

CELEBRATING

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1978-2018

WHAT DO TODAY'S METRO AREAS ACTUALLY LOOK LIKE?

An Examination of Density and Changing Development
Patterns

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National Multifamily Housing Council



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AGENDA

- Why Look at This?
- What Is a Suburb?
- An Alternative Way to Look at Metropolitan Areas—Density
- Is there a Relationship Between Demographics and Density in Metropolitan Areas?
- Has that Changed Over Time?
- Implications for the Apartment Industry



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WHY LOOK AT THIS?

Millennials Are Driving the Suburban Resurgence

These Cities Have Already Reached 'Peak Millennial' as Young People Begin to Leave

Studies Show Millennials Are Moving to the Suburbs (and Employers Are Following)

Conventional wisdom says younger workers only want to live in cities, but the conventional wisdom might be wrong.

The miserable reason behind millennials' slow march to the suburbs

No, Young People Aren't Fleeing Cities

JOE CORTRIGHT DEC 20, 2017

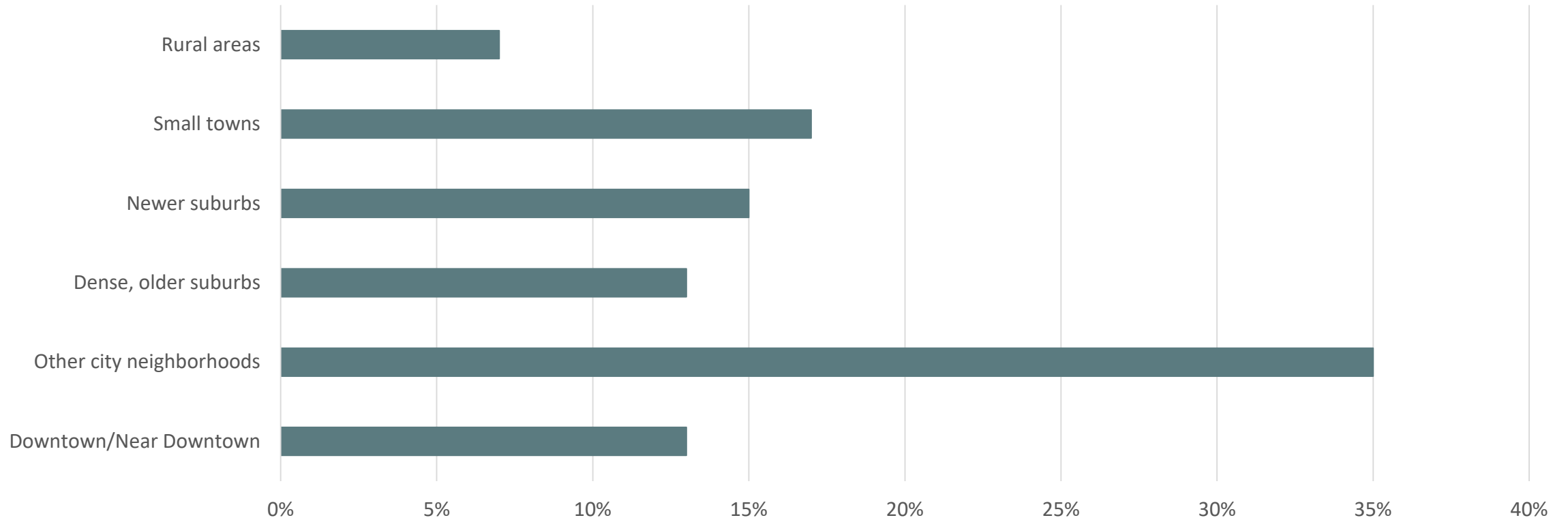


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WHY LOOK AT THIS?

