

**Estimating Available Social Capital from Census Data**  
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**Using NRE HH2001 sample of communities**  
 HH2001AggV30.sps and HH2001AggP40.sps

See: <http://nre.concordia.ca>

**Market-based**

Started with regression using Freshwater variables. Stepwise regression (include). Removed variables that were not significant in equation.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968 <sup>a</sup>	.936	.881	1.37770

a. Predictors: (Constant), V9P87\_1 Median household income \$, PNMV501 % no dwelling change - 5 yr, 01, DWMIZ401 Weak to no MIZ or Territory - dummy variable - 2001, V6P54\_1 Participation rate, PBMAN01 Bill % industry - manufacturing, 2001, PLT1501 % of pop 0-14, 2001

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.821	3.925		5.815	.001
	PNMV501 % no dwelling change - 5 yr, 01	-.151	.034	-.554	-4.509	.003
	V6P54_1 Participation rate	.226	.049	.858	4.605	.002
	PLT1501 % of pop 0-14, 2001	-1.098	.182	-1.183	-6.032	.001
	DWMIZ401 Weak to no MIZ or Territory - dummy variable - 2001	2.870	.919	.357	3.122	.017
	PBMAN01 Bill % industry - manufacturing, 2001	.166	.030	.662	5.621	.001
	V9P87_1 Median household income \$	6.521E-5	.000	.304	2.375	.049

a. Dependent Variable: I2MSoKp Index 2 of Market Social Capital for site - logs, raw sums

**Bureaucratic-based**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795 <sup>a</sup>	.631	.558	5.72348

a. Predictors: (Constant), PIADM01 % administrative service - 01, V8P75\_1 Median income \$, PIEDUCS1 Bill % industries: educational services, CCS - 2001

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.422	5.671		3.425	.004
	V8P75_1 Median income \$	.001	.000	.718	4.360	.001
	PIEDUCS1 Bill % industries: educational services, CCS - 2001	-2.677	.791	-.588	-3.382	.004
	PIADM01 % administrative service - 01	-1.772	.624	-.502	-2.841	.012

a. Dependent Variable: I2BSokp Index 2 of Bureaucratic Social Capital for site - logs, raw sums

## Associative-Based

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999 <sup>a</sup>	.998	.994	.58857

a. Predictors: (Constant), PLPFAM01 % of lone-parent families, PPUBCS1 % public administration industries in CCS - 2001, V10P13\_1 Average number of rooms per dwelling, PMANUCS1 % manufacturing industries in CCS - 2001, PLT15CS1 % of pop 0-14 in CCS, 2001, PPUB01 % public administrative, 2001, V6P7\_1 Employment-population ratio, PNMV501 % no dwelling change - 5 yr, 01, GOVERN01 Government transfer payments %

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	67.693	3.402		19.897	.000
	V10P13_1 Average number of rooms per dwelling	-3.946	.596	-.359	-6.619	.003
	V6P7_1 Employment-population ratio	.332	.020	.776	16.749	.000
	GOVERN01 Government transfer payments %	.244	.032	.452	7.595	.002
	PLT15CS1 % of pop 0-14 in CCS, 2001	-1.066	.104	-.468	-10.275	.001
	PMANUCS1 % manufacturing industries in CCS - 2001	.444	.018	.684	25.173	.000
	PPUBCS1 % public administration industries in CCS - 2001	-2.299	.107	-.646	-21.477	.000
	PPUB01 % public administrative, 2001	-.885	.044	-.561	-20.125	.000
	PNMV501 % no dwelling change - 5 yr, 01	-.160	.024	-.319	-6.669	.003

PLPFAM01 % of lone-parent families	-0.548	.035	-0.594	-15.744	.000
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a. Dependent Variable: I2ASoKp Index 2 of Associative Social Capital for site - logs, raw sums

