# Policy Brief Number 135

# 2021: The Year Transit Failed to Recover

Despite receiving tens of billions of dollars in support from Congress, the transit industry in 2021 failed to recover most of the riders it lost to the pandemic in 2020. Ridership in 2020 had fallen by 54 percent from 2019 due to the pandemic, and was only 3 percent greater, or 52 percent below 2019 numbers, in 2021, according to <u>data</u> released by the Federal Transit Administration last week.



Ridership did improve over the pandemic months of 2020, but not by much. The year 2020 ended with ridership at 38 percent of pre-pandemic levels. It reached 50 percent for the first time in July 2021, slowly climbed to 55 percent in September, and hovered around 55 to 57 percent for the rest of the year.

Transit ridership in December 2021 was 56 percent of December 2019 numbers. This is preliminary and the final number is likely to be slightly higher, but transit is still the slowest to recover of major modes of travel: Amtrak carried 69 percent and the airlines 84 percent of prepandemic numbers in December. Numbers for December driving are not yet available, but November driving was 103 percent of pre-pandemic miles.

# **Before the Pandemic**

To understand how the pandemic affected the transit industry, it is helpful to know how the industry was changing before the pandemic. Ridership had been declining since 2014, but most of that decline was in buses, which lost 12 percent of their riders between 2014 and 2019 compared with just 2 percent for rail transit. Annual bus ridership exceeded rail ridership in every year from 1947 through 2015, but due to the fall in bus ridership, rail ridership exceeded bus ridership in every year since 2016.



Prior to the pandemic, bus ridership was falling faster than rail ridership. "Bus" includes commuter bus, conventional bus, busrapid transit, and trolley bus. "Rail" includes commuter, light, heavy, and hybrid rail (meaning Diesel-powered light rail). "Other" includes demand response and minor modes such as monorails and aerial trams.

The decline in bus ridership reflected a decline in fuel prices, which led many low-income transit riders to buy cars. Since only 5.2 percent of low-income workers commuted by transit in 2014, a small increase in auto ownership rates could translate into a large decline in transit ridership.

Meanwhile, companies like Amazon were locating large numbers of office employees in downtown areas, hoping to attract young workers who supposedly preferred to take transit to work. This led to a significant boost in ridership in Seattle, which was expanding its light-rail system, as well as a few other cities that relied heavily on rail transit. Repairs of the New York and Washington subway systems also helped offset some of the declines in heavy-rail ridership, which had fallen by 7 percent between 2014 and 2018 but recovered a majority of that loss in 2019.

Using data from the 2017 National Household Travel Survey, researchers from the University of South Florida found that most rail commuters had incomes <u>well above</u> <u>\$50,000 a year</u> while most bus commuters had incomes well below \$50,000 a year. High-income rail commuters were more likely to have access to automobiles and more likely to work downtown than low-income bus commuters. While many low-income transit commuters chose transit because they lacked access to an automobile, high-income commuters chose transit mainly to avoid downtown congestion.



Prior to the pandemic, low-income transit commuting was declining and transit's biggest growth market was people earning more than \$75,000 a year—people who are now most likely to work at home.

With the decline in low-income bus riders, highincome commuters were transit's main growth market after 2014. According to the Census Bureau's American Community Survey, between <u>2014</u> and <u>2019</u>, transit lost 733,000 commuters who earned under \$25,000 a year, but gained 715,000 commuters who earned more than \$75,000 a year.





Since it is more likely to be used by high-income people who are now more likely to work at home, rail transit's recovery is lagging behind bus transit.

What is especially bad news for the transit industry is that these high-income riders were the ones most likely to work at home during and after the pandemic. Rail ridership, as a share of pre-pandemic numbers, has consistently lagged behind bus ridership and in December was only 52 percent of December 2019 riders.



*Commter buses (CB) have done poorly relative to conventional bus (MB), bus-rapid transit (RB), and trolley buses (TB).* 

Although bus ridership has done better, not all buses are alike. Two modes of transit that were especially hard hit by the pandemic were commuter bus and commuter rail, both of which were designed to bring commuters into downtowns from wealthy suburbs, commuters who are most likely to work at home today.



Commuter rail (CR) has also done poorly relative to heavy rail (HR), light rail (LR), and hybrid rail (YR). Streetcars haven't done well either, partly because many cities have reduce their operations during the pandemic.