Current Location of Generation Y Survey Respondents



Source: "Gen Y and Housing: What They Want and Where They Want It", p. 9 (UDR/Lachman Associates)

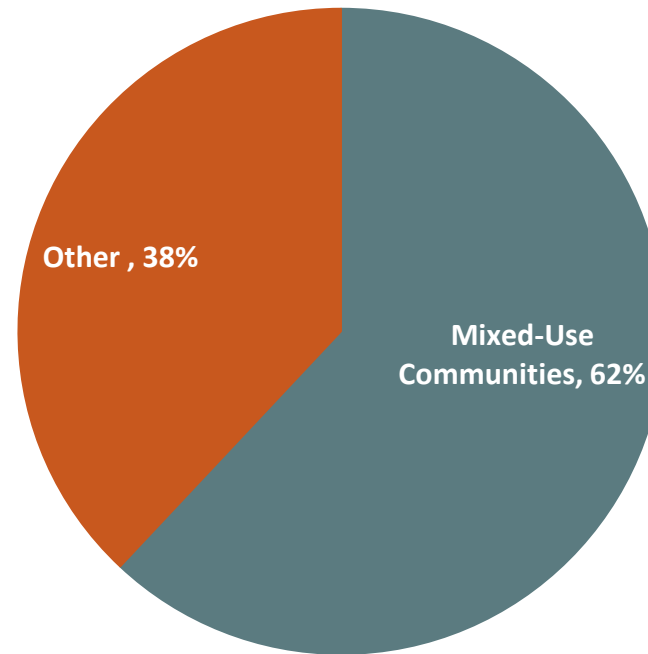


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WHY LOOK AT THIS?

Where Millennial Respondents Want to Live



Source: “Millennials—Breaking the Myths”, p. 16 (Nielsen)



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WHAT IS A SUBURB?

a district lying immediately outside a city or town, especially a smaller residential community.

