



Bulldog®



Build bigger platforms

Improve business and engage employees with social media

Safety incentives
Effective tips from Mack customers

Charged up
Mack unveils fully electric LR

To the rescue
Mack dealer helps flooded farmers



MACK

FULLY ELECTRIC MACK® LR

Recharge your route.



Introducing the fully Electric Mack LR.

The Electric Mack LR powers through your route with the same comfort, visibility and reliability as the industry-leading Mack LR, but with lower maintenance costs, reduced noise and zero carbon emissions. The City of New York Department of Sanitation (DSNY) is rolling out the first Electric Mack LR early next year. See what a smart, clean investment in your company's future could do for you at MackTrucks.com/Electric

BORN READY.

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Focused on the future

Welcome to the latest **Bulldog Magazine** from Mack Trucks. This issue shows the trucking industry is growing, experimenting and innovating. Of course, Mack is leading the way.

The latest in truck technology is on display in these pages with the unveiling of the Electric Mack® LR Model, the first vertically integrated heavy-duty battery electric refuse truck from North America. The Electric LR will undergo real-world testing beginning in 2020 by two of Mack's largest customers. For Mack, this model is a pathway to the future of commercially practical electric vehicles. It's a big deal, combining the latest in drivetrain technology and control with the tough-as-nails design required of urban refuse trucks.

The Mack Anthem® is also a very big deal. In just the short time it's been in production, the Anthem has grabbed the attention of the North American trucking industry. It's a huge success with customers and drivers, for its looks, driver environment and performance. It's a modern, technology-forward Mack that is made better by our heritage of putting the customer first. Customer profiles in this issue of Scotian Distribution Services and BECO Inc. spotlight companies who see the Anthem as a valuable part of their business and a way to attract new employees.

Over our long history we've defined the trucking industry's approach to technology and innovation. Mack's focus on advancements is based on what will benefit the customer, coming up with new ways to help them be more successful, more profitable and safer. Of course reliability, durability and productivity remain mainstays of our development process and brand promise. Our heavy, long-term investment in uptime services and connected truck technologies, such as GuardDog® Connect, are proof of Mack's ability to support fleets with industry-leading uptime and our unrivalled dealer network.

Some technology doesn't involve trucks, but is still becoming more important every day for savvy fleets. Bulldog takes a look at how the rapidly evolving world of social media can be put to good use by trucking companies. Several Mack customers share their tips and observations on how to use the major social media platforms effectively to attract drivers and customers, and to improve operations. And there's also an examination of the important role incentives play in safety programs for many fleets.

Finally, there is a reminder that the trucking industry is made up of people and that the industry exists to serve others. Bulldog has the story of how RDO Truck Centers, a Mack dealer with eight locations in Nebraska and South Dakota, has worked closely with the nonprofit group Farm Rescue to help Midwest farmers feed their herds after the catastrophic flooding this spring. As we like to say, Mack has your back.

Jonathan Randall
Senior Vice President, Sales & Marketing



Mack Trucks is hitting the road again for RoadLife 2.0, a follow up to the acclaimed nine-episode first season. Targeting 16 episodes, RoadLife 2.0 will highlight the often untold stories of men and women in the trucking industry whose hard work and dedication help keep our world moving forward.

Mack Trucks hits the road again for RoadLife 2.0

Mack Trucks' RoadLife series returns for a second season on Amazon Prime Video and <http://roadlife.tv>. RoadLife, produced in-house by the Mack marketing team, celebrates hard-working men and women in the trucking industry whose commitment to getting the job done helps keep our world moving forward.

Shooting of RoadLife 2.0 began in January 2019, and the Mack production team has already racked up more than 40,000 travel miles visiting nine locations, including Valdez, Alaska, Reno, Nevada, and Montreal, Quebec. Targeting 16 episodes this season, RoadLife 2.0 will feature one-of-a-kind stories ranging from snowplow drivers in one of the stormiest places in North America to wine crush season in California.

Viewers can watch RoadLife episodes on Amazon Prime Video and <http://roadlife.tv>, with additional content featured on Mack Trucks' social channels: Facebook, Twitter, Instagram, LinkedIn and YouTube.



Mack leads charge into electromobility era with fully electric refuse truck

Mack Trucks unveiled its highly anticipated Mack® LR battery electric vehicle (BEV) at WasteExpo 2019. Combining the refuse industry-leading design of the Mack LR model with a fully electric Mack drivetrain, the demonstration model will begin real-world testing in 2020 in the demanding operations of the New York City Department of Sanitation (DSNY).

“Built on our decades of experience in powertrain innovation, the electric LR delivers a powerful yet quiet, zero-emission solution designed to tackle one of the most demanding applications in one of the largest cities in the world.” says Jonathan Randall, Mack Trucks senior

vice president, North American sales and marketing.

The Mack LR BEV is powered by Mack’s integrated electric powertrain consisting of two 130-kW motors producing a combined 496 peak horsepower and 4,051 lb.-ft. of torque available from zero RPM. Power is sent through a two-speed Mack Powershift transmission and put to the ground by Mack’s proprietary S522R 52,000-lb. rear axles.

