

PEDESTRIAN VS. CAR

Where can traffic calming measures and the street pedestrianization have the highest impact in Riyadh?



Raised Intersection, Padova, IT



Pedestrianization, Times Square, NYC



Potential
Pedestrian Activity

Congestion



Potential
Pedestrian Activity



Congestion



Potential
Pedestrian Activity



Congestion



Potential
Pedestrian Activity

Twitter Data

50,000 tweets

from October 8th to December 17th,
2015



Potential Pedestrian Activity

a density map shows the number of tweets within a 300m search radius

Travel Time Index (TTI)

ratio of congested travel time to free travel time

1 = no congestion

1.2 = 20% increase in travel time

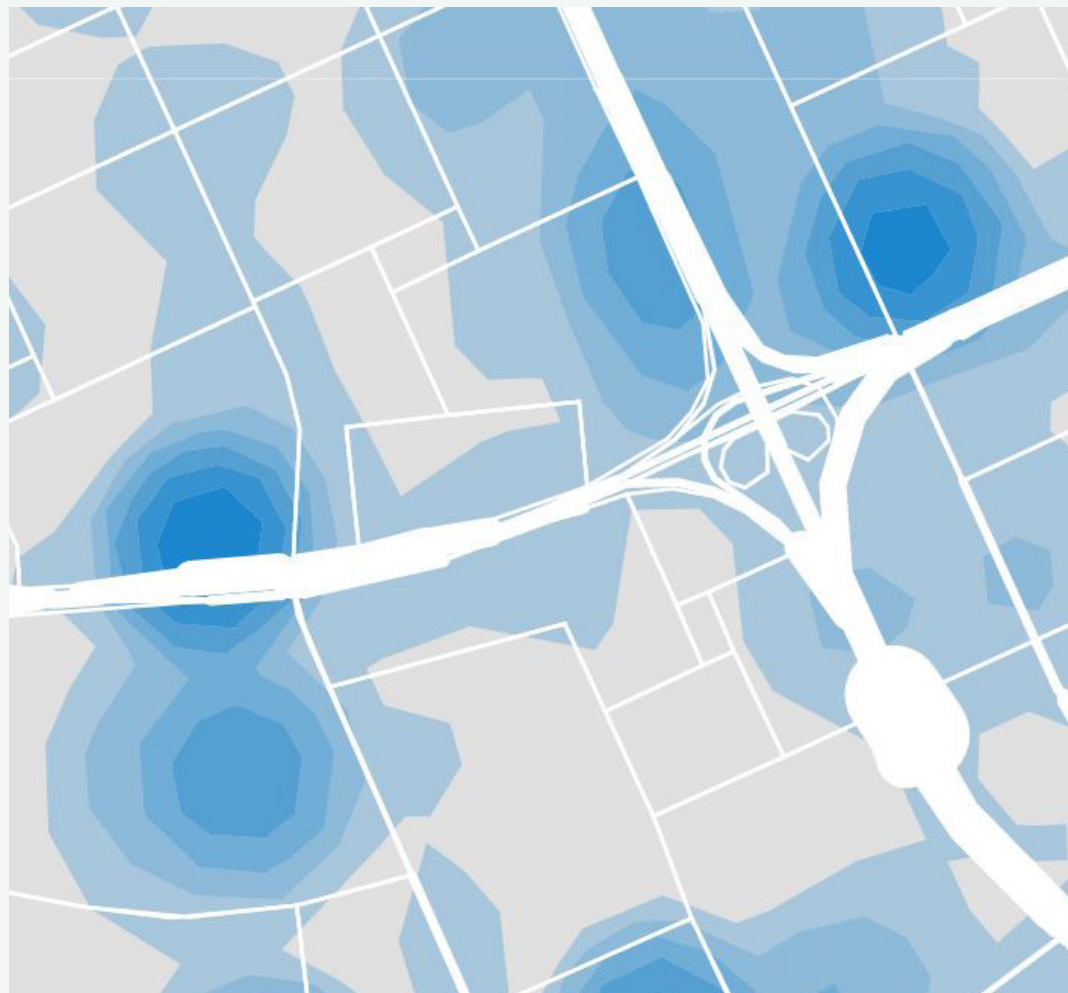


Congestion

A heat map shows the areas that
