The Intra-Urban Geography of COVID Funding Relief in Calgary: A First Look.

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Alberta Centre for Labour Market Research

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Introduction

- Exploratory analysis:
  - COVID-19 Pandemic "Impact"
  - The "Where" of COVID Financial Support (Urban / Nhood Focus).
  - How is the *Urban Geography* of COVID $ relief differentiated?
- Rising Inequalities in Cities (e.g. Three Cities model)
  - (Income inequality, polarization, etc.).
  - Well-known social indicators associated with marginalization, etc.
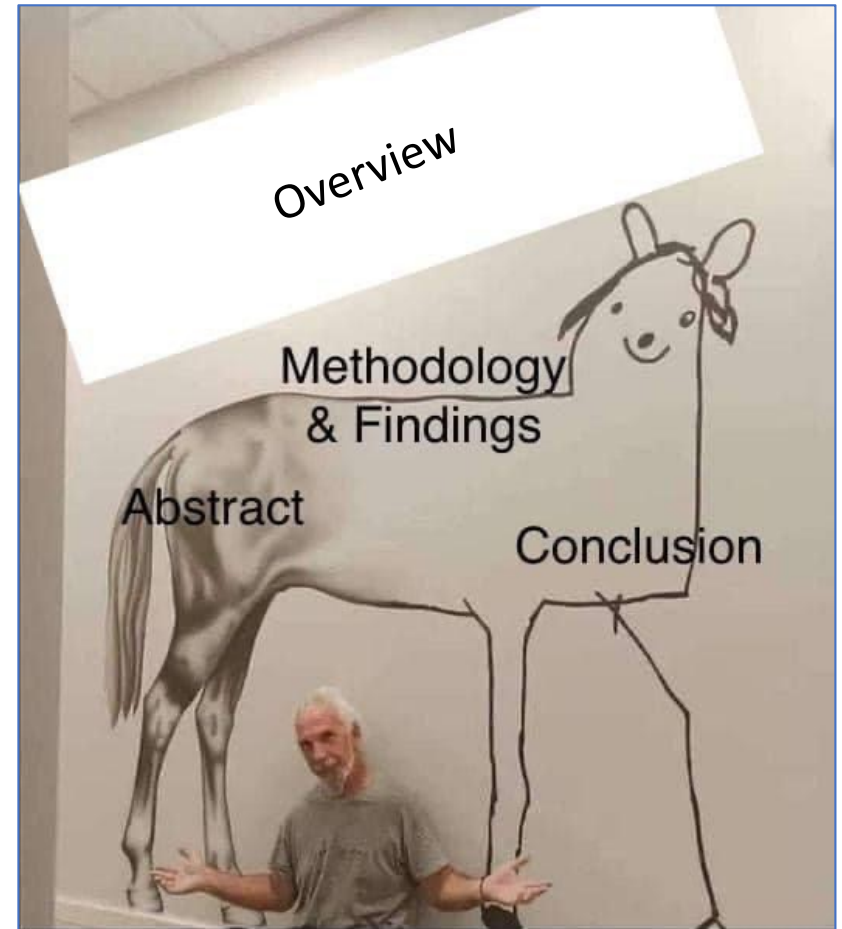
Introduction

- Explore 3 main questions:

1. To what extent is there and unequal geography of COVID-19 financial relief in Calgary, Alberta?

2. What are the social/demographic traits of neighbourhoods that are associated with the observable patterns?

3. Spatial Drivers:
    - Key drivers / predictors:
        - similar to government docs?
        - Key traits (e.g. VISMIN)
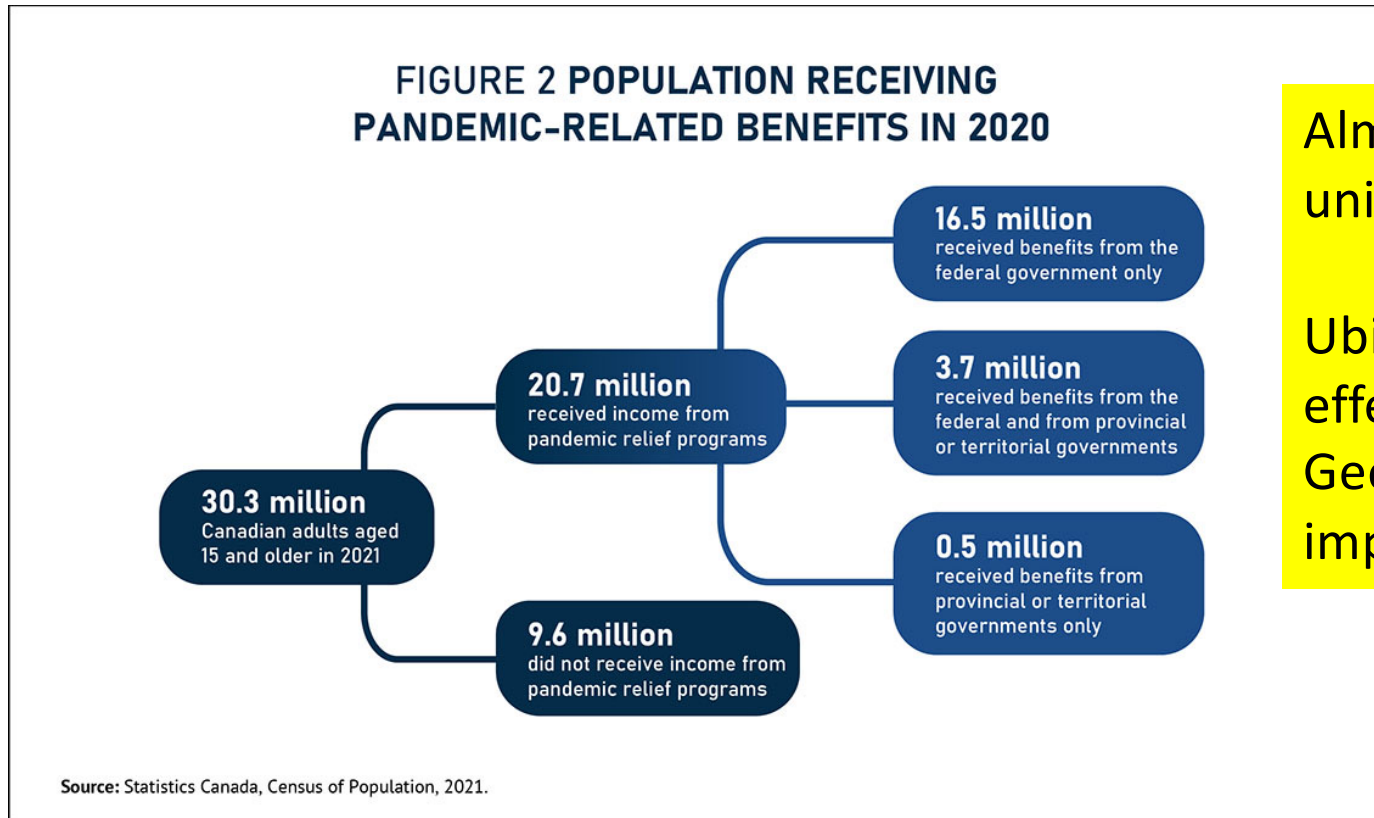   - COVID $ relief as another manifestation of intersectional inequality, and marginalizing forces in the city?
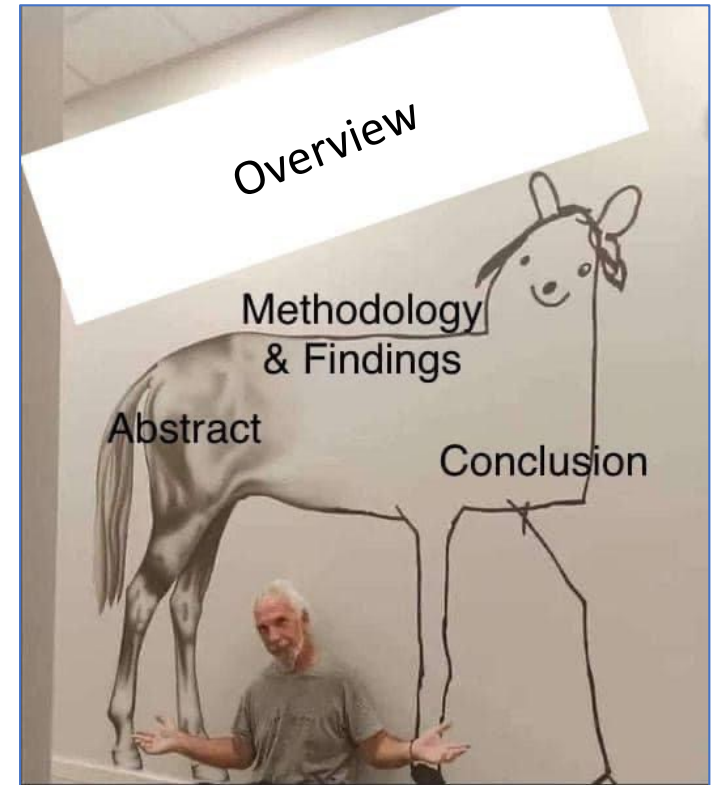
COVID-19 Timeline….

- Jan 25, 2020: First case in Canada
- *March 5, 2020: Alberta's first COVID case.*
- March 11, 2020: WHO declares worldwide COVID-19 pandemic
- *March 12, 2020: Alberta ban on gatherings >250.*
- March 13, 2020: PM Trudeau announced Fed stimulus package to address those affected by the pandemic
- *March 16, 2020: Mayor N. Nenshi declares State of Emergency for Calgary*
- **March 17, 2020: Alberta declares public health State of Emergency**
- March 18, 2020: Canada-USA border closure.
- March 2020: COVID-19 Emergency Loan Program for Canadians outside Canada
- March 24, 2020: $82 B$ spending legislation. COVOD-19 Emergency Response Act.
- **March 25, 2020: Alberta "policing" self-isolation and physical distancing rules**
- April 6, 2020: Trudeau increased CERB funding (Canada Emergency Response Benefit).
- May 1, 2020: Bill C-15, Canada Emergency Student Benefit (CESB)

- …………….so much more

Govt Funding Programs

- "More than **two-thirds** of Canadians benefited from at least one of the pandemic relief programs".

FIGURE 2 **POPULATION RECEIVING PANDEMIC-RELATED BENEFITS IN 2020**

30.3 million
Canadian adults aged 15 and older in 2021

20.7 million
received income from pandemic relief programs

9.6 million
did not receive income from pandemic relief programs

16.5 million
received benefits from the federal government only

3.7 million
received benefits from the federal and from provincial or territorial governments

0.5 million
received benefits from provincial or territorial governments only

Source: Statistics Canada, Census of Population, 2021.

Almost universal?

Ubiquity effect: Geographical implications?

https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021005/98-200-X2021005-eng.cfm

Govt Funding Programs, Eg.

