

Effects of Material & Relational Deprivation on Community Health Status



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Home is where the health is

Buffalo, NY

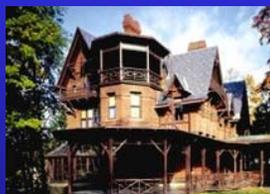


Home is where the health is

Buffalo, NY



Hartford, CT



Home is where the health is

ERIE COUNTY New York

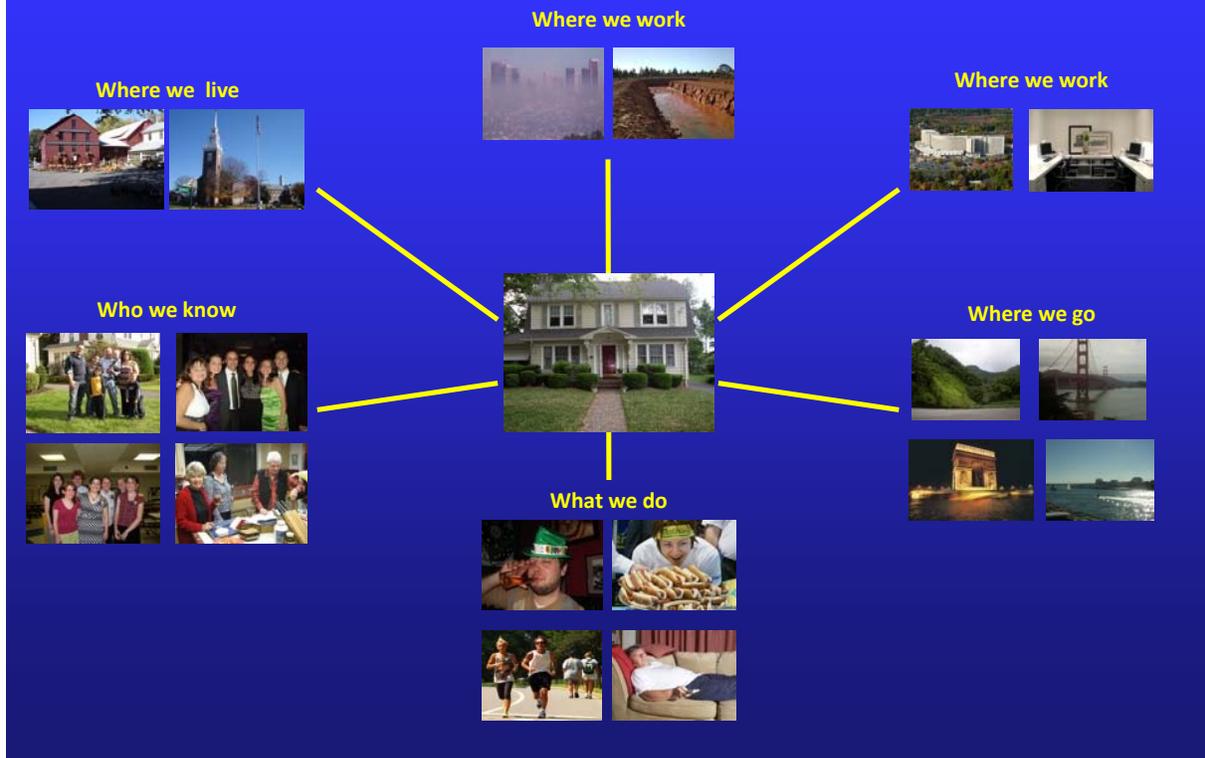
7,310
14
3.9
3.4
8.3
18
27
519
28
235

years of potential life lost (YPLL)
% fair or poor health
poor health days
poor mental health days
% low birth weight infants
% adult smokers
% obese adults
STD rate per 100K
% teen births
HIV prevalence per 100K

HARTFORD COUNTY Connecticut

6,323
11
3.0
3.1
8.5
17
23
489
31
443

Is home really where the health is?



The "isms" and "ations" of health

Racism
Sexism
Ageism
Segregation

Deprivation
Assimilation
Linguistic
Isolation

Townsend Index of Deprivation*

A state of demonstrable disadvantage relative to the local community or wider society or nation to which an individual, family or group belongs

1. Unemployment rate
2. % Overcrowded households
3. % Households w/o car
4. % Not owner-occupied housing

With greater community deprivation, greater prevalence of...

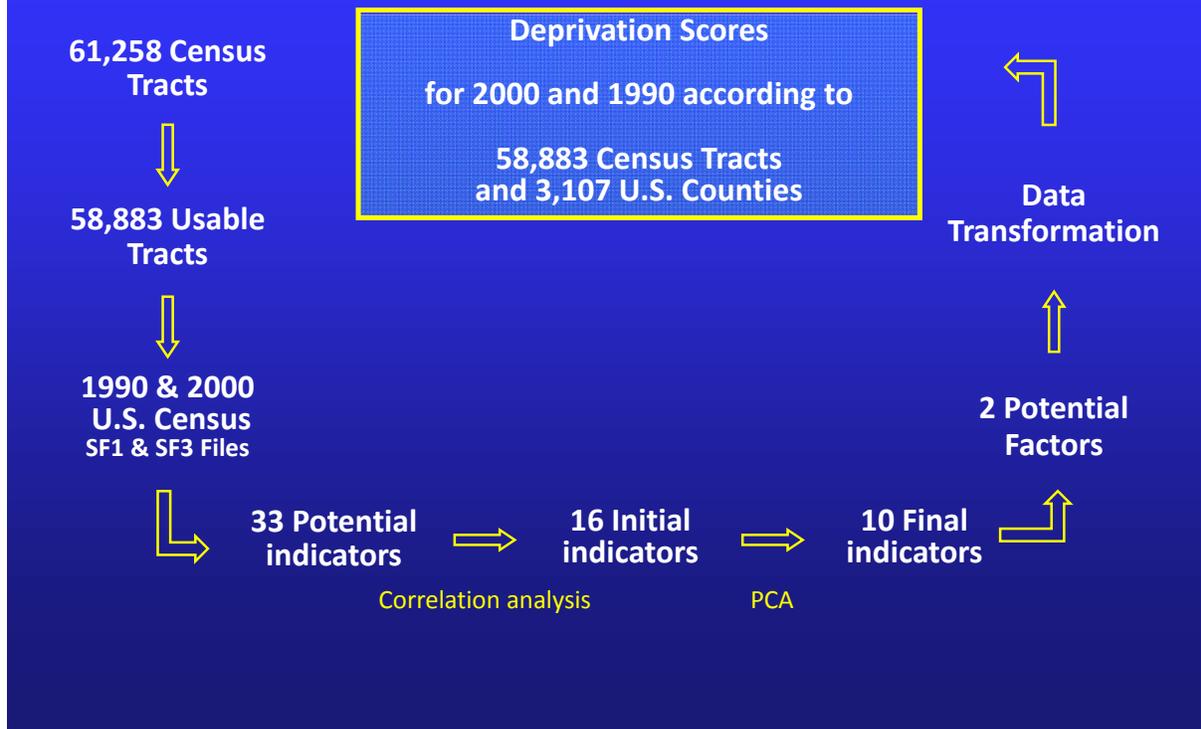
1. Diabetes (Crow, 1991; Meadows, 1995)
2. TB (Spence, 1993)
3. Epilepsy (Morgan, 2000)
4. Colorectal cancer (Haining, 1994)
5. Respiratory illnesses (Spencer, 1996; Watson, 1996)
6. Low birth weight & perinatal death (Spencer, 1999)
7. Out-of-hospital cardiac arrest (Soo, 2001)
8. Depression & organic psychosis (Wilson, 1999)
9. Dental caries & DMFT (Prendergast, 1997)
10. Hospitalizations (Gilthorpe, 1997; Morley, 2000)
11. Fecal contamination (Kaltenthaler, 1995)

