

THE STATE OF VMT AND CONGESTION

Measuring 5 Years of Vehicle Miles Traveled (VMT)









U.S. VMT ACCELERATES (AGAIN)

Until the pandemic, vehicle miles traveled across the U.S. was on a largely unbroken trajectory upwards. And this trend, while often associated with economic output, also meant higher emissions, and thus a worsening impact on climate and public health. Many places were stretched to the breaking point, clogged by congestion, poor air quality, noise pollution, and an increasing awareness of the negative externalities of an economy dependent on everrising gas-powered vehicle travel.

Then stay-at-home orders resulted in an abrupt and dramatic decline in VMT. While this reversal corresponded with pandemic trauma, it also created a different vision of what our cities could be, with less noise, more open space, and cleaner air.

As the pandemic receded and the economy bounced back, changes in work culture raised a new and exciting question: Could the U.S. keep VMT down, or at least below the levels reached by 2019, and keep congestion from coming back, ushering in a new era? With transportation accounting for the largest share of U.S. emissions, and <u>VMT as their primary driver</u>, this is an urgent question. To answer it, StreetLight analyzes how VMT has trended over the intervening 5 years, from January 2019-May 2024, across the entire U.S. The report also compares the top 100 most-populated metros between spring 2019 and 2024 by:

- Change in VMT
- VMT per capita
- Change in congestion
- Overall congestion

To better understand the relationship between change in congestion and VMT, StreetLight analyzes their correlation within the 25 biggest metros, and in their downtown regions.

While there was some hope that a new remote work culture might keep miles driven down and congestion at bay, StreetLight's results indicate that the status quo isn't working. A reliance on remote work is not a panacea to the rise in VMT and the default solution for traffic—adding roadway capacity—isn't solving congestion.

StreetLight finds that, as of spring 2024, VMT has taken a jump upwards, after steadily increasing since mid-2020. In fact, the uptick in VMT in spring 2024 (January-May) compared to the same period in 2023 marks the steepest year-over-year increase since the initial pandemic bounce back in 2021.

HOW NATIONAL VMT HAS TRENDED OVER THE LAST 5 YEARS



Data includes all CBSAs within the continental U.S.

Metrowide data follows a similar pattern as the national data. Overwhelmingly, VMT accelerated in the last year, as compared to 2022-2023. This is a flashing red light to localities. **Without significant changes, the upward trend in VMT shows no signs of peaking.**

The data also offers strong evidence that congestion won't be tackled without meaningfully tackling VMT. Only two metros out of 100 had less congestion in spring 2024 as compared to spring 2019, and as we'll see in the next section, the correlation between VMT and congestion in the biggest metros, and their associated downtowns is quite strong.

While historically, VMT growth has been a proxy for economic growth, GDP now stands above 2019 levels even in the metros where VMT is still down. This is a signal that GDP growth can be decoupled from VMT growth.

For transportation agencies and their partners at the local, state, and federal level tackling congestion and VMT on behalf of safety, equity, public health, climate, or economic goals, infrastructure investments like transit and denser land use can help pull the VMT trendline downward while supporting GDP. The challenge is reimagining cities and suburbs to enable vibrant, less vehicle-centric lifestyles.

CORRELATION BETWEEN VMT AND CONGESTION

VMT and congestion are, of course, related, but historically there has been an effort to tackle congestion by building more roadway capacity, a tactic that encourages VMT. To better understand the strength of the correlation between VMT and congestion, StreetLight analyzed the relationship between change in congestion and change in VMT in the top 25 biggest metros, which are major economic drivers. The positive correlation seen in the chart below suggests a potential underlying relationship between the rise in VMT and the rise in congestion. While five of these metros see VMT still below spring 2019 levels, just one, San Franscisco, sees congestion a hair below where it was in 2019.

TOP 25 METROS | CORRELATING VMT AND CONGESTION % Change in VMT vs. % Change in Congestion, Spring '19 - Spring '24



The trendline is also telling when we look at downtowns in these top 25 metros. While 18 metro region's downtowns see VMT still below the levels reached in spring 2019, only seven of these actually see congestion declining. The downtowns with reduced congestion have reduced VMT by at least 10%, with the exception of Phoenix, where VMT has actually risen slightly.

Metro New York's urban core, in particular, has seen both the biggest increase in VMT over the past 5 years and the biggest increase in congestion. The city's transportation system has been in the news recently due to the pause on its congestion pricing rollout, a policy that had been aimed at tackling congestion in the urban core and boosting transit funding. The data shows that the city's economic center has indeed seen the biggest increase among its peers in both congestion and VMT.

TOP 25 DOWNTOWNS* | CORRELATING VMT AND CONGESTION % Change in VMT vs. % Change in Congestion, Spring '19 - Spring '24



KEY NATIONAL, METRO, AND DOWNTOWN FINDINGS

NATIONAL TRENDS

- Nationally, VMT per capita was up 12% in May 2024 compared to May 2019. While some theorized that the remote work trend might keep VMT depressed following the pandemic, the data shows this is not the case.
- January through May 2024 saw a bigger increase in VMT compared to the same period in 2023 than any year since the initial pandemic bounce back.

TOP 25 METRO & DOWNTOWN TRENDS

- Among the 25 most populous metros, the correlation between VMT and congestion is pronounced. Five see VMT still below spring 2019 levels. Just one, San Franscisco, sees congestion a hair below where it was in 2019.
- Downtown areas in the top 25 of these metros also exhibit a correlation between VMT and congestion. VMT is down in 18 of these urban cores compared to 2019, but congestion is only down in eight of them.
- Nearly every metro whose downtown regions reduced congestion reduced VMT by double digits or more, suggesting that congestion is quite stubborn on these taxed urban roads.