- **Canada Emergency Response Benefit** (CERB).
  - "Of all Canadian workers who earned at least $5,000 in 2019, **35.2% received CERB** payments in 2020".
  - 8,373,550 (15+) people received CERB in 2020
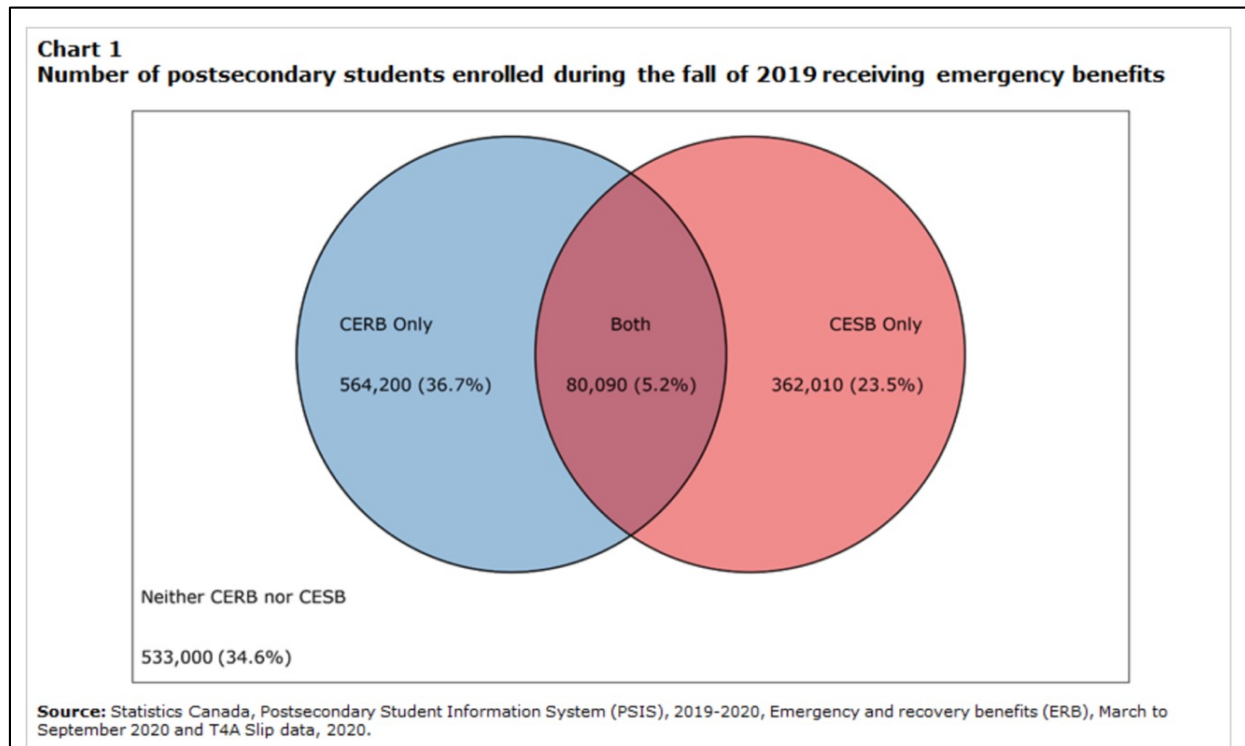 - 27.6% of 15+ received CERB.
  - Median CERB income = $8,000.

Govt Funding Programs

- Canada Emergency Wage Subsidy (CEWS)
  - assist businesses and self employed
  - Subsidy of up to 75% wage remuneration, max $847 / week.
  - As of Sept 2023:
    - 5,070,240 approved applications
    - **> $100 Billion $ in subsidies**
    - **14% of all CEWS benefits was paid to Alberta**.

https://www.canada.ca/en/revenue-agency/services/wage-rent-subsidies/cews-statistics/cews-detailed-data.html

Govt Funding Programs

- Canada Emergency Student Benefit (CESB)
  - For students without CERB
  - $1,250 for a 4-week period, max 16 weeks

Chart 1
Number of postsecondary students enrolled during the fall of 2019 receiving emergency benefits

CERB Only

564,200 (36.7%)

Both

80,090 (5.2%)

CESB Only

362,010 (23.5%)

Neither CERB nor CESB

533,000 (34.6%)

Source: Statistics Canada, Postsecondary Student Information System (PSIS), 2019-2020, Emergency and recovery benefits (ERB), March to September 2020 and T4A Slip data, 2020.

Govt Funding Programs

- ## Other Top-Up Programs:

Table 2
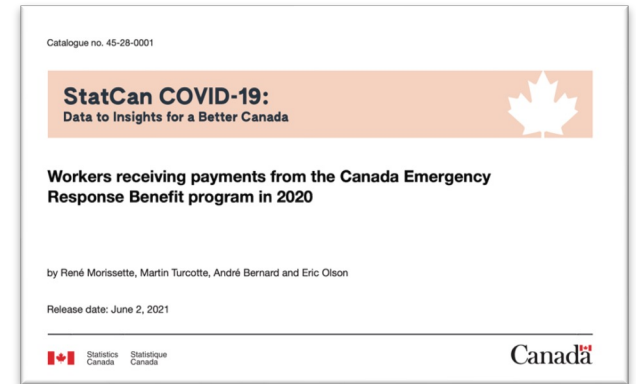**Median amount of pandemic-related benefits received, Canada, 2020**

	Total Population		
	All recipients	Women+ recipients	Men+ recipients
	2020 constant dollars		
Emergency and recovery benefits			
Canada Emergency Response Benefit	8,000	8,000	8,000
Canada Emergency Student Benefit	5,000	5,000	5,000
Canada Recovery Benefit	5,000	5,000	5,000
Canada Recovery Caregiving Benefit	3,000	3,480	2,500
Canada Recovery Sickness Benefit	1,000	1,000	1,000
Top-ups to existing programs			
Canada Child Benefit	600	600	302
Disability benefit	600	600	600
GST/HST credit	424	432	412
Old Age Security	300	300	300
Guaranteed Income Supplement	200	200	200
Provincial or territorial relief programs (%)	276	290	246

Note: Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol. The category "Men+" includes men (and/or boys), as well as some non-binary persons. The category "Women+" includes women (and/or girls), as well as some non-binary persons.
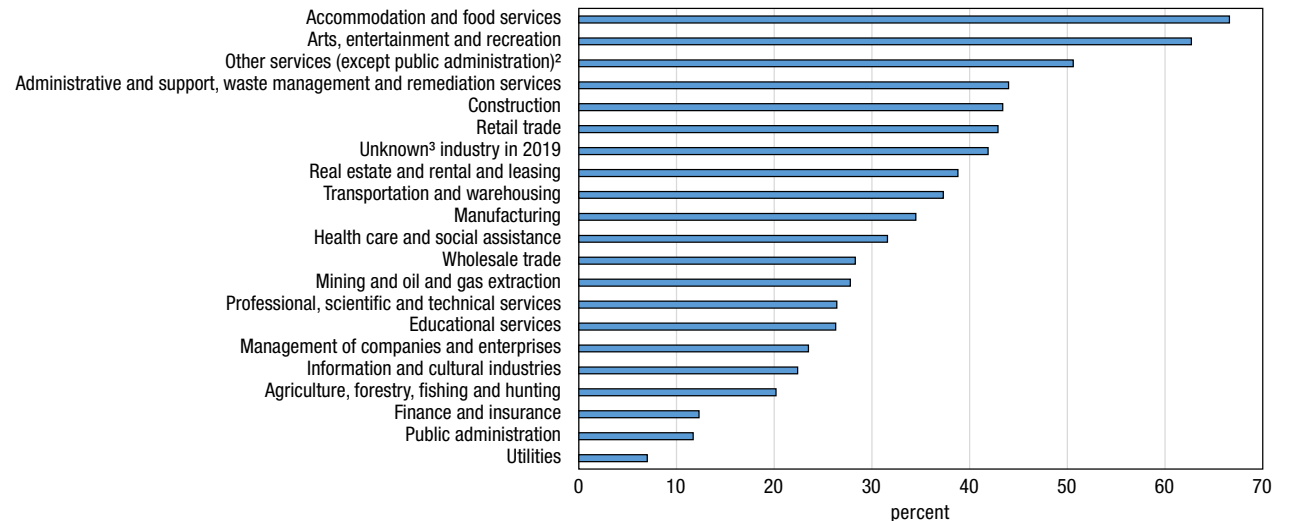**Source:** Statistics Canada, Census of Population, 2021.

https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021005/98-200-X2021005-eng.cfm

Stats Canada: Key Characteristics of Individual CERB recipients

- Employment Sectors / Occupations

- >50%
  - Accom and Food Services
  - Arts, Ent, Recreation
  - Other Service Sectors

Catalogue no. 45-28-0001

StatCan COVID-19:
Data to Insights for a Better Canada

Workers receiving payments from the Canada Emergency Response Benefit program in 2020

by René Morissette, Martin Turcotte, André Bernard and Eric Olson

Release date: June 2, 2021

Statistics Canada   Statistique Canada   Canada

Chart 1
Percentage of workers[1] who received Canada Emergency Response Benefit payments in 2020, by main industry of employment in 2019, Canada

Accommodation and food services
Arts, entertainment and recreation
Other services (except public administration)[2]
Administrative and support, waste management and remediation services
Construction
Retail trade
Unknown[3] industry in 2019
Real estate and rental and leasing
Transportation and warehousing
Manufacturing
Health care and social assistance
Wholesale trade
Mining and oil and gas extraction
Professional, scientific and technical services
Educational services
Management of companies and enterprises
Information and cultural industries
Agriculture, forestry, fishing and hunting
Finance and insurance
Public administration
Utilities

0   10   20   30   40   50   60   70
percent

1. Among workers who earned $5,000 or more in 2019.
2. These are services not covered in other sectors, for example, repairing and maintaining automobiles or machinery, funeral services, personal care services, laundry, organizing and promoting religious activities...
3. Some 14.6% of workers were not classified because industry was not available for their employer or business.
Source: Statistics Canada, Emergency and recovery benefits, March 2020 to September 2020.

https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00021-eng.htm

Statistics   Statistique   Canada

Stats Canada: Key Characteristics of Individual CERB recipients

- All incomes took it, but > for lowest 3 deciles

- Middle income groups benefited

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Statistics Canada Statistique Canada

Chart 2
Percentage of workers¹ who received Canada Emergency Response Benefit payments in 2020, by employment income decile in 2019, Canada

percent

	Bottom 10%	2nd	3rd	4th	5th	6th	7th	8th	9th	Top 10%

Earnings² decile in 2019
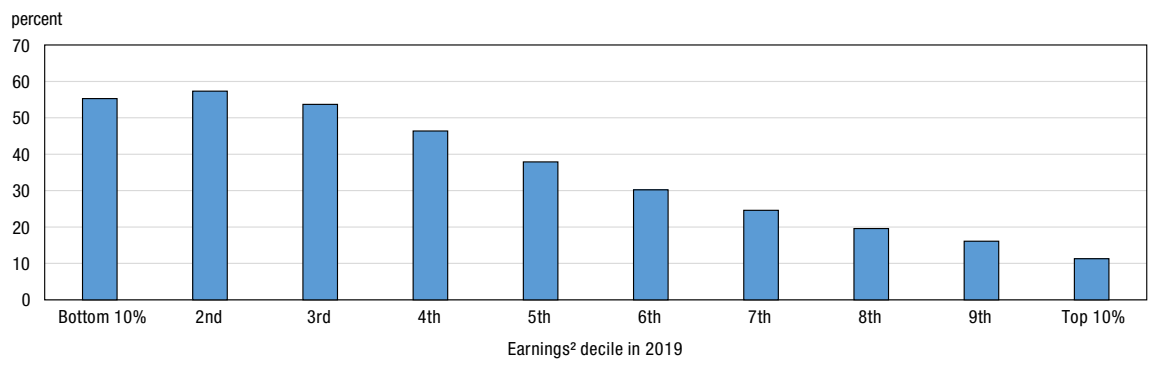
1. Among workers who earned $5,000 or more in 2019.
2. Earnings include paid employment from a T4 slip, net self-employment income and eligible dividends as reported on the T1 return.
Source: Statistics Canada, Emergency and recovery benefits, March 2020 to September 2020.

