

# ***What Makes Us Sick:***

## Getting Real about Social Determinants of Health

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*President Emeritus and Senior Fellow  
Institute for Healthcare Improvement*



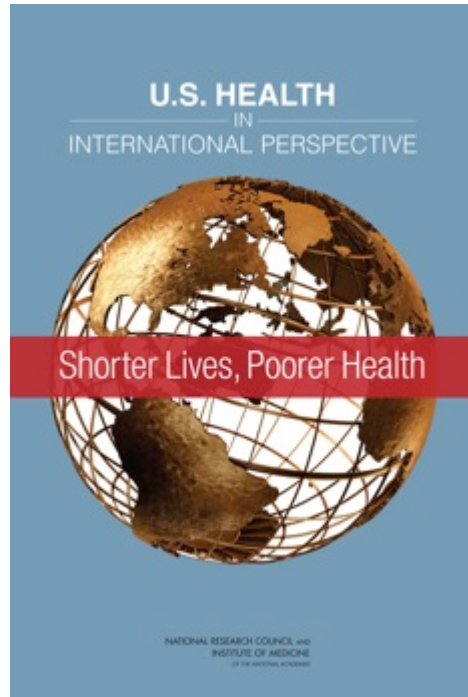
October 11, 2019



**Sir Michael Marmot**



# The US: Behind Many Other Nations



## ***Shorter Lives, Poorer Health:***

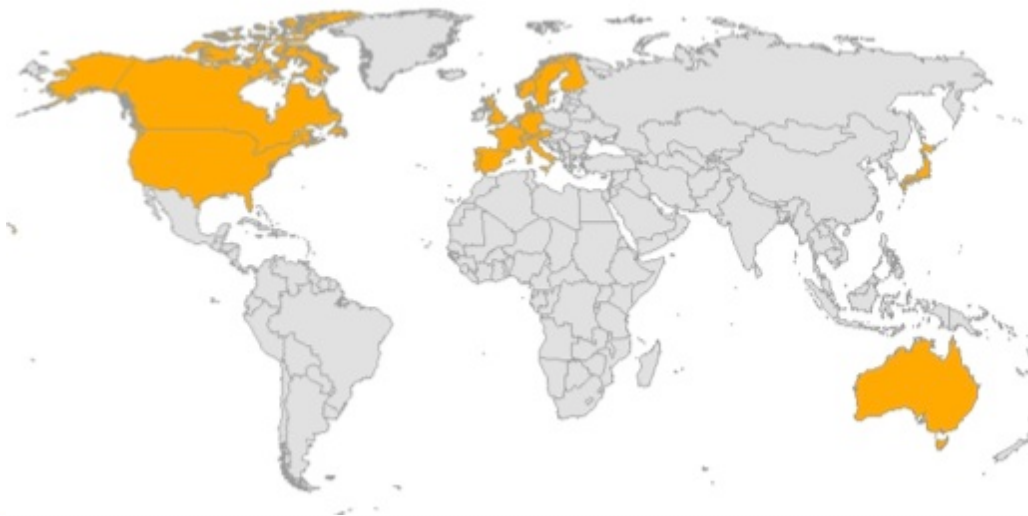
**US Health in  
International  
Perspective**

-- IOM, 2013

# 17 Peer Comparison Countries

- Australia
- Austria
- Canada
- Denmark
- Finland
- France
- Germany
- Italy
- Japan
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- The Netherlands
- United Kingdom
- United States

***US: Shorter Lives,  
Poorer Health***



# Life Expectancy at Birth, 2007

Males			Females		
Country	LE	Rank	Country	LE	Rank
Switzerland	79.33	1	Japan	85.98	1
Australia	79.27	2	France	84.43	2
Japan	79.20	3	Switzerland	84.09	3
Sweden	78.92	4	Italy	84.09	3
Italy	78.82	5	Spain	84.03	5
Canada	78.35	6	Australia	83.78	6
Norway	78.25	7	Canada	82.95	7
Netherlands	78.01	8	Sweden	82.95	7
Spain	77.62	9	Austria	82.86	9
United Kingdom	77.43	10	Finland	82.86	9
France	77.41	11	Norway	82.68	11
Austria	77.33	12	Germany	82.44	12
Germany	77.11	13	Netherlands	82.31	13
Denmark	76.13	14	Portugal	82.19	14
Portugal	75.87	15	United Kingdom	81.68	15
Finland	75.86	16	United States	80.78	16
United States	75.64	17	Denmark	80.53	17