-dictionary.com

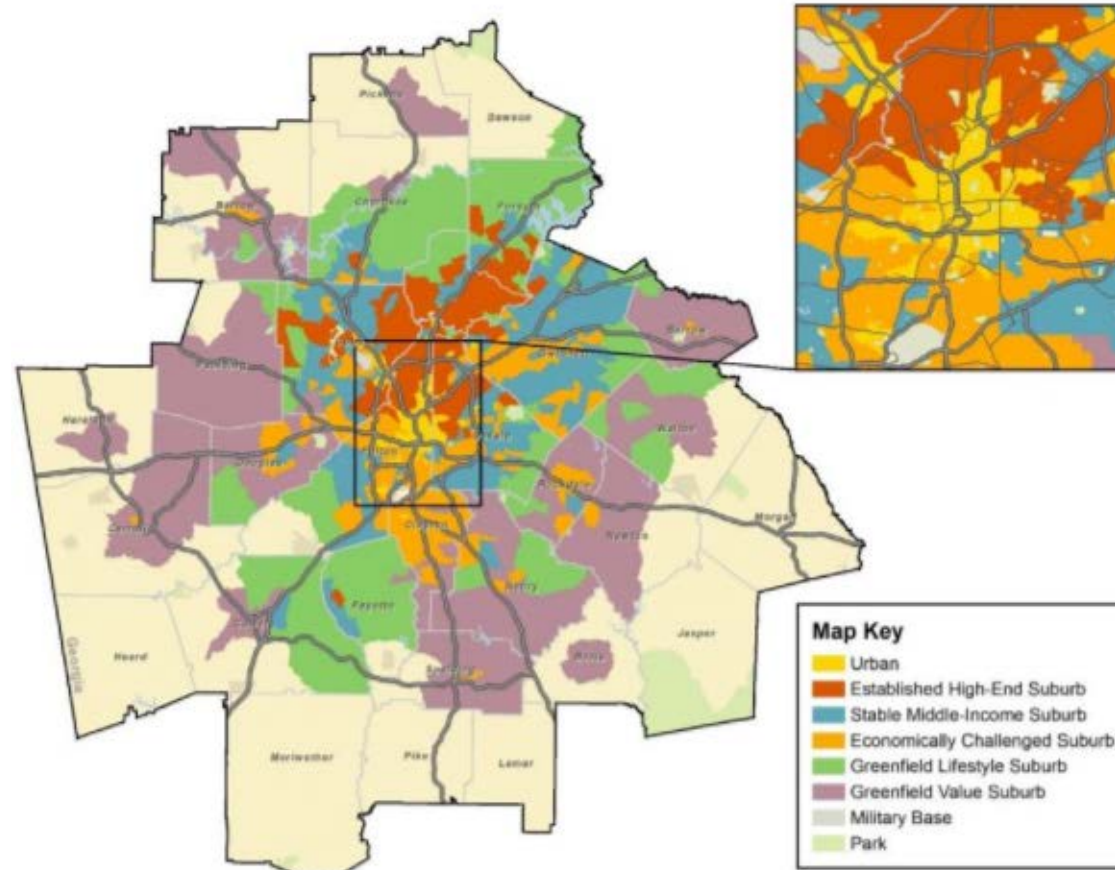


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TYOLOGIES OF SUBURBS

Classification of the Suburbs; Atlanta-Sandy Springs-Roswell, GA MSA



SOURCE: RCLCO



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TYOLOGIES OF SUBURBS

Name of Suburb	Defining Characteristics
Edge Cities	· 5 million sq. ft. office space
	· 600,000 sq. ft. retail space
	· More jobs than bedrooms
	· People perceive as “one place”
Boomburbs	· Incorporated cities with more than 100,000 residents
	· Not the core city of the metro area
	· <10% population growth from 1970 to 2000 Census
	· Have all the elements of a city, but their physical characteristics do not resemble them.
Metroburbia	· “New Metropolis”- employers located outside of city with retail opportunities nearby
Technoburbs	· Mix of all uses, including agricultural
New Urbanism	· Mix of all uses

Source: Hanlon, 2010; Knox, 2008; Lang & Lefurgy, 2007; Garreau, 1991; Fishman, 1987.



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Clarksburg, MD 1993

Legend
County
Germantown



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Clarksburg, MD 2017

Legend

-  County
-  Germantown



Google Earth



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AN ALTERNATIVE WAY TO LOOK AT METRO AREAS: COMPARE CHANGES IN DENSITY OVER TIME



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METHODOLOGY - INDEX

- Time Period: 1990-2015
- Data Source: Urban Institute/Geolytics Neighborhood Change Database and American FactFinder
- Datasets: 1990 & 2000 Decennial Census; 2006-2010 & 2011-2015 American Community Survey
- Geography: Census Tract (in 2010 boundaries)



THREE DIFFERENT INDEXES

- Total Housing Index
- Single-Family Housing Index & Single-Family Share Housing Index
- Multifamily Housing Index & Multifamily Share Housing Index