Chart 2
Middle-income Canadians were more likely to receive pandemic-related benefits
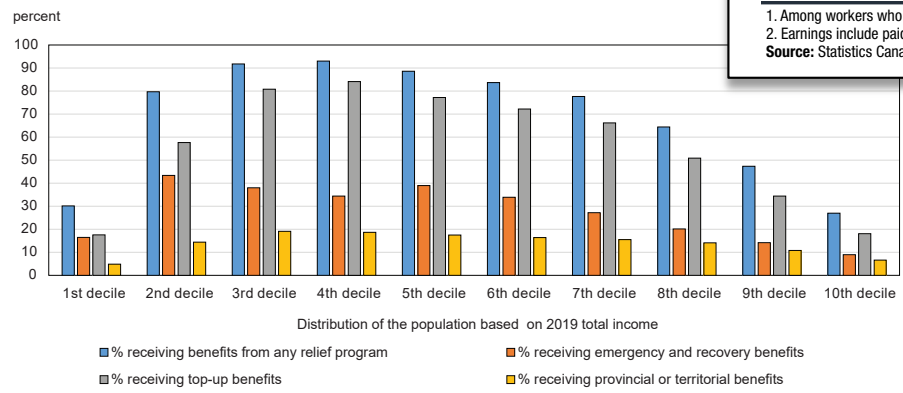
percent

	1st decile	2nd decile	3rd decile	4th decile	5th decile	6th decile	7th decile	8th decile	9th decile	10th decile

Distribution of the population based on 2019 total income

- % receiving benefits from any relief program
- % receiving emergency and recovery benefits
- % receiving top-up benefits
- % receiving provincial or territorial benefits

Source: Statistics Canada, Census of Population, 2021.

Chart 3

https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00021-eng.htm

Stats Canada: Key Characteristics of Individual CERB recipients

- All age groups took CERB, but highest among Youth 15-24.

PERCENTAGE RECEIVING FEDERAL EMERGENCY AND RECOVERY BENEFITS IN 2020

Women+ / Men+

Women+	Age group	Men+
27.4%	15 years and older	27.9%
24.7%	15 to 19 years	21.6%
61.3%	20 to 24 years	55.7%
33.8%	25 to 54 years	32.6%
24.7%	55 to 64 years	26.3%
6.4%	65 years and older	10.1%

% receiving federal emergency and recovery benefits

Note(s): Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses provided. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol. The category "Women+" includes women, as well as some non-binary persons. The category "Men+" includes men, as well as some non-binary persons.

Source(s): Census of Population, 2021 (3901).

Chart 3
Percentage of workers[1] who received Canada Emergency Response Benefit payments in 2020, by age group and sex, Canada

percent

■ Men ■ Women
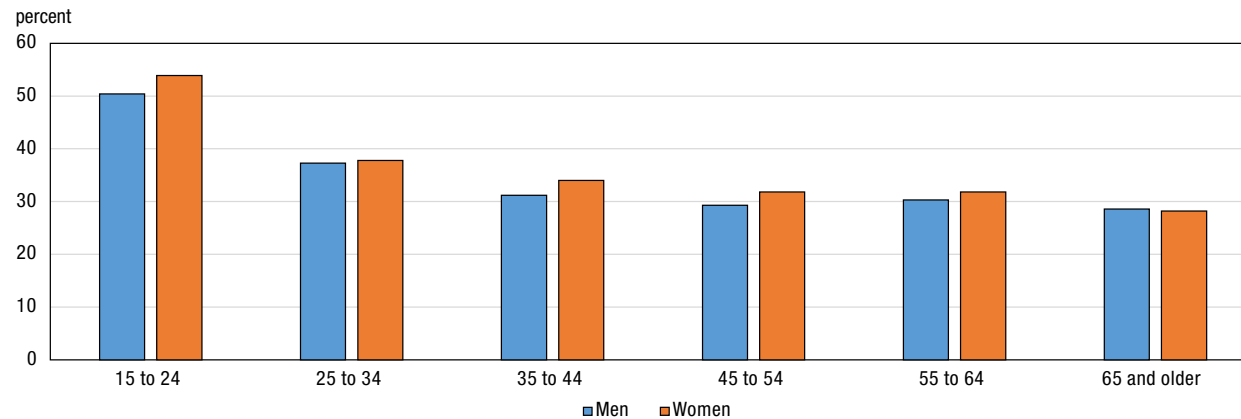
1. Among workers who earned $5,000 or more in 2019.
Source: Statistics Canada, Emergency and recovery benefits, March 2020 to September 2020.

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**Stats Canada: Key Characteristics
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Canada

- **Other:**

  - Vismin more likely to receive CERB
    - (high W. Asian, Low Japanese, etc.)
  - Women / Youth in Vismin higher rates
  - Refugees higher rates
  - Indigeneous workers higher rates
  - **"Intersection"** of above traits.

  - Stas Canada noted:
    - provincial variations in indicators
    - Limited attention to intra-urban geographies of COVID relief

https://www150.statcan.gc.ca/n1/pub/45-28-0001/2021001/article/00021-eng.htm
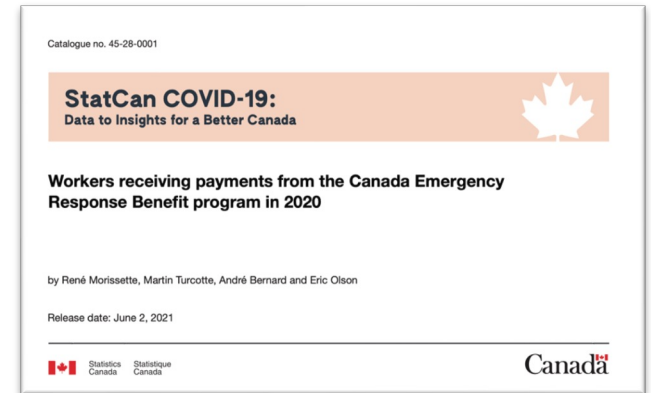
The Alberta Response was immediate, and polarized!

The Alberta Response....

The Right Honourable Justin Trudeau

in·ter·sec·tion·al·i·ty

/ˌin(t)ərsekSHəˈnalədē/

noun

the interconnected nature of social categorizations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage.

"through an awareness of intersectionality, we can better acknowledge and ground the differences among us"
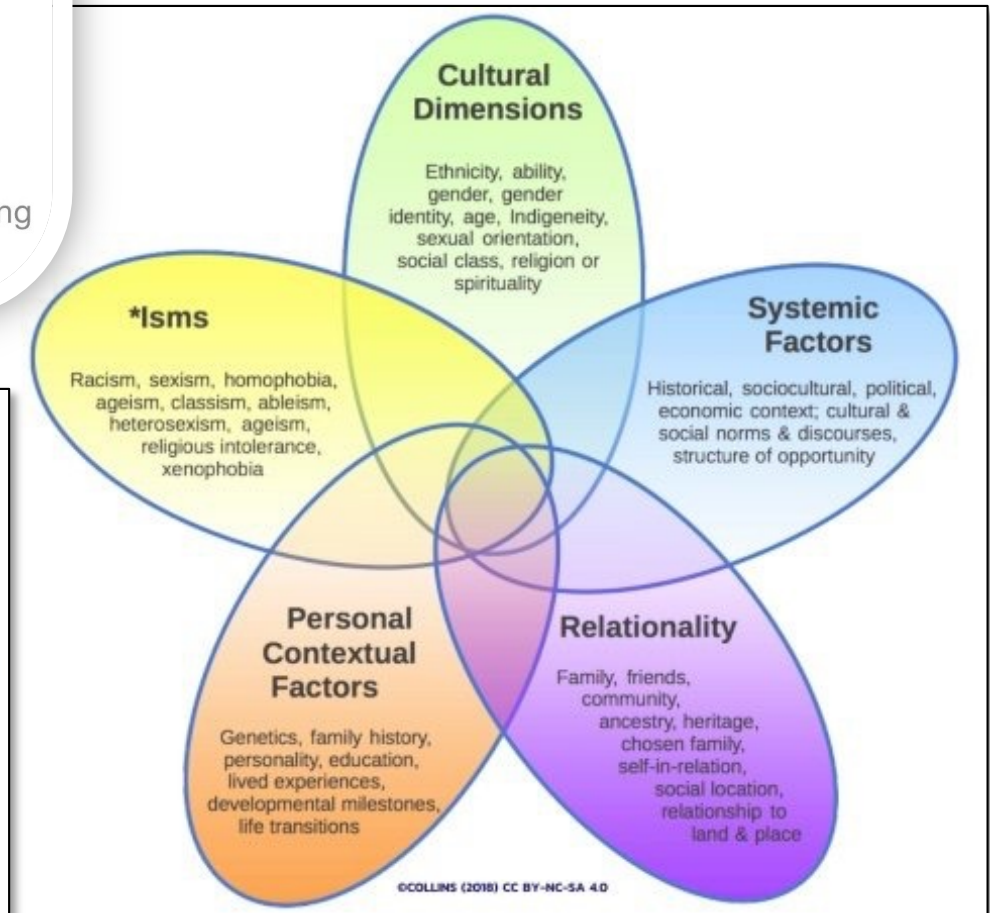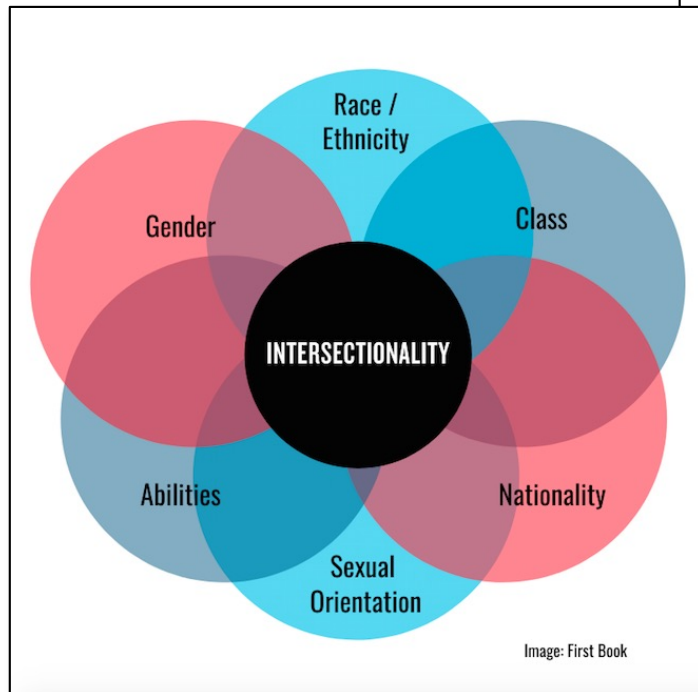
Operationalize 2 Dependent Variables for this study:

- 1) "Uptake".
    - % of CT Pop aged 15+ who received CERB payment in 2020.

- 2). "Aggregate Dependence"
    - % of ALL 2020 Neighbourhood (CT) Income derived from COVID relief payments (not just CERB).