- Metro Minneapolis' urban core region saw the biggest drop in congestion over the 5-year period, accompanied by a 16% decrease in VMT. While Minneapolis' downtown had struggled, as of Feb. 2024 it led its peers in increased foot traffic, according to the University of Toronto's Downtown Recovery report.
- New York metro, including New York City, where congestion pricing was paused, stands out as seeing the biggest increase in both congestion and VMT among the top 25 metros' urban cores.

TOP IOO METRO TRENDS

- 88 of the top 100 metros in the U.S. saw VMT increase from spring 2019 through spring 2024. Only four metros saw decreases in the double digits.
- **Congestion is up in nearly every metro.** Only six of the top 100 metros managed to keep congestion at or below levels seen in 2019.
- California sees a concentration of metros that have kept VMT below 2019 levels. The only other large metro that hasn't seen VMT rise since 2019 is Washington D.C.

- While VMT is often associated with economic output, the data shows this is not preordained. In all 10 metros with decreased VMT over the 5-year study period, GDP was also up between 2019 and 2022, the last date for which data is available. In general, VMT was even lower in 2022, as compared to 2024, a further indication that VMT can be decoupled from GDP.
- San Francisco ranks as the best-performing metro for congestion reduction. It also sees daily VMT per capita reduced by 13%.
- New York, Washington, and California outperform the rest of the U.S. for VMT as of spring 2024. Those three states are home to nine of the top 10 metros with the lowest daily VMT per capita.
- The 10 metros that perform worst for overall daily VMT per capita are concentrated in the southeast. These are places with sprawling geographies and often limited public transit availability.
- Los Angeles, a metro which is notorious for traffic, does in fact rank worst for overall congestion, despite VMT being down. While VMT reduction has not yet translated to a reduction in congestion, LA has managed to keep traffic from worsening, unlike most of its peers.
- When ranking metros by population, the New York City metro region saw congestion worsen over the 5-year period faster than the next 47 most populous cities.



CHARTS TELL THE STORY | TOP 100 METROS



VMT GROWTH IN THE TOP IOO METROS % Change in Avg. Daily VMT Spring '19 - Spring '24



TOP 50 U.S. METROS RANKED BY VMT % CHANGE % Change in Avg. Daily VMT Spring '19 - Spring '24

	Rank	% Change
Los Angeles-Long Beach-Anaheim, CA	1	-17
Oxnard-Thousand Oaks-Ventura, CA	2	-16
San Francisco-Oakland-Berkeley, CA	3	-13
San Jose-Sunnyvale-Santa Clara, CA	4	-12
San Diego-Chula Vista-Carlsbad, CA	5	-8
Springfield, MA	6	-6
Memphis, TN-MS-AR	7	-4
Minneapolis-St. Paul-Bloomington, MN-WI	8	-3
Worcester, MA-CT	9	-3
Milwaukee-Waukesha, WI	10	-2
Denver-Aurora-Lakewood, CO	11	0
Sacramento-Roseville-Folsom, CA	12	0
Washington-Arlington-Alexandria, DC-VA-MD-WV	13	0
Bakersfield, CA	14	1
Madison, WI	15	1
Baltimore-Columbia-Towson, MD	16	1
Portland-Vancouver-Hillsboro, OR-WA	17	2
Boston-Cambridge-Newton, MA-NH	18	2
Seattle-Tacoma-Bellevue, WA	19	2
Hartford-East Hartford-Middletown, CT	20	3
Omaha-Council Bluffs, NE-IA	21	3
Akron, OH	22	4
Pittsburgh, PA	23	5
Providence-Warwick, RI-MA	24	5
Chicago-Naperville-Elgin, IL-IN-WI	25	5

	Rank	% Change
New Haven-Milford, CT	26	5
Bridgeport-Stamford-Norwalk, CT	27	5
Rochester, NY	28	6
St. Louis, MO-IL	29	6
Detroit-Warren-Dearborn, MI	30	6
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	31	6
Stockton, CA	32	7
Las Vegas-Henderson-Paradise, NV	33	8
Kansas City, MO-KS	34	8
Dayton-Kettering, OH	35	8
Riverside-San Bernardino-Ontario, CA	36	8
Grand Rapids-Kentwood, MI	37	8
Colorado Springs, CO	38	8
Toledo, OH	39	8
Harrisburg-Carlisle, PA	40	8
Fresno, CA	41	9
Cleveland-Elyria, OH	42	9
Allentown-Bethlehem-Easton, PA-NJ	43	9
Miami-Fort Lauderdale-Pompano Beach, FL	44	9
Wichita, KS	45	10
Virginia Beach-Norfolk-Newport News, VA-NC	46	10
Albuquerque, NM	47	10
Albany-Schenectady-Troy, NY	48	10
Tucson, AZ	49	10
Des Moines-West Des Moines, IA	50	11

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NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK



TAKEAWAY:

Only six metros kept VMT down by over 5% compared to 2019.

> Numbers are rounded for simplicity. Color coding of ranking reflects rounding.