Most of those high-income former transit commuters are likely to continue <u>working at home</u> at least <u>two days a</u> <u>week</u> in 2022 and beyond. Many of them will move further away from work since commuting only two or three days a week will not be so onerous as five days a week. That means they are less likely to ride transit even on the days they do work in an office.

Equally devastating to transit is the movement of jobs out of downtowns, the heart of most transit hub-andspoke systems and the destination of nearly half of transit commuters. Last week, Merrill Lynch announced it was <u>vacating</u> five floors of a downtown San Francisco office building. The company joins many others that have moved away from downtown San Francisco, leaving behind 7.5 million square feet of office space, enough for 40,000 to 50,000 employees.

Big-city downtowns across the country are experiencing <u>similar departures</u> and <u>high vacancy rates</u>. While many of those offices may eventually be leased out, they will be leased at lower rates, and at lower rates the lessees are likely to allow <u>more square footage per worker</u>, meaning downtowns will still have fewer total workers.

As a result, it is unlikely that transit will be able to recover most of its riders by the end of 2022. Transit expert Steve Polzin once estimated that transit would get back <u>90</u> <u>percent</u> of its riders by March 2022, but that's clearly not going to happen. My own <u>prediction</u> was that transit would never recover more than 75 percent of 2019 ridership, and even that seems optimistic today.

# Transit by Urban Area

As of December, transit carried 58 percent of pre-pandemic riders in the New York urban area, indicating that transit there is recovering slightly faster than in the rest of the country. New York is really the only transit-dependent urban area in the nation, and more than 45 percent of December transit riders were in that area.

Some areas did much better than New York: transit in Tampa-St. Petersburg actually reached 72 percent of prepandemic numbers. Transit carried 60 to 70 percent of 2019 numbers in Los Angeles, Miami, Dallas, Houston, San Diego, Las Vegas, Cincinnati, Orlando, Milwaukee, Austin, Providence, Salt Lake City, and Nashville. The relaxation of COVID lockdowns in Florida, Texas, and some other states influenced some of these numbers, but mode was also important: in many of these urban areas, all or nearly all transit is buses, not rail.

At the other extreme, transit in Detroit, Memphis, and New Orleans still carried fewer than 40 percent December 2019 riders, while transit in Chicago, Philadelphia, Washington, Atlanta, San Francisco-Oakland, Minneapolis-St. Paul, Riverside, Sacramento, San Jose, and Charlotte carried less than half of prepandemic riders. In between, where transit carried 50 to 60 percent of 2019 riders, were (in addition to New York), Boston, Phoenix, Seattle, Denver, Baltimore, St. Louis, Portland, Cleveland, San Antonio, Pittsburgh, Indianapolis, Columbus, and Jacksonville.

# **Transit Service**

To help transit survive the pandemic, Congress gave transit agencies <u>\$25 billion</u> in April 2020, most of which was presumably spent during 2020. In December Congress added another \$14 billion followed by \$30.5 billion more in March 2021. These funds allowed transit to operated 83 percent as much transit service, measured in vehicle-miles of travel, in 2021 as in 2019.

A few minor transit modes, such as San Francisco cable cars, monorails, streetcars, and aerial trams, saw much larger cutbacks, probably because these are more aimed at tourists than commuters and other local users. But conventional buses and subways operated at 90 percent, bus-rapid transit routes at 93 percent, light rail at 86 percent, and hybrid rail (Diesel-powered light rail) at 92 percent of pre-pandemic service.

Like other businesses, many transit agencies complain they are having a difficult time <u>finding employees</u> to operate transit vehicles. Despite claims that this is an "<u>emergency</u>," most transit agencies had stepped up service by December, when they operated 86 percent as many vehicle-miles as in December 2019, up from 83 percent for 2021 as a whole. Thus, low ridership can't be blamed on driver shortages or other causes of poor service.

### **Transit Disasters**

Some transit systems stand out as being particularly hard hit by the pandemic. As of December, commuter trains in Minneapolis still carried less than 10 percent of prepandemic numbers. Commuter trains in Los Angeles, San Francisco, Seattle, and northern Virginia were less than 25 percent of 2019 riders while Maryland and Nashville commuter trains were under 30 percent.



Minnesota's North Star: perhaps the worst-performing transit line in the country. <u>Photo</u> by Michael Hicks.

