

# knowledge neighbourhoods

spatial arrangements and social interactions of arts and sciences



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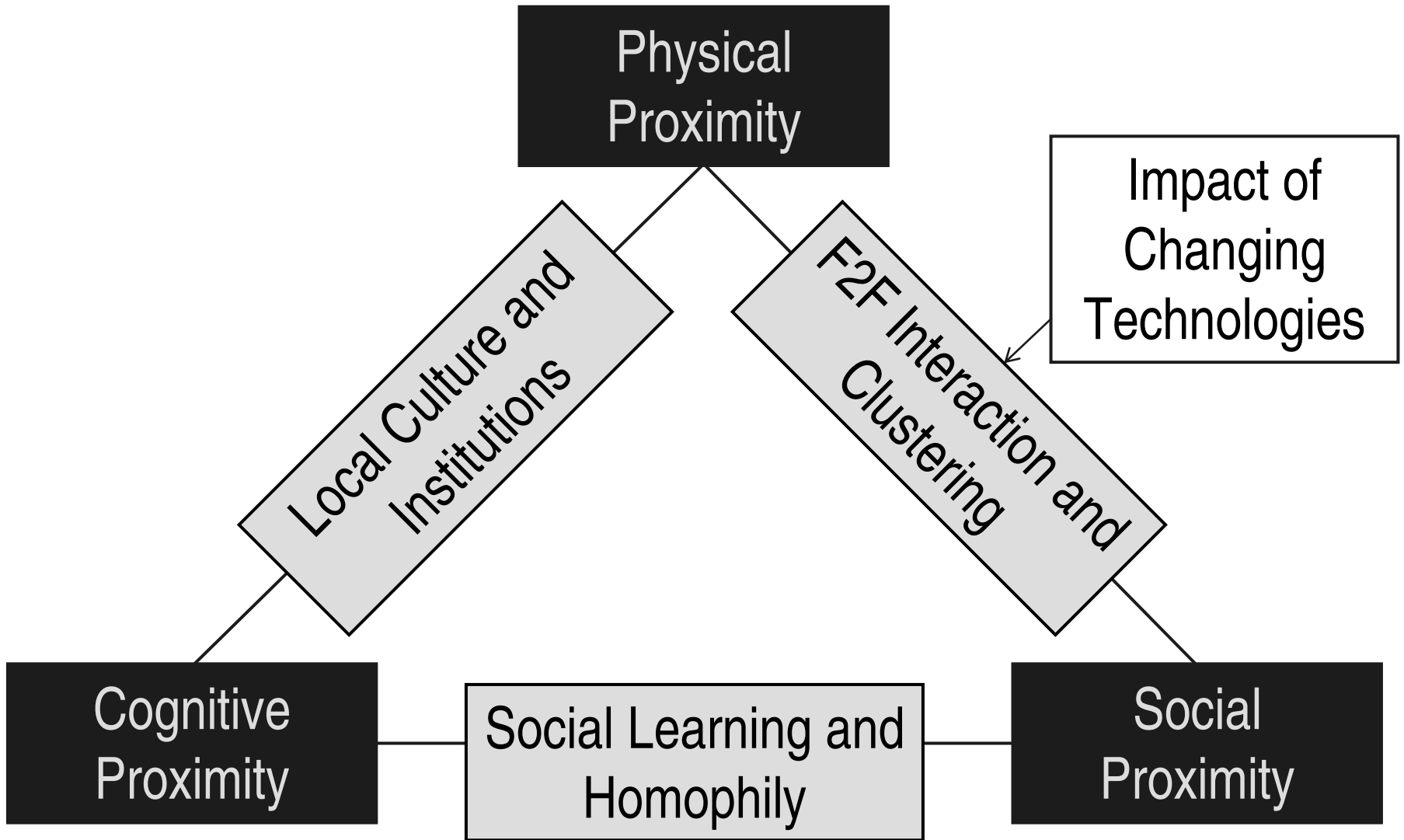
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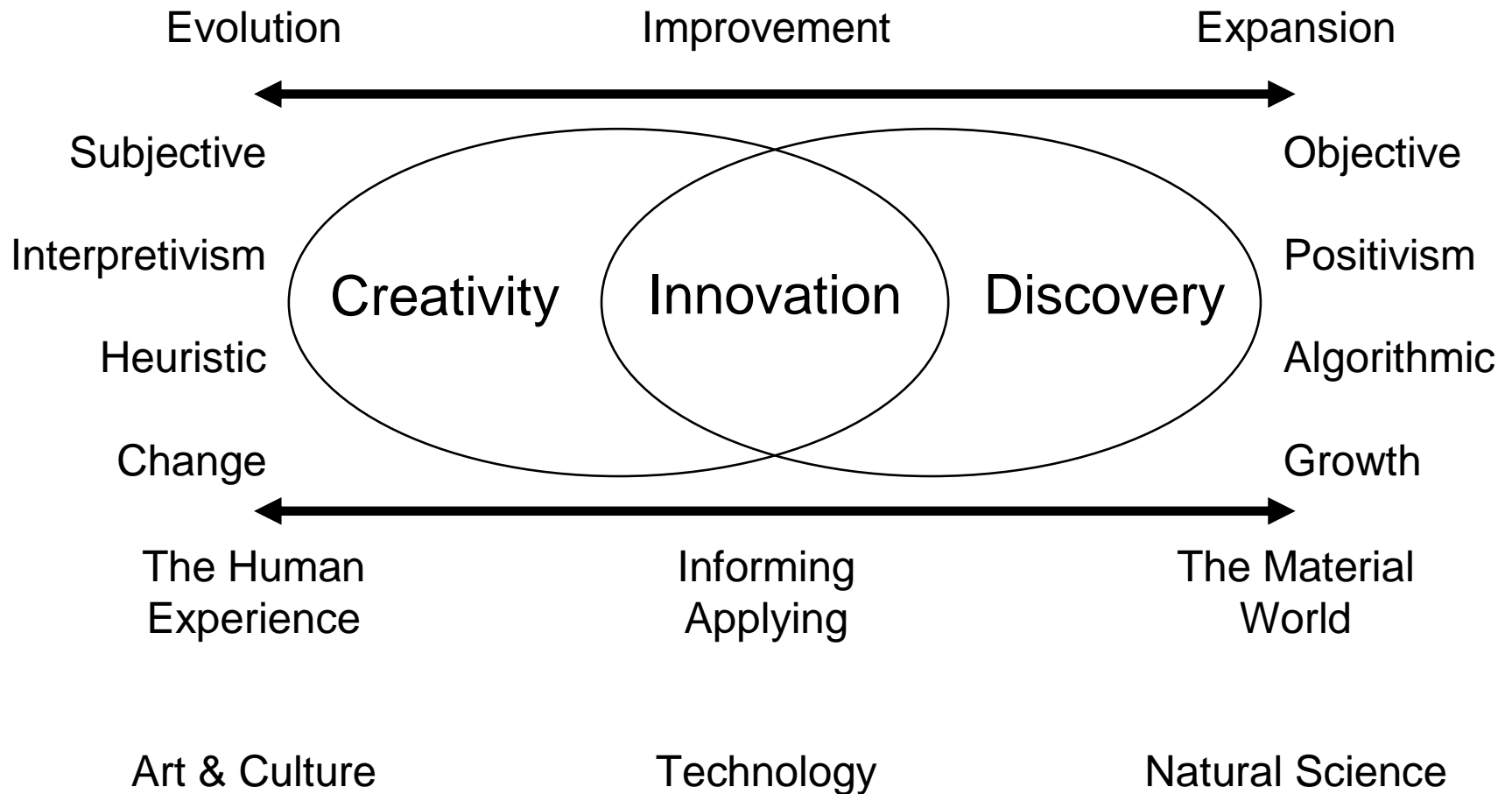
february 25, 2012  
new york