**Journal of Social Policy, 16, 125-46*

**Look at impoverished lives, and not just
at depleted wallets.**

-Amartya Sen

Deprivation (area wide) Indexed Geographically



2000 Area-wide Deprivation Scores*

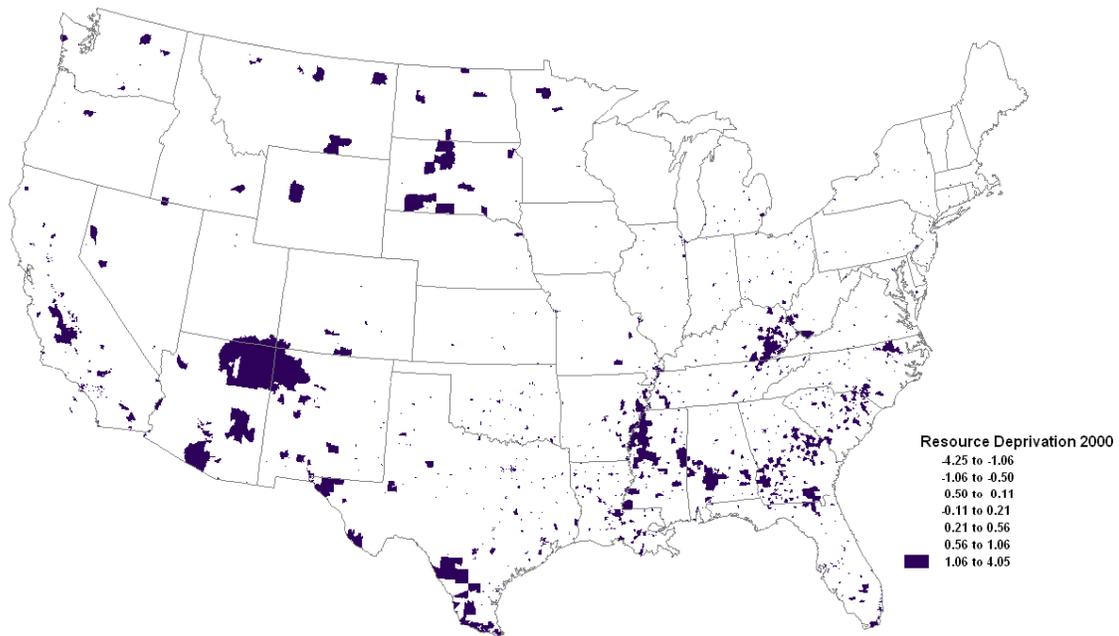
Factor 1: 49% of variance accounted

Name	Factor	MATDep
PCI	Per capita income	0.91
OccStatus	% persons in Prof& kindred occupations	0.91
NoDiploma	% persons w/o high school diploma	0.88
Value	Median Value of housing units	-0.74
PubAssist	% persons receiving public assistance	0.73
SingMom	% female headed households with children (LT18)	0.71
DivSep	% married persons now divorced/separated	0.40
Tenant	% adults in renter-occupied housing units	0.24
New Home	% persons who relocated residence in past 5 yrs	-0.21
NTradFam	% persons in non-traditional households	-0.03

$$MATDep_{00} = (PCI)(0.91) + (OccStatus)(-0.91) + (NoDiploma)(0.88) + (Value)(-0.74) + (PubAssist)(0.83) + (SingMom)(0.71) + (DivSep)(0.40) + (Tenant)(0.24) + (NewHome)(-0.21) + (NTradFam)(-0.03)$$