# Life Expectancy and the London Tube





# Life Span and Life Circumstances

**Life Expectancy**  
 **$\Delta$  10 years**

**Loss of Life:**  
**6 Months/Minute**  
**2.3 Years/Mile**



*“6 months for every minute on the subway;  
3.2 years for every mile travelled.”*





# BMJ Open The effect of statins on average survival in randomised trials, an analysis of end point postponement

Malene Lopez Kristensen,<sup>1</sup> Palle Mark Christensen,<sup>1</sup> J. Hallas

To cite: Kristensen ML, Christensen PM, Hallas J. The effect of statins on average survival in randomised trials, an analysis of end point postponement. *BMJ Open* 2015;5:e006888.

## ABSTRACT

**The effects of statins on average survival....**  
“Death was postponed between -5 and 19 days in primary prevention trials and between -10 and 27 days in secondary prevention trials.”



CrossMark

<sup>1</sup>Department of Clinical Pharmacology, University of

**M. Kristensen, P. Christensen, J. Hallas;  
BMJ 2015; 5:**



# 20 Days of Your Lifespan Equals:



**Taking Statins for  
20 Years**



**Riding the D Train  
for 7 Seconds**



**Riding the Glasgow  
Bus for 43 Feet**

“Social Determinants of Health”

*What does that mean?*



# Conditions of Daily Life That Matter

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## 1. Early Childhood



# ACE Questionnaire Sample

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- While you were growing up, during the first 18 years of your life, how true were each of the following statements? (1 = never true to 5 = always true)
  - You didn't have enough to eat?
  - You knew there was someone to take care of you and protect you?
  - Your parents were too high or drunk to take care of the family?
  - There was someone in your family who made you feel important or special?



# ACES can have lasting effects on....



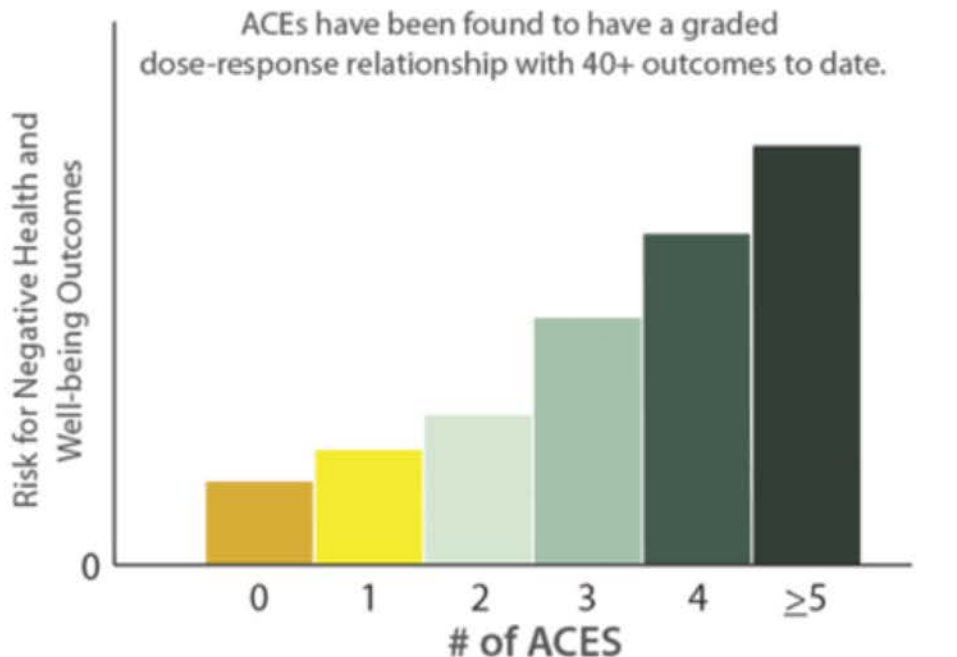
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)



Life Potential (graduation rates, academic achievement, lost time from work)



\*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.



