# Declining driving among Millennials:
## A nationwide perspective of the causes and consequences

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# To Do

- ❑ The four types of Millennial travelers
- ❑ Constraints or preferences?
- ❑ Travel and the built environment
- ❑ Is a back-to-the-city movement underway?

NESCAFÉ
CALIPER

HIRE
ME

BIENVENUE CHEZ
STEEL
ESPRESSO 2.5
ALLONGE 2.5
NOISETTE 3
CREME 4
FILTRE 3
THE 4
FRESH JUICE 4
HOT CHOC 5
GRANOLA 5
FORMULE 10 - 12€

# Travel behavior is multifaceted

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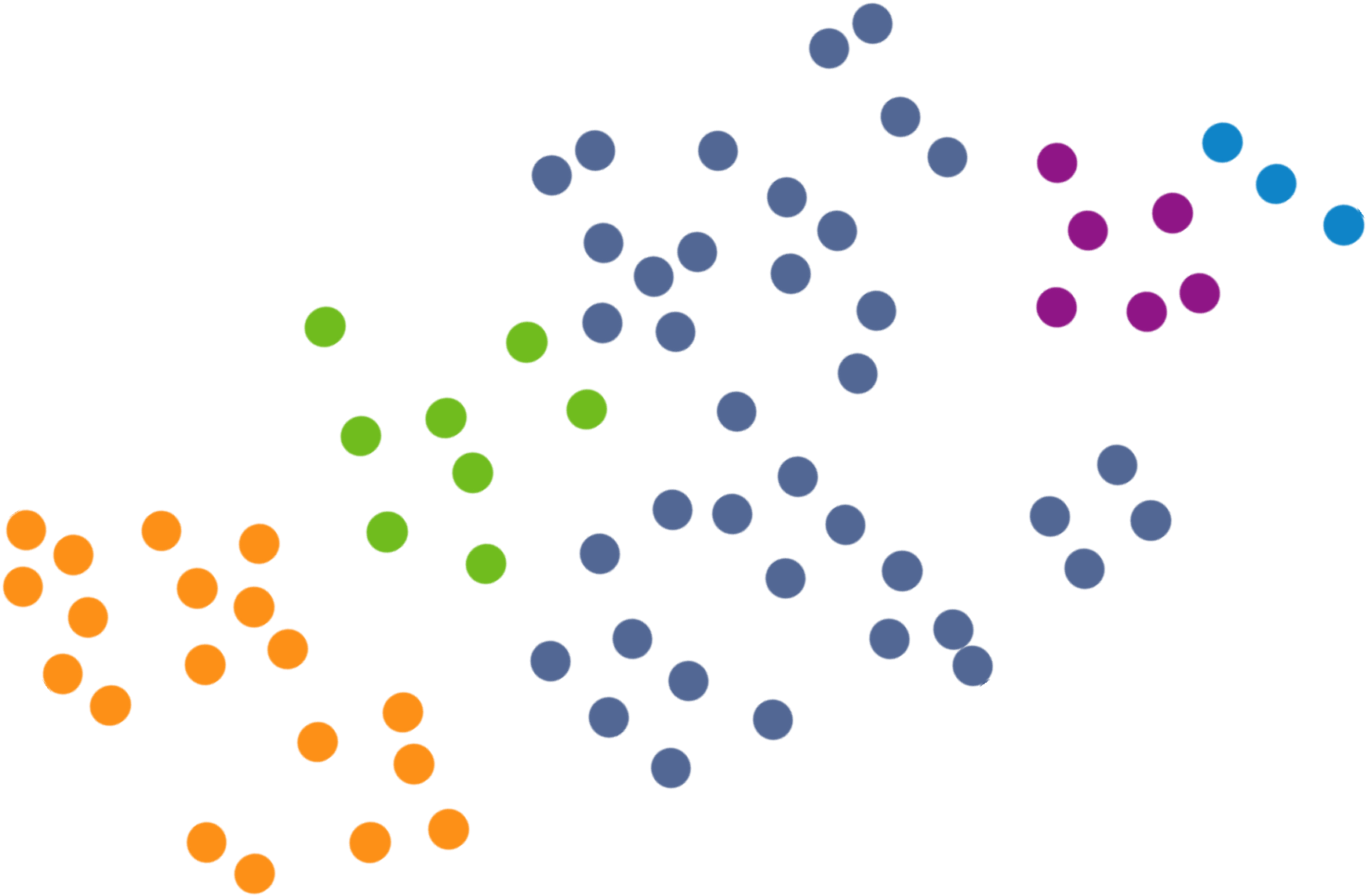
Mobility

Trip making

Automobile access

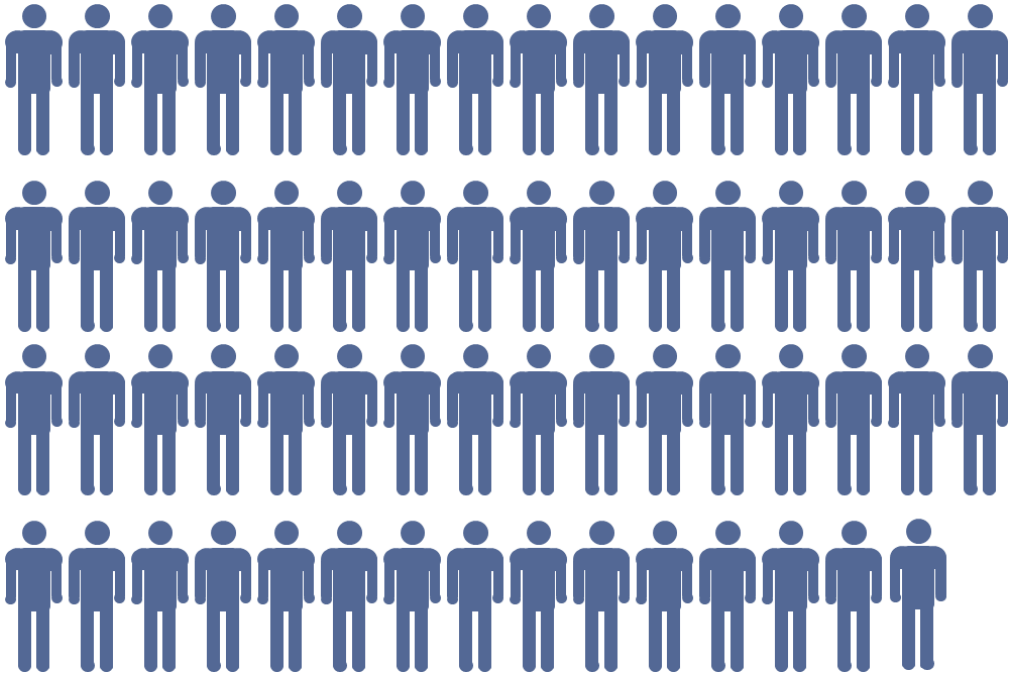
Day-to-day variability



# Latent Profile Analysis

**Latent Profile Analysis**

**Drivers: 79%**



**Drivers: 79%**

**Long-distance Trekkers: 3%**

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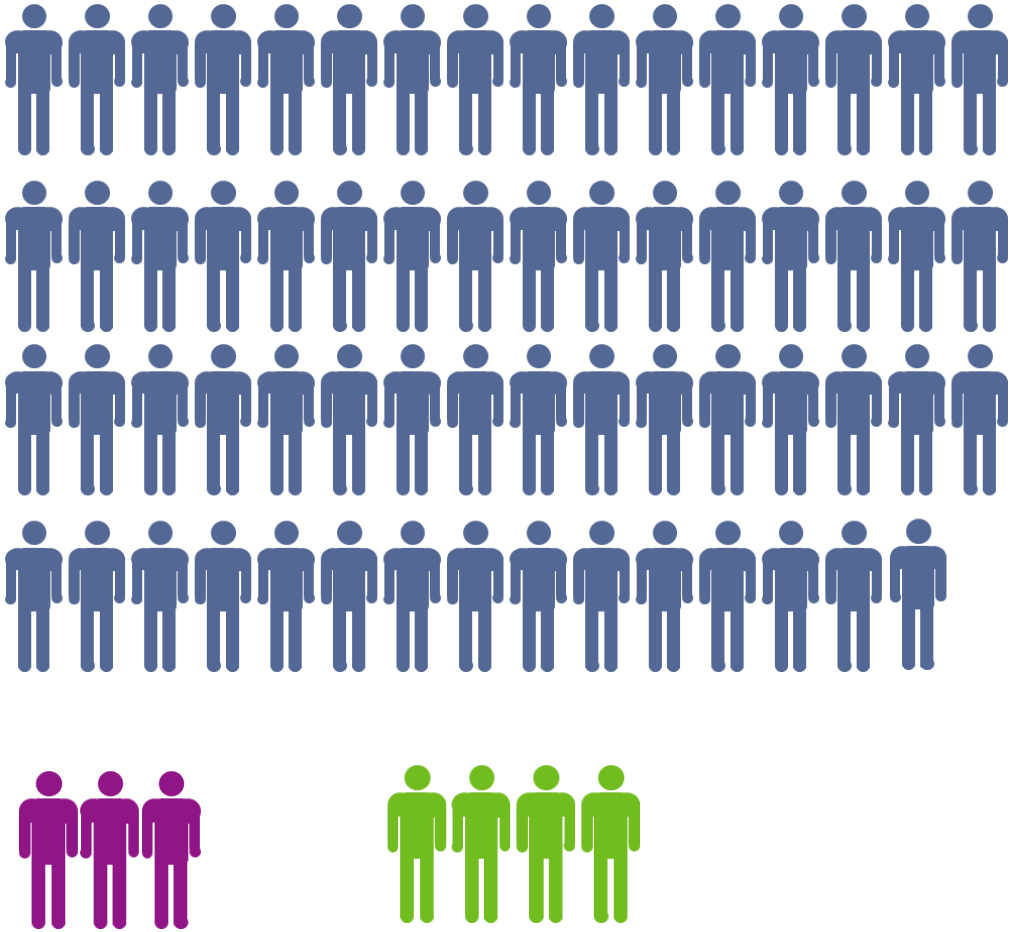
**Long-distance Trekkers: 3%**

