Do you have a trailer logjam outside your distribution center that's slowing down operations? Are you using the trailers parked in your yard for overflow storage? Are you unable to quickly pinpoint which trailer has the goods that must be unloaded right away to fill an urgent order?

If you answered yes to any of these questions, then it's time to consider buying a yard management system (YMS), a type of software that, as its name implies, helps users manage the trailers outside the distribution center.

"A basic YMS tells you where you can find trailers in the yard so that the 'shunter' can move the trailer to the assigned dock door without having to manually search the yard," explains Marc Wulfraat, president of consulting company MWPVL International Inc. "This is the equivalent of an inventory control system in that it tells you where the trailer was placed in the past."

As for who offers this type of software, there are a number of sources. Most of the major vendors of warehouse management systems (WMS) offer YMS as an add-on module. For instance, RedPrairie, Manhattan Associates, and HighJump all offer YMS solutions that work with their WMS offerings. Yard management systems are also available from specialty vendors like C3 Solutions and Yardview, as well as Exotrac, which offers a cloud-based version. There are also vendors, such as Pinc Solutions, that use location technology to provide up-to-the-minute information on the whereabouts of a trailer.

If you're in the market for a YMS, what should you look for? We asked several industry experts for their advice. What follows are their recommendations for five "must have" capabilities:

1. **Appointment scheduling.** Any YMS worth its salt should offer an appointment scheduling capability, according to the experts. Setting a time and date for a truck to arrive at the distribution center is critical to managing work flow in the yard and in the facility itself. "From a warehouse operations perspective, the first and foremost feature is robust appointment scheduling functionality," says Mike Pujda, a project manager at the consulting firm Tompkins International Inc.

Pujda recommends choosing a YMS that incorporates a "self-service" online portal that suppliers can use to schedule delivery appointments for inbound shipments. Once the appointment is made, the program should be able to take information on the load—including the type of shipment and its priority—and match it to available receiving capacity at the DC. This should eliminate the need for manual intervention by DC employees.

2. **Alerts.** For operations facing capacity or labor constraints, using trailers for temporary overflow storage can eliminate the need to rent costly satellite storage space. "Usually, you're allowed to keep a trailer for a number of days if you don't own it. So, you want to maximize the free rent days," says Phil Obal, president of the consulting firm IDII.

But there's a catch: Hold a trailer too long and you risk incurring demurrage changes, which are penalties imposed by motor carriers for a consignee's failure to unload and return a trailer within a designated period. That's why Obal strongly recommends choosing a YMS that alerts the manager when a trailer return deadline is approaching.

3. **User-defined rules.** Since each company's priorities are different, the YMS should allow the user to set up his or her own rules specifying when certain trailers get pulled forward in a yard, says Wulfraat.

This capability allows the logistics manager to ensure scheduling reflects the company's individual needs and priorities—whether the objective is to maximize sales, optimize customer service, or simply deal with scheduling constraints. For instance, a logistics manager could have the YMS flag trailers that contain inventory needed to fill back orders for prompt unloading. Or the YMS could organize trailer movements and unloading based on workforce requirements.

4. **Task management.** Picking a YMS that includes task management capabilities—i.e., a program with the capacity to direct workers to the next assignment—can go a long way toward streamlining work flow. For example, once a yard driver drops a trailer at a dock door, the YMS could then provide the driver with instructions on what trailer to move next. "Time is saved when work is presented to the user rather than the user checking in for the next [assignment]," says Pujda.

Pujda notes that this is more than a matter of simply running...
down a list and checking off tasks. The YMS should be able to rank the moves requested in order of priority and assign work accordingly. If two moves have the same level of priority, the YMS should be “smart” enough to assign the move closest to the yard driver for the sake of efficiency.

5. **Event management integration.** Because so many companies these days run lean on inventory, real-time information on inbound shipments has become essential to the smooth functioning of an operation. For that reason, Greg Braun, a senior vice president at C3 Solutions, advises shippers to look for a YMS that can be integrated with other company systems. “To be truly effective, a yard management system needs to be able to integrate into a WMS and TMS [transportation management system],” he says.

Linking the YMS to other company systems allows for crucial information on “events” to be instantaneously communicated across the network, so the system can determine the next steps to take. Pujda offers the example of a retail operation, where notification of a trailer’s arrival might trigger an inventory allocation program to assign the goods to a particular store. That decision would then dictate whether the goods are sent to storage or cross-docked for loading onto an outbound truck.

Event management capabilities can also include electronic communication with carrier information systems. For example, at the same time the YMS records the movement of a newly unloaded trailer back to the yard, the system could automatically notify the carrier that its equipment is ready for pickup.

**A LOW-COST WAY TO BOOST EFFICIENCY**

All technology comes at a price, and yard management software is no exception. But the experts interviewed for this article point out that there can also be a price to pay for not investing in technology with the potential to bring order to a chaotic operation. For that reason, they urge managers experiencing yard management headaches not to be put off by the costs of the software.

“YMS systems today are pretty low cost,” says Obal. “If you have more than 10 trailers, you need to do something for sure. It’s better than having someone trying to remember what’s outside in the yard.”