IDENTIFYING AND EXPLAINING
SELF-CONTAINED LABOUR AREAS IN
RURAL MANITOBA
REPORT

April 25, 2013

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Executive Summary

One powerful way of defining rural communities is by establishing economic patterns of activities of local businesses and residents. The pattern is evident by tracking where people live and work. The geographical area of their commuting patterns defines a functional area. Examining these areas across Manitoba and Canada, researchers have found these functional economic areas are largely self-contained in the sense that everyone works and lives within the defined area. A functional economic area implies that few individuals commute into the area to work and few individuals commute out of the area for work. Thus, the benefits of development efforts stay within the functional economic area.

Statistics Canada has delineated self-contained labour areas (SLAs) across Canada. In Manitoba, SLAs were delineated in the south with another 9 SLAs involving northern municipalities and Indian Reserves. This report identifies the municipalities within each of the 18 SLAs. Some of the SLAs are large - by geographic area and / or population. As a result, the researchers have examined actual commuting patterns to propose sub-SLAs (or sub-functional economic areas).

Communities are complex, economically, socially, and environmentally and require strong connections. This report maintains that a key cornerstone to a strong municipality is the boundaries are defined within an economically functional area (where at all possible). Commuting patterns have evolved since Manitoba's municipal boundaries were first defined and most people lived and worked in the same municipality. Today, many residents in any given municipality are driving to many different municipalities to work. Municipalities within a functional economic area have a common interest (i.e. all share the benefits of any economic development initiative). This report argues that any new municipal boundary should be delimited (wherever possible) within the boundary of a functional economic area. The SLA is one way to define a functional economic area. It is hoped that this report will help inform the discussions of rural municipal amalgamation in Manitoba.

Introduction

This report identifies and explains the self-contained labour areas (SLAs) in rural Manitoba. An SLA is an area where people live and travel to work and return home. SLAs are comprised of two or more 'census subdivisions' based on flows of commuters. An SLA is a "functional region" in the sense that there are strong commuting flows among the jurisdictions within the SLA and weak commuting flows with jurisdictions outside the SLA. Generally, if everyone is working and shopping and playing in the same geographic space, then everyone is "all in this together" which is one way of describing a 'functional rural region'.

Determining SLAs in Rural Manitoba and Related Results

Statistics Canada (Munro *et al.*, 2011) delineated 27 SLAs covering rural Manitoba (**Table 1, Map 2 and 3**). The methodology for this delineation is summarized in Appendix A. The size of the delineated SLAs varies widely – from 825,303 residents in the Winnipeg (Manitoba) SLA to 693 persons in the Roseau River (Manitoba) SLA. The calculation was based on population counts and commuting flows reported in the 2006 Census of Population.

Not every census subdivision[1] (CSD) was classified to an SLA as many smaller or remote CSDs had too few commuters to enable their assignment to a SLA. The list of CSDs in each SLA is provided in **Table 2** where the CSDs "Not assigned to a SLA (too few commuters to classify)" are identified.

The Municipal Act of Manitoba provides that a minimum of 1,000 residents are required to form a new municipality. According to the 2011 Census of Population, there were 99 CSDs (excluding Indian Reserves and unorganized territories) with less than 1,000 residents in Manitoba. They are listed in **Table 3** and shown in **Map 1**.

Of these CSDs, 52 are rural municipalities, 24 are towns, 18 are villages, 4 are Indian Settlements and 1 is a Local Government District (**Table 4**).

The distribution of the CSDs with less than 1,000 residents across the SLAs is summarized in **Table 5**. Notably, 14 of the CSDs with less than 1,000 residents are in the Brandon (Manitoba) SLA and 11 are in the Killarney-Boissevain (Manitoba) SLA and 10 CSDs had too few commuters to be classified to an SLA.

For the larger SLAs, such as Brandon, Killarney-Boissevain and Dauphin SLAs with 9 or more CSDs with a population less than 1,000 residents, we have created an addendum to this report that proposes a set of "sub-SLAs". These "sub-SLAs" will be based on between-community commuting flows in order to propose (sub) functional areas that do not cover such a wide geographic space and contain fewer CSDs.

Regarding the 10 CSDs with less than 1,000 residents and with too few commuters to classify to an SLA, our proposal for assigning these 10 CSDs to an SLA is outlined in the last column of Table 6. There are two cases for which we have no criteria (at present) to assign the CSD to an SLA. One case is the R.M. of Glenella. As we note in Table 6, the driving time from the Village of Glenella is shorter to Neepawa than it is to Dauphin or Portage la Prairie and thus we propose to assign the R.M. of Glenella to the same SLA as Neepawa is assigned. The other case is the R.M. of Lawrence. Again, as we note in **Table 6**, the R.M. of Lawrence shares a border with the R.M. of Mossey River to the north and shares a border with the R.M. of Ste. Rose to the south. There are less than 20 commuters into or out of the R.M. of Lawrence and thus no basis to assign this R.M. to an SLA.

There are 3 SLAs which, in themselves, have fewer than 1,000 residents. Our proposal for dealing with these 3 SLAs in the context of a 1,000 population threshold is discussed in the last column of **Table 7**. One of them, namely the Hartney (Manitoba) SLA, has virtually no commuters going to or coming from a neighbouring SLA – which is the criteria for being delineated as an SLA. At this point, we have no criteria for combining the Hartney (Manitoba) SLA with a neighbouring SLA. The other 2 SLAs with less than 1,000 residents are Grand Rapids (Manitoba) which is judged too remote to combine with another SLA and the SLA of Roseau River (Manitoba) which is comprised of two Roseau River Indian Reserves and Indian Reserves are out-of-scope for this report.

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[1] A census subdivision (CSD) is the general term for municipalities (as determined by provincial/territorial legislation) or areas treated as municipal equivalents for statistical purposes (e.g., Indian reserves, Indian settlements and unorganized territories).

Table 1

Self-contained labour areas, Manitoba, 2006		
Map number[1]	**Name of self-contain labour area** (SLA), ranked by population size in 2006	**Population in 2006**
1	Winnipeg (Manitoba)	825,303
7	Brandon (Manitoba)	72,400
2	Winkler-Morden-Altona (Manitoba)	51,663
3	Portage la Prairie (Manitoba)	26,048
16	Dauphin (Manitoba)	18,910
11	Esterhazy-Moosomin-Langenburg (Saskatchewan)[2]	15,168
22	Thompson (Manitoba)	14,430
6	Killarney-Boissevain (Manitoba)	13,034
19	Swan River (Manitoba)	10,621
20	The Pas (Manitoba)	10,568
21	Flin Flon (Manitoba/Saskatchewan)	10,010
10	Virden (Manitoba)	9,858
24	Norway House (Manitoba)	9,387
18	Siglunes to St. Laurent (Manitoba)	7,504
4	Treherne-Somerset (Manitoba)	5,989
8	Melita-Deloraine (Manitoba)	4,232
14	Russell (Manitoba)	3,873
	Cross Lake (Manitoba)	3,854
15	Roblin (Manitoba)	3,802
13	Strathclair-Shoal Lake (Manitoba)	2,887
5	Sandy Bay 5 First Nation-Lakeview (Manitoba)	2,860
12	Miniota-Hamiota (Manitoba)	2,750
17	Winnipegosis (Manitoba)	1,242
23	Lynn Lake (Manitoba)	1,191
25	Grand Rapids (Manitoba)	987
9	Hartney (Manitoba)	833
	Roseau River (Manitoba)	693

[1] For the purpose of the present set of maps, we are not showing the self-contained labour areas that consist solely of census sub-divisions that are Indian Reserves.

[2] The SLA of Esterhazy-Moosomin-Langenburg (Saskatchewan) is comprised of 5 census subdivisions in Manitoba (representing a population of 2,267) and 20 census subdivision in Saskatchewan (representing a population of 12,901).

Source: Anne Munro, Alessandro Alasia and Ray D. Bollman (2011). "Self-contained Labour Areas: A Proposed Delineation and Classification by Degree of Rurality". **Rural and Small Town Canada Analysis Bulletin**. Vol. 8, no. 8. Catalogue number 21-006-X2008008.

Table 2 (Part A)