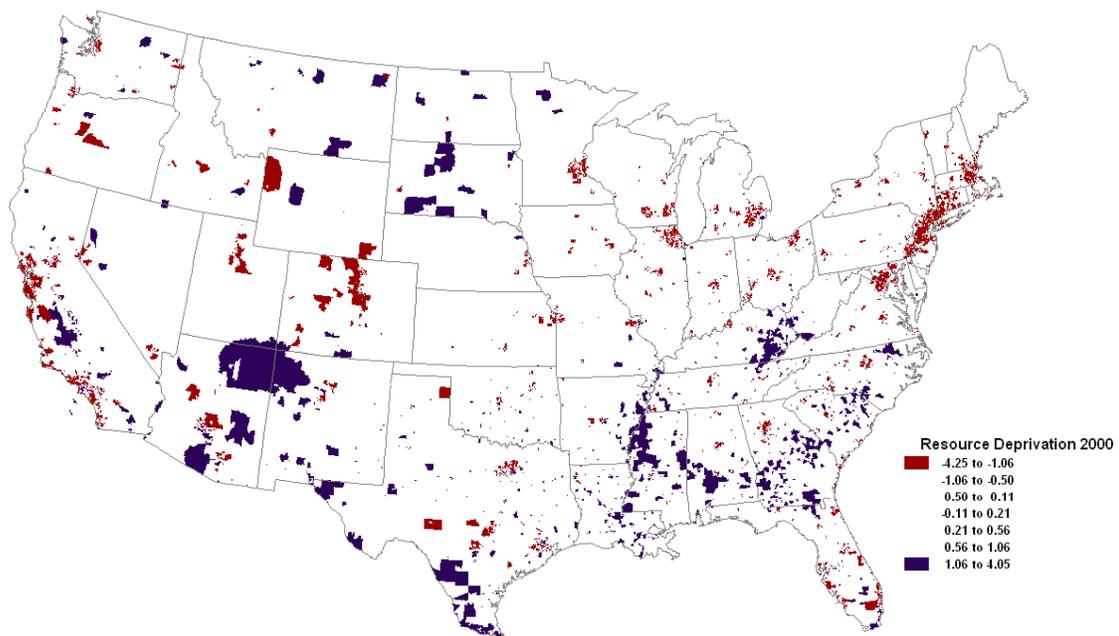
* Factor extraction method: PCA with varimax rotation

Category 7 MATDep Scores, U.S. Census Tracts, 2000



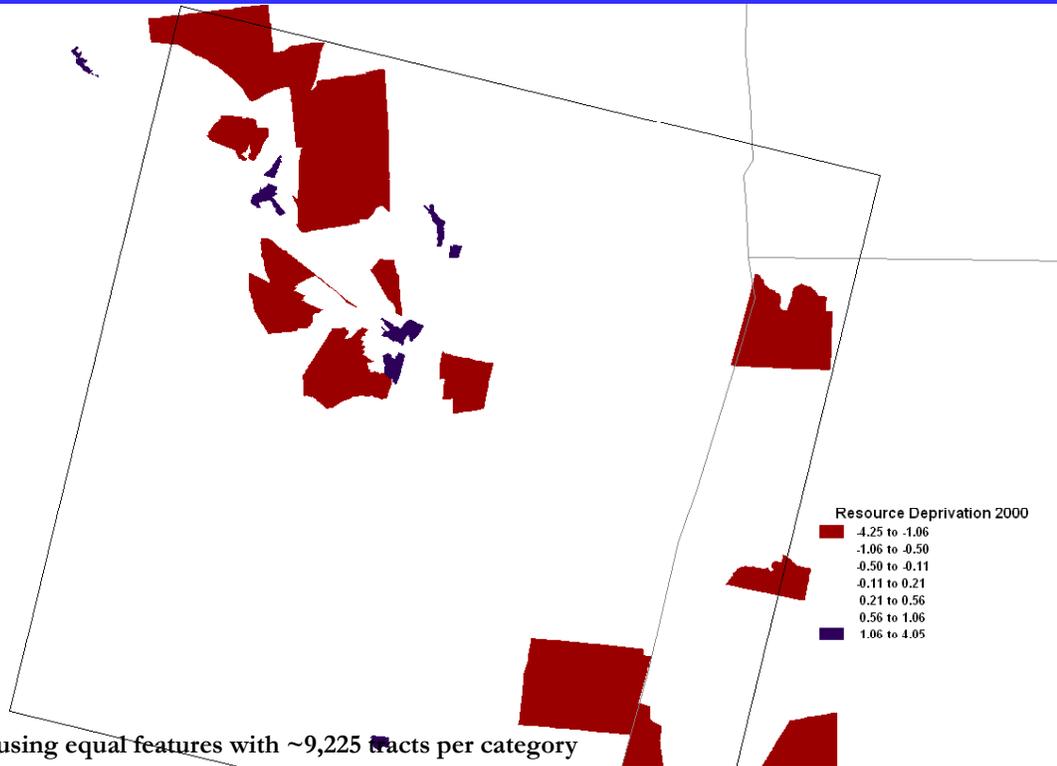
*Projected using equal features with ~9,225 tracts per category

