

## **Segregation and Health, I I:374:4XX**

*Tuesdays & Thursdays, 12:35-1:55pm*

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Semester Credit: 3  
Course type: Junior/senior seminar

### **Catalog description:**

This course examines the connection between two of the United States' most stark racial inequities: Black-White health disparities and Black-White residential segregation. "Segregation" conjures to mind a bygone era of "White Only" signs and legal discrimination. Although such laws no longer exist, racial residential segregation remains very much a part of the social structure in American cities. And because it shapes access to critical resources and opportunities, it has been described as the cornerstone upon which health disparities are built. Readings and data analysis from the social sciences, public health & medicine, and the media, will illuminate the history and consequences of persisting segregation.

### **Course objectives:**

It is widely recognized that health status is dependent on more than genetic makeup, medical care and individual behaviors. Broader aspects of social context are critical in determining health outcomes, and are therefore an important focus of scientific inquiry. If health disparities are to be remediated, future scientists, clinical practitioners, community activists, and policy makers will require a strong understanding of how disparities are perpetuated by social determinants of health such as residential segregation. In so doing, they will need to draw upon a variety of tools to uncover and present evidence to varied audiences.

Students who take the course will:

- Learn the current state of segregation across U.S. cities
- Learn the history, particularly policies and practices, that have led to current segregation levels
- Learn the current state of Black-White health disparities in the U.S.
- Learn to identify, extract and analyze varied data (e.g., U.S. census, BRFSS) related to segregation and health
- Learn to critically assess segregation and other social determinants of health status in the U.S. and potential solutions
- Use a variety of tools to analyze and present information (e.g., written reports, graphics, oral presentation, spatial data)

### **Course structure:**

Class time will rely on a mix of lectures, discussion, in-class exercises, and an emphasis on written assignments and exploration of quantitative data throughout. "Problem sets" will be designed to guide students' understanding of course material through applied exercises, and will draw upon the

social terrain of U.S. cities. Students must show the work that led to their solutions. A final group project will be cumulative, requiring students to synthesize the concepts, theories, and data with which they have engaged over the semester. The group project will be submitted as written reports, but students will also gain speaking skills by giving oral presentations on their projects.

### **Texts**

- Massey, D. S., & Denton, N. A. (1993). American Apartheid: Segregation and the Making of the Underclass. Cambridge: Harvard University Press.
- Sugrue T. (1996). The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit. Princeton, NJ: Princeton University Press.
- Hirsch, A.R. 1983. Making the second ghetto: race and housing in Chicago, 1940-1960. Cambridge: Cambridge University Press.

### **Proposed schedule:**

#### **PART I: THE TERRAIN OF RACIAL SEGREGATION**

#### **Week 1 (September 1): Introduction to class**

#### **Week 2 (September 6 & 8 ~~Monday classes~~): Segregation 1970 to 2000; quantitative indices, regional differences**

Massey & Denton, chapters 1-3

#### **Week 3 (September 13 & 15): Looking back: Segregation and suburbia in Post World-War II America**

Sugrue, chapters 1-4

#### **Week 4 (September 20 & 22): The 1960s: Urban renewal, Civil Rights Movement**

Documentary: *The Sprawling of America*. Watch at: <http://greatlakestv.org/documentary/index.php>.

Fullilove, M.F. (2004). *Root Shock: How Tearing Up City Neighborhoods Hurts America, and What We Can Do About It*. NY: One World.

#### **Week 5 (September 27 & 29): Policies and practices that perpetuate segregation.**

Hirsch, chapters 1-4

#### **PART II: RACIAL SEGREGATION AS A FUNDAMENTAL CAUSE OF HEALTH DISPARITIES**

#### **Week 6 (October 4 & 6): Current health disparities statistics; Conceptual framework-how segregation affects health**

American Cancer Society. (2008). *Breast Cancer Facts and Figures 2007-2008*. Atlanta: American Cancer Society.