Map number[1]	Name of self-contained labour area (SLA)	Census sub-division identifier	Census subdivision name	Census subdivison population 2006
	Manitoba self-contained labour areas (SLAs) showing the 2006 census sub-divisions delineated as part of each SLA			
1	Winnipeg (Manitoba)	4611040	Winnipeg	633,451
1	Winnipeg (Manitoba)	4612047	Springfield	12,990
1	Winnipeg (Manitoba)	4602041	Hanover	11,871
1	Winnipeg (Manitoba)	4613043	St. Andrews	11,359
1	Winnipeg (Manitoba)	4602044	Steinbach	11,066
1	Winnipeg (Manitoba)	4613056	St. Clements	9,706
1	Winnipeg (Manitoba)	4613047	Selkirk	9,515
1	Winnipeg (Manitoba)	4602069	Taché	9,083
1	Winnipeg (Manitoba)	4613032	East St. Paul	8,733
1	Winnipeg (Manitoba)	4614036	Rockwood	7,692
1	Winnipeg (Manitoba)	4618031	Gimli	5,797
1	Winnipeg (Manitoba)	4610035	Macdonald	5,653
1	Winnipeg (Manitoba)	4602075	Ritchot	5,051
1	Winnipeg (Manitoba)	4602057	Ste. Anne	4,509
1	Winnipeg (Manitoba)	4614039	Stonewall	4,376
1	Winnipeg (Manitoba)	4613037	West St. Paul	4,357
1	Winnipeg (Manitoba)	4612054	Brokenhead	3,940
1	Winnipeg (Manitoba)	4602053	La Broquerie	3,659
1	Winnipeg (Manitoba)	4614031	Woodlands	3,562
1	Winnipeg (Manitoba)	4602032	De Salaberry	3,349
1	Winnipeg (Manitoba)	4619045	Division No. 19, Unorganized	3,255
1	Winnipeg (Manitoba)	4610043	Cartier	3,162
1	Winnipeg (Manitoba)	4601071	Alexander	2,978
1	Winnipeg (Manitoba)	4618071	Bifrost	2,972
1	Winnipeg (Manitoba)	4612056	Beausejour	2,823
1	Winnipeg (Manitoba)	4601057	Lac du Bonnet	2,812
1	Winnipeg (Manitoba)	4611042	Headingley	2,726
1	Winnipeg (Manitoba)	4619059	Peguis 1B	2,513
1	Winnipeg (Manitoba)	4602046	Niverville	2,464
1	Winnipeg (Manitoba)	4619050	Fort Alexander 3	2,121
1	Winnipeg (Manitoba)	4618068	Fisher	1,944
1	Winnipeg (Manitoba)	4618037	Armstrong	1,919
1	Winnipeg (Manitoba)	4601039	Piney	1,755
1	Winnipeg (Manitoba)	4601035	Stuartburn	1,629
1	Winnipeg (Manitoba)	4602061	Ste. Anne	1,534
1	Winnipeg (Manitoba)	4601046	Whitemouth	1,480
1	Winnipeg (Manitoba)	4601051	Pinawa	1,450
1	Winnipeg (Manitoba)	4601043	Reynolds	1,410
1	Winnipeg (Manitoba)	4614015	Rosser	1,364
1	Winnipeg (Manitoba)	4601075	Powerview-Pine Falls	1,294
1	Winnipeg (Manitoba)	4601094	Division No. 1, Unorganized	1,130
1	Winnipeg (Manitoba)	4619056	Fisher River 44	1,129
1	Winnipeg (Manitoba)	4614042	Teulon	1,124
1	Winnipeg (Manitoba)	4610052	St. François Xavier	1,087
1	Winnipeg (Manitoba)	4618074	Arborg	1,021
1	Winnipeg (Manitoba)	4618034	Winnipeg Beach	1,017
1	Winnipeg (Manitoba)	4601060	Lac du Bonnet	1,009
1	Winnipeg (Manitoba)	4623071	Shamattawa 1	920
1	Winnipeg (Manitoba)	4602037	St-Pierre-Jolys	839
1	Winnipeg (Manitoba)	4613049	Dunnottar	692
1	Winnipeg (Manitoba)	4619053	Hole or Hollow Water 10	619
1	Winnipeg (Manitoba)	4618077	Riverton	537
1	Winnipeg (Manitoba)	4613062	Brokenhead 4	467
1	Winnipeg (Manitoba)	4601078	Victoria Beach	388
2	Winkler-Morden-Altona (Manitoba)	4603050	Winkler	9,106
2	Winkler-Morden-Altona (Manitoba)	4603053	Morden	6,571
2	Winkler-Morden-Altona (Manitoba)	4603047	Stanley	6,367
2	Winkler-Morden-Altona (Manitoba)	4603036	Rhineland	4,125
2	Winkler-Morden-Altona (Manitoba)	4603040	Altona	3,709
2	Winkler-Morden-Altona (Manitoba)	4603074	Carman	2,880
2	Winkler-Morden-Altona (Manitoba)	4603065	Morris	2,662
2	Winkler-Morden-Altona (Manitoba)	4603072	Dufferin	2,199
2	Winkler-Morden-Altona (Manitoba)	4609017	Grey	2,004
2	Winkler-Morden-Altona (Manitoba)	4602025	Franklin	1,768
2	Winkler-Morden-Altona (Manitoba)	4604033	Pembina	1,712
2	Winkler-Morden-Altona (Manitoba)	4603067	Morris	1,643
2	Winkler-Morden-Altona (Manitoba)	4603030	Montcalm	1,317
2	Winkler-Morden-Altona (Manitoba)	4603058	Thompson	1,259
2	Winkler-Morden-Altona (Manitoba)	4603062	Roland	1,002
2	Winkler-Morden-Altona (Manitoba)	4603042	Plum Coulee	770
2	Winkler-Morden-Altona (Manitoba)	4604035	Manitou	718
2	Winkler-Morden-Altona (Manitoba)	4603033	Emerson	689
2	Winkler-Morden-Altona (Manitoba)	4609020	St. Claude	588
2	Winkler-Morden-Altona (Manitoba)	4603038	Gretna	574

Table 2 (Part B)

Manitoba self-contained labour areas (SLAs) showing the 2006 census sub-divisions delineated as part of each SLA

Map number[1]	Name of self-contained labour area (SLA)	Census sub-division identifier	Census subdivision name	Census subdivison population 2006
3	Portage la Prairie (Manitoba)	4609029	Portage la Prairie	12,728
3	Portage la Prairie (Manitoba)	4609024	Portage la Prairie	6,793
3	Portage la Prairie (Manitoba)	4608045	North Norfolk	2,742
3	Portage la Prairie (Manitoba)	4608059	Westbourne	1,906
3	Portage la Prairie (Manitoba)	4608048	MacGregor	921
3	Portage la Prairie (Manitoba)	4608061	Gladstone	802
3	Portage la Prairie (Manitoba)	4609027	Dakota Tipi 1	156
4	Treherne-Somerset (Manitoba)	4604063	Lorne	2,003
4	Treherne-Somerset (Manitoba)	4608031	South Norfolk	1,170
4	Treherne-Somerset (Manitoba)	4608042	Victoria	1,149
4	Treherne-Somerset (Manitoba)	4608038	Treherne	646
4	Treherne-Somerset (Manitoba)	4608033	Notre Dame de Lourdes	589
4	Treherne-Somerset (Manitoba)	4604066	Somerset	432
5	Sandy Bay 5 First Nation-Lakeview (Man.)	4608069	Sandy Bay 5	2,518
5	Sandy Bay 5 First Nation-Lakeview (Man.)	4608066	Lakeview	342
6	Killarney-Boissevain (Manitoba)	4605027	Killarney	2,199
6	Killarney-Boissevain (Manitoba)	4605033	Boissevain	1,497
6	Killarney-Boissevain (Manitoba)	4605024	Turtle Mountain	1,100
6	Killarney-Boissevain (Manitoba)	4604057	Argyle	1,073
6	Killarney-Boissevain (Manitoba)	4604051	Roblin	964
6	Killarney-Boissevain (Manitoba)	4604039	Louise	819
6	Killarney-Boissevain (Manitoba)	4605070	Riverside	809
6	Killarney-Boissevain (Manitoba)	4605076	Strathcona	727
6	Killarney-Boissevain (Manitoba)	4605031	Morton	718
6	Killarney-Boissevain (Manitoba)	4605067	Whitewater	648
6	Killarney-Boissevain (Manitoba)	4607041	Glenboro	633
6	Killarney-Boissevain (Manitoba)	4604044	Pilot Mound	630
6	Killarney-Boissevain (Manitoba)	4607047	Wawanesa	535
6	Killarney-Boissevain (Manitoba)	4604046	Crystal City	400
6	Killarney-Boissevain (Manitoba)	4604053	Cartwright	282
7	Brandon (Manitoba)	4607062	Brandon	41,511
7	Brandon (Manitoba)	4607060	Cornwallis	4,058
7	Brandon (Manitoba)	4615020	Neepawa	3,298
7	Brandon (Manitoba)	4615075	Minnedosa	2,474
7	Brandon (Manitoba)	4607065	North Cypress	1,902
7	Brandon (Manitoba)	4607053	Souris	1,772
7	Brandon (Manitoba)	4615078	Rosedale	1,658
7	Brandon (Manitoba)	4607068	Carberry	1,502
7	Brandon (Manitoba)	4607057	Whitehead	1,402
7	Brandon (Manitoba)	4607071	Elton	1,285
7	Brandon (Manitoba)	4607077	Rivers	1,193
7	Brandon (Manitoba)	4607045	Oakland	1,033
7	Brandon (Manitoba)	4615095	Park (South)	1,003
7	Brandon (Manitoba)	4607075	Daly	868
7	Brandon (Manitoba)	4607038	South Cypress	834
7	Brandon (Manitoba)	4615018	Langford	787
7	Brandon (Manitoba)	4608054	Lansdowne	750
7	Brandon (Manitoba)	4615073	Minto	667
7	Brandon (Manitoba)	4607051	Glenwood	640
7	Brandon (Manitoba)	4615027	Saskatchewan	593
7	Brandon (Manitoba)	4616007	Rossburn	546
7	Brandon (Manitoba)	4615023	Odanah	540
7	Brandon (Manitoba)	4616002	Rossburn	514
7	Brandon (Manitoba)	4615091	Clanwilliam	494
7	Brandon (Manitoba)	4615093	Erickson	456
7	Brandon (Manitoba)	4615029	Rapid City	416
7	Brandon (Manitoba)	4617092	Division No. 17, Unorganized	204
8	Melita-Deloraine (Manitoba)	4605052	Melita	1,051
8	Melita-Deloraine (Manitoba)	4605039	Deloraine	977
8	Melita-Deloraine (Manitoba)	4605055	Edward	621
8	Melita-Deloraine (Manitoba)	4605037	Winchester	594
8	Melita-Deloraine (Manitoba)	4605043	Brenda	549
8	Melita-Deloraine (Manitoba)	4605050	Arthur	440
9	Hartney (Manitoba)	4605061	Cameron	433
9	Hartney (Manitoba)	4605063	Hartney	400
10	Virden (Manitoba)	4606034	Virden	3,010
10	Virden (Manitoba)	4606028	Wallace	1,501
10	Virden (Manitoba)	4606023	Pipestone	1,419
10	Virden (Manitoba)	4606040	Sioux Valley Dakota Nation	1,079
10	Virden (Manitoba)	4606037	Woodworth	890
10	Virden (Manitoba)	4606015	Sifton	796
10	Virden (Manitoba)	4606030	Elkhorn	461
10	Virden (Manitoba)	4606018	Oak Lake	363
10	Virden (Manitoba)	4605058	Albert	339

Table 2 (Part C)