Category 1 & 7 MATDep Scores, U.S. Census Tracts, 2000

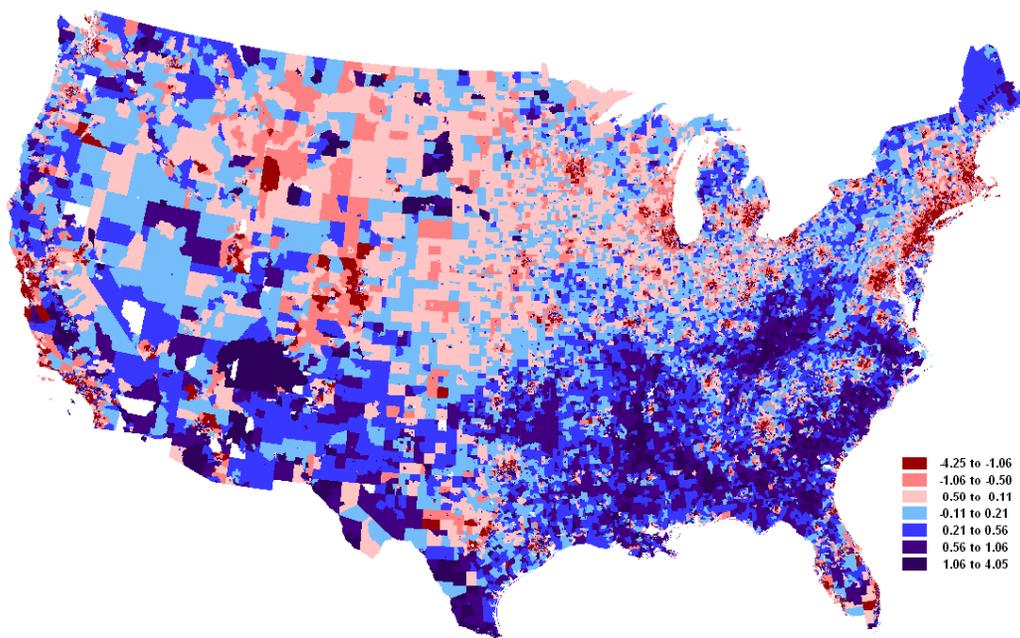


*Projected using equal features with ~9,225 tracts per category

Category 1&7 MATDep Scores, Albany NY Region, U.S. Census Tracts, 2000



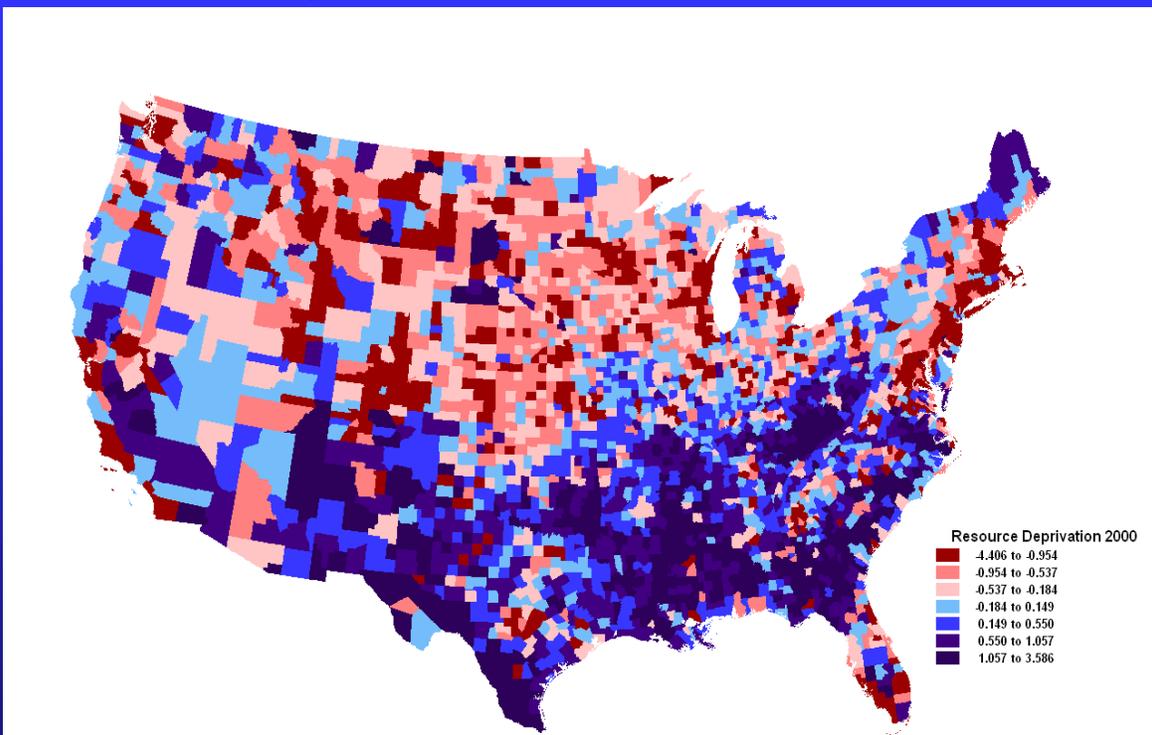
MATDep Scores, U.S. Census Tracts, 2000



Material Deprivation, Poverty and Location, U.S. Census Tracts, 2000

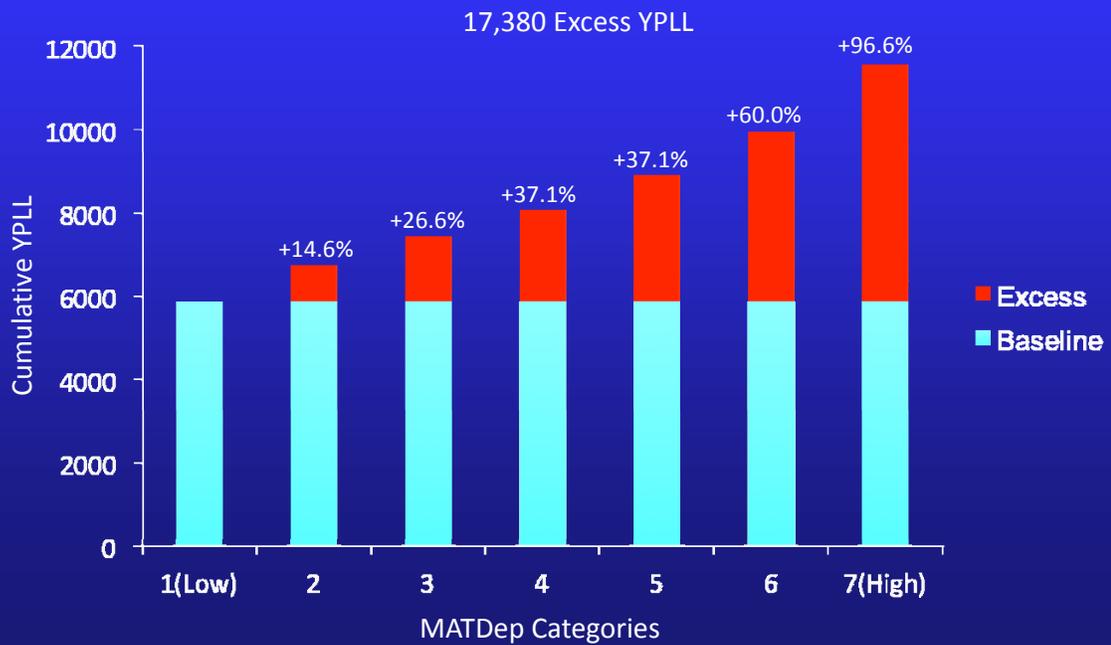
	MATDep	Poverty	Townsend	Latitude
MATDep	1.00			
Townsend Index	0.72	1.00		
Poverty Level	0.75	0.76	1.00	
Census Tract Latitude	-0.08	-0.15	-0.11	1.00
Census Tract Longitude	0.05	-0.02	-0.06	0.12

