

Transportation Policy Brief Number 4

How Vital Is Transit In Your Region? Part 1: Census Data

ransit ridership is plummeting almost everywhere, L yet officials in many cities are still devising hugely expensive plans for transit projects. One such city is Austin, whose leaders are talking about spending between \$6 billion and \$10.5 billion on new transit lines (and the final cost always ends up being more than the projections).

The need for these plans is contradicted by the rapid decline in transit ridership in Austin. Using Austin as an example, this policy brief will show how people in any urban area can use census data to find out just how important transit is to their region and whether it makes sense to spend a lot more money on transit. This is the first of two briefs on this subject; the next one will look at Department of Transportation data.



Does Austin really need to spend \$6 billion to \$10.5 billion on transit improvements? Photo of downtown Austin by Sk5893.

Since 2005, the Census Bureau has sent an annual questionnaire to about 3.5 million households a year asking, among other things, how those who have jobs in those households get to work. Known as the American Community Survey, these data can be downloaded for just about any geographic area -- state, county, city, metropolitan area, urban area, congressional district, or zip code. Since the results are based on a sample, the Census Bureau does not publish data for small geographic areas because the margin of error is too high.

Data from every year from 2005 to 2017 can be downloaded from the American FactFinder web site. However, starting in July, the agency is transitioning to a new web site called data.census.gov. To avoid having to explain how to use a web site that will disappear in a few months, and to save you time using that site, I've already

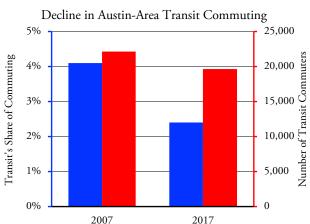
downloaded all of the tables that will be mentioned in this brief and posted them, with some enhancements such as calculations of percentages, for you to use.

The first question is how many people in the Austin urban area commute to work by transit and whether that number is growing or shrinking. This can be answered with table B08103, "means of transportation to work." I've downloaded these data for the nation, states, counties, cities (or, in Census Bureau nomenclature, "places"), and urbanized areas and put them in one file for 2017 and, for comparison, a second file for 2007.

"Urbanized areas," by the way, include all of the urbanized land in and around cities such as Austin, while "metropolitan areas" include all of the land, both urban and rural, in the counties surrounding such cities. I prefer to use urbanized areas since most people in rural areas aren't going to have access to transit. However, the Census Bureau remaps urbanized areas with each decennial census, so the data from 2007 and 2017 aren't based on exactly the same land area.

Transit's Share of Commuting

The 2007 survey found that the Austin urban area (which is on row 684 of the spreadsheet) had about 560,000



Between 2007 and 2017, not only did transit's share of commuting decline by more than 40 percent, but the number of commuters using transit fell by more than 11 percent.

workers in 2007, growing to nearly 890,000 by 2017 (row 736). This growth shouldn't be surprising because, on a percentage basis, Austin for at least some of those years was the fastest growing urban area in America.

Of those employees, the 2007 survey found that about 22,000 of them (4.0 percent) usually took transit to work. Despite the nearly 60 percent growth in the total number of workers in the region, the number commuting by transit shrank to well under 20,000, or just 2.2 percent, by 2017.

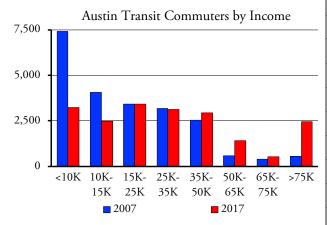
Even that number is probably considerably more than the number of people who actually take transit to work on any given workday. According to a 2017 Department of Transportation survey (see p. 78), people who say they "usually" take transit to work actually take transit only about 71 percent of the time while people who say they usually drive to work in fact drive almost all of the time. Correcting for this would require reducing transit's numbers by almost 25 percent. I'm going to ignore this for the rest of this brief, as the adjustment factors may vary by state and region, but it's likely that the American Community Survey probably overstates the number of people who commute by transit on any given workday.

Transit Commuting by Income

The American Community Survey also provides information on who rides transit to work. According to table B08119 for 2017, most Austin-area transit riders have low incomes, but their numbers are declining. Since 2007, the number of transit commuters earning under \$35,000 a year declined by nearly a third while the number earning more than \$50,000 a year nearly tripled.

Austin-area workers who earned less than \$50,000 a year were significantly less likely to ride transit in 2017 than in 2007, while those who earned more than \$50,000 a year were more likely to ride transit. People who earned more than \$75,000 a year were twice as likely to commute by transit in 2017 as in 2007.