Manitoba self-contained labour areas (SLAs) showing the 2006 census sub-divisions delineated as part of each SLA				
Map number[1]	Name of self-contained labour area (SLA)	Census sub-division identifier	Census subdivision name	Census subdivison population 2006
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705052	Esterhazy	2,336
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705004	Moosomin	2,257
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705048	Langenburg	1,048
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705038	Rocanville	869
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705051	Fertile Belt No. 183	771
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705094	Churchbridge	704
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705093	Churchbridge No. 211	679
11	Esterhazy-Moosomin-Langenburg (Sask.)	4615055	Birtle	666
11	Esterhazy-Moosomin-Langenburg (Sask.)	4615057	Birtle	662
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705047	Langenburg No. 181	558
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705037	Rocanville No. 151	554
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705001	Moosomin No. 121	518
11	Esterhazy-Moosomin-Langenburg (Sask.)	4615048	Ellice	423
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705041	Spy Hill No. 152	365
11	Esterhazy-Moosomin-Langenburg (Sask.)	4701096	Maryfield	347
11	Esterhazy-Moosomin-Langenburg (Sask.)	4701094	Maryfield No. 91	341
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705007	Martin No. 122	339
11	Esterhazy-Moosomin-Langenburg (Sask.)	4615046	Archie	330
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705056	Stockholm	323
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705009	Wapella	311
11	Esterhazy-Moosomin-Langenburg (Sask.)	4615051	St-Lazare	265
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705043	Spy Hill	201
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705044	Gerald	124
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705042	Tantallon	105
11	Esterhazy-Moosomin-Langenburg (Sask.)	4705049	Yarbo	72
12	Miniota-Hamiota (Manitoba)	4615041	Miniota	904
12	Miniota-Hamiota (Manitoba)	4615038	Hamiota	823
12	Miniota-Hamiota (Manitoba)	4615033	Blanshard	586
12	Miniota-Hamiota (Manitoba)	4615036	Hamiota	437
13	Strathclair-Shoal Lake (Manitoba)	4615064	Strathclair	840
13	Strathclair-Shoal Lake (Manitoba)	4615069	Harrison	812
13	Strathclair-Shoal Lake (Manitoba)	4615062	Shoal Lake	680
13	Strathclair-Shoal Lake (Manitoba)	4615060	Shoal Lake	555
14	Russell (Manitoba)	4616032	Russell	1,428
14	Russell (Manitoba)	4616038	Shellmouth-Boulton	906
14	Russell (Manitoba)	4616024	Russell	661
14	Russell (Manitoba)	4616019	Silver Creek	483
14	Russell (Manitoba)	4616029	Binscarth	395
15	Roblin (Manitoba)	4616052	Roblin	1,672
15	Roblin (Manitoba)	4616049	Shell River	931
15	Roblin (Manitoba)	4616045	Hillsburg	484
15	Roblin (Manitoba)	4616046	Valley River 63A	427
15	Roblin (Manitoba)	4616063	Park (North)	288
16	Dauphin (Manitoba)	4617050	Dauphin	7,906
16	Dauphin (Manitoba)	4617048	Dauphin	2,328
16	Dauphin (Manitoba)	4617026	Alonsa	1,446
16	Dauphin (Manitoba)	4617042	Ste. Rose du Lac	995
16	Dauphin (Manitoba)	4617045	Ochre River	929
16	Dauphin (Manitoba)	4617060	Grandview	839
16	Dauphin (Manitoba)	4617053	Gilbert Plains	834
16	Dauphin (Manitoba)	4617040	Ste. Rose	791
16	Dauphin (Manitoba)	4617055	Gilbert Plains	760
16	Dauphin (Manitoba)	4617057	Grandview	736
16	Dauphin (Manitoba)	4617036	McCreary	487
16	Dauphin (Manitoba)	4617034	McCreary	476
16	Dauphin (Manitoba)	4617063	Ethelbert	383
17	Winnipegosis (Manitoba)	4617073	Winnipegosis	628
17	Winnipegosis (Manitoba)	4617071	Mossey River	614
18	Siglunes to St. Laurent (Manitoba)	4618057	Siglunes	1,480
18	Siglunes to St. Laurent (Manitoba)	4618040	St. Laurent	1,454
18	Siglunes to St. Laurent (Manitoba)	4618060	Grahamdale	1,416
18	Siglunes to St. Laurent (Manitoba)	4618044	Coldwell	1,339
18	Siglunes to St. Laurent (Manitoba)	4618052	Eriksdale	911
18	Siglunes to St. Laurent (Manitoba)	4618067	Fairford (Part) 50	904
18	Siglunes to St. Laurent (Manitoba)	4619060	Fairford (Part) 50	0

Table 2 (Part D)

Map number[1]	Name of self-contained labour area (SLA)	Census sub-division identifier	Census subdivision name	Census subdivison population 2006
	Manitoba self-contained labour areas (SLAs) showing the 2006 census sub-divisions delineated as part of each SLA			
19	Swan River (Manitoba)	4620048	Swan River	3,859
19	Swan River (Manitoba)	4620041	Swan River	2,784
19	Swan River (Manitoba)	4620037	Minitonas	1,105
19	Swan River (Manitoba)	4620055	Mountain (North)	766
19	Swan River (Manitoba)	4620032	Mountain (South)	570
19	Swan River (Manitoba)	4620039	Minitonas	497
19	Swan River (Manitoba)	4620043	Benito	370
19	Swan River (Manitoba)	4709075	Livingston No. 331	355
19	Swan River (Manitoba)	4620052	Bowsman	315
20	The Pas (Manitoba)	4621045	The Pas	5,589
20	The Pas (Manitoba)	4621052	Kelsey	2,453
20	The Pas (Manitoba)	4621043	Opaskwayak Cree Nation 21E	2,187
20	The Pas (Manitoba)	4621033	Opaskwayak Cree Nation 21A	181
20	The Pas (Manitoba)	4621040	Opaskwayak Cree Nation 21I	158
21	Flin Flon (Manitoba/Saskatchewan)	4621064	Flin Flon (Part)	5,594
21	Flin Flon (Manitoba/Saskatchewan)	4621078	Division No. 21, Unorganized	1,887
21	Flin Flon (Manitoba/Saskatchewan)	4718051	Creighton	1,502
21	Flin Flon (Manitoba/Saskatchewan)	4718049	Denare Beach	785
21	Flin Flon (Manitoba/Saskatchewan)	4718052	Flin Flon (Part)	242
22	Thompson (Manitoba)	4622026	Thompson	13,446
22	Thompson (Manitoba)	4621071	Snow Lake	837
22	Thompson (Manitoba)	4622017	Mystery Lake	147
23	Lynn Lake (Manitoba)	4623047	Lynn Lake	714
23	Lynn Lake (Manitoba)	4623065	Brochet 197	306
23	Lynn Lake (Manitoba)	4623062	Division No. 23, Unorganized	171
24	Norway House (Manitoba)	4622058	Norway House 17	4,071
24	Norway House (Manitoba)	4622046	Division No. 22, Unorganized	2,313
24	Norway House (Manitoba)	4622048	Garden Hill First Nation	1,898
24	Norway House (Manitoba)	4622049	God's Lake 23	1,105
25	Grand Rapids (Manitoba)	4621027	Grand Rapids 33	651
25	Grand Rapids (Manitoba)	4621025	Grand Rapids	336
	Cross Lake (Manitoba)	4622052	Cross Lake 19A	1,663
	Cross Lake (Manitoba)	4622051	Cross Lake 19	1,586
	Cross Lake (Manitoba)	4622067	Cross Lake 19E	605
	Roseau River (Manitoba)	4602027	Roseau River 2	568
	Roseau River (Manitoba)	4602026	Roseau Rapids 2A	125

[1] For the purpose of the present set of maps, we are not showing the self-contained labour areas that consist solely of census sub-divisions that are Indian Reserves.

Source: Anne Munro, Alessandro Alasia and Ray D. Bollman (2011). "Self-contained Labour Areas: A Proposed Delineation and Classification by Degree of Rurality." **Rural and Small Town Canada Analysis Bulletin**. Vol. 8, no. 8. Catalogue number 21-006-X2008008.

Table 3 (Part A)

Manitoba census divisions (except Indian Reserves and unorganized territories) with less than 1,000 population in the 2011 Census of Population, ranked by size of 2011 population

Census sub-division (CSD) identification number (2011)	Census sub-division (CSD) name (2011)	CSD type (T=town, IRI=Indian Reserve, CY=City, VL=Village, RM=Rural Municipality, S-É=Indian settlement, NO=unorganized)	Map number of SLA	Name of self-contained labour area (SLA) in which the CSD is delineated	Total population of CSD in 2011
4620037	Minitonas	RM	19	Swan River (Manitoba)	996
4605039	Deloraine	T	8	Melita-Deloraine (Manitoba)	977
4608048	MacGregor	T	3	Portage la Prairie (Manitoba)	963
4617045	Ochre River	RM	16	Dauphin (Manitoba)	945
4615095	Park (South)	RM	7	Brandon (Manitoba)	935
4604051	Roblin	RM	6	Killarney-Boissevain (Manitoba)	932
4616038	Shellmouth-Boulton	RM	14	Russell (Manitoba)	930
4604039	Louise	RM	6	Killarney-Boissevain (Manitoba)	913
4608061	Gladstone	T	3	Portage la Prairie (Manitoba)	879
4615041	Miniota	RM	12	Miniota-Hamiota (Manitoba)	871
4615038	Hamiota	T	12	Miniota-Hamiota (Manitoba)	868
4615069	Harrison	RM	13	Strathclair-Shoal Lake (Manitoba)	864
4606037	Woodworth	RM	10	Virden (Manitoba)	860
4617060	Grandview	T	16	Dauphin (Manitoba)	859
4618052	Eriksdale	RM	18	Siglunes to St. Laurent (Manitoba)	846
4603042	Plum Coulee	T	2	Winkler-Morden-Altona (Manitoba)	843
4607038	South Cypress	RM	7	Brandon (Manitoba)	838
4607075	Daly	RM	7	Brandon (Manitoba)	830
4623056	Churchill	T		Not assigned to a SLA (too few commuters to classify)	813
4617053	Gilbert Plains	RM	16	Dauphin (Manitoba)	812
4617055	Gilbert Plains	T	16	Dauphin (Manitoba)	811
4604035	Manitou	T	2	Winkler-Morden-Altona (Manitoba)	808
4606015	Sifton	RM	10	Virden (Manitoba)	789
4605070	Riverside	RM	6	Killarney-Boissevain (Manitoba)	780
4617040	Ste. Rose	RM	16	Dauphin (Manitoba)	771
4615018	Langford	RM	7	Brandon (Manitoba)	767
4623037	South Indian Lake	S-É		Not assigned to a SLA (too few commuters to classify)	767
4615064	Strathclair	RM	13	Strathclair-Shoal Lake (Manitoba)	744
4608054	Lansdowne	RM	7	Brandon (Manitoba)	723
4621071	Snow Lake	T	22	Thompson (Manitoba)	723
4605031	Morton	RM	6	Killarney-Boissevain (Manitoba)	698
4613049	Dunnottar	VL	1	Winnipeg (Manitoba)	696
4608033	Notre Dame de Lourdes	VL	4	Treherne-Somerset (Manitoba)	683
4603033	Emerson	T	2	Winkler-Morden-Altona (Manitoba)	671
4615057	Birtle	T	11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	664
4617057	Grandview	RM	16	Dauphin (Manitoba)	649
4617073	Winnipegosis	VL	17	Winnipegosis (Manitoba)	647
4605067	Whitewater	RM	6	Killarney-Boissevain (Manitoba)	645
4607041	Glenboro	VL	6	Killarney-Boissevain (Manitoba)	645
4615073	Minto	RM	7	Brandon (Manitoba)	644
4605076	Strathcona	RM	6	Killarney-Boissevain (Manitoba)	643
4620055	Mountain (North)	RM	19	Swan River (Manitoba)	637
4604044	Pilot Mound	T	6	Killarney-Boissevain (Manitoba)	635
4615055	Birtle	RM	11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	632
4608038	Treherne	T	4	Treherne-Somerset (Manitoba)	616
4607051	Glenwood	RM	7	Brandon (Manitoba)	602
4609020	St. Claude	VL	2	Winkler-Morden-Altona (Manitoba)	590
4605055	Edward	RM	8	Melita-Deloraine (Manitoba)	574
4615027	Saskatchewan	RM	7	Brandon (Manitoba)	570
4607047	Wawanesa	VL	6	Killarney-Boissevain (Manitoba)	562