BOTTOM 50 U.S. METROS RANKED BY VMT % CHANGE

% Change in Avg. Daily VMT Spring '19 - Spring '24

	Rank	% Change
New Orleans-Metairie, LA	51	11
Richmond, VA	52	12
Orlando-Kissimmee-Sanford, FL	53	12
Syracuse, NY	54	12
ScrantonWilkes-Barre, PA	55	12
Indianapolis-Carmel-Anderson, IN	56	13
Poughkeepsie-Newburgh-Middletown, NY	57	13
Chattanooga, TN-GA	58	14
New York-Newark-Jersey City, NY-NJ-PA	59	14
Cincinnati, OH-KY-IN	60	14
Phoenix-Mesa-Chandler, AZ	61	15
Columbus, OH	62	16
Atlanta-Sandy Springs-Alpharetta, GA	63	17
Greenville-Anderson, SC	64	17
Columbia, SC	65	18
Louisville/Jefferson County, KY-IN	66	19
Little Rock-North Little Rock-Conway, AR	67	19
Spokane-Spokane Valley, WA	68	19
Jackson, MS	69	20
Birmingham-Hoover, AL	70	20
Salt Lake City, UT	71	20
Houston-The Woodlands-Sugar Land, TX	72	20
Nashville-DavidsonMurfreesboroFranklin, TN	73	20
Augusta-Richmond County, GA-SC	74	21
Charlotte-Concord-Gastonia, NC-SC	75	21

	Rank	% Change
Winston-Salem, NC	76	21
Baton Rouge, LA	77	21
Ogden-Clearfield, UT	78	21
Greensboro-High Point, NC	79	23
Deltona-Daytona Beach-Ormond Beach, FL	80	23
Oklahoma City, OK	81	24
Charleston-North Charleston, SC	82	24
Buffalo-Cheektowaga, NY	83	24
Austin-Round Rock-Georgetown, TX	84	24
Tampa-St. Petersburg-Clearwater, FL	85	24
Jacksonville, FL	86	24
Dallas-Fort Worth-Arlington, TX	87	25
Tulsa, OK	88	25
Durham-Chapel Hill, NC	89	25
San Antonio-New Braunfels, TX	90	26
Raleigh-Cary, NC	91	27
Palm Bay-Melbourne-Titusville, FL	92	27
North Port-Sarasota-Bradenton, FL	93	31
Provo-Orem, UT	94	33
Knoxville, TN	95	33
Lakeland-Winter Haven, FL	96	37
Cape Coral-Fort Myers, FL	97	
El Paso, TX	98	42
Boise City, ID	99	58
McAllen-Edinburg-Mission, TX	100	68

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NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK





TAKEAWAY:

Twenty-seven metros have seen VMT rise by more than 20% since 2019.

> Numbers are rounded for simplicity. Color coding of ranking reflects rounding.

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TOP 50 U.S. METROS RANKED BY VMT PER CAPITA Spring '24

	Rank	VMT/ Capita
New York-Newark-Jersey City, NY-NJ-PA	1	17
Buffalo-Cheektowaga, NY	2	18
Portland-Vancouver-Hillsboro, OR-WA	3	18
Spokane-Spokane Valley, WA	4	18
Oxnard-Thousand Oaks-Ventura, CA	5	19
San Francisco-Oakland-Berkeley, CA	6	19
San Jose-Sunnyvale-Santa Clara, CA	7	19
McAllen-Edinburg-Mission, TX	8	19
Rochester, NY	9	19
Seattle-Tacoma-Bellevue, WA	10	20
Tucson, AZ	11	20
Los Angeles-Long Beach-Anaheim, CA	12	20
Colorado Springs, CO	13	20
Boise City, ID	14	20
Chicago-Naperville-Elgin, IL-IN-WI	15	20
Springfield, MA	16	21
Milwaukee-Waukesha, WI	17	21
El Paso, TX	18	21
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	19	21
Providence-Warwick, RI-MA	20	21
Pittsburgh, PA	21	21
Las Vegas-Henderson-Paradise, NV	22	21
Sacramento-Roseville-Folsom, CA	23	21
Detroit-Warren-Dearborn, MI	24	22
Boston-Cambridge-Newton, MA-NH	25	22

	Rank	VMT/ Capita
Washington-Arlington-Alexandria, DC-VA-MD-WV	26	22
Virginia Beach-Norfolk-Newport News, VA-NC	27	22
Albuquerque, NM	28	22
Cleveland-Elyria, OH	29	22
Miami-Fort Lauderdale-Pompano Beach, FL	30	22
Fresno, CA	31	22
Syracuse, NY	32	22
Ogden-Clearfield, UT	33	22
ScrantonWilkes-Barre, PA	34	22
Minneapolis-St. Paul-Bloomington, MN-WI	35	22
Wichita, KS	36	23
Albany-Schenectady-Troy, NY	37	23
San Diego-Chula Vista-Carlsbad, CA	38	23
Bridgeport-Stamford-Norwalk, CT	39	23
Dayton-Kettering, OH	40	23
Tampa-St. Petersburg-Clearwater, FL	41	24
Salt Lake City, UT	42	24
Denver-Aurora-Lakewood, CO	43	24
Grand Rapids-Kentwood, MI	44	24
New Haven-Milford, CT	45	24
New Orleans-Metairie, LA	46	24
Baltimore-Columbia-Towson, MD	47	24
Omaha-Council Bluffs, NE-IA	48	24
Phoenix-Mesa-Chandler, AZ	49	24
Palm Bay-Melbourne-Titusville, FL	50	24

VMT PER CA	PITA	
15 to 21	22 to 28	29 to 35

NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK





TAKEAWAY:

The best-performing metros for VMT per capita are concentrated in the northeast, northwest, and California.

