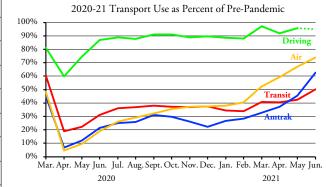


Nationwide transit ridership in June was 50.3 percent of June 2019, making this the first month since the onset of COVID-19 that ridership recovered to half of pre-pandemic levels. Yet transit remains well behind Amtrak, which carried 63 percent of pre-pandemic passenger-miles in June; flying, which was at 74 percent; and driving. June data are not yet available for driving but May driving was 96 percent of pre-pandemic miles.

Transit is doing poorly compared with Amtrak and driving because it is most heavily dependent on commuters. The 2017 *National Household Travel Survey* found that commuting and work-related travel make up less than 20 percent of personal driving but are 40 percent of transit ridership. With many people working at home during the pandemic, transit has lost a large share of its market.



Since May, transit has been the slowest mode to recover from the pandemic.

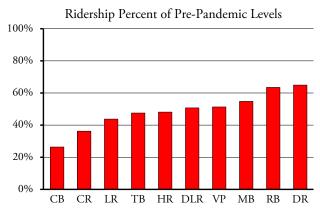
Commuter trains and buses, which are even more heavily dependent on commuters than other transit modes, have been hit the hardest. In June, commuter trains carried just 36 percent and commuter buses 26 percent of pre-pandemic riders. Conventional buses carried 55 percent and bus-rapid transit lines carried 63 percent of pre-pandemic numbers.

Commuter-Dependent Transit

A 2020 analysis of survey data conducted by the Federal Reserve Bank of Dallas found that the share of workers

who worked exclusively at home grew from 8 percent in February, 2020 to 35 percent in May, 2020. By the end of the year, 42 percent of people were working at home, according to the Bureau of Labor Statistics. This is particularly impressive considering that same bureau had estimated before the pandemic that only 29 percent of Americans had jobs that they could do at home.

By June 2021, 65 percent of working-age Americans had been vaccinated, yet many who had been working at home were reluctant to return to offices or other work places. Many businesses were pressuring people to return to offices, but "in the war over work from home," observed *Business Insider*, "working from home is winning." Anecdotal evidence reveals that many people are quitting their jobs if their employers insist on full-time return to offices.

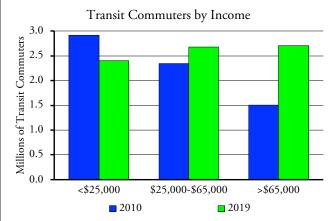


Transit modes that rely most on white-collar commuters are performing the worst in a world coming out of the pandemic. CB=commuter bus; CR=commuter rail; LR=light rail; TB=trolley bus; HR=heavy rail; DLR=Diesel light rail (which the FTA calls hybrid rail); VP=van pools; MB=conventional bus; RB=rapid bus; DR=demand response.

This is terrible news for transit agencies for two reasons. First, most transit systems are oriented to central city downtowns. Most work in these downtowns are office jobs that can more easily be done at home than, say, construction or factory work.

Second, many transit agencies have spent the last few decades focusing on attracting "choice" transit riders, that

is, those who have cars and tend to have higher incomes than transit-dependent riders. Their success can be seen in the fact that, between 2010 and 2019, the number of transit commuters who earned more than \$65,000 a year grew by nearly 80 percent. But this came at a cost: agency neglect of low-income riders helped persuade many of them to buy cars and abandon transit. In 2019, workers who earned less than \$25,000 a year were 8 percent less likely to commute by transit than in 2010.



Betwen 2010 and 2019, transit gained high-income commuters at the expense of losing low-income commuters. Source: American Community Survey table B08119.

Now, in one fell swoop, the pandemic has devastated transit's market for downtown commuters and other choice riders. Millions of people have discovered that working at home, while not perfect, can be more productive, more comfortable, less stressful, and less expensive than commuting five days a week. While some will return to offices as the pandemic fades, many of those who do will work in offices only two or three days per week. With less congestion due to more people working at home, many choice transit riders will choose to drive since it is faster and more convenient than transit.

