



Business Laboratoire de données Data Lab sur les entreprises







Canada's New Workplace Mobility Trends

November 2022

Message from the Chief Economist

The pandemic caused the biggest labour market disruption of our lives. Social distancing forced rapid experimentation with remote work, altering mobility patterns and prompting businesses and workers to fundamentally re-examine where, when and how they work.

This report provides a comprehensive look across Canada at the new patterns of workplace mobility that have emerged since the pandemic began. We provide detailed results for 13 provinces and territories, 153 Census Metropolitan Areas, and 55 Downtowns. Our granular approach reveals significant local variation in the return to workplaces, and allows us to identify which regions are leading, and which are lagging the overall trends. With remote work disproportionately occurring for workplaces in the downtowns of Canada's largest cities, we quantify the extent to which the downtown cores have been hit harder than other areas. Lastly, by linking our large dataset with other detailed demographic and employment data, we uncover the factors that are systematically driving these patterns.

See our report below for all the details. We're excited this release also includes the BDL's first data <u>dashboard</u> — a new tool that allows users to leverage our rich data to easily generate insights for their locations of interest, and quickly compare regions. Give it a try. We hope you like it. We will update our dashboard with the latest data each month and provide more insights and analysis in the months ahead!

Stephen Tapp (<u>STapp@Chamber.ca</u>) Chief Economist, Canadian Chamber of Commerce





SIGNIFICANT REGIONAL VARIATION

BDL analysis reveals significant differences across Canada in the mobility to workplaces since the pandemic began.

WHO'S LEADING THE RECOVERY IN MOBILITY TO WORKPLACES?

The locations experiencing the biggest increases in mobility to workplaces are in Saskatchewan (**Regina, Saskatoon**), mid-sized cities in Ontario outside Toronto (**Barrie, Brantford, Brampton**), in British Columbia outside Vancouver (**Chilliwack, Surrey**), and in Quebec outside Montréal (**Trois-Rivières and Sherbrooke**).

WHO'S LAGGING?

Mobility to workplaces in the downtown cores are diverging from their respective Census Metropolitan Areas and outlying regions. This is particularly the case in Canada's most populous cities — Ottawa-Gatineau, Vancouver, Toronto, Calgary, and Edmonton — all of which have experienced significant declines in mobility to workplaces since the start of the pandemic.

C Key drivers of mobility patterns

BDL analysis finds that the recovery in mobility to workplaces has generally been slower in locations with these attributes:

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- **Family structure:** higher shares of women and families with children
- Commute mode: higher shares of people taking public transit to work (and fewer people driving to work)
- Lindustry: lower shares of workers for on-site services such as construction

These patterns suggest some hollowing out of work, and by implication, related economic activity in downtown cores. As a result of the pandemic, the traditional "hubs" appear to be shrinking, while outlying "spokes" are growing. This is consistent with migration away from the downtowns of Canada's largest cities in favor of less densely-populated areas (often within a two-hour commute of the largest cities), which is being led by knowledge workers embracing remote work. Such changes in the location of work have profoundly impacted local real estate markets, both increasing demand for residential properties outside of the largest cities early in the pandemic, and potentially reducing demand for office spaces downtown, if these trends persist.

Canada's new mobility patterns present challenges for future economic development in the downtowns of the largest cities, but are also bringing new growth opportunities for outlying mid-sized cities in their surrounding areas.

Overview of mobility changes

O Mobility to work is down since the pandemic began

Mobility to workplaces, Canada % change relative to pre-pandemic



Mobility to work patterns have changed the most in the downtown cores of Canada's largest cities

Mobility to workplaces

% change relative to pre-pandemic



Note: CMAs = Census Metropolitan Areas. Source: BDL calculations using Environics Analytics data.

Distinct patterns have emerged for Canada's 10 largest cities by population

Mobility to workplaces

% change relative to pre-pandemic



Note: CMAs = Census Metropolitan Areas. Source: BDL calculations using Environics Analytics data.