American Heart Association. (2006). *Heart Disease, Stroke and African Americans*.

Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 36, 80-94.

Williams, D. R., & Collins, C. (2001). Racial residential segregation: A fundamental cause of racial disparities in health. *Public Health Reports*, 116, 404-416.

## **Week 7 (October 11 & 13): Socioeconomic position and opportunity structures;**

### **\*\*Midterm assessment**

- LaVeist, T. A. (2005). Disentangling race and socioeconomic status: A key to understanding health inequalities. *Journal of Urban Health*, 82(2, Supplement 3), iii26-iii34.
- Krieger, N., Williams, D. R., & Moss, N. E. (1997). Measuring social class in US public health research: Concepts, methodologies, and guidelines. *Annual Review of Public Health*, 18, 341-378.

## **Week 8 (October 18 & 20): Housing quality**

- Krieger, J., & Higgins, D.L. (2002). Housing and Health: Time Again for Public Health Action. *American Journal of Public Health*, 92 (5), 758-768.
- Northridge J, Ramirez OF, Stingone JA, Claudio L. (2010). The role of housing type and housing quality in urban children with asthma. *Journal of Urban Health*, 87(2):211-24.

## **Week 9 (October 25 & 27): Vice products (fast food, alcohol, tobacco)**

- Block, J., Scribner, R., & DeSalvo, K. (2004). Fast food, race/ethnicity, and income: A Geographic Analysis. *American Journal of Preventive Medicine*, 27(3), 211-217.
- Hackbarth, D., Silvestri B, & Cosper W. (1995). Tobacco and alcohol billboards in 50 Chicago neighborhoods: Market segmentation to sell dangerous products to the poor. *Journal of Public Health Policy*, 16, 213-230.
- Kwate, N. O. A. (2008). Fried chicken and fresh apples: Racial segregation as a fundamental cause of fast food density in Black neighborhoods. *Health & Place*, 14(1), 32-44.
- Kwate, N. O. A., & Meyer, I. H. (2009). Association between residential exposure to outdoor alcohol advertising and problem drinking among African American women in New York City. *American Journal of Public Health*, 99(2), 228-230.
- LaVeist, T. A., & Wallace, J. M. (2000). Health risk and inequitable distribution of liquor stores in African American neighborhood. *Social Science & Medicine*, 51, 613-617.
- Lochlan Jain, S. S. (2003). "Come up to the Kool taste": African American upward mobility and the semiotics of smoking methods. *Public Culture*, 15, 295-322.

## **Week 10 (November 1 & 3): Criminal justice**

- Pager, D. (2003). The mark of a criminal record. *American Journal of Sociology*, 5, 937-975.
- Pettit, B., & Western, B. (2004). Mass Imprisonment and the Life Course: Race and Class Inequality in U.S. Incarceration. *American Sociological Review*, 69:151-69.
- Schnittker, J., Massoglia, M., & Uggen, C. (2011). Incarceration and the health of the African American community. *DuBois Review*, 8(1), 1-9.

## **Week 11 (November 8 & 11): Health care**

- Smedley, B. D., Stith, A. Y., & Nelson, A. R. (Eds.). (2003). *Unequal treatment: Confronting Racial and Ethnic Disparities in Health*. Washington, DC: National Academies Press.

## **PART III: CHANGING THE TERRAIN OF SEGREGATION & HEALTH**

## **Week 12 (November 15 & 17): Moving to Opportunity**

- National Bureau of Economic Research. A Summary Overview of Moving to Opportunity: A

Random Assignment Housing Mobility Study in Five U.S. Cities

Duncan, G.J., & Zuberi, A. (2006). Mobility Lessons from Gautreaux and Moving to Opportunity. *Northwestern Journal of Law and Social Policy*, 1(1): 110-126.

Leventhal, T., & Brooks-Gunn, J. (2003). Moving to Opportunity: An experimental study of neighborhood effects on mental health. *American Journal of Public Health*. 93(9): 1576-82.