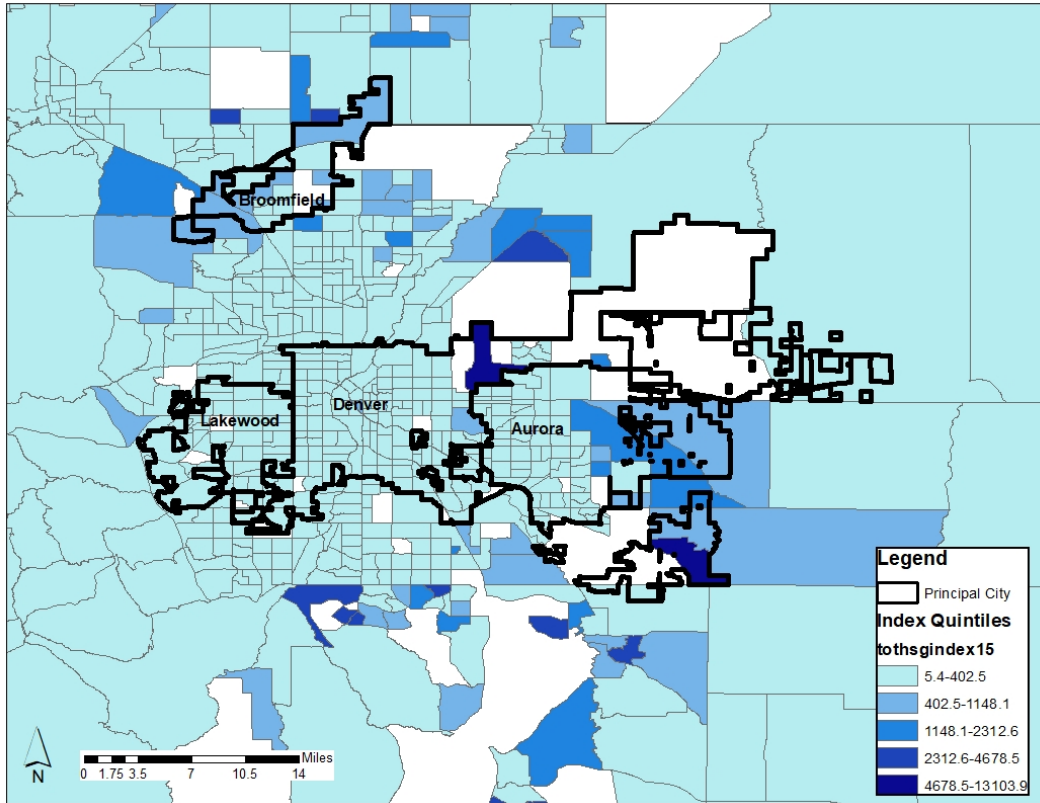


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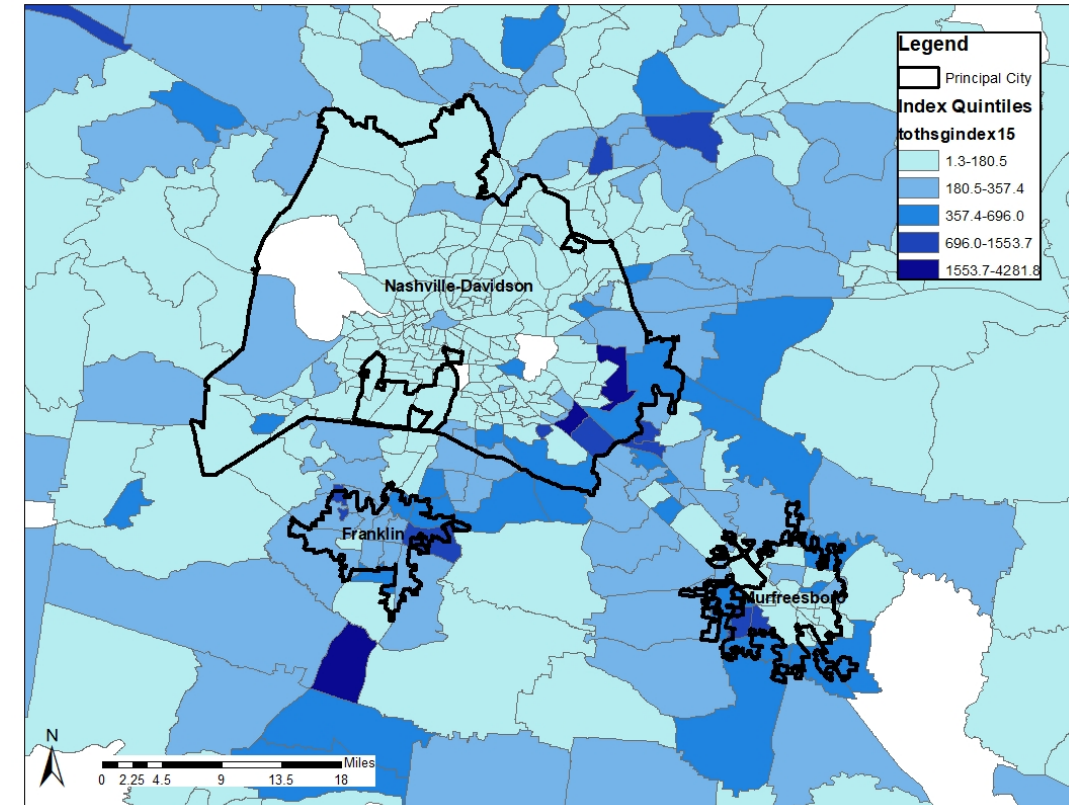


DENSITY IS MOVING OUTWARD

Total Housing Index in Denver Metro Area, 2015



Total Housing Index in Nashville Metro Area, 2015



Source: ESRI; U.S. Census Bureau; Geolytics; Urban Institute.