> Numbers are rounded for simplicity. Color coding of ranking reflects rounding. StreetLight normalizes for population based on the 2020 Census.

BOTTOM 50 U.S. METROS RANKED BY VMT PER CAPITA Spring '24

	Rank	VMT/ Capita
Allentown-Bethlehem-Easton, PA-NJ	51	24
St. Louis, MO-IL	52	25
Augusta-Richmond County, GA-SC	53	25
Cincinnati, OH-KY-IN	54	25
Provo-Orem, UT	55	25
Cape Coral-Fort Myers, FL	56	25
Toledo, OH	57	26
North Port-Sarasota-Bradenton, FL	58	26
Columbus, OH	59	26
Houston-The Woodlands-Sugar Land, TX	60	26
Kansas City, MO-KS	61	26
Akron, OH	62	26
Worcester, MA-CT	63	26
Madison, WI	64	26
Hartford-East Hartford-Middletown, CT	65	27
Stockton, CA	66	27
Riverside-San Bernardino-Ontario, CA	67	27
Memphis, TN-MS-AR	68	27
Louisville/Jefferson County, KY-IN	69	27
Poughkeepsie-Newburgh-Middletown, NY	70	27
Bakersfield, CA	71	27
Raleigh-Cary, NC	72	27
Des Moines-West Des Moines, IA	73	27
Tulsa, OK	74	27
Atlanta-Sandy Springs-Alpharetta, GA	75	28

	Rank	VMT/ Capita
Greenville-Anderson, SC	76	28
Harrisburg-Carlisle, PA	77	28
Charleston-North Charleston, SC	78	28
Baton Rouge, LA	79	28
Indianapolis-Carmel-Anderson, IN	80	28
Winston-Salem, NC	81	28
San Antonio-New Braunfels, TX	82	28
Lakeland-Winter Haven, FL	83	28
Jacksonville, FL	84	28
Greensboro-High Point, NC	85	29
Charlotte-Concord-Gastonia, NC-SC	86	29
Dallas-Fort Worth-Arlington, TX	87	29
Oklahoma City, OK	88	29
Deltona-Daytona Beach-Ormond Beach, FL	89	29
Durham-Chapel Hill, NC	90	29
Richmond, VA	91	30
Austin-Round Rock-Georgetown, TX	92	30
Little Rock-North Little Rock-Conway, AR	93	30
Orlando-Kissimmee-Sanford, FL	94	31
Columbia, SC	95	31
Chattanooga, TN-GA	96	31
Knoxville, TN	97	31
Jackson, MS	98	32
Birmingham-Hoover, AL	99	32
Nashville-DavidsonMurfreesboroFranklin, TN	100	34

VMT PER CAPITA



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NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK



TAKEAWAY:

The worst-performing metro sees twice the daily VMT per capita as the best-performing metro.

> Numbers are rounded for simplicity. Color coding of ranking reflects rounding. StreetLight normalizes for population based on the 2020 Census.

TOP 50 U.S. METROS RANKED BY CONGESTION % CHANGE Spring '24

	Rank	% Change
San Francisco-Oakland-Berkeley, CA	1	-0.4
Albuquerque, NM	2	-0.3
Los Angeles-Long Beach-Anaheim, CA	3	0
Memphis, TN-MS-AR	4	0
Birmingham-Hoover, AL	5	0
Omaha-Council Bluffs, NE-IA	6	0
Minneapolis-St. Paul-Bloomington, MN-WI	7	0.1
San Jose-Sunnyvale-Santa Clara, CA	8	0.1
St. Louis, MO-IL	9	0.3
Salt Lake City, UT	10	0.3
San Diego-Chula Vista-Carlsbad, CA	11	0.4
Tucson, AZ	12	0.4
Ogden-Clearfield, UT	13	0.4
Wichita, KS	14	0.4
Bakersfield, CA	15	0.5
Kansas City, MO-KS	16	0.6
Oxnard-Thousand Oaks-Ventura, CA	17	0.6
Winston-Salem, NC	18	0.6
Phoenix-Mesa-Chandler, AZ	19	0.7
Tampa-St. Petersburg-Clearwater, FL	20	0.7
Augusta-Richmond County, GA-SC	21	0.7
Greenville-Anderson, SC	22	0.8
Colorado Springs, CO	23	0.9
Little Rock-North Little Rock-Conway, AR	24	0.9
Chattanooga, TN-GA	25	0.9

	Rank	% Change
Pittsburgh, PA	26	1
Tulsa, OK	27	1
Dayton-Kettering, OH	28	1
Deltona-Daytona Beach-Ormond Beach, FL	29	1
Washington-Arlington-Alexandria, DC-VA-MD-WV	30	1.1
Atlanta-Sandy Springs-Alpharetta, GA	31	1.1
Detroit-Warren-Dearborn, MI	32	1.1
Orlando-Kissimmee-Sanford, FL	33	1.1
Cincinnati, OH-KY-IN	34	1.1
Grand Rapids-Kentwood, MI	35	
Sacramento-Roseville-Folsom, CA	36	1.2
Jacksonville, FL	37	1.2
New Orleans-Metairie, LA	38	1.2
McAllen-Edinburg-Mission, TX	39	1.2
Des Moines-West Des Moines, IA	40	1.2
Jackson, MS	41	1.2
Portland-Vancouver-Hillsboro, OR-WA	42	1.3
Fresno, CA	43	1.3
Columbia, SC	44	1.3
Greensboro-High Point, NC	45	1.3
Madison, WI	46	1.3
Palm Bay-Melbourne-Titusville, FL	47	1.3
Houston-The Woodlands-Sugar Land, TX	48	1.4
Miami-Fort Lauderdale-Pompano Beach, FL	49	1.4
Seattle-Tacoma-Bellevue, WA	50	1.4

CONGESTION PERCENT CHANGE

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NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK



TAKEAWAY:

Congestion is incredibly stubborn. Only two metros have reduced congestion, and by less than half a percentage point.

