issue, computations generating Table 3 are repeated but comparing 2002 with 1997 and 2014 with 2002. That is, two sub-periods are examined. The year 2002 is selected as the separation point because those early years may reflect an initial response to the end of the regional planning commissions. That year characterizes the beginning of a period of rapid growth in Alberta, and 2002 also corresponds with the examination of the two metropolitan areas in Conger et al., (2016). The results of the analysis paralleling that of Table 3 are presented in Tables 4 and 5. Without pursuing any detail, the highlighted observations (indicating growth in city share) reveal rather different patterns between the two periods. Between 1997 and 2002, the cities' residential shares rose for those outside the metro areas while the shares of business assessment deteriorated. From 2002 to 2014, however, the pattern largely reversed with city residential shares diminishing (but for one) while five of the 11 experienced growth in business shares and seven of 11³² saw an expanded share of total assessments.³³ Obviously, there has been some waxing and waning in development patterns.

Overall, consideration of the city and metro areas does not appear to provide evidence of a prevailing shift in property assessments and land use between the cities and their rural neighbours that might be attributed to the diminished influence of the regional planning commissions, culminating in their termination as of 1996. Nor is it clear that rapid growth, or other obvious factors, had a prevailing influence. It might be suspected that many of the changes were the product of local features. This assessment is based on a quite high (i.e., gross) level of analysis and, definitely, more detailed investigation could reveal many interesting insights, particularly specific to particular cases.

³¹ The choice between Edmonton Metro A and B complicates the comparison because B is more favourable to city share growth.

³² And another, Calgary metro, experienced essentially no change.

³³ Treating Strathcona County as a city/urban area changes the pattern somewhat. When that is the case, the Edmonton metro "cities" realize a larger share of the 2002 to 2014 growth in all assessment categories. That change reflects the considerable growth, especially relative to the rural municipalities, in Strathcona County and Sherwood Park during those years.

TABLE 4 RATIO OF 2002 TO 1997 CITY EQUALIZED ASSESSMENT SHARES

	Residential	Business	Total
Edmonton Metro (A)	0.9867	0.9700	0.9896
Edmonton Metro (B)	0.9991	0.9806	0.9973
Calgary Metro	0.9926	0.9992	0.9949
Brooks	1.2390	0.8753	0.9516
Camrose	1.2861	0.9854	1.0371
Cold Lake	1.4646	1.3906	1.4066
Grande Prairie	1.0154	0.9997	0.9842
Lacombe	1.1597	0.6970	0.9905
Lethbridge	1.0601	0.9890	0.9930
Medicine Hat	1.0555	0.9897	1.0007
Red Deer	1.0450	0.9644	1.0154
Wetaskiwin	1.0345	0.9644	0.9403

TABLE 5 RATIO OF 2014 TO 2002 CITY EQUALIZED ASSESSMENT SHARES

	Residential	Business	Total
Edmonton Metro (A)	0.9869	0.9647	0.9846
Edmonton Metro (B)	1.0150	1.0108	1.0339
Calgary Metro	0.9931	0.9849	0.9999
Brooks	0.8705	0.9000	0.9173
Camrose	0.8360	1.0179	1.0066
Cold Lake	0.8732	1.0527	1.1741
Grande Prairie	0.9311	0.8476	1.0118
Lacombe	1.0106	1.2791	1.2122
Lethbridge	0.9916	1.0523	1.0371
Medicine Hat	0.9697	1.0977	1.0273
Red Deer	0.9845	0.9241	1.0099
Wetaskiwin	0.8317	0.8757	0.9672

MOVEMENTS IN THE BUSINESS TO RESIDENTIAL ASSESSMENT RATIOS

Increasing the business to residential assessment ratio is widely regarded as appealing to local governments and a motivation for them to pursue business development. With the devolution of planning authority to municipal governments, have rural municipalities been successful at attracting business so as to increase the business to residential tax base? Tables 6 and 7 provide information towards addressing this question from an analysis for the years 1997, 2002 and 2014 (the same years as were examined in the previous section).