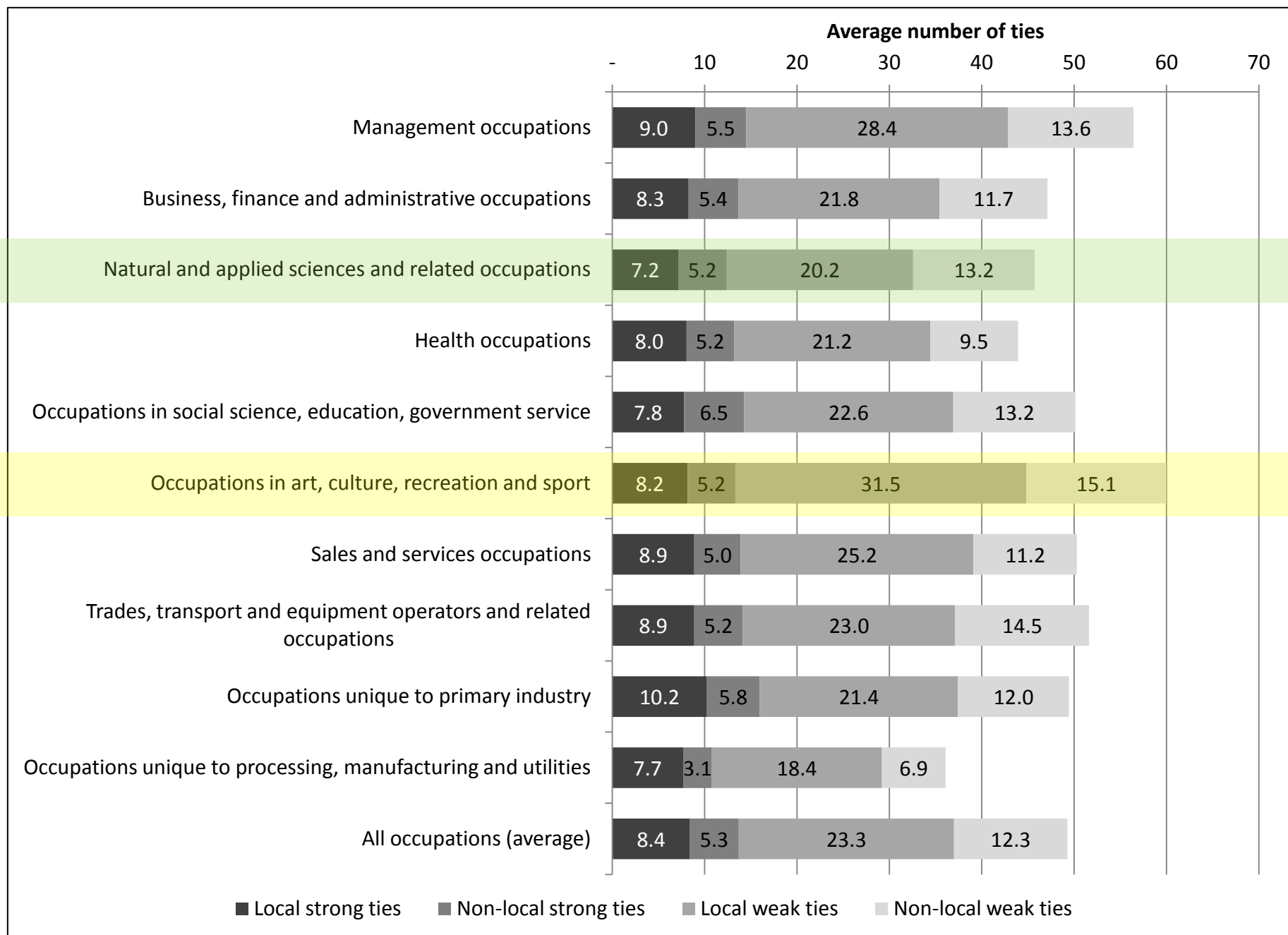


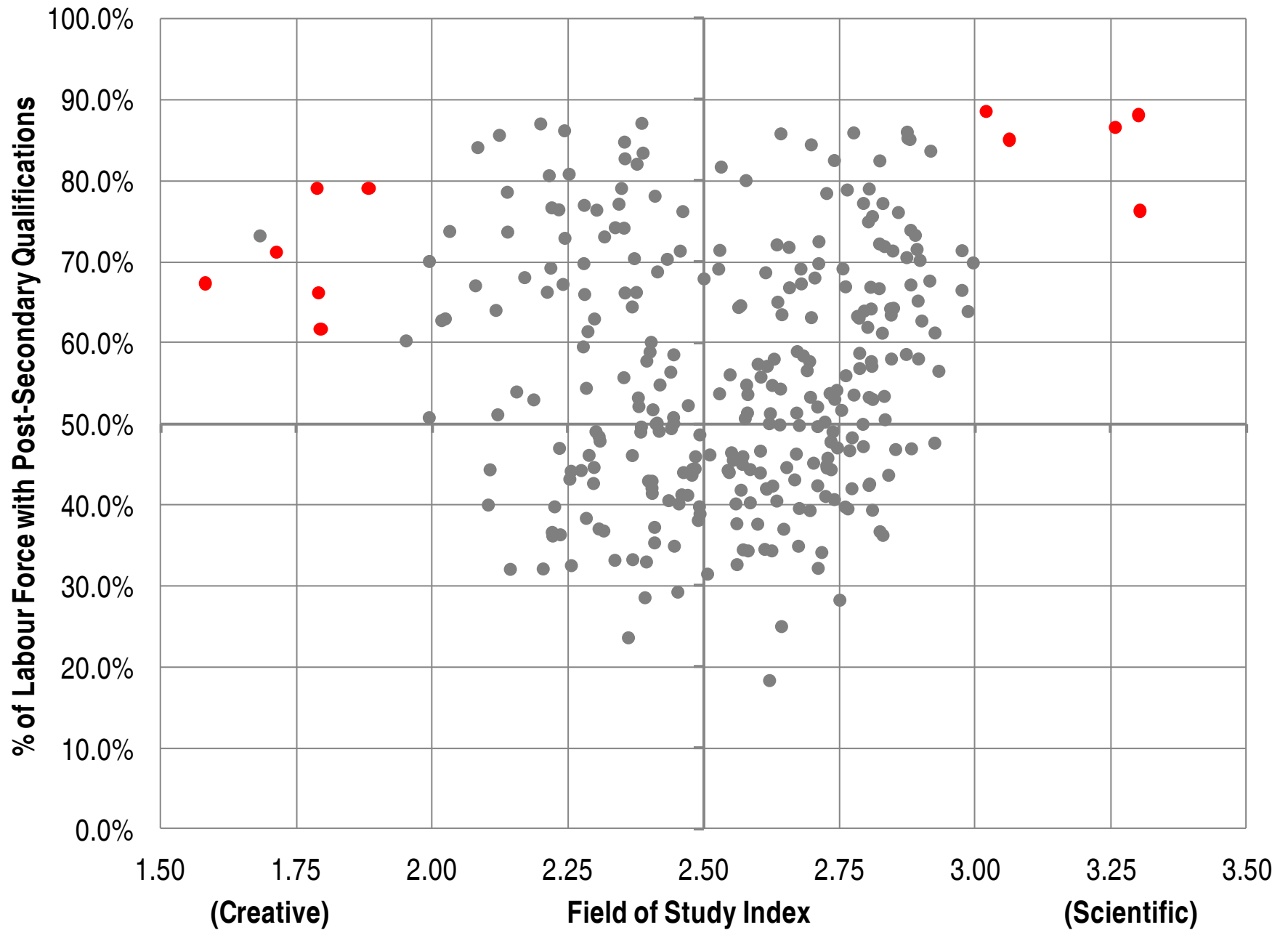
# Aims of the paper:

- a) research at the sub-regional scale can improve our understanding of how and why clustering occurs
  - Investigation of urban landscape for clues about patterns of interaction
- b) demonstrate that the patterns of local clustering varies between creative industries and science-based industries
  - patterns of social interaction also differ significantly between knowledge-bases (amount of interaction + intra/inter-firm)
- c) suggest that these nuances need to be reflected in the policy recommendations of local economic governance









## **creative industries**

5121 Motion picture and video industries (excluding 512130 movie theatres)

5122 Sound recording industries

5151 Radio and television broadcasting

5414 Specialized design services

7111 Performing arts companies

7115 Independent artists, writers and performers

## **science industries**

3254 Pharmaceutical and medicine manufacturing

5112 Software publishers

5415 Computer systems design and related services

5417 Scientific research and development services

6215 Medical and diagnostic laboratories

	Creative Industries			Science Industries		
	Employment	LQ	% share of national	Employment	LQ	% share of national
Montréal	43,550	1.62	18.4%	68,455	1.61	18.4%
Toronto	62,855	1.63	26.6%	98,505	1.62	26.4%
Vancouver	28,385	1.76	12.0%	37,075	1.46	9.9%
3 region totals	134,790	1.65	57.1%	204,035	1.58	54.7%

