



# What's driving all this change? Socio-demographics

Mark Bradley, RSG

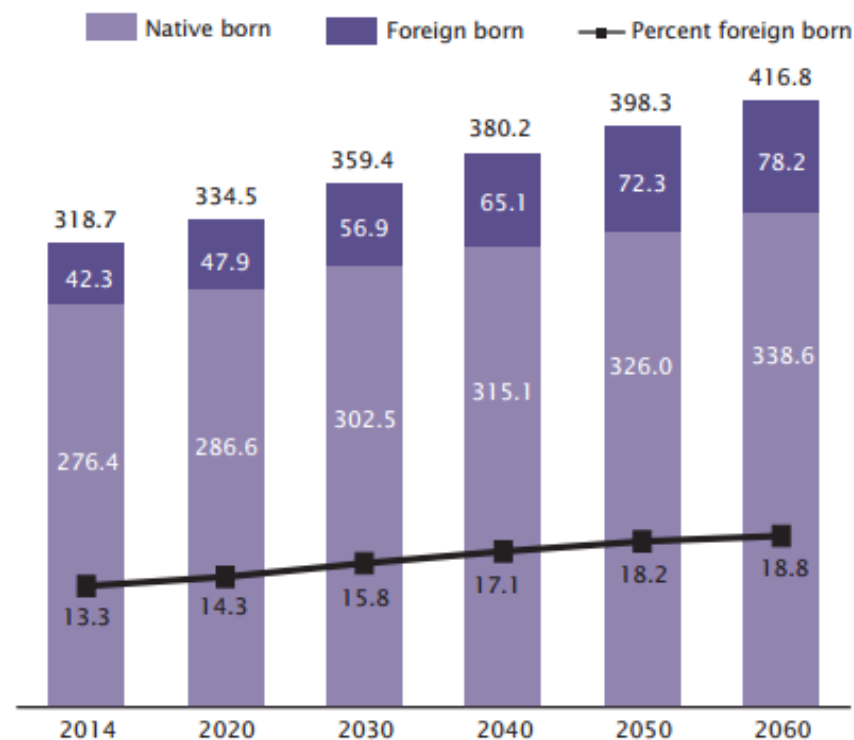
TRB Scenario Planning Conference, Portland, August 2016

# The Next 100 Million

## Trends, Uncertainties

- US population growing at higher rate than rest of world's developed nations
- For transportation planning, national totals are not that interesting...
- Which sectors will be growing? (age, employment, income, etc.)
- Who will be living where?

**U.S. Population by Nativity: 2014 to 2060**  
(Population in millions)



Source: U.S. Census Bureau, 2014 National Projections.

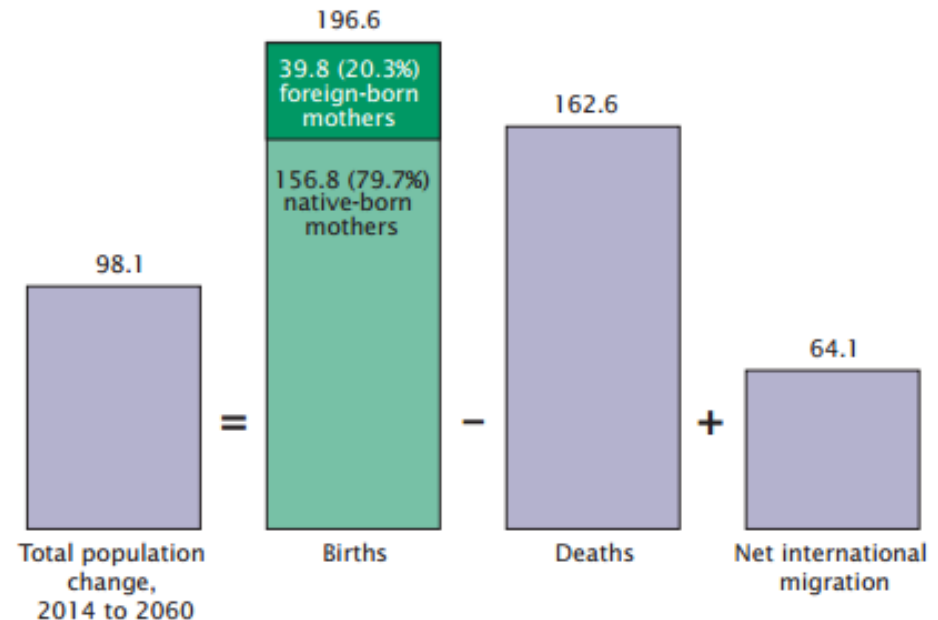
# Sources of population growth

## Trends, Uncertainties

- Projected growth....
  - one third “natural”,
  - two thirds from net international migration
- But, immigration rates depend on a lot of things....
  - National economies
  - Climate change
  - Geopolitics

### Numeric Change in Population and Components of Population Change: 2014–2060

(In millions)



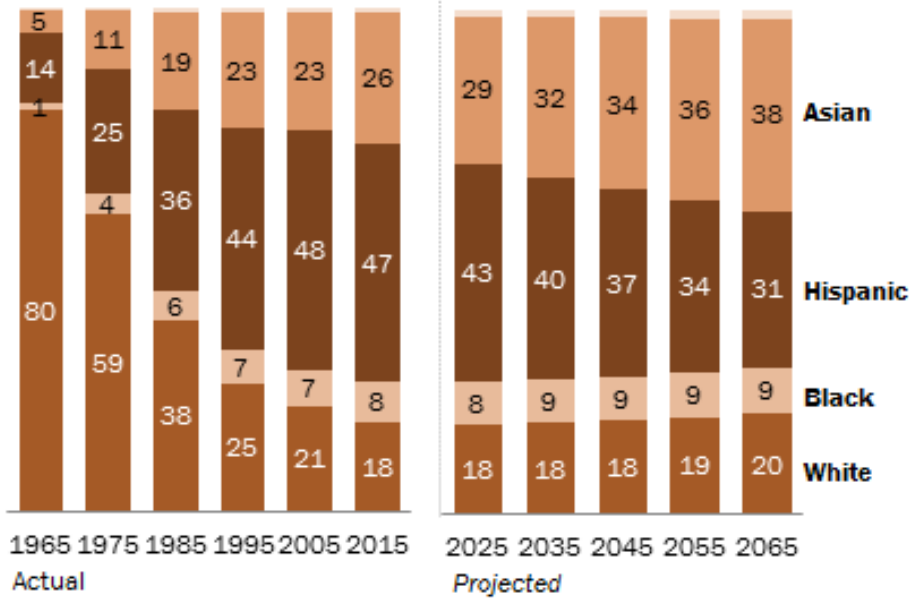
Source: U.S. Census Bureau, 2014 National Projections.