**Multimodals: 4%**

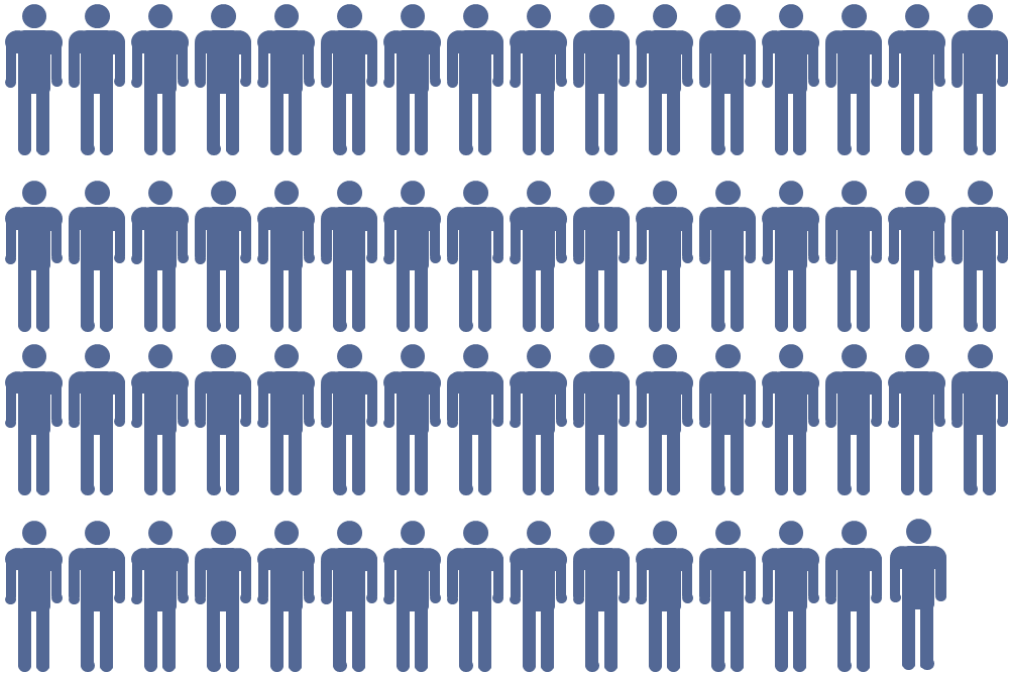


Drivers: 79%

Long-distance Trekkers: 3%

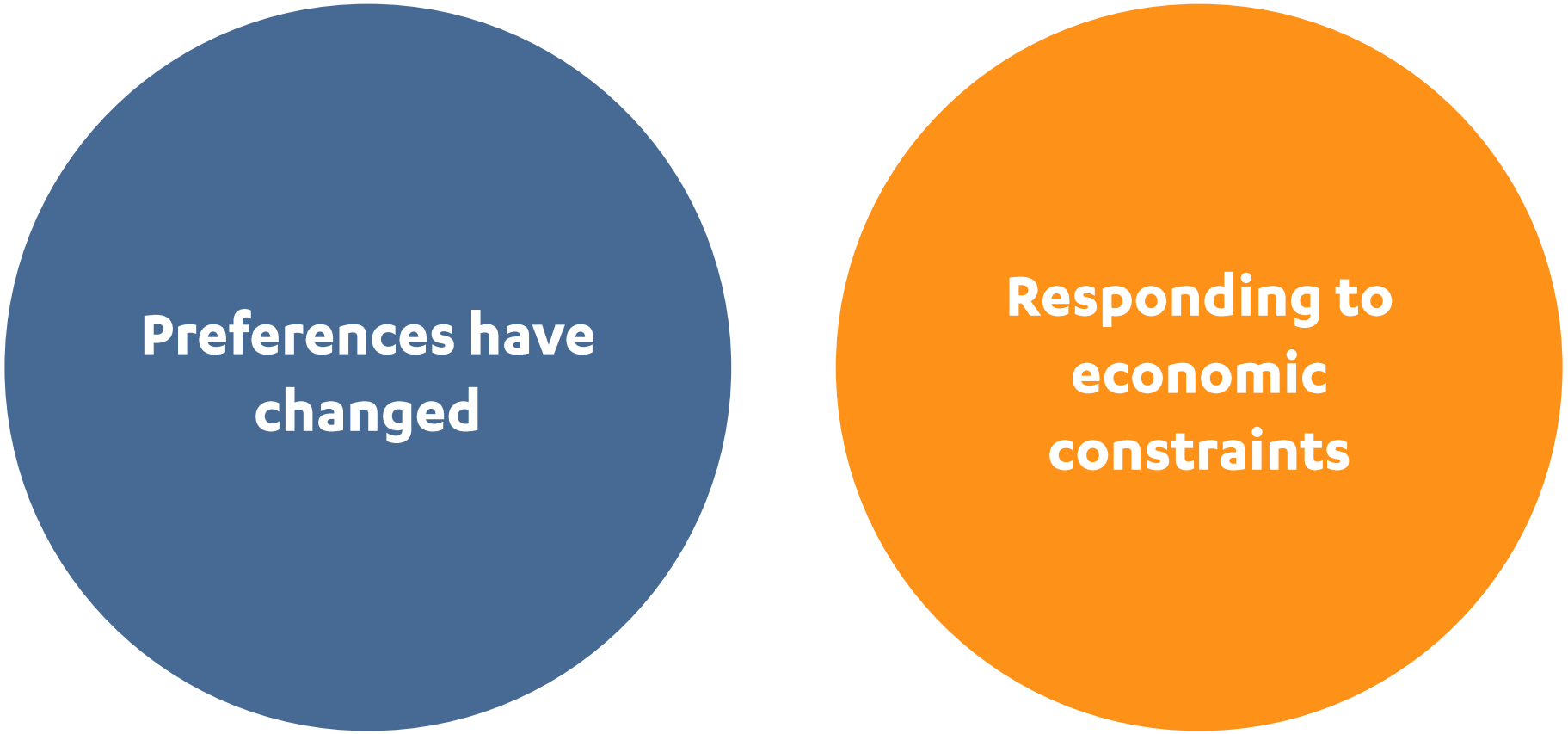
Multimodals: 4%

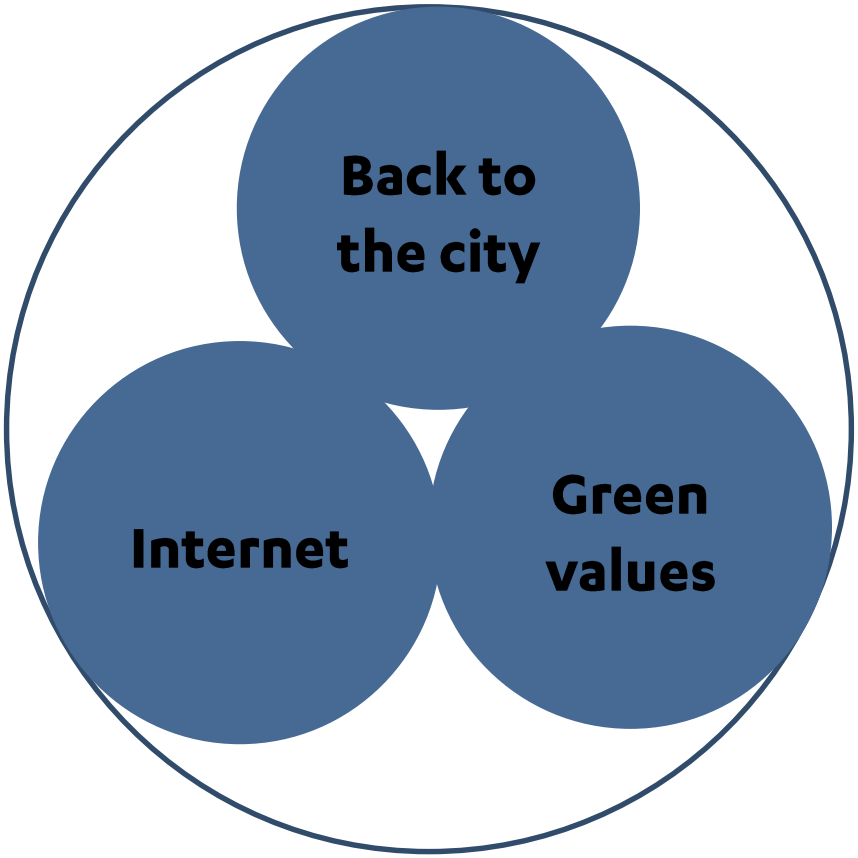
Car-less: 14%



- ✓ The four types of Millennial travelers

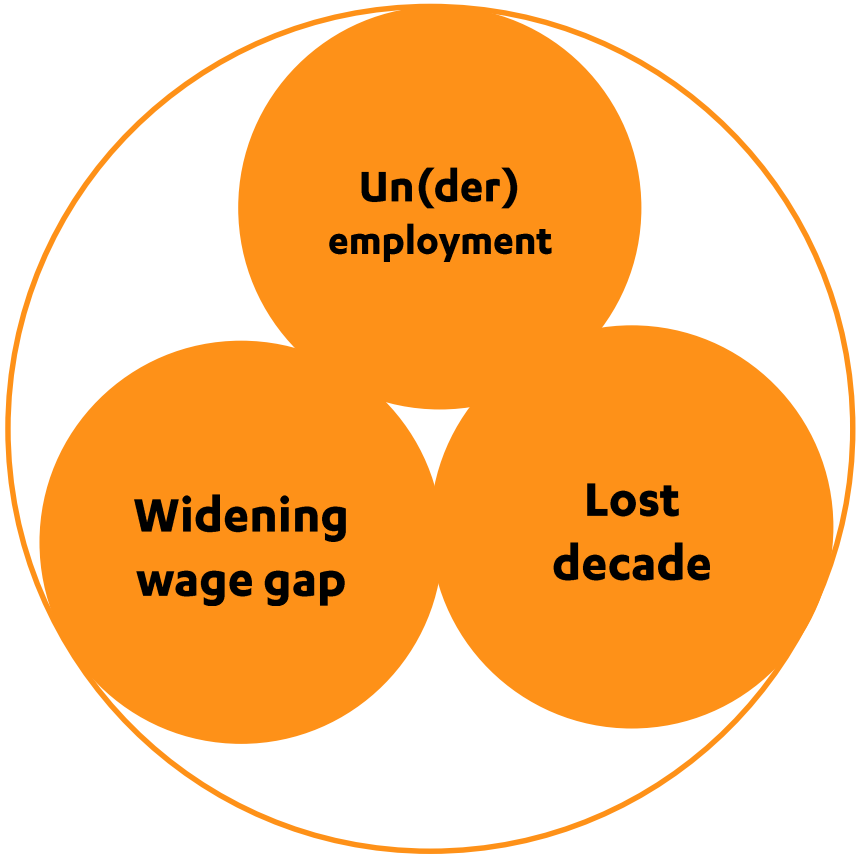
- Constraints or preferences?