Fully electric trucks like the Mack LR BEV provide a number of benefits, including zero emissions and the potential for improved environmental sustainability. In addition, fully electric trucks produce significantly less noise, enabling nighttime operation

Welcome to #Mackonomics

Two drivers will explore fuel savings benefits of Mack Anthem® over next year

For the next year, two drivers operating Mack Anthem® models will track and share their fuel savings efforts.

Jamie Hagen, owner of Stratford, South Dakota-based Hell Bent Xpress LLC, and Joel Morrow, senior driver and vice president for fleet equipment procurement at Ploger Transportation based in Norwalk, Ohio, will share their findings using the hashtag #Mackonomics.

Throughout the year, Hagen and Morrow will track their loads, driving distances, routes, weather and more in evaluating how their Mack Anthem models stack up on fuel efficiency. Hagen (@hellbenthagen on Twitter, Instagram and Facebook) and Morrow (<https://www.linkedin.com/in/joel-morrow-a15a6aa0/> on LinkedIn, and @TestDriver10MPG on Facebook) will regularly post updates, videos and other content to show how much #Mackonomics is saving their operations and improving total cost of ownership. Mack’s social media channels (Facebook, Twitter, Instagram, LinkedIn, YouTube) will also share Hagen and Morrow’s findings.

Hagen and Morrow’s Mack Anthem models are spec’d with Mack’s HE+ efficiency package, which combines the 13-liter Mack MP®8HE engine with Mack Energy Recovery Technology, along with several aerodynamic and efficiency enhancements to deliver up to 9.5% improvement in fuel efficiency. Mack Energy Recovery Technology captures energy from the engine’s exhaust that would otherwise be wasted and converts it to mechanical energy fed back to the engine crankshaft as additional torque. This extra energy helps relax the engine and improve fuel efficiency.



Mack Trucks displays second generation plug-in hybrid truck

Mack Trucks displayed its second-generation zero-emission capable Class 8 drayage truck at the California Air Resources Board Low Carbon Transportation Heavy-Duty Showcase in Sacramento, California, this spring.

The plug-in hybrid electric truck based on a Mack® Pinnacle™ axle back Day Cab has been operating in revenue service with a customer drayage fleet for more than a year.

The truck is being tested as part of a \$23.6 million project led by the South Coast Air Quality Management District. “Testing of this truck has allowed us to validate the emission reduction potential of the plug-in electric vehicle technology in combination with self-learning algorithms to control electric operation. We look forward to continuing real-world testing, as well as collaborating with CARB, SCAQMD and others,” says Jonathan Randall, Mack Trucks senior vice president, North American sales and marketing.

The project aims to reduce pollution and greenhouse gas emissions at locations with heavy freight volumes, including ports, rail yards and the freight corridors connecting them.

Similar to the first-generation truck, the second-generation PHEV drayage truck is capable of zero-emission operation thanks to the integration of a Mack MP®7 diesel engine with a parallel hybrid system and lithium-ion battery pack. But unlike the first-generation truck, which used geo-fencing, the second-generation truck relies on adaptive self-learning to identify and create zero-emission zones in order to maximize all-electric operation.

During normal operation, the truck records the load, speed, and power and torque demand, analyzes that data and combines it with GPS location information to identify, create and store information about zones where the electric driveline is capable of operating in zero-emission mode.

Build a bigger platform

From heart-tugging video stories to real-life truckers promoting your brand, social media is where all the valuable connections are being made.

By Carolyn Magner Mason



What do a video of a trucker driving a beautiful Mack Anthem® and a popular internet trucker tweeting fuel saving tips have in common? Both are examples of using new content strategies to connect with and influence a desirable audience across a plethora of social media platforms.

A strong social media presence deepens customer relationships, connects you with potential employees and helps retain top performers.

“Sharing our brand across social media gives us the ability to develop more personal relationships with customers by getting to interact with them one-on-one in ways you can’t do with traditional marketing,” says Lauren McGuirk, digital marketing communications manager for Mack Trucks. McGuirk says fleets are becoming more savvy in their social media marketing and are reaping the benefits of successful campaigns.

Social media can propel your company’s compelling story onto platforms where your target audience hangs out.

Trends and best practices in social media

strategies rapidly change. In fact, since Bulldog’s 2015 story on social media, enthusiasm for Facebook, Instagram (including its Stories feature), Twitter, YouTube and LinkedIn has surged, as the platforms develop new ways to tell your story, including short- and long-form video and using influencers to promote your company.

Mobile first

There’s plenty of advice for best social media practices, but the most crucial tip can’t be overestimated. All of your content, especially driver applications, must be mobile friendly.

According to the 2019 *Overdrive* Connectivity Report, 79.9% of company drivers and 69.7% of owner-operators use social media every day, with the majority accessing their networks through their smartphones. This means drivers access the digital platforms you use for recruiting on mobile devices. If your website and marketing strategies are not mobile-friendly, you miss out on crucial audience.

- **Facebook:** 96% of Facebook traffic comes from mobile devices
- **Google Search:** Over half of search queries come from mobile devices
- **Email:** 75% of people in the U.S. use smartphones more than other devices to check emails

Drive audience to your website

No matter if you are a small fleet or a large company like Mack Trucks, social media offers broad opportunities to share your content and drive your target audience to your website.

Jessica Novich is an owner and chief accounting officer for her family-owned company Full Tilt Logistics in Reno, Nevada, and is also their social media coordinator. As a millennial, she’s adept at social media but is clear about the ultimate mission of using the platforms in her job.

