

U.S. BICYCLING TRENDS 2021 UPDATE



STREETLIGHT

Table of Contents

I. THE LATEST: COVID BIKING BOOM HOLDS (MOSTLY) STEADY	4
II. ON THE UP & UP: CITIES GAINING	7
III. BICYCLING HABITS FLEETING: CITIES LOSING	11
IV. HABITS HOLDING: CITIES STAYING THE COURSE	13
V. LOCAL DATA SPOTLIGHT: ZOOMING IN ON SEATTLE	15

New Data Points the Way on Bike Infrastructure Investment

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eBook for a deep dive
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I. THE LATEST: COVID BIKING BOOM HOLDS (MOSTLY) STEADY



When we published our [COVID Bicycle Trends](#) update in the fall of 2020, we were thrilled to find that an overall spike in cycling across America's top 100 metros had largely persisted throughout the first six months of the COVID-19 pandemic, with a remarkable **11% year-over-year (YOY) cycling increase in September of 2020**. This is consistent with media reports of booming bike sales and Americans taking to neighborhood streets made empty by stay-at-home orders and persisting remote work options for previously office-based employees. But as Americans moved beyond the depths of the pandemic in 2021, did they keep their new biking habits going, or did they get back into their cars?

To find out, we tapped the StreetLight InSight® Multimode Metrics for an assessment of July YOY ridership. (Summer months provide a clean comparison afforded by warm weather virtually everywhere in the U.S.) We found that **total U.S. bike activity in Summer 2021 showed an increase of 10% compared to pre-pandemic Summer 2019 — and was virtually flat versus Summer 2020**: Good news for cycling overall!

However, a more granular analysis of the 100 biggest American CBSA metro areas reveals a much more varied perspective. We visualized the differences among metros through maps comparing the growth in ridership for both Summer of 2020 and Summer of 2021 relative to the pre-pandemic Summer 2019 (respectively captured in Figures 1 and 2).

Looking specifically at the last *12 months*, we observe decreased cycling activity in West Coast and Midwest metros in 2021 versus 2020, and increased activity in Southwest metros for the same time period. Moreover, the number of metros recording *negative cycling growth* versus pre-pandemic increased from 10 to 19, with many large cities in the red.

And while there are clear winners and losers of this year's cycling trends report, our analysis found that the COVID bicycling boom has generally persisted beyond the worst of the pandemic. Keep reading to learn where bike activity remains strong, where it fizzled out, and which policy decisions led cities to a cycling boom — or bust.