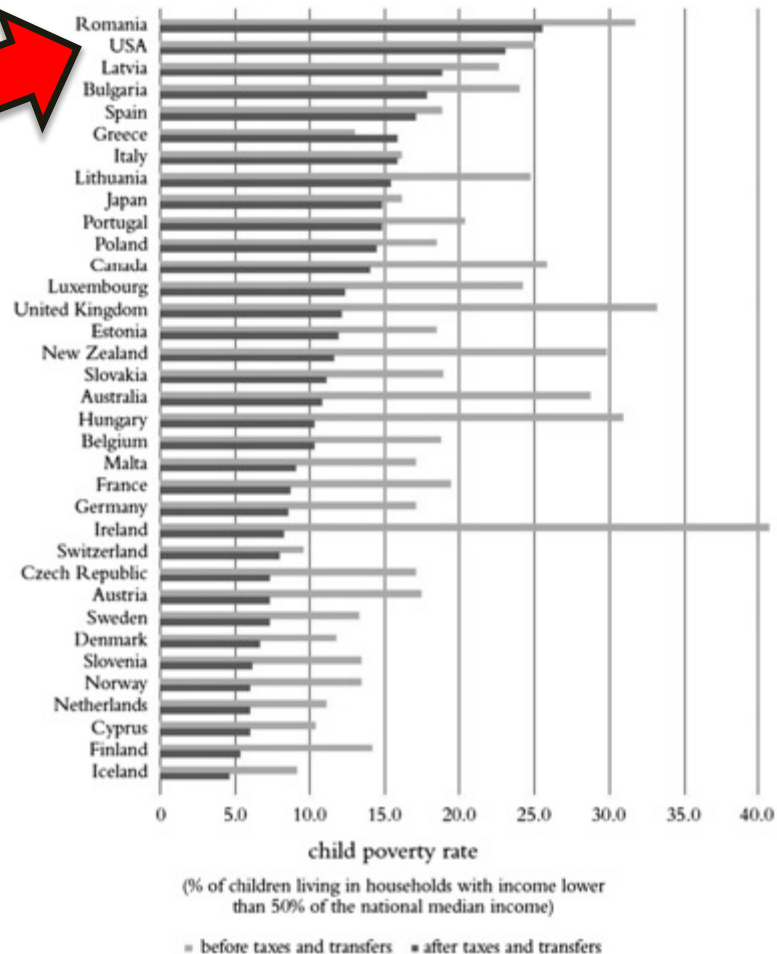
**Child Well-Being  
in the USA ...  
Ranked Last  
among 20  
Nations**

Rank	Late 2000s
1	Netherlands
2	Norway
3	Finland
4	Sweden
5	Germany
6	Denmark
7	Belgium
8=	France
8=	Ireland
8=	Switzerland
11	Portugal
12	Poland
13	Czech Republic
14=	Canada
14=	Italy
16	United Kingdom
17	Austria
18=	Greece
18=	Hungary
18=	Spain
21	United States





# Child Poverty Rate in the USA ... 2<sup>nd</sup> Highest of 35 Nations



# Conditions of Daily Life That Matter

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1. Early Childhood
2. Education



# Life Expectancy at Birth for Men and Women in the US, 2008

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Years of education	White women	Black women	White men	Black men
<12	73	73	67	66
12	78	74	72	68
13-15	82	80	79	74
16+	83	81	81	75

# Conditions of Daily Life That Matter

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1. Early Childhood
2. Education
3. The Conditions of Work



*“A minimum income includes not just what is necessary for food and shelter, but what is required to live a life of dignity and to take one’s place in society.”*