BOTTOM 50 U.S. METROS RANKED BY CONGESTION % CHANGE Spring '24

	Rank	% Change
Charlotte-Concord-Gastonia, NC-SC	51	1.4
Cleveland-Elyria, OH	52	1.4
Milwaukee-Waukesha, WI	53	1.4
Oklahoma City, OK	54	1.4
Akron, OH	55	1.4
Springfield, MA	56	1.4
Toledo, OH	57	1.4
Dallas-Fort Worth-Arlington, TX	58	1.5
Denver-Aurora-Lakewood, CO	59	1.5
Baltimore-Columbia-Towson, MD	60	1.5
San Antonio-New Braunfels, TX	61	1.5
Nashville-DavidsonMurfreesboroFranklin, TN	62	1.5
Virginia Beach-Norfolk-Newport News, VA-NC	63	1.5
Louisville/Jefferson County, KY-IN	64	1.5
Boston-Cambridge-Newton, MA-NH	65	1.6
Baton Rouge, LA	66	1.6
Stockton, CA	67	1.6
Harrisburg-Carlisle, PA	68	1.6
Chicago-Naperville-Elgin, IL-IN-WI	69	1.7
Columbus, OH	70	1.7
Indianapolis-Carmel-Anderson, IN	71	1.7
Knoxville, TN	72	1.7
Riverside-San Bernardino-Ontario, CA	73	1.8
Richmond, VA	74	1.8
Austin-Round Rock-Georgetown, TX	75	1.9

	Rank	% Change
Raleigh-Cary, NC	76	1.9
Charleston-North Charleston, SC	77	1.9
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	78	2
Las Vegas-Henderson-Paradise, NV	79	2
Hartford-East Hartford-Middletown, CT	80	2
Rochester, NY	81	2
El Paso, TX	82	2
Durham-Chapel Hill, NC	83	2
Spokane-Spokane Valley, WA	84	2
Providence-Warwick, RI-MA	85	2.1
Worcester, MA-CT	86	2.1
Provo-Orem, UT	87	2.1
New York-Newark-Jersey City, NY-NJ-PA	88	2.2
Albany-Schenectady-Troy, NY	89	2.2
Poughkeepsie-Newburgh-Middletown, NY	90	2.2
ScrantonWilkes-Barre, PA	91	2.3
Allentown-Bethlehem-Easton, PA-NJ	92	2.4
Bridgeport-Stamford-Norwalk, CT	93	2.5
North Port-Sarasota-Bradenton, FL	94	2.5
Syracuse, NY	95	2.5
Lakeland-Winter Haven, FL	96	2.6
New Haven-Milford, CT	97	2.7
Cape Coral-Fort Myers, FL	98	2.7
Buffalo-Cheektowaga, NY	99	2.8
Boise City, ID	100	3

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NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK





TAKEAWAY:

While increases in congestion are relatively small on a percentage basis, they translate to real hours lost, especially in places where congestion is already high.

TOP 50 U.S. METROS RANKED BY CONGESTION Spring '24

	Rank	Congestion Factor
Madison, WI	1	0.168
Wichita, KS	2	0.169
Ogden-Clearfield, UT	3	0.171
Des Moines-West Des Moines, IA	4	0.171
Winston-Salem, NC	5	0.172
Greensboro-High Point, NC	6	0.176
Little Rock-North Little Rock-Conway, AR	7	0.179
Richmond, VA	8	0.179
Toledo, OH	9	0.180
Tulsa, OK	10	0.182
Akron, OH	11	0.182
Kansas City, MO-KS	12	0.184
Minneapolis-St. Paul-Bloomington, MN-WI	13	0.185
Birmingham-Hoover, AL	14	0.186
Dayton-Kettering, OH	15	0.186
Columbia, SC	16	0.187
Durham-Chapel Hill, NC	17	0.187
Omaha-Council Bluffs, NE-IA	18	0.188
Grand Rapids-Kentwood, MI	19	0.188
Jackson, MS	20	0.188
Syracuse, NY	21	0.189
Deltona-Daytona Beach-Ormond Beach, FL	22	0.190
Oklahoma City, OK	23	0.190
St. Louis, MO-IL	24	0.191
Palm Bay-Melbourne-Titusville, FL	25	0.192

	Rank	Congestion Factor
Harrisburg-Carlisle, PA	26	0.192
Columbus, OH	27	0.192
Augusta-Richmond County, GA-SC	28	0.193
Chattanooga, TN-GA	29	0.193
Cleveland-Elyria, OH	30	0.193
Albany-Schenectady-Troy, NY	31	0.193
Poughkeepsie-Newburgh-Middletown, NY	32	0.194
Knoxville, TN	33	0.195
Spokane-Spokane Valley, WA	34	0.195
Provo-Orem, UT	35	0.195
Worcester, MA-CT	36	0.195
Cincinnati, OH-KY-IN	37	0.197
Rochester, NY	38	0.197
Bakersfield, CA	39	0.200
Milwaukee-Waukesha, WI	40	0.201
Nashville-DavidsonMurfreesboroFranklin, TN	41	0.201
Raleigh-Cary, NC	42	0.201
Greenville-Anderson, SC	43	0.203
Springfield, MA	44	0.203
ScrantonWilkes-Barre, PA	45	0.203
Charlotte-Concord-Gastonia, NC-SC	46	0.204
Virginia Beach-Norfolk-Newport News, VA-NC	47	0.204
Jacksonville, FL	48	0.205
Indianapolis-Carmel-Anderson, IN	49	0.205
Louisville/Jefferson County, KY-IN	50	0.206



0.150 to 0.199 0.200 to 0.249 0.250 to 0.300

↑50

NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK



TAKEAWAY:

Congestion is less pronounced in smaller metros.