SUMMER 2020 | CHANGE IN RIDERSHIP VS. PRE-PANDEMIC

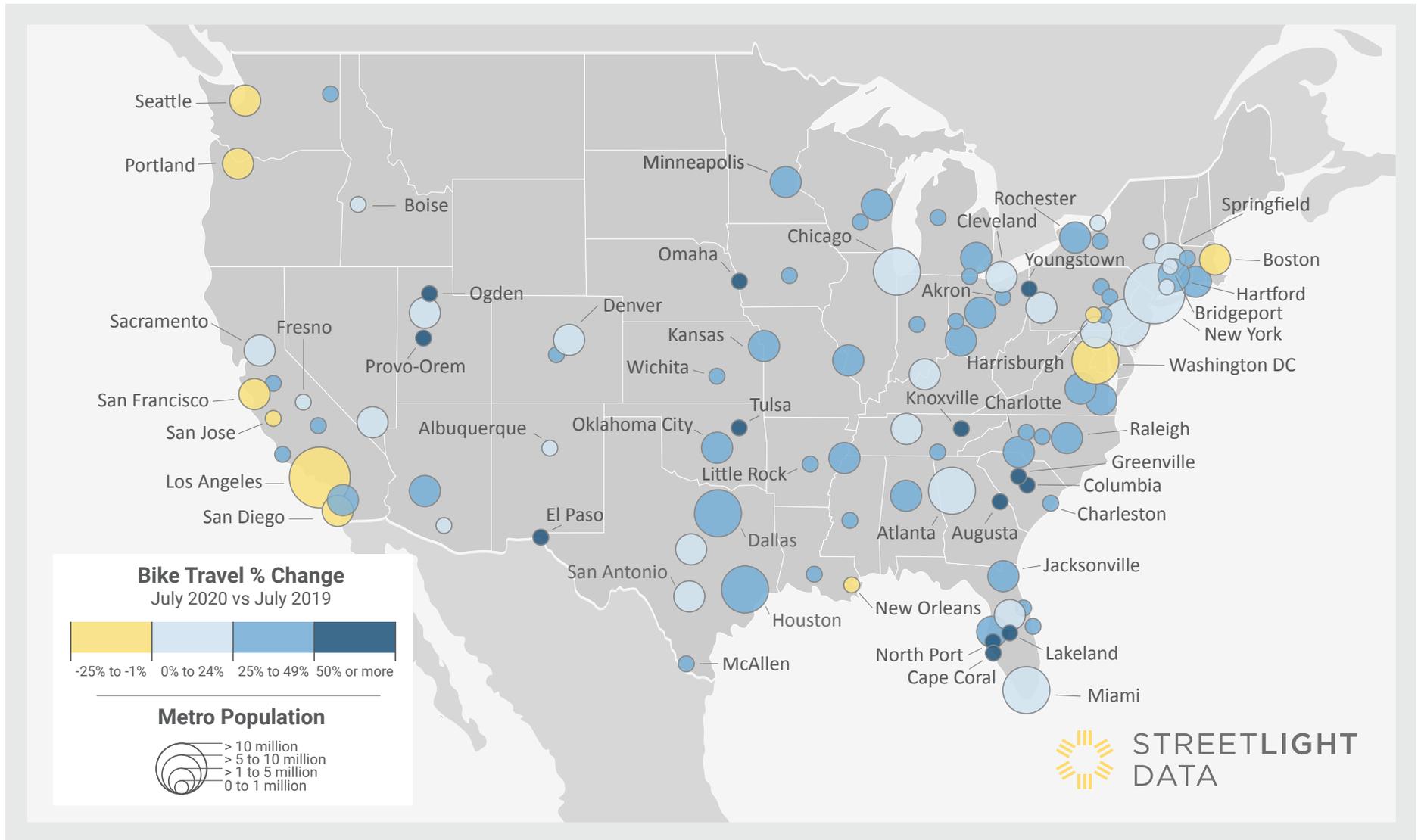


Figure 1. Percent change in July 2020 bike travel vs. July 2019

SUMMER 2021 | CHANGE IN RIDERSHIP VS. PRE-PANDEMIC

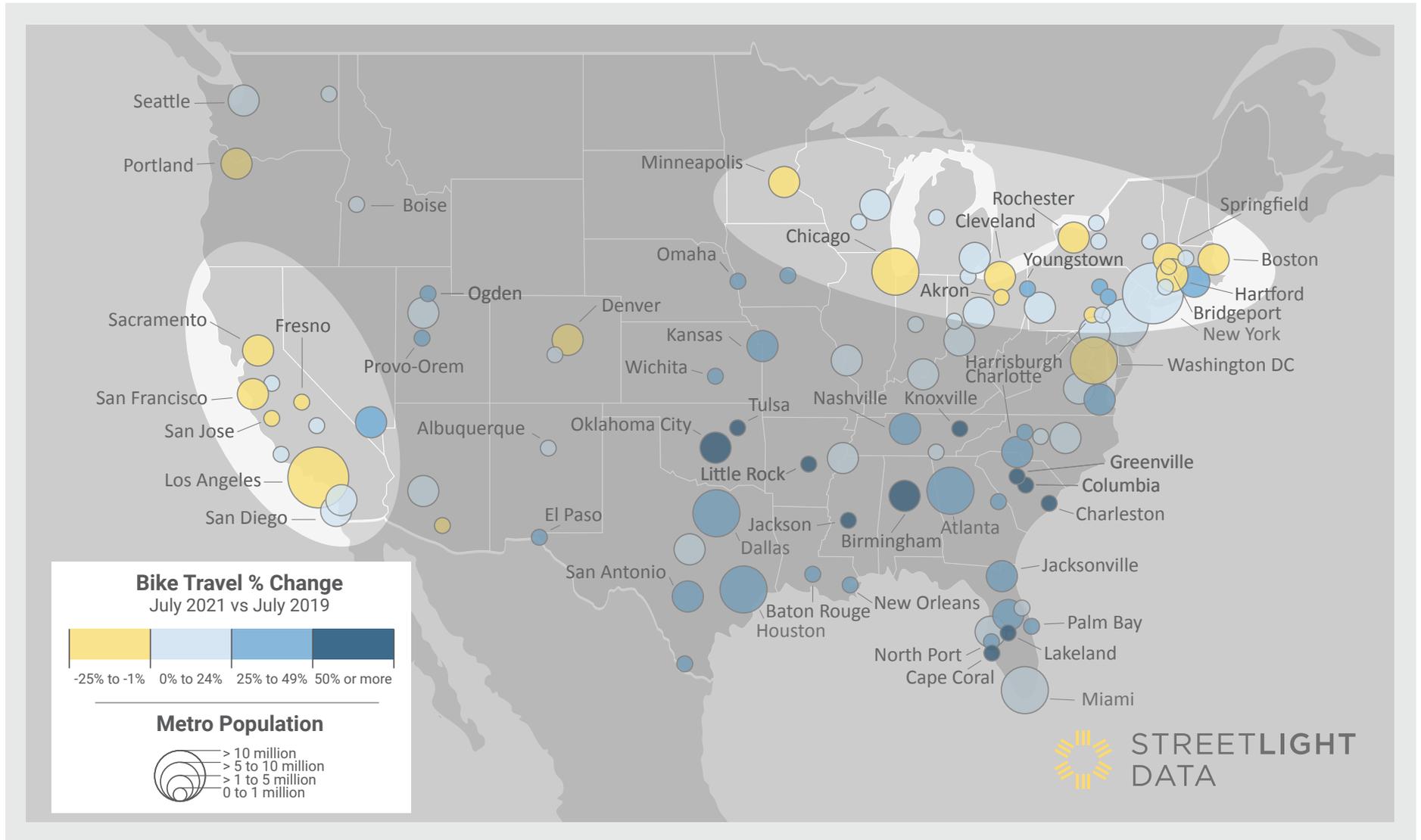


Figure 2. Percent change in July 2021 bike travel vs. July 2019

Note, this year the number of metros with negative bicycling growth versus pre-pandemic increased from 10 to 19, concentrated in inland California, the Northeast, and the Great Lakes, which had initially seen gains in 2020 (see Figure 1). The two light ovals above highlight most of these areas.

II. ON THE UP & UP: CITIES GAINING



The CBSA metro areas of **Atlanta and Las Vegas** showed only modest gains during the Summer of 2020, but they were both firmly up 25% by the Summer of 2021, compared to pre-pandemic. **New Orleans** lost ridership in the Summer of 2020 but was up 25% by the Summer of 2021, and it is one of the many mid-sized cities that showed growth over the last year.

Four mid-sized metros — **Birmingham, AL; Charleston, SC; Jackson, MS; and Little Rock, AR** — moved into the top 10 list for growth in ridership, reaching gains of 50% or more in Summer 2021 versus Summer 2019. The Jackson metro area alone saw a 23% increase in July 2021 ridership YOY, which is likely attributed to recreational cycling. It's not easy to ride a bike in Jackson proper, but mountain bike trails along the Pearl River abound, with many other trail options in surrounding cities helping bikers ride more safely.