# What will the immigrant population look like?

FIGURE 5

## Asians Projected to Become the Largest Immigrant Group, Surpassing Hispanics

% of immigrant population

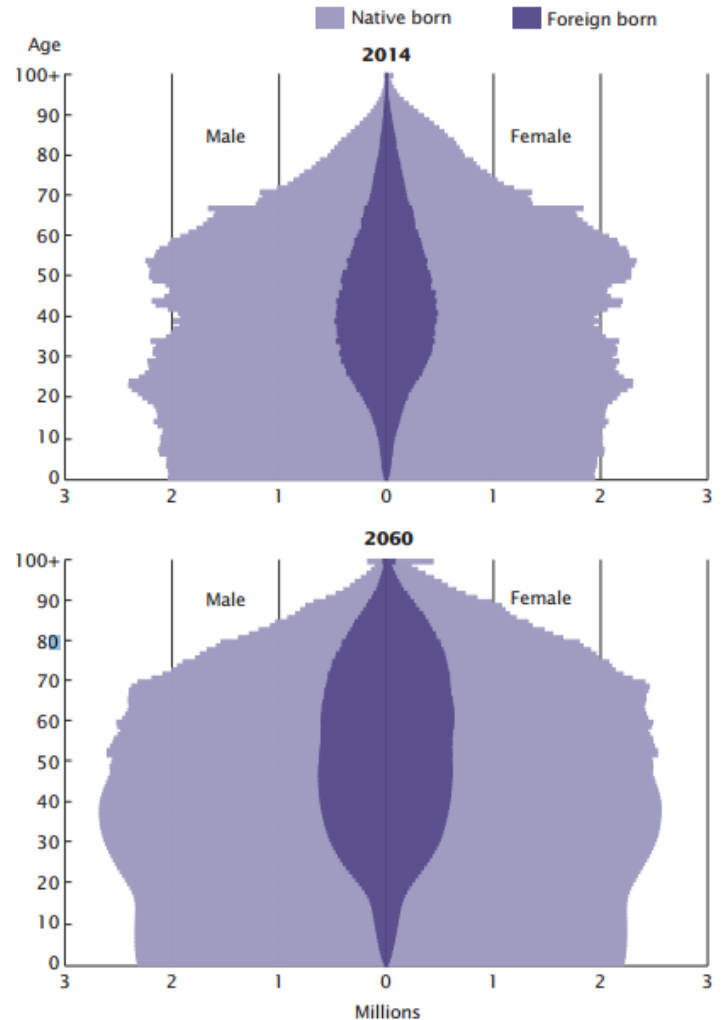


Note: Whites, blacks and Asians include only single-race non-Hispanics. Asians include Pacific Islanders. Hispanics are of any race. Other races shown but not labeled.

Source: Pew Research Center estimates for 1965-2015 based on adjusted census data; Pew Research Center projections for 2025-2065

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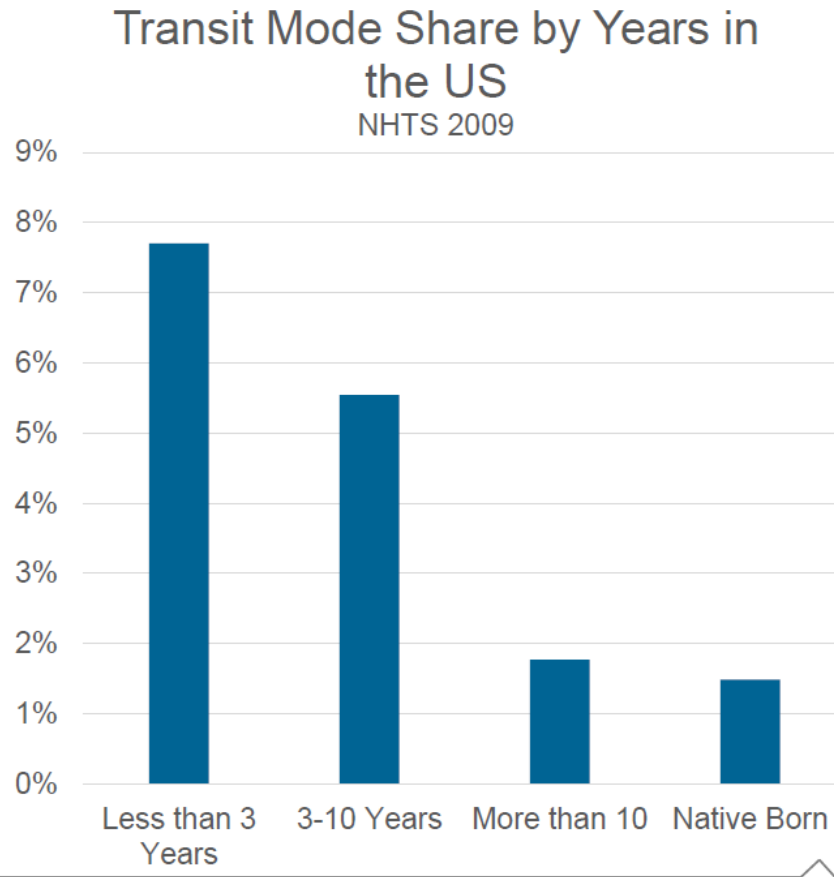
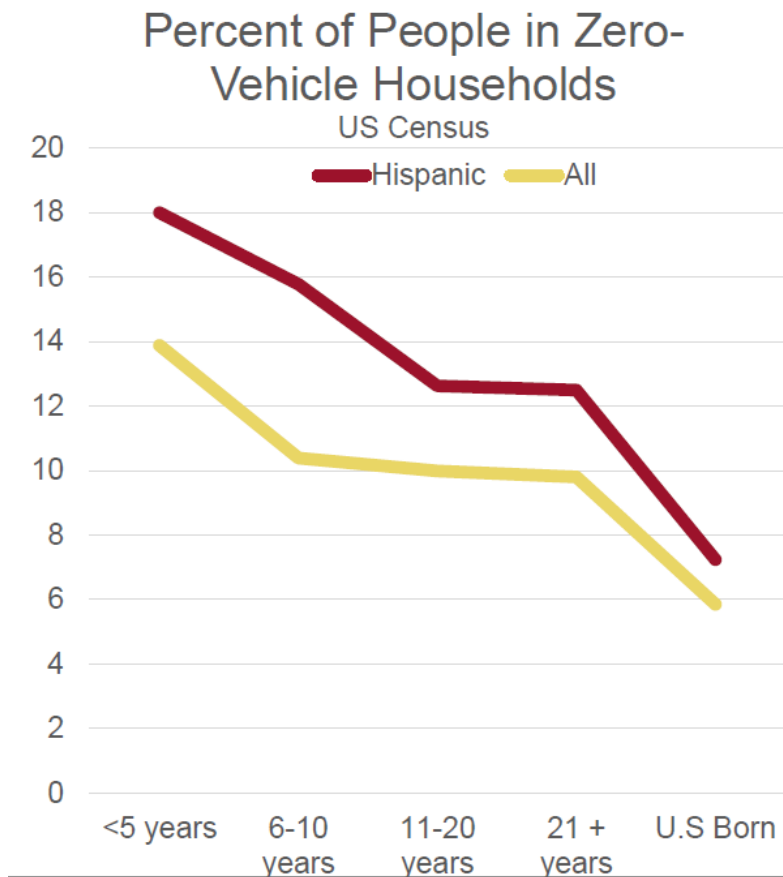
Age and Sex Structure of the Population by Nativity: 2014 and 2060