The San Francisco BART system was under 25 percent of 2019 numbers, while heavy-rail systems in Baltimore and Washington were only around 30 percent. Light-rail systems did a little better but were only around a third of pre-pandemic numbers in Pittsburgh and San Jose, and were less than half in Baltimore, Boston, Charlotte, Cleveland, Denver, Minneapolis, Portland, Sacramento, and San Francisco.

#### Lessons

Congress expected that most of the nearly \$70 billion in COVID relief funds for transit agencies would be spent on operations, but some of the money could be spent on capital improvements. To this, Congress added another \$40 billion in the infrastructure bill, which is all to be spent on capital improvements or replacement of worn-out infrastructure.

Ridership numbers offer some lessons on where funds can be most effectively spent. Most important, any project that aims to get high-income downtown workers out of their cars is almost certain to be a waste. Those workers will be fewer in number, they will be less likely to live on transit lines, and there will be less congestion to discourage them from driving. In addition, the world is changing so fast that the lengthy times required to plan and build new infrastructure almost guarantees that such infrastructure will be obsolete before it opens for business.

Instead of blowing the money on expensive, downtown-oriented transit projects that are unlikely to attract many riders, transit agencies should take this opportunity to reinvent themselves so they can serve more people. One simple way would be to increase frequencies on existing routes that are already heavily used.

More drastically, agencies need to recognize that central city downtowns are no longer the significant job centers they once were. Before the pandemic, demographer Wendell Cox calculated that, only <u>20</u> <u>percent</u> of the New York metro area's jobs were in midtown or downtown Manhattan. This was, in fact, the best case: in the nation's 54 largest urban areas outside of New York City, only 6.5 percent of jobs were in the downtown areas.

Many metro areas have other job centers, sometimes called edge cities, that have as many or more jobs as their downtowns. In an <u>earlier analysis</u>, Cox identified more than two dozen edge cities around Los Angeles that had more than 20,000 jobs each, several of which had more jobs than downtown Los Angeles. While downtown Los Angeles had about 137,000 jobs, the edge cities had more than 2 million jobs. Yet these areas are poorly served by transit: at the time of Cox's analysis, more than 22 percent of downtown Los Angeles workers took transit to work, while the highest for any of L.A.'s edge cities was under 12 percent and the average was just 5 percent.

Transit systems work better in downtowns because they are hub-and-spoke systems bringing people in from many areas. As described in a <u>previous policy brief</u>, transit can better serve other job centers by creating systems with multiple hubs, with spokes radiating from each hub to most or all the other hubs. This is easily possible because most edge cities are at the intersections of two major freeways or highways, so buses can easily travel between job centers on those freeways or highways.

# **Ending the Waste**

The nation's taxpayers have spent hundreds of billions of dollars building transit systems aimed at attracting people out of their cars. Most of these systems didn't work, and the pandemic has undone any of the benefits some of them were able to achieve.

While the pandemic seems never-ending, what is really happening is we are trending towards a New Normal that will be different in many ways from what people considered normal before 2020. The New Normal will have more people working at home and fewer people commuting on any given day. More people will live in more remote areas. More jobs will be in suburban or other low-density areas. Roads will be less congested, providing less of an incentive for people to ride transit. Fewer people will be willing to risk infectious diseases by riding mass transportation systems that are slower, less convenient, and more expensive than driving a personal automobile.

Transit agencies have a choice: they can use the opportunity to use the influx of funds provided by the infrastructure bill to reinvent themselves to meet the needs of this New Normal or they can continue to follow their historic path of planning for downtown-centric cities of the early twentieth century. Sadly, I suspect most will follow the latter course.

I've posted an <u>enhanced spreadsheet</u> of monthly transit data. FTA's raw data are in cells A1 through IO2244. Annual totals are in columns IP through JI, mode totals in rows 2247 through 2268, agency totals in rows 2275 through 3274, and urban area totals are in rows 3280 through 3768. Columns JJ and JK show December 2021 numbers as a percent of December 2019 and December 2020. Columns JL and JM show 2021 as a percent of 2019 and 2020. These enhancements are on the UPT (unlinked passenger trips) and VRM (vehicle-revenue miles) worksheets.

Randal O'Toole, the Antiplanner, is a land-use and transportation policy analyst and author of Romance of the Rails: Why the Passenger Trains We Love Are Not the Transportation We Need. <u>Masthead photo</u> by Mr.TimDC.