A LOOK AT NASHVILLE, TN

Gaining 45% since pre-pandemic, the Nashville-Davidson-Murfreesboro-Franklin, TN metro area offers an interesting case study of cycling improvements: This area having jumped 65 spots (from 81 to 16) in our top 100 growth in ridership list from July 2020 to July 2021.

Its bicycling growth is a testament to local cycling activism and incentives from corporations and community groups to ride. Amazon's new commuter benefit offers Nashville employees an incentive of \$175 each month to bike to work, while groups like Walk Bike Nashville have prioritized community outreach events and safety programs to encourage ridership.

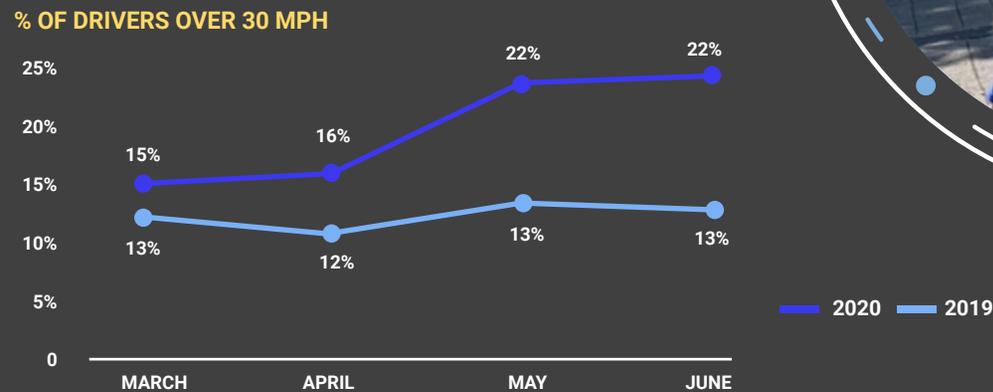
In 2020, the organization Walk Bike Nashville used the StreetLight InSight® platform to perform an analysis of traffic volume and speed in the Greenwood Avenue corridor in East Nashville. The analysis concluded that average vehicle speeds on the road have gone up during the pandemic, often over the speed limit, as they did in many neighborhoods across the U.S. These findings have prompted Walk Bike Nashville to further advocate for calmer streets and support of the city's Vision Zero program, resulting in increased confidence among local riders. We invite you to read more about this case study on [StreetLight's blog](#).