Table 3 (Part B)

Census sub-division (CSD) identification number (2011)	Census sub-division (CSD) name (2011)	CSD type (T=town, IRI=Indian Reserve, CY=City, VL=Village, RM=Rural Municipality, S-É=Indian settlement, NO=unorganized)	Map number of SLA	Name of self-contained labour area (SLA) in which the CSD is delineated	Total population of CSD in 2011
		Manitoba census divisions (except Indian Reserves and unorganized territories) with less than 1,000 population in the 2011 Census of Population, ranked by size of 2011 population			
4603038	Gretna	T	2	Winkler-Morden-Altona (Manitoba)	556
4616007	Rossburn	T	7	Brandon (Manitoba)	552
4617071	Mossey River	RM	17	Winnipegosis (Manitoba)	539
4618077	Riverton	VL	1	Winnipeg (Manitoba)	538
4615023	Odanah	RM	7	Brandon (Manitoba)	533
4615033	Blanshard	RM	12	Miniota-Hamiota (Manitoba)	526
4620039	Minitonas	T	19	Swan River (Manitoba)	522
4608072	Glenella	RM		Not assigned to a SLA (too few commuters to classify)	522
4605037	Winchester	RM	12	Melita-Deloraine (Manitoba)	508
4616002	Rossburn	RM	7	Brandon (Manitoba)	494
4615093	Erickson	T	7	Brandon (Manitoba)	487
4623047	Lynn Lake	T	23	Lynn Lake (Manitoba)	482
4617034	McCreary	RM	16	Dauphin (Manitoba)	476
4617036	McCreary	VL	16	Dauphin (Manitoba)	472
4606030	Elkhorn	VL	10	Virden (Manitoba)	471
4605043	Brenda	RM	8	Melita-Deloraine (Manitoba)	469
4620032	Mountain (South)	RM	19	Swan River (Manitoba)	467
4616019	Silver Creek	RM	14	Russell (Manitoba)	460
4616024	Russell	RM	14	Russell (Manitoba)	459
4617076	Lawrence	RM		Not assigned to a SLA (too few commuters to classify)	456
4623034	Leaf Rapids	T		Not assigned to a SLA (too few commuters to classify)	453
4604066	Somerset	VL	4	Treherne-Somerset (Manitoba)	439
4616045	Hillsburg	RM	15	Roblin (Manitoba)	426
4616029	Binscarth	VL	14	Russell (Manitoba)	425
4605061	Cameron	RM	9	Hartney (Manitoba)	420
4615036	Hamiota	RM	12	Miniota-Hamiota (Manitoba)	420
4615029	Rapid City	T	7	Brandon (Manitoba)	417
4605063	Hartney	T	9	Hartney (Manitoba)	415
4615091	Clanwilliam	RM	7	Brandon (Manitoba)	414
4605050	Arthur	RM	8	Melita-Deloraine (Manitoba)	413
4615048	Ellice	RM	11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	392
4604046	Crystal City	VL	6	Killarney-Boissevain (Manitoba)	384
4606018	Oak Lake	T	10	Virden (Manitoba)	383
4620043	Benito	VL	19	Swan River (Manitoba)	377
4601078	Victoria Beach	RM	1	Winnipeg (Manitoba)	374
4617063	Ethelbert	RM	16	Dauphin (Manitoba)	354
4615046	Archie	RM	11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	325
4605058	Albert	RM	10	Virden (Manitoba)	323
4608066	Lakeview	RM	5	Sandy Bay 5 First Nation-Lakeview (Manitoba)	311
4604053	Cartwright	VL	6	Killarney-Boissevain (Manitoba)	308
4620052	Bowsman	VL	19	Swan River (Manitoba)	298
4617067	Ethelbert	VL		Not assigned to a SLA (too few commuters to classify)	275
4615051	St-Lazare	VL	11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	254
4621025	Grand Rapids	T	25	Grand Rapids (Manitoba)	239
4605047	Waskada	VL		Not assigned to a SLA (too few commuters to classify)	183
4622064	Ilford	S-É		Not assigned to a SLA (too few commuters to classify)	141
4623025	Gillam	S-É		Not assigned to a SLA (too few commuters to classify)	72
4623039	Granville Lake	S-É		Not assigned to a SLA (too few commuters to classify)	16
4622017	Mystery Lake	LGD	22	Thompson (Manitoba)	10

[1] For the purpose of the present set of maps, we are not showing the self-contained labour areas that consist solely of census sub-divisions that are Indian Reserves.

Sources: Munro, Anne, Alessandro Alasia and Ray D. Bollman. (2011) "Self-contained labour areas: A proposed delineation and classification by degree of rurality." **Rural and Small Town Canada Analysis Bulletin** Vol. 8, No. 8 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=eng).

Statistics Canada. Census of Population, 2011.

Table 4

Manitoba census subdivisions (CSDs) with less than 1,000 residents in the 2011 Census of Population, by type of subdivision (excluding Indian Reserves and unorganized territories)	
Type of CSD	**Number of CSDs**
Rural municipalities	52
Towns	24
Villages	18
Indian settlements	4
Local government districts	1
Total	**99**

Source: Statistics Canada. (2012) **GeoSuite: 2011 Census** (Ottawa: Statistics Canada, Catalogue no. 92-150) (http://www5.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=92-150-X&chropg=1&lang=eng)

Table 5

Map number[1]	Name of self-contained labour area	Number of CSDs with less than 1,000 residents
Manitoba census subdivisions (CSDs) with less than 1,000 residents in the 2011 Census of Population, by self-contained labour area (excluding Indian Reserves and unorganized territories)		
7	Brandon (Manitoba)	14
6	Killarney-Boissevain (Manitoba)	11
	Not assigned to a SLA (too few commuters to classify)	10
16	Dauphin (Manitoba)	9
19	Swan River (Manitoba)	6
2	Winkler-Morden-Altona (Manitoba)	5
8	Melita-Deloraine (Manitoba)	5
10	Virden (Manitoba)	5
11	Esterhazy-Moosomin-Langenburg (Saskatchewan)	5
12	Miniota-Hamiota (Manitoba)	4
14	Russell (Manitoba)	4
1	Winnipeg (Manitoba)	3
4	Treherne-Somerset (Manitoba)	3
3	Portage la Prairie (Manitoba)	2
9	Hartney (Manitoba)	2
13	Strathclair-Shoal Lake (Manitoba)	2
17	Winnipegosis (Manitoba)	2
22	Thompson (Manitoba)	2
5	Sandy Bay 5 First Nation-Lakeview (Manitoba)	1
15	Roblin (Manitoba)	1
18	Siglunes to St. Laurent (Manitoba)	1
23	Lynn Lake (Manitoba)	1
25	Grand Rapids (Manitoba)	1
	Total	**99**

Sources: Munro, Anne, Alessandro Alasia and Ray D. Bollman. (2011) "Self-contained labour areas: A proposed delineation and classification by degree of rurality." **Rural and Small Town Canada Analysis Bulletin** Vol. 8, No. 8 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=eng).

Statistics Canada. (2012) GeoSuite: 2011 Census (Ottawa: Statistics Canada, Catalogue no. 92-150) (http://www5.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=92-150-X&chropg=1&lang=eng)

Table 6

Manitoba census divisions (except Indian Reserves and unorganized territories) with less than 1,000 population in the 2011 Census of Population which were not assigned to a self-contained labour area					
Census sub-division (CSD) identification number (2011)	**Census sub-division (CSD) name (2011)**	**CSD type** (T=town, IRI=Indian Reserve, CY=City, VL=Village, RM=Rural Municipality, S-É=Indian settlement, NO=unorgan-ized)	**Name of self-contained labour area (SLA) in which the CSD is delineated by Munro *et al.* (2011)**	**Total population of CSD in 2011**	**Proposed classification to an SLA for our study**
4623056	Churchill	T	Not assigned to a SLA (too few commuters to classify)	813	Too remote for a meaningful SLA delineation.
4653037	South Indian Lake	S-É	Not assigned to a SLA (too few commuters to classify)	767	Too remote for a meaningful SLA delineation.
4608072	Glenella	RM	Not assigned to a SLA (too few commuters to classify)	522	The R.M. of Glenella borders on the SLA of Brandon (Manitoba) by sharing a border with the R.M. of Lansdowne and the R.M. of Rosedale. The R.M. of Glenella also borders on the SLA of Portage la Prairie (Manitoba) by sharing a border with the R.M. of Westbourne. The R.M. of Glenella also borders on the SLA of Dauphin (Manitoba) by sharing a border with the R.M. of McCreary and the R.M. of Alonsa. Glenella has fewer than 20 commuters to any other CSD. Anecdotal information would suggest that Neepawa would be the first destination for shopping and a hospital. The driving time from the Village of Glenella to Neepawa is just under one hour whereas it is over one hour to Dauphin or Portage la Prairie. Thus, it is proposed that for the purpose of the SLA discussion, the R.M. of Glenella be included in the same SLA as Neepawa.
4617076	Lawrence	RM	Not assigned to a SLA (too few commuters to classify)	456	The R.M. of Lawrence shares a border with the R.M. of Mossey River to the north and shares a border with the R.M. of Ste. Rose to the south. There are less than 20 commuters into or out of the R.M. of Lawrence and thus no basis to assign this R.M. to an SLA.
4623034	Leaf Rapids	T	Not assigned to a SLA (too few commuters to classify)	453	Too remote for a meaningful SLA delineation.
4617067	Ethelbert	VL	Not assigned to a SLA (too few commuters to classify)	275	Assign to SLA of Dauphin (Manitoba), as it is embedded within the R.M. of Ethelbert which is assigned to this SLA
4605047	Waskada	VL	Not assigned to a SLA (too few commuters to classify)	183	Assign to SLA of Melita-Deloraine (Manitoba), as it is embedded within this SLA
4622064	Ilford	S-É	Not assigned to a SLA (too few commuters to classify)	141	Too remote for a meaningful SLA delineation.
4623025	Gillam	S-É	Not assigned to a SLA (too few commuters to classify)	72	Too remote for a meaningful SLA delineation.
4623039	Granville Lake	S-É	Not assigned to a SLA (too few commuters to classify)	16	Too remote for a meaningful SLA delineation.