Preferences have changed
Responding to economic constraints

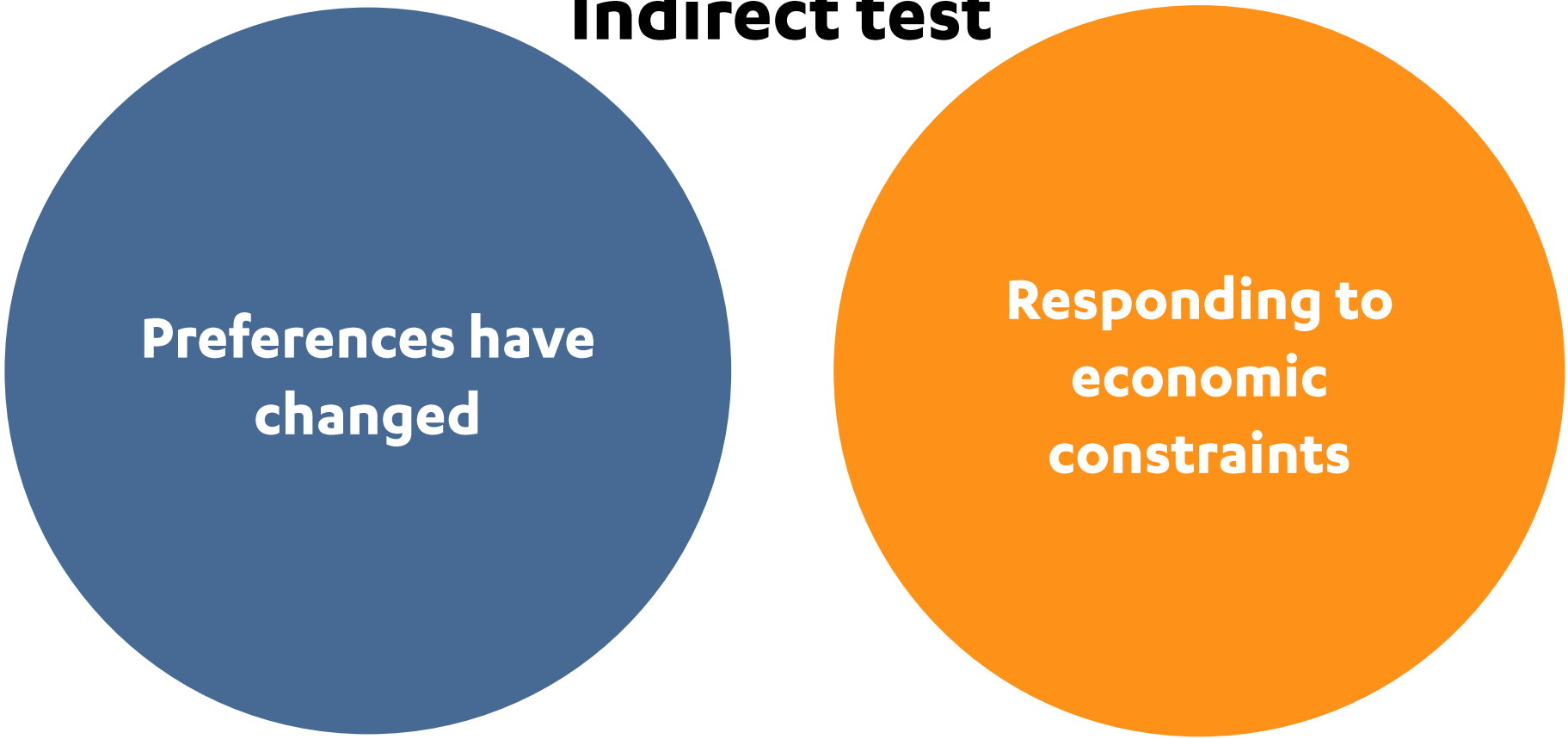



Responding to economic constraints

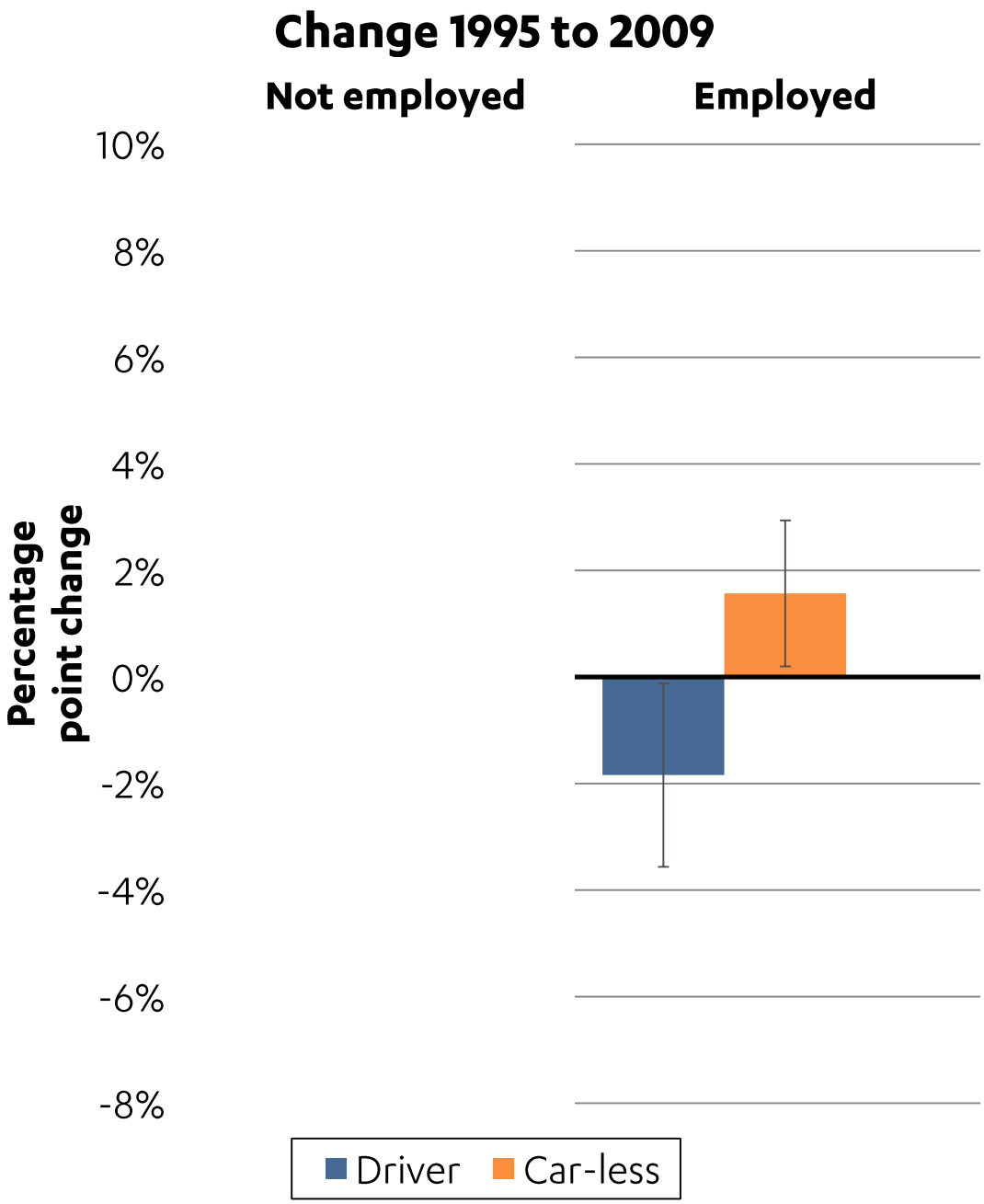
Preferences have changed

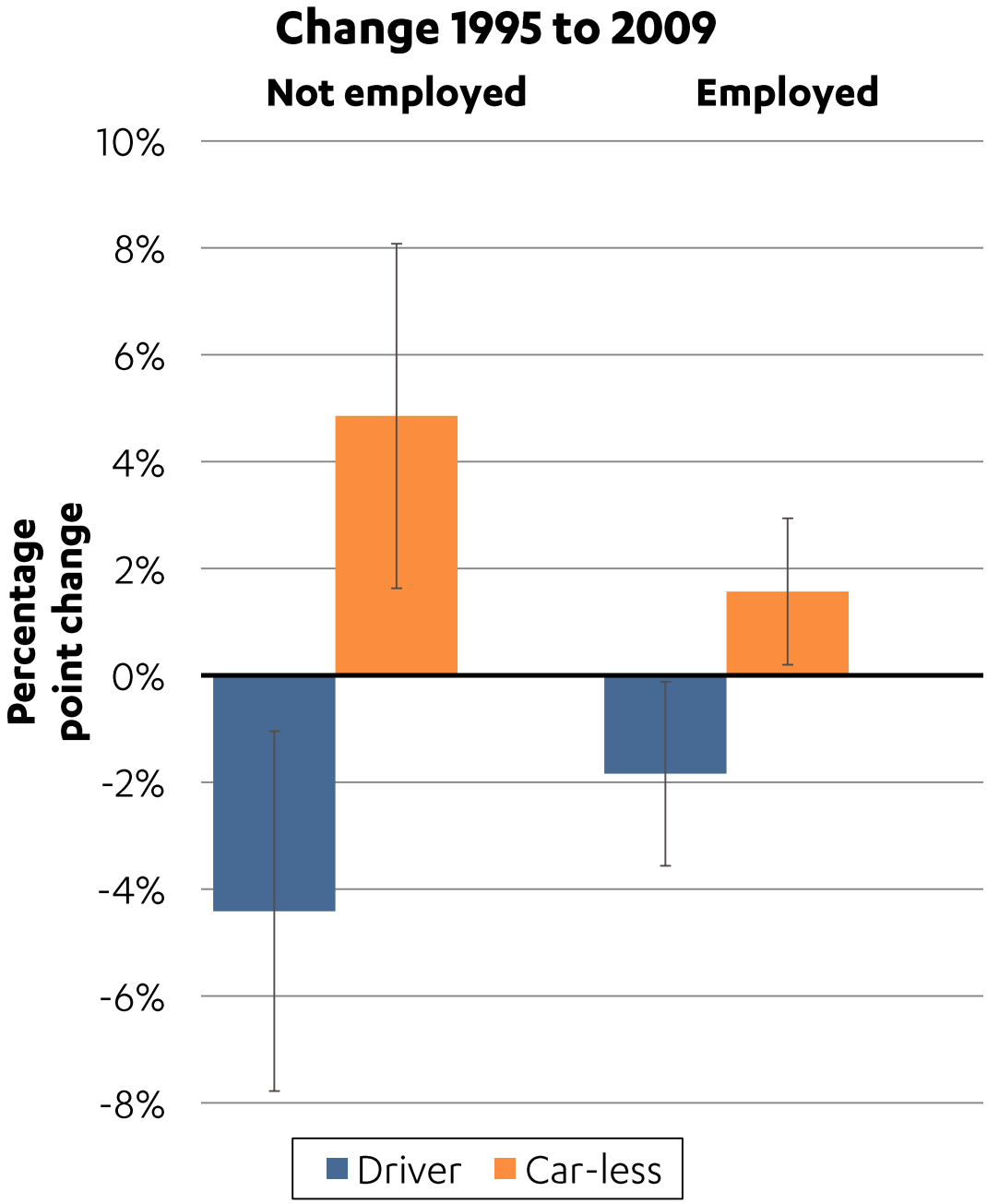


# Indirect test

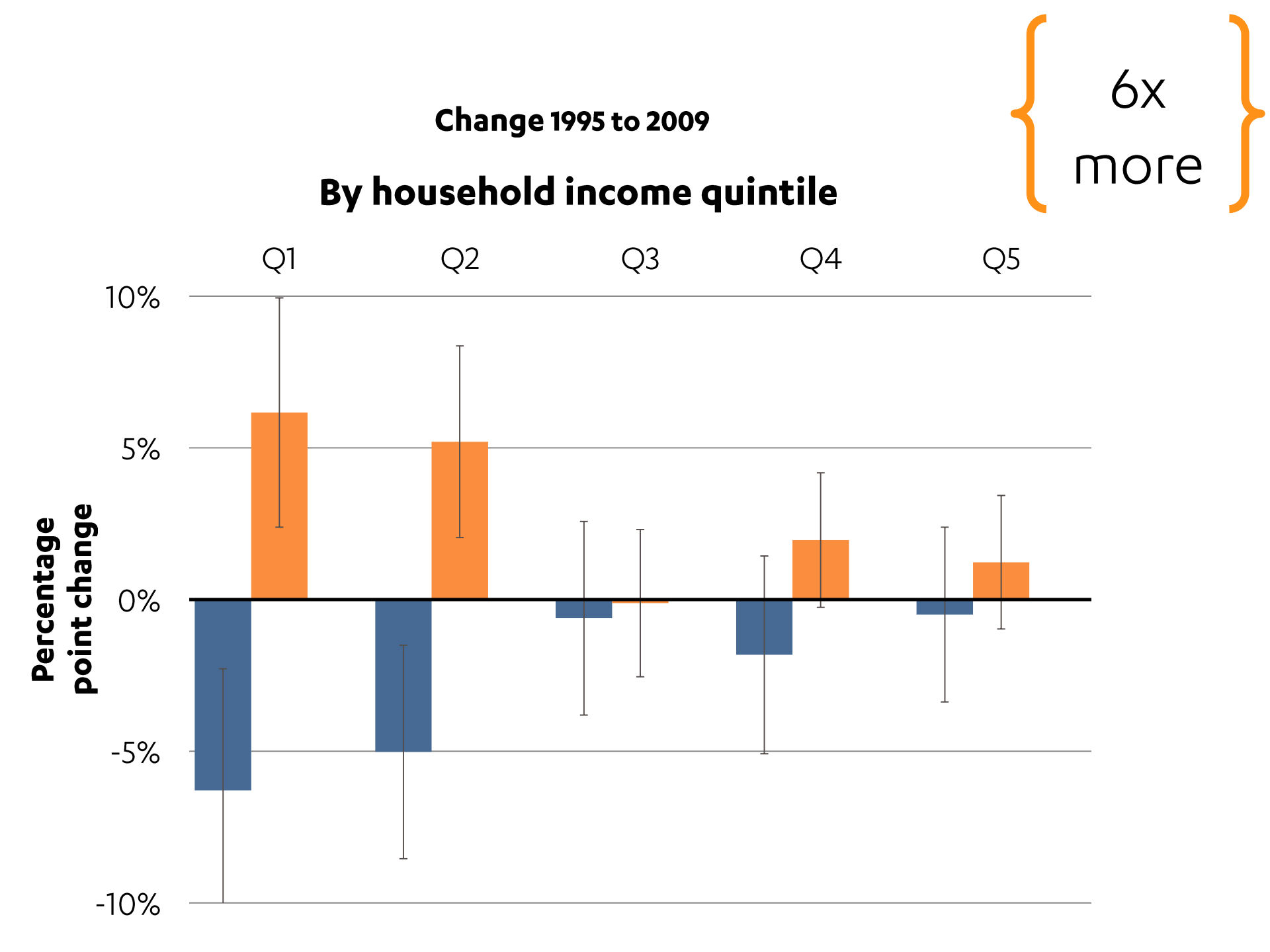


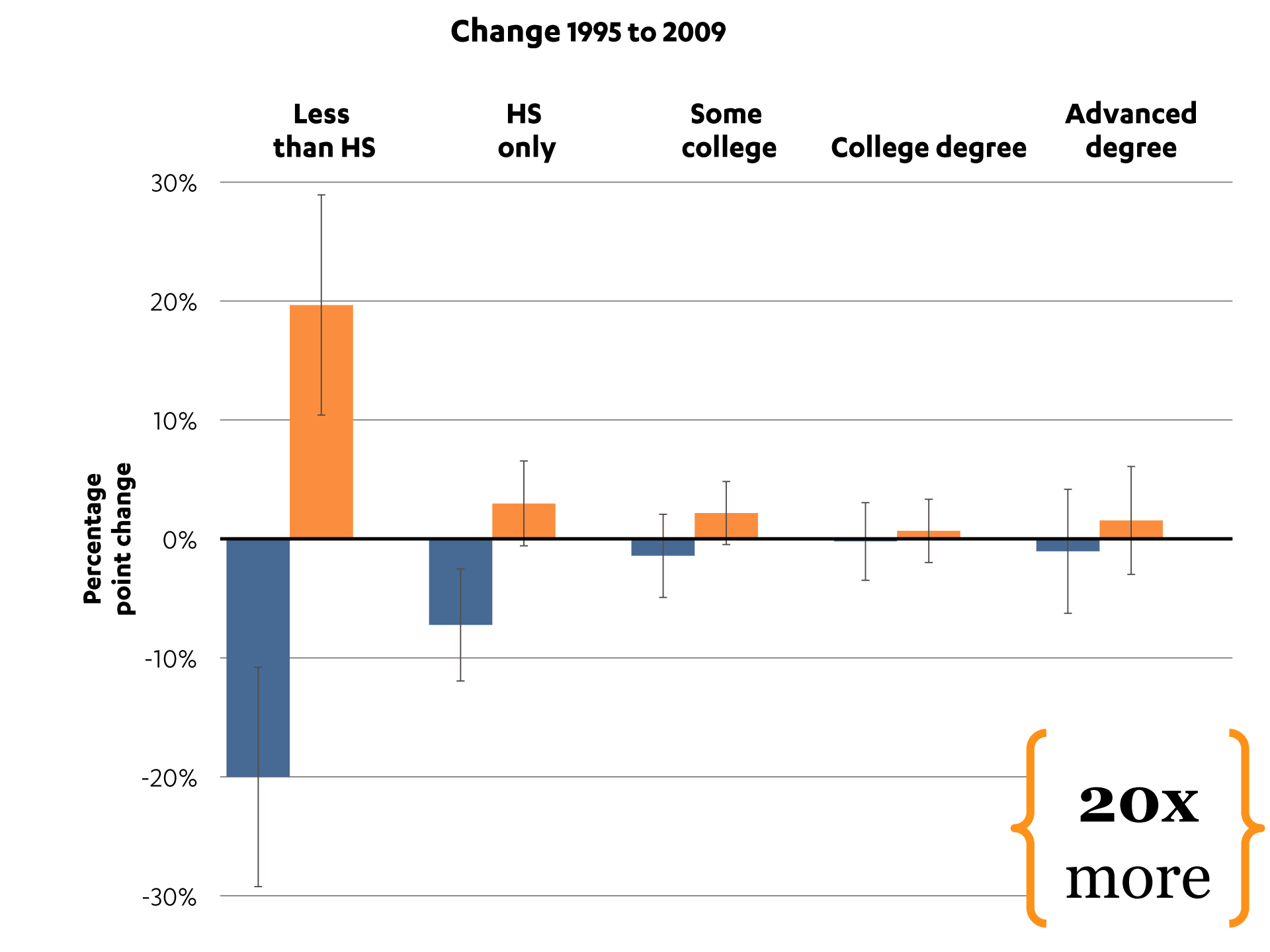
**Assumption:** Young people with many resources are better able to act on their preferences than those with few resources.


Change 1995 to 2009
Not employed
Employed
10%
8%
6%
4%
2%
0%
-2%
-4%
-6%
-8%
Percentage point change
Driver
Car-less


Change 1995 to 2009
Not employed
Employed
10%
8%
6%
4%
2%
0%
-2%