A full list of all 100 metros for both Summers of 2020 and 2021 is provided on pages 9 and 10.

Case Study

Walk Bike Nashville's Mobility Data for Safer Streets Project

Learn how Walk Bike Nashville, as part of Spin's Mobility Data for Safer Streets program, used traffic data from StreetLight InSight® to advocate for funding for improved infrastructure and safer streets, as part of the city's new Vision Zero program.



streetlightdata.com/nashville



We were very grateful to be able to validate the residents' concerns, and bring attention to this critical issue using the tools provided to us by our participation in the Mobility Data for Safer Streets program, and specifically the StreetLight InSight® platform.

– Nora Kern, Walk Bike Nashville



U.S. BICYCLING TOP 50

National Rank Ordered by % Change in Ridership vs. July 2019

	July 2020	July 2021		July 2020	July 2021
Columbia, SC	2	1		38	26
Tulsa, OK	6	2		48	27
Greenville-Anderson-Mauldin, SC	4	3		19	28
Knoxville, TN	3	4		37	29
Birmingham-Hoover, AL	31	5	↗	44	30
Lakeland-Winter Haven, FL	7	6		72	↗ 31
Charleston-North Charleston, SC	35	7	↗	17	32
Jackson, MS	41	8	↗	12	↘ 33
Little Rock-North Little Rock-Conway, AR	15	9		73	34
Cape Coral-Fort Myers, FL	10	10		25	35
Oklahoma City, OK	21	11	↗	16	36
Charlotte-Concord-Gastonia, NC-SC	27	12		85	↗ 37
Jacksonville, FL	14	13		97	↗ 38
Kansas City, MO-KS	18	14		70	39
North Port-Sarasota-Bradenton, FL	11	15		45	40
Nashville-Davidson-Murfreesboro-Franklin, TN	81	16		52	41
Ogden-Clearfield, UT	1	17	↘	42	42
El Paso, TX	8	18		55	43
Palm Bay-Melbourne-Titusville, FL	34	19		56	44
Omaha-Council Bluffs, NE-IA	13	20		43	45
Wichita, KS	23	21		87	↗ 46
Baton Rouge, LA	53	22		36	47
Youngstown-Warren-Boardman, OH-PA	5	23	↘	59	48
Provo-Orem, UT	9	24	↘	20	↘ 49
Dallas-Fort Worth-Arlington, TX	32	25		46	50
Providence-Warwick, RI-MA					
Houston-The Woodlands-Sugar Land, TX					
Allentown-Bethlehem-Easton, PA-NJ					
Scranton-Wilkes-Barre-Hazleton, PA					
Virginia Beach-Norfolk-Newport News, VA-NC					
Atlanta-Sandy Springs-Roswell, GA					
Des Moines-West Des Moines, IA					
Augusta-Richmond County, GA-SC					
Orlando-Kissimmee-Sanford, FL					
Winston-Salem, NC					
McAllen-Edinburg-Mission, TX					
Las Vegas-Henderson-Paradise, NV					
New Orleans-Metairie, LA					
San Antonio-New Braunfels, TX					
Chattanooga, TN-GA					
Stockton-Lodi, CA					
Madison, WI					
Lancaster, PA					
St. Louis, MO-IL					
Cincinnati, OH-KY-IN					
New York-Newark-Jersey City, NY-NJ-PA					
Indianapolis-Carmel-Anderson, IN					
Tampa-St. Petersburg-Clearwater, FL					
Toledo, OH					
Spokane-Spokane Valley, WA					

Color Key:
Change in Ridership vs July 2019

-25% to -1% 0% to 24% 25% to 49% 50% or more

Number inside each cell indicates the metro's national rank

11

Metros with substantial change in ridership Between Jul 2020 and July 2021

↗ Metros with large gain in ridership

↘ Metros with large loss in ridership

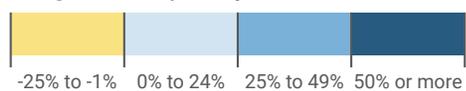
Figure 3. America's Cycling Top 50 in July 2021

U.S. BICYCLING BOTTOM 50

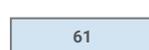
National Rank Ordered by % Change in Ridership vs. July 2019