Source: U.S. Census Bureau, 2014 National Projections.



# New immigrants are less likely to own a vehicle and more likely to use transit. “Acculturation” appears to occur within a decade or two:



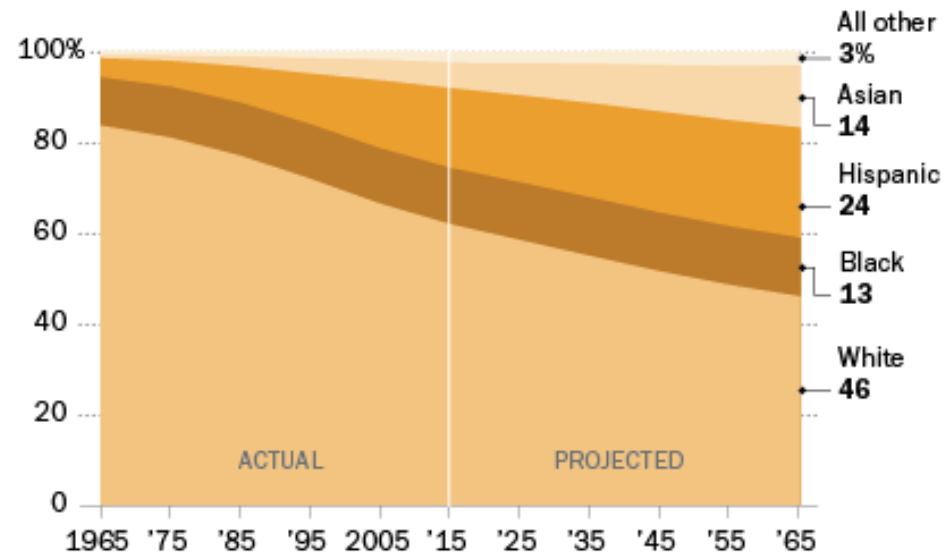
# “Browning” of America

## Trends, Uncertainties

- White, non-Hispanic share of US population declining
- Majority of America’s children are of color
- Varies a great deal by region
- Influenced by immigration / emigration (highly uncertain), also birth and death rates of existing residents (less uncertain)

## The changing face of America, 1965–2065

% of the total population



Note: Whites, blacks and Asians include only single-race non-Hispanics; Asians include Pacific Islanders. Hispanics can be of any race.

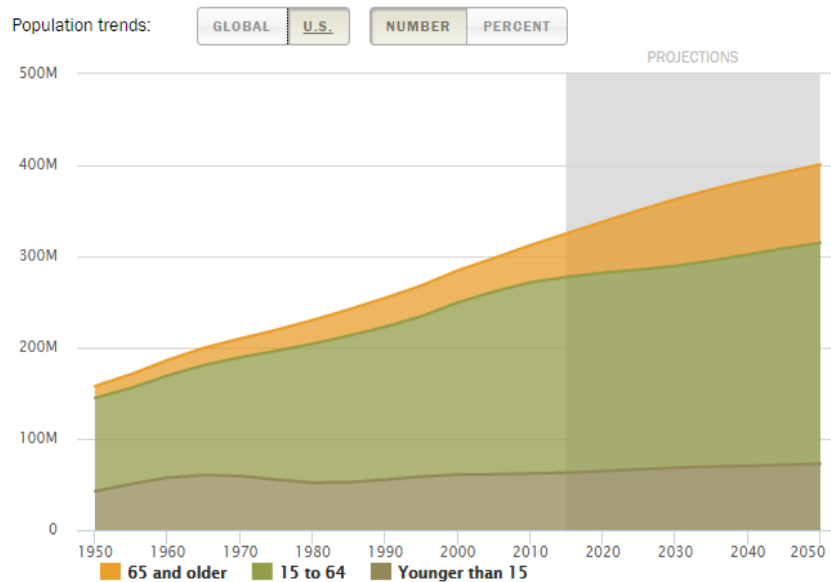
Source: Pew Research Center 2015 report, “Modern Immigration Wave Brings 59 Million to US, Driving Population Growth and Change Through 2065”

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# “Graying” of America

## Trends, Uncertainties

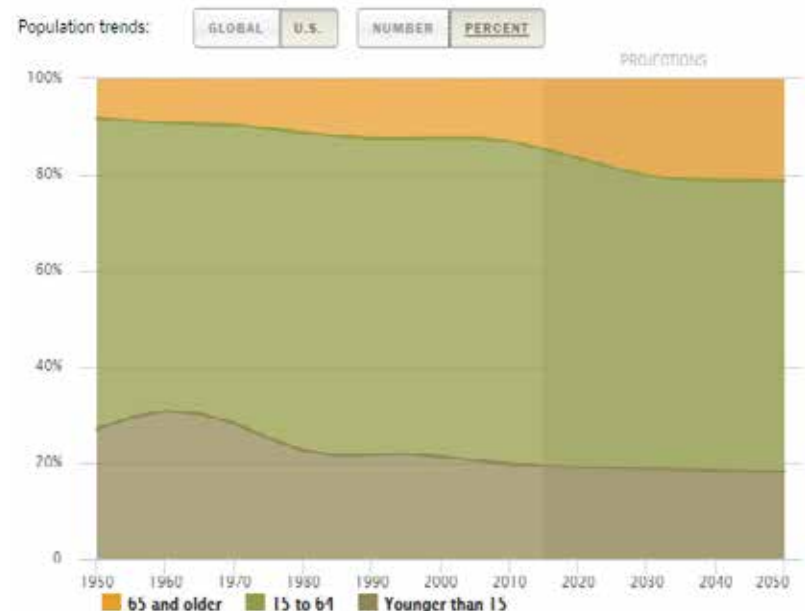
- Significant increase in population age 65+ due to Baby Boomers
- Levels off, until Millennials hit 65?