Area-wide Deprivation Scores for U.S. Counties*, 2000

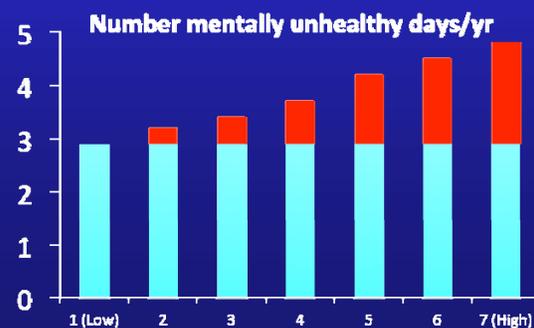
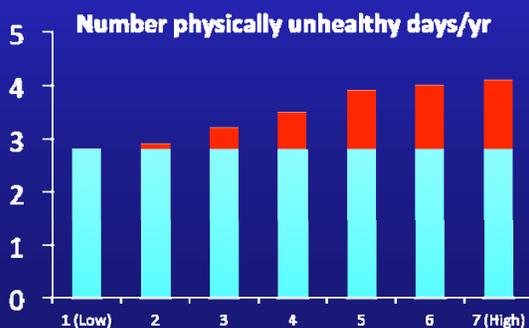
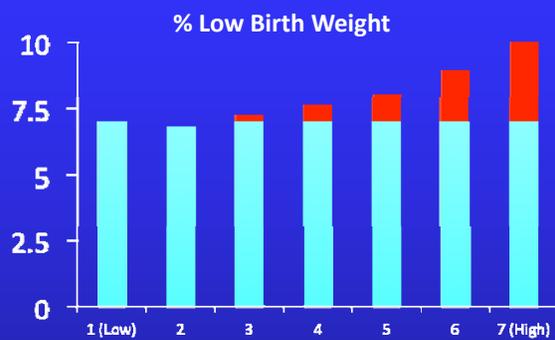
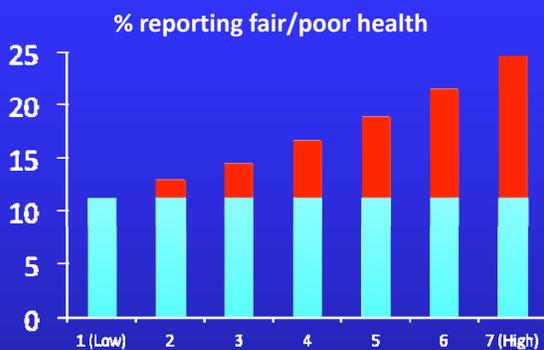


*Projected using equal features with ~449 counties per category

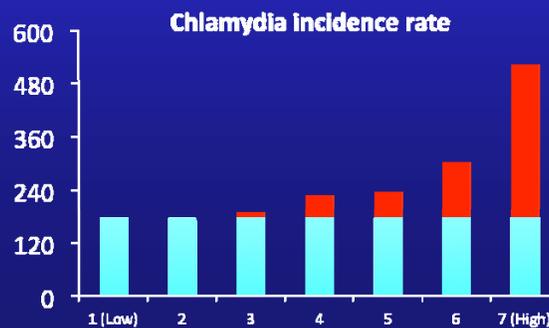
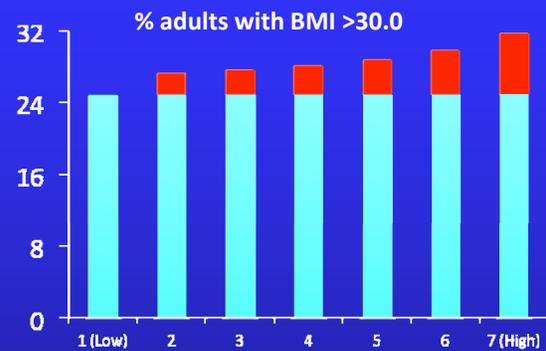
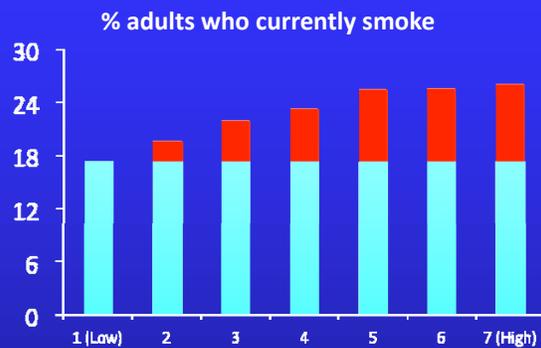
Years of Potential Life Lost (YPLL) according to MATDep scores, U.S. Counties, 2000



