

# Re-imagining Streets as Public Open Space in the US and Canada: Opinions from a COVID-19 Twitter Corpus

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Annual Meeting of the Transportation Research Board, January 2021

1: University of Alberta; 2: University of Colorado Denver

Poster Session # 1415

Paper # TRBAM-21-02887



## Background and Context for the Research

### CONTESTED PUBLIC SPACE AND THE PANDEMIC

- The historic nature of shared public right-of-way has been challenged by the arrival and widespread adoption of the automobile since the 1920s.
- The growing speed and volume of car traffic resulted in safety concerns and increased demands for efficient flow resulting in regulated design of sidewalks, curbs, and traffic lanes.
- Over time, the car took over the public right-of-way, leaving designated slivers for other uses.
- The COVID-19 pandemic has upset the status quo around the meaning and consumption of the public right-of-way.
- With diminished vehicular traffic, and a need to find space for businesses and people to engage in the public realm, many cities have embarked on measures to re-imagine the public right-of-way.
- Many sidewalks and by extension curbs have been extended further into the roadway.
- 'Curbspace' has become a valuable and contested resource.



Photo source: BILDAGENTUR-ONLINE / TH FOTO / SCIENCE PHOTO LIBRARY



Photo source: <https://multichannelmerchant.com/blog/future-topics-covid-19/>



Photo source: <https://usa.streetsblog.org/2020/05/21/covid-19-outdoor-dining-already-squeezing-walkers/>