- Dr. Jerry Morris



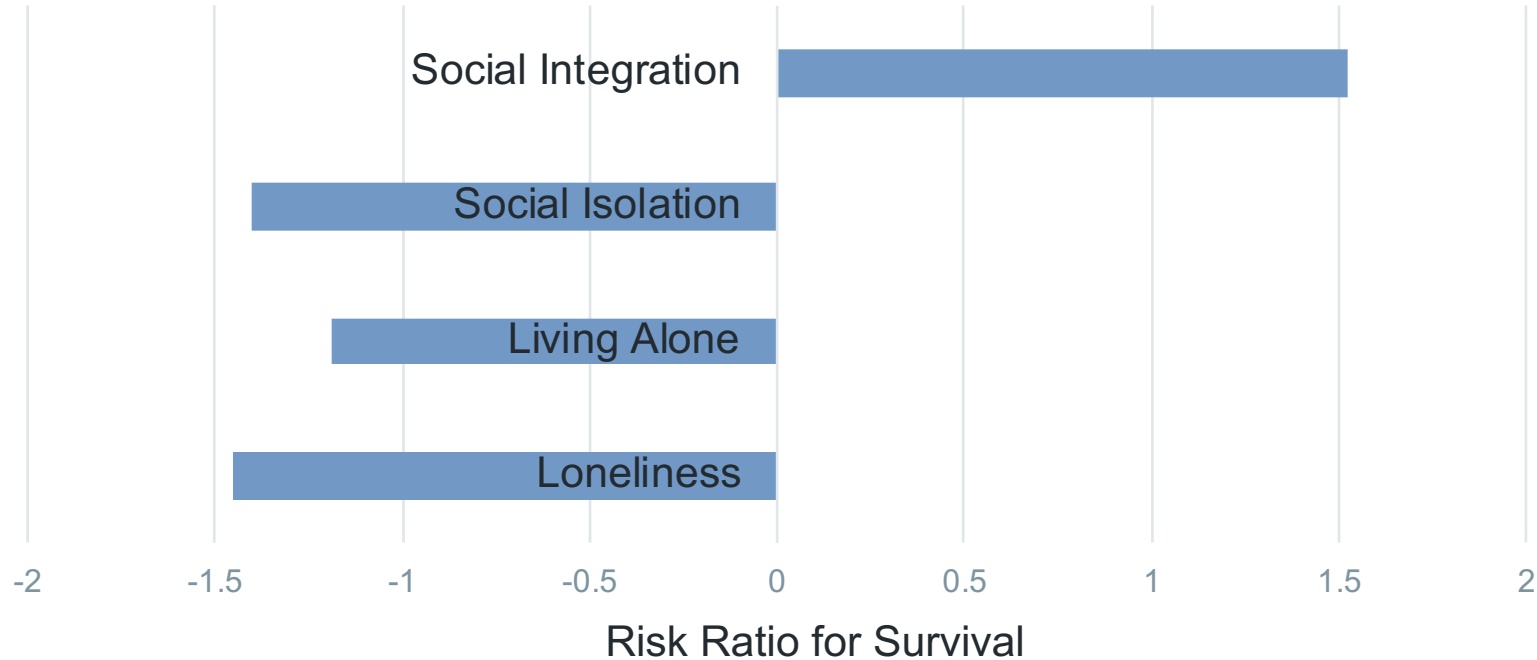
# Conditions of Daily Life That Matter

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1. Early Childhood
2. Education
3. The Conditions of Work
4. Aging



# Social Engagement and Lifespan





# Clinical Effects of Loneliness

- CHD +29%
- STROKE +32%

ORIGINAL ARTICLE

## Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies

Nicole K Valtorta,<sup>1</sup> Mona Kanaan,<sup>2</sup> Simon Gilbody,<sup>3</sup> Sara Ronzi,<sup>4</sup> Barbara Hanratty<sup>5</sup>

***“Poor social relationships were associated with a 29% increase in risk of incident CHD (pooled relative risk: 1.29, 95% CI 1.04 to 1.59) and a 32% increase in risk of stroke”***

Heart 2016;  
102:1009-1016



# Conditions of Daily Life That Matter

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1. Early Childhood
2. Education
3. The Conditions of Work
4. Aging
5. Resilience of Communities



