





POLARIZATION IN HALIFAX

- Restricting analysis to the Peninsula reveals greater evidence of polarization.
- Off the Peninsula, trends vary: declining relative position for older suburban areas; increasing for areas converted from rural to new suburban.



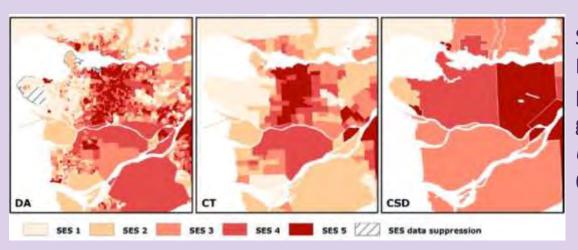
EVALUATING NEIGHBOURHOOD CHANGE AND THE "THREE CITIES" MODEL IN HALIFAX

- Polarization is less extreme than in Toronto or Vancouver: more CTs remained stable.
- Halifax experienced formative growth from 1980 to 2010; many areas witnessed suburban neighbourhood creation (as rural areas became urban) rather than neighbourhood change.
- Large size and diversity of census tracts (CT) may mask significant changes occurring at a smaller geographic scale. (Neighbourhoods in Halifax are smaller than CTs.)



SCALE MATTERS

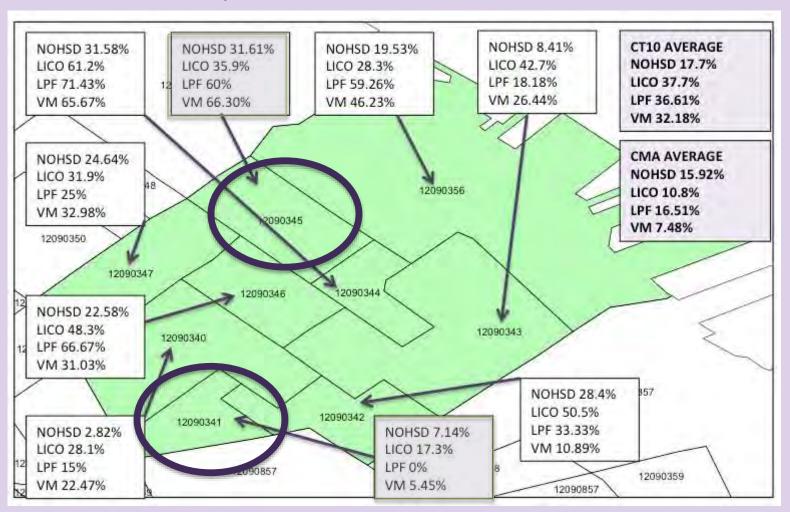
Halifax's political, geographical, and jurisdictional setting makes census tracts too large to represent neighbourhoods and to reveal the character or extent of sociospatial polarization. CT averages can hide disparities.



Schuurman, N. et al 2007. Deprivation indices, population health and geography. *Journal of Urban Health* 84(4): 591-603.

Polarized Adjacencies: Census Tract 10

Bounded by North Street, Robie Street, Cornwallis Street, Halifax Harbour



NOHSD No high school diploma

LICO Low income

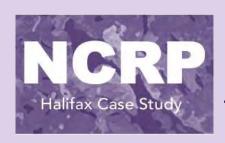
LPF Lone parent family

VM Visible minority



Since drafting the report...

- 1. Prouse, Victoria; Howard Ramos; Jill Grant; and Martha Radice. Forthcoming. "How Scale Matters: The Modifiable Areal Unit Problem and Interpreting Income Inequality in the Halifax Regional Municipality" Canadian Planning and Policy.
- 2. How Do People Perceive Neighbourhoods and Neighbourhood Change in Halifax?—ongoing project
- 3. Leverage our NCRP work by submitting SSHRC IG: Perceptions of Change in Atlantic Canadian Cities



"How Scale Matters: The Modifiable Areal Unit Problem and Interpreting Income Inequality in the Halifax Regional Municipality"

- Audience urban planners in small cities
- Comparison of CT and DA units to determine when and how scale matters for material, social and structural measures
- CTs mask variation in descriptive statistics
- CTs mask trends when looking at GIS mapping
- BUT in regression analysis DAs did not improve model fit nor offer conclusions that differed in terms of significance of terms or directions of effect



How Do People Perceive Neighbourhoods and Neighbourhood Change in Halifax?

