

snowiest city in the United States, (and one of the snowiest in the world) but he wanted more of the white stuff. Using instructions from the Internet, Lawrence, a letter carrier in Syracuse, NY, since 1997, built his own snow machine so he and his children can sled all winter long.

Syracuse gets an average of 126 inches of snow a year, the most among U.S. cities with a population of 50,000 or more and among the top five anywhere. (The others are in Japan or Canada.) The abundance of snow is attributable to the warm moisture rising from Lake Ontario and meeting blasts of freezing air coming south

> from Canada. Lawrence's home has a great sledding hill and he has two young daughters who love to slide down it, but repeated sledding can melt it fast.

"I'm a skier-I know that they make snow at the ski resorts." he said, "so I looked online

and I discovered that, indeed, you can build your own snow gun."

With a pressure washer and air

rence found the rest of the required parts—some valves, hoses and other plumbing equipment—and put together a snow-making machine using instructions he found on the Internet. With it, he keeps his sledding track usable all winter long. He makes several inches of snow and shovels it onto sledding tracks. When the tracks get thin and nature hasn't done its part, he blows more snow.

All he needs is cold air.

"It has be roughly 28 degrees or colder" to make artificial snow, he said. The daily low temperatures in Syracuse can drop below 28 degrees for nearly half of the year, giving Lawrence many opportunities to make fresh snow. "When you do make it, man-made snow lasts 10 times longer than natural snow because the crystals are really compact."

When the first cold snap of fall comes, usually in November, Lawrence turns on the snow machine and builds a base of snow that, with more snow added from time to time, can last all winter, even as warm air returns periodically and melts the natural snow in his neighbors' vards.

"This year, we had below 28 degrees in the middle of November, so I was able to make and build our giant sledding track for my now six-year-old daughter's birthday party," Lawrence said. With the occasional blast of the snow gun to freshen up the sledding track, he added, the fun should last until April.

The snow machine relies on simple science to make snow. It sprays



One of Lawrence's kids rides down the man-made sledding slope outside his house.













Right: Lawrence made his snow machine from plans found on the internet.



tiny water droplets into the cold air under pressure. The sudden drop in pressure as the droplets hit the air reduces their temperature, freezing them instantly into tiny spheres of ice. It's the same basic physics used by air conditioners. Because the crystals from a machine are small and compact compared to the beautiful, delicate flakes of natural snow, manmade snow lasts much longer.

Lawrence's wife is a high school physics teacher, so the family has used the snow gun to teach the kids about physics. "All of this is science," he said. "When my oldest daughter was three and a half, she could explain surface area relative to volume."

Lawrence, his children and their friends love sledding on the snow he makes, of course, but Lawrence said children aren't the point.

"The kids? Me! This is for me. man," he said. "The kids will get cold and go inside, and I stay outside and keep going." PR



Boston, Los Angeles selected as convention sites for 2024, 2026

■he NALC Executive Council has announced the sites and dates for two upcoming national conventions following the one in Chicago on Aug. 8-12, 2022. The Council voted to hold the 74th national convention in Boston from Aug. 5-9. 2024, and the 75th convention in Los Angeles from Aug. 3-7, 2026.

Certain minimum requirements are crucial for potential host cities to make a successful bid for a convention that can bring between 5,500 and 8,000 delegates-requirements that eliminate many cities that lack facilities large enough to hold an NALC convention. To find and help the Executive Council select potential sites, the Convention Site Committee considers the following criteria:

- The convention facilities must have theater seating for approximately 8,000 delegates, as well as space for registration, voting, committee functions, workshops and more.
- NALC requires at least 3,500 hotel rooms, with preference given to unionized hotels.
- All of these must be available during NALC's constitutionally mandated convention window, between the Fourth of July and the third full week of August. PR