“Our goal is to drive everyone to the



website. We connect on Instagram and Facebook, but we want everyone to go to our website where you can read about our story, our mission and easily navigate through all the information you need," she says. She thinks it's imperative to operate a clean,

What's trending?

What are the top social platforms? What do people do when they visit? What draws people to them? Be knowledgeable on what's new and what's popular so you can always practice best methods for reaching your audience.

Facebook

Addictive, guilty pleasure.

75% of Facebook users check the platform daily.

Top social network on the web with about 2 billion monthly active users.

Features: Facebook Messenger is the second most popular messaging app behind WhatsApp. Users tend to join or set up groups.

Tip: Create regular posts and rapid response to comments.

Instagram/Stories

According to Statista, Instagram reached a milestone of 1 billion monthly users in June 2018 with 4 billion likes per day.

Most popular network for short videos and real-time photos.

Tip: Shoot vertically.

YouTube

The average mobile viewing session lasts more than 40 minutes. This is up more than 50% from 2017-2018.

After Google, it's the second largest search engine.

Truckers watch hours of videos, movies, vlogs and films.

Tip: Approximately 20% of the people who start your video will leave after the first 10 seconds. Create a good intro.

Twitter

80% of Twitter users are on mobile.

Short messages now include up to 280 characters.

Timelines are controlled by algorithms.

Tip: Stay away from politics.

LinkedIn

Job searching

40% of LinkedIn users check the platform daily.

Tip: Keep it professional and informative.

user-friendly website supported by an easy, mobile-friendly application process. "We have about a 20-second window to access a driver application before they give up. If it's not easy, they may not come back."

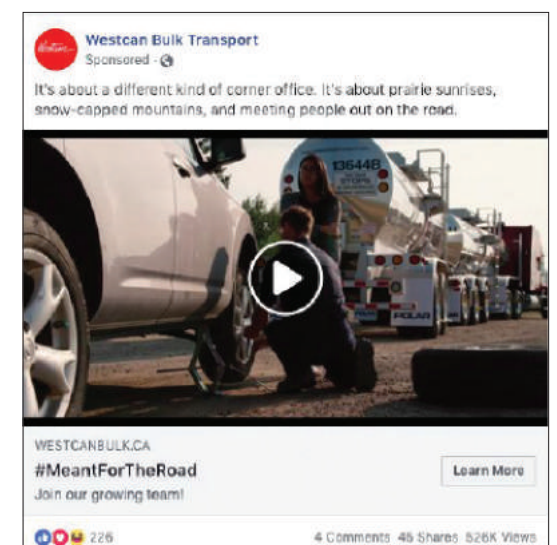
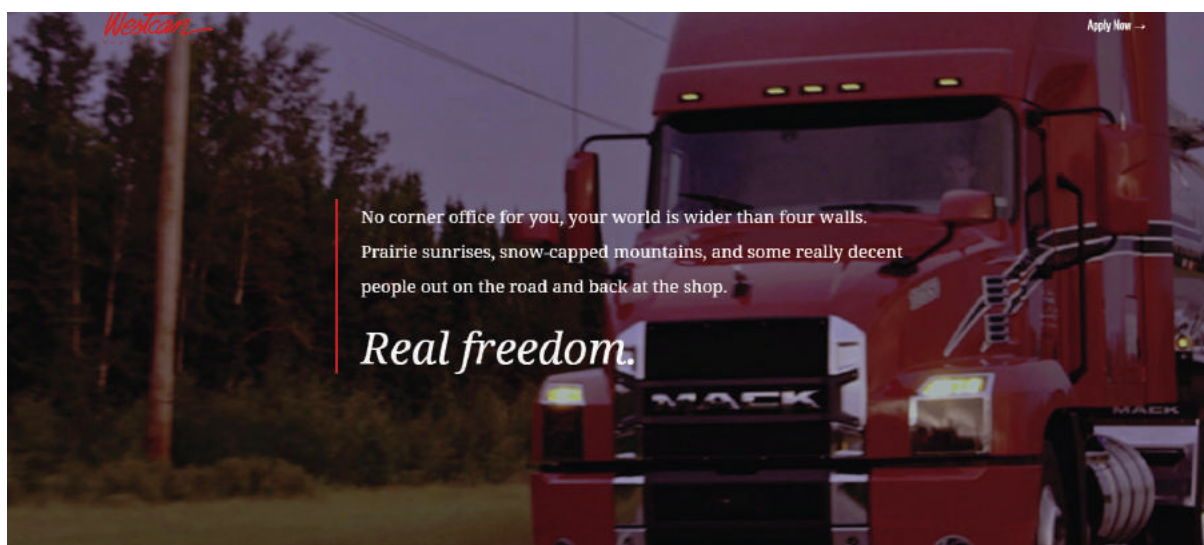
Novich uses a wide range of social sites to push out her messaging. "We find that Facebook and LinkedIn are huge for us, and Instagram continues to show strong numbers," she says.

She sits down with her outside media

partner every month to review the stats and ROI and says they plan to move more into video stories as well. Even simple blog posts on the site get shared and enhance the image of the company. "We can really connect with our drivers and our customers."