*Congestion factor is measured as one minus the average observed speed over the free flow speed.

↓50

BOTTOM 50 U.S. METROS RANKED BY CONGESTION Spring '24

	Rank	Congestion Factor
Salt Lake City, UT	51	0.207
Memphis, TN-MS-AR	52	0.208
Stockton, CA	53	0.208
Detroit-Warren-Dearborn, MI	54	0.209
Hartford-East Hartford-Middletown, CT	55	0.210
Albuquerque, NM	56	0.211
San Antonio-New Braunfels, TX	57	0.211
Pittsburgh, PA	58	0.212
Allentown-Bethlehem-Easton, PA-NJ	59	0.212
Phoenix-Mesa-Chandler, AZ	60	0.213
Charleston-North Charleston, SC	61	0.213
Tucson, AZ	62	0.214
Oxnard-Thousand Oaks-Ventura, CA	63	0.214
Buffalo-Cheektowaga, NY	64	0.214
Baton Rouge, LA	65	0.216
Boise City, ID	66	0.216
Colorado Springs, CO	67	0.218
Dallas-Fort Worth-Arlington, TX	68	0.218
Atlanta-Sandy Springs-Alpharetta, GA	69	0.220
Fresno, CA	70	0.220
New Haven-Milford, CT	71	0.220
New Orleans-Metairie, LA	72	0.222
Providence-Warwick, RI-MA	73	0.222
Lakeland-Winter Haven, FL	74	0.222
Orlando-Kissimmee-Sanford, FL	75	0.224

	Rank	Congestion Factor
Baltimore-Columbia-Towson, MD	76	0.224
Sacramento-Roseville-Folsom, CA	77	0.225
Austin-Round Rock-Georgetown, TX	78	0.225
North Port-Sarasota-Bradenton, FL	79	0.225
El Paso, TX	80	0.227
San Diego-Chula Vista-Carlsbad, CA	81	0.228
Portland-Vancouver-Hillsboro, OR-WA	82	0.229
Denver-Aurora-Lakewood, CO	83	0.229
Riverside-San Bernardino-Ontario, CA	84	0.230
Tampa-St. Petersburg-Clearwater, FL	85	0.231
Houston-The Woodlands-Sugar Land, TX	86	0.231
Seattle-Tacoma-Bellevue, WA	87	0.233
Boston-Cambridge-Newton, MA-NH	88	0.234
Washington-Arlington-Alexandria, DC-VA-MD-WV	89	0.235
Las Vegas-Henderson-Paradise, NV	90	0.236
Cape Coral-Fort Myers, FL	91	0.237
Chicago-Naperville-Elgin, IL-IN-WI	92	0.240
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	93	0.241
San Francisco-Oakland-Berkeley, CA	94	0.245
San Jose-Sunnyvale-Santa Clara, CA	95	0.246
Bridgeport-Stamford-Norwalk, CT	96	0.247
McAllen-Edinburg-Mission, TX	97	0.248
New York-Newark-Jersey City, NY-NJ-PA	98	0.265
Miami-Fort Lauderdale-Pompano Beach, FL	99	0.268
Los Angeles-Long Beach-Anaheim, CA	100	0.269

CONGESTION	FACTOR*	
0.150 to 0.199	0.200 to 0.249	0.250 to 0.300

NUMBER INSIDE EACH CELL INDICATES THE METRO'S NATIONAL RANK





TAKEAWAY:

The worst congestion is concentrated in many of the most populated metros, places where limiting VMT will be critical to reigning in traffic.

*Congestion factor is measured as one minus the average observed speed over the free flow speed.

Get access to VMT and other metrics to drive down congestion in your city.

Did you know you can use our StreetLight InSight[®] software to go deeper for virtually any geography?

We used metro-wide VMT and Congestion Factor metrics for this report, but StreetLight InSight® helps you access more granular metrics, including segment-level VMT, volumes, and speeds, origindestination patterns, intersection activity, demographics, and more, all in one place.

SEE HOW IT WORKS



(i)

WHAT IS STREETLIGHT INSIGHT[®]?

It's self-serve software that lets users ask mobility questions and get the answers within minutes. Access traffic metrics for any road, without sensors. From VMT to VHD, vehicle volumes, and commercial truck metrics, **point and click** your way to the data you need to measure and mitigate congestion.