On top of this, vaccination rates have slowed. As of last week, less than half of all Americans had been fully vaccinated, and the number is growing by just half a percent per week, at which rate it would take two years to vaccinate every American. Even if 70 percent, or some other large number, of working-age Americans get vaccinated, many people will remain uncomfortable riding transit. Vaccines don't appear to be as effective against the delta variant of the virus, and with lambda and other variants on the horizon, people will remain wary of crowding no matter how loudly transit agencies proclaim that riders are safe.

This leaves transit dependent on its diminished market of transit-dependent commuters. Suddenly, transit agencies are concerned about equity, something that never bothered them when they were cutting bus service to inner-city neighborhoods so they could finance rail lines to high-income suburbs. Agencies now say they need more money to improve bus frequencies and speeds to low-in-

come neighborhoods.

That vehicle, however, has left the station. Low-income workers are not going to sell their cars and start riding transit again just because a transit agency increases the frequency of buses that are slower and less reliable than driving. Despite transit claims that it is bringing "essential workers" to work, just 5 percent of low-income workers commuted by transit in 2019, and that percentage is probably lower today. Thus, the arguments for subsidizing transit are disappearing as fast as the transit riders themselves.

These observations are based on national numbers, but the figures vary from urban area to urban area just as they do among various transit modes. A table on page 3 provides some relevant numbers for the nation's largest urban areas. The pre-pandemic peak year since 1990 and 2019's change in ridership since that peak shows what was happening with each urban area's transit system before the coronavirus. The share of 2019 workers who used transit shows how important the transit system was to the urban area. June 2021's and F.Y. 2021's ridership as a percent of June 2019's and F.Y. 2019's ridership shows how the pandemic has impacted transit. (For the purposes of this paper, "F.Y." refers to July through June ridership; thus F.Y. 2021 is July 2020 through June 2021.)

New York

Due to its sheer size, its population densities, and its concentration of downtown jobs, the New York urban area is always in a class by itself when it comes to transportation. The region, which includes northern New Jersey, most of Long Island, much of Westchester County, and a small portion of Connecticut, houses less than 8 percent of the nation's urban population, yet the its transit carries 44 percent of all transit rides.

New York was transit's great success story before 2014. Ridership grew from a low of 2.4 million trips in 1993 to a high of 4.4 million in 2014. But years of deferred maintenance resulted in unreliable service, leading ridership to decline to 4.2 million trips in 2018. Some dramatic rehabilitation efforts helped improve reliability, allowing ridership to bounce to 4.3 million trips in 2019, but still below the 2014 peak. The New York Metropolitan Transportation Authority admits that reliability improvements are only temporary as it still has a \$60 billion maintenance backlog.

The pandemic reduced ridership for F.Y. 2021 by 60 percent. However, June ridership was only 47 percent below pre-pandemic levels, making it better than the national average. This is probably because a higher percentage of New York transit trips are for non-work purposes than most other transit systems, allowing ridership to recover somewhat even as nearly 90 percent Manhattan offices remained vacant at the end of May. Commuter bus in June was still down by 69 percent and commuter rail by 59 percent while heavy rail was down by only 47 percent and conventional bus by just 42 percent.