Sources:

. . . . . Munro, Anne, Alessandro Alasia and Ray D. Bollman. (2011) "Self-contained labour areas: A proposed delineation and classification by degree of rurality." **Rural and Small Town Canada Analysis Bulletin** Vol. 8, No. 8 (Ottawa: Statistics Canada, Catalogue no. 21-006-XlE) (www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=eng).

. . . . . Statistics Canada. Censuses of Population, 1996 to 2011.

Table 7

Manitoba SLAs with less than 1,000 residents in the 2006 Census of Population			
Map number[1]	Name of self-contained labour area (SLA) (ranked by total population size)	Population in 2006	Proposal for study of SLAs
25	Grand Rapids (Manitoba)	987	This SLA has 2 component CSDs: the Town of Grand Rapids (2006 population = 336) and the Indian Reserve of Grand Rapids 33 (2006 population = 651). This SLA is judged to be too remote to consider joining with another SLA.
9	Hartney (Manitoba)	833	This SLA has 2 component CSDs: the R.M. of Cameron (2006 population = 433) and the Town of Hartney (2006 population = 400). The options for joining this SLA with another SLA include joining with the SLA of Virden (Manitoba) because the R.M. of Cameron shares a border with the R.M. of Sifton or joining with the SLA of Melita-Deloraine (Manitoba) because the R.M. of Cameron shares a border with the R.M. of Brenda and the R.M. of Winchester or joining with the SLA of Killarney-Boisevain (Manitoba) because the R.M. of Cameron shares a border with the R.M. of Whitewater. The only commuting flow of 20 or more into or out of SLA of Hartney (Manitoba) is a flow of 20 commuters from the R.M. of Sifton to the Town of Hartney. Thus, the lack of strong commuting flows indicate a) that the R.M. of Cameron plus the Town of Hartney is a self-contained labour area and b) there is no evidence from commuting data to suggest with which SLA the SLA of Hartney (Manitoba) might be might be joined for our SLA study.
	Roseau River (Manitoba)	693	This SLA has 2 component CSDs: the Indian Reserve of Roseau Rapids 2A (2006 population = 125) and the Indian Reserve of Roseau River 2 (2006 population = 568). These CSDs are not in scope for the present study.

[1] For the purpose of the present set of maps, we are not showing the self-contained labour areas that consist solely of census sub-divisions that are Indian Reserves.

Appendix A: How Were Self-Contained Labour Areas (SLAs) Delineated?

SLAs were mathematically created by Statistics Canada (Munro *et al.*, 2011). This involved a calculation of reciprocal commuting flows between any two CSDs. The two CSDs with the highest reciprocal commuting flows were grouped together (as a start to the delineation of an SLA) and then with the new group of CSDs, the calculation of reciprocal commuting flows was repeated to find the next highest reciprocal commuting flows.

A reciprocal commuting flow recognizes the importance of a commuting flow to both the sending CSD and the receiving CSD. The specific calculation is succinctly explained by Munro *et al.* (2011):

> **Clustering algorithm: focus on reciprocal importance of commuting flows**
>
> The algorithm used in this analysis has specific features that make it useful for the purpose of discovering rural labour areas. We used an algorithm based on the principle of "reciprocal importance" to indicate the strength of the linkage between any two census subdivisions (CSDs). The algorithm at the core of the clustering procedure shows a stronger linkage between two areas if the flows between any two areas are proportionally important to both areas. Specifically, our measure of reciprocal importance (*RI*) is:
>
> $$RI_{a,b} = RI_{b,a} = \frac{F_{a,b}}{R_a} * \frac{F_{a,b}}{W_b} + \frac{F_{b,a}}{R_b} * \frac{F_{b,a}}{W_a}$$
>
> where *F* is the flow of workers (number) who commute from one CSD to another (a to b, or b to a); *R* is the number of workers who reside in the CSD (a or b), regardless of where they work; *W* is the number of workers who work in the CSD, regardless of where they live; and *a* and *b* are the subscripts for any pair of CSDs.
>
> Reciprocal importance describes our desire to indicate that a given commuting flow from *a* to *b* is proportionally significant to both "A" area and "B" area. As an illustration of this concept, take a situation where 100 workers are leaving area A to go to area B. If area A is a large city with hundreds of thousands of resident workers, then the departure of those 100 workers is not particularly important to area A. If however area A is a very small town with only 200 resident workers overall, then this flow is very important to area A. Thus, a given flow between two smaller towns would generate a higher reciprocal importance (*RI*) than with the same flow between a smaller and a larger place. Using this example, the concept of reciprocal importance means that the algorithm will tend to group smaller areas together in order to produce larger increases in self-containment (defined below). This means that this algorithm is more likely than the other possible algorithms to discover self-contained labour areas among relatively smaller settlements.
>
> Other key features of the procedure are that:
>
> - All things being equal, this procedure tends to group smaller areas together first. This occurs because a relatively small flow can represent a significant proportion of commuters for a smaller area, and thus will produce a stronger linkage (i.e. a larger *RI*) than it would if it occured in a larger area. Additionally, larger areas are more likely to have a greater number of areas contributing or receiving its commuters, which leads to a relative reduction in the importance of any given connection.
> - In comparison to clustering methods that take pre-defined urban areas as set starting points for each cluster, this procedure minimizes the urban bias by repeatedly selecting for the CSD or CSD group with the lowest degree of self-containment, regardless of classification.

- This procedure requires a higher level of self-containment for very small areas, which prevents small areas from reaching completion while significant flows remain, even if those flows are to or from a larger urban area.

Self-containment

Self-containment is a measure of the degree to which the workers living in "A" are also working in "A". Thus, by clustering areas with a high reciprocal importance of commuting flows and a low level of self-containment, we can create new areas with increasingly higher degrees of self-containment. Once a certain threshold for self-containment has been reached, this would then be considered a self-contained labour market because most residents with jobs are working in the given labour area and most individuals living in the given labour area are also working in the given labour market area.

It is important to note that self-containment is defined by two components. First, the self-containment of workers: the percent of workers in the area that also live in that area; and second, the self-containment of residents: the percent of residents in the area that also work in that area. Throughout this bulletin, whenever the term self-containment is used it refers to the combination of both of these components.

In order to define a threshold for self-containment we used a sliding scale that requires a higher degree of self-containment if the area (CSD or grouping of CSDs) has a small(er) resident labour force. Accordingly, for CSDs with under 1,000 resident workers, we set the minimum self-containment level to be 90%. For larger CSDs (with over 25,000 resident workers), our self-containment level was lower (at 75%). Hence, regardless of the size of the area, the minimum self containment of any SLA is 75%. There are two reasons for using a sliding scale to set the self-containment threshold. First, to ensure that smaller labour areas are not formed by excluding large numeric connections, we have used a higher threshold of self-containment where a smaller labour area is delineated as a self-contained labour area; and second, in order to avoid agglomerating all urban areas in Canada into one enormous labour area, larger areas need to have a lower threshold of self-containment to be designated as a self-contained labour area. (Munro *et al.,* 2011, p. 7)
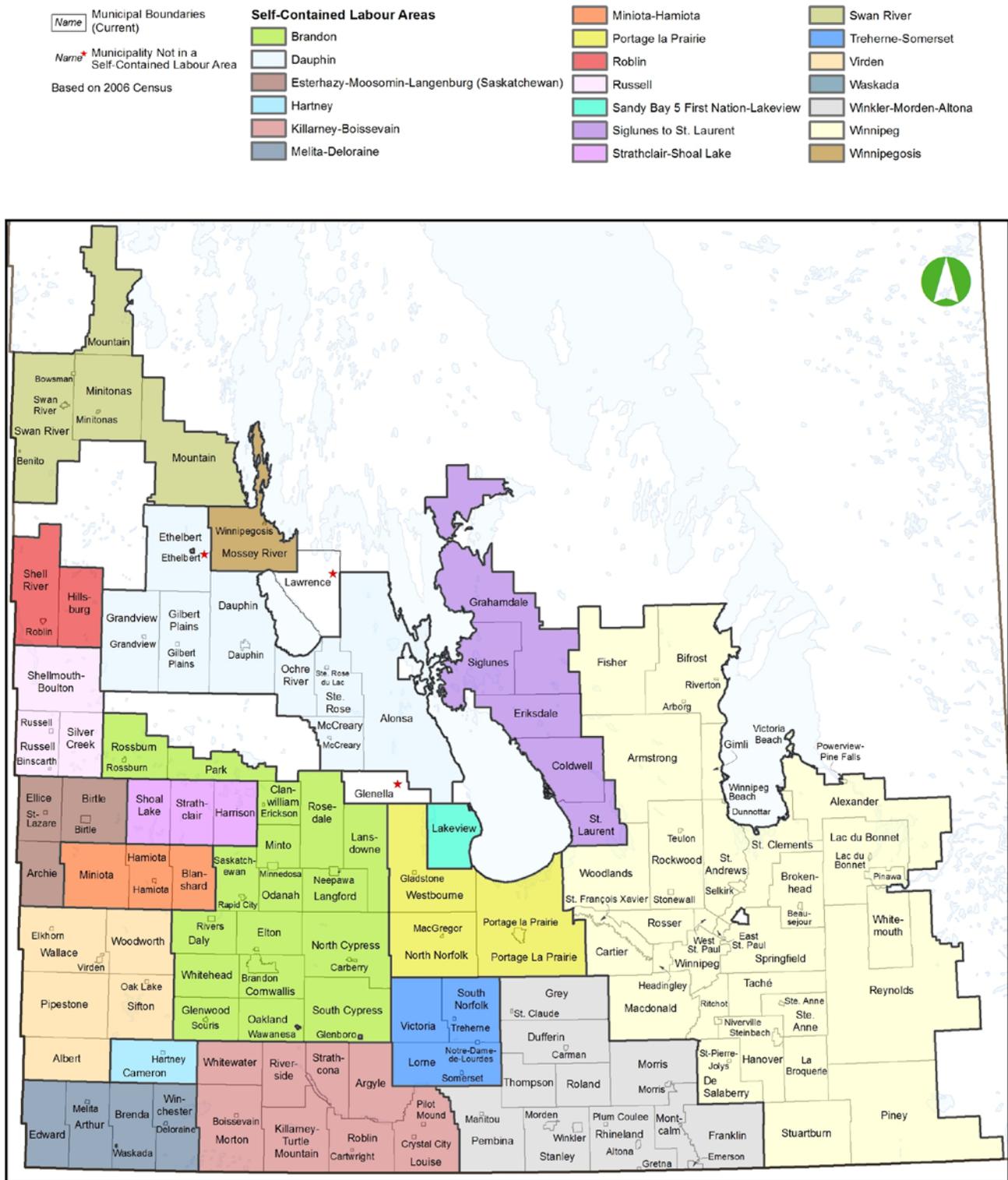
References

Munro, Anne, Alessandro Alasia and Ray D. Bollman. (2011) "Self-contained labour areas: A proposed delineation and classification by degree of rurality." **Rural and Small Town Canada Analysis Bulletin** Vol. 8, No. 8 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=eng).