**Week 13 (November 22 & ~~24~~ Thanksgiving): Gentrification**

Selections from:

Lees, L., Slater, T., & Wyly, E. (2007). Gentrification. New York: Routledge

Taylor, M. (2002). Harlem Between Heaven and Hell. University of Minnesota Press.

**Week 14 (November 29 & Dec 1): Public health and the remediation of health disparities**

Robert Wood Johnson Foundation, Commission to Build a Healthier America. (2009). Beyond Health Care: New Directions to a Healthier America.

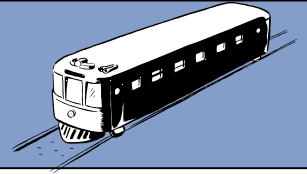
PART IV: SYNTHESIS

**Week 15 (December 6 & 8): Group project presentations**

**Week 16 (December 13): Group project presentations**

**Segregation and Health, 11:374:xxx**  
**Prof. Kwate**

**Problem Set—Due xxx**  
**Quantifying segregation**



I. Attached is a table showing the population characteristics for Cookville, a small Midwestern city with a history of high segregation levels across its 31 neighborhoods. You are preparing an Op-Ed on segregation in the U.S. when you learn that Cookville is boasting about the city's low segregation levels—particularly in comparison to other neighboring cities such as Chicago and Detroit. Are the town boosters warranted in their claims?

A. Calculate the Black-White dissimilarity index (D) for the city.

$$D = .5 \sum_{i=1}^N |(b_i/B) - (w_i/W)|$$

where  $b_i$  = the Black population of the  $i^{\text{th}}$  areal unit (e.g., in this case, neighborhood);  $B$  = the total Black population of the large geographic entity for which the dissimilarity index is being calculated (the city);  $w_i$  = the White population of the  $i^{\text{th}}$  areal unit; and  $W$  = the total White population of the large geographic entity for which the dissimilarity index is being calculated.

Show your work—present the values you are using for each neighborhood in addition to the total index.

B. Next, explain what this D value means.

C. Calculate the isolation index (P) for Black residents in the city.

$$P = \sum_{i=1}^N |(b_i/B) - (b_i/t_i)|$$

where the values are as previously defined, and  $t_i$  = the total population of the  $i^{\text{th}}$  areal unit. Again, show all work.

D. What does this P value mean?

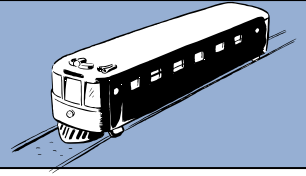
E. Are the values the same? If not, why might that be?

F. As per above, are the Cookville segregation levels lower than those of its Midwestern neighbors? If so, should the Cookville administration be proud of its segregation levels?

Neighborhood	Total Population	White	Black
1	2125	1101	415
2	5091	3574	617
3	2568	1213	620
4	3175	1195	1227
5	1192	140	671
6	2444	552	1410
7	4659	1458	2224
8	5617	983	3575
9	3843	147	2864
10	3820	53	3364
11	3928	73	3320
12	3996	106	3146
13	781	15	482
14	3734	8	3263
15	1593	4	1292
16	2650	14	2392
17	4782	37	4263
18	5371	30	4780
19	3673	23	3313
20	3579	56	3086
21	3850	670	2811
22	4541	23	4016
23	2779	40	2484
24	5434	46	4791
25	2529	15	2191
26	3140	11	2754
27	5572	105	4733
28	5052	660	3596
29	5558	576	4160
30	2295	8	1893
31	5257	36	4419

**Segregation and Health, 11:374:xxx**  
**Prof. Kwate**

**Problem Set—Due xxx**  
**Fundamental Causes**



**I. The absent-minded supervisor**

You're busy working at your desk at the New York City Department of Health (DOH) when one of your supervisors returns from an urban inequality task force meeting. He tells you that he received the attached Excel table at the meeting, but now he can't remember what it was supposed to illustrate. He asks you to look over the data and write a brief (1/2 page, double-spaced) analysis explaining what the data might show. He also asks you to make sure to refer to specific data points and variables in the table to support your assertions.