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...BUT NOT AT AN INCREDIBLY RAPID RATE

Total Housing Index (excluding top 5th percentile)

Index Year	No. of Obs.	10th Percentile	50th Percentile	90th Percentile	Mean	Std. Dev.
2000	64,713	94.65	106.34	137.75	111.58	19.32
2010	64,713	91.46	111.90	184.53	127.48	50.41
2015	64,713	90.58	112.72	194.54	130.39	55.81

Source: U.S. Census Bureau; Geolytics; Urban Institute.

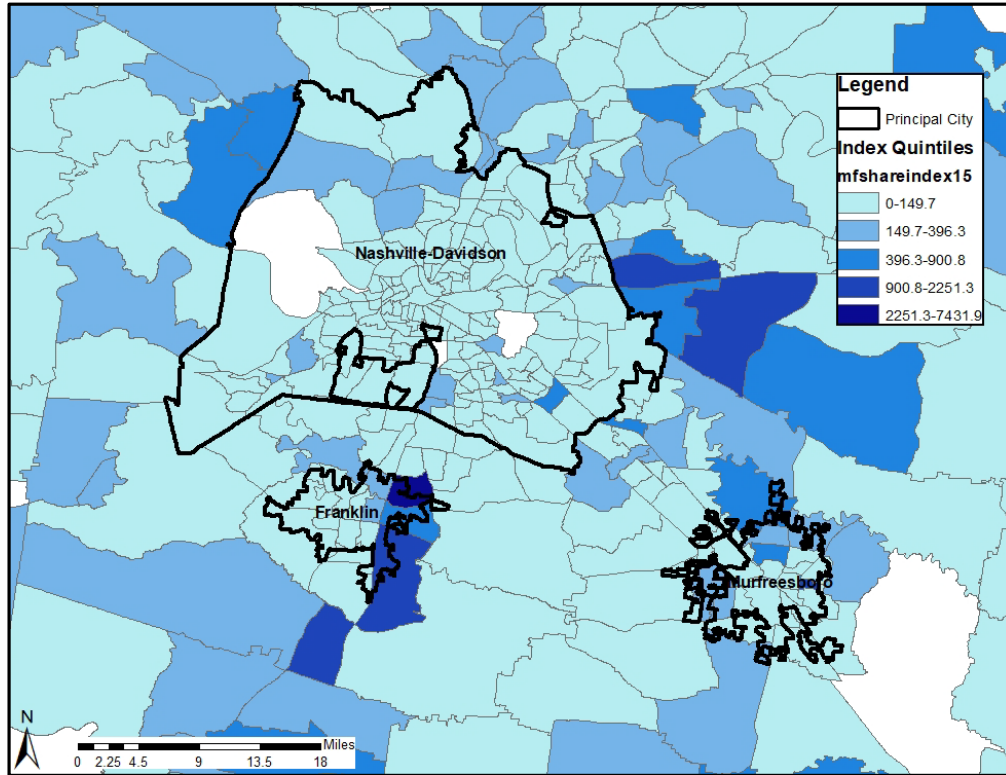


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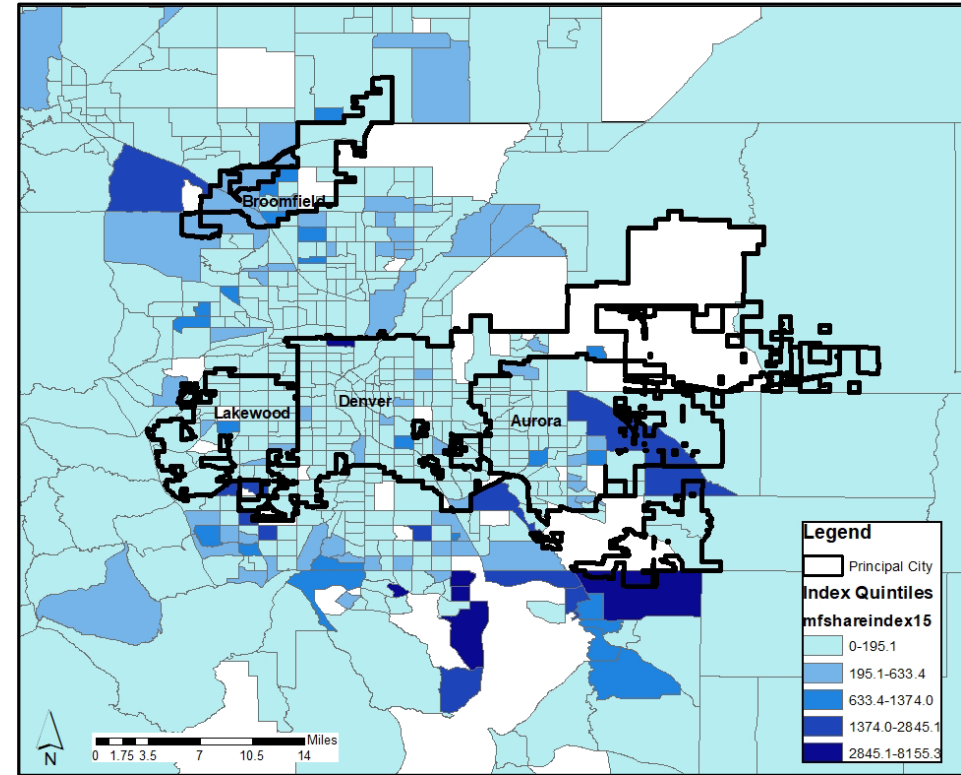