Storifying social

How you create the content for your message has evolved from occasional



Canada-based Westcan Bulk Transport created a two-minute, social media-friendly video called "Meant for the Road," which is an homage to trucking, complete with a professional trucker driving a new Mack Anthem through gorgeous Canadian countryside.

COVER STORY

marketing-oriented blog post (Driver pay increase! More home time!) to more thoughtful, curated content that includes best practices in storytelling. In Hootsuite's 2019 Social Trends Survey, more than 3,000 Hootsuite customers report that they are using new formats as ways of engaging and thriving throughout social media. One top trend found in the survey is "storifying social," with 64% of respondents either already implementing Instagram Stories into their social strategy or planning to do so in the next 12 months.

Long-form video

Video storytelling is one of the most effective ways to increase company awareness while at the same time recruiting drivers.

Westcan Bulk Transport's two-minute video, "Meant for the Road," is an homage to trucking, complete with a professional trucker driving a new Mack Anthem through gorgeous Canadian countryside. When viewers finish the video about a day in the life of a truck driver, they can easily fill out a job application right from their phone.

Stephanie Theede, vice president of human resources for Edmonton, Alberta-based Westcan, says they developed the video to promote awareness of Westcan as an industry leader and to recruit and show respect to drivers in the industry.

"We wanted to formally recognize our professional truck drivers, who are a large part of Westcan's brand. The video was designed to address a misconception of drivers being disconnected, and to highlight safety, respect for drivers and position Westcan's drivers as a group of elite, trustworthy and skilled role models," she says.



Jamie Hagen
April 22 at 8:17 a.m.
Yesterday was just one of those great days for fuel economy, hot and the wind was blowing the direction I was headed. Started in Toledo and bounced empty to Channahon, IL where I loaded up to 79,000 lbs of Palm Oil. From there we went north into Wisconsin with that wind and it just floated all day, virtually using no boost and often in eco-roll mode. If only I could get mother nature to work with me everyday. #Mackonomics

Jamie Hagen (@hellbenthamen on Twitter) is a Mack truck enthusiast, professional driver and popular influencer. He is one of two drivers participating in Mack's #Mackonomics campaign this year.

Since the launch of the Meant for the Road campaign, the results were tallied and Theede says they exceeded expectations.

They were pleased with the overall increased brand awareness and reach, especially into the younger market. According to their statistics, the two-minute video garnered nearly a half of a million views — with a total watch time of 695,550 minutes — while the Facebook video ads created 5 million impressions and more than 56,000 page views.

"We feel this campaign, in addition to driver enhancements such as pay increases, have really helped our successes. As of this March, our net driver growth is up about 9% and driver retention has improved by over 3% over last year. We expect our results to continue trending in these directions," she says.

Video stories

McGuirk was part of the team that produced Mack's #RoadLife, a series of short video stories spotlighting the hardworking men and women behind the wheel and their life on the road. The RoadLifeTV crew traveled to 32 cities over the course of 136 days and 32,000 miles to tell these stories. Available on Amazon Prime, the series was a hit, and a second season is underway.

"When it comes to our increasing use of videos, it's because we realized in order to be relevant in today's world, we need to keep up with the rapid shift in content consumption. And today, it's all about digital content consumed on mobile devices," she says.

McGuirk says Mack spent the past several years creating a marketing ecosystem focused on digital. This includes social media and video marketing that provides Mack followers with the experience and content they need to self-educate.

"Ultimately, we win both their minds and hearts," she says.

But even simple videos that capture the drivers' experience can be an effective recruiting tool.

For Jessica Novich, Novich of Full Tilt Logistics, filming a short interview about life on the road with one of her female drivers was shared by other drivers and led to a qualified new hire.

Introducing influencers

Consumer marketers use "influencers" on social platforms such as Twitter, Facebook and Instagram to promote products, places

Superior social media tips

Superior Carrier's Chris Halvachs shares the five rules he follows when creating a digital strategy.

- 1 Be consistent on the time of day when you post. That way your audience will know when to expect new content.
- 2 Engage with your audience, whether that is liking every appropriate post or replying to the post.
- 3 Keep your brand message and voice consistent.
- 4 Give credit where credit is due. If you use a photo provided by someone else, tag them in the photo or the comment.
- 5 Be honest.



Tamlynn Hegdahl, one of Full Tilt's most reliable drivers, is earning her stripes as a cross-country big-rig driver, hoping to attract more women to cope with an industrywide driver shortage. A short blog post and video about her generated interest and applications.

and lifestyles through short, disappearing "stories," photos and longer-form videos.

Because truckers still rank "word-of-mouth," as the number one way they choose to drive for a company, it makes sense to use your own top drivers to spread the word. Truckers post photos of their trucks and develop a "following" of enthusiasts who are interested in the opinion of their peers. Fleets use influencers to spread the word about their positive company culture and suppliers load them up with their product to review.