**II. Subways, straphangers and social determinants of health**

Just when you finish up the task in I. and can finally return to your own work, another supervisor comes back from another meeting, this time on health disparities, and she is clearly animated by whatever took place there. She smacks down the attached documents (Straphangers 6, Straphangers C) about the subway on your desk, and exclaims, "See! *That's* why we have health disparities in this town." Before you can ask what she's talking about, she tells you she needs a brief write-up describing why the documents reveal the underlying causes of racial health disparities, to be included in a DOH report. She also notes that you should refer to the demographics of the subway ridership to support your analysis, and to obtain that data from the NYC Dept. of City Planning/Reference/Census fact finder.

A. Write a 1 page analysis (double-spaced). Refer to theories/concepts from the literature you read on fundamental causes of health.



Census tract	Population 1990	White population '90	Black population '90	% aged 18-24 '90	Population 2000	White population '00	Black population '00	% aged 18-24 '00	Median Household Income
BK 385	454	5	431	12.6	578	31	485	10.03	24,999
BK 116	289	11	242	11.8	506	34	343	13.4	31,874
MN 201	584	12	559	14.7	842	49	664	10.6	14,069
MN 220	680	23	567	6.9	1456	59	1207	8.7	20,271
MN 224	702	11	679	9.8	978	22	866	8.8	23,456

White MHI   Black MHI   %Black '00   %White '00   %Black '90   %White '90

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87,499	23,905	84	5	95	1
67,499	28,749	68	7	84	4
134,999	13,951	79	6	96	2
229,999	20,639	83	4	83	3
62,044	22,633	89	2	97	2

# Straphangers Campaign

## C SUBWAY LINE PROFILE



**Straphangers Campaign MetroCard Rating 80¢**

The C line ranks tied for 18th place out of the 21 subway lines rated by the Straphangers Campaign. Our ranking is based on the MTA New York City Transit data below, using a method described at [www.straphangers.org](http://www.straphangers.org).

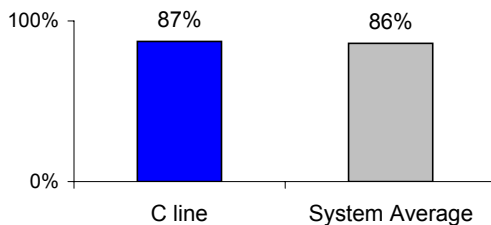
### The C line has a below-average amount of daytime service and doesn't run at night.

scheduled minutes between weekday trains  
as of December 2007

	AM Rush	Noon	PM Rush	Overnight
<b>C line</b>	<b>9:15</b>	<b>10</b>	<b>10</b>	<b>-</b>
<b>System Average</b>	<b>5:33</b>	<b>8:20</b>	<b>5:45</b>	<b>20</b>

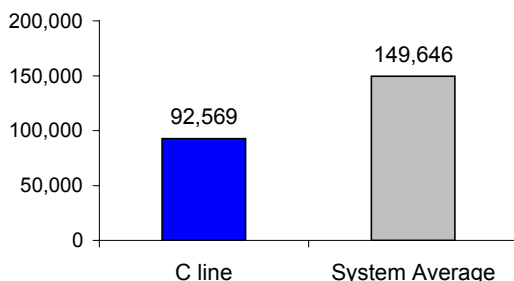
### The C line arrives with above-average regularity...