Source: Census of Population 2006



# creative industries

# MONTREAL

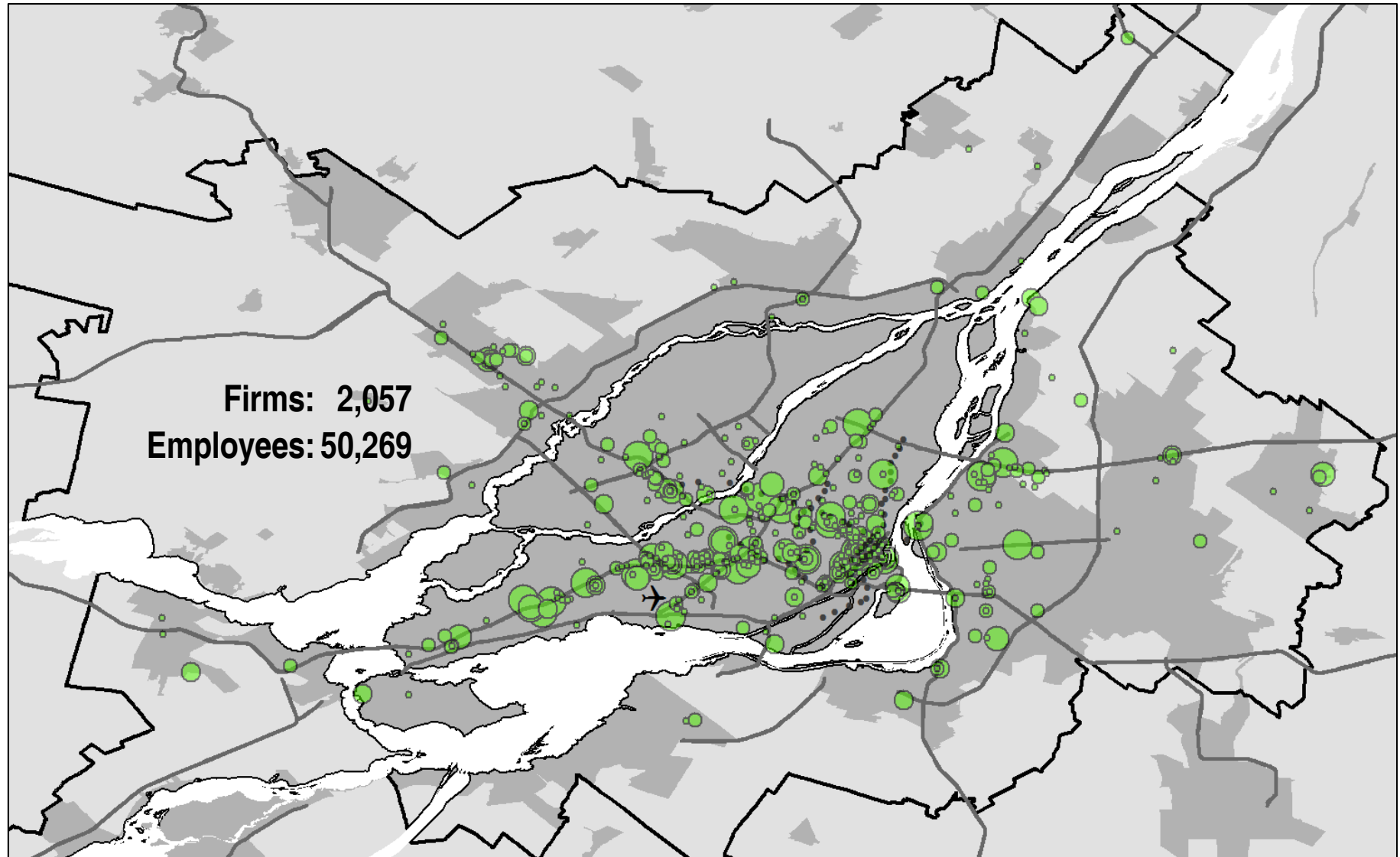


Source: Dun & Bradstreet 2011

Employees    • 10-19    ○ 20-49    ○ 50-199    ○ 200+

# science industries

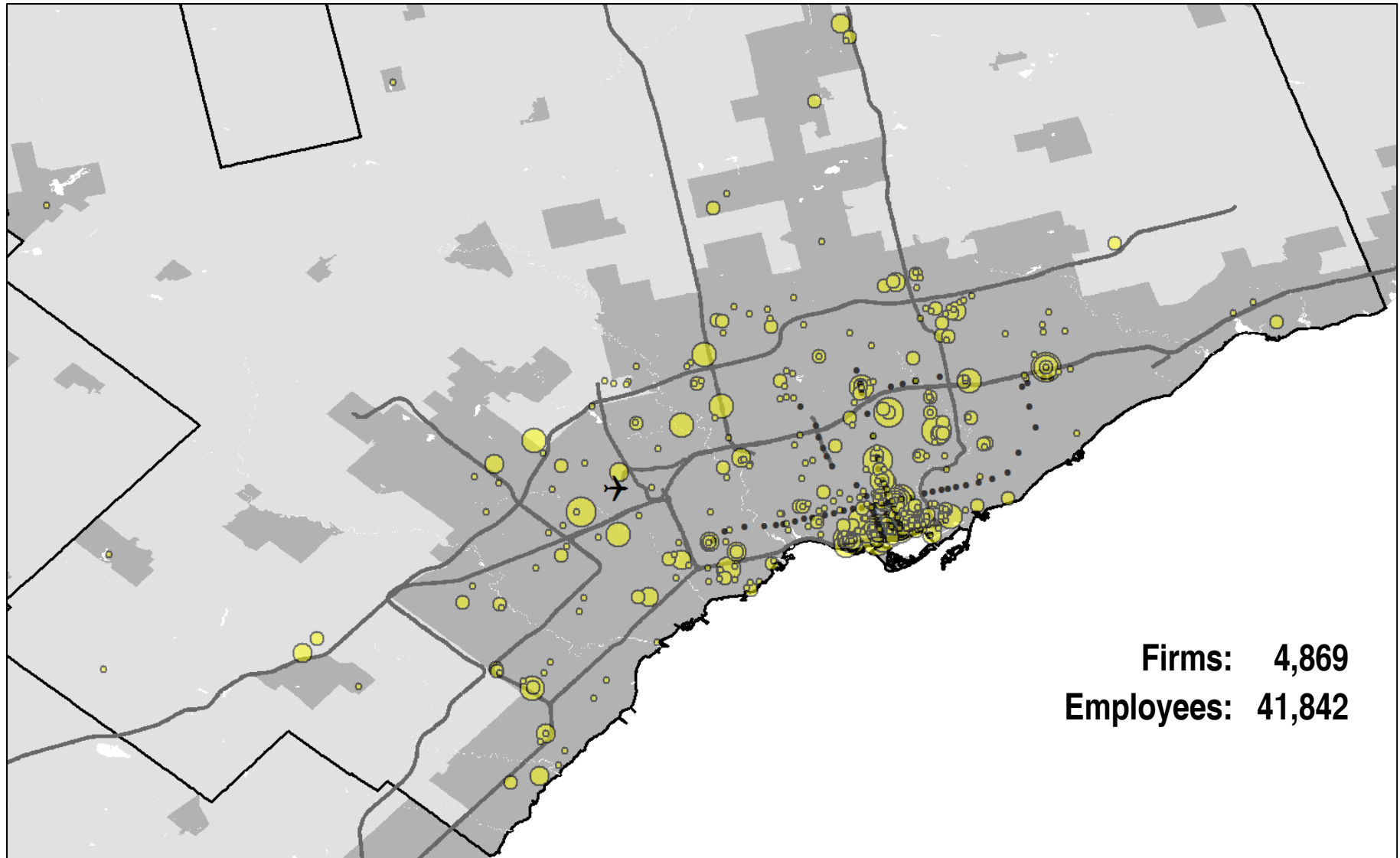
# MONTREAL



Source: Dun & Bradstreet 2011

# creative industries

# TORONTO

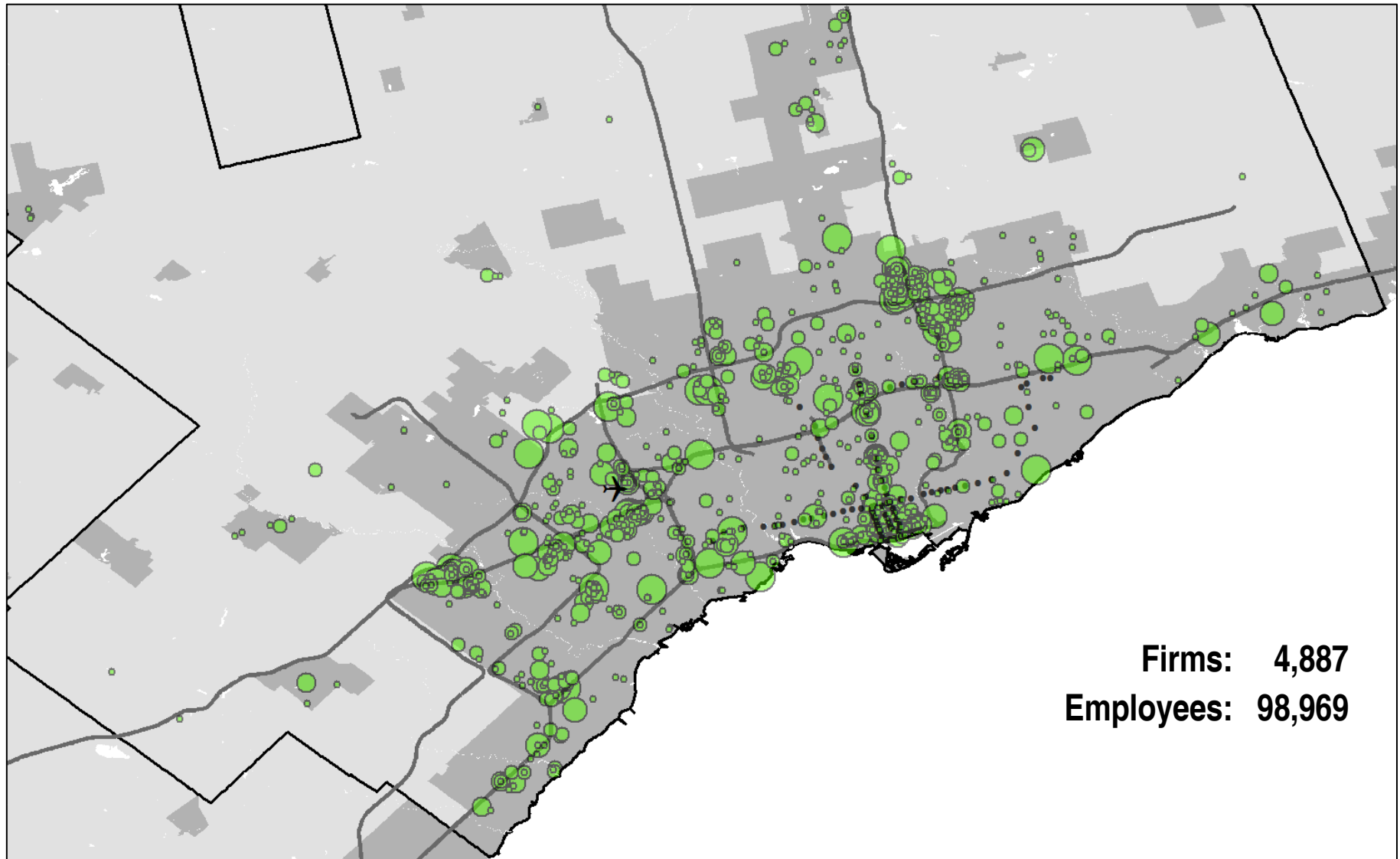


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# science industries