Learn more at

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TOP IOO METROS INDEX | FULL RESULTS TABLE



	VMT % Change	Daily VMT/ Capita	Congestion % Change	Congestion Factor					
New York-Newark-Jersey City, NY-NJ-PA	14	17	2.2	0.265					
Los Angeles-Long Beach-Anaheim, CA	-17	20	0	0.269					
Chicago-Naperville-Elgin, IL-IN-WI	5	20	1.7	0.24					
Dallas-Fort Worth-Arlington, TX	25	29	1.5	0.218					
Houston-The Woodlands-Sugar Land, TX	20	26	1.4	0.231					
Washington-Arlington-Alexandria, DC-VA-MD-WV	0	22	1.1	0.235					
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	6	21	2	0.241					
Miami-Fort Lauderdale-Pompano Beach, FL	9	22	1.4	0.268					
Atlanta-Sandy Springs-Alpharetta, GA	17	28	1.1	0.22					
Boston-Cambridge-Newton, MA-NH	2	22	1.6	0.234					
Phoenix-Mesa-Chandler, AZ	15	24	0.7	0.213	VMT PERCENT	VMT PER CAPITA	CONGESTION PERCENT	CONGESTION FACTOR*	
San Francisco-Oakland-Berkeley, CA	-13	19	-0.4	0.245	CHANGE		CHANGE		
Riverside-San Bernardino-Ontario, CA	8	27	1.8	0.23					
Detroit-Warren-Dearborn, MI	6	22	1.1	0.209	41% or more	29 to 35	2.1% to 3%	0.250 to 0.300	
Seattle-Tacoma-Bellevue, WA	2	20	1.4	0.233					
Minneapolis-St. Paul-Bloomington, MN-WI	-3	22	0.1	0.185	21% to 40%		1.1% to 2%		
San Diego-Chula Vista-Carlsbad, CA	-8	23	0.4	0.228		22 to 28		0.200 to 0.249	
Tampa-St. Petersburg-Clearwater, FL	24	24	0.7	0.231	1% += 20%		0.1% to 1%		
Denver-Aurora-Lakewood, CO	0	24	1.5	0.229	1% to 20%				
Baltimore-Columbia-Towson, MD	1	24	1.5	0.224		15 to 21		0.150 to 0.100	
St. Louis, MO-IL	6	25	0.3	0.191	-20% to 0%	15 to 21	-1% to 0%	0.150 to 0.199	
Orlando-Kissimmee-Sanford, FL	12	31	1.1	0.224					
Charlotte-Concord-Gastonia, NC-SC	21	29	1.4	0.204					
San Antonio-New Braunfels, TX	26	28	1.5	0.211	*Congestion fact	tor is measured as one min	nus the average observed	speed over the free	
Portland-Vancouver-Hillsboro, OR-WA	2	18	1.3	0.229	TIOW SJ Numbe	peed. StreetLight normalize	es for population based (ity. Color coding of ranki	on the 2020 Census. The reflects rounding	

	VMT % Change	Daily VMT/ Capita	Congestion % Change	Congestion Factor							
Sacramento-Roseville-Folsom, CA	0	21	1.2	0.225							
Pittsburgh, PA	5	21	1	0.212							
Austin-Round Rock-Georgetown, TX	24	30	1.9	0.225							
Las Vegas-Henderson-Paradise, NV	8	21	2	0.236							
Cincinnati, OH-KY-IN	14	25	1.1	0.197							
Kansas City, MO-KS	8	26	0.6	0.184							
Columbus, OH	16	26	1.7	0.192							
Indianapolis-Carmel-Anderson, IN	13	28	1.7	0.205							
Cleveland-Elyria, OH	9	22	1.4	0.193							
San Jose-Sunnyvale-Santa Clara, CA	-12	19	0.1	0.246							
Nashville-DavidsonMurfreesboroFranklin, TN	20	34	1.5	0.201	VM1 PER	CENT	VMT PER CAPITA	CONGEST PERCENT	ION	CONGESTION FACTOR*	
Virginia Beach-Norfolk-Newport News, VA-NC	10	22	1.5	0.204	CHA	NGE		CHANGE			
Providence-Warwick, RI-MA	5	21	2.1	0.222							
Jacksonville, FL	24	28	1.2	0.205		41% or more	29 to 35	2.1%	% to 3%	0.250 to 0.300	
Milwaukee-Waukesha, WI	-2	21	1.4	0.201							
Oklahoma City, OK	24	29	1.4	0.19		21% to 40%		1.19	% to 2%		
Raleigh-Cary, NC	27	27	1.9	0.201			22 to 28			0.200 to 0.249	
Memphis, TN-MS-AR	-4	27	0	0.208		1% to 20%		0.1% to 1%	% to 1%		
Richmond, VA	12	30	1.8	0.179		1%1020%					
Louisville/Jefferson County, KY-IN	19	27	1.5	0.206			15 to 21			0 150 to 0 100	
New Orleans-Metairie, LA	11	24	1.2	0.222		-20% to 0%	151021	-1%	to 0%	0.150 to 0.199	
Salt Lake City, UT	20	24	0.3	0.207							
Hartford-East Hartford-Middletown, CT	3	27	2	0.21							
Buffalo-Cheektowaga, NY	24	18	2.8	0.214		*Congestion facto	or is measured as one min	us the average	observed	speed over the free	
Birmingham-Hoover, AL	20	32	0	0.186		tiow sp Numbei	seed. StreetLight normalize	es for populations for codin	on based o q of rankin	on the 2020 Census. Ing reflects rounding.	