-4%
-6%
-8%
Percentage point change
Driver
Car-less

2x more

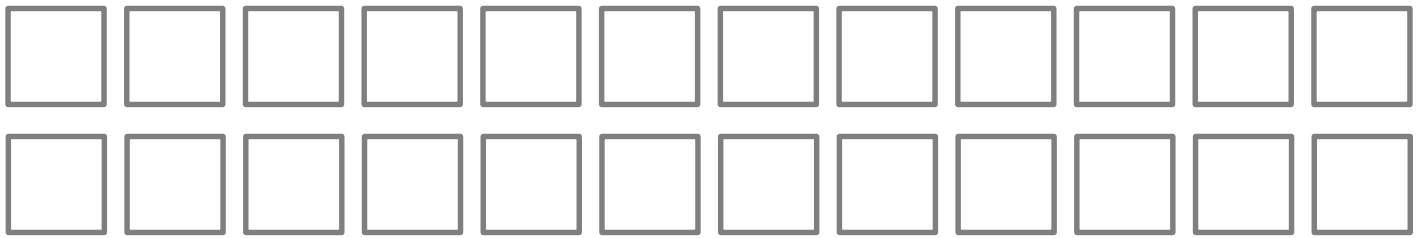

Change 1995 to 2009
By household income quintile
6x more
Q1
Q2
Q3
Q4
Q5
10%
5%
0%
-5%
-10%
Percentage point change


Change 1995 to 2009
Less than HS
HS only
Some college
College degree
Advanced degree
30%
20%
10%
0%
-10%
-20%
-30%
Percentage point change
20x more

- ✓ Constraints or preferences?

- Travel and the built environment

- Travel and the built environment
  - Neighborhood types



Density | Stability | Transience | Diversity | Accessibility

Rural | New development | Patchwork | Established suburb | Urban residential | Old urban | Mixed-use