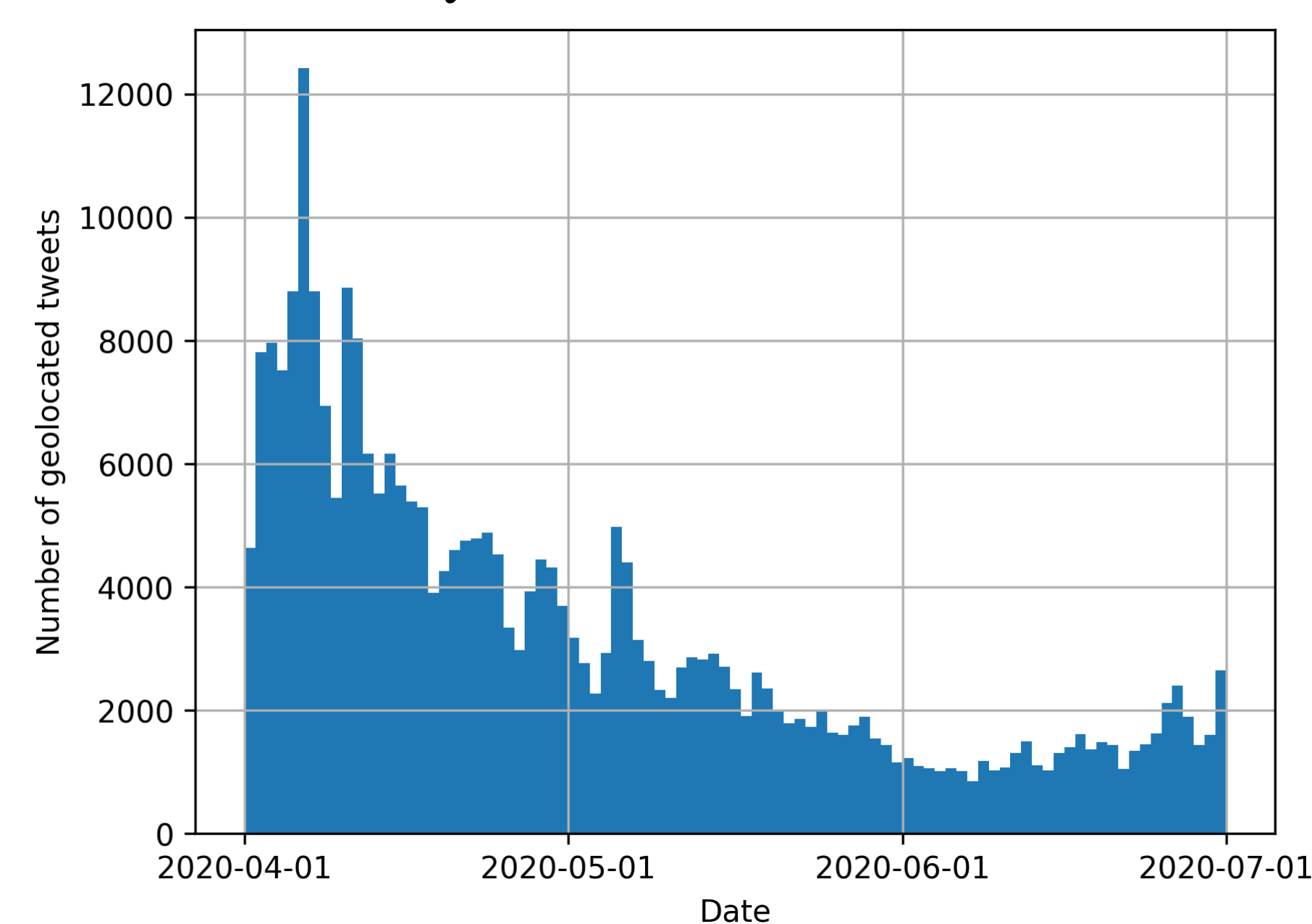
## Research Question

What do users of public open space have to say regarding shifts in street design and use of curb space during COVID-19?