Some differences in indicators **across Alberta CMAs (CMA-Level)**

2021 Census, CMA Level[a]

			CMA				
	Medicine Hat	Lethbridge	Calgary	Red Deer	Edmonton	Grande Prairie	Wood Buffalo
% Receive COVID CERB 15+"	25.54	24.98	**30.53**	31.26	29.89	33.30	30.09
MED COVID benefit 15+"	8000.00	8000.00	**8500.00**	8000.00	8000.00	8000.00	8000.00
AVG COVID benefit 15+"	9150.00	8420.00	**9310.00**	9050.00	9160.00	9070.00	8850.00
% on E. I. in 2020 15+"	10.60	9.03	**10.90**	12.49	11.92	13.97	13.61
% on E. I. in 2019 15+"	7.47	6.45	**6.75**	7.65	7.78	8.54	10.81
% of 2020 CT Income Gov Xfer"	19.30	17.70	**13.30**	18.20	15.70	14.80	7.00
% of 2020 CT Income COVID 19 support"	5.20	4.80	**5.00**	5.90	5.40	5.80	3.10
% of 2019 CT Income Gov Xfer"	13.50	12.60	**7.80**	11.40	9.80	8.10	3.70
Change in % CT Income Gov Xfer 2020-2019"	5.80	5.10	**5.50**	6.80	5.90	6.70	3.30
Change in % CT Income E. I. 2020-2019"	3.13	2.58	**4.15**	4.84	4.14	5.42	2.80
Prevalence LIM-AT in hhlds"	10.50	9.60	**8.60**	9.80	8.80	7.50	4.40
Prevalence LICO in hhlds"	3.50	3.70	**5.40**	3.60	5.10	3.10	2.00
HH Income Gini (Tot Income)"	.30	.30	**.40**	.30	.30	.30	.30
HH Income Gini (Markert Income)"	.40	.40	**.50**	.40	.40	.40	.40
HH Income Gini (AT Income)"	.30	.30	**.30**	.30	.30	.30	.30
HH Income P90P10 ratio (AT Income)"	3.60	3.40	**4.00**	3.60	3.70	3.30	3.90

a. Limited to first 100 cases.

- Some consistency across CMAs
- Some CMAs not as impacted by COVID indicators / unemployment indicators / poverty indicators, etc.

Calgary:
- highest average benefit
- highest LICO
- Highest $ Inequality
- Highest $ Polarization

Some differences in indicators across **ALL Alberta Neighbourhhods** (CTs)

- Nhood uptake between **13% and 73%**
- Between **1% and 33%** of ALL 2020 nhood income based on COVID $ support
- Increases in Gov Xfer from 2019-2020 (**up to 13% increase**).
- Levels of **Impoverishment and Low Income** HHLDS varies widely at Nhood scale (**can > 25%**)
- Income **Inequality and Polarization** WITHIN Nhoods **varies widely**.
  - Gini (Indiv, HH, AT): 0.2 to 0.7
  - P90/10: 2.5 to 14.9

The Urban Ecology of COVID $ Relief: A First Look at CT in Calgary CMA

- **Within CALGARY CMA** high level of variation among Nhoods (CTs) in terms of :

- COVID Indiv $ **Uptake** (17.1% o 43.2%)
- COVID $ Aggregate **Dependency** (0.8% to 15.1%)
- Gov Xfers $:
  - 2019: 1.0 to 25.6%
  - 2020: 0.8 to 15.1%
- Poverty, LICO: 0.8 to 19.5%
- $ Inequality
  - Gini:
    - HH tot: 0.2 to 0.6
    - HH AT: 0.2 to 0.6
    - HH Market: 0.3 to 0.7
- $ Polarization:
  - P90/10:   2.6 to 13.7

Patterns of Variation in Calgary.

% Pop Aged 15+ Received CERB Payments in 2020 ("Uptake")
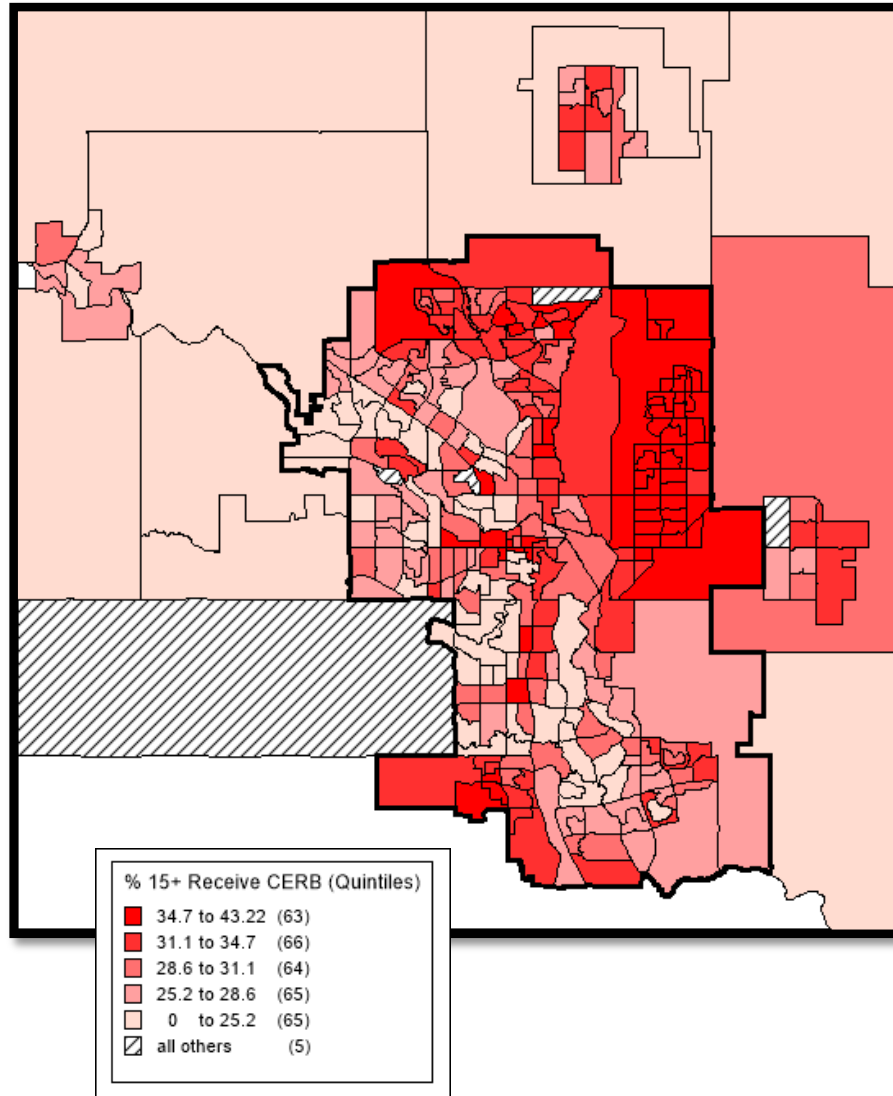
% of Total 2020 CT Income from COVID$ Support ("Aggregate Dependence")

r=0.9

% 15+ Receive CERB (Quintiles)
- 34.7 to 43.22 (63)
- 31.1 to 34.7 (66)
- 28.6 to 31.1 (64)
- 25.2 to 28.6 (65)
- 0 to 25.2 (65)
- all others (5)

% 2020 CT Inc Covid Xfers (Quintiles)
- 7.6 to 15.1 (65)
- 5.6 to 7.6 (67)
- 4.6 to 5.6 (63)
- 3.4 to 4.6 (70)
- 0 to 3.4 (58)
- all others (5)

21
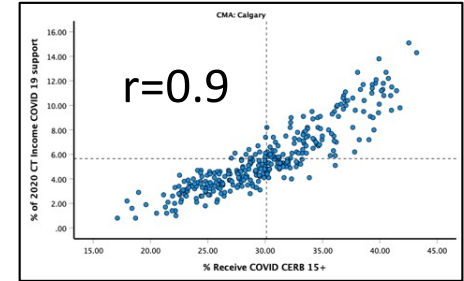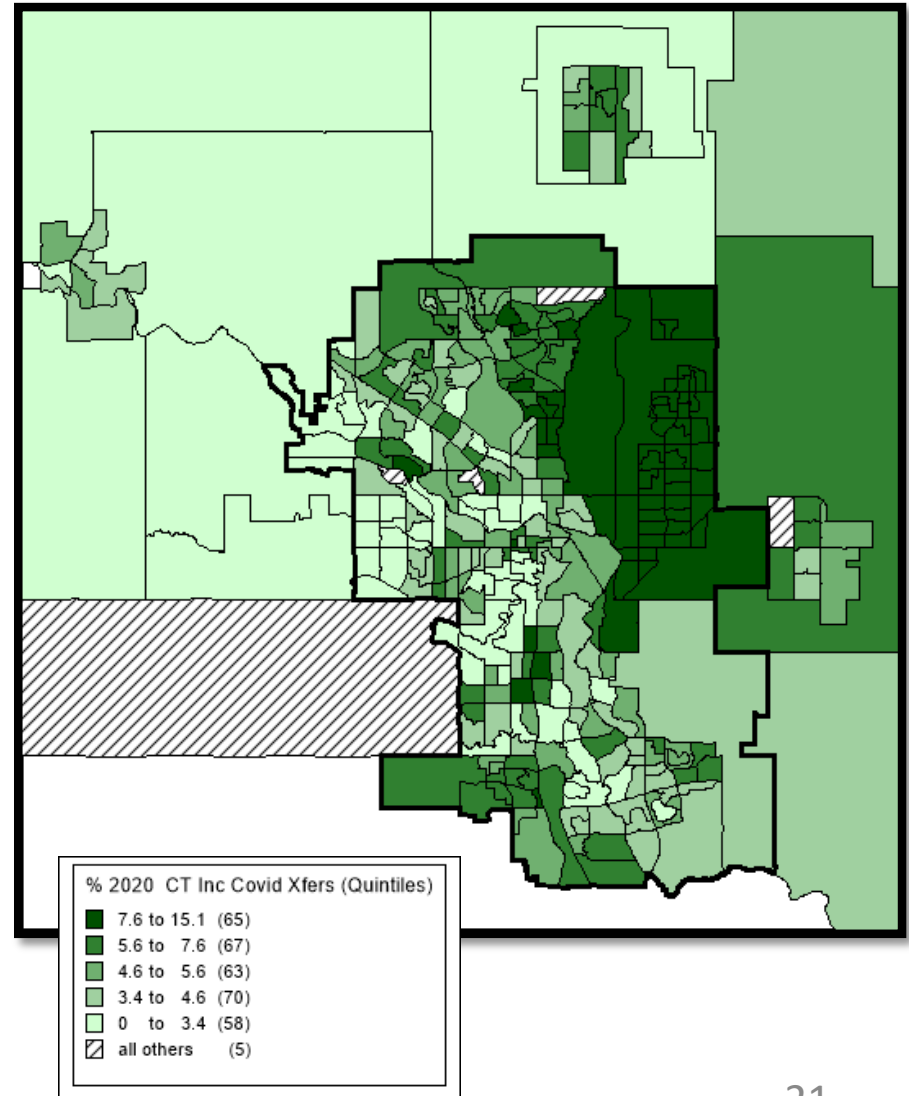
How Does the Geography of COVID Uptake and Aggregate Dependence relate to other key characteristics of urban social differentiation?