**M. Chandler,  
C. Lalonde. *Cultural  
Continuity as a  
Hedge Against  
Suicide in Canada's  
First Nations***

Figure 1: Suicide Rates in British Columbia (1987-1992)

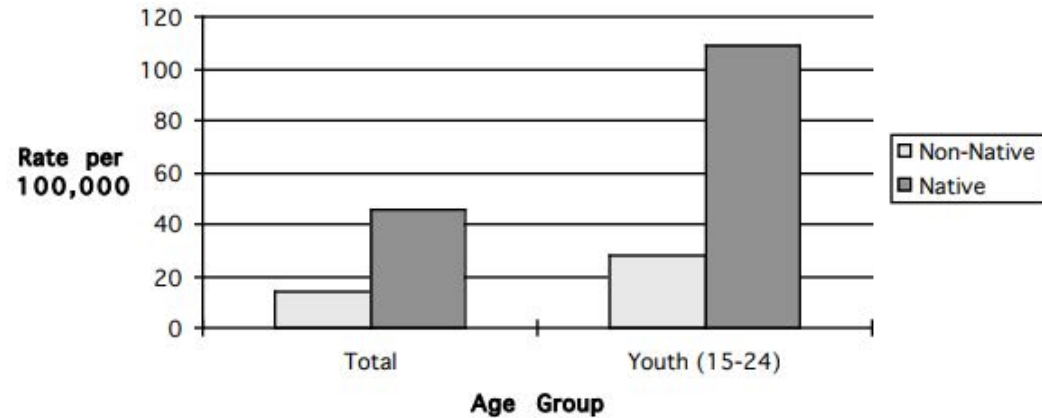
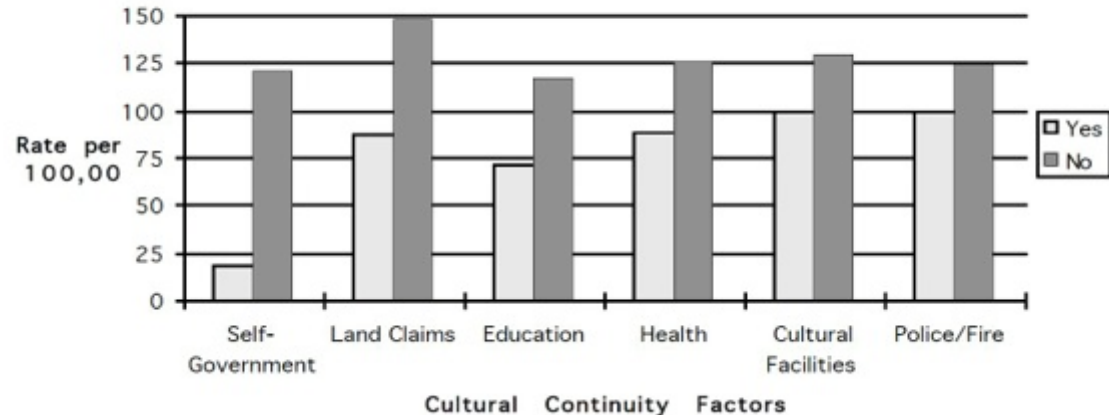


Figure 5: Youth Suicide Rates by Cultural Continuity Factors



# Conditions of Daily Life That Matter

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1. Early Childhood
2. Education
3. The Conditions of Work
4. Aging
5. Resilience of Communities
6. Fairness