Source: United Nations, Department of Economic and Social Affairs, World Population Prospects: 2012 Revision, June 2013

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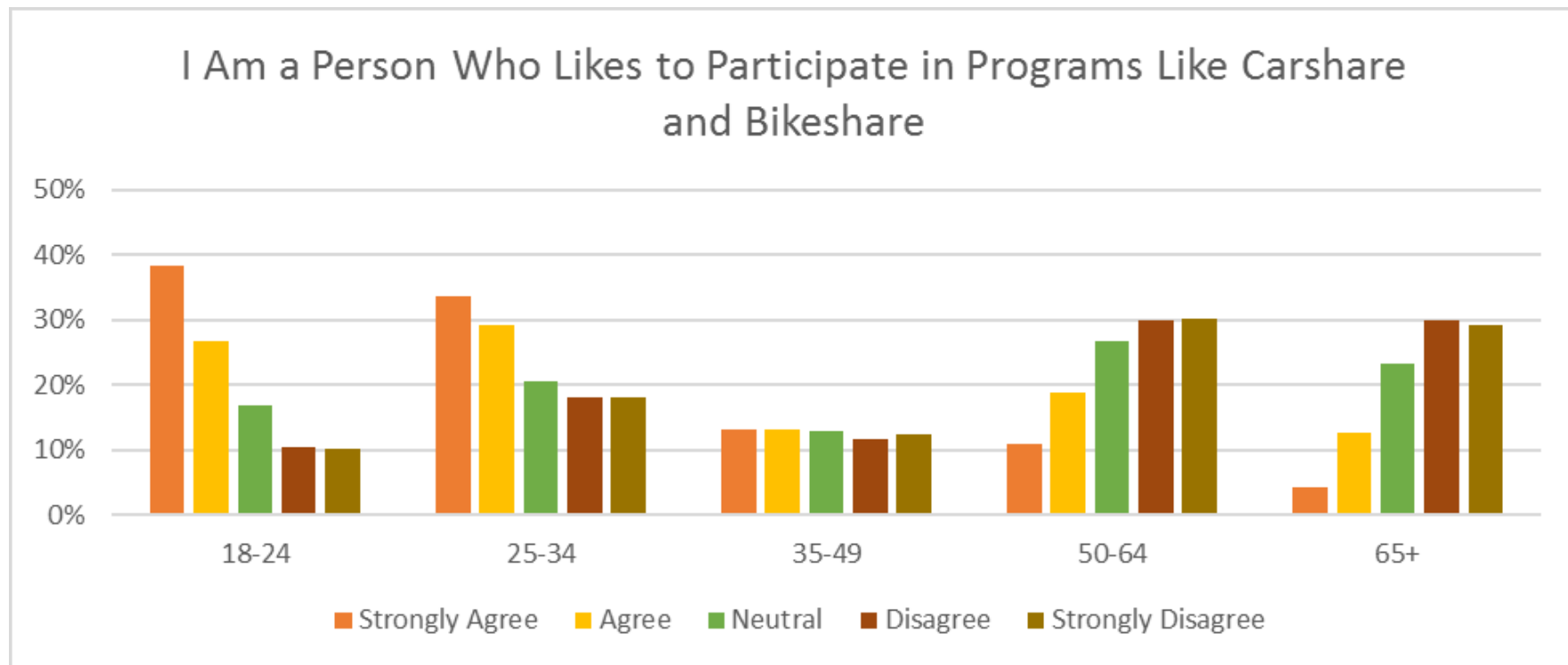
Source: United Nations, Department of Economic and Social Affairs, World Population Prospects: 2012 Revision, June 2013

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# Attitude toward car and bike sharing are very different by age group



Source: RSG survey data





# Generation C



## Trends, Uncertainties

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- Gen C = hyperlinked
- Spend entire lives connected with digital devices
- What will be the influences on travel behavior?

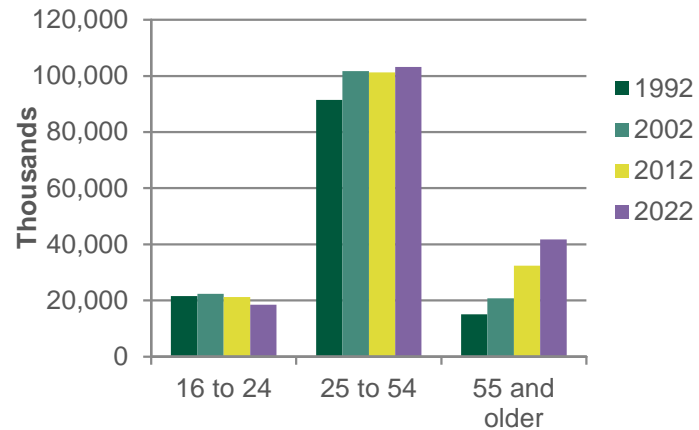


# Changing American Workforce

## Trends, Uncertainties

- Labor-force participation rate declining, but average retirement age increasing
- Workforce is growing older and more diverse
- Future trends will depend on the supply of jobs and who will have the needed skills
- Could vary a great deal by region