Manitoba CSDs with less than 1000 in population
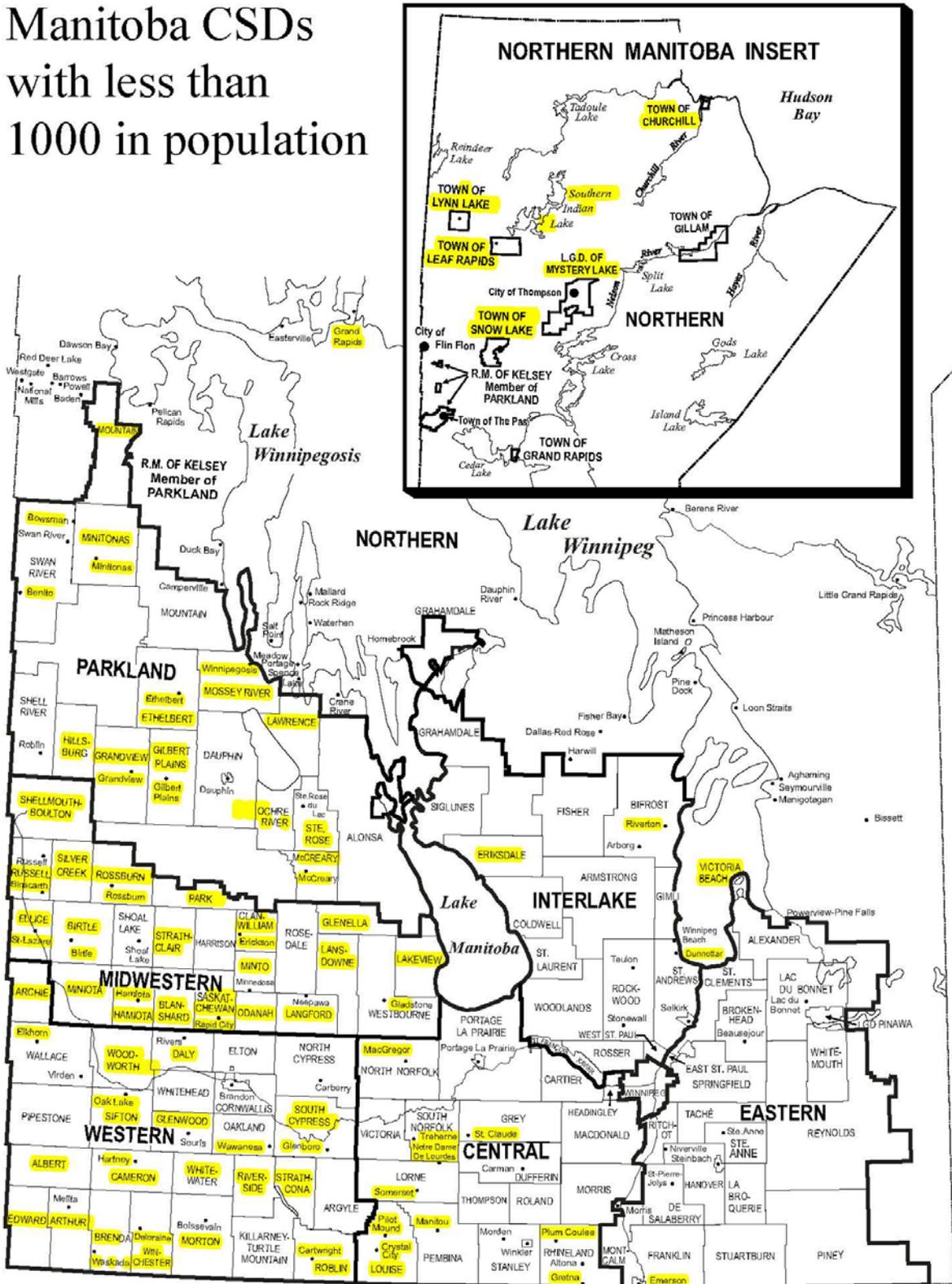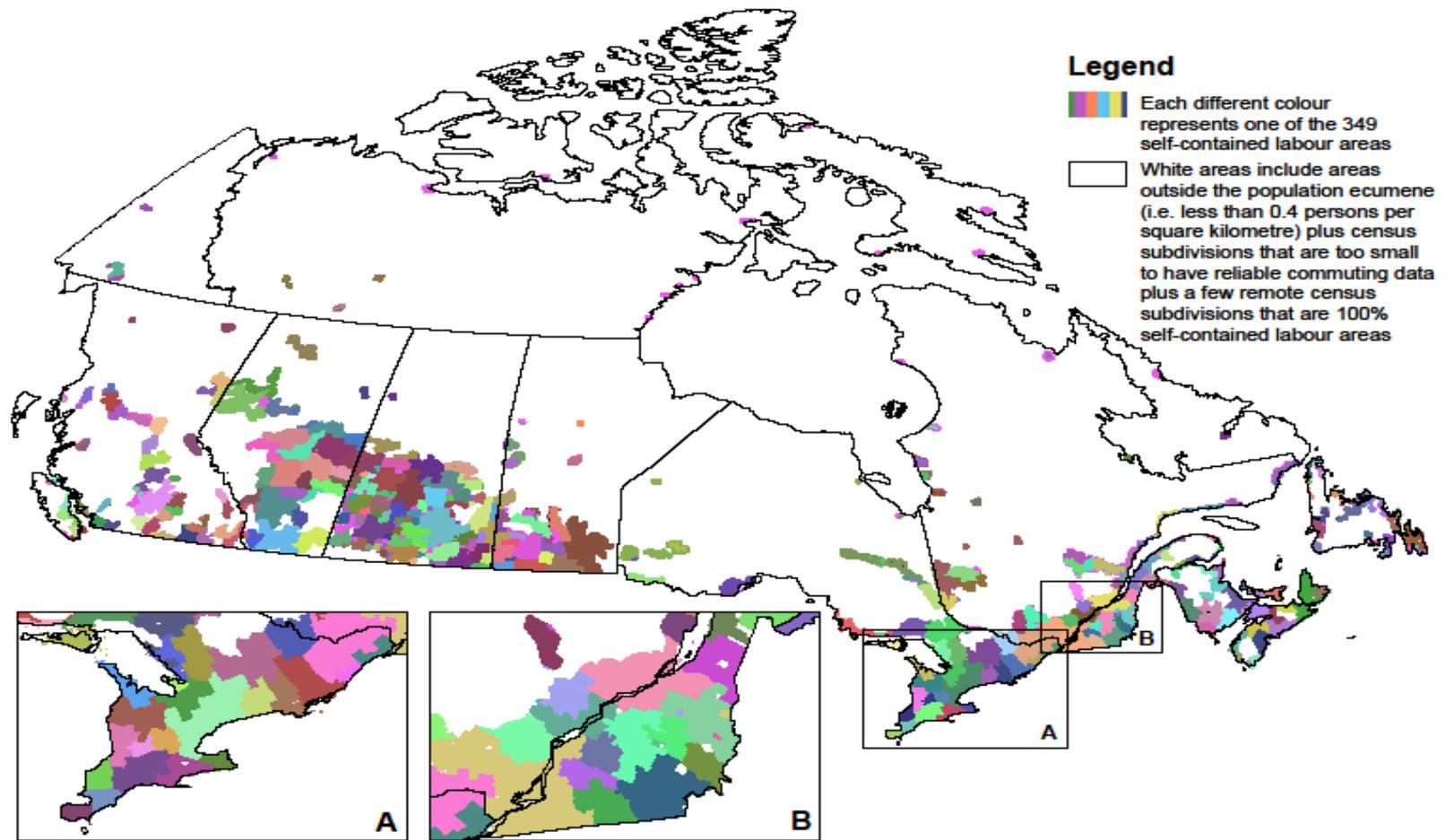

Map 1 Manitoba CSDs with less than 1000 in population

Map 2: Southern Manitoba Municipalities and Self-Contained Labour Areas

Source: Munro, Anne, Alessandro Alasia and Ray D. Bollman. (2011) "Self-contained labour areas: A proposed delineation and classification by degree of rurality." **Rural and Small Town Canada Analysis Bulletin** Vol. 8, No. 8 (Ottawa: Statistics Canada, Catalogue no. 21-006-XIE) (www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=21-006-X&CHROPG=1&lang=en

Map 2 SLAs in rural Manitoba

Self-contained labour areas, Canada, 2006

Legend

Each different colour represents one of the 349 self-contained labour areas

White areas include areas outside the population ecumene (i.e. less than 0.4 persons per square kilometre) plus census subdivisions that are too small to have reliable commuting data plus a few remote census subdivisions that are 100% self-contained labour areas

Source: Delineated by author using commuting data from the 2006 Census of Population, Statistics Canada.
Map produced by the Remote Sensing and Geospatial Analysis Section (RSGA), Agriculture Division, Statistics Canada, 2010.

Map 3 SLAs in Canada, 2006

Breaking Down SLAs

BRANDON SLA

The Brandon SLA is comprised of 26 municipalities with 14 of those municipalities having a population of less than 1,000.