Health status indicators according to MATDep scores, U.S. Counties, 2000



Health status indicators according to MATDep scores, U.S. Counties, 2000



2000 Area-wide Deprivation Scores*

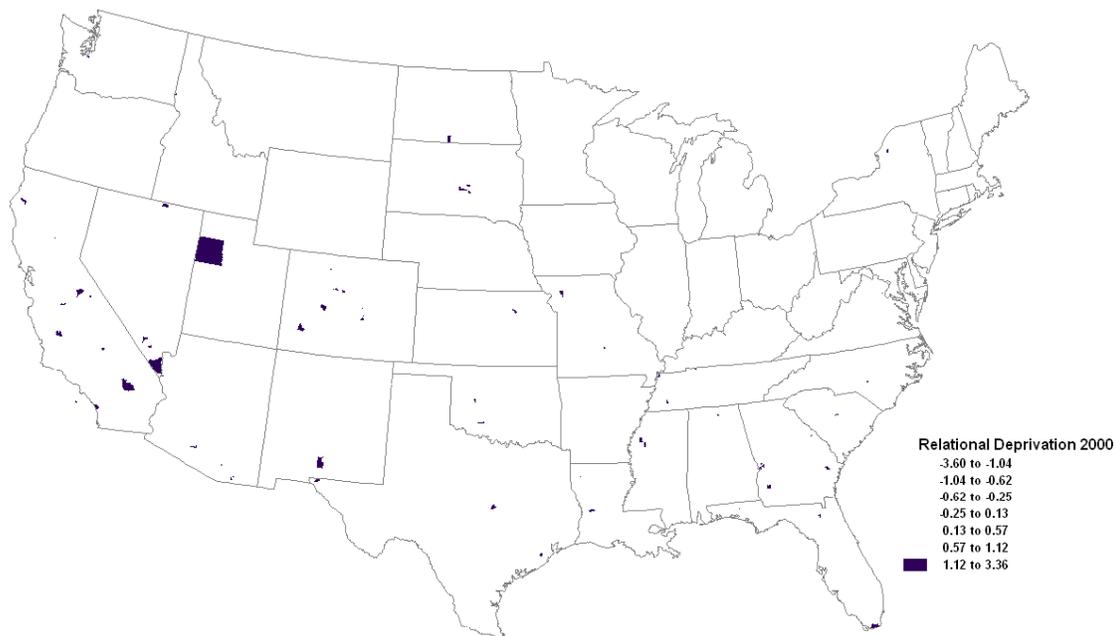
Factor 2: 22% of variance accounted

Name	Factor	RELDep
Tenant	% adults in renter-occupied housing units	0.87
NTradFam	% persons in non-traditional households	0.84
DivSep	% married persons now divorced/separated	0.76
New Home	% persons who relocated residence in past 5 yrs	0.73
SingMom	% female headed households with children (LT18)	0.39
PubAssist	% persons receiving public assistance	0.37
PCI	Per capita income	-0.16
NoDiploma	% persons w/o high school diploma	0.12
OccStatus	% persons in Prof& kindred occupations	-0.03
Value	Median Value of housing units	-0.02

$$RELDep_{00} = (Tenant)(0.87) + (NTradFam)(0.84) + (DivSep)(0.76) + (NewHome)(0.73) + (SingMom)(0.39) + (PubAssist)(0.37) + (PCI)(0.16) + (NoDiploma)(0.12) + (OccStatus)(-0.03) + (Value)(-0.02)$$

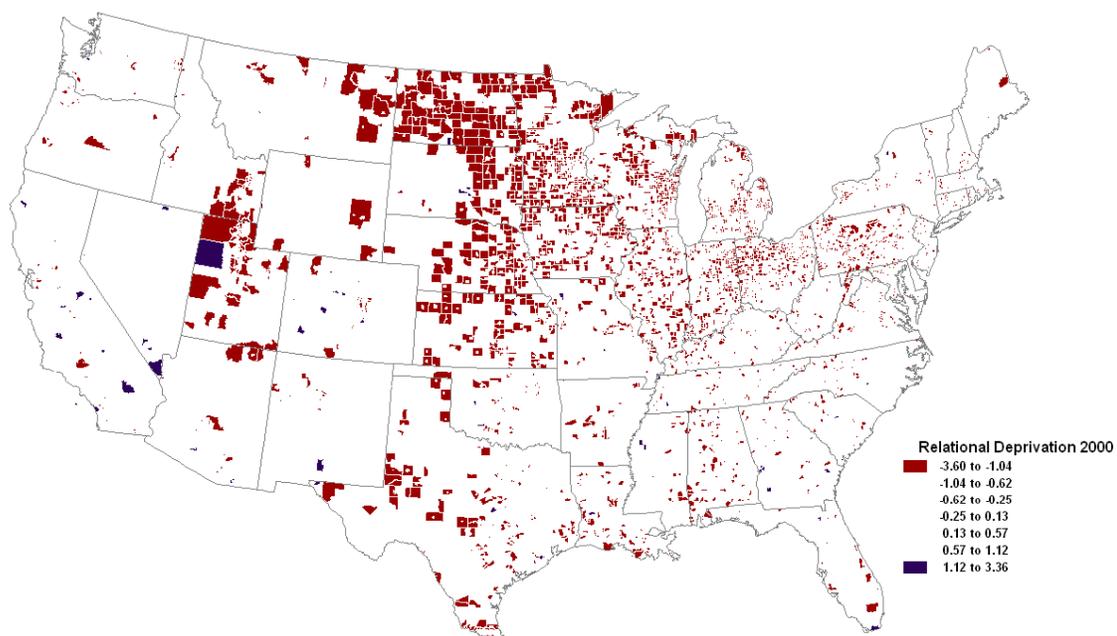
* Factor extraction method: PCA with varimax rotation

Category 1 RELDep Scores, U.S. Census Tracts, 2000



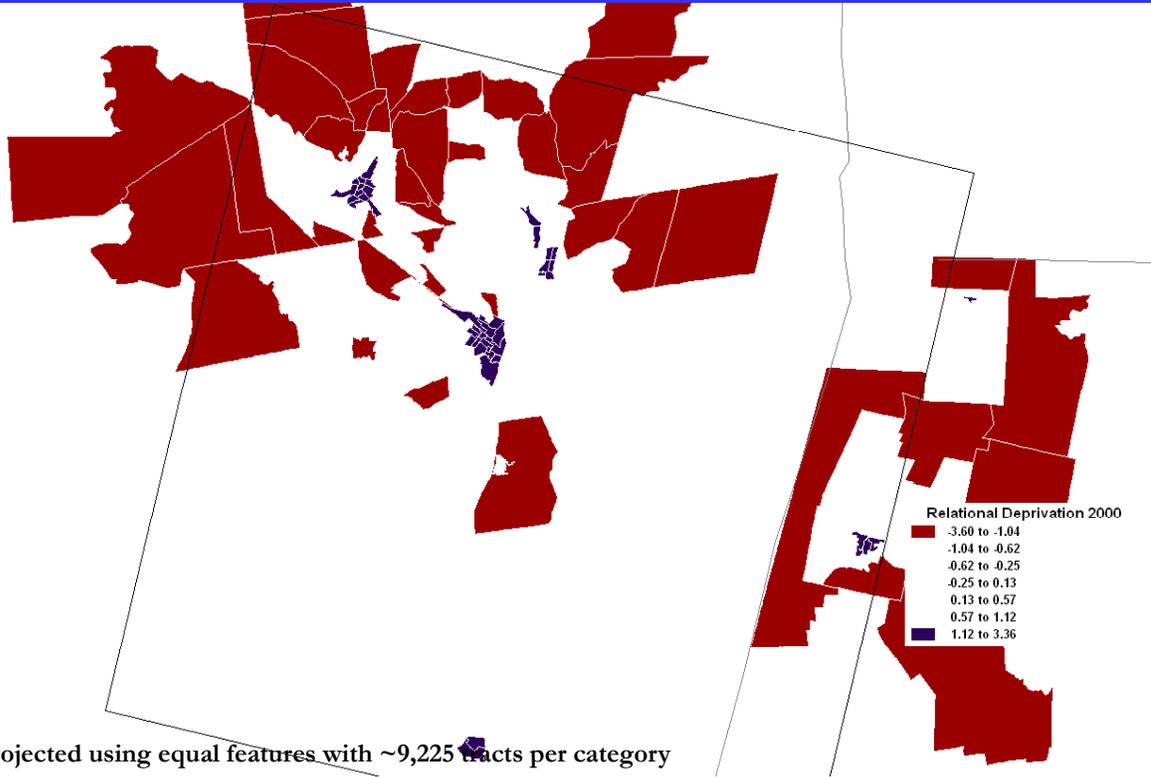
*Projected using equal features with ~9,225 tracts per category