# TORONTO

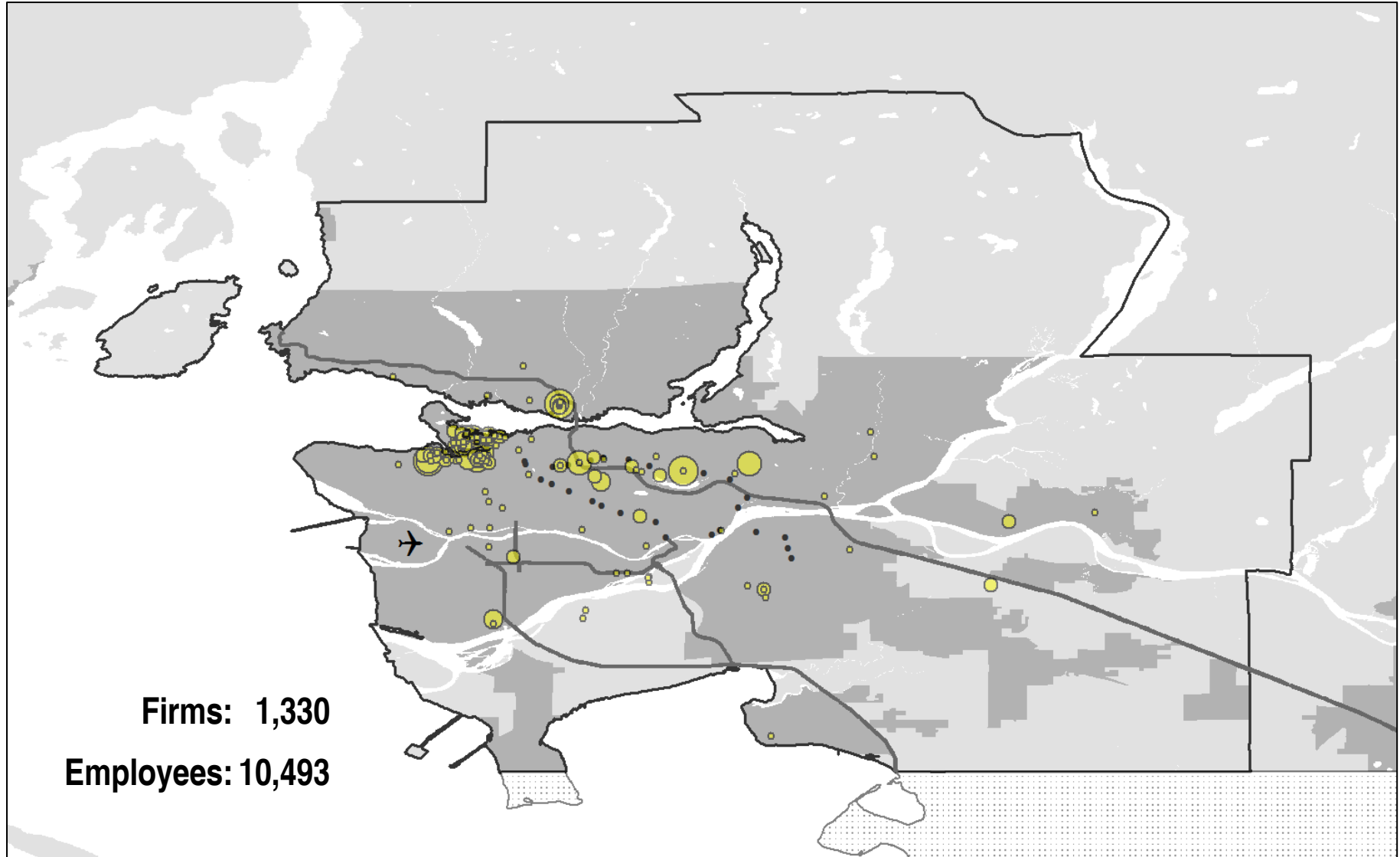


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# creative industries

# VANCOUVER

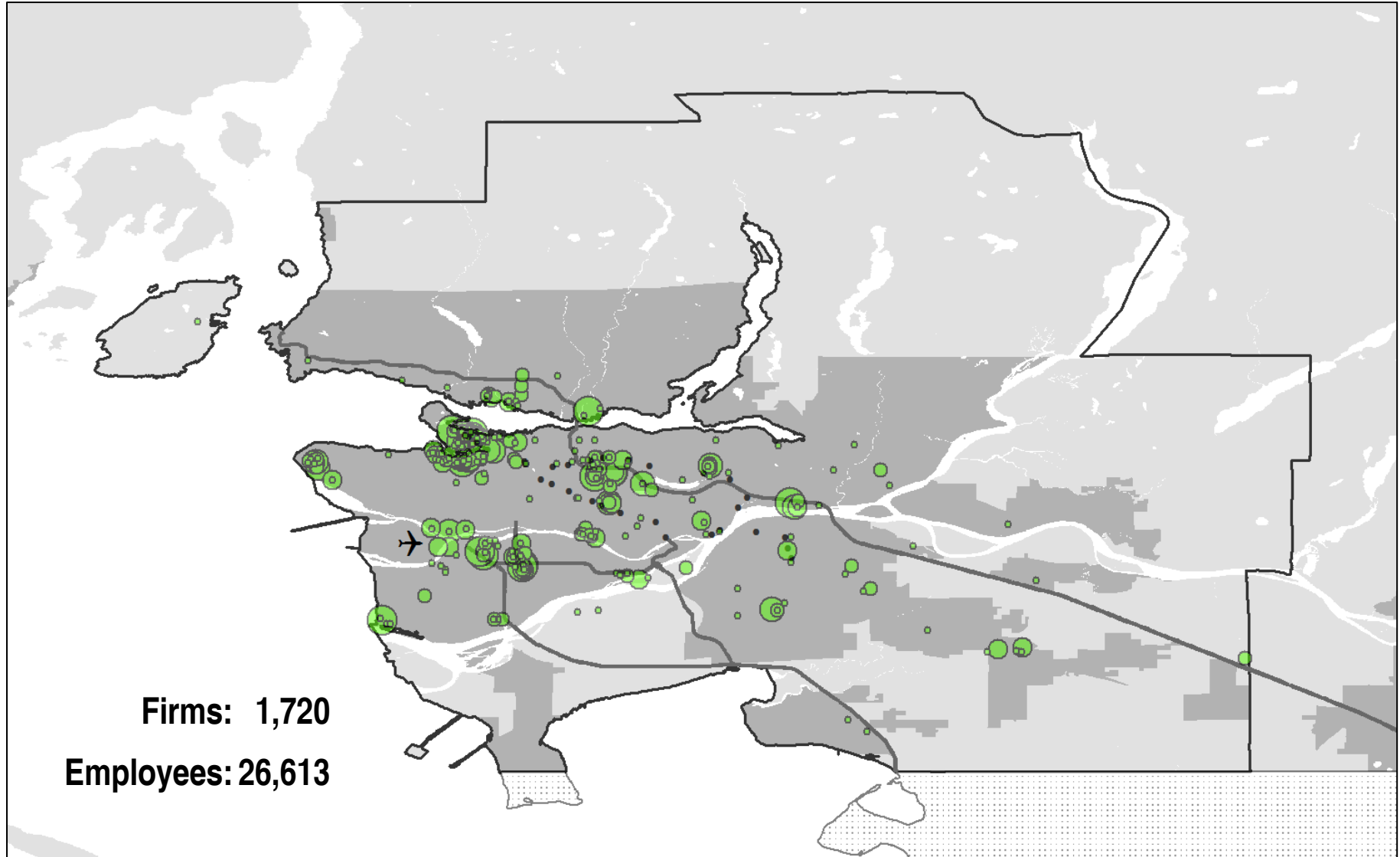


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# science industries

# VANCOUVER

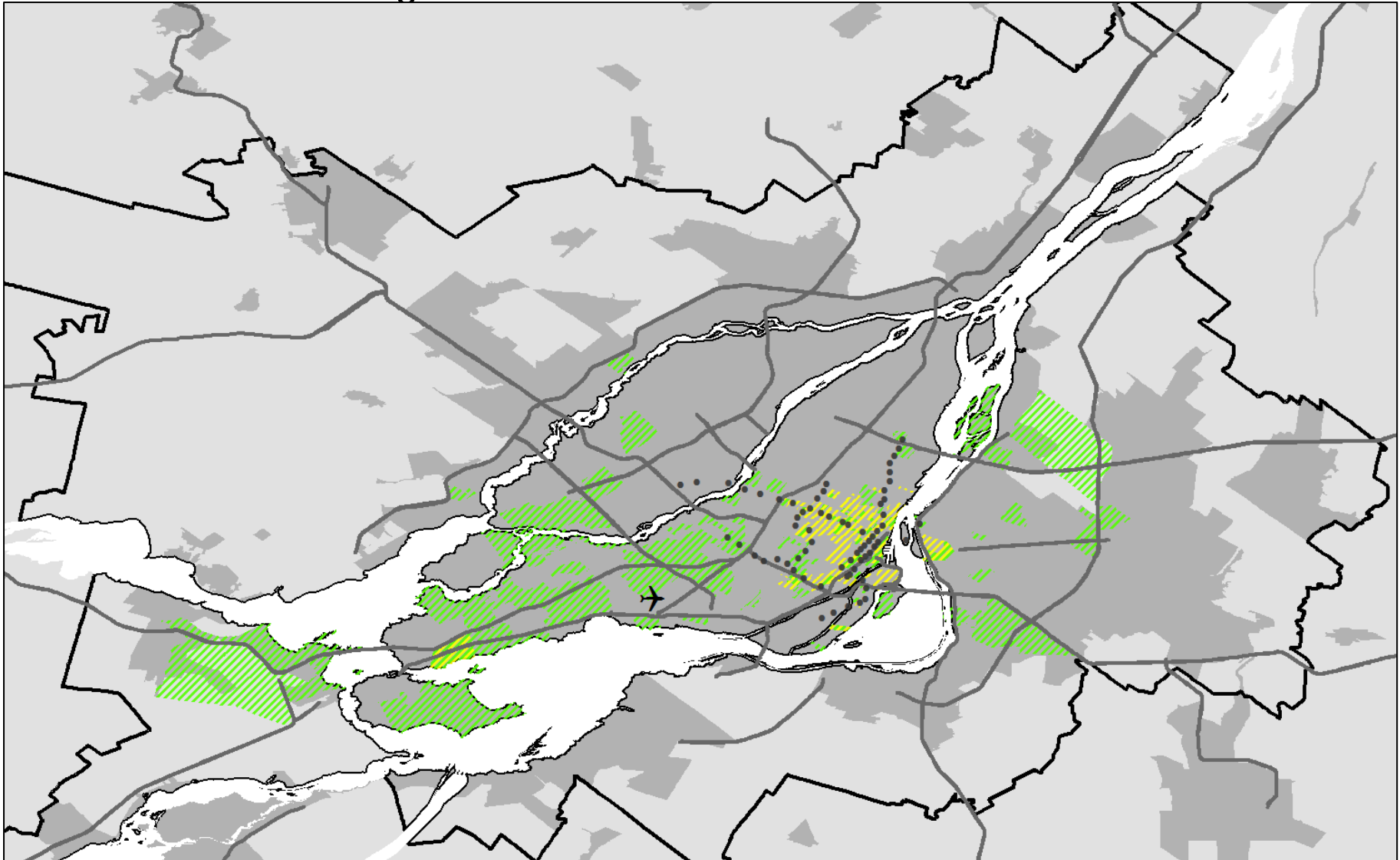


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Employees    • 10-19    ○ 20-49    ○ 50-199    ○ 200+