• Among Canada's 10 largest cites, Ottawa-Gatineau's workplace mobility shifted the most relative to pre-pandemic levels

Mobility to workplaces, Top 10 cities by population

% change relative to pre-pandemic



Downtowns
CMAs



Mapping Canada's new workplace mobility



Mobility to workplaces % change Sept 2022 vs. Jan 2020

Mobility to workplaces has increased in Saskatchewan and the Territories, but has fallen in Ontario and Manitoba.





Mobility to workplaces % change Sept 2022 vs. Jan 2020

Mobility to workplaces has fallen significantly in Burnaby and Vancouver, but has increased in outlying areas such as Chilliwack and Surrey.



Edmonton - Calgary area

Mobility to workplaces % change Sept 2022 vs. Jan 2020

Mobility to workplaces has fallen significantly in Edmonton and Calgary, but has increased in Camrose, Canmore and Wetaskiwin.



Note: Downtowns are shown for Edmonton, Calgary and Red Deer. The remaining areas are Census Metropolitan Areas. Source: BDL calculations using Environics Analytics data.



Mobility to workplaces % change Sept 2022 vs. Jan 2020

Mobility to workplaces has fallen significantly in downtown Toronto and Kitchener-Waterloo, but has increased in outlying areas such as Brantford, Barrie, Brampton, Kawartha Lakes and Wasaga Beach.



Note: Downtowns are shown for all areas, except Wasaga Beach and Kawartha Lakes, which are Census Metropolitan Areas. Source: BDL calculations using Environics Analytics data.



Mobility to workplaces % change Sept 2022 vs. Jan 2020

Mobility to workplaces has fallen significantly in downtown Gatineau and Ottawa, but has increased in outlying areas such as Arnprior and Carleton Place.



Montréal - Québec City area

Mobility to workplaces

% change Sept 2022 vs. Jan 2020

Mobility to workplaces has fallen significantly in Longueil and Quebec City, but has increased in outlying areas, such as Trois-Rivières, Lachute Sorel-Tracy, and Sherbrooke.



Note: Downtowns are shown, except for Hawkesbury, Lachute, Saint-Hyacinthe, Granby, and Sorel-Tracy, which are Census Metropolitan Areas. Source: BDL calculations using Environics Analytics data. 0

Mobility rankings

Mobility changes since the start of the pandemic

Mobility to workplaces, Canada, Provinces and Territories

% change Sept 2022 vs. Jan 2020



Rankings for provinces and territories

Out

Mobility to workplaces, Provinces and Territories

% change Sept 2022 vs. Jan 2020



5 of 13 provinces and territories (38.5%) experienced increased mobility relative to Jan 2020.

RANK Out of 13	PROVINCE/TERRITORY	% CHANGE
1	Saskatchewan	46.1%
2	Nunavut	21.7%
3	Northwest Territories	5.3%
4	Prince Edward Island	3.5%
5	Quebec	1.6%
6	Newfoundland and Labrador	-2.6%
7	Yukon	-4.6%
8	Nova Scotia	-5.5%
9	New Brunswick	-7.4%
10	British Columbia	-8.2%
11	Alberta	-8.8%
12	Ontario	-13.0%
13	Manitoba	-13.5%
	Canada	-7.0%

Source: BDL calculations using Environics Analytics data.



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Mobility to workplaces, Downtowns

% change Sept 2022 vs. Jan 2020



14 of 55 downtowns (25.5%) experienced increased mobility relative to Jan 2020.

