

Snow Plowing in Providence

March 2022

We had a conversation with Leo Perrotta, the Director of Providence's Department of Public Works, about the city's system for snow plowing. The notes below are edited from that conversation. We also encourage you to review the [city's snow emergency FAQ here](#).

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PLOWING CAPACITY

What is the city's capacity for snow plowing?

The city owns some trucks and contracts with vendors to help during larger storms. The city currently owns 32 6-wheel trucks – larger trucks with plows and sanders. If it is a few inches of snow the city can handle it, but for anything more we rely on vendors. We also have 20 trucks we leased to offset the loss of vendors over the last 5-6 years.

So what is the total capacity?

With city drivers and vendors, Providence currently has a maximum of 110-115 trucks on the road in a storm. That's the capacity DPW tries to deploy if it snows 4 or more inches. If the storm requires more capacity, it just takes longer to clear the city. If we had 50 more plows, we could obviously clear streets more quickly.

Why has there been a loss of vendors?

Typically plow vendors are construction or landscape businesses that shut down in the winter. Reinsuring trucks and employing drivers is an expense, so it's got to be worth it.

Some companies just aren't interested in winter work. Some vendors would rather contract with the state to plow highways. Highways are smooth and straight – no manhole covers, no parking, no curbs. It is quicker, easier work, and there is less risk to your equipment. Some vendors prefer private work, like clearing parking lots – one location, no cars and typically happens at the end of the storm.

Providence also competes with other towns for vendors. In suburban communities there are fewer cars on the street because more people have driveways and more businesses have parking lots. So vendors see working in cities as more challenging.

PLOWING TIMING

When does plowing begin?

First we pre-treat streets. Ideally, this begins hours before a storm and takes about 4 hours to complete. We don't start plowing until there is at least 2 inches of snow.

How much snow justifies plowing?

If it snows 2 inches or less, we don't plow. Plowing small amounts runs the risk of breaking plow blades. If a plow blade hits a manhole cover it can crack pretty easily. Instead, we treat the roads so the snow will melt, as long as temperature cooperates.

How long does it take to plow the city?

Typically we complete plowing about 8 hours after the snow stops falling. If it is a big storm it can take us longer. We can't plow if it is too dangerous. Often at the height of a storm there are white out conditions, and that means we can't put trucks on the road.

What are the priorities for plowing?

We plow streets in three priority groups:

1. Main streets, hills, overpasses, hospital routes, bus routes
2. Secondary streets
3. Dead ends, cul de sacs, alleyways and narrow lanes

The first pass on any street is always down the middle of the street. This is to get all the roads open to some level of service. Emergency vehicles need access, and that is obviously our first priority. Then the trucks go back to widen roads, with a goal of getting roads as clear as possible. We would like to see curb to curb plowing, but we know that is not always possible.

PLOWING CHALLENGES

Does your team ever miss a street?

We do. It happens, and it shouldn't happen. A major storm can be tough. In our last blizzard our staff worked 30-36 hours straight, and then came back the next day to keep going. It is a tough job. Sometimes it is dark, you can get snow blind, you can get lost.

A driver or an inspector can miss a street. Usually it is an alleyway or a small street. Streets can also get missed when we are using new vendors who are learning the city. This winter we had 12 new vendors on our team.

What stands in the way of curb-to-curb plowing?

Our main challenge is parking on the street. Plow drivers want to go down the curb line to get a clean curb-to-curb clearing, and cars prevent that. It is not easy to maneuver a large plow truck on a residential street in a storm with parked cars. The roads are slippery, and the last thing a plow driver wants to do is damage a car, so they are cautious.

Sometimes a truck can't get down a street at all because there are cars parked on both sides of the street.

Another challenge is that once the snow stops, particularly if it is during the day, people want to get out. They shovel and get their car out. We may have done one pass on the streets, but we still have hours to go to clear the streets of snow. The more people who are out on the streets, the longer it is going to take. I understand that people want to get out, but every person who is driving or shoveling snow into the street is slowing us down. So folks should stay home if they can.

Doesn't the parking ban get cars off the streets?

Parking bans do help. The city issues parking bans judiciously because it has consequences for residents, schools and businesses. That is understandable. Often the parking bans are issued with specific end times, so the parking ban may end before we are finished plowing.

In Providence we also have overnight parking permits, so some residents have no place to put their car. The city has offered lots, but sometimes they are far from a resident's home. It would be great if private lots – churches, etc. – could offer space during a storm. But on the East Side, there just aren't a lot of parking lots.

Can't you just tow the cars that are violating the parking ban?

We do tow some cars, but there are limits there, too. Our capacity is typically about 500 cars. In a major storm that capacity can be reduced because tow lots need to be plowed, and piles of snow reduce their capacity.

In the most recent blizzard we towed about 360 cars, and then the lots were full. There were hundreds and hundreds of cars still on the streets.

If there is a narrow street with multiple cars parked, our only option if we want to plow is to tow the cars. And that takes time. We have to wait for the tow truck. The tow truck

has to come, hook up a car, tow it away to a lot, and then come back for another. That process alone can slow down plowing for hours. And a slow down in any one area of the city impacts the entire city. It is a cascading effect.

Are there particular challenges on the East Side?

The East Side is one of the oldest parts of Providence, and it has many narrow streets that allow on-street parking. Those are a real challenge.

Are you trying any new systems to improve efficiency?

We are always trying to maximize the resources we have. We are testing new systems to help our drivers increase efficiency including:

- A system of inspectors in smaller trucks who drive around and mark any deficiencies on a map on an iPad. This can help us see problems more quickly. Do we need to redeploy some of our staff? Did a truck break down?
- A GPS system that helps us track the location of all of the plows so we can coordinate deployment as efficiently as possible

Do 311 complaints about plowing matter?

DPW reviews all of the 311 complaints we receive. A lot of people reach out to 311 before our team has been able to finish plowing – it just takes longer than people expect given the amount of resources we have.

Here's an example: In the last storm there were 104 postings to 311 throughout the city.

- 99 were received on the day of the storm, and 76 of those came in before 3pm
- The snow stopped at 12-1pm, and DPW stopped plowing at around 9pm
- Only 5 of the 311 posts came in after the storm

We do review all of the data and check with our inspectors. We are always trying to use our resources to meet the demand, and we know that often it is not quick enough to satisfy everyone.

Thank you Leo, and the team at the Providence Department of Public Works!