Category 1 & 7 RELDep Scores, U.S. Census Tracts, 2000

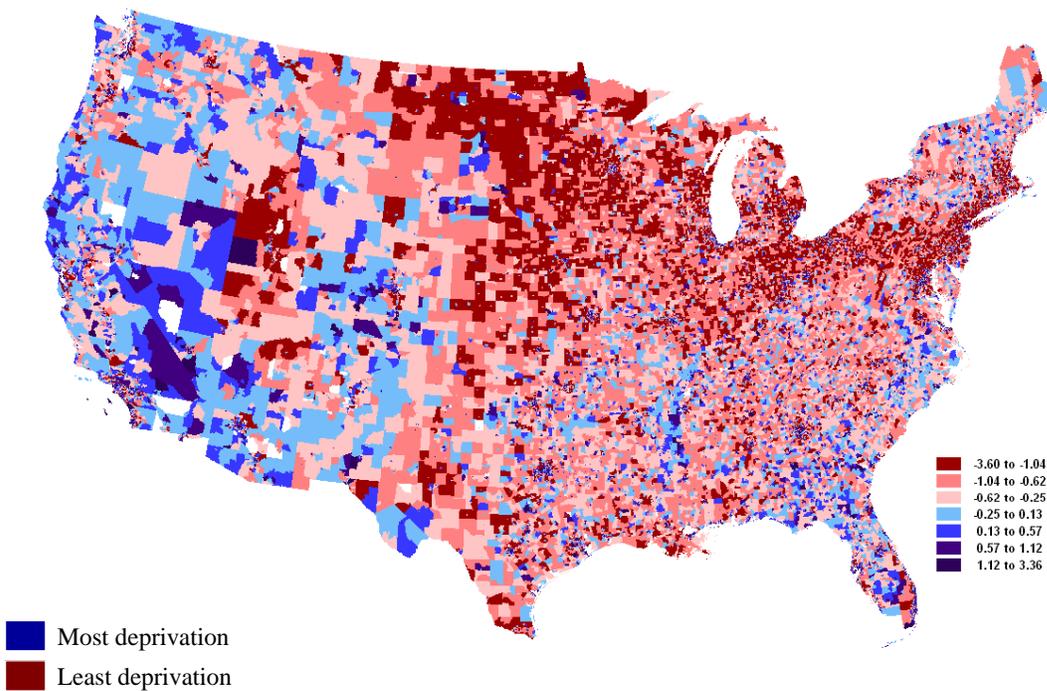


*Projected using equal features with ~9,225 tracts per category

Category 1&7 RELDep Scores, Albany NY Region, U.S. Census Tracts, 2000



RELDep Scores, U.S. Census Tracts, 2000

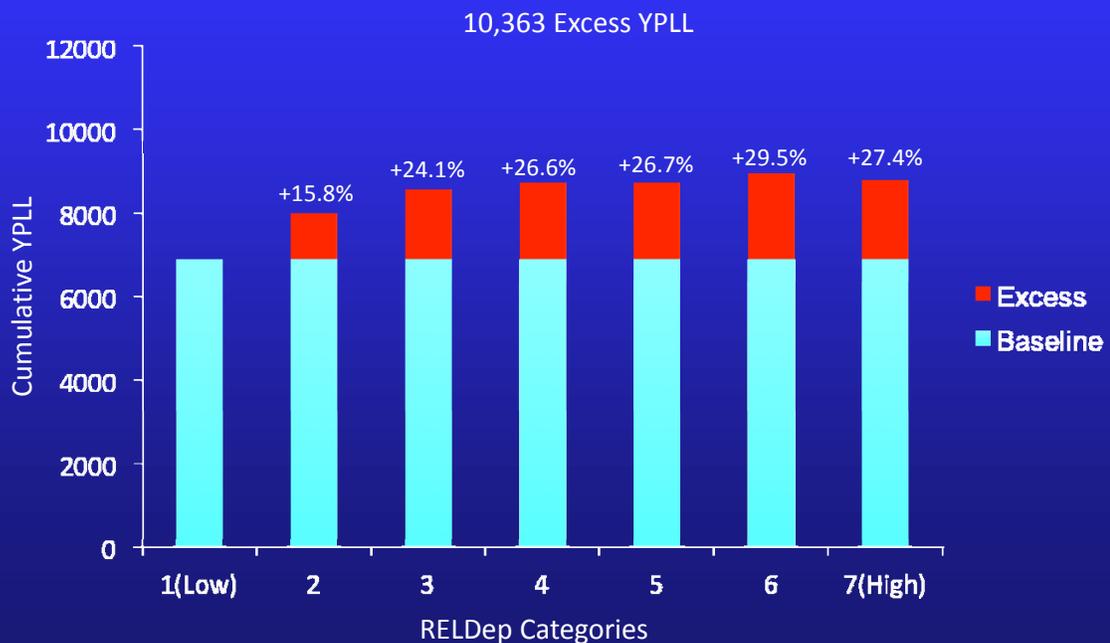


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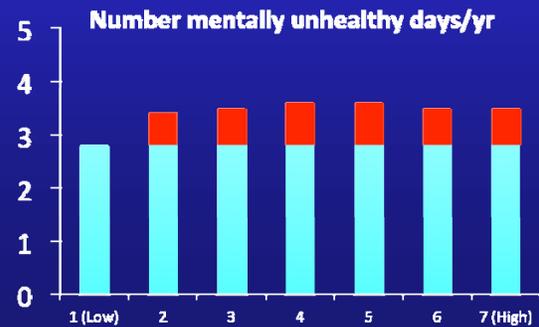
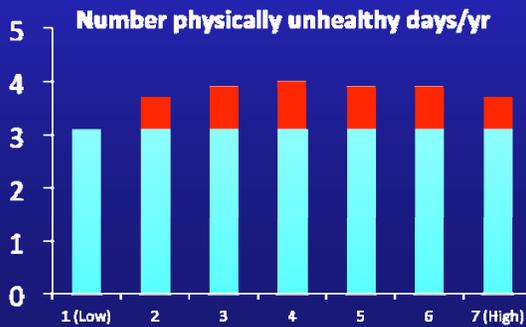
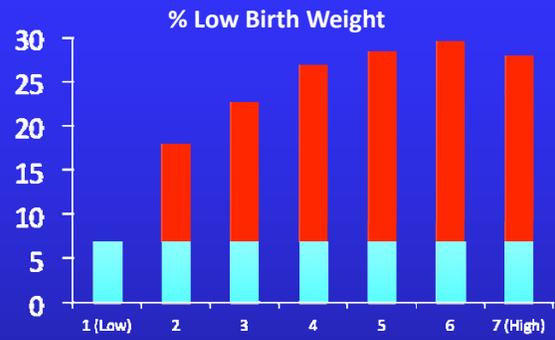
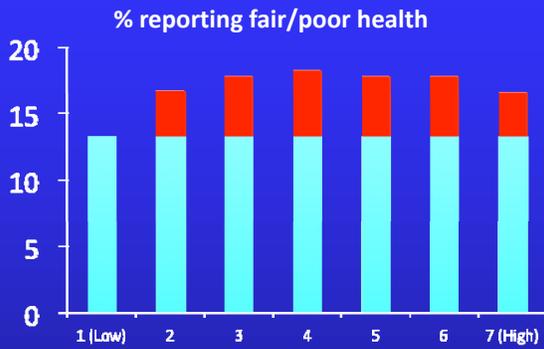
Relational Deprivation, Poverty and Location, U.S. Census Tracts, 2000

	RELDep	Poverty	Townsend	Latitude	MATDep
RELDep	1.00				0.38
Townsend Index	0.75	1.00			
Poverty Level	0.52	0.76	1.00		
Census Tract Latitude	-0.08	-0.15	-0.11	1.00	
Census Tract Longitude	-0.12	-0.02	-0.06	0.12	

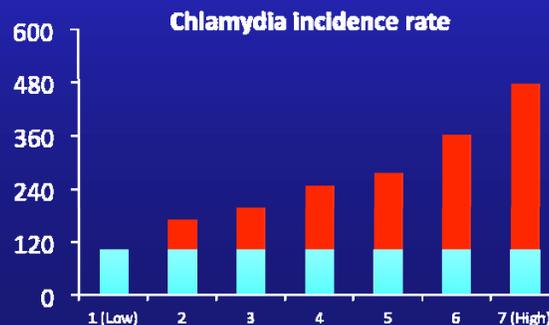