Cout of 55	DOWNTOWNS	% CHANGE	Cout of 55	DOWNTOWNS	% CHANGE	Cout of 55	DOWNTOWNS	% CHANGE
1	Regina, SK	92.1%	20	Halifax, NS	-6.3%	39	Moncton, NB	-28.4%
2	Saskatoon, SK	78.1%	21	Richmond Hill, ON	-7.6%	40	Thunder Bay, ON	-31.3%
3	Chilliwack, BC	60.7%	22	Fredericton, NB	-9.5%	41	Longueuil, QC	-32.0%
4	Brantford, ON	38.5%	23	Laval, QC	-10.7%	42	Sudbury, ON	-32.7%
5	Barrie, ON	29.0%	24	Winnipeg, MB	-10.8%	43	Mississauga, ON	-33.0%
6	Trois-Rivières, QC	28.7%	25	Saguenay, QC	-11.9%	44	St. John's, NF	-33.3%
7	Kingston, ON	27.5%	26	Guelph, ON	-12.1%	45	Peterborough, ON	-34.7%
8	Brampton, ON	27.4%	27	Red Deer, AB	-13.4%	46	Markham, ON	-39.9%
9	Sherbrooke, QC	13.7%	28	Lethbridge, AB	-13.6%	47	Calgary, AB	-41.6%
10	Surrey, BC	4.8%	29	St. Catharines, ON	-16.0%	48	Edmonton, AB	-43.8%
11	London, ON	2.8%	30	Victoria, BC	-17.0%	49	Ottawa, ON	-45.1%
12	Burlington, ON	1.3%	31	Saint John, NB	-18.0%	50	Toronto, ON	-46.3%
13	Cambridge, ON	0.8%	32	Belleville, ON	-18.4%	51	Waterloo, ON	-47.3%
14	Abbotsford, BC	0.3%	33	Kamloops, BC	-18.8%	52	Vancouver, ON	-47.6%
15	Richmond, BC	-1.0%	34	Kelowna, BC	-21.4%	53	Kitchener, ON	-48.8%
16	Nanaimo, BC	-1.4%	35	Hamilton, ON	-22.0%	54	Burnaby, BC	-62.6%
17	Montréal, QC	-3.5%	36	Oakville, ON	-25.4%	55	Gatineau, QC	-74.7%
18	Windsor, ON	-4.3%	37	Vaughan, ON	-25.7%			
19	Oshawa, ON	-4.7%	38	Québec City, QC	-27.7%			

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O Mobility changes for CMAs in Atlantic Canada and Quebec

Mobility to workplaces, Census Metropolitan Areas

% change Sept 2022 relative to January 2020



Recovered Not Recovered

49 of 153 Canadian CMAs (32%) experienced increased mobility relative to Jan 2020.

Atlantic Canada					
RANK Out of 153	CMAs	% CHANGE			
10	Bay Roberts, NL	41.1%			
22	Kentville, NS	19.3%			
33	Gander, NL	8.6%			
48	St. John's, NL	1.1%			
61	Charlottetown, PEI	-2.8%			
67	Fredericton, NB	-4.6%			
70	Saint John, NB	-5.3%			
71	Grand Falls-Windsor, NL	-5.4%			
94	Corner Brook, NL	-8.8%			
96	Halifax, NS	-10.1%			
104	Cape Breton, NS	-11.3%			
108	Truro, NS	-12.0%			
109	Moncton, NB	-12.2%			
118	Summerside, PEI	-13.8%			
119	Campbellton (NB/QC)	-14.0%			
123	Miramichi, NB	-16.5%			
130	Bathurst, NB	-20.4%			
134	New Glasgow, NS	-21.8%			
137	Edmundston, NB	-22.4%			

antic Canada

Quebec

RANK Out of 153	CMAs	% CHANGE
12	Rimouski, QC	29.6%
13	Dolbeau-Mistassini, QC	29.2%
24	Lachute, QC	17.3%
25	Sorel-Tracy, QC	16.3%
27	Saint-Georges, QC	14.7%
31	Sainte-Marie, QC	9.0%
37	Cowansville, QC	7.1%
41	Montréal, QC	4.5%
42	Matane, QC	4.1%
46	Shawinigan, QC	3.1%
49	Sherbrooke, QC	0.3%
54	Saguenay, QC	-1.1%
55	Thetford Mines, QC	-1.3%
63	Drummondville, QC	-3.7%
75	Trois-Rivières, QC	-5.9%
76	Baie-Comeau, QC	-5.9%
83	Rouyn-Noranda, QC	-7.1%
85	Rivière-du-Loup, QC	-7.2%
89	Sept-Îles, QC	-8.6%
90	Victoriaville, QC	-8.6%
91	Québec City, QC	-8.7%
92	Joliette, QC	-8.7%
93	Salaberry-de-Valleyfield, QC	-8.8%
100	Val-d'Or, QC	-10.8%
101	Alma, QC	-10.8%
113	Granby, QC	-12.8%
132	Saint-Hyacinthe, QC	-21.2%