# Rural

**New development**

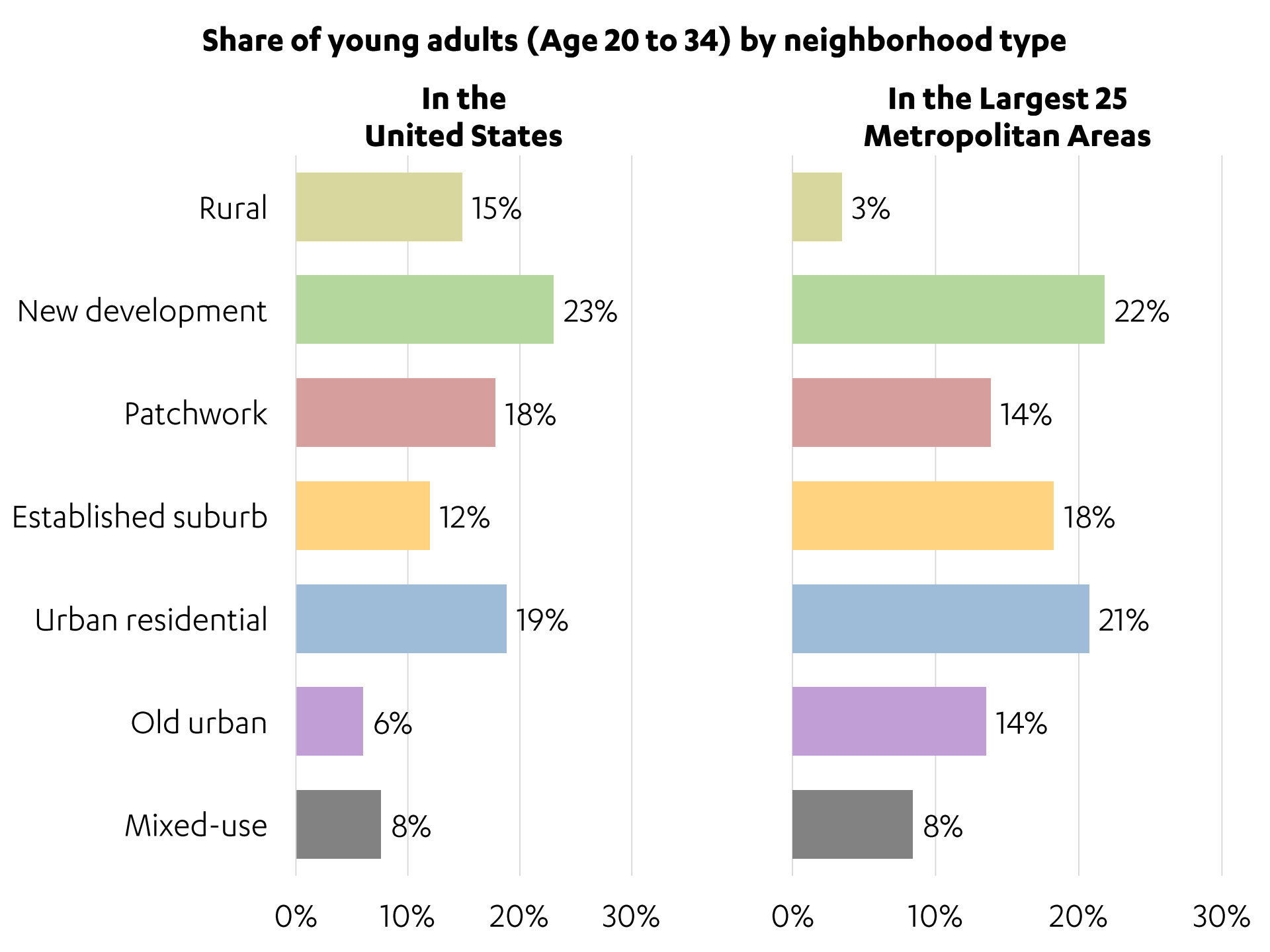
**Patchwork**

**Established suburb**

**Urban residential**

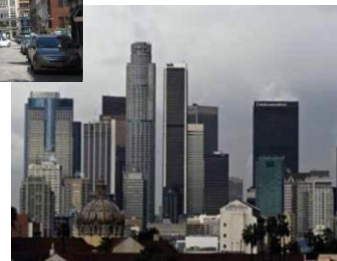
**Old urban**

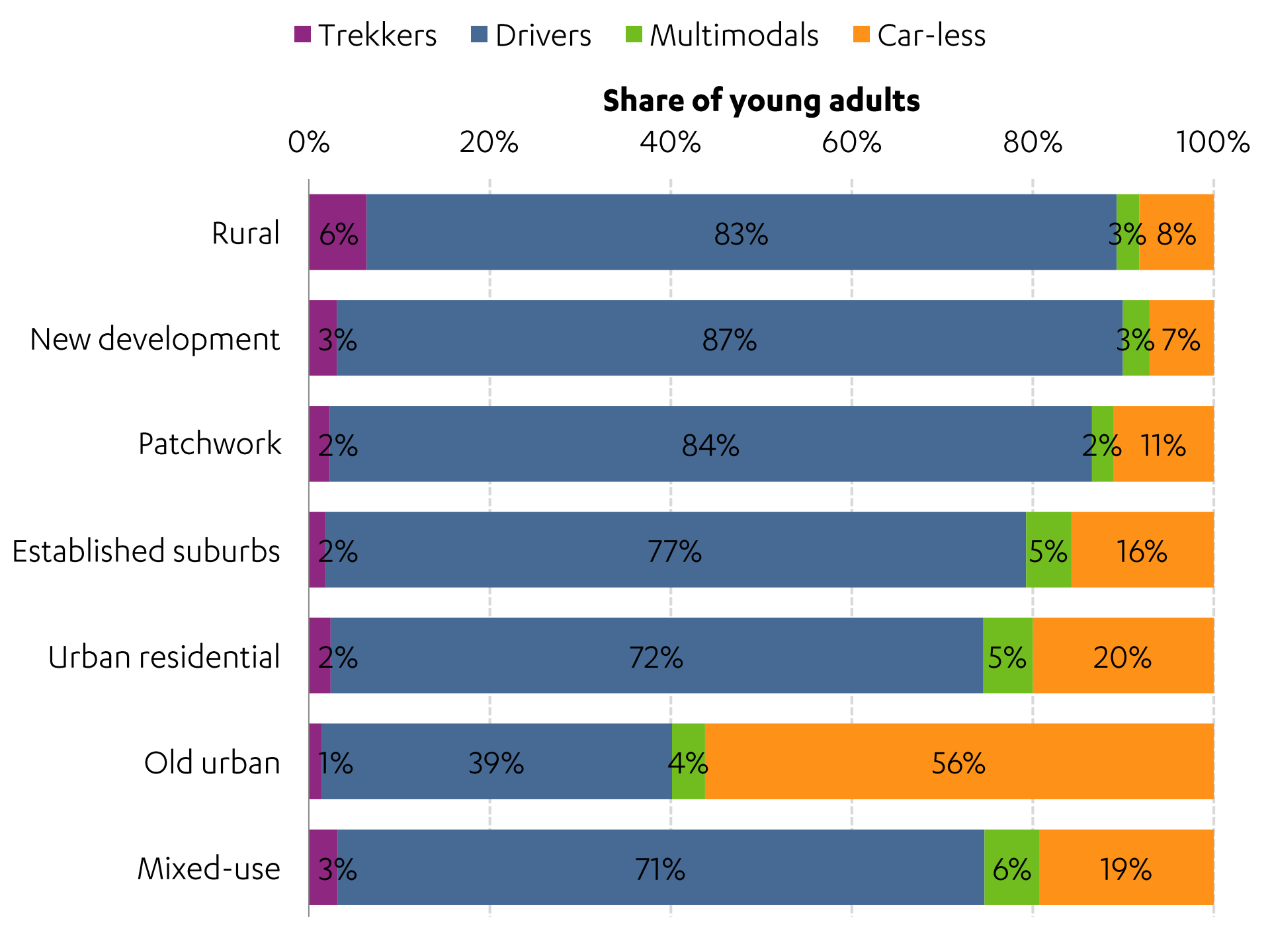
**Mixed-use**

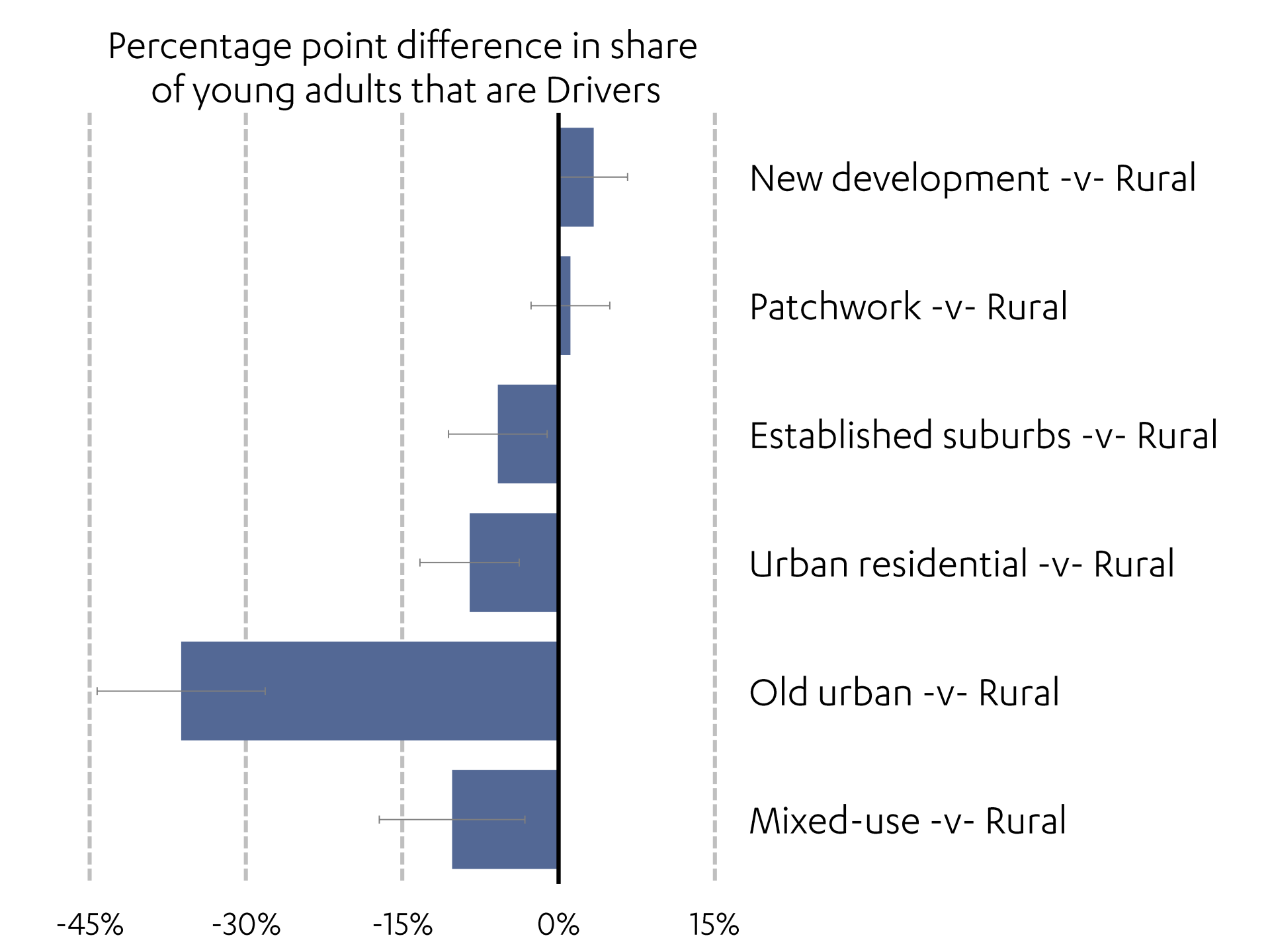

Share of young adults (Age 20 to 34) by neighborhood type
