DOING MORE WITH HOUSING DATA WE ALREADY HAVE:

"WORK-AROUND" RESPONSES TO PRESSING DECISION-MAKER QUESTIONS

PRESENTATION TO A COMMUNITY DATA PROGRAM SOLUTIONS LAB WORKSHOP
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DATA-DRIVEN "FORESIGHT" ABOUT ISSUES:

- Anticipates opportunities for/threats to communities.
- Tries to avoid unpleasant surprises...
- Cuts through "noise" of up/down market indicators.
- Leads to proactive options to shape future.
- Engages citizens, turn opportunities to advantage.

2 WHAT'S MOSTLY MISSING RIGHT NOW?

- *Fresher data* than Census, *deeper* than media reports.
- Smaller-community data by municipality.
- Integrated data from multiple trusted sources.
- Wider scope: housing as ~50% of urbanization.
- Focus more on demographic demand, full supply.

3 DATA-*SUPPLIERS* CAN SUPPORT FORESIGHT, STARTING SOON!

- Detect net *annual* change, almost as it occurs.
- Estimate *drivers* of housing demand by source.
- Conceive housing "supply" in *broad terms*.
- Avoid *"magical thinking"* re: fast affordability results.

4 PUTTING UNDERUSED DATASETS TO WORK – EIGHT EXAMPLES FROM WORK IN PROGRESS:

- Reason for/capacity to track intercensal change (by Census Subdivisions).
- Annual StatsCan population data (Census Subdivisions) = households.
- Annual StatsCan population-change data (Census Divisions) = demand archetypes.
- Annual CMHC completions data by dwelling type (selected CSDs) = match with supply.
- Building Permits data (selected CSDs) = changes in existing stock (prototyping underway).
- Census secondary rental market metrics updated using social media (prototyping underway).
- Smaller community overlays: e.g., climate change threat and opportunity mapping.
- Census dwelling stock, updated via completions, demolitions (prototyping underway).

5 TAPPING INTERCENSAL DATA SOURCES – SOME EXAMPLES FOR ATLANTIC CANADA:

- Intercensal CSD turnarounds in P.E.I. and N.B., 2017 to 2020.
- N.B. population-to-households conversion.
- N.B. basic demand archetype, plus population/completions match.
- Building Permits data list of potential stock changes.
- Secondary rental market totals for N.B. and P.E.I.
- Smaller community risk overlays for NL.
- Census dwelling stock inventory updated for Atlantic Canada.

6 TEN P.E.I. CENSUS SUBDIVISIONS THAT TURNED AROUND MOST BETWEEN 2017 AND 2020:

Census Subdivision:	Population Change, 2001 to 2020:	% Change, whole period:	Population Change, 2017 to 2020:	% Change, last 4 years, 2017 to 2020
Lot 9	-19	-4.6%	81	25.9%
Lot 42	-2	-0.6%	56	21.9%
Lot 63	-7	-0.7%	107	12.2%
Lot 1	-55	-2.9%	160	9.4%
Mount Stewart	-72	-23.0%	18	8.1%
Crapaud	-16	-4.2%	27	7.9%
Victoria	-35	-29.4%	5	6.3%
Lot 47	-49	-8.3%	31	6.1%
Morell	-3	-0.9%	17	5.4%
St. Peters Bay	-11	-4.1%	13	5.3%

Source: Statistics Canada, Catalogue # 91-214-X.

7 SOME GROWING P.E.I. CENSUS SUBDIVISIONS, 2001 TO 2020 LOST POPULATION FROM 2017 TO 2020:

Census Subdivision:	Population Change, 2001 to 2020:	% Change, whole period:	Population Change, 2017 to 2020:	% Change, last 4 years, 2017 to 2020
Lot 26	126	+13.2%	-3	-0.3%
Lot 16	22	+3.2%	-3	-0.4%
Kensington	303	+21.6%	-16	-0.9%
Lot 39	11	+1.8%	-11	-1.7%
Lot 17	142	+31.2%	-12	-2.0%
Resort Municipality*	69	+25.6%	-8	-2.3%
Lot 5	23	+1.9%	-116	-8.6%