Mobility to workplaces, Census Metropolitan Areas

% change Sept 2022 vs. January 2020

RANK Out of 153	CMAs	% CHANGE	RANK Out of 153	CMAs	% CHANGE
6	Wasaga Beach, ON	66.9%	82	Tillsonburg, ON	-6.9%
11	Kawartha Lakes, ON	32.3%	86	Sudbury, ON	-7.3%
16	Elliot Lake, ON	24.3%	87	Cornwall, ON	-8.1%
19	Arnprior, ON	21.7%	95	Centre Wellington, ON	-9.9%
32	Kingston, ON	8.8%	99	Owen Sound, ON	-10.6%
35	Guelph, ON	7.8%	102	Belleville, ON	-10.9%
36	Thunder Bay, ON	7.6%	106	Petawawa, ON	-11.6%
39	Carleton Place, ON	7.0%	112	Hawkesbury (ON/QC)	-12.7%
40	Cobourg, ON	4.5%	114	Hamilton, ON	-13.2%
43	Barrie, ON	3.8%	116	Port Hope, ON	-13.4%
44	Kitchener - Cambridge - Waterloo, ON	3.8%	124	Stratford, ON	-16.6%
50	Brantford, ON	-0.1%	125	Ottawa - Gatineau (ON/QC)	-17.4%
52	Sarnia, ON	-1.1%	131	Chatham-Kent, ON	-20.6%
53	Oshawa, ON	-1.1%	133	Toronto, ON	-21.7%
57	Peterborough, ON	-1.4%	136	Woodstock, ON	-22.2%
59	North Bay, ON	-1.9%	138	Timmins, ON	-22.4%
65	Windsor, ON	-4.1%	139	Brockville, ON	-23.1%
68	Pembroke, ON	-4.6%	140	Norfolk, ON	-23.6%
69	Orillia, ON	-5.2%	142	Midland, ON	-27.5%
73	London, ON	-5.6%	144	Ingersoll, ON	-29.0%
78	Leamington, ON	-6.3%	150	Collingwood, ON	-42.1%
79	Sault Ste. Marie, ON	-6.3%	152	Kenora, ON	-50.2%
81	St. Catharines - Niagara, ON	-6.8%			

Source: BDL calculations using Environics Analytics data.

Mobility Changes for CMAs Western Canada and the Territories

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Mobility to workplaces, Census Metropolitan Areas

% change Sept 2022 vs. January 2020

Manitoba and Saskatchewan

Alberta

RANK Out of 153	CMAs	% CHANGE	RANK Out of 153	CMAs	% CHANGE
1	Moose Jaw, SK	103.1%	4	Camrose, AB	69.5%
2	Regina SK	79.6%	17	Okotoks, AB	23.8%
2	Regina, SK	76.2%	21	Wetaskiwin, AB	19.5%
3	Prince Albert, SK	70.5%	23	Canmore, AB	18.5%
7	Saskatoon, SK	55.7%	47	Strathmore, AB	2.1%
8	Swift Current, SK	53.1%	56	Sylvan Lake, AB	-1.3%
9	North Battleford. SK	42.8%	60	Wood Buffalo, AB	-2.3%
14	Estevan SK	28.7%	74	Lethbridge, AB	-5.8%
1	Verlater CK	25.20/	84	Medicine Hat, AB	-7.1%
15	YOFKLON, SK	23.270	97	Edmonton, AB	-10.2%
20	Steinbach, MB	21.4%	110	Calgary, AB	-12.3%
51	Weyburn, SK	-0.2%	111	Grande Prairie, AB	-12.6%
122	Winnipeg, MB	-15.6%	117	Brooks, AB	-13.6%
143	Brandon. MB	-29.0%	120	Red Deer, AB	-14.3%
1/17	Winkler MB	-37.0%	128	High River, AB	-19.1%
147			129	Lloydminster (SK/AB)	-19.5%
151	Portage la Prairie, MB	-42.4%	145	Lacombe, AB	-33.6%
153	Thompson, MB	-87.6%	148	Cold Lake, AB	-38.4%