In the United States
In the Largest 25 Metropolitan Areas
Rural
New development
Patchwork
Established suburb
Urban residential
Old urban
Mixed-use
15%
23%
18%
12%
19%
6%
8%
3%
22%
14%
18%
21%
14%
8%
0%
10%
20%
30%
0%
10%
20%
30%

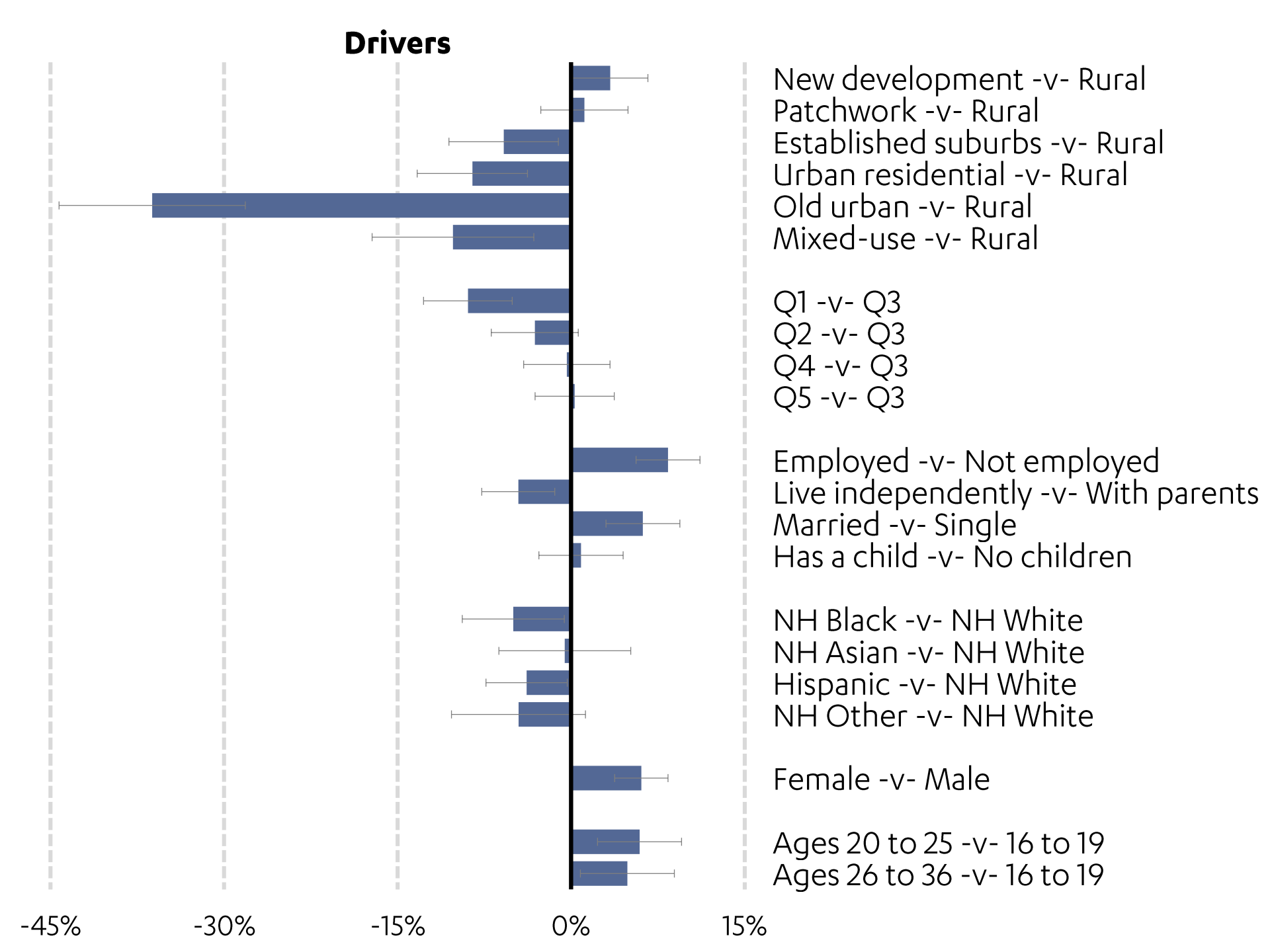
- Travel and the built environment
  - ✓ Neighborhood types