## Methodology

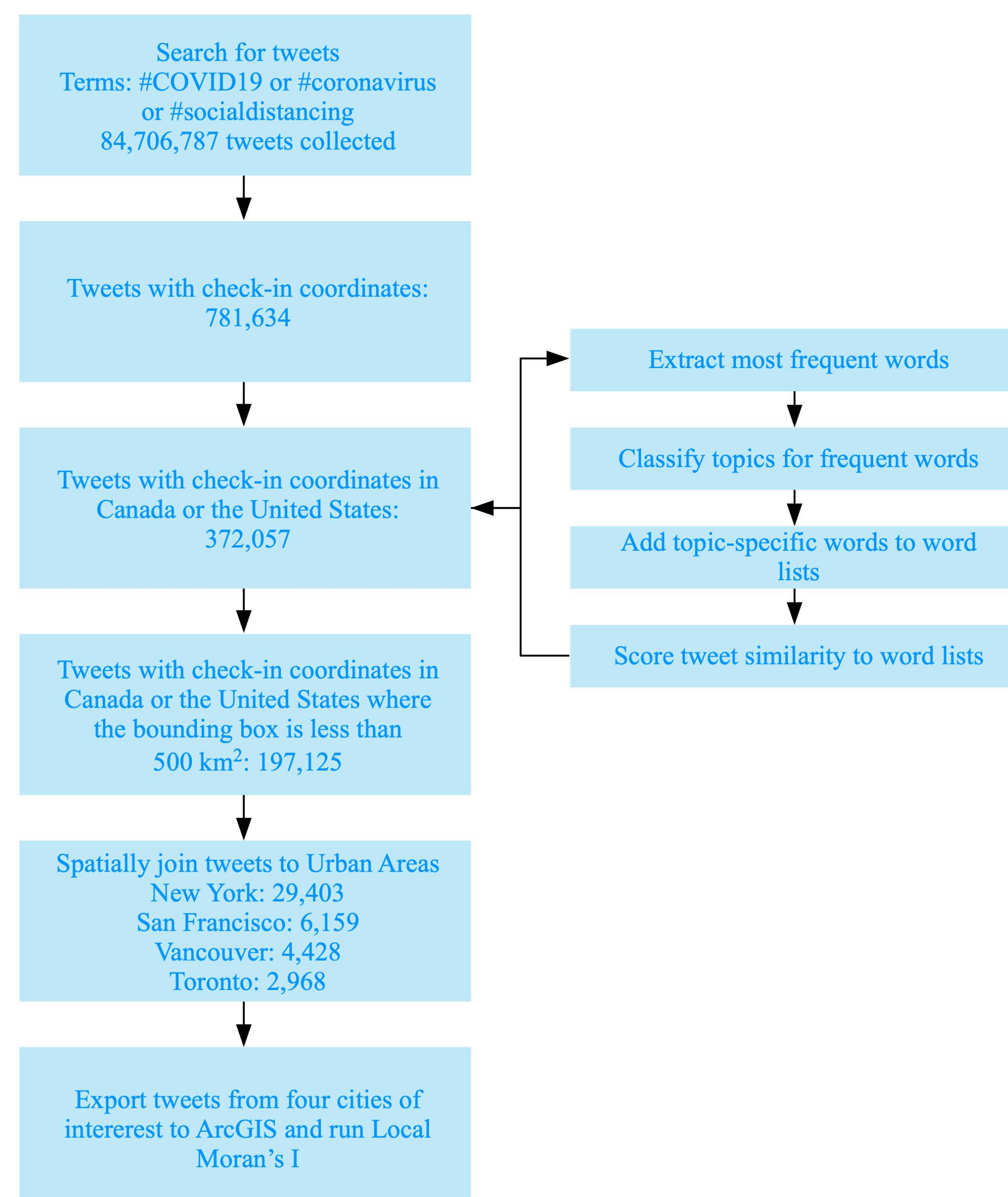
### DATA ASSEMBLY

- We collected nearly 85 million tweets about COVID-19.
- We geolocated tweets using their check-in location.
- Approximately 43,000 tweets were geolocated in New York, San Francisco, Toronto, and Vancouver which are used for this analysis.



### DATA ANALYSIS

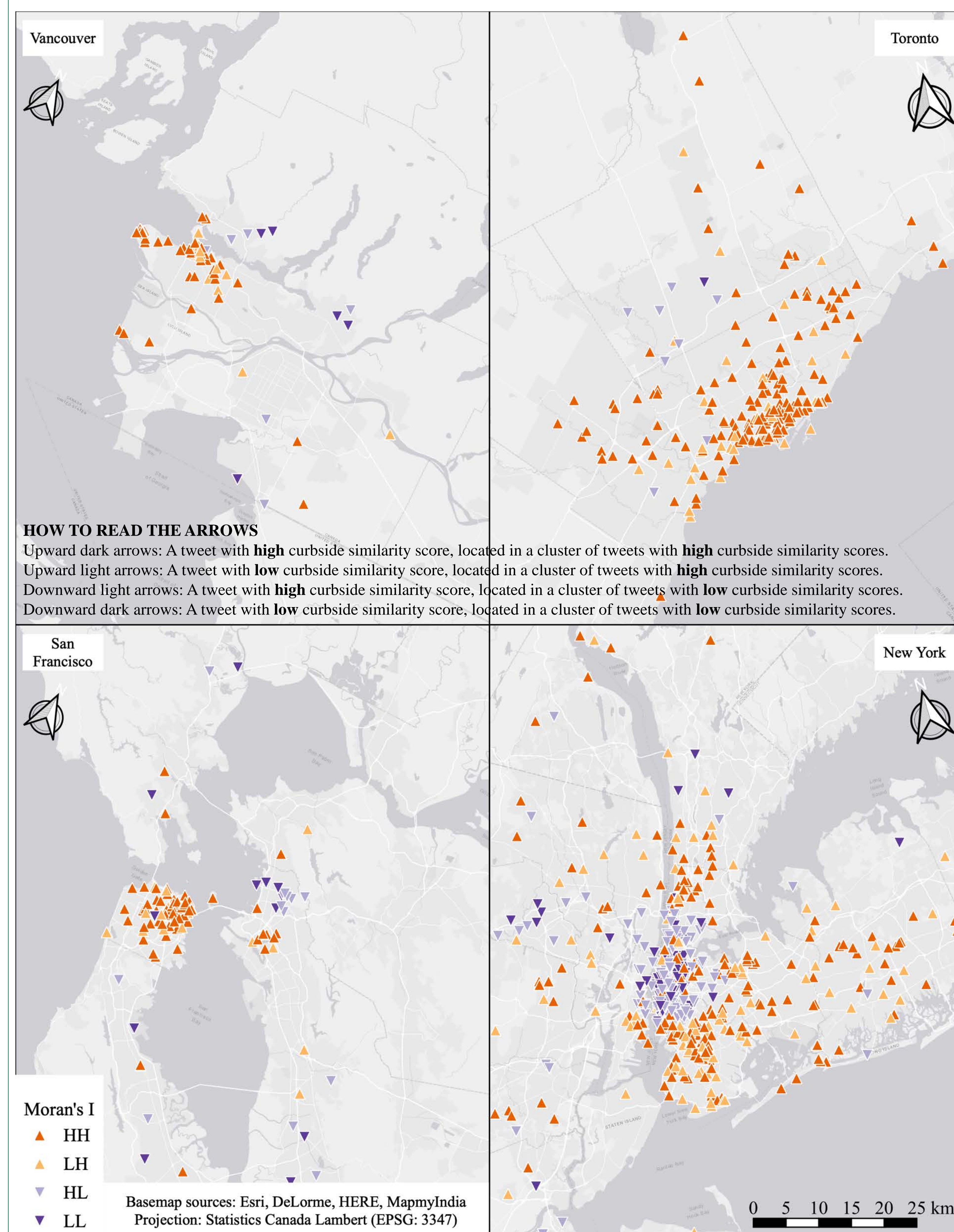
- We scored tweets based on their likelihood to contain text about the curbside.
- We also calculated spatial autocorrelation (Local Moran's I) of curbside similarity score for geolocated tweets.
- Finally, we conducted a qualitative assessment of what was being said in tweets that contained curbside content.