## Civilian Labor Force by Age (Millions)

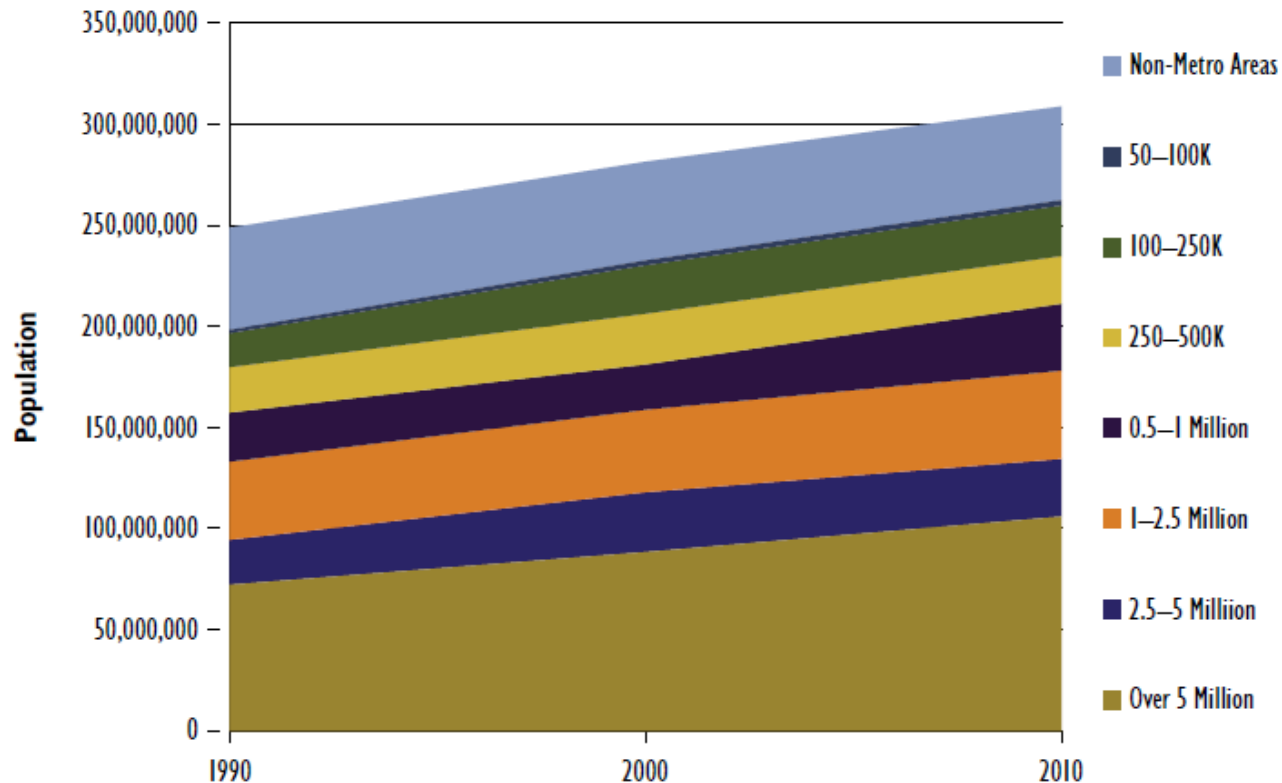


Source: BLS, Monthly Labor Review, December 2013; Toossi, M. December 2013. "Labor Force Projections to 2022: The Labor Force Participation Rate Continues to Fall." Monthly Labor Review. U.S. Department of Labor, Bureau of Labor Statistics. <http://www.bls.gov/opub/mlr/2013/article/pdf/labor-force-projections-to-2022-the-labor-force-participation-rate-continues-to-fall.pdf>



# Trends Toward Larger Metro Areas

- Metro regions with population > 5 million have grown most
- Top 22 areas (2.5 million +) account for 44% of total population



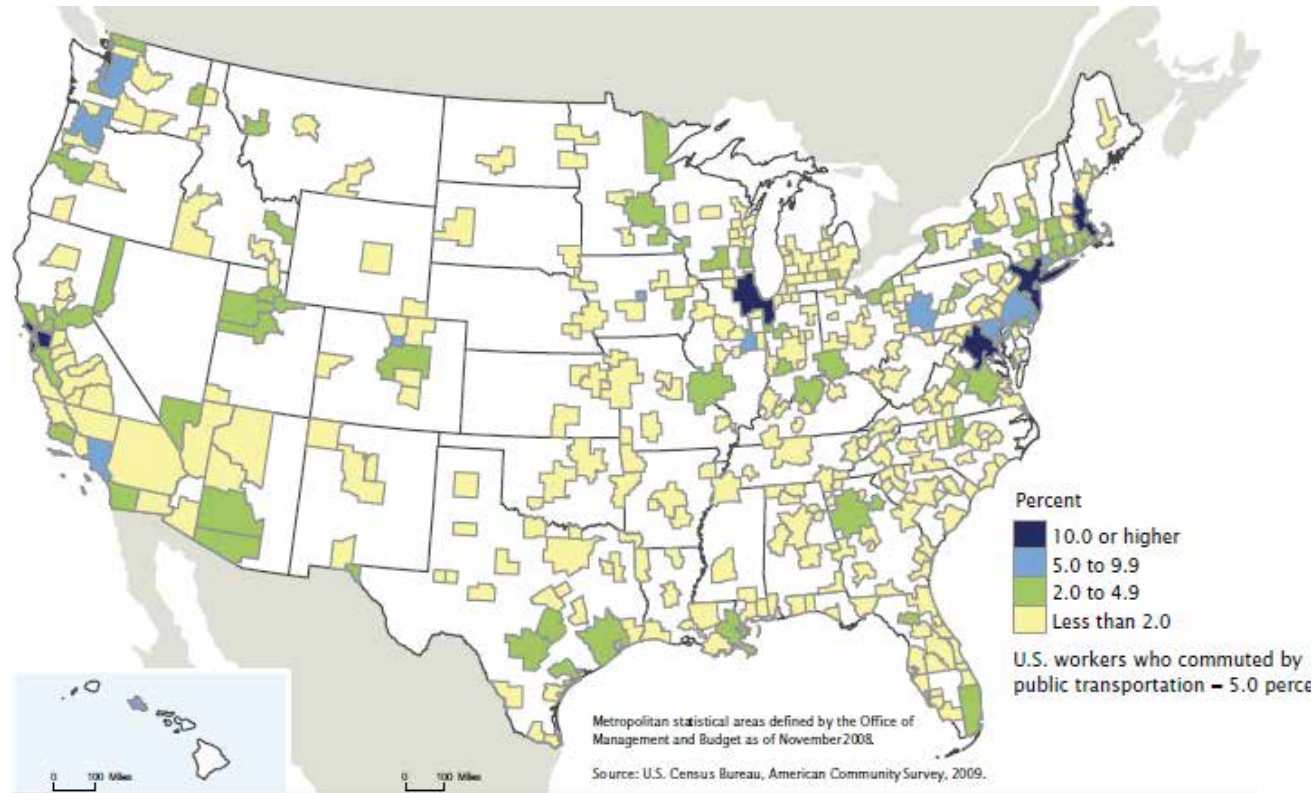
Source: US Census Bureau, taken from Commuting in America IV Brief 4