Some Potential Domains (Known domains of difference from PCA analysis and Factorial Ecology methods)
- Davies and Herbert, Davies and Townshend 1999, Townshend 1996, 2002, etc.:

1. Areal Content / Housing
2. Income / Housing / Tenure
3. Education
4. Housing Affordability / Suitability
5. Income Inequality and Diversity
6. Government Transfers
7. Age and Life Course
8. Marital / Family Status
9. Household Characteristics
10. Mobility and Migration status
11. Employment and Occupation
12. Visible Minority / Immigrant / Newcomer status

Some indicator variables and their relationship to COVID Uptake and Dependence

Operationalize a set of indicator variables to index each domain

Eg. Income / Housing / Tenure
- Avg Value Dwelling
- % Renters
- Avg Indiv Income
- Avg HH Income
- % with income LT 20K
- % with Income GE 100K
- CT to CMA Indiv Income Ratio
- % Change in CT Indiv Income Ratio 2019-2020

Eg. Age / Life Course
- % Children aged 0-14
- % Aged 15-24
- % Young Adults Aged 20-24
- % Seniors 65+
- Median age in CT

How Does the Geography of COVID Uptake and Aggregate Dependence relate to other key characteristics of urban social differentiation?

Types of Social Indicators (spatial) with Sig Correlation with Dep Vars (some indicators from every domain):

- Dense nhoods
- Small homes
- Multifamily hsg
- Substandard hsg

- Low $ housing
- Low HH Income

- Low Educ level

- Housing Unsuitability
- Housing Need

- Low Income HHLDs
- HH Income "Equality" in Nhod

- Prior Gov Xfers

- Young adult pop
- Few seniors

- Singles NM
- FLPFam
- Non-Couples

- MultiGen HHLDS
- Multiple Family HHLDS

- Movers

- Unemployed
- Blue Collar
- Limited Occup diversity
- Sales and Service
- Retail
- Accom Food Svcs
- Non-Professional
- Non-Managerial
- Non-Self-employed

- Vismin
- Non-Canadian Ethnic
- Immigrants
- First Gen
- Refugees

Numerous spatial / ecological associations, Eg.:
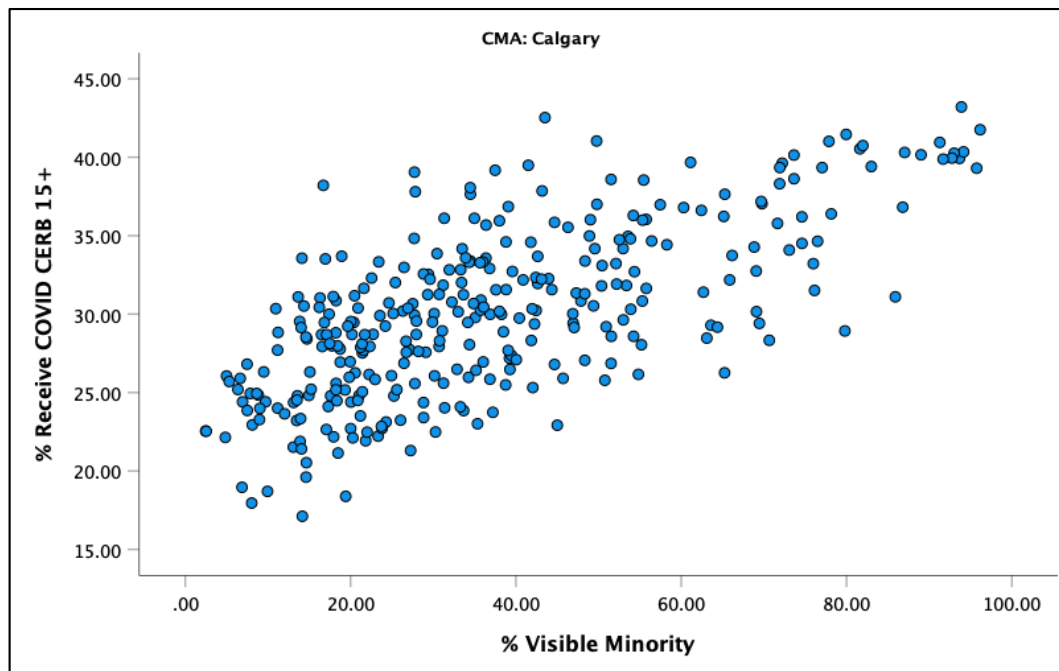
Domains
- ✓ Areal Content / Housing
- ✓ Income / Housing / Tenure
- ✓ Education
- ✓ Housing Affordability / Suitability
- ✓ Income Inequality and Diversity
- ✓ Government Transfers
- ✓ Age and Life Course
- ✓ Marital / Family Status
- ✓ Household Characteristics
- ✓ Mobility and Migration status
- ✓ Employment and Occupation
- ✓ Visible Minority / Immigrant / Newcomer status

What are some of the KEY Aggregate Nhood social indicators (or combinations) that are associated with / Explain the Geography of "Uptake" and "Dependency" COVID $ relief?

- Approx 50 vars Pearson GE |0.3|
- Obvious Co-Linearity
- IVs for Multiple Regression
- No theoretical basis for "Block" models (Domain entry)
- Stepwise: Tease out Sig Vars
- Stepwise M Regr. Problem of Data Dredging (Frost, Smith, etc.)
  - Statistical "Model" (Over-modeling) vs
  - Substantive Modeling (meaningful)

Approach for Substantive Model:
1) Only choose Input Vars with Pearson Corr GE |0.3|
2) Examine Adjusted R2 sequence for stabilization
3) Stop including new Vars (model complexity) if >R2 LT 1%.

What are some of the KEY Aggregate Nhood social indicators (or combinations) that are associated with / Explain the Geography of "Uptake" and "Dependency" COVID $ relief?
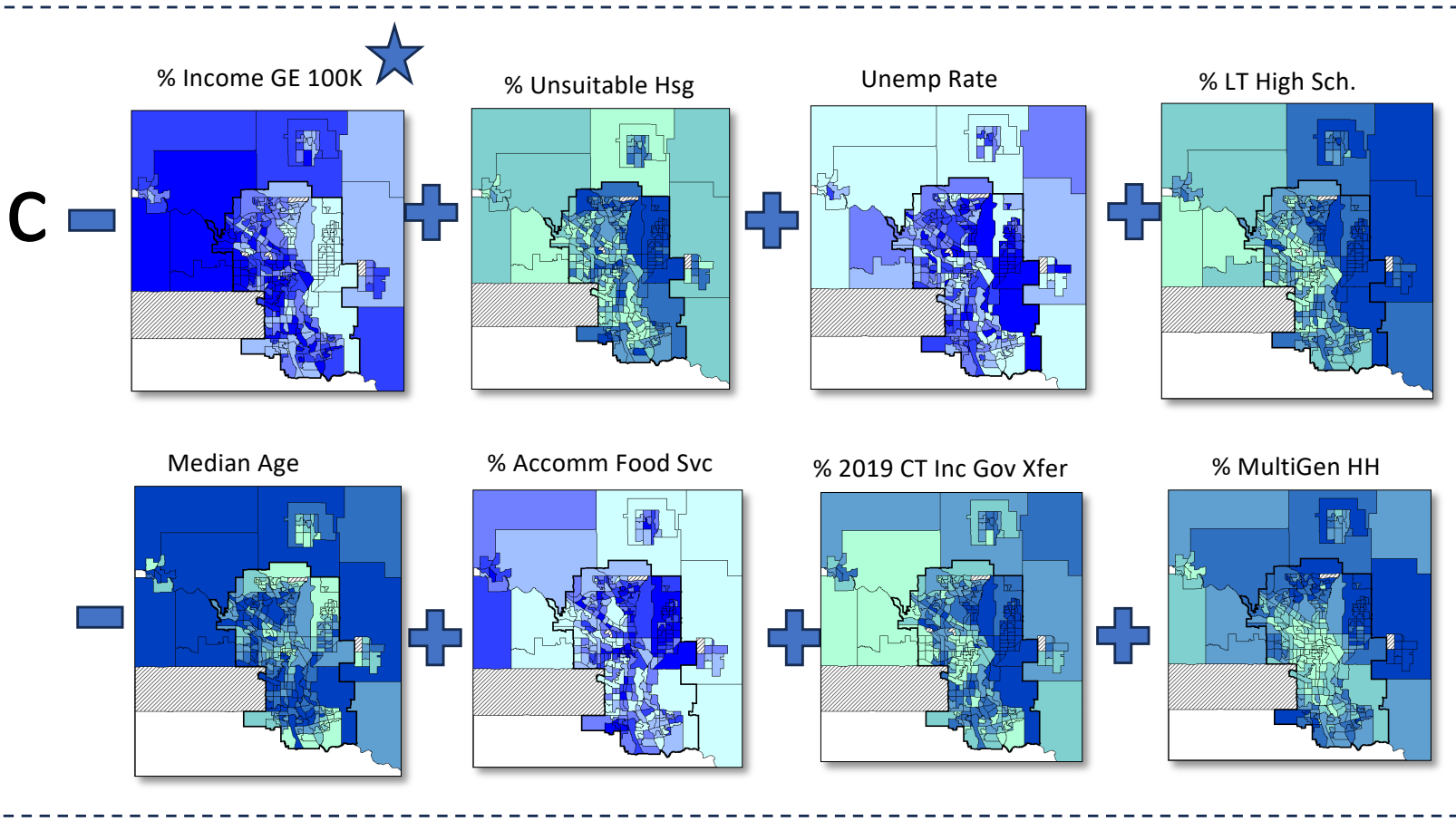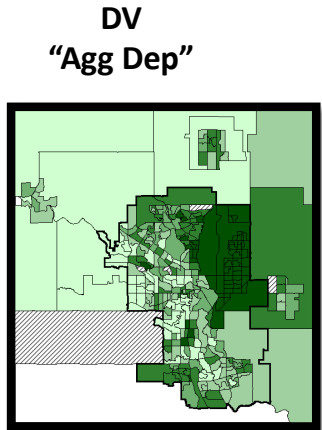
$$\hat{y} = a + bx + cy + dz...etc$$
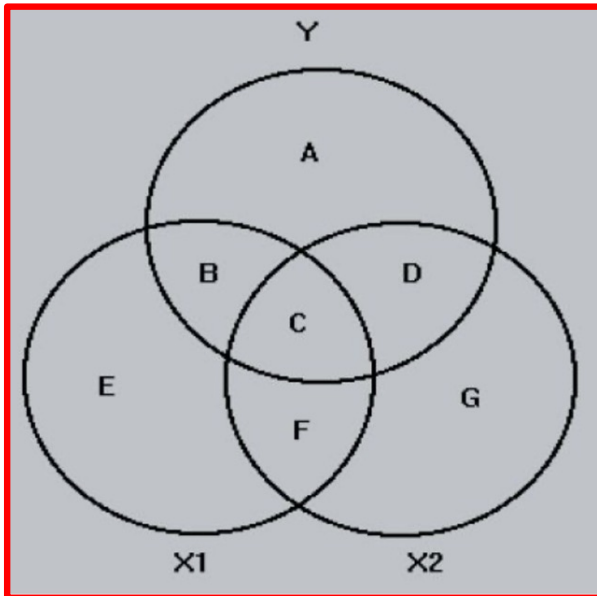
Approach for Substantive Model:
1) Only choose Input Vars with Pearson Corr GE |0.3|
2) Examine Adjusted R2 sequence for stabilization
3) Stop including new Vars (model complexity) if >R2 LT 1%.