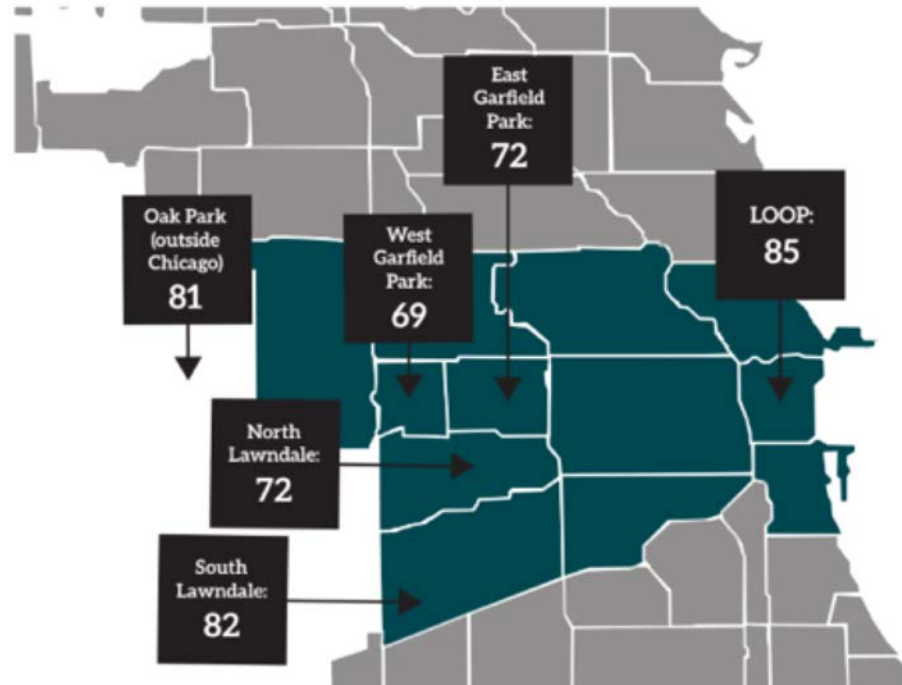
*“Inequities in power, money, and resources give rise to inequities in the conditions of daily life, which in turn lead to inequities in health.”*

- Sir Michael Marmot



# Rush University Medical Center

## Life Expectancy (Years) at Birth by Neighborhood on Chicago's West Side



Data: 2010 Life Expectancy Estimates By Community Area, Illinois Department of Public Health



# “Anchor Mission” Approach:

*“A commitment to apply [...] economic power in partnership with community to mutually benefit the long-term well-being of both. For instance, anchor institutions can use their position as major employers and purchasers to improve economic opportunity and well-being in low-income and underserved communities.”*