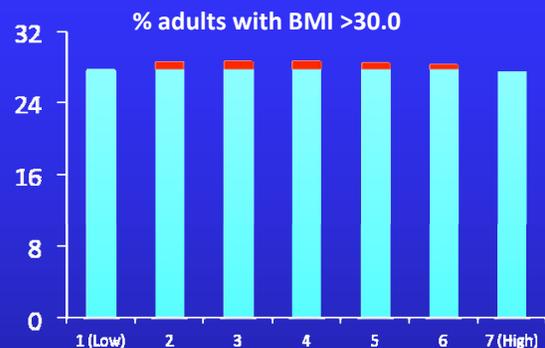
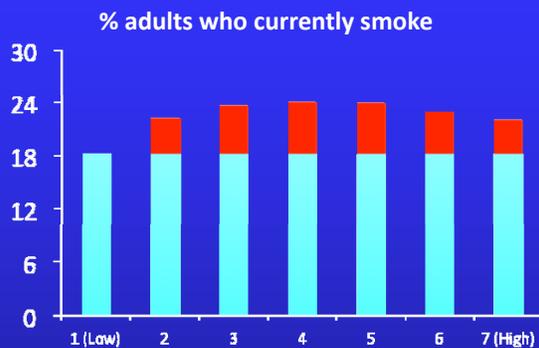
Years of Potential Life Lost (YPLL) according to RELDep scores, U.S. Counties, 2000



Health status indicators according to RELDep scores, U.S. Counties, 2000



Health status indicators according to RELDep scores, U.S. Counties, 2000



SUMMARY

Deprivation is multi-dimensional

Material, Relational, Financial, Environmental.....

Census-based indicators capture population variability
across U.S. Counties and Tracts

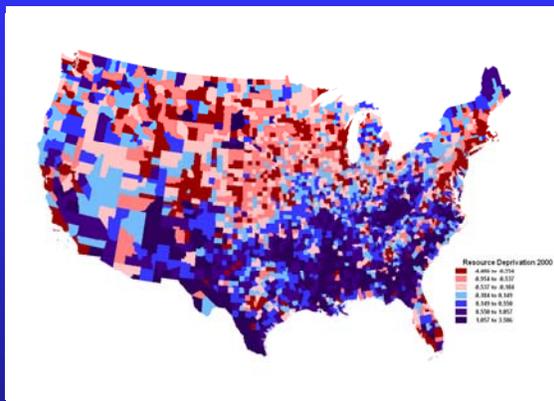
Correlates with other composite and individual indicators

Correlates with health outcomes

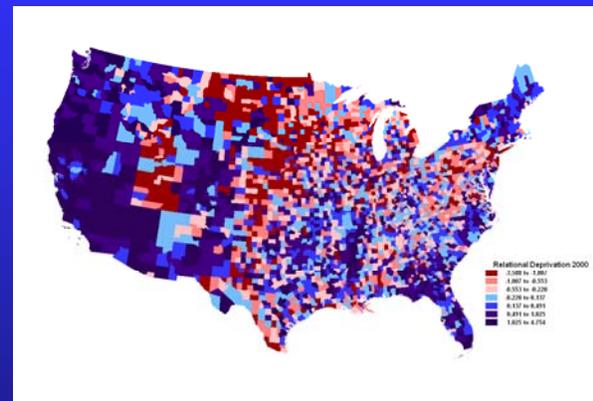


Area-wide Deprivation Scores for U.S. Counties*, 2000

MATDep



RELDep



■ Most deprived
■ Least deprived

*Projected using equal features with ~449 counties per category