Then, **Decompose R2 into Unique and Joint Contributions**
- Unique: **B, D.**
- Shared / Joint: **C**
- Total R2 = **B,C,D.**

What are some of the KEY Aggregate Nhood social indicators (or combinations) that are associated with / Explain the Geography of "Uptake" and "Dependency" COVID $ relief?

$$\hat{y} = a + bx + cy + dz....etc$$

DV "Uptake"

- R2 = 0.930
- 12.4% "Unique" (B+D)
- 80.6% "Joint" (C)

% Unsuitable Hsg

% Income GE 100K

% Seniors

% Single NM

% Vismin

% E.I. in 2019

% Self Employed

% Accomm Food Svc
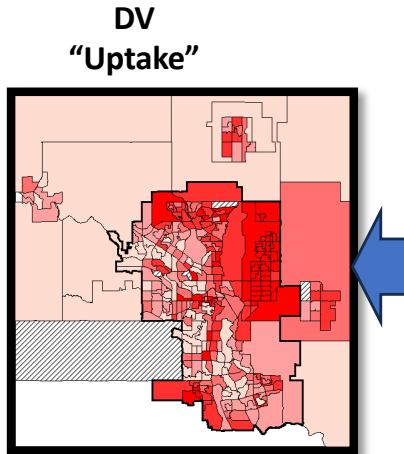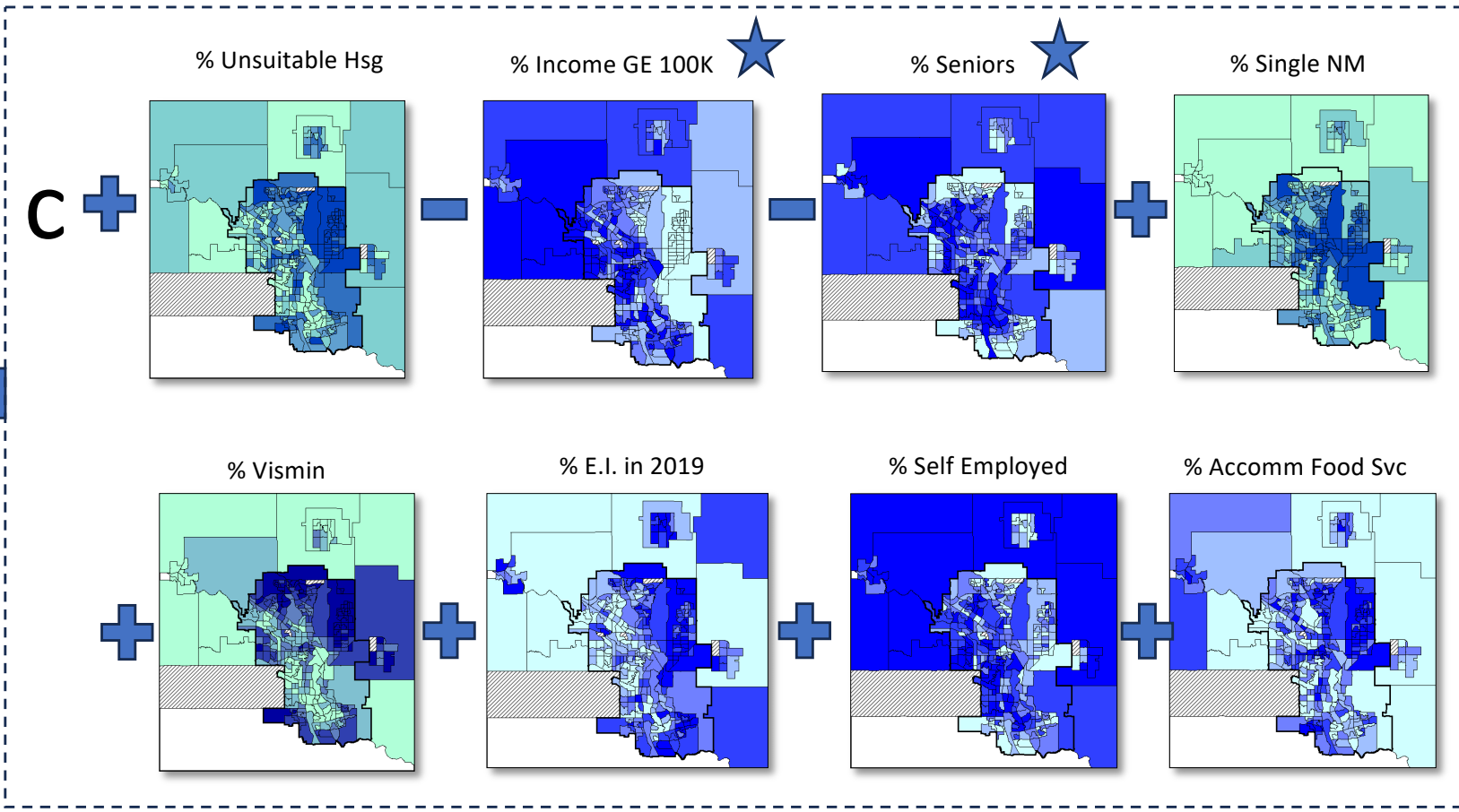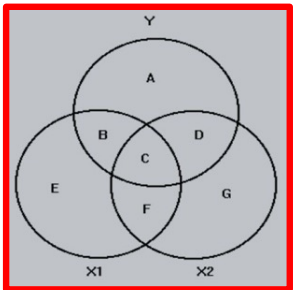
- Substantive Model
- 8 sig predictors
- R2 = 0.930
- Includes Indicators from 7 of the 12 different domains

28

What are some of the KEY Aggregate Nhood social indicators (or combinations) that are associated with / Explain the Geography of "Uptake" and "Dependency" COVID $ relief?

$$\hat{y} = a + bx + cy + dz....etc$$

DV "Agg Dep"

C − % Income GE 100K + % Unsuitable Hsg + Unemp Rate + % LT High Sch.

− Median Age + % Accomm Food Svc + % 2019 CT Inc Gov Xfer + % MultiGen HH

- R2 = 0.951
- 6.9% "Unique" (B + D)
- 88.2% "Joint" (C)
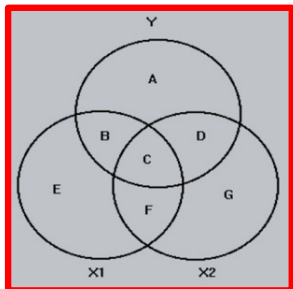
- Substantive Model
- 8 sig predictors
- R2 = 0.951
- Includes Indicators from 7 of the 12 different domains

Some Similarities and Differences in the Models.

% Pop Aged 15+ Received CERB Payments in 2020 ("Uptake")

% of Total 2020 CT Income from COVID$ Support ("Aggregate Dependence")
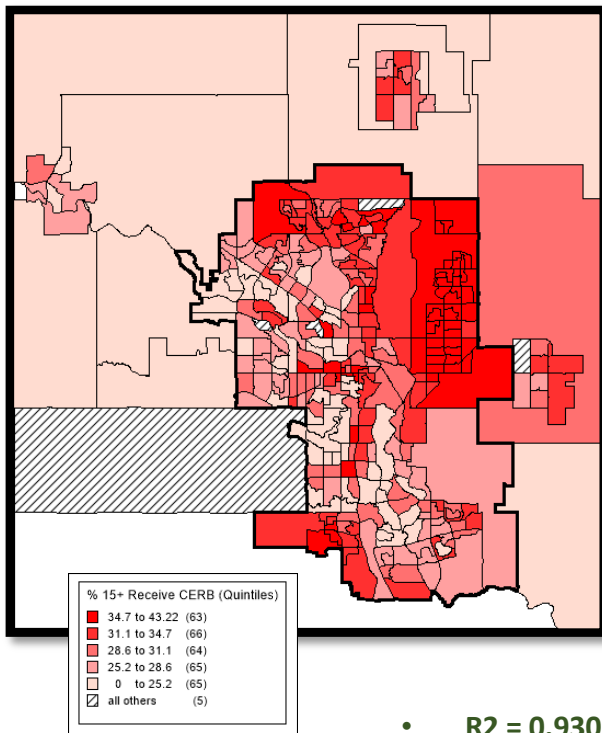
3 common IV
5 unique IV

3 common IV
5 unique IV

		Areal Content / Housing		
		Income / Housing / Tenure		
	2	% with income GT $100,000	1	
		Education		
		% LT High School 15+	4	
		Housing Affordability / Suitability		
	1	% HH in unsuitable hsg	2	
		Income Inequality and Diversity		
		Government Transfers		
	6	% on E. I. in 2019 15+		
		% of 2019 CT Income Gov Xfer	7	
		Age and Life Course		
	3	% Seniors 65+		
		Median Age	5	
		Marital / Family Status		
	4	% Single Nev Married		
		Household Characteristics		
		% Multigen HH	8	
		Mobility and Migration status		
		Employment and Occupation		
		Unemployment Rate	3	
	7	% LF Self Employed		
	8	% Accomm Food Svcs	6	
		Visible Minority / Immigrant / Newcomer		
	5	% Vismin		
R2=.930			R2 = 0.951	
AdjR2=.928			Adj R2 = .950	

- R2 = 0.930
- 12.4% "Unique" (B+D)
- 80.6% "Joint" (C)
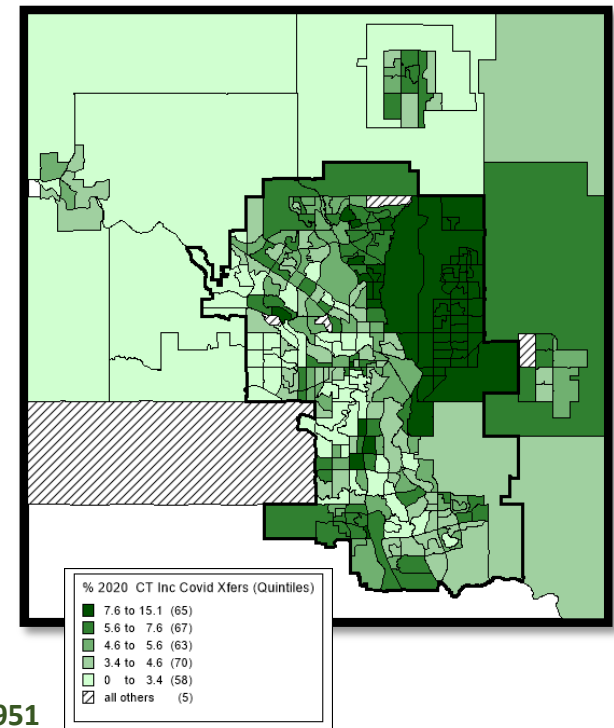
- R2 = 0.951
- 6.9% "Unique" (B + D)
- 88.2% "Joint" (C)

- 8 domains each
- Some Different domains
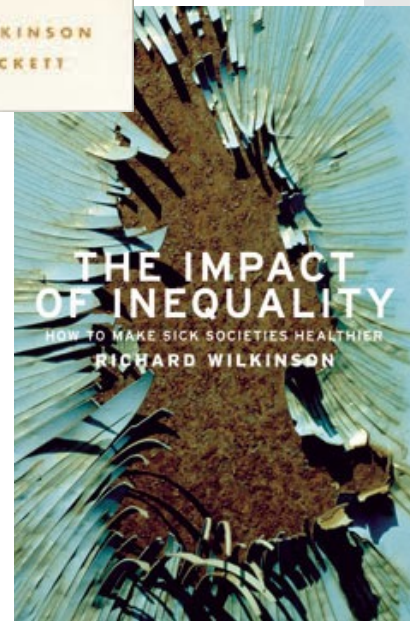- Some common drivers
- Some different drivers

30

Is COVID $ part of a broader manifestation of rising inequalities and spatial transformation in patterns of inequality?
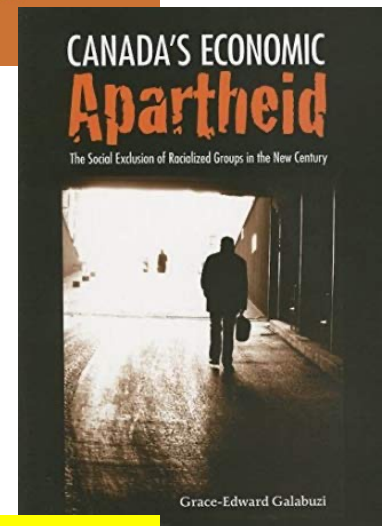
- A new <u>socio-spatial order</u>
- stronger divisions
- greater inequality
- Increasing polarization between affluent and vulnerable
- Linked to post-industrial / neoliberal governance

(Marcuse 1993; van Kempen, Owens 2012, Wilkinson 2005 etc.).