Table 6 provides information on the developments since the termination of the regional planning authorities for the municipalities in the Edmonton and Calgary metropolitan areas. Table 7 provides the parallel analysis for the other cities and their rural counterparts. The first three columns show business property tax assessments relative to the residential property tax assessments in the municipalities. The data are not available for 1997 for the rural municipalities because residential and farmland assessments were combined prior to 2002 and the amounts of farmland in the rural municipalities are sufficiently large and variable so as to distort the numbers. Also note, business property here (as above) is not all non-residential property but the unregulated assessment class

(notably commercial) that is more flexible regarding location. In particular, it excludes linear property and machinery and equipment.³⁴ The business to residential assessment percentages differ considerably among the municipalities and, not infrequently, over the years within a municipality.

The data in the three right-hand columns provide the most insight into the question of the changes in the business to residential ratios. When the value exceeds 1.0 (highlighted in the table), business assessments have increased relative to residential assessments for the time period noted. For example, the value 0.97 indicates that the business to residential ratio declined slightly in Edmonton between 1997 and 2014, but as the 1.04 value indicates, that ratio actually rose somewhat between 2002 and 2014. Among the cities, only Leduc and Calgary experienced increases in all three periods. Beyond that, only the City of Cold Lake reports an increase since 1997. In addition, only those three cities and Airdrie show an increase over the initial 1997 to 2002 period. The decline in the business shares in the other cities might suggest that the neighbouring rural municipalities were more successful in attracting business developments after the elimination of the regional planning commissions. However, without data on the 1997 business shares in the rural municipalities, one cannot assess that hypothesis.

For the rural municipalities, data are only available for the 2002 to 2014 timeframe. Hence, it is only that period for which comparable numbers are available for both the cities and the rural municipalities. From 2002 to 2014 Alberta experienced rapid growth. Over those years, 14 of the 31 municipalities (less than half) had business to residential assessments increase. Eight of the 14 experiencing increases were cities and six were rural. In the Edmonton metro area, three of the five cities and three of the four rural municipalities had increases, while in the Calgary metro area, the business share increased in Calgary and Rocky View County but declined in Airdrie and Foothills County.³⁵ Elsewhere, the business share grew for both the city and the rural municipality in Grande Prairie and Red Deer but only for the cities of Brooks and Medicine Hat. Across those nine cases, in six the business share deteriorated in the rural municipalities relative to that of the neighbouring city.

The diversity of the results suggest that it is safe to conclude that there is no consistent evidence to indicate that rural municipalities were more successful at securing business development following the termination of the regional planning commissions. If anything, where growth occurs might be better attributed to local characteristics and demand idiosyncrasies.

³⁴ Note Table 1.

³⁵ Recall that Rocky View County was a rural municipality that considered its development hampered by the Calgary Regional Planning Commission and advocated strongly for its termination.

TABLE 6 EVOLUTION OF BUSINESS TO RESIDENTIAL ASSESSMENTS IN THE EDMONTON AND CALGARY METROPOLITAN AREAS, 1997 TO 2014^a

Municipality	Business Assessment as % of Residential Assessment			Ratio of Assessment Ratios in Selected Years		
	2014	2002	1997 ^b	2014/1997	2014/2002	2002/1997
Edmonton Metro						
Edmonton	34.35	32.98	35.26	0.97	1.04	0.93
Fort Saskatchewan	33.70	54.93	98.18	0.34	0.61	0.56
Leduc	38.71	25.02	24.36	1.59	1.55	1.03
Spruce Grove	17.86	21.31	22.51	0.79	0.84	0.95
St. Albert	13.23	12.06	13.95	0.95	1.10	0.86
Leduc County	127.68	99.73			1.28	
Parkland County	22.65	17.16			1.32	
Strathcona County	24.09	19.27			1.25	
Sturgeon County	19.89	37.41			0.53	
Calgary Metro						
Airdrie	18.56	22.79	18.93	0.98	0.81	1.20
Calgary	34.54	31.69	29.99	1.15	1.09	1.06
Foothills MD	7.59	8.64			0.88	
Rocky View County	16.13	7.04			2.29	

Note: a) Business assessment is the unregulated non-residential subtotal in the Alberta Municipal Affairs financial statistics. b) Residential and farmland assessments are not separated prior to 2002 and that distorts the 1997 figures for the rural municipalities. Hence, for the rural municipalities, the 1997 data are omitted.