Statistics Canada data → Survey → Focus groups

VARIABLE	VARIABLE LABEL	RANKING
pctUNDER24	% of population 24 years or under	1=HIGHEST
pctPLUS65	% of population 65 years or older	1=HIGHEST
pctLNPRNT	% of families that are lone parent	1=HIGHEST
pcntLowAPT	% of private dwellings that are Apartments with less than 5 stories	1=HIGHEST
pcnthighAPT	% of private dwellings that are Apartments with 5 stories or more	1=HIGHEST
pctOnePerHH	% of occupied private dwellings with single occupancy	1=HIGHEST
pctimmig	% of population that are immigrants	1=HIGHEST
pctothlng	% of population with mother tongue other than English or French	1=HIGHEST
pctABOR	% of population that self-identifies as Aboriginal	1=HIGHEST
pctVM	% of population that self-identifies as a visible minority	1=HIGHEST
pctMOBIL	% of population that has moved in the last 5 years	1=HIGHEST
pctRENTERS	% of private dwellings that are rented	1=HIGHEST
pctMJREP	% of private dwellings that are in need of major repairs	1=HIGHEST
pctHSLESS	% of population that have a high school diploma, or equivalency or less	1=HIGHEST
pctUNI	% of population that have a university degree, at the bachelor's level, or higher	1=HIGHEST
LFTOTALUR	unemployment rate	1=HIGHEST
INCAVTOT	Total average income (individual)	1=LOWEST
pctRENT30	% of renters that spend more than 30% of income on shelter costs	1=HIGHEST



How Do People Perceive Neighbourhoods and Neighbourhood Change in Halifax?

Statistics Canada data → Survey → Focus groups

Regression of Indexes on Indicators of Precariousness and Diversity									
	1996 Index			2006 Index			2011 Index		
Variables	Coef.	S.E.	P-value	Coef.	S.E.	P-value	Coef.	S.E.	P-value
% Under 24	2.05	1.72	0.24	-4.77	1.81	0.01	-0.70833	1.499684	0.64
% 65 years or older	1.23	1.52	0.42	-1.36	0.93	0.15	-1.63802	1.091384	0.14
% Lone parent families	-5.16	1.01	0.00	-3.85	1.00	0.00	-3.89518	1.292852	0.01
% Apartments less than 5 stories	-0.31	0.55	0.57	-0.57	0.59	0.34	-0.6397	0.665886	0.34
% Apartments more than 5 stories	0.27	0.78	0.73	0.30	0.58	0.62	0.487062	0.721885	0.50
% Single occupancy	-1.18	1.34	0.38	-3.89	1.06	0.00	-1.31661	1.041841	0.21
% Immigrants	-3.78	3.16	0.24	-5.50	2.52	0.04	-2.61559	1.668118	0.13
% Other language	-6.03	2.94	0.05	-5.93	2.31	0.01	-4.15376	1.99024	0.04
% Aboriginal	-13.14	7.27	0.08	-11.78	4.35	0.01	-12.5199	2.892806	0.00
% Visible minority	-0.53	0.75	0.49	-1.60	0.93	0.09	-2.1856	0.916568	0.02
% Moved last 5 years	-1.24	0.67	0.07	-0.40	0.53	0.46	-0.64556	0.677387	0.35
% Rented	-1.63	0.51	0.00	-0.85	0.55	0.13	-1.21343	0.697295	0.09
% Major repairs	-8.01	1.76	0.00	-4.03	1.62	0.02	-2.77997	0.988667	0.01
% HS or less	-1.22	1.37	0.38	-3.25	1.64	0.06	-1.63312	1.158569	0.17
% University	-0.64	1.30	0.63	-1.34	0.98	0.18	-1.83794	0.897109	0.05
Unemployment rate	-2.48	2.43	0.31	-4.17	2.05	0.05	-4.70486	1.291987	0.00
Average income (individual)	0.00	0.00	0.60	0.00	0.00	0.99	0.00055	0.000215	0.02
% Renters more than 30% on shelter costs	-2.71	0.57	0.00	-2.16	0.39	0.00	-1.04102	0.516706	0.05
Constant	1076.17	101.17	0.00	1385.11	106.51	0.00	1051.621	66.42289	0.00



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SSHRC IG: Perceptions of Change in Atlantic Canadian Cities

- Extend current NCRP funded project for two additional cross-sections and comparison to St John's, Moncton, and Charlottetown
- 11 Researchers, Dalhousie, UNB, MUN, and UBC
- 5 years, \$500k
- Responds to lack of data on the region's cities
- Responds to current policy concerns
- Responds to rapidly changing context