# Highest growth rates in Southeast and Southwest



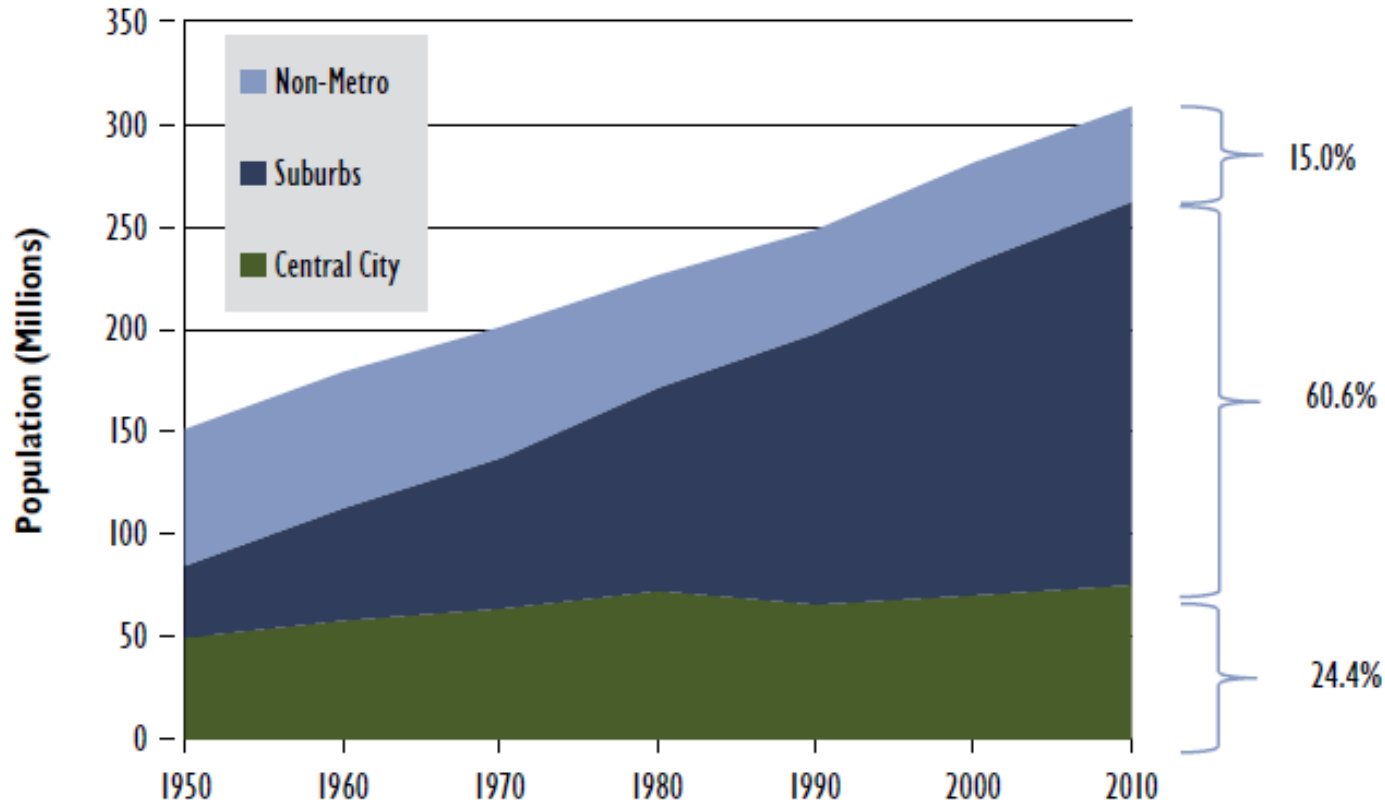
Region	# Metro Areas	Population (mil)		Population (mil)		Transit Work Share
		1990	2010	Increase	%	
Northeast + Mid-Atlantic	6	41.5	50.7	9.2	22%	12%
Southeast	9	14.7	26.1	11.4	<b>78%</b>	<b>2%</b>
Midwest	11	30.2	36	5.8	19%	3%
Southwest	8	17.4	28	10.6	<b>61%</b>	<b>3%</b>
Northwest + West	6	28.4	38.5	10.1	36%	7%
All	40	132.2	179.3	47.1	36%	



Source: US Census Bureau, taken from Commuting in America IV Brief 4, and 2009 ACS

# (Sub)urbanization of America

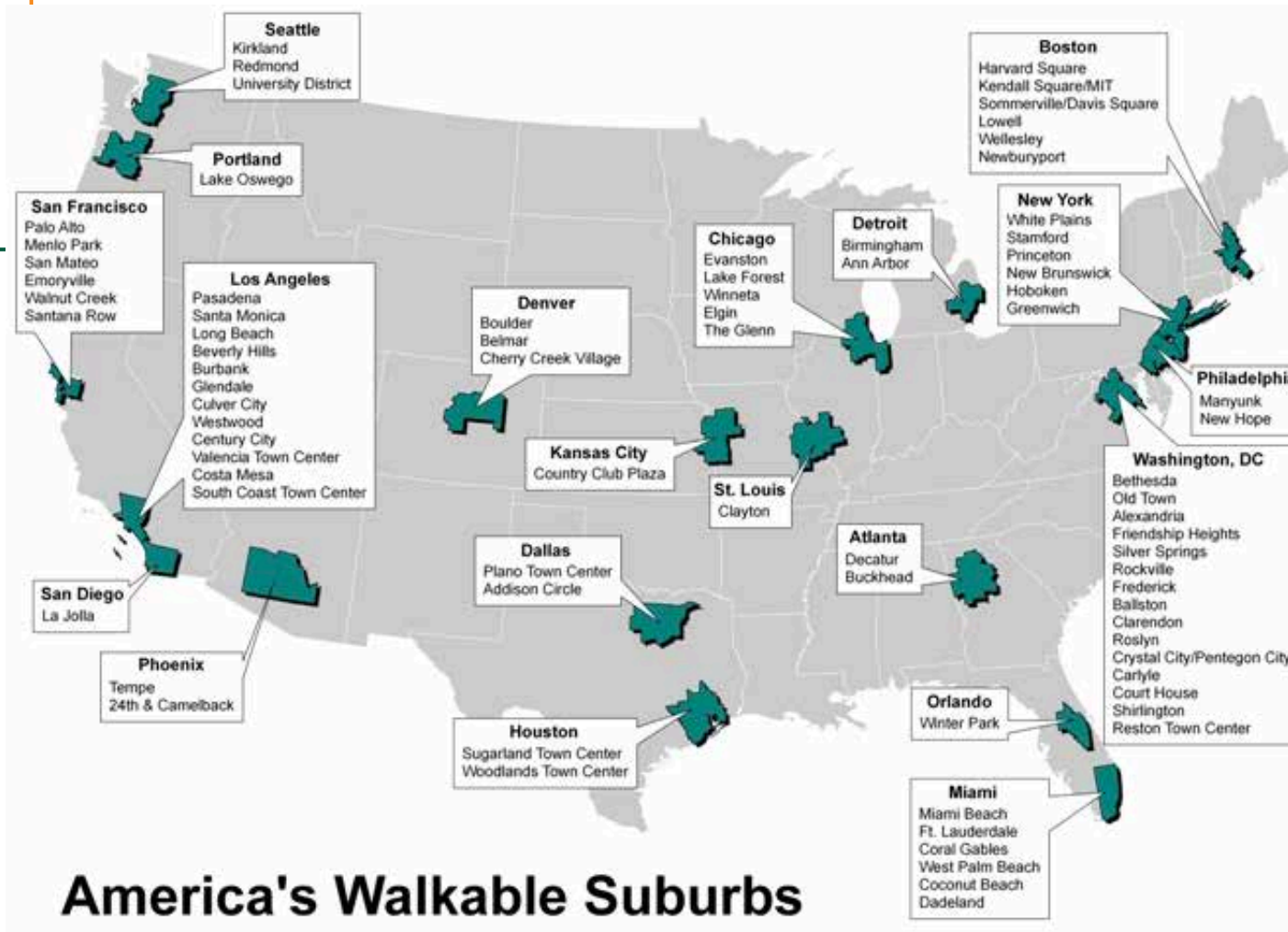
- Metro areas contain 85% of all population (~ 50% in 1950)
- Suburban areas contain about 71% of all Metro population (~25% in 1950)