### Communal-based

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995 <sup>a</sup>	.991	.972	.21450

a. Predictors: (Constant), PCFWCh01 Prop of CFamilies with childres - 2001, V6P7\_1 Employment-population ratio, PFREN01 % french mother tongue - 2001, pNVM01 prop non visible minority - 2001, PH01PYGT % of hh where owner paym >=30% of hh inc - 2001, PDW01MJ % of dwellings needing major repairs - 2001, PDIVO01 % persons divorced - 2001, PLT15CS1 % of pop 0-14 in CCS, 2001, PB9ED01 % < grade 9 education - 2001, P15\_4401 % of pop 15-44, 2001, AVGEMI01 Average employment income \$, V1P93\_1 Average number of children at home per census family

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.589	2.376		17.504	.000
	V1P93_1 Average number of children at home per census family	-6.367	.960	-1.362	-6.631	.001
	V6P7_1 Employment-population ratio	.121	.015	1.540	8.202	.000
	AVGEMI01 Average employment income \$	.00026	.000	-1.798	-11.697	.000
	PLT15CS1 % of pop 0-14 in CCS, 2001	-.773	.061	-1.820	-12.650	.000
	P15_4401 % of pop 15-44, 2001	.166	.035	.745	4.751	.003
	PB9ED01 % < grade 9 education - 2001	-.051	.011	-.467	-4.488	.004
	PH01PYGT % of hh where owner paym >=30% of hh inc - 2001	.083	.014	.376	6.121	.001
	PFREN01 % french mother tongue - 2001	-.015	.003	-.517	-5.178	.002
	PDIVO01 % persons divorced - 2001	.443	.050	.711	8.805	.000
	PDW01MJ % of dwellings needing major repairs - 2001	.276	.028	1.241	9.895	.000
	pNVM01 prop non visible minority - 2001	-35.039	2.210	-1.026	-15.857	.000

PCFWCh01 Prop of CFamilies with childres - 2001	10.324	1.069	1.629	9.655	.000
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a. Dependent Variable: I2CSokp Index 2 of Communal Social Capital for site - logs, raw sums

### Proposed equations for estimating types of social capital.

Market-based= 22.8 – 1.10 (% of pop 0-14) + .23 (Participation rate) + .17 (% employed in manufacturing) - .15 (% with no dwelling change over the last 5 years) +2.87 (dummy variable for weak to no MIZ or Territory) + .00006 (median household income)

Bureaucratic-based= 19.4 + .001 (Median income) -2.68 (% employed in educational services in the CCS) – 1.77 (% employed in administrative services)

Associative-based= 67.69 + .33 (Employment/population ratio) + .44 (% employed in manufacturing industries in the CCS) – 2.30 (% employed in public and administration industries in the CCS) - .55 (% of lone-parent families) - .89 (% employed in public administrative services) – 1.07 (% of population between 0 and 14 in the CCS) + .24 (% of government transfer payments) – 3.95 (average number of rooms per dwelling) - .16 (% of people who did not change dwelling over the last 5 years)

Communal-based= 41.6 - .77 (% of population 0 to 14 in CCS) - .0003 (average employment income) + 10.32 (Proportion of Census Families with children) + .12 (Employment/population ratio) – 6.37 (average number of children at home per census family) + .28 (% of dwellings needing major repairs) – 35.04 (proportion of people not in a visible minority group) + .17 (% of population 15 to 44 years old) + .44 (% of persons divorced) - .02 (% French mother tongue) - .05 (% of people with less than a grade 9 education) + .08 (% of households where the owner’s payments are >= 30% of the household income)

### Variables required:

#### CCS-level

- % employed in educational services in the CCS
- % employed in manufacturing industries in the CCS
- % employed in public and administration industries in the CCS
- % of population between 0 and 14 in the CCS

#### CSD-level

- dummy variable for weak to no MIZ or Territory
- % of pop 0-14
- % of population 15 to 44 years old
- average number of children at home per census family
- % of lone-parent families
- % of persons divorced
- Proportion of Census Families with children
- % of people with less than a grade 9 education
- average number of rooms per dwelling
- % of households where the owner’s payments are >= 30% of the household income
- % with no dwelling change over the last 5 years
- % of dwellings needing major repairs

Participation rate  
Employment/population ratio  
% employed in manufacturing  
% employed in administrative services  
% employed in public administrative services  
median household income  
average employment income  
% of government transfer payments  
proportion of people not in a visible minority group  
% French mother tongue