TABLE 7 EVOLUTION OF BUSINESS TO RESIDENTIAL ASSESSMENTS IN THE OTHER AREAS, 1997 TO 2014^a

Municipality	Business Assessment as % of Residential Assessment			Ratio of Assessment Ratios in Selected Years		
	2014	2002	1997 ^b	2014/1997	2014/2002	2002/1997
Brooks	31.20	31.24	36.24	0.86	1.00	0.86
Newell County	49.93	59.12			0.84	
Camrose	28.43	32.00	32.26	0.88	0.89	0.99
Camrose County	11.91	29.35			0.41	
Cold Lake	33.28	43.14	27.49	1.21	0.77	1.57
Bonnyville MD	21.17	41.85			0.51	
Grande Prairie	41.66	39.22	43.79	0.95	1.06	0.89
Grande Prairie County	56.50	41.83			1.35	
Lacombe	16.70	18.69	23.64	0.71	0.89	0.79
Lacombe County	55.34	82.05			0.67	
Lethbridge	23.63	25.80	29.71	0.79	0.91	0.87
Lethbridge County	41.04	67.07			0.61	
Medicine Hat	22.81	22.12	27.19	0.84	1.03	0.81
Cypress County	51.78	87.65			0.59	
Red Deer	32.97	32.45	35.26	0.93	1.01	0.92
Red Deer County	38.92	29.07			1.34	
Wetaskiwin	21.48	39.73	42.68	0.50	0.54	0.94
Wetaskiwin County	7.66	12.85			0.60	

Note: a) Business assessment is the unregulated non-residential subtotal in the Alberta Municipal Affairs financial statistics. b) Residential and farmland assessments are not separated prior to 2002 and that distorts the 1997 figures for the rural municipalities. Hence, for the rural municipalities, the 1997 data are omitted.

THE GROWTH OF POPULATION AND DWELLINGS

For a final perspective on developments in the city-rural balance, the location and the relative growth of population and dwellings is reviewed. The data and assessments are for the cities and the rural municipalities of the Calgary and Edmonton metropolitan areas and for each of the other nine cities and their rural neighbours.³⁶

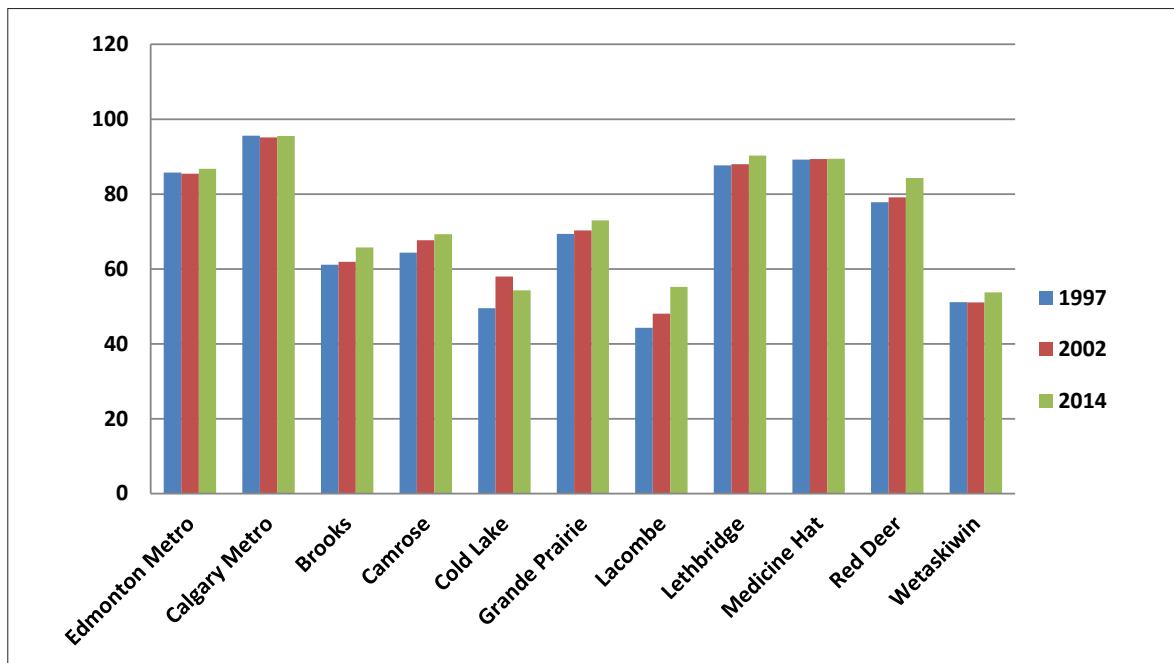
The cities' percentage shares of the combined city and rural populations are shown in Figure 4 for 1997, 2002 and 2014. The most notable feature is that the cities' shares in 2014 are as large as or larger than in 1997. The change in the city share has been essentially nil or small in the Edmonton and Calgary metro areas and in Medicine Hat.^{37,38} In the other cities, the percentage share of the population increased by at least 2.5 per cent.