# artist & scientist neighbourhoods

MONTREAL

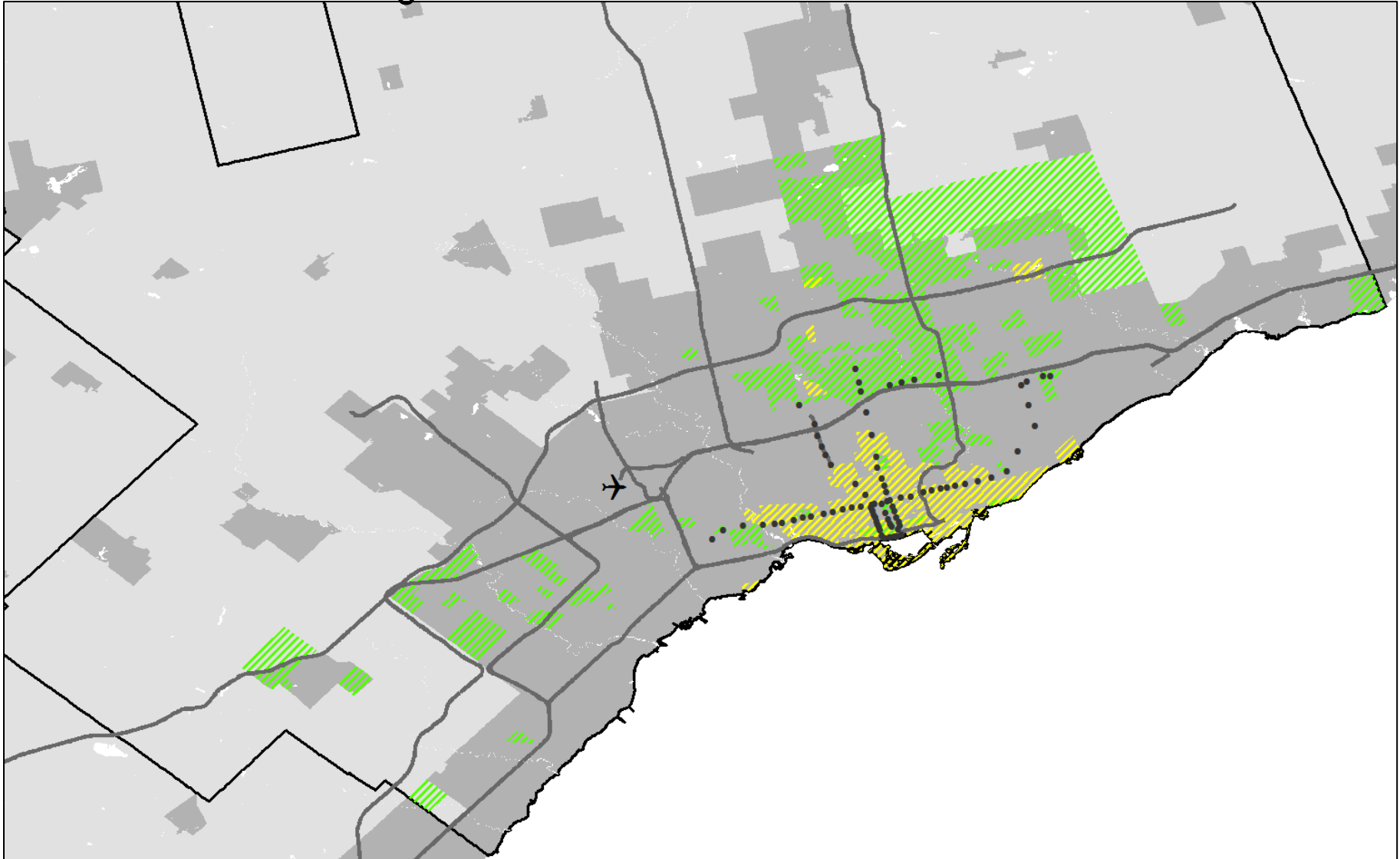


Source: Census of Population 2006

Residential neighbourhoods where occupational (NOC C&F) LQ > 1SD above mean LQ

# artist & scientist neighbourhoods

TORONTO



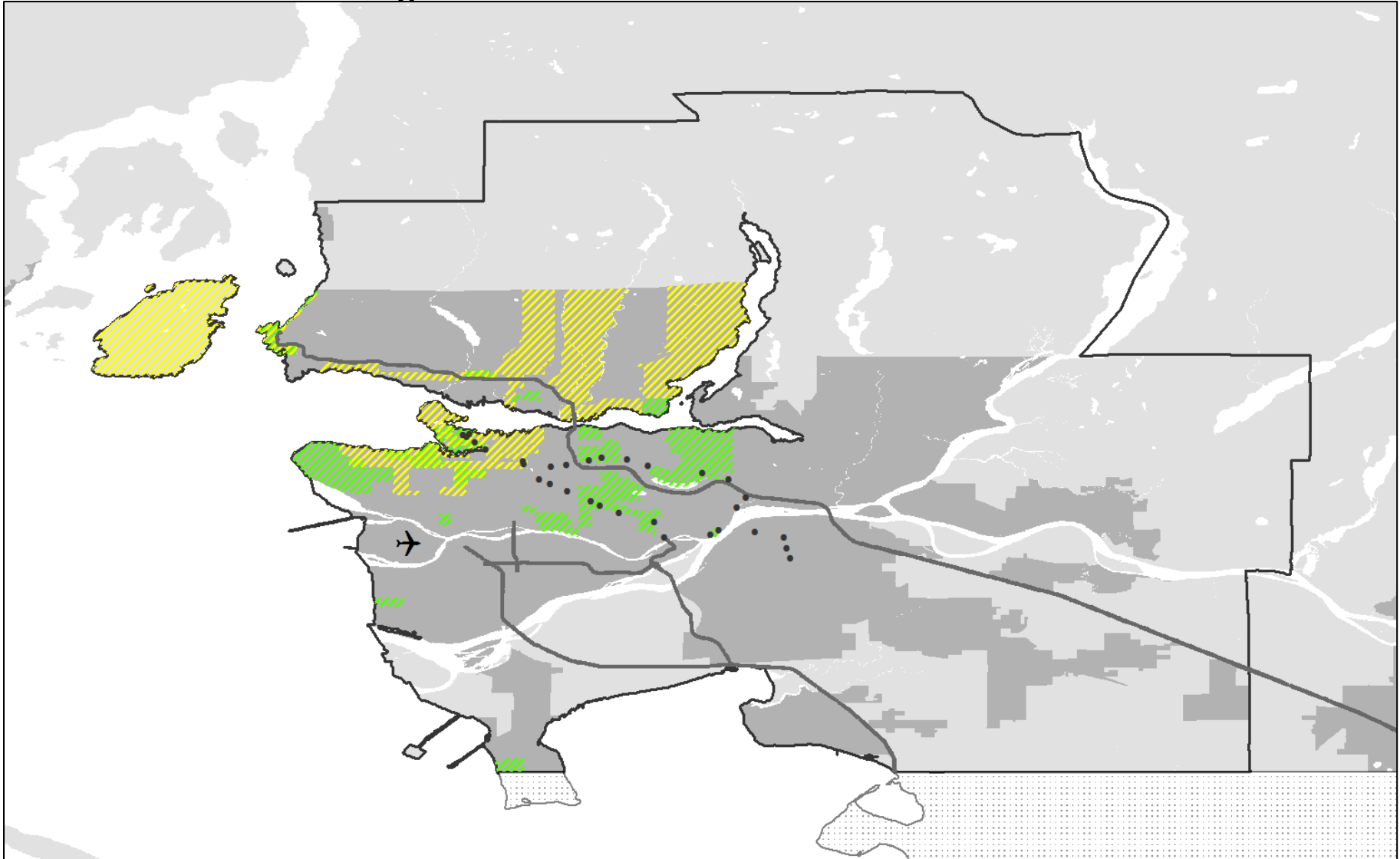
Source: Census of Population 2006

Residential neighbourhoods where occupational (NOC C&F) LQ > 1SD above mean LQ



# artist & scientist neighbourhoods

VANCOUVER



Source: Census of Population 2006

Residential neighbourhoods where occupational (NOC C&F) LQ > 1SD above mean LQ

## creative neighbourhoods

Old Montreal  
MONTREAL



King & Queen W  
TORONTO



Yaletown  
VANCOUVER



## science neighbourhoods

A. Chomedey &  
A. Felix-Leclerc  
MONTREAL



404 & 407  
TORONTO



Knight St. &  
East-West  
Corridor  
VANCOUVER



creative and scientific business locations

source: Dun & Bradstreet

**creative** neighbourhoods

Old Montreal  
**MONTREAL**



**science** neighbourhoods

A. Chomedey &  
A. Felix-Leclerc  
**MONTREAL**



King & Queen W  
**TORONTO**



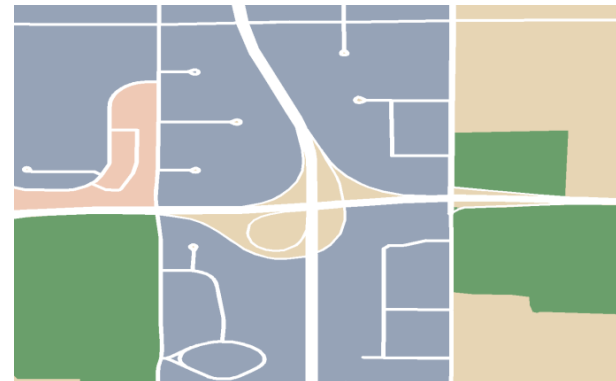
404 & 407  
**TORONTO**



Yaletown  
**VANCOUVER**



Knight St. &  
East-West  
Corridor  
**VANCOUVER**



land use  
source: CanMap 2011

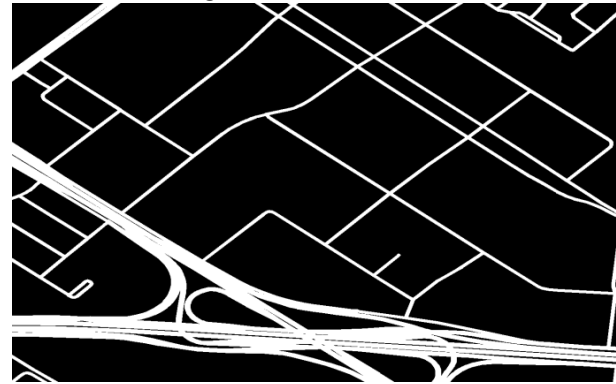
**creative** neighbourhoods

Old Montreal  
MONTREAL



**science** neighbourhoods

A. Chomedey &  
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MONTREAL

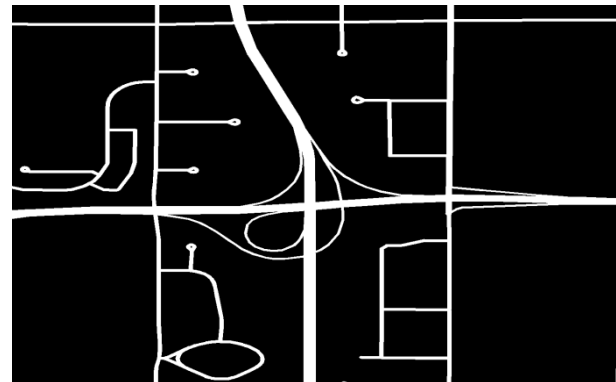
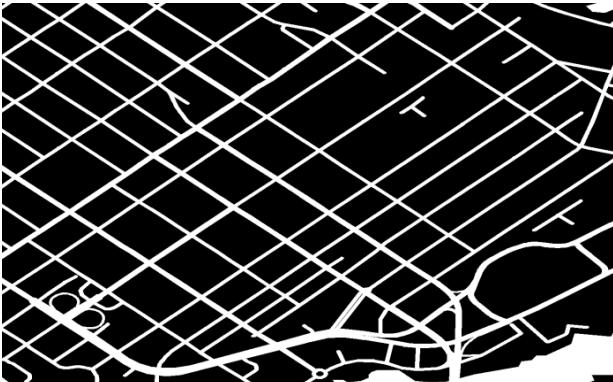


King & Queen W  
TORONTO



404 & 407  
TORONTO

Yaletown  
VANCOUVER

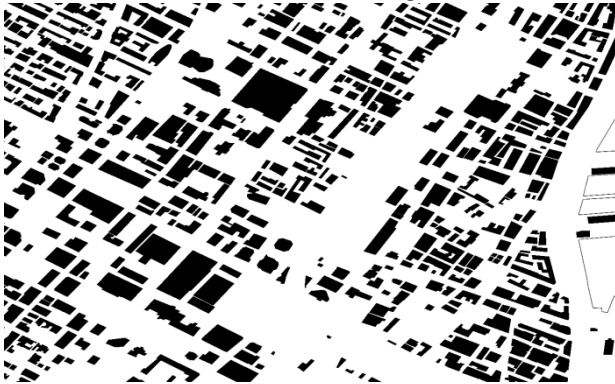


Knight St. &  
East-West  
Corridor  
VANCOUVER

block diagrams  
source: CanMap 2011

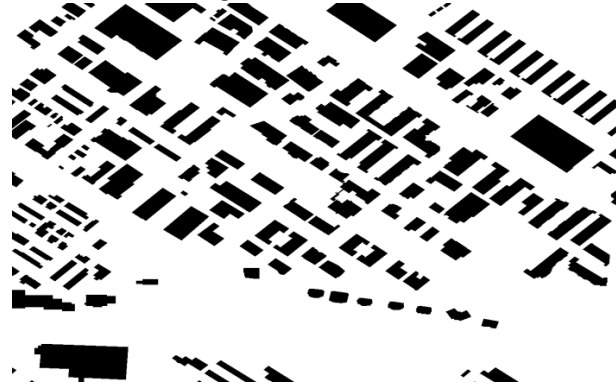
**creative** neighbourhoods

Old Montreal  
MONTREAL

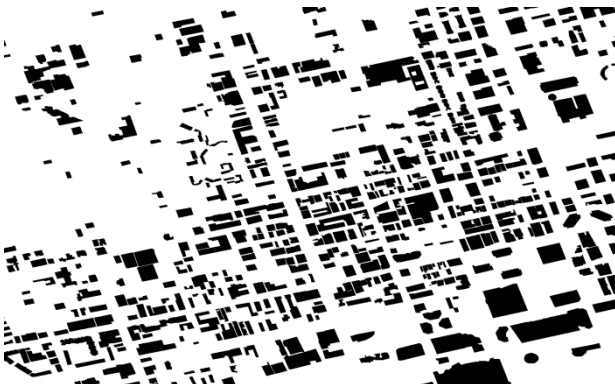


