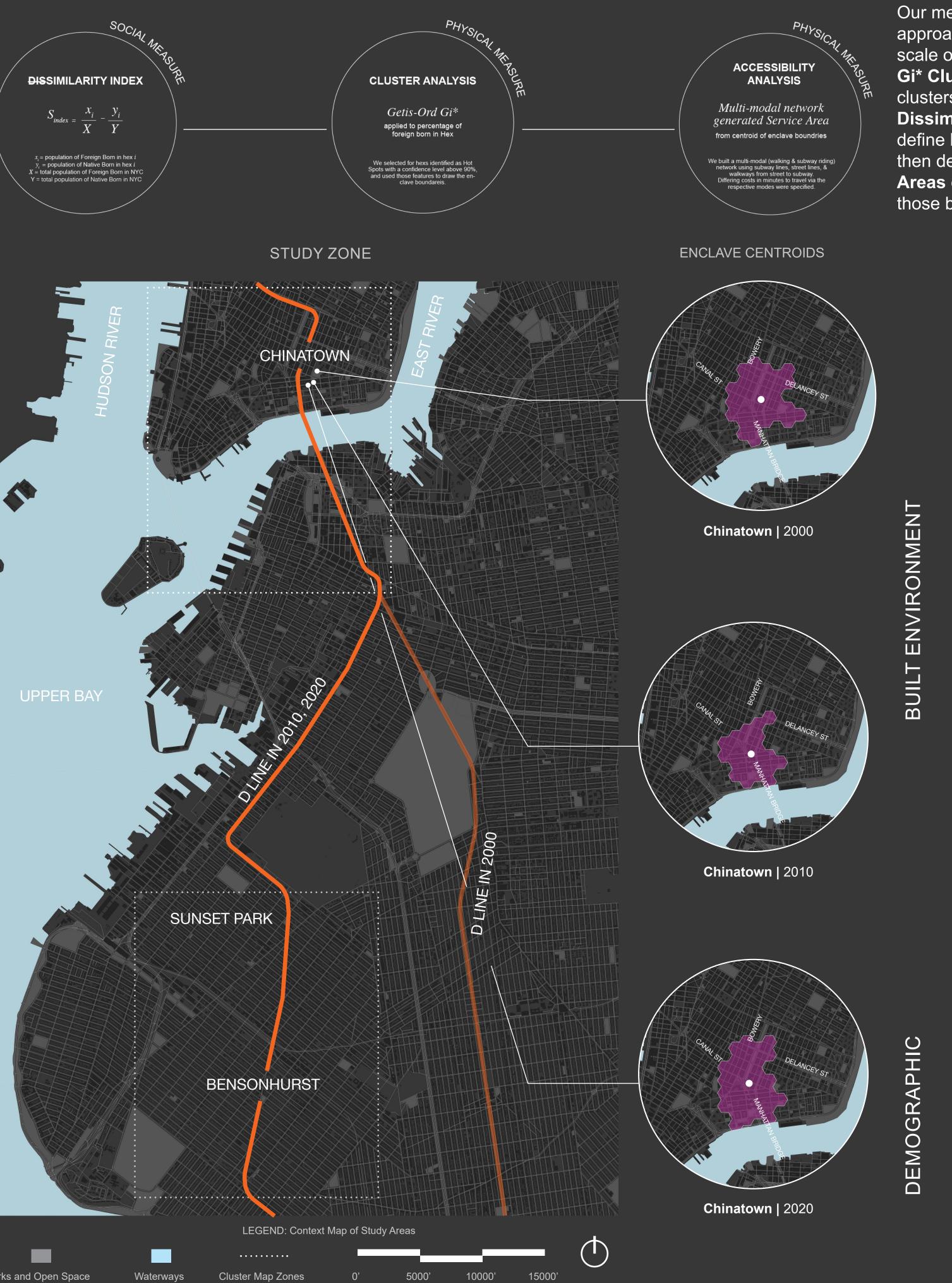
## TRANSIT AND ETHNIC ENCLAVES: CHINATOWN TO SOUTHERN BROOKLYN BY TRAIN

In February 2004, the MTA re-opened the north tracks of the Manhattan Bridge with new service patterns. This resulted in the ability to have a one-seat express ride from Chinatown in Manhattan to the Southern Brooklyn neighborhoods of Sunset Park, Bensonhurst, and Dyker Heights. In the decades since this service change, we have observed a fraying of the once-clustered Chinatown in Manhattan and the development of ethnic enclaves in Southern Brooklyn. Our study charts how this shift has affected a variety of metrics relevant to ethnic enclaves.