N La C: M Ph	re- and Post		nic Transit			.l A	Currently, the best estimates are that about three out	
— Lo C. M Pl		Doole		'19 Transit		FY21%		-
— Lo C. M Pl		Peak Year	of Peak	Share	of 6-19	of FY'19	of five Manhattan office workers will return to work by	
- C M Pl	ew York	2014	-1.6%	32.4%	-46.8%	-59.7%	September, but most of those will work in offices only	
M Pl	os Angeles	2007	-24.4% 16.404	4.9%	-40.6%	-51.6%	three days a week. Notably, one of the biggest obstacles	
Pl	hicago Iiami	2012 2008	-16.4% -27.7%	13.5% 2.9%	-59.0% -30.5%	-68.3% -41.1%	employers face in persuading employees to return to offic-	
_	hiladelphia	2012	-14.8%	10.2%	-50.8%	-65.3%	es is that employees don't feel safe on transit. Thus, New	
- 1	allas	2006	-10.8%	1.5%	-40.4%	-47.9%	York transit will have permanently lost about half of its	
	ouston	2006 2009	-11.6% -17.0%	2.2% 15.3%	-45.5% -63.9%	-51.6% -73.0%	Manhattan commuters and will have to rely on other com-	_
	⁷ ashington tlanta	1997	-27.9%	3.2%	-57.4%	-61.5%	muters and non-work-related trips to sustain itself.	
	oston	2014	-10.1%	14.5%	-56.5%	-67.6%	Big Six	
	etroit	1991	-63.0%	1.6%	-65.3%	-65.6%	Other than New York, only six urban areas saw transit car-	
	h <mark>oenix</mark> an Francisco	2009 2016	-7.2% -4.8%	2.1% 21.6%	-56.2% -67.7%	-60.6% -75.7%	ry more than 10 percent of commuters to work in 2019.	
	eattle	2018	-0.5%	11.7%	-56.2%	-63.4%		
Sa	ın Diego	2015	-12.5%	3.0%	-43.3%	-53.9%	These six areas—Boston, Chicago, Philadelphia, San Francisco-Oakland, Seattle, and Washington—all have	
	linneapolis	2015	-7.3%	5.3%	-58.3%	-65.3%	downtowns that had well over 200,000 jobs surrounded	
	ampa Jenver	2015 2019	-11.1% 0.0%	1.2% 4.8%	-32.4% -53.7%	-33.8% -60.7%		
	altimore	2009	-23.0%	7.1%	-54.5%	-55.0%	by moderately high-density residential areas. The rail sys-	
St	. Louis	2007	-31.3%	2.2%	-50.9%	-52.5%	tems in most of these regions also have multi-billion-dollar maintenance backlogs. (In the table, Bridgeport and Con-	-
- 1	ın Juan	2004	-66.1%	1.5%	-50.0%	-73.5%	cord also show more than 10 percent transit commuters,	
	iverside as Vegas	2013 2007	-22.1% -9.9%	1.3% 3.0%	-58.3% -40.8%	-63.7% -47.8%	but they are really parts of the New York and San Francisco	
	ortland	2009	-4.5%	7.7%	-55.0%	-58.4%	urban areas.)	+
	leveland	2006	-53.1%	3.2%	-44.9%	-56.4%		
	n Antonio	2012	-16.2%	2.4%	-43.7%	-42.6%	Probably because they are more dependent on com-	
	ittsburgh acramento	1991 2009	-25.1% -40.2%	7.5% 2.4%	-56.8% -50.9%	-64.4% -61.8%	muters than New York transit, the transit systems in the	
	ın Jose	2001	-37.4%	4.8%	-63.1%	-66.9%	Big Six areas are distinctly worse off than the national aver-	_
- 1	incinnati	1991	-47.1%	1.8%	-36.7%	-52.6%	age. In most cases, June ridership was still 56 to 68 percent	
	ansas City Irlando	1991	-16.1%	1.1%	-25.7%	-31.1%	below pre-pandemic levels. Only Philadelphia enjoyed	
- 1	rdianapolis	2015 1996	-12.7% -18.0%	1.7% 0.8%	-30.9% -42.5%	-43.0% -43.2%	ridership that was "only" 51 percent below June of 2019. Transit in these six urban areas will have a difficult time	+