British Columbia

RANK out of 153	CMAs	% CHANGE
18	Parksville, BC	22.4%
26	Quesnel, BC	14.9%
28	Nelson, BC	12.8%
29	Chilliwack, BC	11.2%
30	Abbotsford - Mission, BC	9.0%
34	Terrace, BC	7.8%
38	Cranbrook, BC	7.1%
45	Fort St. John, BC	3.4%
58	Dawson Creek, BC	-1.9%
62	Prince George, BC	-3.1%
64	Victoria, BC	-3.8%
66	Powell River, BC	-4.3%
77	Salmon Arm, BC	-6.1%
80	Campbell River, BC	-6.4%
98	Kamloops, BC	-10.6%
103	Courtenay, BC	-11.2%
105	Vancouver, BC	-11.4%
107	Duncan, BC	-12.0%
115	Vernon, BC	-13.3%
121	Port Alberni, BC	-15.3%
126	Nanaimo, BC	-17.4%
127	Kelowna, BC	-17.7%
135	Penticton, BC	-21.9%
141	Williams Lake, BC	-27.0%
146	Squamish, BC	-34.7%
149	Prince Rupert, BC	-40.8%

Territories

RANK Out of 153	CMAs	% CHANGE
5	Iqaluit, NU	68.2%
72	Whitehorse, YT	-5.5%
88	Yellowknife, NT	-8.1%

Time series

Selected mobility changes, Western Canada

Mobility to workplaces, Downtowns % change relative to pre-pandemic



Source: BDL calculations using Environics Analytics data.

Selected mobility changes, Ontario

Mobility to workplaces, Downtowns

% change relative to pre-pandemic



Source: BDL calculations using Environics Analytics data.

Selected mobility changes, Quebec

Mobility to workplaces, Downtowns

% change relative to pre-pandemic



Source: BDL calculations using Environics Analytics data.

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Selected mobility changes, Atlantic Canada

Mobility to workplaces, Downtowns



% change relative to pre-pandemic

Source: BDL calculations using Environics Analytics data.

Selected mobility changes, Western Provinces

Mobility to workplaces, Provinces and Territories

% change relative to pre-pandemic



Selected mobility changes, Central Provinces

Mobility to workplaces, Provinces and Territories % change relative to pre-pandemic



Source: BDL calculations using Environics Analytics data.

Selected mobility changes, Atlantic Provinces

Mobility to workplaces, Provinces and Territories % change relative to pre-pandemic



0%

Source: BDL calculations using Environics Analytics data.

Selected mobility changes, Territories

Mobility to workplaces, Provinces and Territories % change relative to pre-pandemic





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Scatterplots and regression analysis

Cities with a higher share of workers with university degrees have had slower recoveries in workplace mobility



• Cities with a higher share of females have had slower recoveries in workplace mobility



Cities with a higher share of public transit commuters have had slower recoveries in workplace mobility



Cities with a higher share of commuters driving to work have had faster recoveries in workplace mobility



Cities with a higher share of workers in construction have had faster recoveries in workplace mobility



C Regression results, first lockdowns

*Mobility*_i = $\beta_1 * X_i + e_i$ Where β_1 = regression coefficients; X_i = Control variables; e_i = error terms

Dependent variable: Percent change in	workplace m	obility, Jan 2	020 to Apr	2020 (First	Lockdown)
Control variables	Model 1	Model 2	Model 3	Model 4	Model 5
Bachelor's degree or higher	-1.098*** (0.0627)	-0.983*** (0.0666)	-0.777*** (0.0841)	-0.632*** (0.136)	-0.593*** (0.116)
Married		1.196*** (0.305)			
Families with children			-0.533*** (0.102)		
Commute to work by car				0.463*** (0.122)	
Commute to work by public transit					-0.522*** (0.104)
Number of observations (CMA-level)	153	153	153	153	153
R ²	0.880	0.892	0.899	0.891	0.898

*** p<0.01, ** p<0.05, * p<0.10; Standard errors in parentheses.

Notes: Provincial fixed effects; analytic weights for Jan 2020 household population 15+ at workplaces used; controls expressed as a population or shares; constants not reported. Source: BDL calculations using Environics Analytics data.