| Rural | New development | Patchwork | Established suburb | Urban residential | Old urban | Mixed-use |
|---|---|---|---|---|---|---|




Trekkers
Drivers
Multimodals
Car-less
Share of young adults
0%
20%
40%
60%
80%
100%
Rural
6%
83%
3%
8%
New development
3%
87%
3%
7%
Patchwork
2%
84%
2%
11%
Established suburbs
2%
77%
5%
16%
Urban residential
2%
72%
5%
20%
Old urban
1%
39%
4%
56%
Mixed-use
3%
71%
6%
19%


Percentage point difference in share of young adults that are Drivers
New development -v- Rural
Patchwork -v- Rural
Established suburbs -v- Rural
Urban residential -v- Rural
Old urban -v- Rural
Mixed-use -v- Rural
-45%
-30%
-15%
0%
15%


Drivers
New development -v- Rural
Patchwork -v- Rural
Established suburbs -v- Rural
Urban residential -v- Rural
Old urban -v- Rural
Mixed-use -v- Rural
Q1 -v- Q3
Q2 -v- Q3
Q4 -v- Q3
Q5 -v- Q3
Employed -v- Not employed
Live independently -v- With parents
Married -v- Single
Has a child -v- No children
NH Black -v- NH White
NH Asian -v- NH White
Hispanic -v- NH White
NH Other -v- NH White
Female -v- Male
Ages 20 to 25 -v- 16 to 19
Ages 26 to 36 -v- 16 to 19
-45%
-30%
-15%
0%
15%

- ✓ Travel and the built environment

- Are Millennials heading back-to-the-city?

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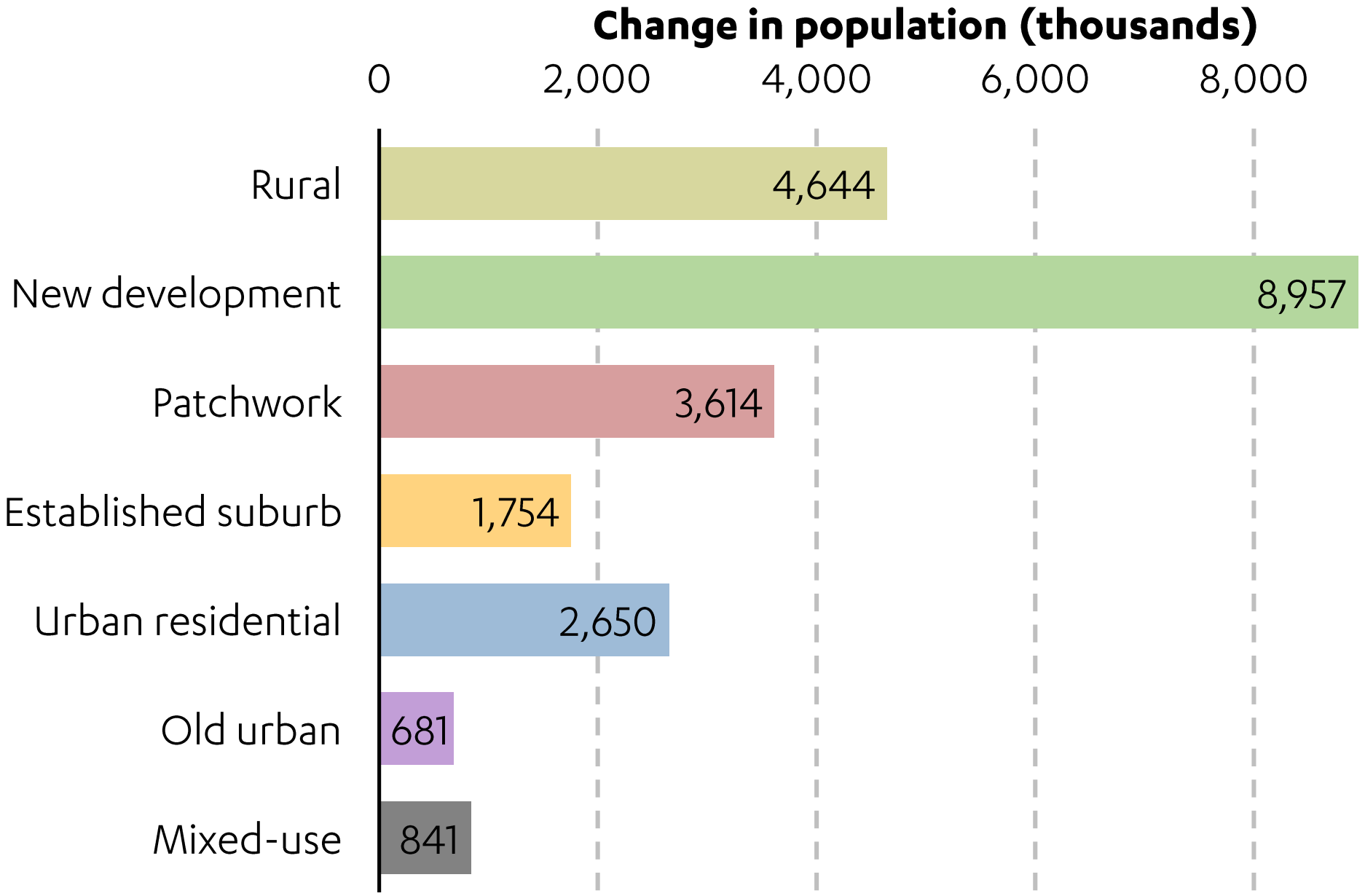
How many more/fewer young people (ages 20 to 34) lived in each type of neighborhood in 2010 than in 2000?

4.2 million more young people in urban neighborhoods

in 2010 than in 2000.

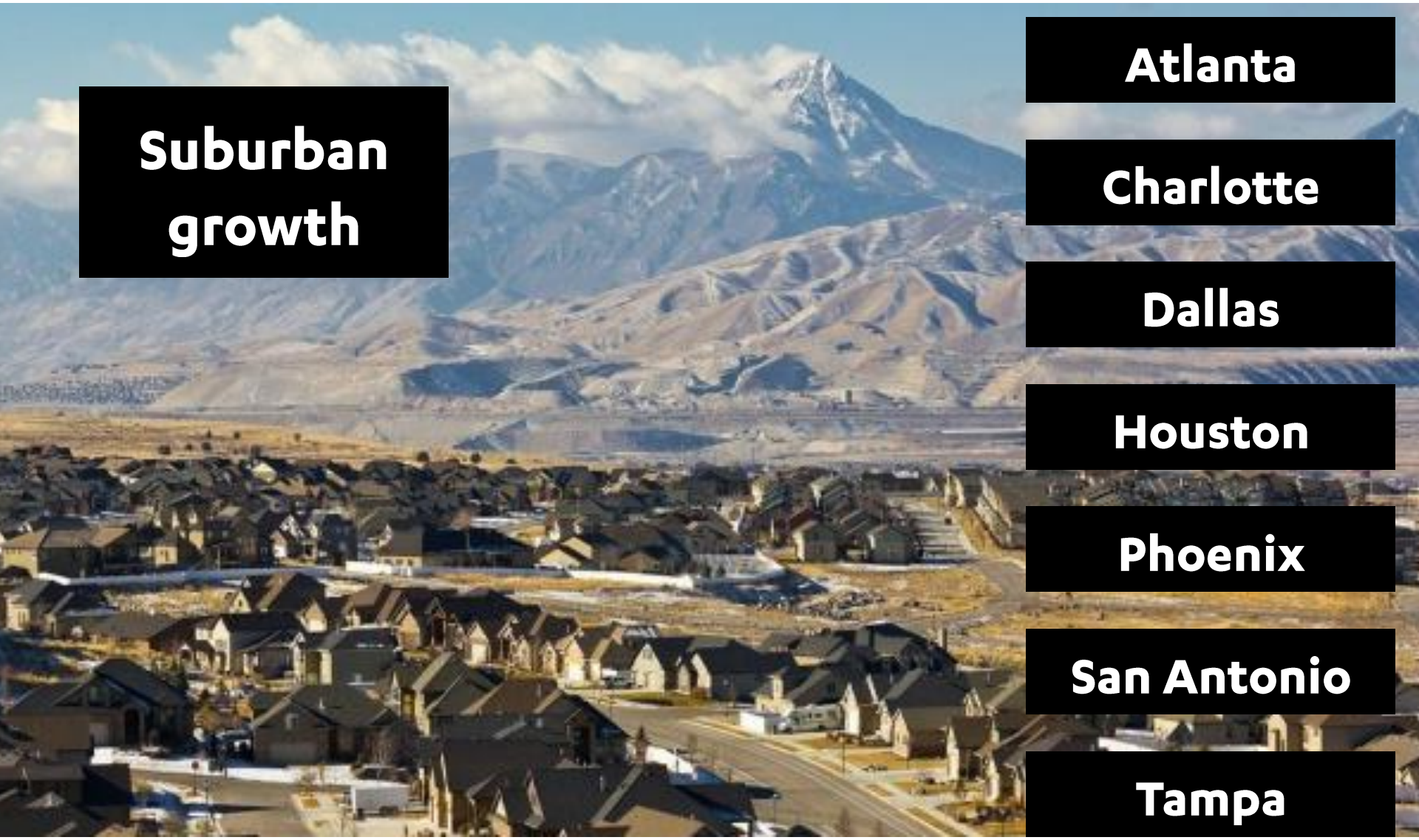
14.3 million more young people in suburbs