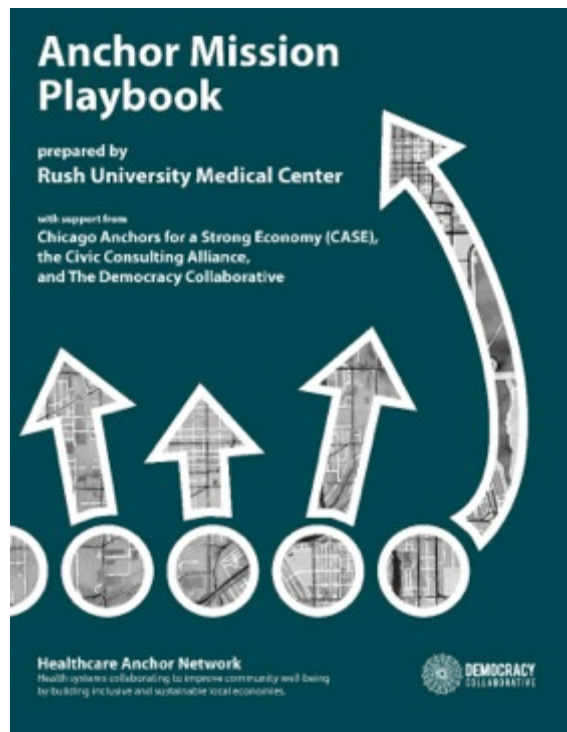




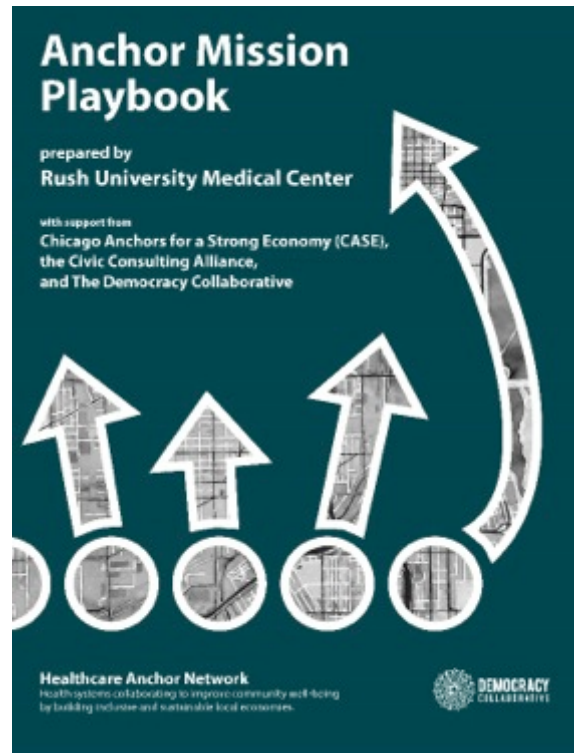
*“When hospitals and health systems nationwide collectively spend more than \$782 billion annually, employ more than 5.6 million people, and hold investment portfolios of \$400 billion, the potential game changing impact on the health and wellbeing of America’s communities cannot be overstated .”*



# Rush University Medical Center



Ambition	Increase life expectancy		Reduce hardship		Improve quality of life
Intended Impact	Measurable internal community impact	Measurable external community impact	Employee engagement in our local communities	Strengthened values and sense of purpose	
Theory of Change	Collaborate with community partners				
	Hire locally and develop talent	Utilize local labor for capital projects	Buy and source locally	Invest locally	Volunteer and support community building



**Website:** [www.democracycollaborative.org](http://www.democracycollaborative.org)

**Email:** [lworth@democracycollaborative.org](mailto:lworth@democracycollaborative.org)

**Call:** 1.202.559.1473



# East Lake, Georgia

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East Lake Foundation/Purpose Built Communities' holistic community development model (Source: Purpose Built Communities)

- 90% less violent crime
- Welfare dependence down 59% to 5%
- Unemployment of non-disabled, non-elderly 0%
- Highschool graduation up to 80% from 50%

# East Lake, Georgia



1,300+

Residents live in 542 best-in-class mixed-income apartments, and more than one hundred new additional are scheduled to open in 2019. A diverse mix of families live in this community of market-rate and subsidized townhomes, villas and garden apartments.



Cradle-to-College  
Education Pipeline

100%

Of the first graduating class from Charles R. Drew Charter School was accepted into college in 2017. Future classes are on track to achieve similar outcomes. Drew was founded in 2000 and was the first charter school in Atlanta.

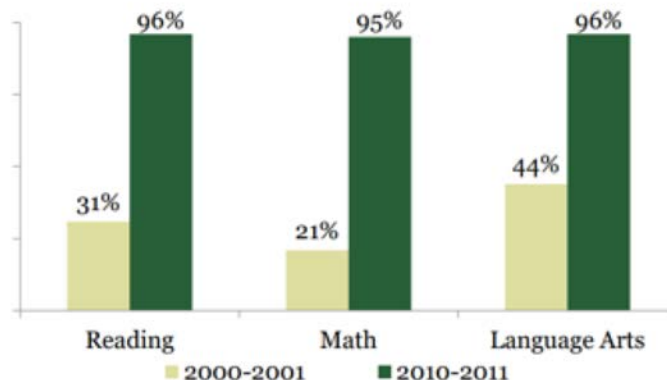


Community Wellness

850

Students, ages 5-17, served by The First Tee program®, a golf and life skills program developed around the East Lake area's long, rich history with golf.

Percentage of Drew 4<sup>th</sup> graders who meet or exceed standards



## RESIDENT & COMMUNITY SUPPORT PROGRAM

The Resident and Community Support Program (RCSP) offers resources and support to residents of The Villages of East Lake mixed-income housing community, with an emphasis on economic stability and community engagement.



# For Communities:

*“What matters to you?”*



*“What happens at the local level can contribute to crime, alcohol-related deaths, obesity, road traffic injuries, depression, health problems linked to pollution of air and water, problems with housing. On the plus side, the local level can improve health through a high level of **social cohesion and social participation, security and low fear of crime, active transport, provision of green space, walkability, availability of healthy food, good services.**”*

– Sir Michael Marmot