have the largest TTI



Congestion



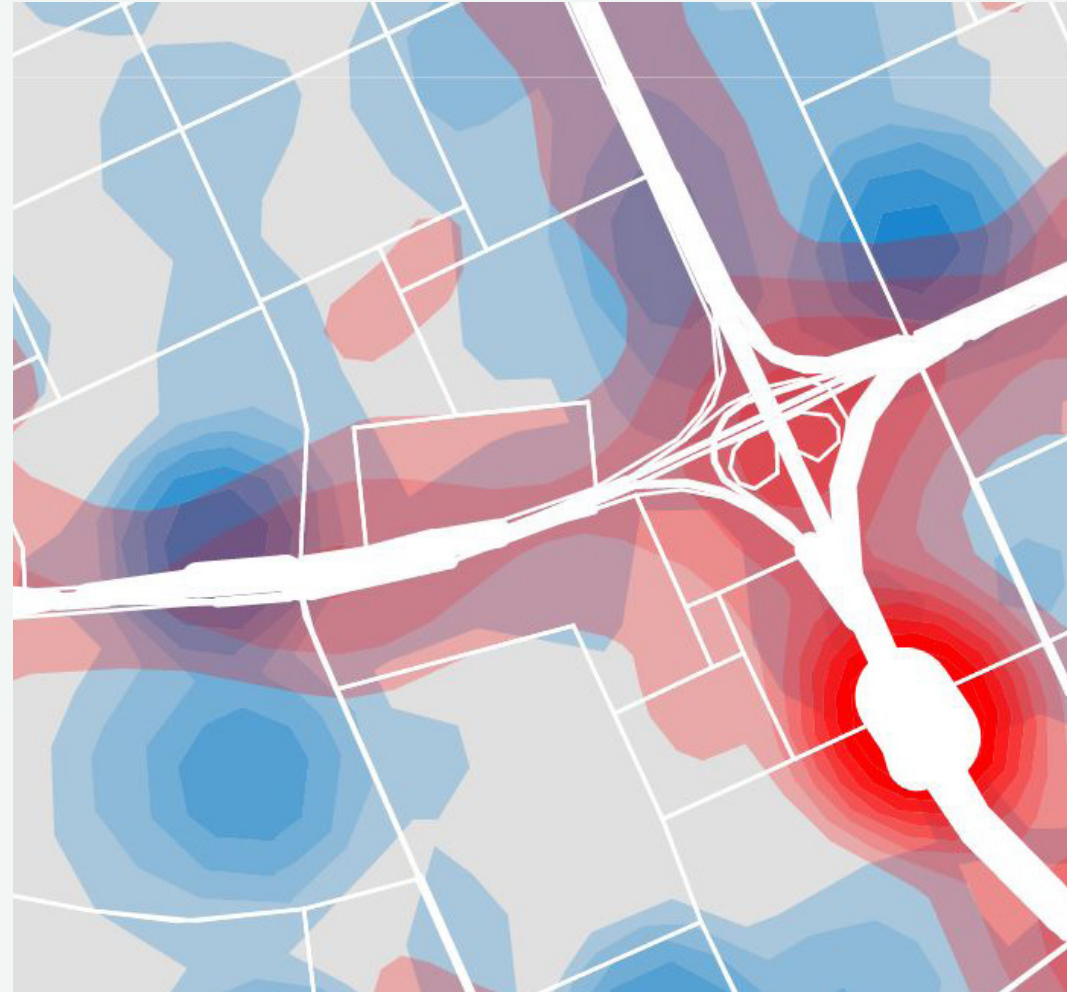
Potential
Pedestrian Activity



Congestion

Making the data more legible

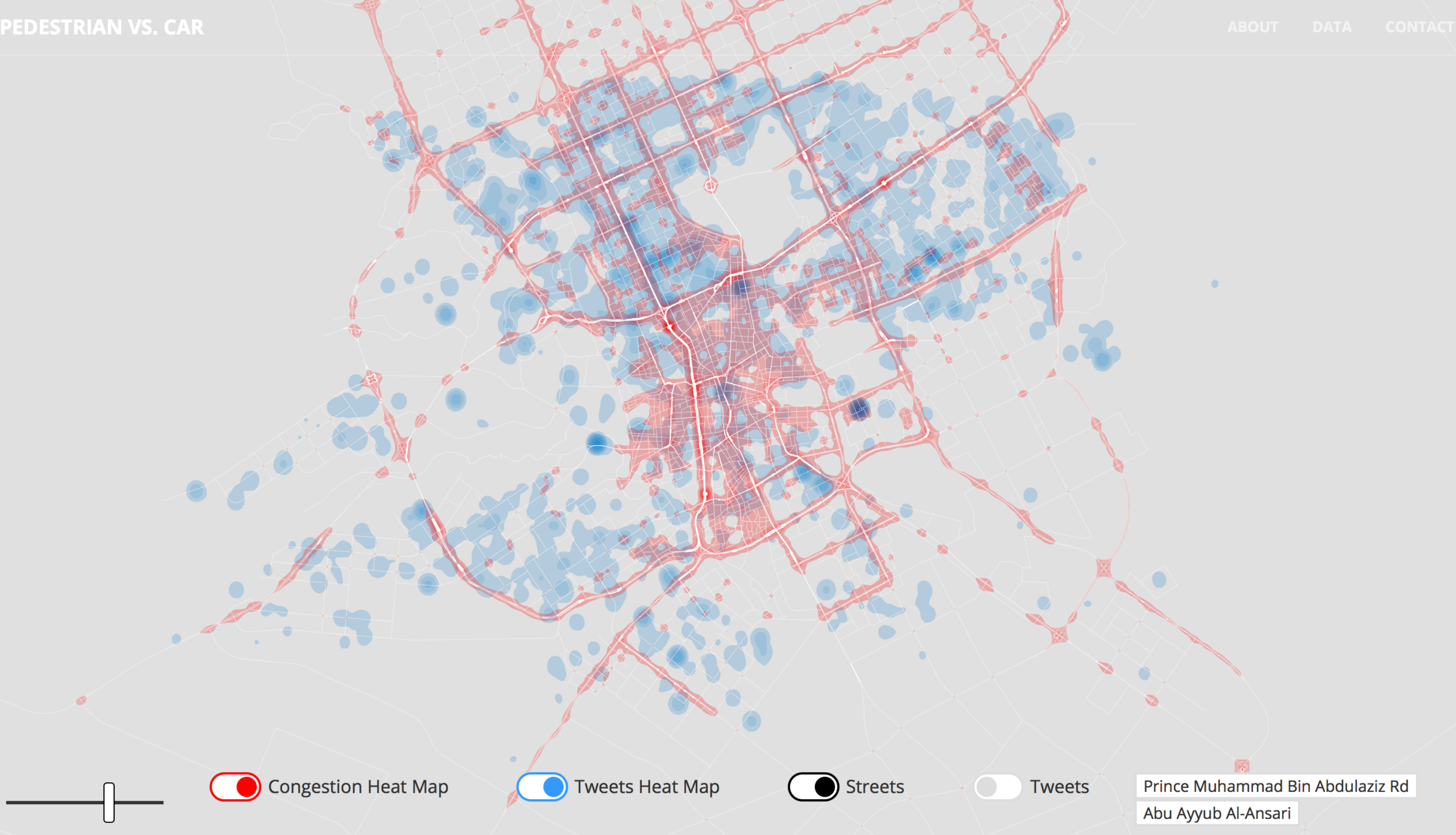
PEDESTRIAN VS. CAR



Composite Map

Overlaying the data

PEDESTRIAN VS. CAR



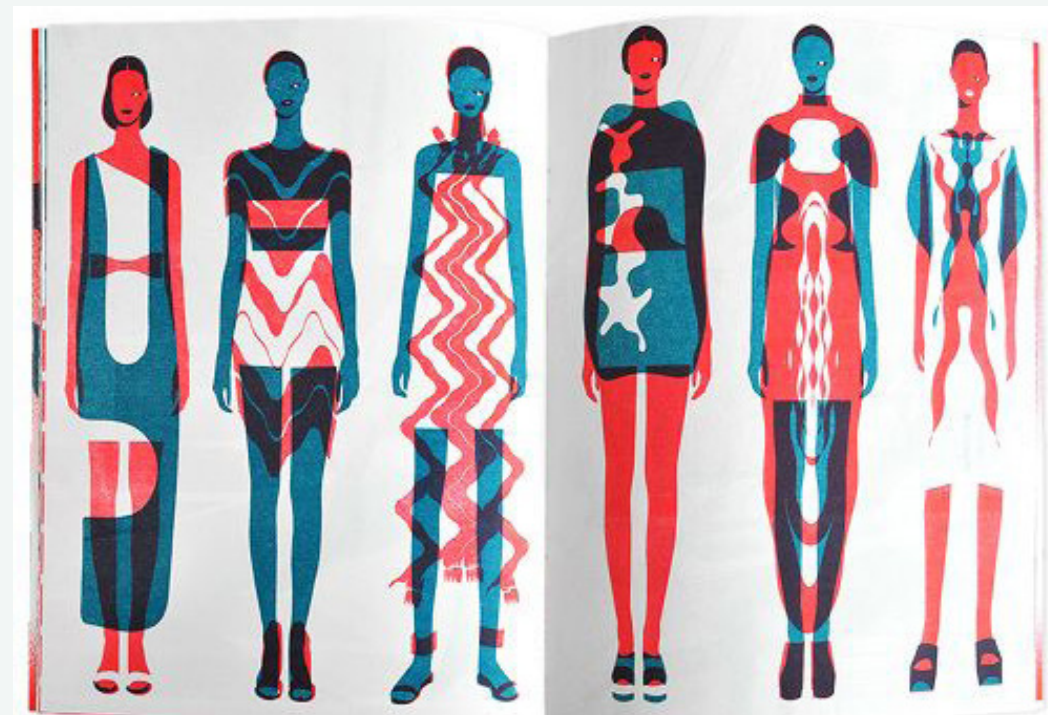
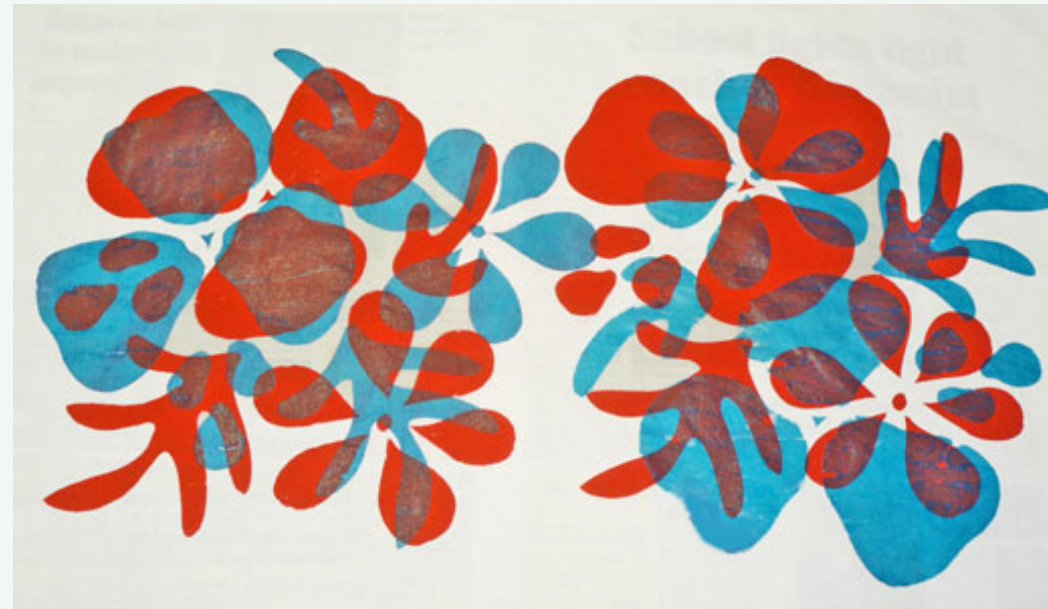
☒ Congestion Heat Map

☒ Tweets Heat Map

☒ Streets

☐ Tweets

Prince Muhammad Bin Abdulaziz Rd
Abu Ayyub Al-Ansari



Visual References

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Next Steps

- compare these results to on the ground observations to see if Twitter is a good proxy for social activity
- create a rating system for pedestrianization potential that can be applied to street segments