³⁶ As before, the local towns, villages, etc. are not included.

³⁷ The data reported here are for Edmonton Metro (A) above; that is, with all Strathcona County included with the rural municipalities. A variation on Edmonton Metro (B) – that is, with the Sherwood Park population included with the cities and the rural population of Strathcona County with the rural population – results in numbers paralleling those reported but are about five per cent larger.

³⁸ In fact, the 2014 percentage in the Calgary metro area (i.e., Calgary and Airdrie) is 0.1 per cent lower than in 1997 but that is considered no growth in the share as the population grew by 55 per cent between those years.

FIGURE 4 CITY SHARE OF THE AREA CITY AND RURAL POPULATION IN PERCENT; 1997, 2002 & 2014

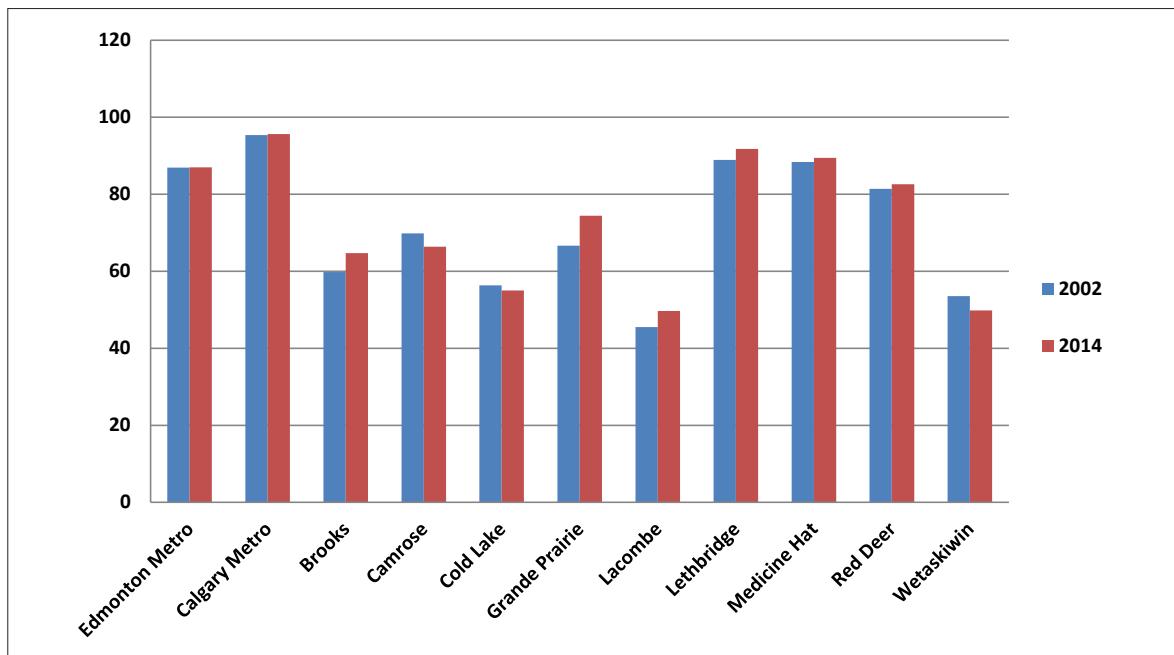


The growth in the population shares was not necessarily uniform over time. The Calgary and Edmonton regions and Wetaskiwin experienced slight declines in their shares between 1997 and 2002. Only Cold Lake experienced a decline in its share between 2002 and 2014, but after a large increase to 2002.