Jamie Hagen, owner of Stratford, South Dakota-based Hell Bent Xpress LLC (@hellbenthagen, Mack Lovin), is a Mack truck enthusiast, professional driver and popular influencer across multiple platforms — but mainly on Twitter where he has more than 8,000 followers. "Twitter is the CB radio of trucking," he says. He laughs about how now he's called an "influencer," but says he gets recognized as "that guy," on Twitter, Instagram and Facebook. His influencing started out when he began talking to other truckers about NASCAR and organically evolved into promoting a more professional image of truckers. His love of all things Mack has endeared him to his trucking enthusiast followers. He regularly posts images of his fuel economy stats along with driving tips, witty banter and personal stories from the road. For the next year, Hagen and Joel Morrow, senior driver and vice president for fleet equipment procurement at Ploger Transportation based in Norwalk, Ohio, both operating Mack Anthem models, will track their fuel savings efforts and share their experiences using the hashtag #Mackonomics.

"Influencers are invaluable due to the fact that they not only help drive the conversation, but they give us the ability to reach fans and drivers outside of our own network, and who best to promote a product than an actual customer? Put the product in the customer's hands and it will speak for itself," says



Tracking a tribute truck

Chris Halvachs, digital marketer for Superior Carriers, says one of the company's most effective programs was a huge hit across all social platforms.

Last year, after months of planning and designing, they unveiled a one-of-a-kind Mack Anthem designed to pay tribute to past and current service men, women and their families.

"It was important that we did this because it reinforces our corporate culture to support the U.S. military veterans and their families," says Brian Nowak, president of Superior Carriers.

The custom truck, nicknamed Superior Anthem, or #SuperiorAnthem on social media, was presented to Mike Godfrey, a 20-year Air Force veteran and five-year Air Force contractor turned driver trainer out of their Greer, South Carolina, terminal.

"It still hasn't sunk in but driving this truck is a dream come true," Godfrey says.

The #SuperiorAnthem project is unique. "I think it's perfect," says Superior Carriers Senior VP of Operations Steve Lowman. "The time and attention paid to the detail and how our graphic designers (with Modagraphics) aligned everything in perfect balance. We believe that this truck honors our company's appreciation for the men and women who sacrifice so much for our great nation.

The positive image of a beautiful custom tribute truck draws attention to veterans and the trucking image and ultimately makes the case for qualified drivers to consider driving for Superior.

McGuirk, who regularly communicates with Hagen and other Mack truck influencers.

Beauty shots and tribute trucks

Instagram's format is ideal for truck beauty shots. If you have not already created a hashtag for your company, it's a great place for your drivers to post photos and evolve into influencers.

A recent Instagram post on #SuperiorLife features two beautiful blue Mack trucks with the caption; "Man, I love my job! The only thing blue on a Monday is our trucks!" It's hard to put a value on that kind of recruiting message and the reply back says, "We love you too."

Chris Halvachs, digital marketer for Superior Carriers in Oak Brook, Illinois, says

his focus on social media has grown over the seven years he's been with the company. Where he used to post the occasional blog post on the company website or Facebook page, now he says the shift to social is the best way to spotlight the company's safe drivers and positive culture. Using influencers on Instagram is something that has happened organically as drivers post photos using their hashtag.

"Instagram lets our drivers show off their company and truck pride and we have the benefit of a positive presence on their social networks as well as our own," he says.

He encourages drivers to post and spends time with new drivers in for training where he urges them to engage and comment on their posts. "It carries so much more weight when a driver speaks well of the company," he says. ■

Safety incentives that work

Positive reinforcement is a compelling component of a strong safety culture.

By Olivia McMurrey

When Rich Szecsy joined Charley's Concrete as chief operating officer 15 months ago, his first questions weren't about ROI or profitability. Instead, he asked about safety statistics at the ready-mix producer, which operates a 160-truck fleet, including 110 Mack Granite mixers and 46 Mack Pinnacle dump trucks, in the Dallas/Fort Worth area.

"My experience in our industry has been if you're a safe company, you're a profitable company," Szecsy says. "So to me, one of the easiest and fastest barometers for knowing about the financial health and growth potential of a company is to look at how it approaches safety.

"That tells me how you approach and mitigate risk. That tells me how you approach and make strategic decisions. And it carries into risk and strategic decision making in the marketplace. It's the canary in the coal mine."

On a more direct level, the negative impact of unsafe trucks, driver behaviors and business practices on a company's bottom line is indisputable – as are the devastating costs in terms of injuries and loss of life.

According to the Federal Motor Carrier Safety Administration, the average cost of a large truck crash is about \$91,000. Accidents with injuries average \$200,000 per crash, and those involving a fatality average \$3.6 million per incident.

"Assuming that each year your fleet has 10 large truck crashes averaging a cost of \$91,000 per incident, if you could cut your accident rate in half, you're talking about half a million dollars you would have saved," says Jeremy Godwin, vice president of risk management for N.W. White & Co., a 300-truck fleet based in South Carolina that operates 125 Mack Granite and Pinnacle dump trucks to haul aggregates to road-building sites.

Using incentives to drive behavioral change

Cultivating a strong safety culture is imperative to lowering accident rates, and incentives play an important role in that process.

"Incentives are a big part of any program that's designed to influence behavior," Godwin says. "The No. 1 thing you have to do in order to change behavior is to answer the question 'Why?' Why is safety performance important? We frequently talk about the bad things that could happen. But it's sometimes difficult to articulate the good things that can happen through positive safety performance. Incentives are a way to do that."