MULTIFAMILY SHARE IS INCREASING IN MANY “SUBURBS”

Multifamily Share Index in Nashville Metro Area, 2015



Multifamily Share Index in Denver Metro Area, 2015



Source: ESRI; U.S. Census Bureau; Geolytics; Urban Institute.



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LITTLE DIFFERENCE IN AVERAGE INDEX VALUES BETWEEN CITIES AND SUBURBS

Single-Family Index Average Values

	2000	2010	2015
Principal City	136.28	202.70	212.79
Suburbs	133.81	201.83	212.37

Source: U.S. Census Bureau; Geolytics; Urban Institute.

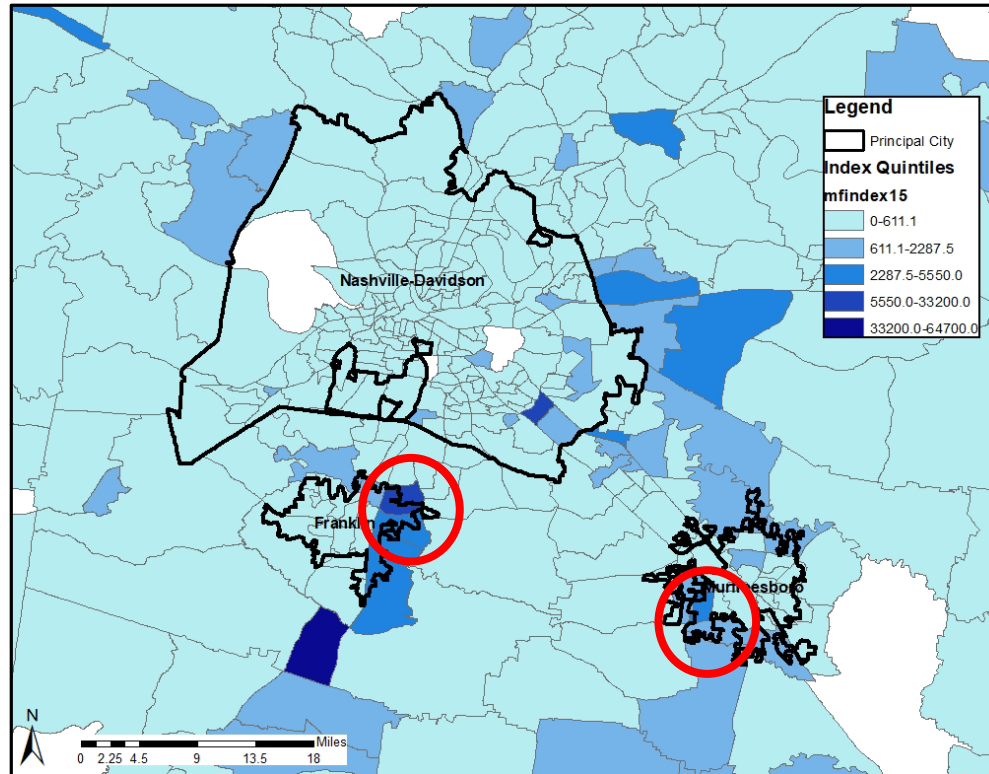


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DEVELOPMENT TRENDS SUPERSEDE POLITICAL DEFINITIONS

Multifamily Index in Nashville Metro Area, 2015



Source: ESRI; U.S. Census Bureau; Geolytics; Urban Institute.