in 2010 than in 2000.


Change in population (thousands)
0
2,000
4,000
6,000
8,000
Rural
4,644
New development
8,957
Patchwork
3,614
Established suburb
1,754
Urban residential
2,650
Old urban
681
Mixed-use
841

# Is there unambiguous urban growth in some areas?

Urban growth
Boston
New York
Pittsburgh


Suburban growth
Atlanta
Charlotte
Dallas
Houston
Phoenix
San Antonio
Tampa

# Mixed

Baltimore

Chicago

Denver

Detroit

Los Angeles

Miami

Minneapolis

Philadelphia

Portland

San Diego

San Francisco

Seattle

St. Louis

Washington DC

# A Recap

- ✓ The four types of Millennial travelers

# A Recap

- ✓ The four types of Millennial travelers
- ✓ Constraints or preferences?

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# A Recap

- ✓ The four types of Millennial travelers
- ✓ Constraints or preferences?
- ✓ Travel and the built environment
- ✓ Is a back-to-the-city movement underway?

# Thank you.

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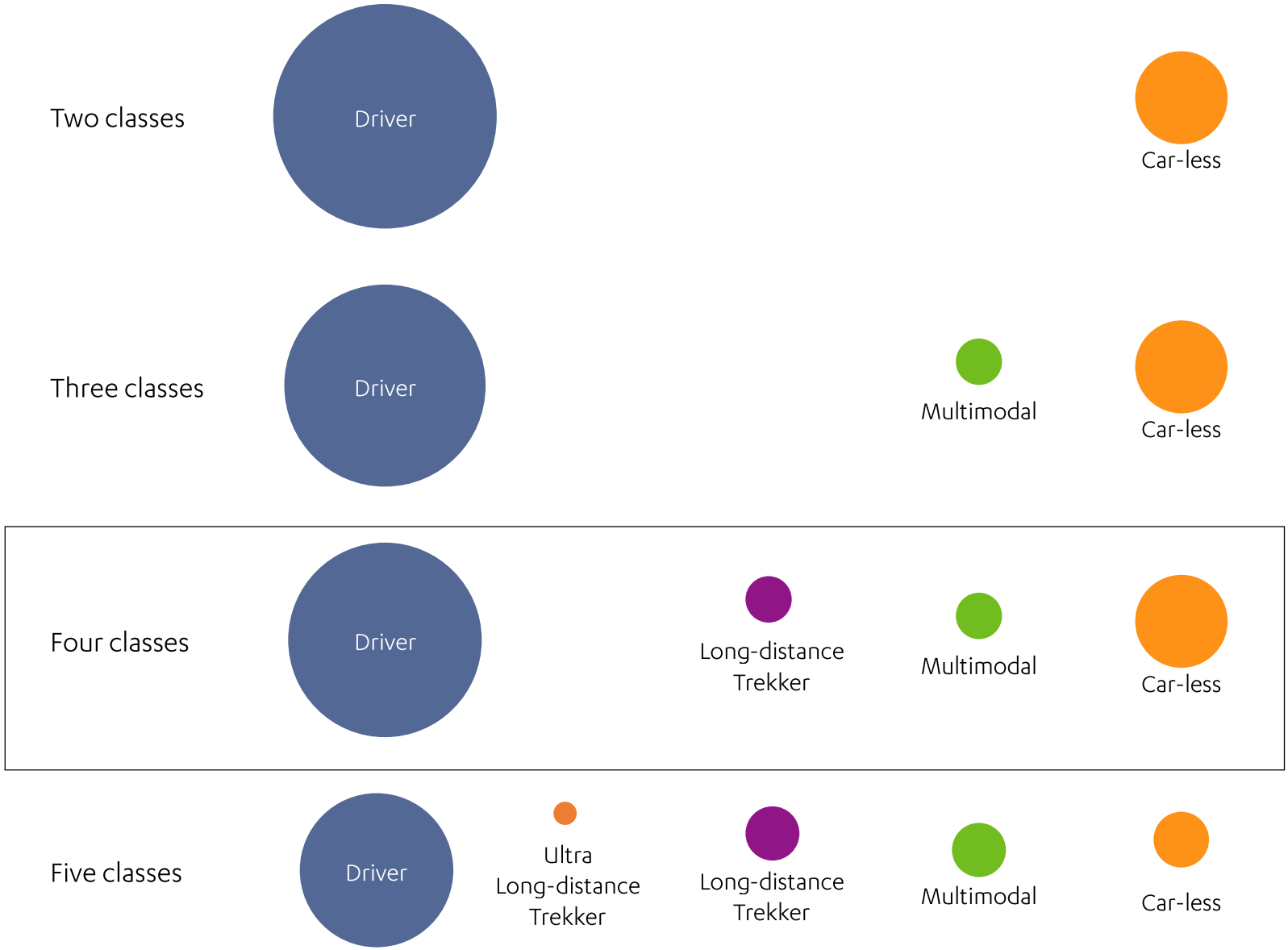
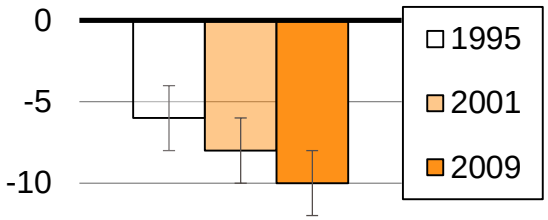

Two classes
Driver
Car-less
Three classes
Driver
Multimodal
Car-less
Four classes
Driver
Long-distance Trekker
Multimodal
Car-less
Five classes
Driver
Ultra Long-distance Trekker
Long-distance Trekker
Multimodal
Car-less

## Another indirect test

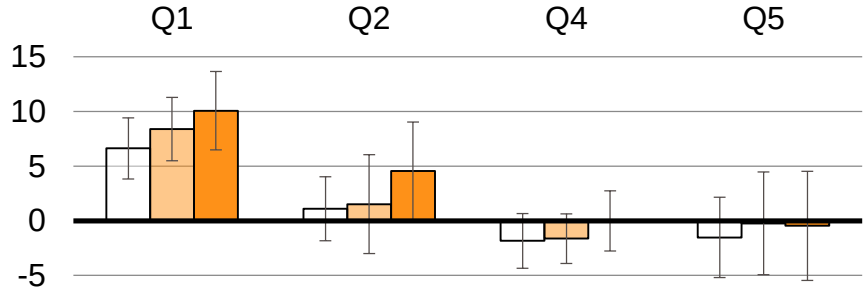
If preferences were indeed the primary cause of the decline,  then over time, being Car-less would have less to do with resources.

Change in proportion Car-less relative to base

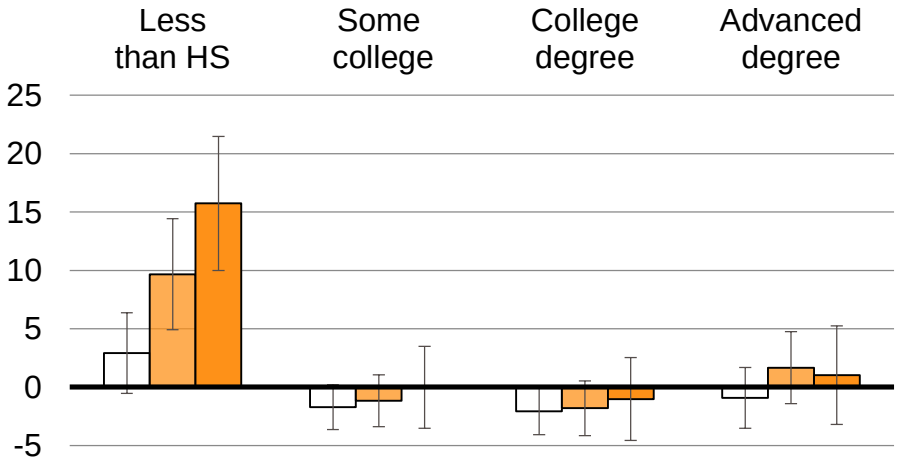
**Employed**
**(Base: Not employed)**




**Household income quintile**
**(Base: Q3)**




**Educational attainment**
**(Base: High school only)**




The gap between the haves and the have nots is widening.