BRANDON SLA	
Langford *	North Cypress
Neepawa	Carberry
Oakland	Rosedale *
Brandon	Glenwood *
Elton	Souris
South Cypress *	Lansdowne *
Cornwallis	Rossburn *
Whitehead	Rossburn (RM) *
Odanah *	Daly *
Minnedosa	Rivers
Saskatchewan (RM)*	
Rapid City *	
Minto *	
Park (South) *	
Clanwilliam *	
Erickson *	* = CSDS with < 1000

Table 9 Brandon SLA with member municipalities

To create more manageable regions, the Brandon SLA was divided into sub-groups of municipalities. Two approaches were applied to identify different municipal groupings for the Brandon SLA. The first approach was to use sub-SLAs, halting the SLA delineation process several steps before it resulted in the Brandon SLA. The second approach was to form city/town-centric groups within the SLA.
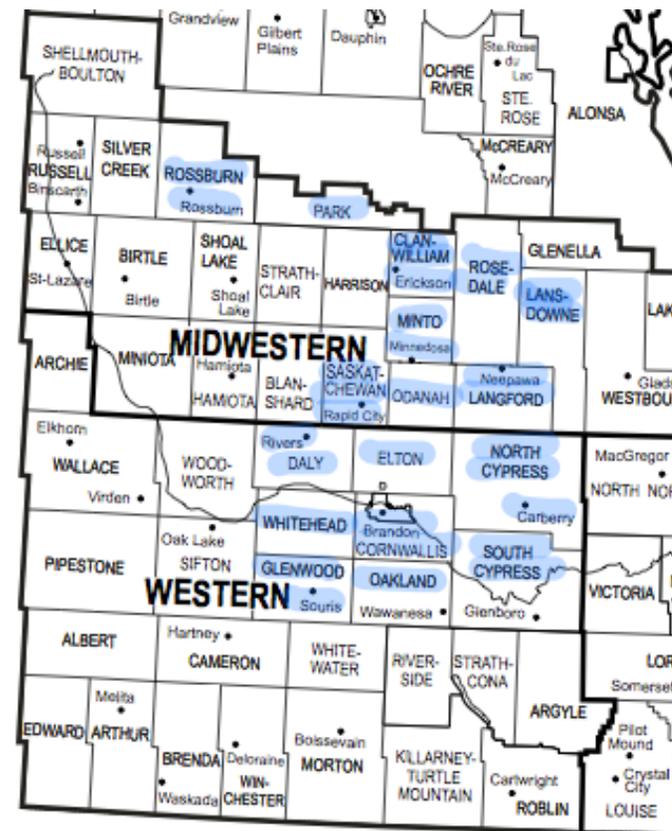
Figure 1 Brandon SLA

The main criterion for sub-SLA grouping was to limit groups to 5 municipalities or less. This limit was reached at the 2nd step into the Brandon SLA matching process and resulted in the sub-groups illustrated in the figure below. Three municipalities (Rosedale, Lansdowne and Elton) were left out of groups at this point in the process.
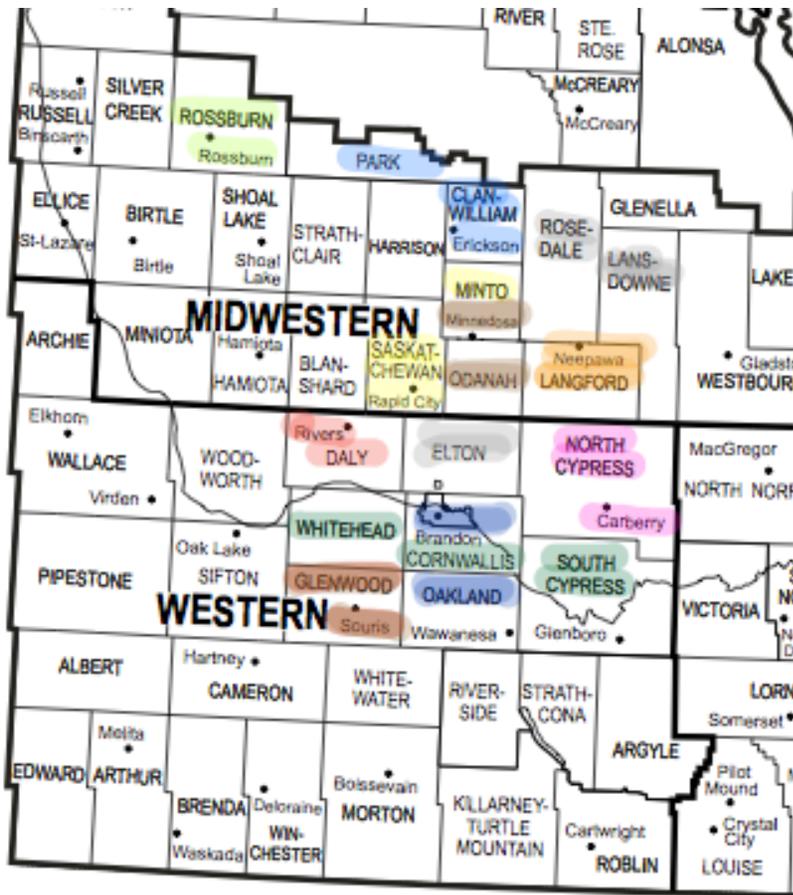
The main criterion for city/town centric grouping was to limit groups to 5 municipalities or less. The cities/towns with the strongest commuting inflows were identified as centres and then the remaining municipalities were grouped with them in accordance to their strength of commuting to these centres.
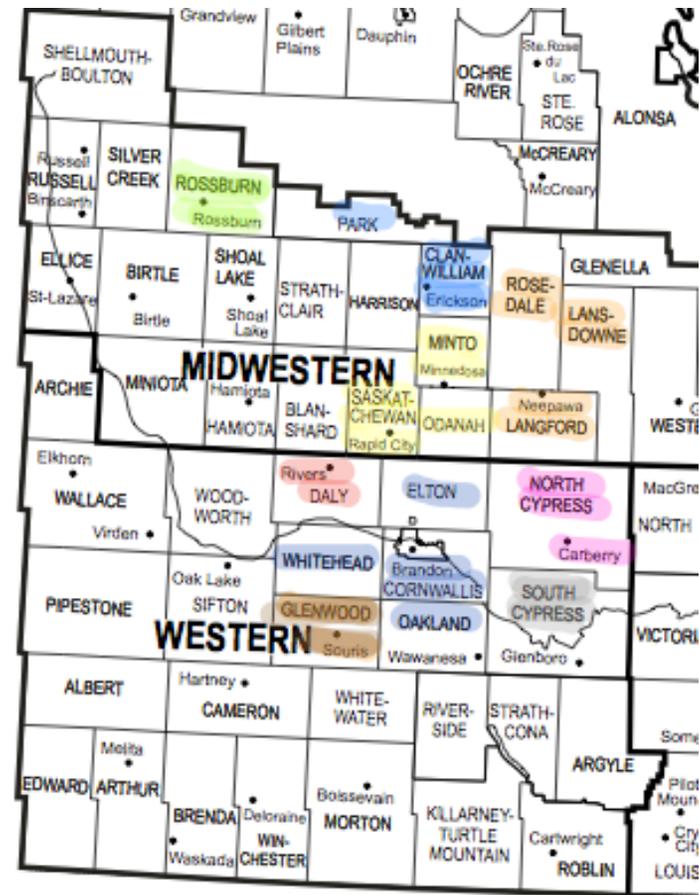

Figure 2 Brandon SLA divided into sub-SLAs

Figure 3 Brandon SLA divided into commuting groups

Compared side by side, the two approaches to grouping illustrate the similarities and differences between the two. Many of the groupings are the same between the two approaches with the groups of Rossburn, Souris, Carberry and Rivers all identified the same in both approaches. In regards to differences, there are fewer town-centric commuting groups overall and the non-identical commuting sub-groups are larger in size than the sub-SLA groups.

BRANDON SLA: Sub-SLAs (13)				BRANDON SLA: Town-centric commuting groups (9)			
Langford Neepawa	4,396	North Cypress Carberry	3,529	Langford Neepawa		Rosedale Lansdowne	6,746
Oakland Brandon	47,117	Rosedale	1,627	Oakland Brandon	54,285	Souris	2,439
Elton	1,257	Glenwood Souris	2,439	Elton		Glenwood	
South Cypress Cornwallis Whitehead	6,749	Lansdowne	743	Whitehead Cornwallis		Carberry North Cypress	3,529
		Rossburn Rossburn (RM)	1,046	South Cypress	838	Rossburn Rossburn (RM)	1,046
Odanah Minnedosa	3,120	Daly Rivers	2,019	Odanah Minnedosa		Daly Rivers	2,019
Saskatechewan (RM) Rapid City Minto	1,631			Saskatechewan (RM) Rapid City Minto	4,751		
Park (South) Clanwilliam Erickson	1,631			Park (South) Clanwilliam Erickson	1,631		

Table 10 Comparing Brandon SLA sub-groupings

KILLARNEY-BOISSEVAIN SLA

The Killarney-Boissevain SLA is comprised of 14 municipalities with 11 of those municipalities having less than 1,000 residents.

To create more manageable regions, the Killarney-Boissevain SLA was divided into sub-groups of municipalities. Town-centric groups within the SLA were created with municipalities grouped with towns based on the largest number of commuters to that town.

This resulted in 6 commuting groups for the Killarney-Boissevain SLA highlighted in table 11. Two of the groups are individual municipalities because they commuted to another SLA in a stronger fashion than to neighbouring municipalities within the SLA.

KILLARNEY–BOISSEVAIN SLA	KILLARNEY–BOISSEVAIN SLA: Town-centric commuting groups (6)	
Whitewater (RM) *	Whitewater (RM) *	
Boissevain	Boissevain	2,915
Morton (RM) *	Morton (RM) *	
Wawanesa *	Wawanesa *	562
Riverside (RM) *	Riverside (RM) *	
Killarney-Turtle Mountain	Killarney-Turtle Mountain	
Strathcona (RM) *	Strathcona (RM) *	4,656
Glenboro *	Glenboro *	645
Cartwright *	Cartwright *	
Roblin (RM) *	Roblin (RM) *	1,240
Pilot Mound *	Pilot Mound *	
Crystal City *	Crystal City *	
Louise (RM) *	Louise (RM) *	3,003
Argyle (RM)	Argyle (RM)	
* = CSDS with < 1000		