	July 2020		July 2021			
Raleigh, NC	22	↘	51		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	83
Miami-Fort Lauderdale-West Palm Beach, FL	80	↗	52		Grand Rapids-Wyoming, MI	26
Deltona-Daytona Beach-Ormond Beach, FL	28	↘	53		Seattle-Tacoma-Bellevue, WA	93
Memphis, TN-MS-AR	58		54		Albuquerque, NM	66
Colorado Springs, CO	40		55		New Haven-Milford, CT	69
Richmond, VA	64		56		Worcester, MA-CT	51
Pittsburgh, PA	75		57		Minneapolis-St. Paul-Bloomington, MN-WI	57
Louisville/Jefferson County, KY-IN	74		58		Springfield, MA	78
Phoenix-Mesa-Scottsdale, AZ	49		59		Rochester, NY	33
San Diego-Carlsbad, CA	91	↗	60		Los Angeles-Long Beach-Anaheim, CA	95
Buffalo-Cheektowaga-Niagara Falls, NY	86		61		Chicago-Naperville-Elgin, IL-IN-WI	90
Dayton, OH	24	↘	62		Denver-Aurora-Lakewood, CO	79
Greensboro-High Point, NC	60		63		Hartford-West Hartford-East Hartford, CT	54
Salt Lake City, UT	82		64		San Francisco-Oakland-Hayward, CA	98
Boise City, ID	65		65		Fresno, CA	77
Columbus, OH	61		66		Bridgeport-Stamford-Norwalk, CT	76
Bakersfield, CA	50		67		Akron, OH	30
Syracuse, NY	39	↘	68		Sacramento-Roseville-Arden-Arcade, CA	71
Baltimore-Columbia-Towson, MD	84		69		Washington-Arlington-Alexandria, DC-VA-MD-WV	100
Albany-Schenectady-Troy, NY	68		70		Cleveland-Elyria, OH	67
Oxnard-Thousand Oaks-Ventura, CA	47		71		Portland-Vancouver-Hillsboro, OR-WA	94
Riverside-San Bernardino-Ontario, CA	63		72		Boston-Cambridge-Newton, MA-NH	99
Detroit-Warren-Dearborn, MI	29	↘	73		Harrisburg-Carlisle, PA	96
Milwaukee-Waukesha-West Allis, WI	62	↘	74		Tucson, AZ	88
Austin-Round Rock, TX	89		75		San Jose-Sunnyvale-Santa Clara, CA	92

Color Key:
Change in Ridership vs July 2019



Number inside each cell indicates the metro's national rank



Metros with substantial change in ridership Between Jul 2020 and July 2021

- ↗ Metros with large gain in ridership
- ↘ Metros with large loss in ridership

Figure 4. America's Cycling Bottom 50 in July 2021

III. BICYCLING HABITS FLEETING: CITIES LOSING



Unfortunately, a number of metros slipped into the red by Summer 2021, suggesting a short-lived revival in bicycling. **Sacramento, CA** was up in July of 2020 nearly 20% versus pre-pandemic July 2019 — but by July of 2021 was down 10% versus pre-pandemic. Similarly, **Fresno, CA**, located just 170 miles south of Sacramento, was up 15% in 2020 but down some 5% by 2021. This behavior wasn't limited to California's sprawling Central Valley: The **Bridgeport-Stamford-Norwalk, CT metro area and Denver's metro** exhibited the same behavior. **Minneapolis, MN; Cleveland, and Akron, OH**, as well as Rochester, NY, also saw their initial COVID cycling gains evaporate: All four metros were up about 25% in July 2020 but slightly below pre-pandemic by July 2021.

The upper Midwest region was mixed but saw many metros recede from July 2020 to July 2021. In the state of Ohio, **Youngstown, Cincinnati, and Toledo** gained almost 50% in July 2020 but all three lost about half of their initial gains by July 2021. **Dayton, OH** lost 75% of its gain as did **Columbus, OH**. A state survey found less than 1% of Ohioans biked to work in 2020, which likely played a factor in Ohio's low ridership amid the slow return of commuting in 2021. Meanwhile, a report out of Cleveland cited dwindling bike inventory and high costs as a major challenge facing the region.

Pittsburgh, PA is one Great Lakes region metro that bucks the trend, remaining at +15% versus pre-pandemic in both time periods. The city has been busy deploying various initiatives to make its 1,300 miles of core city streets safer for bicyclists and pedestrians, addressing many inherent challenges, including topographical barriers, scarcity of available cartway space, high demand for on-street parking, and unusual road geometry. We invite you to read more about its data-driven active transportation planning efforts at streetlightdata.com/pittsburgh

Case Study

Enhancing Bike and Pedestrian Safety in Pittsburgh

To enhance bike and pedestrian safety, the City of Pittsburgh used StreetLight Data's Origin-Destination (O-D) Metrics to capture bike and pedestrian trip information. See why high-travel corridors didn't correlate with crash severity.



streetlightdata.com/pittsburgh

“

We no longer have to make assumptions in people's trip activity and travel behaviors. Now we have data to support our research and it separates fact from fiction.