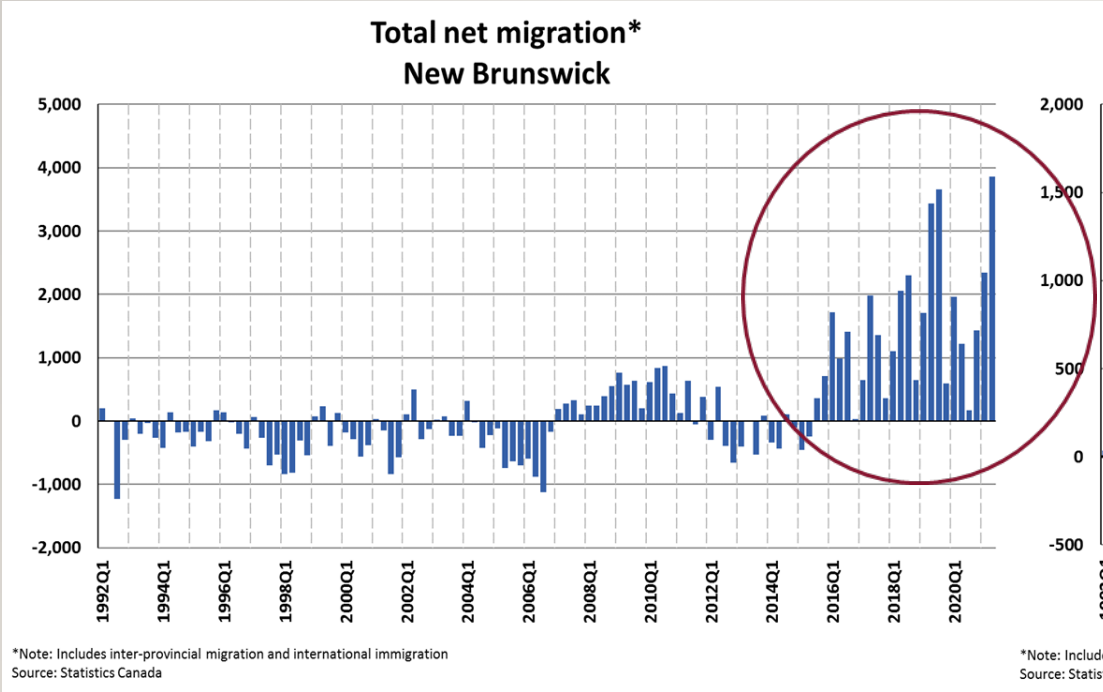
Source: Statistics Canada, Catalogue # 91-214-X.

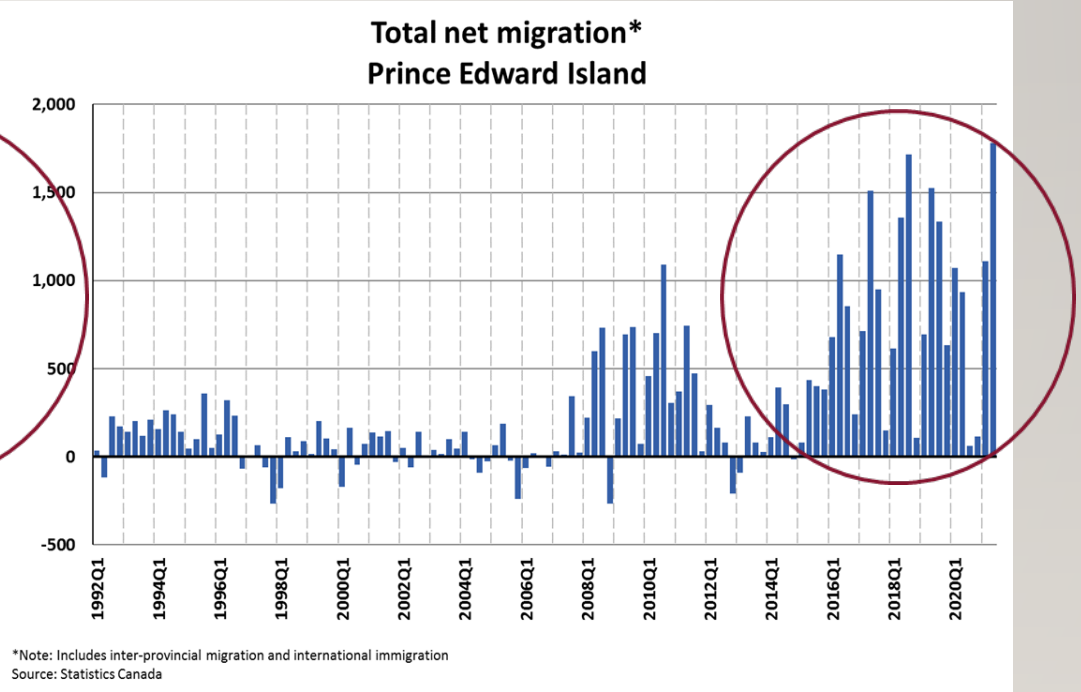
8 SIMILAR TRENDS AMONG NEW BRUNSWICK CENSUS DIVISIONS SINCE 2017:

Census Division:	Population Change, 2001 to 2020:	Average Annual Rate of Change:	Population Change, 2017 to 2021:	Average Annual Rate of Change:
Saint John	-637	-32	1703	426
Charlotte	-2103	-105	94	24
Sunbury	2413	121	315	79
Queens	-1922	-96	-292	-73
Kings	5071	254	790	198
Albert	2843	142	598	150
Westmorland	35741	1787	8567	2142
Kent	-602	-30	580	145
Northumberland	-5304	-265	-200	-50
York	19072	954	4344	1086
Carleton	-1153	-58	150	38
Victoria	-3274	-164	-261	-65
Madawaska	-3491	-175	-241	-60
Restigouche	-6251	-313	-497	-124
Gloucester	-8747	-437	-795	-199

Source: Statistics Canada, Catalogue # 91-214-X.