And it's a method that's paid off for N.W. White & Co., which has won its division of the South Carolina Trucking Association's safety contest seven out of the past nine years. In 2018, the company had only six DOT



Kevin Carver is a longtime employee of N.W. White & Co. Incentives play a big role in the safety culture of N.W. White & Co., which has won its division of the South Carolina Trucking Association's safety contest seven out of the past nine years.

Photo by Doug Smith

recordable accidents, and just three of those were preventable by N.W. White drivers. The company's trucks traveled 13.5 million miles last year, with 80 percent of those miles driven in urban and suburban areas with high traffic volumes.

Szecszy cautions that incentives must be a component of an overall safety culture.

"For us, it starts with orientation. I go into those orientation meetings and explain to them that every employee is empowered to look for, and bring attention to, unsafe conditions," he says. "And their jobs are not in jeopardy when they do so." In fact, employees are incentivized to point out hazards.

Szecszy says he has heard drivers for other companies say they couldn't tell a supervisor a situation was unsafe because production and keeping the trucks moving was the most important thing.

"We let our employees know that is not the

most important thing," Szecszy says. "Their safety is the most important thing, and they are in control of it. And that's changed behaviors and ultimately changed our culture so much."

In 2017, Charley's Concrete had a lost-time injury frequency rate (the number of lost-time injuries per 1 million hours worked) of 4.4. In 2018, the rate was 3.6, and so far this year it's averaging below 2.

Godwin says consistency between a company's messages and its actions is key. "There aren't many trucking companies that would say safety is not important," he says. "But do they practice it? It's arguably worse to say you believe in safety and then not practice it than to not say anything at all."

Incentive types

Every company needs to tailor safety incentives to its particular setup and circumstances.

Below are some general types of incentives leaders at N.W. White & Co. and Charley's Concrete have customized to their operations.

Recognition

Godwin and Szecszy say recognition is an often-overlooked yet powerful incentive.

N.W. White & Co. managers begin every driver safety meeting by showing camera footage (outside-the-cab view) of a situation in which an attentive driver reacted in time to prevent an accident, Godwin says. Meeting leaders then recognize the driver.

Likewise, employees who point out hazardous conditions are recognized at Charley's Concrete safety meetings. "Financial support is one thing, but we think recognition in front of one's peers has a huge impact on morale and is a huge motivator," Szecszy says. "We let those employees speak at the meetings about what they saw and the solutions they came up with. And now people aren't afraid to identify something to their supervisor or management."

Bonuses

N.W. White & Co. provides monthly and annual monetary incentives to its drivers and technicians, allowing individuals to earn bonuses totaling up to 7 percent of their annual salaries.

To earn a monthly bonus, a driver can't have an accident resulting in damage costs of more than \$2,000. And if a driver qualifies for a safety bonus during the first nine months of the annual term, the bonus increases by 50 percent during the last three months.

Criteria for technician safety bonuses mirror requirements for drivers. Technicians who don't have to perform rework because of faulty repairs earn a monthly bonus.

Drivers and technicians who earn 75% of safety bonuses and meet certain safety goals receive the company's annual STAR award, bestowed during a safety banquet. Roughly 70% of N.W. White drivers and technicians attain their maximum safety bonus each year, Godwin says, and the monthly milestones help them get there.

"We think it's important to have a high frequency of safety incentives because it's hard for any of us to look forward to something we're going to get 12 months down the road," he says. "It also gives people a clean slate every month."

Team incentives

Charley's Concrete focuses on group incentives, Szecszy says, with drivers and concrete-plant workers at each of its four large sites comprising teams.

"Team incentives mean I'm not just looking out for my own decisions," he says. "When I see that guy walking across the yard without a

ON BUSINESS



Charley's Concrete emphasizes team incentives, which can include benefits such as free luncheons or treats for teams that meet objectives.

Photo courtesy of Charley's Concrete

hard hat or safety glasses, I'm going to go tell him, 'Hey, you forgot your hard hat,' or, 'Hey, you forgot your glasses,' because I'm now aware of that incentive for the entire team."

When a facility doesn't have a lost-time injury during a month, all the employees are rewarded for the team's success with a luncheon the following month.

The company also provides an annual incentive for the team with the safest facility. Two plants went the entire year without a lost-time injury in 2018. Szecsy says it was an incredible feat.

"Two weeks before Christmas, we walked in and rewarded each one of those employees with a cash bonus," he says.

N.W. White & Co. offers divisional bonuses, and safety is part of that program. The company has seven divisions based on location. Safety factors include accident rates and metrics derived from DriveCam footage — seat belt and cellphone usage, following distance and failure to yield at traffic signals, for instance.

Each division is given a score calculated according to vehicle miles traveled.

Informal safety incentives

Incentives that fall outside a formal program and can be given any time are helpful as well. N.W. White & Co. provides gift cards to drivers who avoid accidents or discuss their near misses at safety meetings.

Godwin says drivers who talk about their



Photo by Doug Smith and courtesy N.W. White & Co.

at-fault accidents often are incentivized through revocation of disciplinary action.

"I have a CDL, but I've probably driven less than one-tenth of 1% of the number of miles most of our folks who are driving do," Godwin says. "So it's a lot more impactful when one of their peers who is struggling through traffic with them every day can stand up and say, 'This is what happened to me and here's what I should have done differently.'"