**science** neighbourhoods

A. Chomedey &  
A. Felix-Leclerc  
MONTREAL

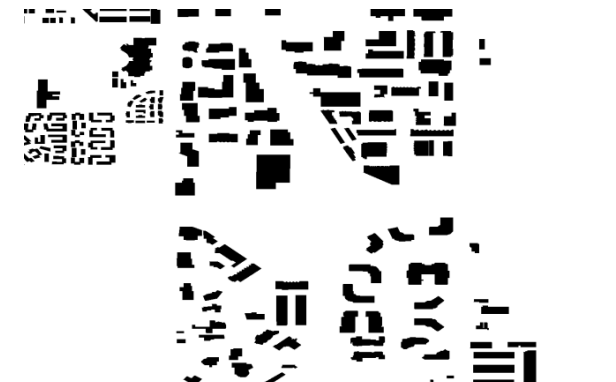


King & Queen W  
TORONTO



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Yaletown  
VANCOUVER



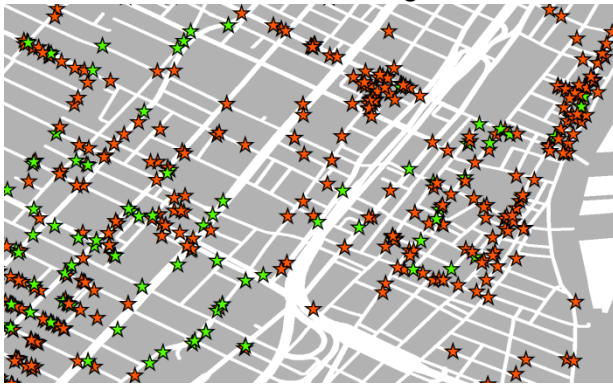
Knight St. &  
East-West  
Corridor  
VANCOUVER

commercial building footprints

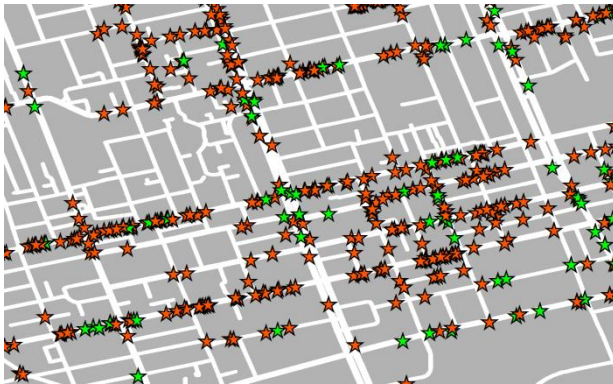
source: CanMap 2011



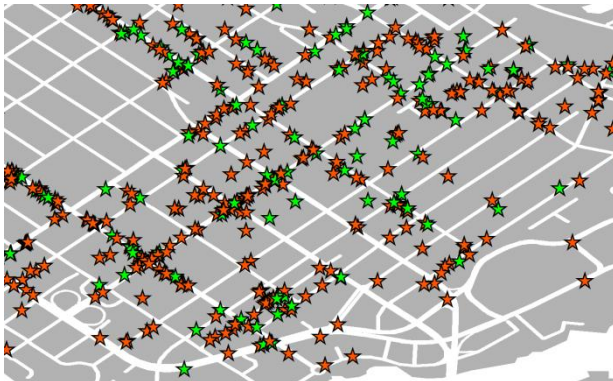
Old Montreal  
**MONTREAL**



King & Queen W  
**TORONTO**



Yaletown  
**VANCOUVER**



**science** neighbourhoods



A. Chomedey &  
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**MONTREAL**



404 & 407  
**TORONTO**



Knight St. &  
East-West  
Corridor  
**VANCOUVER**

cafes, restaurants & bars by single (orange) and multiple (green) locations

source: Dun & Bradstreet

Characteristics	Creative Neighbourhoods	Science Neighbourhoods
Firm Location	Edge of core	Suburban
Office Rents	Medium-high	Low-medium
Firm Structure	Micro-Small	Medium-Large
Anchors	Venues; institutions	Large firms; institutions
Work force location	Overlapping	Adjacent
Transportation	Public; walk; bike	Private (cars)
Density	Very High	Low-medium
Land Use	Mixed	Mono
Building Types	Varied; adapted re-use	New; purpose-built
Bars, restaurants, cafes	Dense; authentic	Sparse; inauthentic
Change/evolution	Gentrification	Sprawl
<b>Key social dynamics</b>	<b>Inter-firm</b>	<b>Intra-firm</b>

# **At this point more questions than answers:**

How does urban form influence social interaction?

- some landscapes likely foster more interaction (especially inter-firm)

How does urban form affect knowledge production?

- links to diversity (creative-based) versus specialization (science-based)?

How does this impact the spatial patterns of economic activity?

- creative industries occupy highly specific spaces
- science-based industries in disposable/temporary landscapes?