9 INTERPROVINCIAL AND INTERNATIONAL MIGRATION COMPOUNDED EACH OTHER…





10 POPULATION, HOUSEHOLD CHANGE BETWEEN CENSUSES IN NEW BRUNSWICK FOR DEVELOPING DEMAND ARCHETYPES:

Components of population change:	2016 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021	Net Change:
Births	6,593	6,425	6,371	6,228	6,216	-377
Deaths	7,394	7,615	7,631	7,582	7,998	+604
Immigrants	3,448	4,116	5,076	4,910	2,689	-759
Emigrants	330	593	301	236	186	-144
Returning emigrants	273	379	276	382	59	-214
Net temporary emigrants	206	209	211	117	41	-165
Net interprovincial migration	434	481	1,669	1,826	3,887	+3,453
Net non-permanent residents	453	696	1,578	665	1,395	942

Source: Statistics Canada Table: 17-10-0008-01 (formerly CANSIM 051-0004).

11 DID HOUSING PRODUCTION KEEP UP WITH HOUSEHOLD FORMATION IN NEW BRUNSWICK OVER PAST DECADE?

Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2010-20
Net added households @ 2.3 p.p.h.	**1,084**	**553**	**-378**	**- 393**	**- 404**	**1,239**	**1,315**	**1,388**	**2,374**	**2,403**	**9,180**
Housing completions	**2,359**	**2,651**	**2,432**	**1,909**	**1,243**	**1,950**	**1,153**	**1,820**	**1,614**	**2,208**	**19,339**
Net additions to stock	**1,275**	**2,098**	**2,810**	**2,302**	**1,647**	**711**	**-162**	**432**	**-760**	**-195**	**10,158**
Births	7,140	7,246	6,927	7,045	6,693	6,647	6,593	6,425	6,371	6,228	67,315
Deaths	6,467	6,358	6,529	6,613	7,349	6,954	7,394	7,615	7,631	7,582	70,492
Natural increase	673	888	398	432	-656	-307	-801	-1,190	-1,260	-1,354	-3,177
Immigrants	1,986	2,263	2,024	2,293	2,797	4,458	3,448	4,116	5,076	4,910	33,371
Emigrants	352	421	311	406	505	475	330	593	301	236	3,930
Returning emigrants	344	347	310	293	224	286	273	379	276	382	3,114
Net immigration	1,978	2,189	2,023	2,180	2,516	4,269	3,391	3,902	5,051	5,056	32,555
Net interprovincial migration	- 158	-1,806	-3,290	-3,517	-2,790	-1,113	434	481	1,669	1,826	-8,264
Net basis for household formation	2,493	1,271	-869	-905	-930	2,849	3,024	3,193	5,460	5,528	21,114

Source: Statistics Canada Table: 17-10-0008-01 (formerly CANSIM 051-0004).

Bolded items basis for demand archetypes of dwelling aspirations…

12 FURTHER POSSIBILITIES BEING EXPLORED FOR DEMAND ARCHETYPES:

- **Natural increase:** when a dwelling becomes "too small".
- **Intraprovincial migration:** "Move-up" buyer characteristics.
- **Interprovincial migration:** job opportunities - who moves?
- **International migration:** household types; rent versus own.

USING BUILDING PERMITS DATA TO TRACK CHANGES IN EXISTING STOCK:

- **Conversions:** non-residential to residential, vice versa.
- **Conversions:** single-family to multi-family occupancy, vice versa.
- **Additions** to existing dwellings.
- **Demolitions** as % of existing dwellings.