Marcuse:
"invidious differentiation"

Is COVID $ part of a broader manifestation
of rising inequalities and
spatial transformation in patterns of inequality?

"City"
- ■ 1 Income Increase (50)
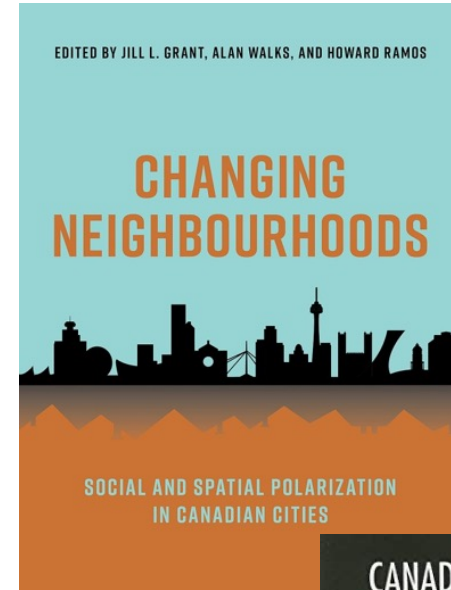- ■ 2 Income Stable (27)
- ■ 3 Income Decline (94)
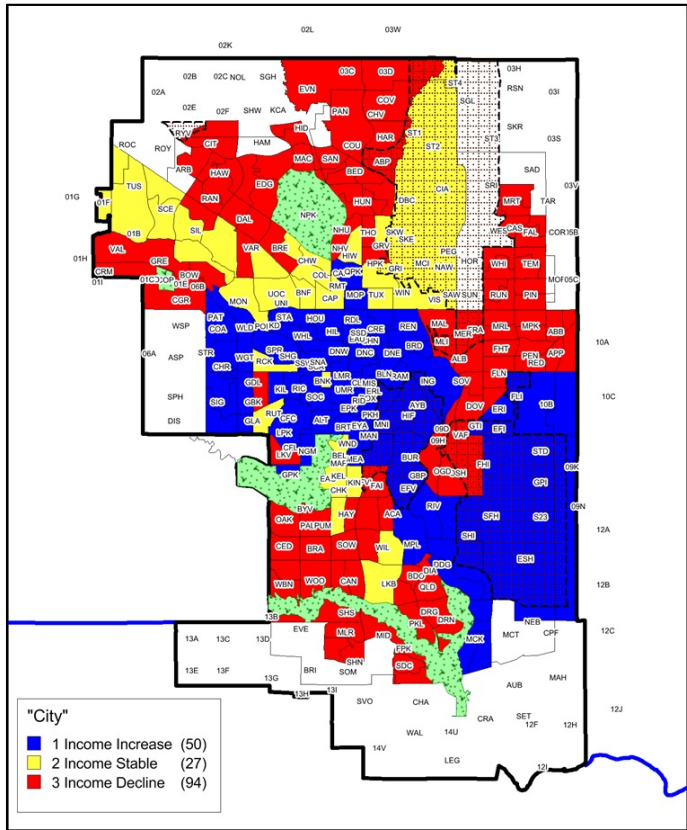
The Three Cities Model
in Calgary (10% Change
1981-2006).

Significant
Differences in
Nhood Social
Attributes between
Gain (City 1) and
Decline (City 3):

- **VISMIN**
- **Immigrants**
- **Labour Market Sectors**
- **Education**
- **Occupations**
- **Age and Family Structure**
- **Housing Affordability**
- **Mobility, etc.**

EDITED BY JILL L. GRANT, ALAN WALKS, AND HOWARD RAMOS

CHANGING NEIGHBOURHOODS

SOCIAL AND SPATIAL POLARIZATION IN CANADIAN CITIES

CANADA'S ECONOMIC Apartheid

The Social Exclusion of Racialized Groups in the New Century
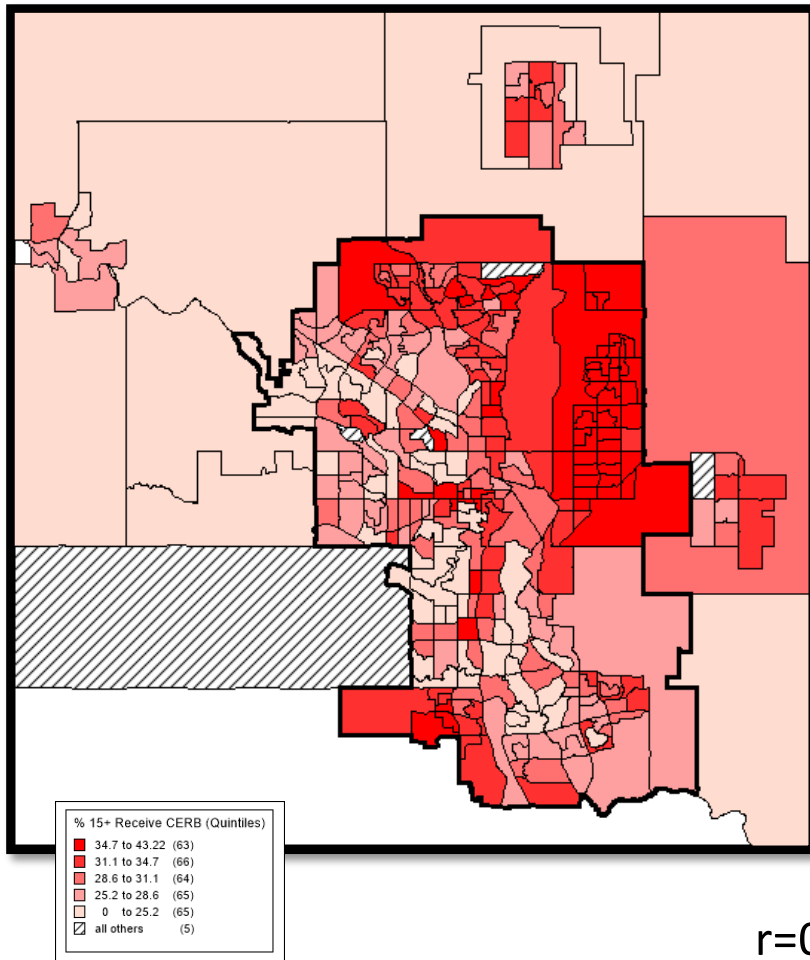
Grace-Edward Galabuzi

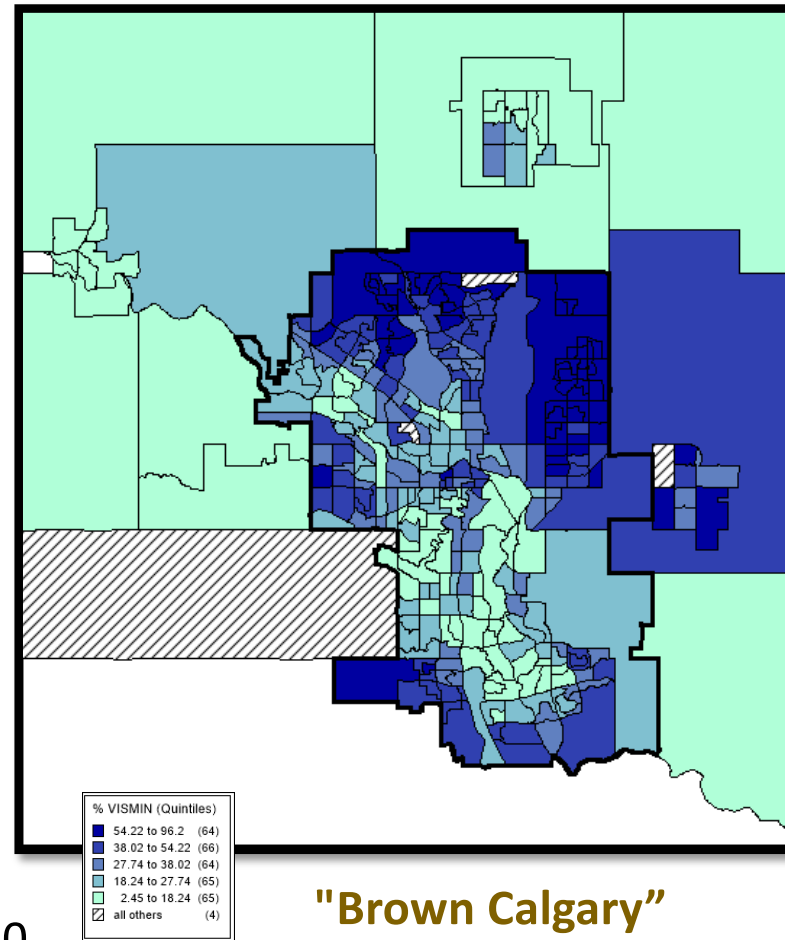- Galabuzi: Canada's emerging "Apartheid"?
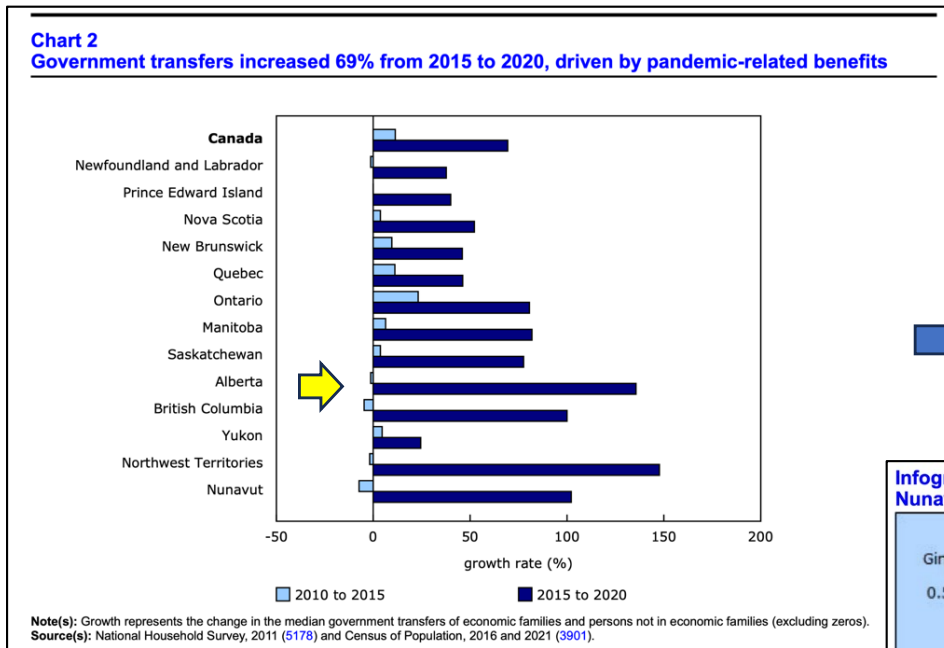
32

Is COVID $ part of a broader manifestation of rising inequalities and spatial transformation in patterns of inequality?