C Regression results, most recent data

*Mobility*_i = $\beta_1 * X_i + e_i$ Where β_1 = regression coefficients; X_i = Control variables; e_i = error terms

Dependent variable: Percent change in workplace mobility, Jan 2020 to Sept 2022

Control variables	Model 1	Model 2	Model 3	Model 4	Model 4
Bachelor's degree or higher	-0.427*** (0.104)	-0.401*** (0.152)	-0.374*** (0.108)	-0.0148 (0.234)	-0.202 (0.208)
Families with children		-0.0437 (0.185)			
Share of females in population			-2.708* (1.56)		
Commute to work by car				0.410* (0.209)	
Commute to work by public transit					-0.233* (0.187)
Number of observations (CMA-level)	153	153		153	153
R ²	0.652	0.652		0.662	0.656

*** p<0.01, ** p<0.05, * p<0.10; Standard errors in parentheses.

Notes: Provincial fixed effects; analytic weights for Jan 2020 household population 15+ at workplaces used; controls expressed as a population or shares; constants not reported. Source: BDL calculations using Environics Analytics data. 0

Downtown boundaries



Source: Statistics Canada, Centre for Demography.



Source: Statistics Canada, Centre for Demography.



Source: Statistics Canada, Centre for Demography.



Source: Statistics Canada, Centre for Demography.



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Source: Statistics Canada, Centre for Demography.

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Source: Statistics Canada, Centre for Demography.

Source: Statistics Canada, Centre for Demography.



Source: Statistics Canada, Centre for Demography.



Source: Statistics Canada, Centre for Demography.

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Appendix

Data sources and methodology

- Objectives of the Study: In this report, the Canadian Chamber of Commerce Business Data Lab (BDL) analyzes changes in mobility patterns across Canada since the start of the pandemic. Our data set includes results for Canada, 13 provinces and territories, 153 unique Census Metropolitan Areas (CMAs), and 55 Downtowns (using geographic definitions developed by Statistics Canada <u>2021a</u>).
- Data Sources: Mobility and demographic results are BDL calculations using Environics Analytics' WorkplaceNow and DemoStats datasets. Mobility data are collected weekly from January 2020 to September 2022. Demographic estimates are annuals for 2022. Employment data by industry are monthly, and use Statistics Canada's Labour Force Survey Tables <u>14-10-0022</u> and <u>14-10-0379</u>. Remote work potential by industry uses Statistics Canada, <u>2021b</u>.
- Key Concepts: "Mobility to workplaces" quantifies broad patterns using aggregated, anonymous, privacy-compliant, location-enabled, mobile devices crossing pre-defined downtown and CMA boundaries to travel to workplaces. Pre-pandemic mobility for the adult population (age 15+) is benchmarked to activity averaged over January 2020 for monthly data, and January 6-12, 2020 for weekly data. We calculate percent changes relative to these benchmarks, on a weekly and monthly basis, for each CMA and downtown region. We apply geographic analysis, time-series, scatter plots and cross-section regressions in conjunction with demographic and employment data to better understand the key drivers of these mobility patterns.
- Contact: For comments and questions on this research, contact Stephen Tapp, Canadian Chamber of Commerce, Chief Economist (<u>STapp@Chamber.ca</u>).



Economic Innovation Group (2022), <u>The Uneven Geography of Remote Work</u>

School of Cities (2022), <u>Death of Downtown? Pandemic Recovery Trajectories across 62 North American Cities</u> Statistics Canada (2021a), <u>Defining Canada's Downtown Neighbourhoods: 2016 Boundaries</u> Statistics Canada (2021b), <u>Working From Home During the COVID-19 Pandemic, April 2020 to June 2021</u>



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