

CASE STUDY

How Hydro-Chem Systems Streamlined Bus Wash Operations with Grand Ledge Public Schools



Introduction

Grand Ledge Public Schools, an award winning district in Mid-Michigan, faced the challenge of efficiently washing and maintaining its large fleet of 40 buses.

With approximately 5,000 students relying on safe transportation, ensuring a consistent and thorough cleaning process is essential. Mat Moeggenberg, Assistant Supervisor of Transportation, encountered difficulties in scheduling regular bus washes due to the time-consuming and inconsistent manual process.

To overcome these challenges, Grand Ledge partnered with Hydro-Chem Systems to implement an Automated Touchless 2-Step Fleet Wash System tailored to their specific needs.



“The goal was once a week but scheduling was a nightmare... it wasn’t just the drivers, but making time for the buses to sit there and get pressure washed by hand was a lot.”

- Mat, Assistant Supervisor of Transportation

The Challenge

Maintaining a fleet of 40 buses presented multiple challenges for Grand Ledge Public Schools. The inconsistent scheduling of bus washes emerged as a primary issue, resulting in dirty buses on the road and prolonged exposure to contaminants. This prolonged exposure, particularly during the winter months when road salt is applied, significantly raised the risk of rust and corrosion.

Allocating time for manual washing of the 40 buses, with only 35 drivers responsible, proved challenging. This task often led to varying wash quality and missed cleaning opportunities, including neglecting the undercarriage.

Mat explained that although the bus drivers volunteered to wash the fleet once a week, the actual execution of the task proved to be “hit or miss” despite their best intentions.

“The goal was once a week but scheduling was a nightmare,” Mat said. “It wasn’t just the drivers, but making time for the buses to sit there and get pressure washed by hand was a lot. That’s almost half an hour for the driver to do it and it takes a lot of effort.”

“Cleaning the undercarriage is a good example. It’s just hard to get the pressure washer [wand] underneath to clean it properly.”



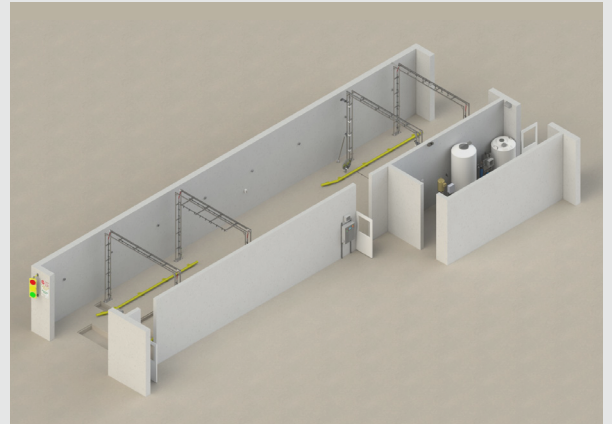
The Solution

Hydro-Chem Systems, an experienced provider of automated vehicle wash systems, collaborated with Grand Ledge Public Schools to design and implement a customized solution.

An Automated Touchless 2-Step Bus Wash System addressed their fleet's specific needs by offering an optional pre-wash and undercarriage wash capability. Additionally, carefully selected detergents and soaps were incorporated, tailored specifically for their fleet. The new system significantly reduced the time and effort required for each wash compared to the previous manual process, enabling drivers to quickly clean their buses.

Mat acknowledged that the new system required some initial adjustments for smooth operation. "With the new system, it takes time for things to start running smoothly. That's normal. For example, the RO skids were finicky. But the [service] guys we work with are super responsive and we seem to have everything worked out... it's now so much less effort than before [with just a pressure washer]."

Now they're able to give each bus a full extensive wash that includes cleaning the undercarriage, which had previously been a major issue. Mat highlighted the advantages, "that's one of the biggest benefits — the undercarriage. Especially during winter with the snow and salt."



The Results

Since the installation of the automated wash system, Grand Ledge Public Schools has experienced remarkable improvements, greatly benefiting both their fleet and their drivers.

The introduction of the system has revolutionized their process, **now drivers only need a few minutes at the beginning or end of their shifts to drive through the wash.** There is no need for them to exit the vehicle or engage in any additional physical labor tasks. This streamlined process allows the drivers to focus on their primary responsibilities, ensuring a smooth transportation experience for the students.

Additionally, the time spent on each bus wash has been drastically reduced to less than 2 minutes per bus, making it 15 times faster than the previous method.



Mat emphasized the switch to an automated wash system was "night and day", crediting its effectiveness to both the system itself and the quality of the chemicals used.

"It's completely different. It's hard to say if it's just the system itself, or the chemicals, so I'd probably say it's both," he said. "It just does a better overall job and takes much less effort."

While it is too early to quantify the exact cost savings, Mat expects a notable difference due to the anticipated decrease in maintenance and repairs resulting from regular bus washing. By using a system that is more thorough and includes the undercarriage, they will have significantly reduced the risk of corrosion.



Conclusion

Grand Ledge Public Schools successfully tackled the challenge of maintaining a large bus fleet by partnering with Hydro-Chem Systems to implement an Automated Touchless 2-Step Fleet Wash System.

The new system significantly improved efficiency, reducing the wash time to less than 2 minutes per bus and enhanced the overall quality of cleaning. It also addressed the issue of being able to clean the undercarriage, helping to mitigate the risk of rust and corrosion.

As Grand Ledge Public Schools enters their second year with the system, they will continue to closely monitor the impact of the full automated wash system and the utilization of premium chemicals, aiming to assess the system's effectiveness in extending the lifespan of the buses.

By adopting this proactive approach, Grand Ledge Public Schools is not only lengthening the replacement cycle of their buses but also gaining substantial cost savings in the long run.

To achieve similar results for your fleet, contact us today for a complimentary consultation. With over 50 years of experience, we have successfully assisted numerous schools, municipalities, and private trucking companies in optimizing their fleet cleaning processes.

We carefully study your specific fleet washing requirements, taking into account your operating environment, and provide tailored solutions. Whether you prefer an automated system like the one at Grand Ledge or an improved washing process for your manual wash bay, we collaborate with you to identify the best fit for your fleet.

Speak with us to discover how you can improve your fleet washing efficiency and significantly reduce cleaning time.



About Hydro-Chem Systems

Hydro-Chem Systems is a trusted leader in automated vehicle wash systems, fleet washing chemicals, and servicing equipment. Our educational approach ensures that we deliver solutions that precisely meet your needs, aiming to enhance your cleaning process, save time, and reduce costs.

With over 50 years of experience, we specialize in superior conceptual design and results-driven engineering. Our comprehensive range of offerings includes full-size automated drive-thru systems, as well as washing equipment suitable for smaller fleets. Additionally, we formulate and manufacture our own fleet washing detergents using cutting-edge chemical technology tailored to your specific requirements.

At Hydro-Chem Systems, our goal is to provide a complete solution for all your fleet washing needs, exceeding your expectations every step of the way.