	VMT % Change	Daily VMT/ Capita	Congestion % Change	Congestion Factor					
Rochester, NY	6	19	2	0.197					
Grand Rapids-Kentwood, MI	8	24	1.1	0.188					
Tucson, AZ	10	20	0.4	0.214					
Tulsa, OK	25	27	1	0.182					
Fresno, CA	9	22	1.3	0.22					
Worcester, MA-CT	-3	26	2.1	0.195					
Omaha-Council Bluffs, NE-IA	3	24	0	0.188					
Bridgeport-Stamford-Norwalk, CT	5	23	2.5	0.247					
Greenville-Anderson, SC	17	28	0.8	0.203					
Albuquerque, NM	10	22	-0.3	0.211					
Albany-Schenectady-Troy, NY	10	23	2.2	0.193	VM1 PER	- CENT	VMT PER CAPITA	CONGESTION PERCENT	CONGESTION FACTOR*
Bakersfield, CA	1	27	0.5	0.2	CHA	NGE		CHANGE	
Knoxville, TN	33	31	1.7	0.195					
McAllen-Edinburg-Mission, TX	68	19	1.2	0.248		41% or more	29 to 35	2.1% to 3%	0.250 to 0.300
El Paso, TX	42	21		0.227					
New Haven-Milford, CT	5	24	2.7	0.22		21% to 40%		1.1% to 2%	
Baton Rouge, LA	21	28	1.6	0.216			22 to 28		0.200 to 0.249
Allentown-Bethlehem-Easton, PA-NJ	9	24	2.4	0.212		1% to 20%		0.1% to 1%	
Oxnard-Thousand Oaks-Ventura, CA	-16	19	0.6	0.214		1%1020%			
North Port-Sarasota-Bradenton, FL	31	26	2.5	0.225			15 to 21		0 150 to 0 100
Columbia, SC	18	31	1.3	0.187		-20% to 0%	131021	-1% to 0%	0.130 10 0.199
Dayton-Kettering, OH	8	23	1	0.186					
Charleston-North Charleston, SC	24	28	1.9	0.213					
Greensboro-High Point, NC	23	29	1.3	0.176		*Congestion facto	or is measured as one min	us the average obser	ved speed over the free
Stockton, CA	7	27	1.6	0.208		now sp Numbei	rs are rounded for simplicit	y. Color coding of ra	nking reflects rounding.

	VMT % Change	Daily VMT/ Capita	Congestion % Change	Congestion Factor						
Cape Coral-Fort Myers, FL	40	25	2.7	0.237						
Boise City, ID	58	20	3	0.216						
Colorado Springs, CO	8	20	0.9	0.218						
Little Rock-North Little Rock-Conway, AR	19	30	0.9	0.179						
Lakeland-Winter Haven, FL	37	28	2.6	0.222						
Des Moines-West Des Moines, IA	11	27	1.2	0.171						
Akron, OH	4	26	1.4	0.182						
Springfield, MA	-6	21	1.4	0.203						
Ogden-Clearfield, UT	21	22	0.4	0.171						
Poughkeepsie-Newburgh-Middletown, NY	13		2.2	0.194						
Madison, WI	1		1.3	0.168	VMT PERCE	ENT	VMT PER CAPITA	CONGESTION PERCENT	CONGESTION FACTOR*	
Winston-Salem, NC	21	28	0.6	0.172	CHAN	GE		CHANGE		
Provo-Orem, UT	33		2.1	0.195						
Deltona-Daytona Beach-Ormond Beach, FL	23	29	1	0.19		41% or more	29 to 35	2.1% to 3%	0.250 to 0.30	
Syracuse, NY	12	22	2.5	0.189						
Toledo, OH	8	26	1.4	0.18		21% to 40%		1.1% to 2%		
Durham-Chapel Hill, NC	25	29	2	0.187			22 to 28		0.200 to 0.24	
Wichita, KS	10	23	0.4	0.169		19: 1 . 009:		0.1% to 1%		
Augusta-Richmond County, GA-SC	21	25	0.7	0.193		1% to 20%				
Palm Bay-Melbourne-Titusville, FL	27	24	1.3	0.192			15 4- 01		0.150 += 0.10	
Harrisburg-Carlisle, PA	8	28	1.6	0.192		-20% to 0%	15 to 21	-1% to 0%	0.150 to 0.19	
Spokane-Spokane Valley, WA	19	18	2	0.195						
Jackson, MS	20	32	1.2	0.188						
ScrantonWilkes-Barre, PA	12	22	2.3	0.203	*0	congestion fact	or is measured as one mir	nus the average observed	I speed over the free	
Chattanooga, TN-GA	14	31	0.9	0.193	flow speed. StreetLight normalizes for population based on the 2020 Census. Numbers are rounded for simplicity. Color coding of ranking reflects rounding.					

METHODOLOGY

This analysis includes all vehicle segment-level travel within the geographic zone on segments that are at least 15 meters, including all residential roadways and excluding service roads. National data includes VMT in all CBSAs across the continental U.S., covering nearly all of the populated lower 48. The top 100 metros are identified based on population size and include the full CBSA, used interchangeably with the term "metro." To measure downtowns, StreetLight analyzes census tracts labeled as "urban core" based on the density of their roadway networks. Congestion factor is measured as one minus the average observed speed over the free flow speed. StreetLight normalizes for population based on the 2020 Census.



ABOUT STREETLIGHT

StreetLight Data, Inc. ("StreetLight") pioneered the use of Big Data analytics to shed light on how people, goods, and services move, empowering smarter, data-driven transportation decisions. The company applies proprietary machine-learning algorithms and its vast data processing resources to measure travel patterns of vehicles, bicycles and pedestrians, accessible as analytics on the StreetLight InSight® SaaS platform. Acquired by Jacobs as a wholly owned subsidiary in February 2022, StreetLight provides innovative digital solutions to help communities reduce congestion, improve safe and equitable transportation, and maximize the positive impact of infrastructure investment.