## CLUSTERS

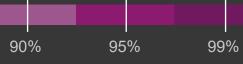


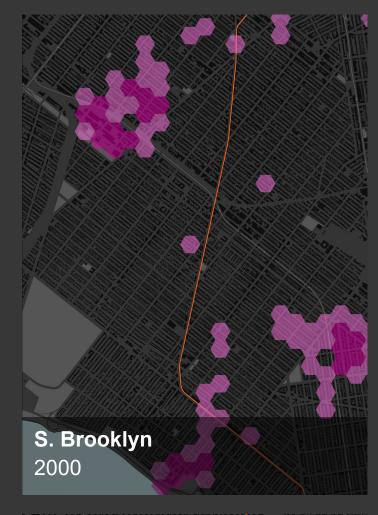


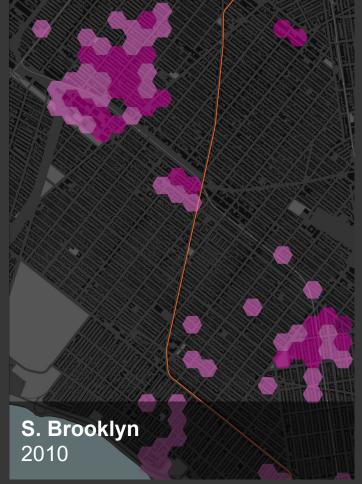


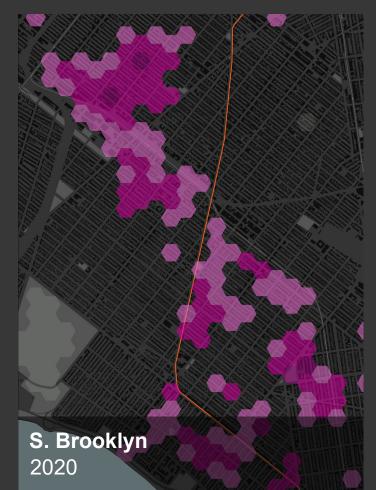
2020

LEGEND: Getis Ord Gi\* Confidence

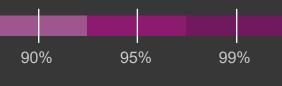


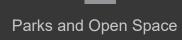






LEGEND: Getis Ord Gi\* Confidence





## SARAH ABDALLAH, EDDIE JOE ANTONIO, ZOE LIN SPRING 2023

Our methodology followed a three step approach: first, we identified clusters at the scale of New York City using Getis Ord Gi\* Clustering. We then compared these clusters more deeply by using **Duncan's Dissimilarity Index**, which helped us define boundaries for our enclaves. We then developed Multi-Modal Service Areas originating from the centroids of those boundaries for each study year.

The results, below right, paint a complicated picture on how various measurements of life in the city have affected the ethnic enclave near the foot of the Manhattan Bridge. The 20 years post-service changes are clearly servicing a greatly different Lower Manhattan, one with higher property values, greater connectivity to the city, and lower percentage of immigrant residents.

## METRICS

METRIC	2000	2010	2020
Property Value Arithmetic Average	\$0.85 million	\$1.43 million	\$2.65 million
Construction Permits Overall Count	345,050	542,116	757,746
Residential Units Percent Measure	87.3%	83.4%	86.0%
Mixed Commercial Percent Measure	15.8%	17.11%	20.1%
<b>Public Amenities</b> Density Measure 6	00 people	1324 people	375 people
<b>Connectivity</b> Size of Service Area	28.2 sq mi	26.3 sq mi	28.5 sq mi
Immigrant Residents Percentage Measure	26.9%	26.2%	24.9%
Non-English Speakers			
Percentage Measure	30.2%	28.5%	25.0%
Commute Length Arithmetic Average	34.0 mins	33.0 mins	36.1 mins