– PANINI CHOWDHURY, AICP



The Great Seal
of the City of Pittsburgh



IV. HABITS HOLDING: CITIES STAYING THE COURSE

While some regions saw significant fluctuations in YOY cycling activity, a number of metro areas maintained steady ridership by continuously adapting to rider demands in the wake of the pandemic.

Columbia, SC jumped from the second spot to the top of our 2021 list, with an impressive 83% growth in overall ridership from Summer 2019 – and the momentum is holding. After a year of steep ridership gains in 2020, the South Carolina Department of Transportation adopted a long-awaited Complete Streets policy in February that will identify and implement bicycle infrastructure and safety improvements statewide. Meanwhile, the federal infrastructure bill has earmarked \$4 million in funding for biking and walking improvements within the City of Columbia.

TREADING WATER IN UTAH, A STATE WITH HIGH INCUMBENT RIDERSHIP

Columbia's rise to the top of the 2021 list replaced the **Ogden-Clearfield UT** metro region, which dropped from first to 17th rank this year.

The **Provo-Orem UT** region also saw a drop from 9th to 24th in 2021, yet both metros have maintained a net-positive ridership growth from pre-pandemic levels.

These Beehive State regions face both positive and negative factors that will likely sway cycling behaviors in the next year. While heavy construction has plagued ridership in Downtown Ogden and other urban hotspots across Utah, a slew of new cycling trails have been added to the state's bicycle route system to increase cycling access across metros. The nonprofit Bike Utah has worked with the Governor's office to meet the goal of a thousand miles of family-friendly bicycle facilities in the state, using the StreetLight InSight® platform to evaluate and prioritize corridors for safety improvements. [Watch this YouTube video](#) for the program's director's summary of how the state defines family-friendly infrastructure and how it's going about meeting the thousand-mile goal.

Bike Infrastructure Metrics 101

What makes infrastructure and trails family friendly?

When Chris Wiltsie and Bike Utah were asked to assist the Governor with his goal of adding 1,000 miles of family-friendly bicycle facilities across the state, they turned to StreetLight to assess the network for opportunities. Watch StreetLight's Sean Co introduce the topic and Chris Wiltsie dive into AADT, O-D and other Metrics.



streetlightdata.com/bike-utah



We do have a lot of data for vehicular traffic, but not for active transportation... we don't have that many counters out... and StreetLight helps you overcome those issues.



V. LOCAL DATA SPOTLIGHT: ZOOMING IN ON SEATTLE



The regional trends covered by this eBook offer a perspective on metro-wide ridership, which helps us understand this vast country — but it obscures trends at a *neighborhood level*. That's where StreetLight InSight®, our self-serve mobility measurement platform, comes in. Every day, transportation professionals use it to diagnose travel activity, and we used it to investigate bicycling in central Seattle.

At a regional level, the **Seattle-Tacoma-Bellevue, WA** area has lagged behind many U.S. metros in bicycling, taking 78th place in the Summer of 2021. Like many large U.S. cities, Seattle's ridership actually dipped below pre-pandemic levels in the Spring of 2020, handicapped by the lack of office commuting (by bicycle) due to stay-at-home orders and sustained remote work policies among the area's employers. By July 2020, the Seattle metro recovered to just shy of pre-pandemic ridership. Unfortunately, a year later, ridership doesn't appear much stronger, staying within just 1% of pre-pandemic levels.

Looking at dedicated bike lanes in *central Seattle* offers a more striking view of the toll of remote work on ridership to downtown offices. In Spring 2020, biking dipped a massive ~80%, recovering only slightly by Summer and substantially lagging in the wider metro (which, as noted above, was nearly back to normal by then due in

part to recreational ridership). It took an extra year for downtown to recover, as illustrated by the trend line in Figure 5.3

