

Snow Day Radar™

MISSION 1 · GRADES 3-5

The Case of the 2-Inch Snow Day

Why does the same snow close one school and not another? Time to investigate.



Would 2 inches of snow close our school?

✋ Yes ✋ No ✋ It depends

Free from Snow Day Radar

THE MYSTERY

Same 2 inches. Opposite answers.



JANUARY 28, 2014

Atlanta

About 2½ inches of snow

Gridlock. Kids slept at school.



ANY WINTER

Buffalo

2 inches of snow

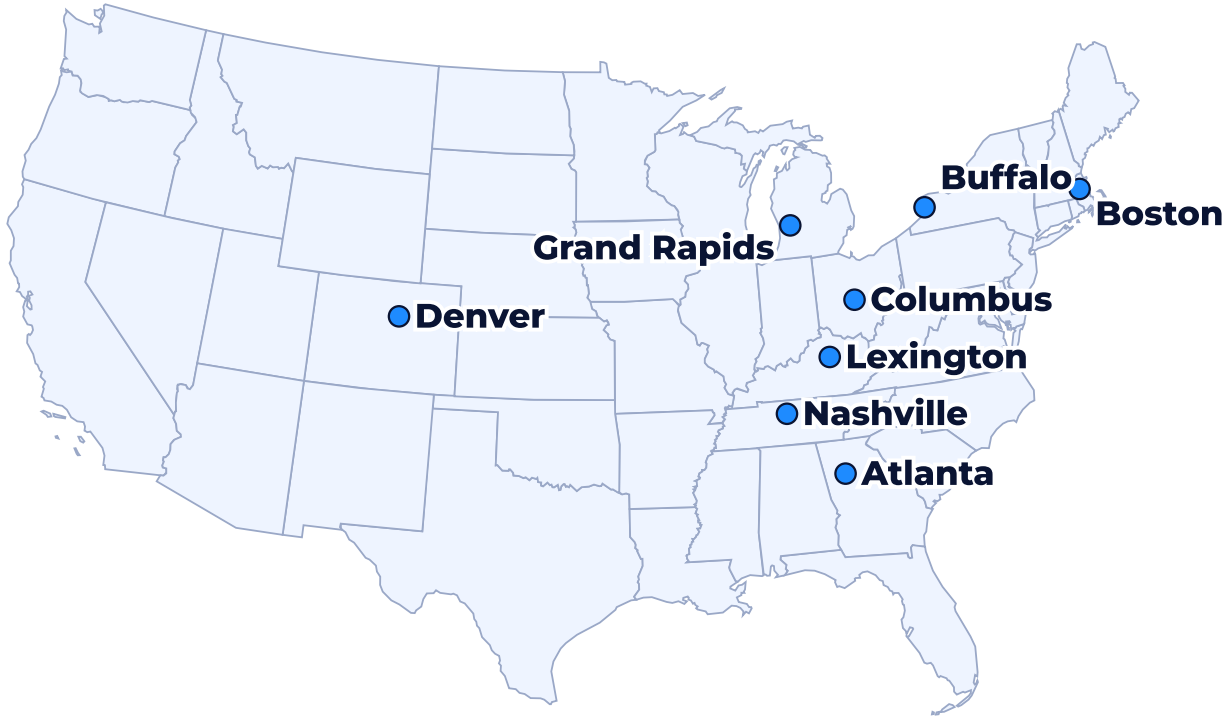
Just another winter day

EVIDENCE A · SNOW RECORDS

How often does 2 inches fall?

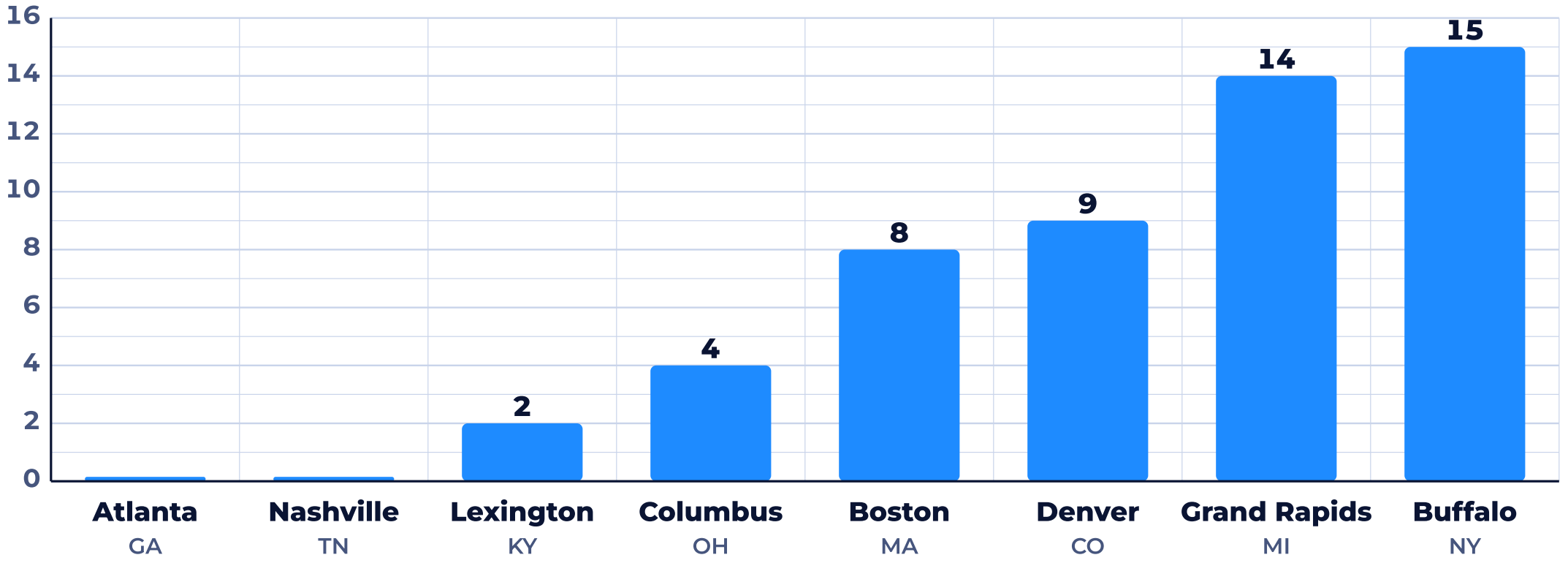
Days in a normal winter with 2 inches of snow or more.