Source: US Census Bureau, taken from Commuting in America IV Brief 4

# Blurring City and Suburb

## Trends, Uncertainties



- Both cities and suburbs home to employers and residences
- Inner-ring suburbs having density changes similar to center city
- What will be the demand and supply for different types of neighborhoods?

Map by Zara Matheson, Martin Prosperity Institute

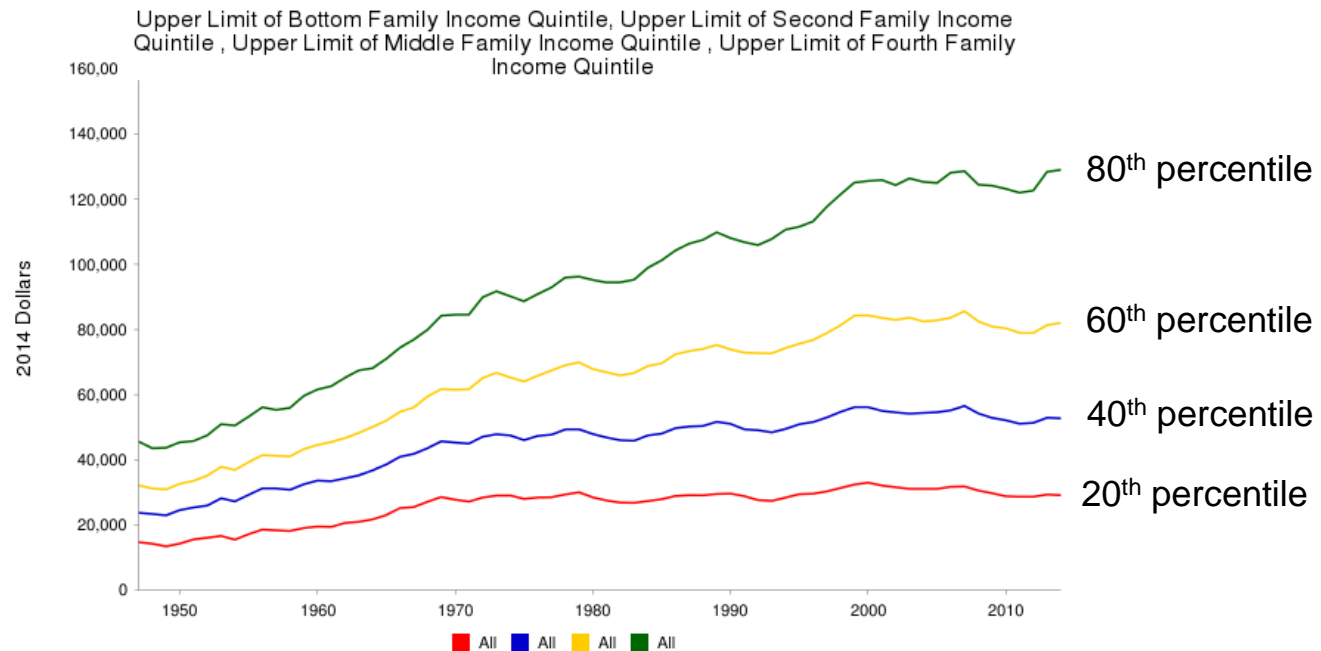
Data Source:

[http://www.brookings.edu/papers/2007/1128\\_walkableurbanisim\\_leinberger.aspx](http://www.brookings.edu/papers/2007/1128_walkableurbanisim_leinberger.aspx)



# The Distribution of Income

- Around 1980, income growth stopped in the lowest two income quintiles
- Around 2000, income growth stopped in the middle quintile also
- What will these curves look like as we leave the Great Recession behind?
- What will happen in specific regions?