Though the number of high-income transit commuters is small—fewer than 7,500 transit commuters in

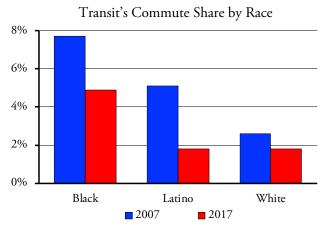


Between 2007 and 2017, the number of Austin-area transit commuters declined in every income bracket below \$35,000, and grew in every bracket above \$35,000.

2017 earned more than \$35,000 a year—that is the only growth market for Austin transit. As a result, according to table B08121, the median income of transit riders grew by 85 percent between 2007 and 2017, while the median income of the region as a whole grew by only 49 percent.

Transit's Share by Race

The American Community Survey also breaks down commute habits by race. According to table B08105B, the share of black workers commuting by transit declined from 7.7 percent in 2007 to 4.9 percent in 2017, while the share of non-Hispanic white workers commuting by transit declined from 2.6 percent in 2007 to 1.8 percent in 2017. The biggest change was among Latino workers, whose transit commute share declined from 5.1 percent in 2007 to 1.8 percent in 2017.



Between 2007 and 2017, the share of commuters who relied on transit declined for blacks and whites, but the decline was particularly large for Latinos. In this chart, "white" refers to non-Hispanic whites.

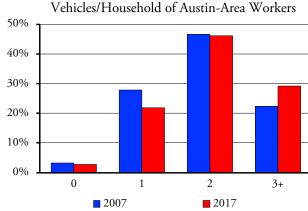
Latino commuting underwent another startling change: a decline in carpooling from 24.4 percent in 2007 to 14.6 percent in 2017. This contributed to an increase in the drive-alone share of Latino commuting from 65.1 percent in 2007 to 80.4 percent in 2017. It seems likely that Latinos significantly increased their motor vehicle ownership rates during this period.

The Growth of Three-Car Households

While it isn't broken down by race, table B08141 indicates that the share of Austin-area workers who live in households with no vehicles declined from 3.2 percent in 2007 to 2.7 percent in 2017, while the share who lived in households with three or more vehicles grew from 22.4 percent in 2007 to 29.2 percent in 2017.

Table B08141 also reveals that, as of 2017, little more than a quarter -- 26.3 percent -- of the people who live in households with no vehicles commuted by transit. This is down from 41.8 percent in 2007. People without cars were almost twice as likely to commute by automobile than by transit in 2017.

Curiously, more people who live in households without cars -- 40.0 percent -- commuted by driving alone



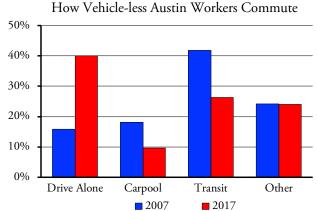
The number and share of Austin-area workers who live in households with three or more vehicles significantly grew between 2007 and 2017 while the share with no vehicles declined. This left fewer people than ever dependent on transit to get to work.

to work than by transit. How do they drive alone if they don't have a car? Probably they use an employer-supplied vehicle.

In sum, American Community Survey data show that transit has become all but irrelevant for commuters in the Austin urban area. Less than 5 percent of black workers and less than 2 percent of both Latino and non-Latino white workers commute by transit. The number of low-income workers who rely on transit is rapidly shrinking, while transit's only real growth market is among high-income workers who don't need to have their commutes subsidized.

Growing automobile ownership is a likely explanation for transit's decline. Yet transit no longer even works well for most commuters who don't own cars.

The next policy brief will show how Department of Transportation data can be used to assess the value of



Of workers who live in households without vehicles, the share who commuted to work by transit declined from 42 percent in 2007 to 26 percent in 2017, while the share who drive alone to work grew from 16 percent to 40 percent.

transit in Austin and other urban areas. I'll then make some recommendations for improving Austin's transit system without spending \$6 billion to \$10.5 billion.

The Antiplanner, Randal O'Toole, is a transportation policy analyst and author of Gridlock: Why We're Stuck in Traffic and What to Do About It as well as a review of Austin's 2014 light-rail transit plan. The header photo on page 1 shows Austin's Congress Avenue Bridge.

Summary of Downloadable Tables

B08301: Commute to Work	2007	2017
B08119: Commute by Income	2007	2017
B08121: Median Income by Mode	2007	2017
B08105B: Commute, Blacks	2007	2017
B08105L: Commute, Latinos	2007	2017
B08105H: Commute, Non-H. Whites	2007	2017
B08141: Commute by Vehicles in HH	2007	2017