	A Beach	2008	-48.3%	1.9%	-49.4%	-51.3%		
	lilwaukee	2000	-57.2%	3.3%	-46.2%	-49.6%	recovering after the pandemic.	
	olumbus ustin	2019 2009	0.0% -21.0%	2.1% 2.3%	-53.0% -37.4%	-55.5% -48.4%	Big-City Disasters	+
	harlotte	2009	-16.0%	2.4%	-61.4%	-63.6%		
	rovidence	2008	-23.4%	3.2%	-49.4%	-55.0%	Prior to the pandemic, transit was less important in Los	
	cksonville	2016	-13.7%	1.6%	-46.5%	-49.9%	Angeles, Miami, Atlanta, Baltimore, and St. Louis than in	
	lemphis ılt Lake	1995 2015	-55.4% -4.6%	0.4% 3.7%	-43.7% -46.3%	-54.7% -54.8%	the Big Six. However, ridership was suffering drastic de-	
	ouisville	1994	-53.9%	2.3%	-52.8%	-59.4%	clines in these regions before the pandemic. In Los Angeles	
	ashville	2009	-4.8%	1.6%	-44.0%	-56.4%	and Miami, June ridership has recovered more than the	
	ichmond	1992	-57.5%	2.1%	-14.0%	-15.9%	national average, but this recovery is to a level that is far	_
	uffalo artford	1991 1991	-24.8% -14.2%	3.5% 2.9%	-49.7% -37.5%	-54.3% -41.8%	below the numbers transit carried just a few years before	
- 1	artiora ridgeport	2001	-14.2% -25.5%	2.9% 11.0%	-37.3% -35.4%	-41.8% -42.4%	the pandemic. The others are not doing as well. In general,	
_ N	ew Orleans	2012	-34.8%	2.7%	-47.3%	-57.0%	it appears that the pandemic has greatly accelerated the	_
	aleigh	2014	-4.5%	0.9%	-28.9%	-52.3%	declines that these regions were already suffering.	
	K City ucson	2002 2009	-44.3% -27.9%	0.6% 1.8%	-33.2% -7.2%	-31.7% -26.1%	Choice Regions	
	l Paso	2012	-31.5%	1.1%	-66.0%	-68.6%	- - 	
Н	onolulu	2009	-18.8%	7.7%	-39.1%	-55.2%	The above five urban areas had all attempted to increase	
	irmingham	1992	-49.1%	0.7%	-47.7%	-46.7%	choice riders by building rail transit, and all of them lost	
	lbuquerque IcAllen	2014 2019	-28.9% 0.0%	1.7% 0.6%	-51.5% -58.1%	-59.8% -73.1%	more bus riders than they gained rail riders. Since 1990,	
	maha	1991	-44.1%	1.2%	-35.7%	-/3.1% -40.4%	many other urban areas made concerted efforts to attract	
D	ayton	1996	-37.8%	1.9%	-39.4%	-42.1%	more choice riders by building new rail transit lines that	
	rban area na						they hoped were more attractive to middle-class riders than	
	rancisco=San c. "2019 % o						buses. These include Charlotte, Dallas, Denver, Houston,	
sh	c. 2019 % o own in colum	, 1 cak 1 n 2. "'19	Transit Sh	are" is trans	it's share of	commuting	Minneapolis-St. Paul, Phoenix, Pittsburgh, Portland, Salt	
in	2019. "6-21	% of 6-1	19" is riders	ship in June	2021 rela	tive to June	Lake City, San Diego, and San Jose. Pre-pandemic rider-	
_ 20	019 while "FY	721% of 1	FY19" is ria	lership in F.	Y. 2021 rei	ative to F.Y.	ship declines in some of these urban areas were lower than	_
	019. Colors co ough some reg					ne text titles,	the national averages. Denver, notably, carried more riders	
"	ougn some reg	wus aorti	, μι πεαιιή τ	nio a sirigie	uicgory.		in 2019 than in any of the previous 28 years.	
+								