## Findings

### CONCENTRATION OF SIMILAR TWEETS ABOUT CURBSIDE

- Tweets with high curbside similarity scores tend to cluster in older, denser parts of the metropolis.
- Only Manhattan and the Bronx have large clusters of low curbside similarity scores.
- Number of tweets about the curbside decreases over time, similar to overall number of tweets about COVID-19 (see paper for further details).
- Toronto shows an increase in daily average curbside similarity score over time while average score decreases in Vancouver. Daily average curbside similarity scores are constant in New York and San Francisco.



### A SAMPLE OF OPINIONS FROM TWITTER USERS

Majority of curbside tweets were about curbside pickup:

- Happy #CincoDeDrinko from @NicksCrispyTaco ! Tacos so good, it's worth the risk of contracting #COVID19. Clearly this business was not ready to manage the curb side pickup and in-person orders. No one from restaurant was managing the line on sidewalk @PolkMerchants @AaronPeskin -San Francisco, CA*
- Our take away menu has everything for everyone including wine and beer to go with your meal. Place your order via phone and we'll have it ready for curbside pickup within 30 minutes #socialdistancing #stayhome... -Chappaqua, NY*

Space required for physical distancing was a concern:

- Great idea to give more space to people waiting in line to get into grocery stores or for restaurant pick up orders instead of using up limited sidewalk space that's too narrow to begin with. @hobokenalliance @HudsonChamPrez @RaviBhalla #solutions for #socialdistancing -Hoboken, NJ*
- This is why we are trying to get City officials @inAsburyParkNJ to open MORE space for #SocialDistancing and not close spaces down. Public space currently used for car storage can be space for people to recreate and for businesses to get going again. @amyquinn @zella725 - Ashbury Park, NJ*
- #onassignment #fox5news #coronavirus #nyc re-start Phase 2 - outdoor dining in the bike lane & parking lane so customers can socially distance. Some say it's a little crazy but restaurant owners say it's their only hope of staying in business. - Manhattan, NY*

Tweets showed different approaches used by cities for contested curbspace:

- We walked down 42nd St today, one of the streets #Oakland closed to cars so people can get out during the #COVID19 #ShelterInPlace & maintain #SocialDistancing. Very few folks taking advantage here, though. - Temescal District, CA*
- The @City\_of\_Vaughan is now offering curbside marriage licences to couples looking to tie the knot. While the global #COVID19 pandemic persists, licences will be issued by appointment only & available for curbside pickup at #Vaughan City Hall. Learn more: - Vaughan, ON*



Photo source: <https://usa.streetsblog.org/2020/05/21/covid-19-outdoor-dining-already-squeezing-walkers/>

## Discussion

### URBAN CORE

- Competition for curbspace is highest where densities are highest.
- Opinions are stronger where vehicles in the urban core are more common or in hyperactive locations e.g., downtown San Francisco.
- Concern about the curbside grew over time, likely as restrictions were eased and time spent away from home increased.

### REALLOCATION OF SPACE

- The past 100 years has seen street space given over to the automobile. The pandemic has brought competing demands and alternative visions of curbspace to the forefront.
- COVID-19 has shown that there are competing demands for a reimagined curbspace: pickup location, private dining patios, alternate mobility lanes, etc.

**Funding:** This research was funded by the University of Colorado Denver's College of Architecture and Planning.