

PREVENTIVE MAINTENANCE IS THE ORIGINAL

By **Mike Mitchell**

As a manufacturer of protective coatings and preventive maintenance products, I might be accused by some readers of having a biased opinion. While that's very much true, I can also make the case that protecting your existing parking facilities is the most sustainable and greenest option available.

I'm going to focus primarily on surface parking (as that is the world I live in on a daily basis), but the concept transfers well to parking structures, on-street parking, signage, etc. Let me start by putting a few facts on the table:

- Asphalt is the single most recycled/reused material on the planet; the Federal Highway Administration says approximately 99 percent of asphalt is recycled.
- The average cost to tear out and replace a 15-year-old asphalt parking lot is \$39.07 per square yard, according to the Asphalt Institute.
- The average cost to perform preventive maintenance for 15 years on an asphalt parking lot is \$23.84 per square yard, says the Asphalt Institute. In addition, the parking lot will be in good condition for years to come (as long as preventive maintenance is continued).



ROI

Certain aspects of facility management have great ROI stories. For example, replacing or retrofitting an old lighting system with an energy-efficient system can have a payback period of two years or less. Additionally, making the lighting switch is good for the environment. Similarly, garage ventilation upgrades can significantly lower your energy consumption and provide a 94 percent decrease in monthly costs. In those instances, replacing an old system is the greenest option available. But before the technological advances were made that offered those results, the systems required preventive maintenance to maintain operating efficiencies. In the ventilation example you would change the filters, check the condition of sensors, and maintain the air handlers.

While there have been technological advances in the construction of surface lots, parking structures, signage, etc., earlier numbers from the asphalt industry show a direct savings in the maintenance of parking facilities. Very few studies have been done comparing the carbon

footprint difference in maintaining vs. replacing asphalt surfaces, but one study done in the U.K. shows a 95 percent reduction in carbon footprint in the application of preventive maintenance surface treatments. In lieu of additional studies, empirical data would seemingly confirm the U.K. study, as the energy needed to remove, manufacture, and construct a parking lot/parking structure is significantly higher.

Going back to the numbers from the Asphalt Institute for a second, the life-cycle cost savings of preventive maintenance should not be ignored. During the course of 15 years, every 400 parking spaces that are maintained provide a savings of \$357,000. That \$357,000 doesn't even account for the fact that your savings will continue forward as preventive maintenance keeps your facility in good working condition. An additional consideration is that the \$357,000 in savings could be allocated for additional green projects (lighting, ticketing, smart meters, ventilation), which would double down on reducing the carbon footprint of your facility.



MIKE MITCHELL is product development manager with Vance Brothers, Inc., and a member of IPI's Sustainability Committee. He can be reached at memitchell@vancebrothers.com.


SUSTAINABILITY

Planning

Ted Mattingly, CFM, director of facilities and administration services for The National Recreation and Park Association (NRPA), writes, "A preventive maintenance program can help you plan away at least 75 percent of your typical problems and 90 to 95 percent of your critical component issues." He continues, "Preventive maintenance programs are also a central factor in reducing overall energy consumption in an organization, further emphasizing its importance as a key component in sustainable practices."

What Ted is saying is that the systems in a facility are most efficient when they are maintained in a way that keeps them in proper working condition. Of course,

as with any program, the data should be tracked and measured to ensure you are getting the right bang for your buck.

Parking professionals should continue to put preventive maintenance at the top of their priority list. It is easy for any of us to get wrapped up in the day-to-day operations and the necessity to put out fires, but a preventive maintenance plan that is properly implemented will have a direct impact on both your bottom line and sustainability initiatives. It is easy to overlook the boring side of your parking assets (asphalt, concrete, signage, etc.) and focus on the sexy projects (LED lights, solar, etc.), but there is a need for both in a comprehensive sustainability program. 



RYDIN PermitExpress™

Get excited about your parking program. It's easy.

Easily manage all of your important parking information from a desktop computer, tablet or smartphone.

- Easy Set Up
- Easy Training
- Easy to Use
- Easy on the Budget

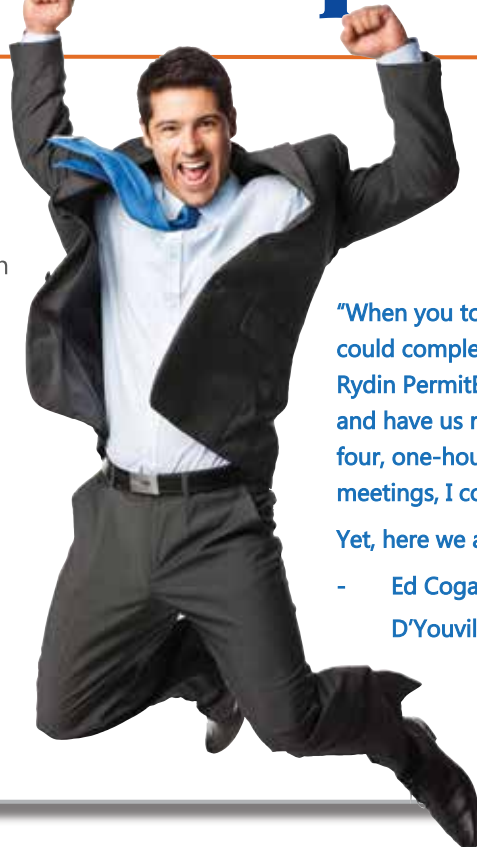
With Rydin PermitExpress™, you're up and running before you know it.

Contact Us Today to learn how!

RYDIN DECAL

sales@rydin.com | 800.448.1991 | www.rydin.com

permits. distribution. software.



"When you told me that you could completely set up our Rydin PermitExpress™ account and have us ready to go live in four, one-hour, online meetings, I couldn't believe it.

Yet, here we are – you did it!"

- Ed Cogan,
D'Youville College