However, this policy made them vulnerable to losses as more choice riders decide to work at home. Recoveries in Charlotte, Denver, Minneapolis, Phoenix, Pittsburgh, Portland, and San Jose are well below the national average. Transit systems in Dallas, Houston, and San Diego recovered a little more than the national average in June, but not much.

Death-Spiral Regions

Prior to the pandemic, transit systems in some urban areas were in a death spiral, with ridership declines so great that agencies were forced to cut service, leading to more ridership declines and, in turn, more service cuts. The worst, losing more than half their riders, were in Detroit, Cleveland, Milwaukee, Memphis, and Louisville. Others losing 40 to 50 percent of their riders, including Sacramento, Cincinnati, Virginia Beach, and Oklahoma City, also appeared to be in death spirals.

Except for Detroit, many of these region's transit systems seem to be recovering more than the national average. This is probably because they had already lost most of their choice riders so most of their patrons were transit-dependent commuters who remain transit-dependent after the pandemic.

Transit-Dependent Transit Systems

Prior to the pandemic, some urban areas, including Kansas City, Indianapolis, Las Vegas, Nashville, Raleigh, Riverside, San Antonio, and Tampa, seemed content to operate their transit systems mainly for transit-dependent riders. Transit's share of commuting in these areas was low—only 0.8 percent in Indianapolis, which is probably an indication of the size of the truly transit-dependent community in most urban areas outside of New York. Transit in these areas had experienced ridership declines before the pandemic, but the declines were not so severe as to cause them to enter death spirals.

In most of these areas, transit ridership has recovered more than the national average. In June, Kansas City transit carried 74 percent of pre-pandemic numbers; Raleigh carried 71 percent; Tampa 68 percent; Cincinnati 63 percent; Las Vegas 59 percent; and Indianapolis 57 percent. Only Riverside is doing poorly.

The Future of Transit

I have previously estimated that nationwide transit ridership will not recover to more than 75 percent of pre-pandemic levels. Considering that driving has already returned to 96 percent of pre-pandemic levels, the latest transit data suggest that 75 percent may be too high. The hardest hit agencies will be the ones that spent the most money building rail transit lines and otherwise tried to attract downtown office workers and other choice riders.

In the long run, it appears that the transit systems

that will be least affected by the pandemic are those that, before the pandemic, served mainly transit-dependent riders. Even they are likely to continue losing riders due to increased automobile ownership.

Most distressing is that transit industry success now more than ever depends on keeping people poor. CNN recently argued that working at home is bad for the economy because someone benefits from the money spent on commuter costs, fancy clothes, and power lunches, as if that money wouldn't be spent somewhere else providing just as much if not more economic benefit.

In the same way, we can expect transit advocates to resist efforts to help low-income people obtain automobiles even though such autos will do far more to help people out of poverty than free transit (especially when that transit is paid for out of regressive taxes). With the encouragement of the Biden administration, agencies will step up their efforts to make low-income neighborhoods less auto friendly by reducing the capacities and speeds of arterial and collector streets serving those neighborhoods. This will all be in the name of providing better transit service to the 5 percent of neighborhood residents who remain transit dependent regardless of the negative economic impact on the 82 percent who rely on automobiles to get to work and other important destinations.

All of this is just more evidence is that transit's real problem is not a shortage of funds but too much money. Political subsidies make transit more beholden to politicians than to transit riders. Such subsidies have reduced transit's resilience to social and economic changes because agencies don't need to actually carry many riders to get the subsidies. The appropriate political response to the effects of the pandemic on transit is to reduce, not increase, transit subsidies.

Ridership and service data by transit agency and mode for every month between January, 2002 and June, 2021 are available from the National Transit Database. I've uploaded an enhanced spreadsheet that has totals by mode, year, transit agency, and major urban areas. The raw transit data are in cells A1 through II2228. I've added annual totals in columns IJ through JC, mode totals in rows 2230 through 2251, agency totals in rows 2260 through 3259 and totals for the 203 largest urban areas in rows 3260 through 3663. "F.Y." (July through June) totals for F.Y. 2019 through F.Y. 2021 are in columns JD through JF. Columns JG through JJ compare June 2021 and F.Y. 2021 numbers with June 2019 and F.Y. 2019 data. All of these enhancements are on both the UPT (unlinked passenger trips) and VRM (vehicle-revenue miles) worksheets.

Randal O'Toole, the Antiplanner, is a transportation and land-use policy analyst and author of Romance of the Rails: Why the Passenger Trains We Love Are Not the Transportation We Need. Masthead photo of Boston bus and rail transit is by Mark Zastrow.