% of trains arriving at regular intervals (without gaps in service or train "bunching") between 6 am and 9 pm



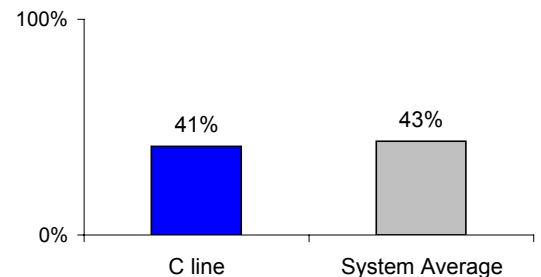
### but its cars break down much more often than those on the average line.

average miles traveled between delays caused by mechanical failures, 2007



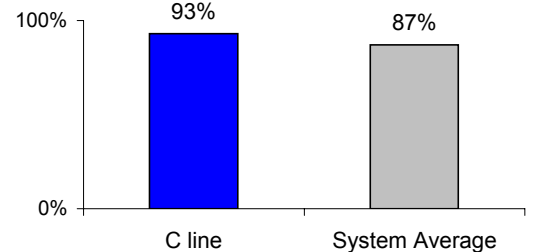
### You're less likely to get a seat on the C.

% of passengers with seats at most crowded point during rush hour



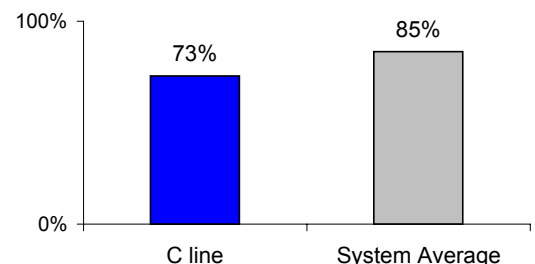
### The C line is cleaner than average...

% of cars with 'light or no interior dirtiness' as defined by NYC Transit



### but performs below average on in-car announcements.

% of cars with correct announcements as defined by NYC Transit



**Suggestions? Questions? Complaints? Call (718) 927-8511**

# Straphangers Campaign

## 6 SUBWAY LINE PROFILE



**Straphangers Campaign MetroCard Rating \$1.20**

The 6 line ranks tied for 4th place out of the 21 subway lines rated by the Straphangers Campaign. Our ranking is based on the MTA New York City Transit data below, using a method described at [www.straphangers.org](http://www.straphangers.org).

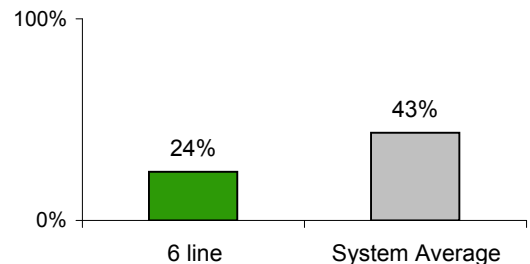
### The 6 line has more service than any other line in the system.

scheduled minutes between weekday trains as of December 2007

	AM Rush	Noon	PM Rush	Overnight
<b>6 line</b>	<b>2:30</b>	<b>4</b>	<b>2:30</b>	<b>20</b>
<b>System Average</b>	<b>5:33</b>	<b>8:20</b>	<b>5:45</b>	<b>20</b>

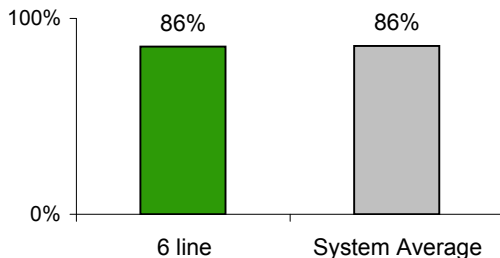
### You're much less likely to get a seat on the 6 line

% of passengers with seats at most crowded point during rush hour



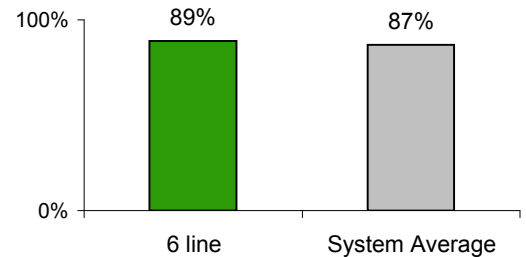
### The 6 line arrives with average regularity...