% CHANGE IN BICYCLING ACTIVITY VS. SUMMER 2019

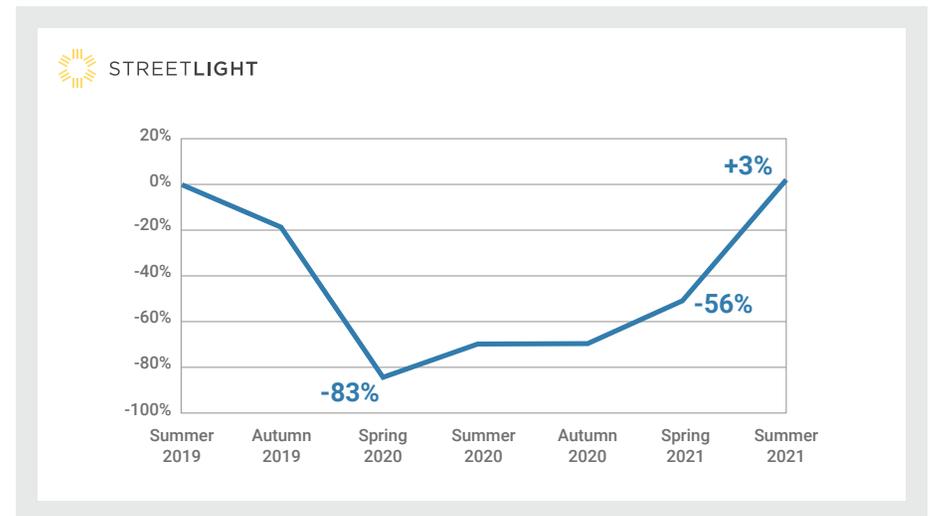


Figure 5. Percent change in bicycling activity on dedicated bike lanes in central Seattle vs. the Summer of 2019.



Belltown neighborhood, Seattle, WA

Seattle-Tacoma-Bellevue, WA lost ridership during the pandemic, despite a well-built-out bike network. It is still treading water as a whole, but as life returns to central Seattle, the Belltown neighborhood, with its high-rise condos, trendy shops and restaurants, and less dense loft-format office space, became one of the highest activity areas in 2021 for those choosing two wheels to get around.

BICYCLING DESTINATIONS IN SEATTLE, JULY 2021

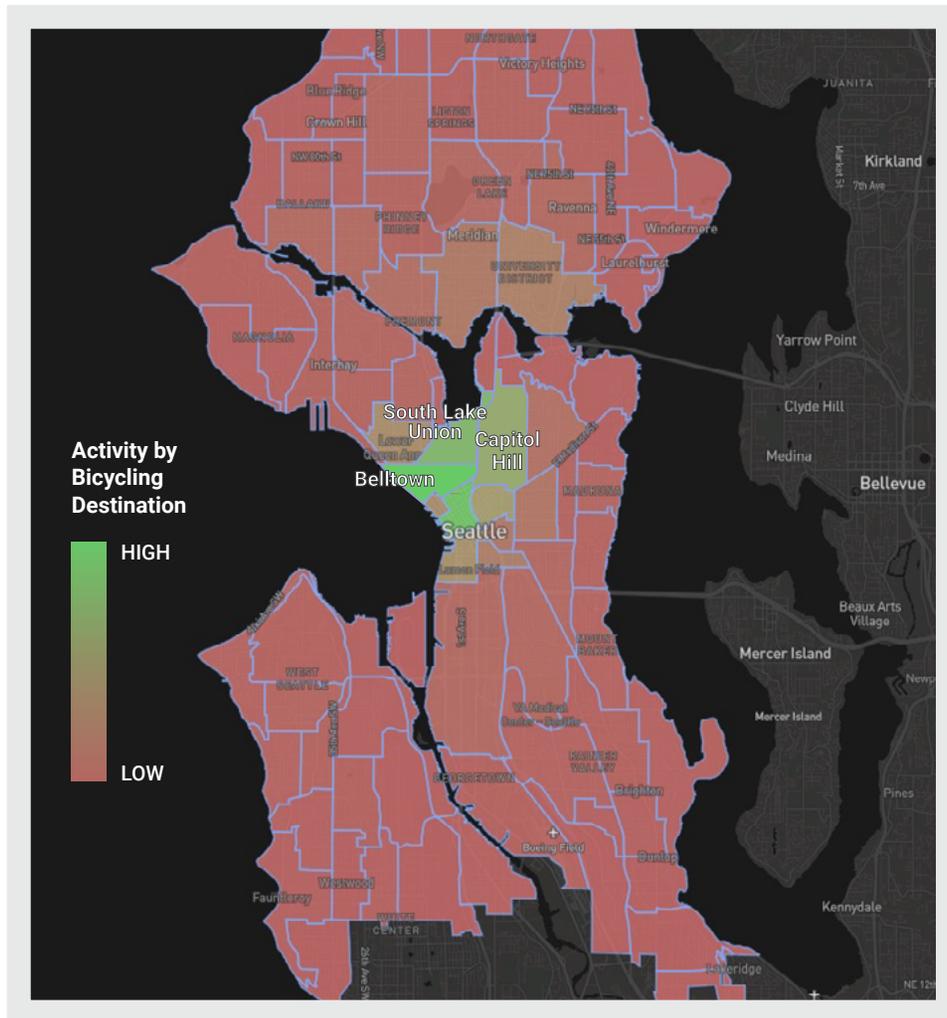


Figure 6. Top bicycling destinations for the city of Seattle in July, 2021, with Belltown, South Lake Union and Capitol Hill (in bright green) showing the highest bicycling activity

Like many other cities, Seattle used the unusually traffic-light pandemic period in its central core to construct permanent bike infrastructure. From the early 2020 through June 2021, the city built 7 miles of protected lanes, which contribute to the trend along with a broader return of Seattleites to downtown and surrounding areas for both work and play.