# Possible policy implications

- a) Universal models of clusters/RIS/learning need to be differentiated (i.e. knowledge-bases)
- b) Not all industries can be expected to thrive in all types of local environments (i.e. questioning the wisdom of promoting creative and cultural industries 'everywhere')
- c) The regional scale is not *necessarily* always the optimal scale of local economic governance
- d) Should urban design/planning be better integrated with economic development?

# creative industries firm growth 2001-2011

MONTREAL

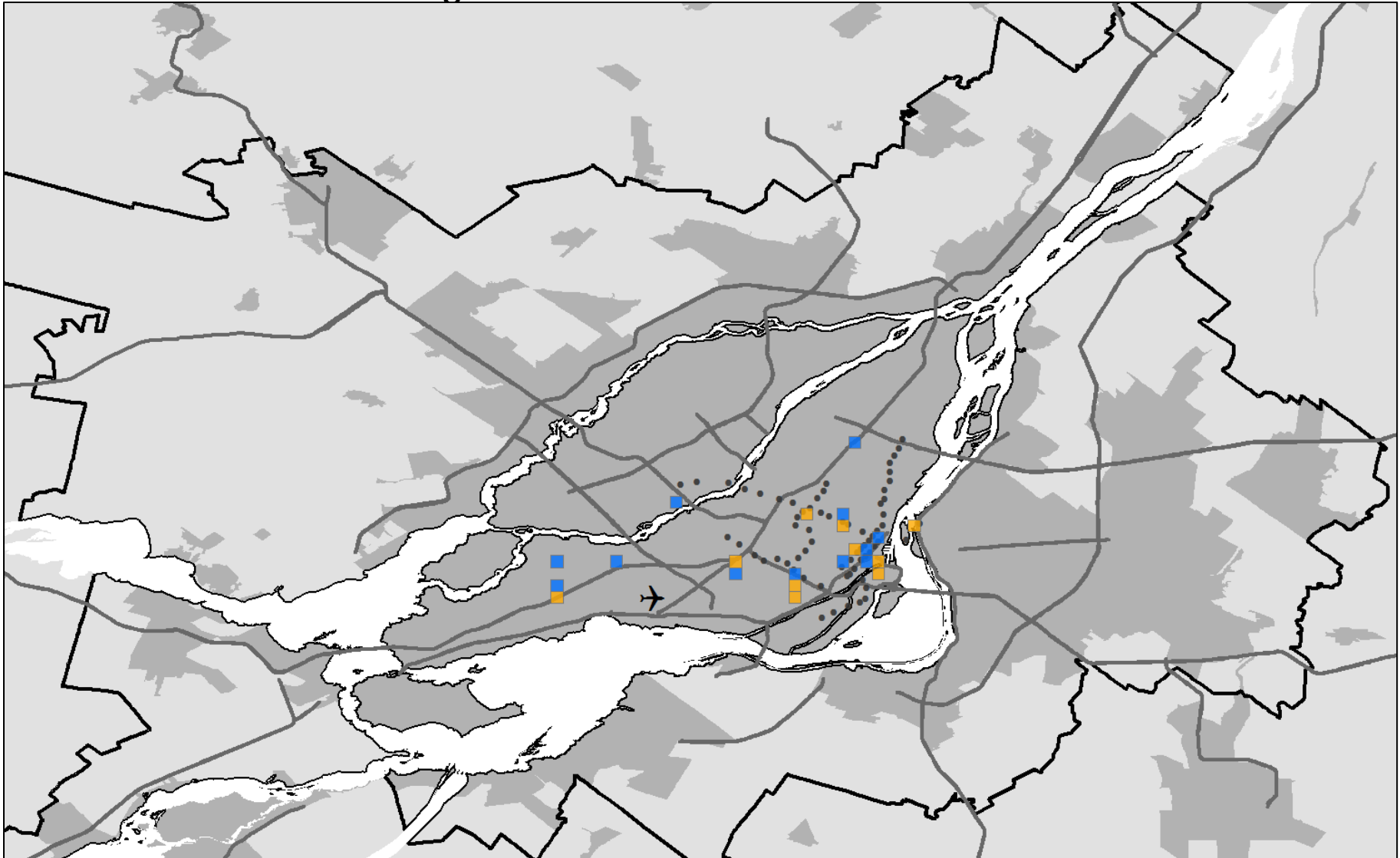


Source: Dun & Bradstreet 2001, 2011

Change => 5 firms Orange (+) Blue (-)

# science industries firm growth 2001-2011

MONTREAL

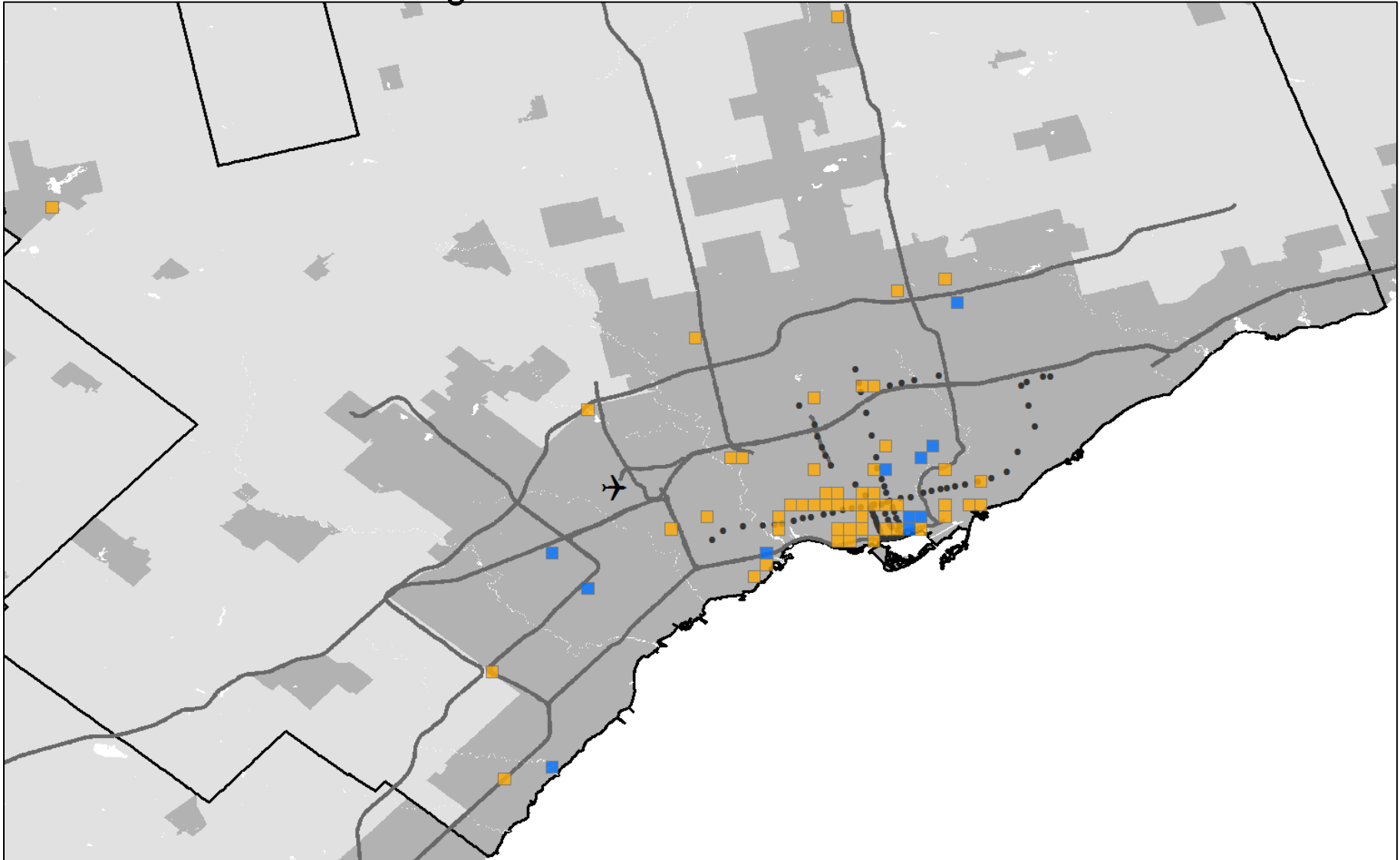


Source: Dun & Bradstreet 2001, 2011

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# creative industries firm growth 2001-2011