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WHAT ABOUT THE PEOPLE LIVING IN
METROPOLITAN AREAS?



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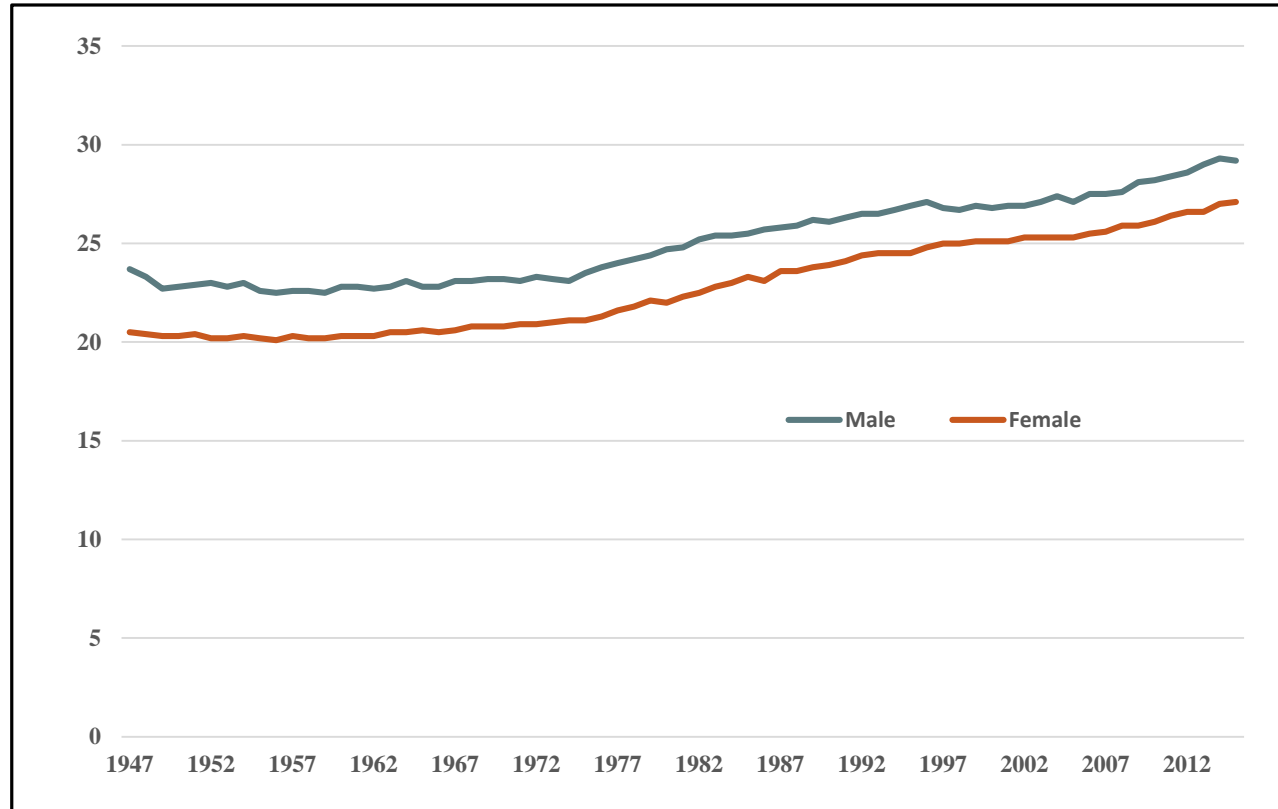


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ARE MILLENNIALS ANYTHING MORE THAN A MARKETING GROUP?

Median Age at First Marriage



Source: U.S. Census Bureau.