% CT Pop 15+ Received CERB (2020)

% 15+ Receive CERB (Quintiles)
- 34.7 to 43.22 (63)
- 31.1 to 34.7   (66)
- 28.6 to 31.1   (64)
- 25.2 to 28.6   (65)
- 0   to 25.2   (65)
- all others   (5)

% VISMIN of CT Population (2021)

% VISMIN (Quintiles)
- 54.22 to 96.2   (64)
- 38.02 to 54.22 (66)
- 27.74 to 38.02 (64)
- 18.24 to 27.74 (65)
- 2.45 to 18.24   (65)
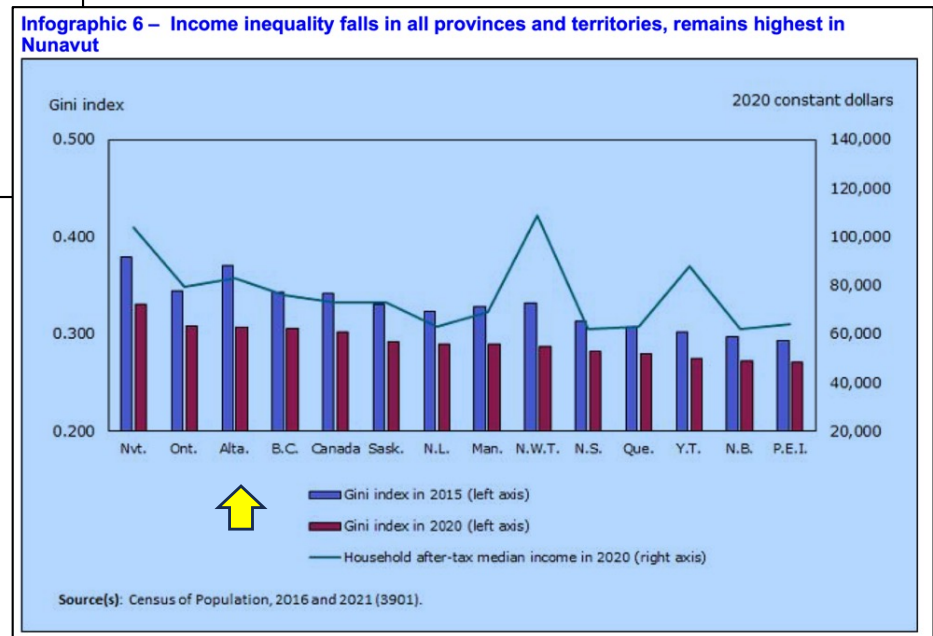- all others   (4)

"Brown Calgary"

r=0.70

33

Is COVID $ part of a broader manifestation of rising inequalities and spatial transformation in patterns of inequality?

COVID relief as Temporary reduction in Inequality?

"The reductions in income inequality across provinces and territories were largely driven by increases in government transfers"

Chart 2
Government transfers increased 69% from 2015 to 2020, driven by pandemic-related benefits

Note(s): Growth represents the change in the median government transfers of economic families and persons not in economic families (excluding zeros).
Source(s): National Household Survey, 2011 (5178) and Census of Population, 2016 and 2021 (3901).

https://www150.statcan.gc.ca/n1/en/daily-quotidien/220713/dq220713d-eng.pdf?st=mQ06omu8

Infographic 6 – Income inequality falls in all provinces and territories, remains highest in Nunavut

Source(s): Census of Population, 2016 and 2021 (3901).

https://www150.statcan.gc.ca/n1/en/daily-quotidien/220713/dq220713d-eng.pdf?st=mQ06omu8

34

Conclusion: COVID relief and Intersectionality?

in·ter·sec·tion·al·i·ty
/ˌin(t)ərsekSHəˈnalədē/

noun

the interconnected nature of social categorizations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage.
"through an awareness of intersectionality, we can better acknowledge and ground the differences among us"

"Intersectionality is an approach to research that focuses upon mutually constitutive forms of social oppression rather than on single axes of difference. Intersectionality is not only about multiple identities but is about relationality, social context, power relations, complexity, social justice and inequalities".
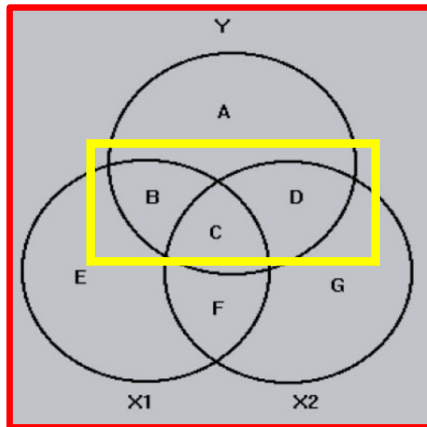
Hopkins, P. (2019). Social geography I: Intersectionality. *Progress in Human Geography*, *43*(5), 937-947. https://doi.org/10.1177/0309132517743677

Conclusion: COVID relief and Intersectionality?

"Researchers using intersectionality are urged not to adopt an additive approach and instead to look at how specific forms of inequality are mutually constitutive..."

Hopkins, P. (2019). Social geography I: Intersectionality. *Progress in Human Geography*, *43*(5), 937-947

$$\hat{y} = a + bx + cy + dz...etc$$
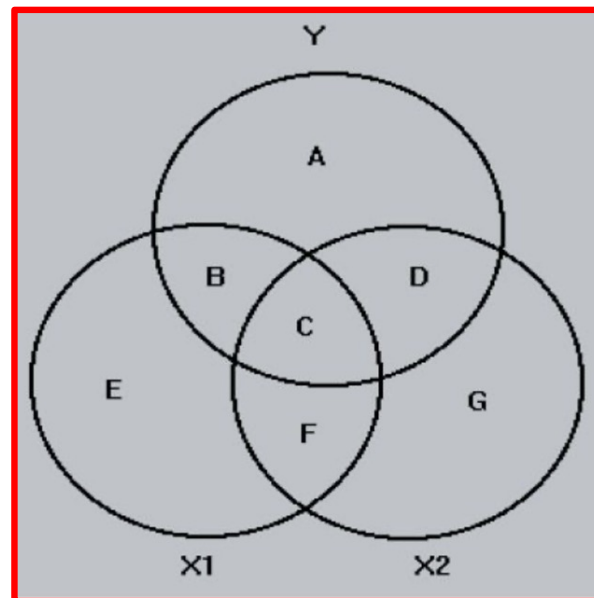
🔊 in·ter·sec·tion·al·i·ty
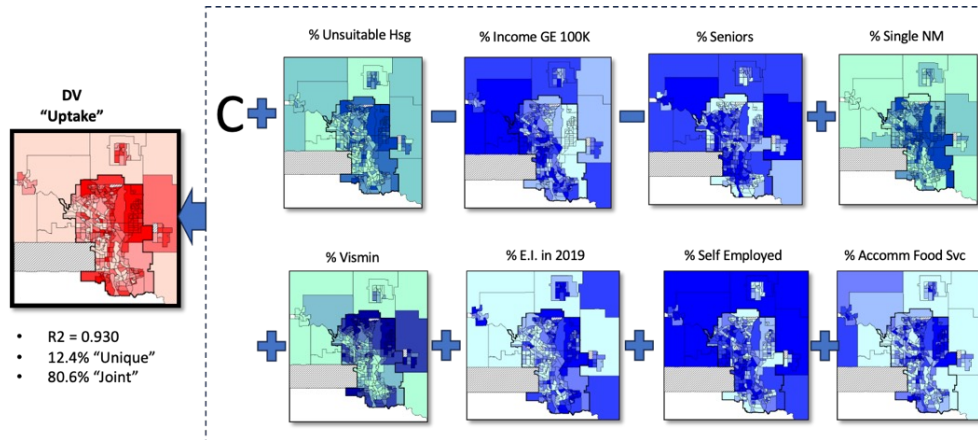
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Conclusion: COVID relief and Intersectionality?

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$$\hat{y} = a + bx + cy + dz....etc$$

DV "Uptake"

- R2 = 0.930
- 12.4% "Unique"
- 80.6% "Joint"

% Unsuitable Hsg   % Income GE 100K   % Seniors   % Single NM

% Vismin   % E.I. in 2019   % Self Employed   % Accomm Food Svc

Y
A
B   C   D
E   F   G
X1   X2

Unique + Shared
Additive + Mutually Constitutive

>80% Shared in both Studies!

"Intersectionality is an approach to research that focuses upon mutually constitutive forms of social oppression rather than on single axes of difference. Intersectionality is not only about multiple identities but is about relationality, social context, power relations, complexity, social justice and inequalities".

"Researchers using intersectionality are urged not to adopt an additive approach and instead to look at how specific forms of inequality are mutually constitutive…"

Relevance
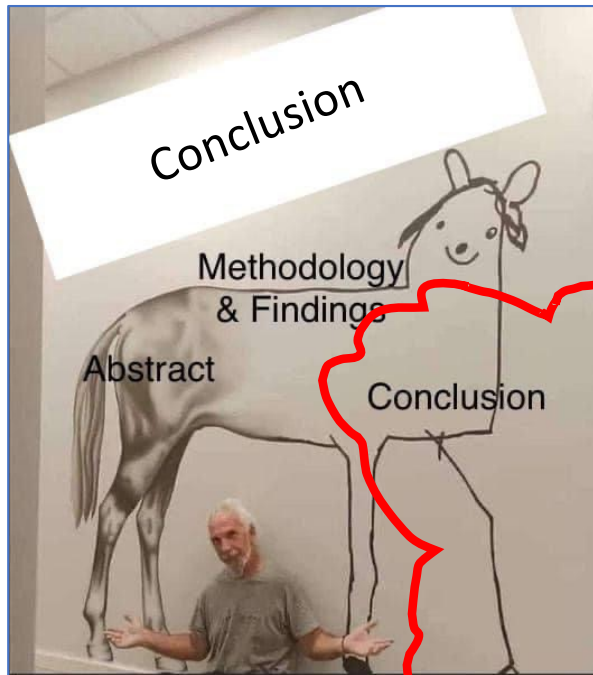
Structural:

- Aggregate (Spatial) Unique geographies /ecologies matter (somewhat)
- Aggregate (Spatial) Joint/ Intersectional geographies / ecologies matter (more)
  - i.e. multivariate geographies)
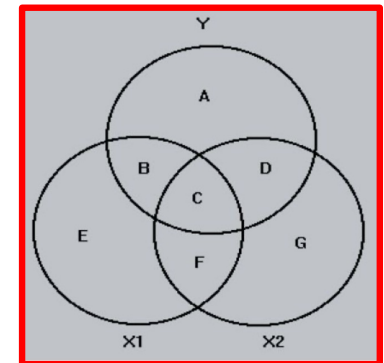
Individual / Human Agency:

- The lived experience of COVID relief and intersectional outcomes of marginalization matter

Thank you for your attention!