14 WHAT'S THE "SECONDARY RENTAL MARKET"?

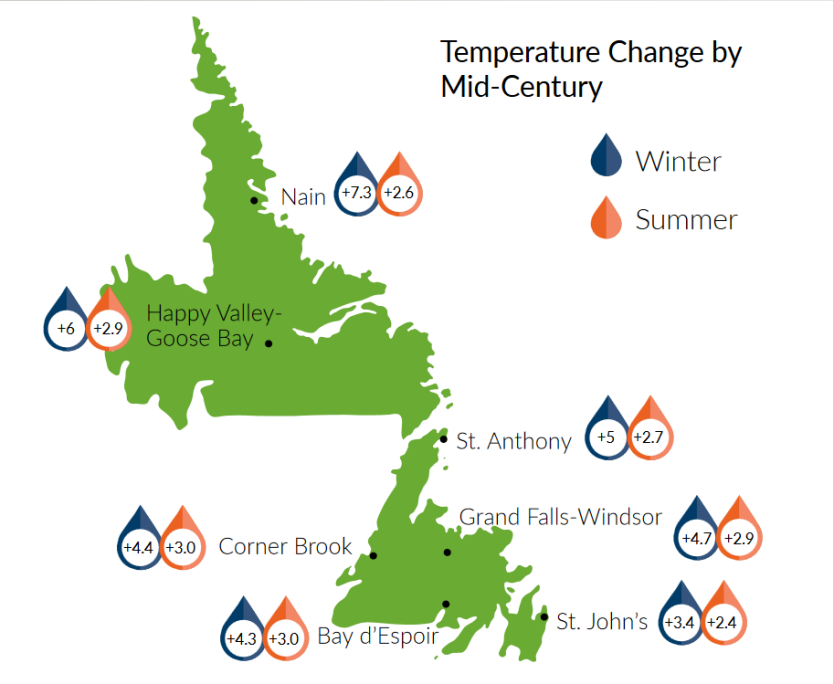
Structural Type:	Prince Edward Island:	Percent:	New Brunswick:	Percent:
Total	17,575	100.0%	79,865	100.0%
Single-detached house	**3,540**	**20.1%**	**15,780**	**19.8%**
Semi-detached house	**2,350**	**13.4%**	**5,015**	**6.3%**
Row house	**2,005**	**11.4%**	**5,450**	**6.8%**
Duplex	**660**	**3.8%**	**6,595**	**8.3%**
Other single-attached	**50**	**0.3%**	**640**	**0.8%**
Movable dwelling	**310**	**1.8%**	**1,545**	**1.9%**
Apartment <5 storeys	8,595	48.9%	41,150	51.5%
Apartment 5+ storeys	55	0.3%	3,690	4.6%

Source: Statistics Canada, *Census of Canada*, 2016

15 WHAT CLIMATE CHANGE RISKS TO HOUSING AND SUPPORTING INFRASTRUCTURE BY CSD?

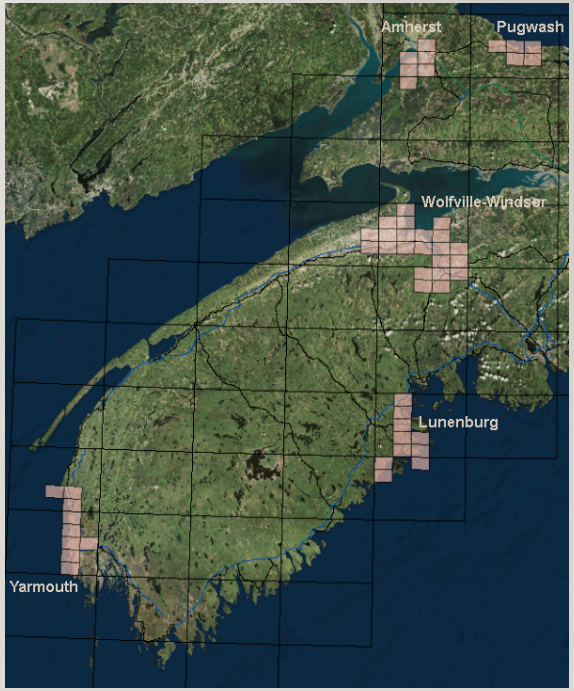
- Warmer temperature
- Wetter, more flooding
- Stormier, more tornadoes
- Rising sea levels, coastal areas permanently removed
- More wildfires/smoke

16 CAN HOUSING/INFRASTRUCTURE RISKS BE REDUCED: EXAMPLES FROM NL AND NS…



https://www.gov.nl.ca/ecc/files/publications-the-way-forward-climate-change.pdf

All Provinces in Atlantic Canada have done location-focused mapping of climate change impacts. Challenge now is acting on the capital works and individual buildings to mitigate accordingly, and at least cost…



https://novascotia.ca/natr/meb/download/mg/ofm/htm/agrg_rac_ofms.asp

17 POTENTIAL TO USE CENSUS DATA ON WHOLE DWELLING STOCK, ADJUSTED FOR CHANGES…

Geographic name	Total private dwellings, 2016:	Private dwellings occupied by usual residents, 2016:	Vacant, Temporarily-Occupied Dwellings:	Vacancy, Temporary Occupancy Rate:
Canada	15,412,443	14,072,079	1,340,364	8.7%
NL	265,739	218,673	47,066	17.7%
PE	71,119	59,472	11,647	16.4%
NS	458,568	401,990	56,578	12.3%
NB	359,721	319,773	39,948	11.1%

Source: Statistics Canada, *Census of Canada,* 2016.