Atlanta, GA	**less than 1**
Nashville, TN	**less than 1**
Lexington, KY	**2**
Columbus, OH	**4**
Boston, MA	**8**
Denver, CO	**9**
Grand Rapids, MI	**14**
Buffalo, NY	**15**



CHECK YOUR GRAPH

Buffalo gets 2 inches about 15 times a winter. Atlanta, almost never.



EVIDENCE B · THE KENTUCKY TWINS

Same snow from space. Different snow days.

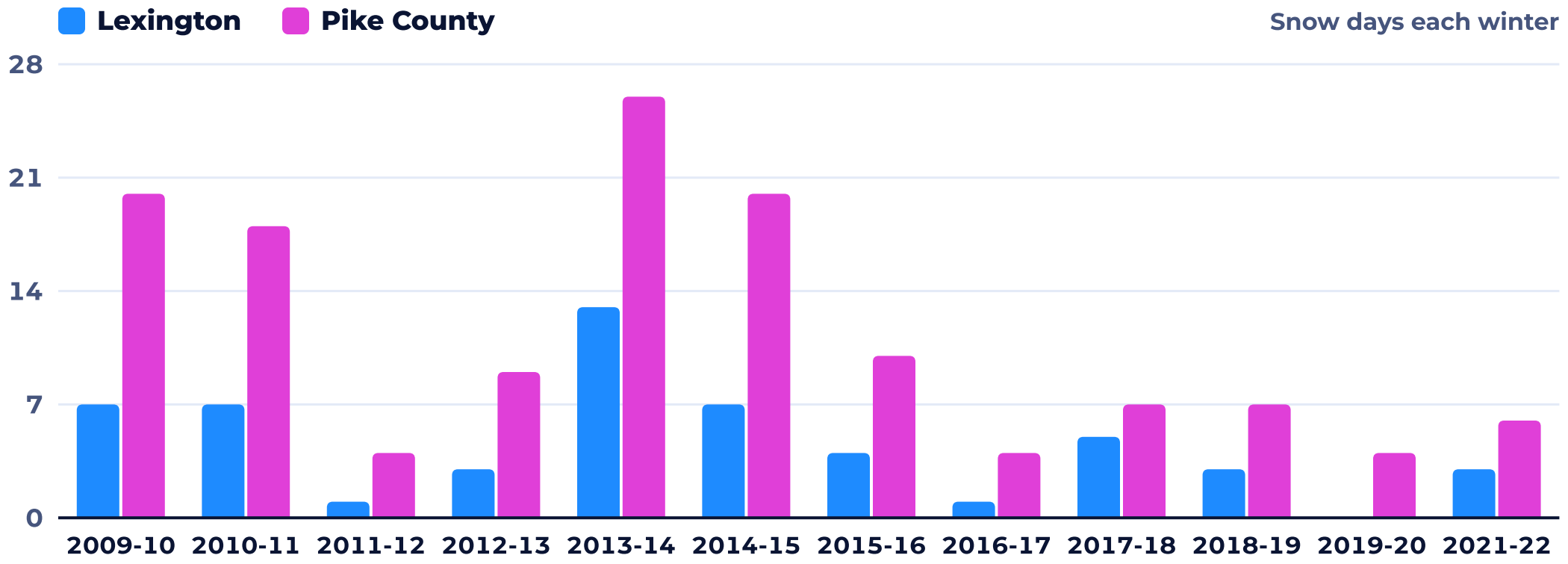


January 9, 2025: both districts under snow

NASA Worldview / VIIRS, January 9, 2025

EVIDENCE B · 12 WINTERS

Lexington: about 4½ snow days a winter. Pike County: about 11.



THE CLUES

Why does Pike County close more?



CLUE 1

Pike County is in the Appalachian Mountains. Lexington sits in rolling hills.



CLUE 2

Mountain roads are steep and curvy. A school bus can't stop on an icy hill.



CLUE 3

Pike is Kentucky's biggest county. Many bus rides are long ones on back roads.

CASE REPORT

Explain it like a scientist



Claim

Schools close for snow when...



Evidence

Two facts from my case files: A (snow records) and B (the twins).



Reasoning

This happens because...



MISSION COMPLETE

Snow Detective

You solved the case: the same snow can mean different things in different places.

Take-home mission: Be a Snow Spotter. Measure the next snow and bring your data to class.