TORONTO

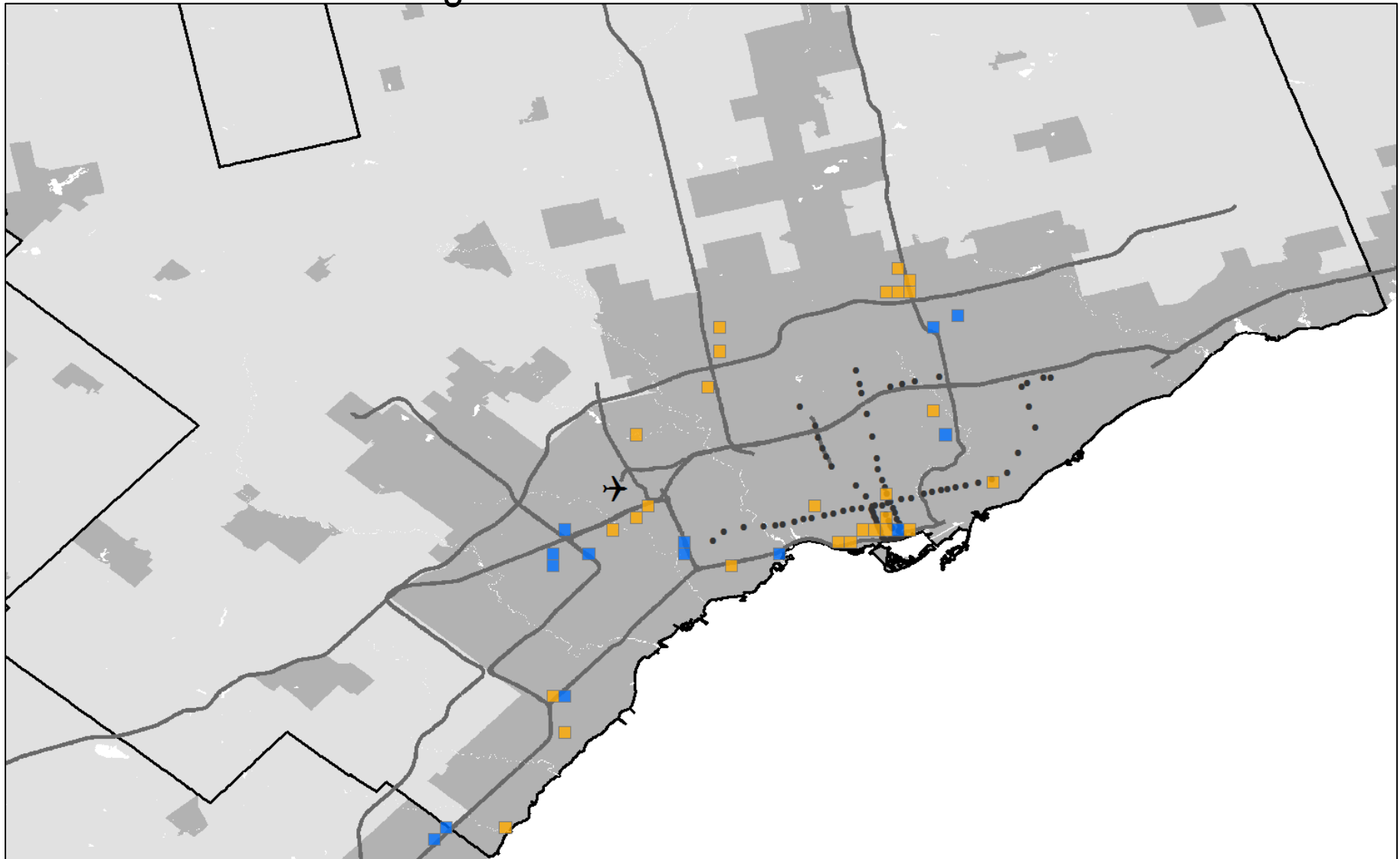


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TORONTO

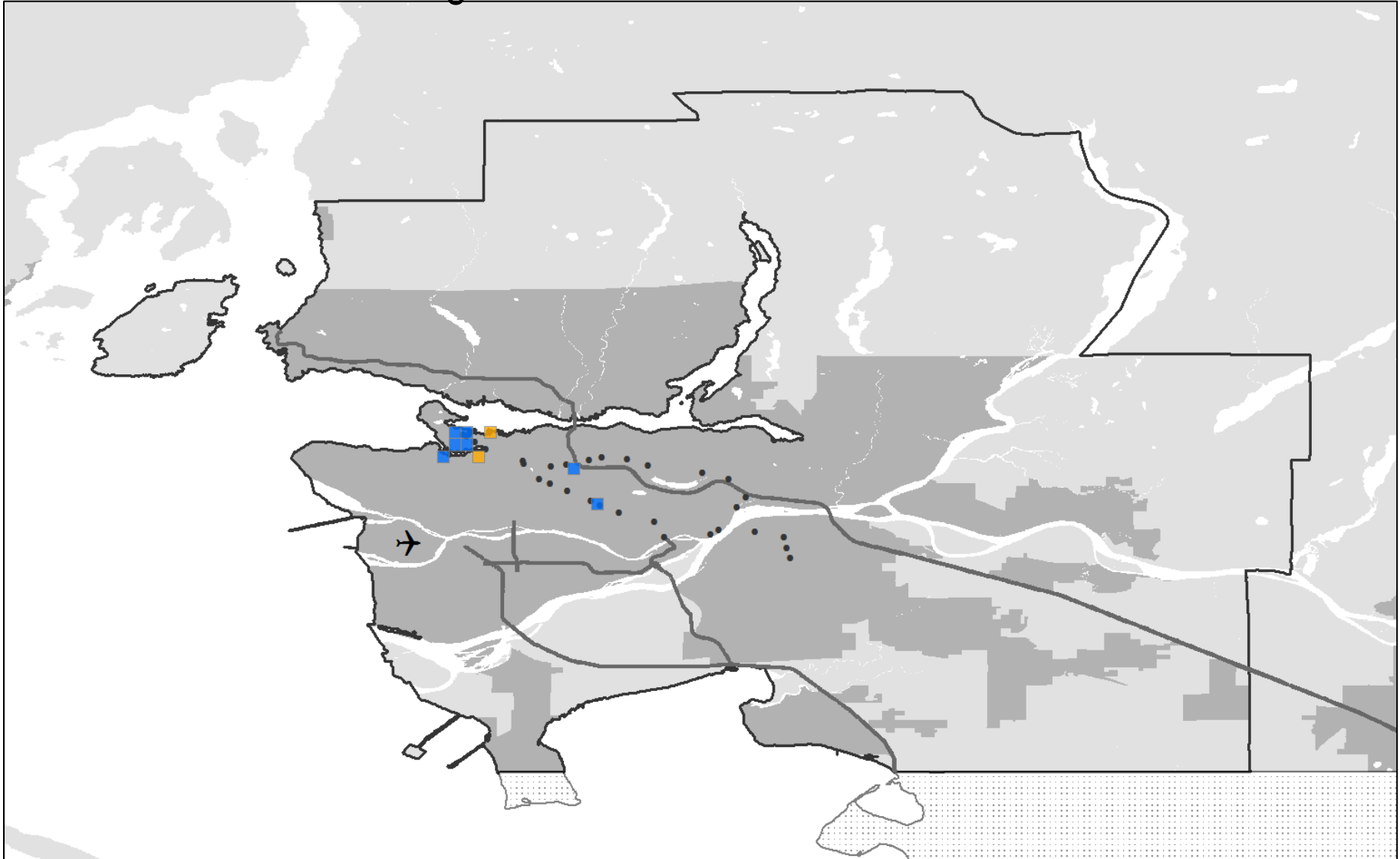


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# creative industries firm growth 2001-2011

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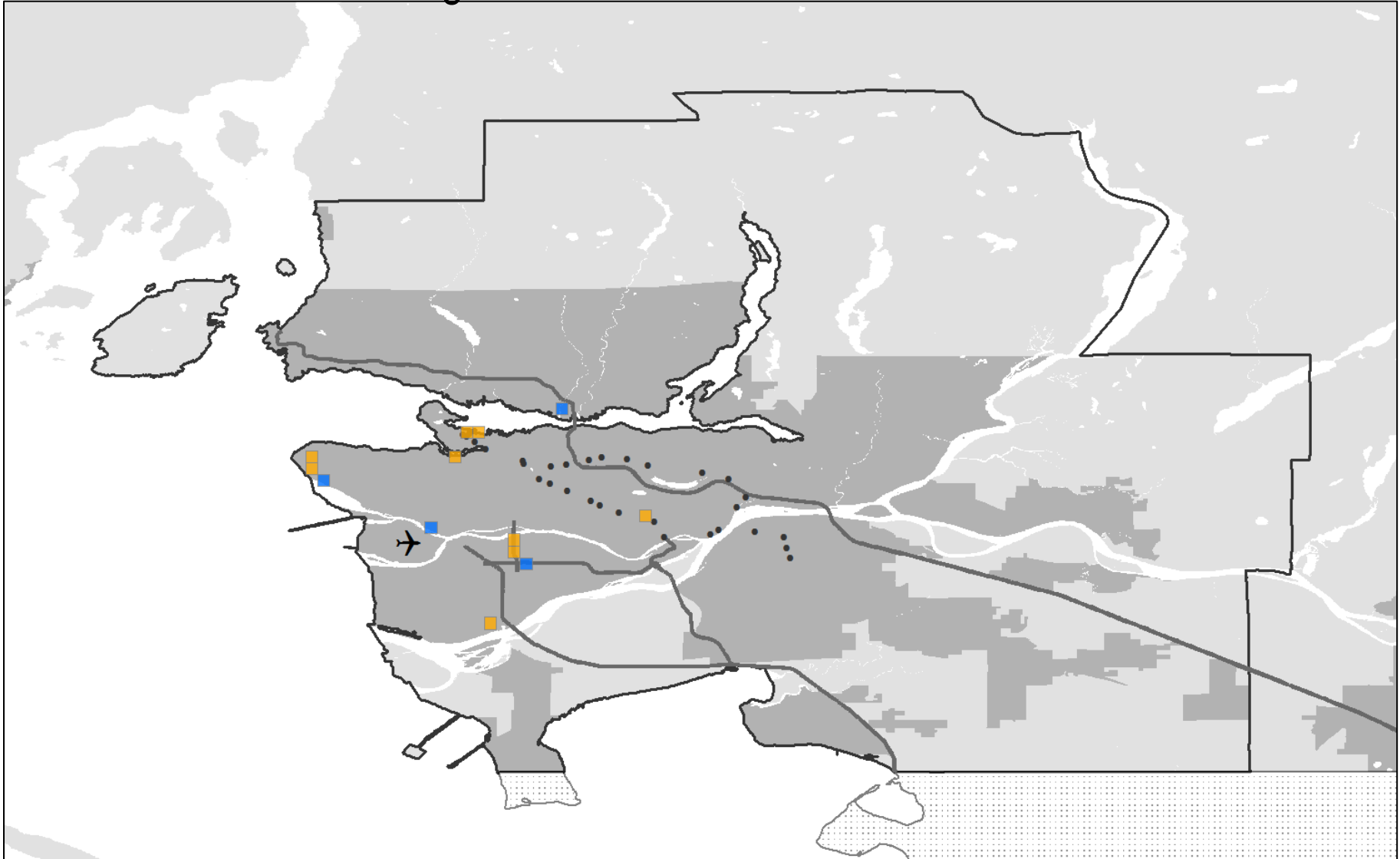


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