Table 11 Killarney-Boissevain SLA and Commuting Groups

The Killarney-Boissevain SLA has 14 municipalities in its self-contained labour area ranging in population from 384 to 3,233. The total population for the SLA is 13,021.
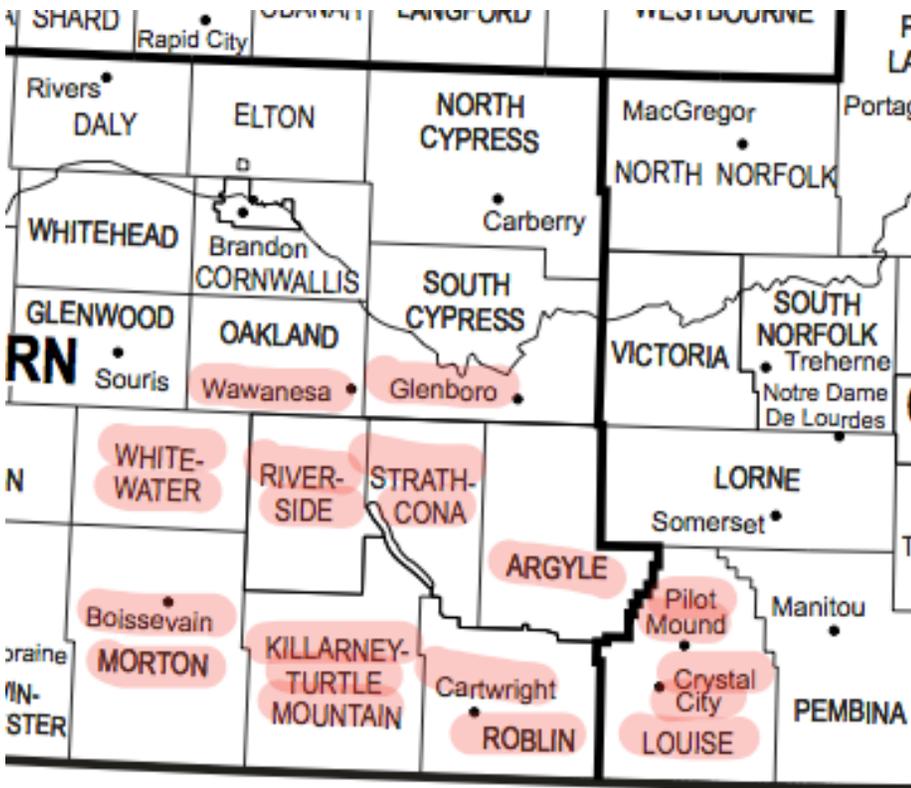
The main criterion for town centric grouping was to limit groups to 5 municipalities or less. The towns with the strongest commuting inflows were identified as centres and then the remaining municipalities were grouped with them in accordance to their strength of commuting to these centres.
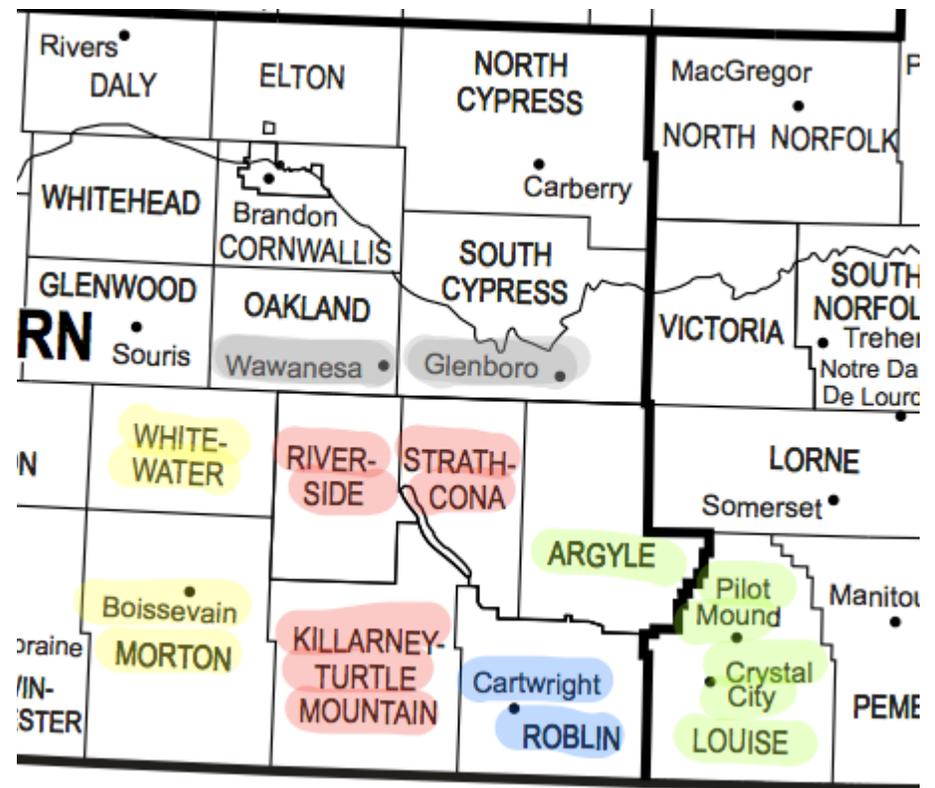

Figure 4 Killarney-Boissevain SLA

Figure 5 Killarney-Boissevain commuting groups

Dauphin SLA

The Dauphin SLA has 14 municipalities with 10 of those municipalities having less than 1,000 residents.

To create more manageable regions, the Dauphin SLA was divided into sub-groups of municipalities. Town-centric groups within the SLA were created with municipalities grouped with towns based on the largest number of commuters to that town.

This resulted in 4 commuting groups for the Dauphin SLA highlighted in table 12. One group (the Rural Municipality of Alonsa) is composed of an individual municipality because it only had a commuting relationship with the city of Dauphin but the Dauphin sub-group had already reached the imposed limit of 5 municipalities and the R.M. of Alonsa does not have boundaries that are contiguous with Dauphin.

DAUPHIN SLA	DAUPHIN SLA: Town-centric commuting groups	
Dauphin	Dauphin	
Dauphin (RM)	Dauphin (RM)	
Ethelbert *	Ethelbert *	12,153
Ethelbert (RM) *	Ethelbert (RM) *	
Ochre River *	Ochre River *	
Grandview *	Grandview *	
Grandview (RM) *	Grandview (RM) *	
Gilbert Plains *	Gilbert Plains *	4,076
Gilbert Plains (RM) *	Gilbert Plains (RM) *	
Ste. Rose du Lac	Ste. Rose du Lac	
Ste. Rose (RM) *	Ste. Rose (RM) *	2,742
McCreary *	McCreary *	
McCreary (RM) *	McCreary (RM) *	
Alonsa	Alonsa	1,270
* = CSDS with < 1000		

Table 12 Dauphin SLA and Commuting Groups

The Dauphin SLA has 14 municipalities in its self-contained labour area ranging in population from 275 to 8,251. The total population for the SLA is 19,296.

The main criterion for city/town centric grouping was to limit groups to 5 municipalities or less. The city/towns with the strongest commuting inflows were identified as centres and then the remaining municipalities were grouped with them in accordance to their strength of commuting to these centres.
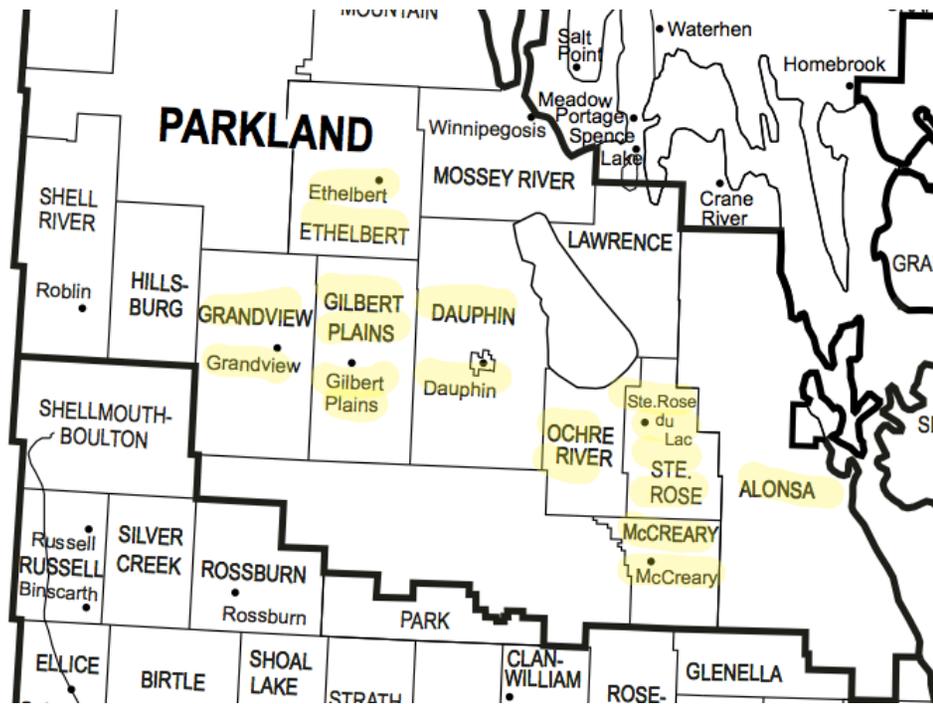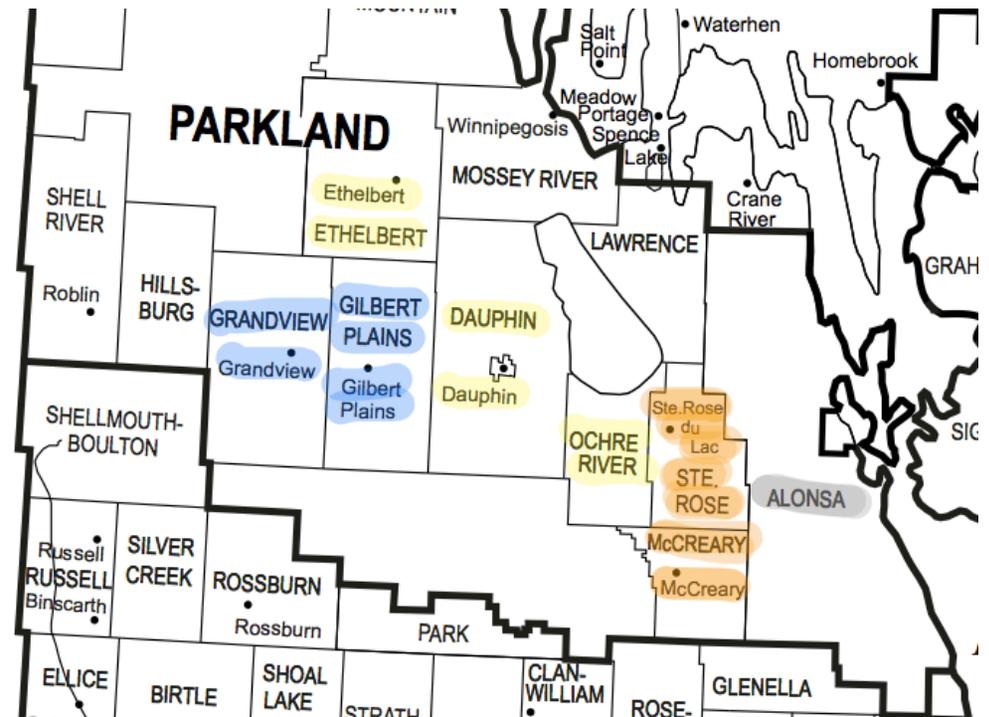

Figure 6 Dauphin SLA

Figure 7 Dauphin Commuting Groups