Management action as incentive

Szecsy says the best way management can promote a safety culture and incentivize employees is to listen — and then take swift action based on the knowledge operational managers and workers share.

For example, Charley's Concrete queried

drivers after an employee was injured last year when he missed a step while dismounting a truck.

"They very clearly articulated what went wrong," Szecsy says. "The manufacturer of the step had increased its length by about four inches. The person who was injured had trained on a truck with the newer version of the step, which is longer. His muscle memory said the step should be there, but it wasn't.

"We went all the way back to the manufacturer and said, 'We need to figure out how to retrofit these steps.'"

A safety partner

This case illustrates why having equipment partners who value safety matters, Szecsy says.

"Our culture of safety here matches very well with Mack's," he says. "They've been extremely responsive to any suggestions we have operationally or for technical improvements. And when we come across a problem we haven't seen before and ask them for suggestions, they have a wealth of resources. They just spin their digital Rolodex and say, 'We've got experts in x, y and z.' As a partner, Mack functions as the Google of safety for us." ■

"They just spin their digital Rolodex and say, 'We've got experts in x, y and z.' As a partner, Mack functions as the Google of safety for us."

Rich Szecsy, chief operating officer for Charley's Concrete

INFRASTRUCTURE

Clogged arteries

Truck speeds at top 10 most congested bottlenecks for heavy vehicles in America dropped nearly 9% year-over-year, according to the American Transportation Research Institute's recently released annual list.

"ATRI's research shows us where the worst pain points are – but they are far from the only ones," says Chris Spear, ATA president and CEO. "This report should be a wakeup call for elected leaders at all levels of government that we must act quickly to address our increasingly congested highway system."

Top 10 truck bottlenecks

- Fort Lee, New Jersey:** I-95 at SR 4
- Atlanta:** I-285 at I-85 (North)
- Atlanta:** I-75 at I-285 (North)
- Los Angeles:** SR 60 at SR 57
- Houston:** I-45 at I-69/US 59
- Cincinnati:** I-71 at I-75
- Chicago:** I-290 at I-90/I-94
- Nashville:** I-24/I-40 at I-440 (East)
- Atlanta:** I-20 at I-285 (West)
- Los Angeles:** I-710 at I-105

DRIVERS

Driver turnover rate sinks at large fleets, climbs at small fleets

The annualized driver turnover rate for large truckload carriers fell 9 percentage points during the fourth quarter of 2018 and rose 5 percentage points for small truckload fleets, according to the American Trucking Associations' quarterly update on turnover rates. ATA measures large truckload carriers as those with more than \$30 million in annual revenue.

The fourth-quarter turnover rate at large fleets was 78%, and the rate at small fleets was 77%. For all of 2018, the turnover rate was 89% at large truckload carriers and 73% for smaller fleets.

INDUSTRY INDICATORS

Trucking conditions remain positive

FTR's Trucking Conditions Index, which tracks changes representing five major conditions in the U.S. truck market (freight volumes, freight rates, fleet capacity, fuel price and financing), was 1.71 in February.

1.71

A positive score represents optimistic conditions, while a negative score represents pessimistic conditions. Readings near zero are consistent with a neutral operating environment. FTR projects the TCI measure to remain close to neutral throughout 2019 and into 2020.

386,000

trailer orders in past 12 months

Trailer market performs above expectations

Trailer orders fell 9% from January to February, but the trailer market is still performing above expectations, says Don Ake, FTR's vice president of commercial vehicles.

"The trailer market continues to show surprising resilience despite the moderation in economic and freight growth," Ake says. "The current strength of the trailer market is good news for the general economy. It indicates fleets expect sturdy freight demand to continue throughout 2019."

1,200 fewer jobs

Trucking employment remained flat in March

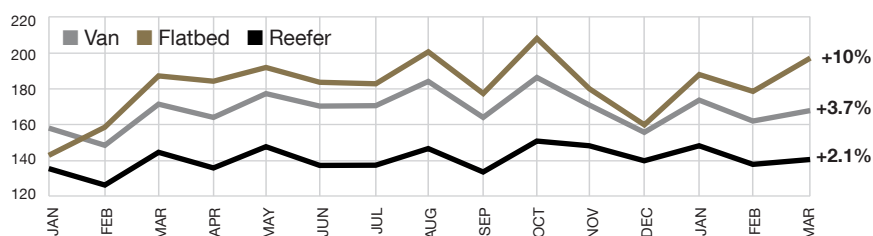
Employment in the for-hire trucking industry declined by 1,200 jobs in March. This was the first month-to-month drop since April 2018 and only the second in the past 19 months.

In March 2019, employment in the for-hire trucking industry was 1.51 million – a gain of 28,500 jobs from the same month in 2018. The U.S. economy as a whole added 196,000 jobs, and the unemployment rate was 3.8%.

FREIGHT

Spot market freight volume

(January 2018 through March 2019)



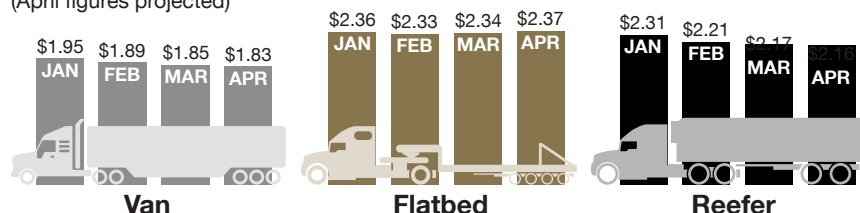
Freight volume climbs, rates stagnant

Spot market freight volume in the three major truckload segments (van, reefer and flatbed) jumped in March from February and were down only slightly year-over-year, DAT reported in its monthly Freight Index.