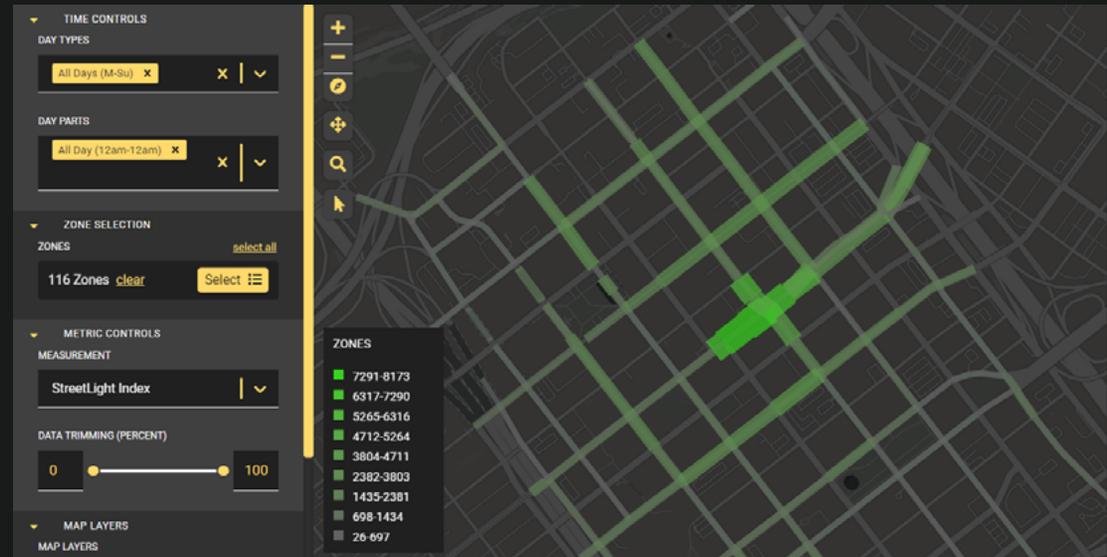
The StreetLight InSight® platform offers more color to the Seattle destinations driving this recovery. An origin-destination analysis of weekday bicycling reveals that the neighborhoods of Belltown, the office-heavy South Lake Union, and Capitol Hill are the biggest draw for cyclists. The same analysis on the weekend (not shown) points to an increase in bike activity in tourism and recreation areas, including the famed Pike Place.

Planners interested in ensuring that high-demand areas are safe for both local and tourist cyclists can run multiple Zone Activity analyses in the StreetLight InSight® platform to understand which road segments have the highest concentration of bike activity – on and off the bike network – and prioritize infrastructure accordingly to complement new bike lanes currently under construction. Overlaying bicycle activity data with demographics also allows them to measure social equity impact of these investments.

We invite you to peruse our on-demand Bicycle Metrics on the next page or visit streetlightdata.com/bike-ped.

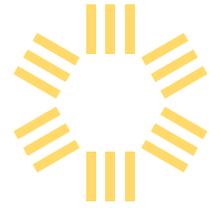
Analyze bicycle and pedestrian traffic data, without counters, surveys, or sensors

Get access to data from 2019, 2020, and 2021 to compare bike and pedestrian trends throughout the pandemic and understand the impact of COVID-19. Origin-destination analysis and demographic overlays are two examples of Metrics available for the bicycle mode.



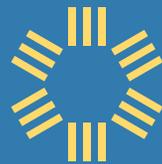
streetlightdata.com/bike-ped

About StreetLight Data



StreetLight Data pioneered the use of Big Data analytics to help transportation professionals solve their biggest problems. Applying proprietary machine-learning algorithms to over four trillion spatial data points over time, StreetLight measures diverse travel patterns and makes them available on-demand via the world's first SaaS platform for mobility, StreetLight InSight®. From identifying sources of congestion to optimizing new infrastructure to planning for autonomous vehicles, StreetLight powers more than 10,000 global projects every month.

For more information, please visit: streetlightdata.com



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