Population growth can also be compared to assessment growth. Between 2002 and 2014, the cities' population growth exceeds the growth in their share of residential assessments. The implication is that residential assessments in the rural municipalities had a higher average value than in the cities and the per capita values moved in favour of the rural municipalities. However, when considering the changes from 1997 to 2014, the results are mixed, with several cities having growth in residential assessment share keeping pace with or exceeding that of population share. Still, the differences between the two periods are notably large for Grande Prairie and Wetaskiwin where the population shares of the cities grew by five per cent while the residential assessments declined by five and 15 per cent respectively.

Alberta Municipal Affairs reports the number of dwellings in municipalities back to 2002 so changes in the city-rural distribution of dwellings can also be examined but over fewer years. That information is reported in Figure 5. The cities' shares in the Edmonton and Calgary metropolitan areas remained essentially unchanged between 2002 and 2014 although both showed a very small increase. Six of the other nine cities had some increase in their shares of dwellings relative to the neighbouring rural municipalities. Those increases averaged 3.7 per cent. Three cities had their share decline: Camrose, Cold Lake and Wetaskiwin. Dwelling share growth exceeds residential assessment share growth (see Table 5) between 2002 and 2014 for all the cities. Hence, over those years, per-dwelling assessments increased more in the rural areas.

FIGURE 5 CITY SHARE OF AREA CITY AND RURAL DWELLINGS IN PERCENT: 2002 AND 2014



Between 1997 and 2014, the cities' populations have not declined relative to their neighbouring rural jurisdictions. In fact, the city shares have typically increased. Although less uniformly, the share of dwellings in the cities has typically increased relative to those in the rural areas. The relative value of the residential dwellings, however, has gone up in the rural areas compared to the cities. These patterns suggest that residential development has not migrated away from cities and towards the rural municipalities. Rural municipalities, however, seem to have attracted more expensive housing.

CONCLUSIONS

Whether land-use patterns have changed over two decades of relatively rapid growth in the comparatively autonomous land-use planning environment that followed the disbanding of the regional planning commissions is an interesting question. In particular, was one result that land development shifted from cities towards the rural municipalities? This study sought to provide some insight to the matter, albeit at a quite aggregated level. The analysis focused on the distribution or split in residential and in business land use between cities and their rural neighbours where land use was identified by property tax assessments.

Considered from several perspectives, none of the evidence indicates that the change in the planning environment resulted in any recognizable or consistent movement of property development from cities towards rural municipalities. Trends over 19 years revealed little change in the provincial shares of the cities or the rural municipalities.³⁹ The urban-rural development patterns were reviewed for the Calgary and Edmonton metropolitan areas and for nine cities. That analysis demonstrated that patterns varied among the cities and over time but it did not provide evidence of a prevailing shift in land use between the cities and their rural neighbours. Examination of the change in business to residential ratios for the 31 individual municipalities

³⁹ What was obvious in the trends was that the special municipalities, notably Wood Buffalo and Strathcona County, did grow substantially compared to elsewhere and that other types of municipalities (primarily towns and villages) declined relatively.

involved also did not reveal any consistent changes in the urban-rural balance. There were increases and decreases in the ratios for both cities and rural municipalities (including within metro areas). Thus, there is no indication that rural municipalities in general were more successful in enhancing their business tax base than their adjacent cities. Also, examination of the split in population and dwellings between cities and their neighbouring rural municipalities showed that the portions living in the rural jurisdictions have declined.

Thus, overall, despite the institutional change and the rapid growth, there does not appear to have been a notable shift of land development away from cities to rural areas. The diversity in the growth of both residential and business property among both city and rural municipalities and over time suggests that growth patterns are particular to local characteristics and the specifics of property demands. That evidence is lacking of any consistent shift in development or rebalancing of land use towards rural municipalities should be noted by those interested in or concerned about fiscal impacts on municipalities. In addition, that the evidence suggests that there has not been a relative expansion in the intensive development of rural land – a consequence that might have contributed to urban sprawl – should be of interest to planners and others concerned about effective land use. This outcome, however, is only one feature of the land-use patterns that emerged. Further and particularly more detailed and intensive investigations (and especially if using alternative indicators) are encouraged.

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ISSN

ISSN 2560-8312 The School of Public Policy Publications (Print)
ISSN 2560-8320 The School of Public Policy Publications (Online)

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February 2018

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