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METHODOLOGY - REGRESSION

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REGRESSION VARIABLES

- Dependent Variable: Total Housing Units per Acre (Log)
- Independent/Control Variables:
 - Share of Each Age Cohort
 - City/Suburb Status
 - Household Income
 - Educational Attainment
 - Race/Ethnicity
 - Commute Time to Work
 - Means of Transportation to Work
 - Structure Type
 - Tenure & Vacancy Status



THE RELATIONSHIP BETWEEN THE SHARE OF 25-34 YEAR OLDS & DENSITY HAS CHANGED LITTLE OVER TIME

Coefficients for Young Adult Cohort from Larger Regression

	1990	2000	2010	2015
Share of 25-34 Year Olds	-2.55*	-4.05*	-1.32*	-0.42*
Dependent Variable: Log of Total Housing Units per Acre				
*p<0.05				

Source: U.S. Census Bureau; Geolytics; Urban Institute.



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HOUSING STOCK VARIABLES ARE SIMILAR TO WHAT WAS ANTICIPATED

Coefficients for Stock-Related Variables from Larger Regression

	1990	2000	2010	2015
Multifamily Share	2.44*	2.29*	3.24*	3.08*
% Renters	2.07*	1.51*	-0.52*	-0.37*
% Vacant Units	N/A	N/A	-3.71*	-3.79*

Dependent Variable: Log of Total Housing Units per Acre

*p<0.05

Source: U.S. Census Bureau; Geolytics; Urban Institute.



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DEMOGRAPHIC VARIABLES ARE MIXED, BUT RELATIONSHIPS WITH DENSITY REMAIN CONSTANT OVER TIME

Coefficients for Resident Characteristics from Larger Regression

	1990	2000	2010	2015
% Pop. Under 18	-4.57*	-5.93*	-3.39*	-3.29*
% Pop. 18-24	-1.99*	-4.97*	-3.29*	-2.06*
% Pop. 35-44	-7.99*	-6.38*	-2.20*	-0.14
% Pop. 45-54	-11.83*	-8.47*	-4.76*	-3.22*
% Pop. 55-64	-1.67*	-15.44*	-6.76*	-4.96*
% HH Inc. \$25,000-\$49,999	1.96*	0.17	0.16	-0.07
% HH Inc. \$50,000-\$74,999	5.98*	1.81*	-0.34*	0.03
% HH Inc. \$75,000-\$99,999	7.21*	5.88*	-0.19	-0.63*
% HH Inc. \$100,000 or Greater	3.00*	3.28*	0.88*	0.89*

*p<0.05



DEMOGRAPHIC VARIABLES ARE MIXED, BUT RELATIONSHIPS WITH DENSITY REMAIN CONSTANT OVER TIME

Coefficients for Resident Characteristics from Larger Regression

	1990	2000	2010	2015
% Black/African American Residents	1.05*	1.36*	1.77*	1.62*
% Hispanic Residents	1.37*	1.97*	2.31*	1.82*
% Pop. With High School Diploma	-1.95*	-0.71*	-0.66*	-2.94*
% Pop. With Some College	2.19*	2.23*	2.45*	1.27*
% Pop. With Associate's Degree	-2.61*	0.44	-0.18	-1.18*
% Pop. With Bachelor's	-1.69*	N/A	1.94*	N/A
% Workers Who Use Public Transportation	3.55*	3.28*	0.89*	1.38*
% Workers Who Walk	-4.92*	-4.39*	-1.91*	-3.69*
*p<0.05				



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Source: U.S. Census Bureau; Geolytics; Urban Institute.



SUMMARY

- The traditional city-suburb distinction is less useful today
- Density is increasing, but at a slow, uneven rate
- The relationship between certain demographic groups and residential density has changed little from 1990 to 2015—will this relationship continue in the future?



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IMPLICATIONS FOR APARTMENT INDUSTRY

- Must be careful to avoid building for one group of individuals
- Additional demand in outer areas as employment patterns continue to change
- Continuation of NIMBY issues as outer areas change
- Affordability concerns becoming more heightened in areas commonly known as “suburbs”



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OPPORTUNITIES FOR FURTHER RESEARCH

- Commercial data – role of employers
- Role of 25-to-34-year-olds living at home in data
- Case studies—regional differences, shrinking cities



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THANK YOU!

Comments/Questions?



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