% of trains arriving at regular intervals (without gaps in service or train "bunching") between 6 am and 9 pm



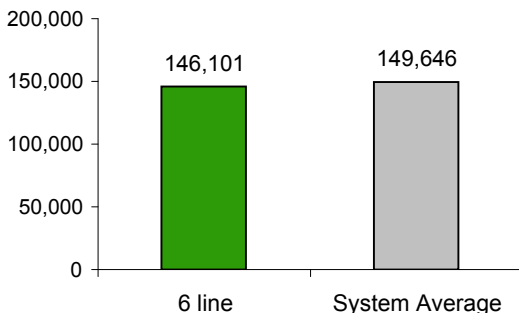
### The 6 line is cleaner than average..

% of cars with 'light or no interior dirtiness' as defined by NYC Transit



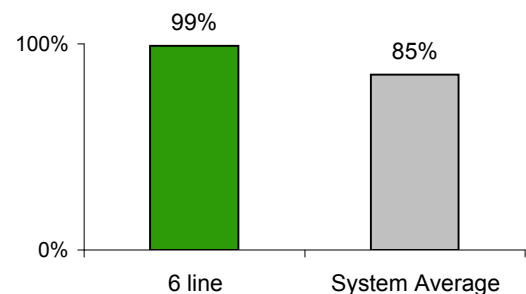
### but its cars break down more often than those on the average line

average miles traveled between delays caused by mechanical failures, 2007



### and performs near perfect on in-car announcements.

% of cars with correct announcements as defined by NYC Transit



**Suggestions? Questions? Complaints? Call (212) 424-5363**

**Segregation and Health, 11:374:xxx**  
**Prof. Kwate**

**Problem Set—Due xxx**  
**Housing Quality**



**I. Housing Affordability**

The Hopper family (2 parents, 2 children) is looking for a new apartment. The parents *each* earn slightly more than minimum wage—a gross yearly income of \$15,000 (\$7.50/hr x 40 hrs/week x 52 weeks). Common convention for calculating how much housing a household can afford is to calculate 30% of the gross household income.

- A. By the standard metric, how much can the Hoppers afford to pay in rent per month?
- B.
  1. Try and find a 2BR apartment on Cragislist (<http://newyork.craigslist.org/>, and select “apts/housing”) within the 5 boroughs of NYC for this amount. If you find one, attach the printout for the one you would choose if you were head of the Hopper household.
  2. Evaluate the apartment listing—if you were the Hoppers, how would you feel about this ad and the potential for the apartment it describes to be tenable housing for your family?
- C.
  1. If you can’t find a 2BR, simply attach a printout of whatever housing accommodations you can get for this price.
  2. Again, evaluate the listing.

The residual income approach does not take a simple proportion of gross income to calculate housing affordability. Instead, it recognizes that housing is the largest and least flexible claim on after-tax income. So, a household has an affordability problem if it can’t meet its non-housing needs at some basic level of adequacy after paying for housing.

- D. With this in mind, calculate how much the Hoppers will have left per month for non-housing needs if they spend 30% of their gross income on rent.

The Economic Policy Institute (EPI) has argued that the federal poverty line is not sufficient to support most working families. Additionally, because the cost of goods and services vary across the U.S., so too should the guidelines—one standard for the whole country will not do. The institute estimates that a very basic budget—one that only covers enough to feed, shelter and clothe the household, get the members to work and school, and really, simply to exist in 21<sup>st</sup> century America—would comprise the list below.

This very basic subsistence budget does not include savings, leisure, emergency funds, insurance, etc.

EPI monthly budget for a 2 parent, two child household in NYC, 2007

Food = \$643

Child care = \$1,372

Transportation = \$401

Health care = \$547

Other necessities = \$471

Taxes = \$977

- E. 1. Using this budget to operationalize monthly non-housing costs in the residual income approach, how much would the Hoppers have to earn (gross) in income to be able to afford the rent value you calculated in (A)?
2. Is this value comparable to the income they actually earn with minimum wage?