Source: U.S. Census Bureau

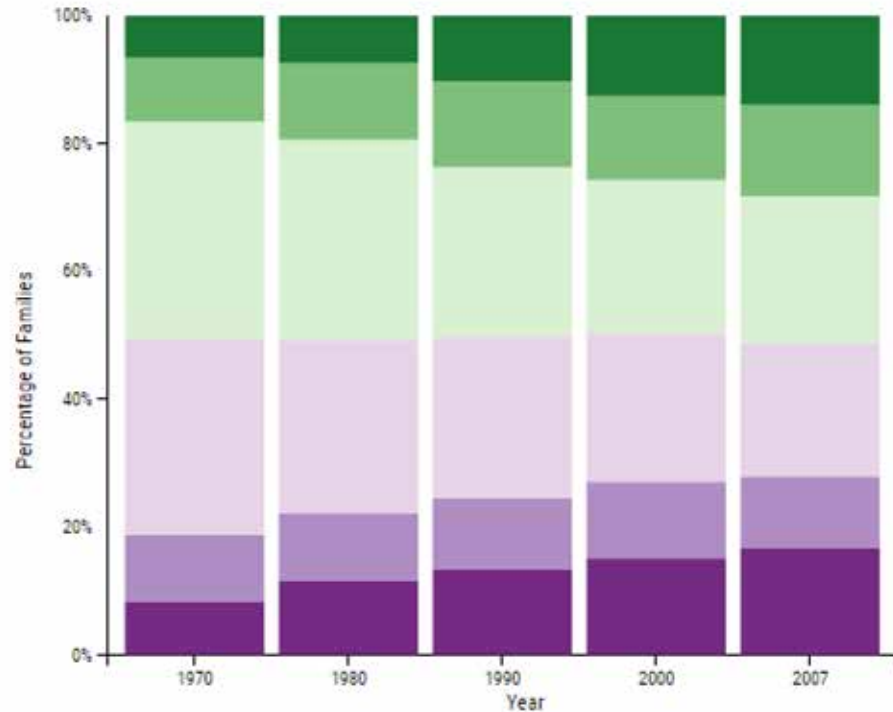


# Distribution of income by geography.... Increasing segregation, fewer middle-class neighborhoods

Neighborhood Median Income Level



Percentage of Families Living in High-, Middle-, and Low-Income Neighborhoods  
Metropolitan Areas with Population > 500,000, 1970-2007



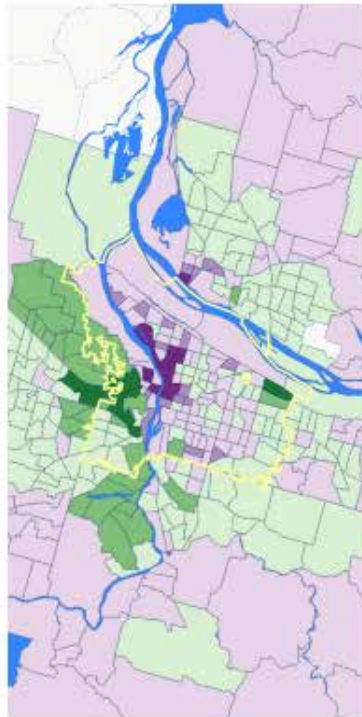


# Increasing segregation by income- Portland

*Neighborhood Median Income Level*

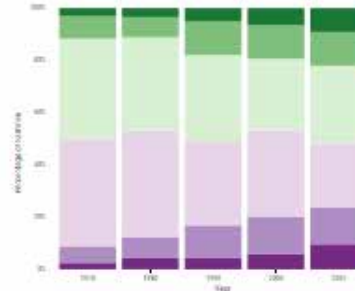


**Neighborhood Income Composition**  
Portland-Vancouver-Beaverton, OR-WA, 1970



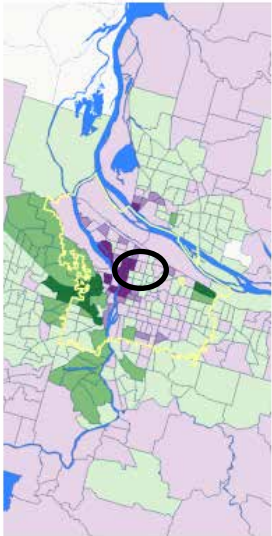
**Percentage of Families Living in High-, Middle-, and Low-Income Neighborhoods**

Portland-Vancouver-Beaverton, OR-WA 1970-2007

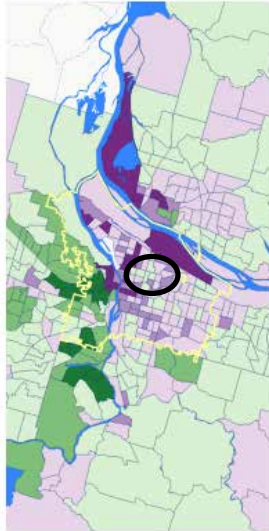


# Increasing segregation by income- Portland (2)

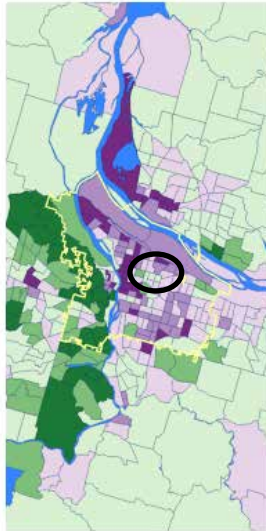
Neighborhood Income Compos  
Portland-Vancouver-Beaverton,  
WA, 1970



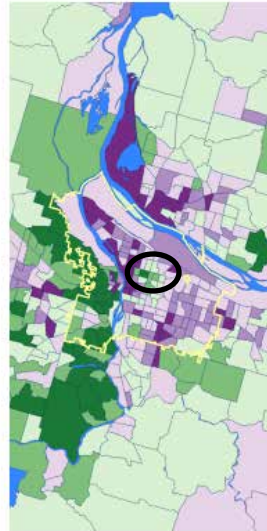
Neighborhood Income Composi  
Portland-Vancouver-Beaverton, WA, 1980



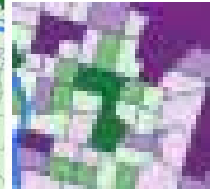
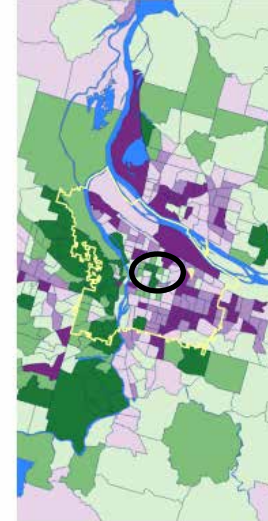
Neighborhood Income Compos  
Portland-Vancouver-Beaverton  
WA, 1990



Neighborhood Income Composi  
Portland-Vancouver-Beaverton, WA, 2000



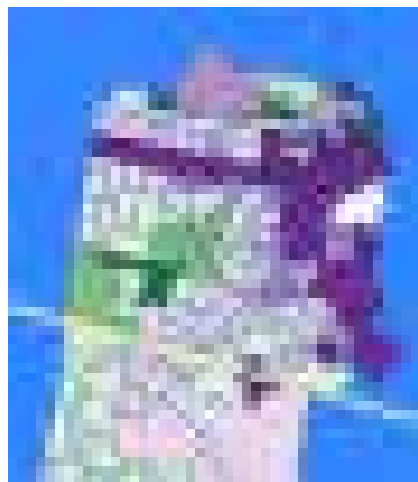
Neighborhood Income Compositio  
Portland-Vancouver-Beaverton, OR  
WA, 2007



# Not only segregation – also gentrification

## City of San Francisco

1970



2007



2050?

More recessions?

More segregation?

More gentrification?

Sea level rise?

None of the above?