"We anticipated a bigger increase in demand for trucking services, but unexpected events, including flooding in the Midwest and a major tank fire in Houston, prevented the typical surge of shipments ahead of the close of Q1," said Mark Montague, DAT senior industry analyst.

Truckload rates

(April figures projected)



Source: DAT

Source: U.S. Department of Labor Employment Situation Report

AT WORK

Data, drivers and reliability

Scotian Distribution Services turns to Mack for dedicated logistics

By Jim McNamara





Photos by Shelley Wyman

AT WORK



Erville Ellsworth, president of Scotian Distribution Services, left, talks to driver Joseph Mason.

Erville Ellsworth likes to know what's happening. His fleet, Scotian Distribution Services (SDS), of Halifax, Nova Scotia, handles freight that has to be tracked and accounted for every step of the way. This means all elements of his operation must work seamlessly for the special handling and sometimes high value shipments. Data keeps his operation reliable and his customers happy.

"Exceptional service is what we've built the company on," says Erville, who started the fleet in 2003. "There's other people out there — they're trucking companies. Our diversification is that we're specialized. We'll transport general freight, but the majority of the time is dedicated logistics."

SDS' freight includes bonded and insured freight, pharmaceuticals, perishable shipments such as fresh seafood, and air cargo. These shipments require extra security and tracking. "Anything that goes through the mail, we're hauling it," he says.

"We have air cargo security in place. We're able to go onto the tarmac next to an airplane. So we have a lot of security clearances that we've put in place and we follow strict rules."

The fleet is able to pick up shipments coming through Canadian customs at the Halifax docks and deliver to U.S. destinations.

This level of reliability and control can be difficult in Atlantic Canada, given the long winter's challenging weather and road conditions, and a limited population for finding qualified drivers. But it creates business opportunities, too.

SDS in recent years has looked to Mack Trucks and its dealer, Mackay's Truck Center, to meet its challenges. Disappointing experiences with other OEMs led Erville to closely scrutinize every purchase decision. This included visiting Mack's Lehigh Valley Assembly Operations and the Mack Customer Center in Allentown, Pennsylvania, for in-depth knowledge of the Mack integrated powertrain and vehicle engineering.

Local support is vital. "Knowing that your salesman (Mackay's sales representative Earl McLean) has your back is tremendous in this day and age. It means a lot to us to have that kind of relationship with these people."

"Mack has been good to our business with its proven reliability to get the job done," he says. "Mack makes a tough truck, and some of the sea container work we do is rough on a truck. Our Macks don't seem to mind it at all."

Halifax is an important port on the eastern edge of Canada. So while the freight market is modest and stable, it also has variety: containerized freight coming through the port for inland Canada, seafood from the local fisheries and inbound freight for the region.

SDS has added several Mack® Pinnacle™ day cabs and sleepers in recent years, and took delivery of its first Mack Anthem® in 2018, and



added the *mDRIVE* automated manual transmission to its spec. Erville notes that fuel economy is very important for the fleet, so the axle ratios are matched to the transmission ratios to downspeed the engines.

SDS's Mack trucks embody the increased need for efficiency that the fleet faces, while addressing the other demands for safety, driver acceptance and durability.

"There has been a large shift from the traditional square body trucks to the more aerodynamic fuel-efficient models, and to lighter weights. These are safer trucks with a much better ride and comfort for the drivers.

"We have always viewed Mack as a tough, reliable truck," Erville says. The new Macks are very comfortable for the drivers." Aside from the labor-saving *mDRIVE*, SDS specs popular amenities for the driver environment including "a great seat."

The driver environment impressed Erville. "Mack's done a really good job on the ergonomics of the dash, particularly where your hands are on the wheel and having everything within reach. You're not looking, everything's in front of you."

Respect, late model equipment, a safe working environment, scheduled work and home time are key to attracting and retaining drivers for SDS. Scheduled runs with dedicated customer linehauls help.

Qualified drivers are a critical component of SDS operations and like everywhere else, are in short supply. "Anyone can apply if they qualify, then interview and road test," Erville says. He knows not everyone will pass the rigorous security and background checks some of his routes require, but there could still be an opportunity on one of the other routes.



“Some people make mistakes. We’re human. That’s the first thing, instead of getting shown the door, we’re actually saying, ‘No, come on. Let’s try going through this together.’ We’re showing our loyalty to them right away, and they appreciate and respect the fact that respect was given to them. Already, they want to be part of this.”

He looks for that attitude in his customers, some of whom he’s been with for 26 years. “We treat our employees fair, that is all anyone wants. We look for the same quality in our customers we choose to do business with. If they treat their employees fair it says a lot of how they will treat our employees.”

The drivers play a huge role in the fleet’s high safety ratings. “That’s something that the employees take pride in. That’s something they did. We didn’t do it — we created an idea, but without those men and women, it will not happen.”

Mack’s GuardDog® Connect telematics platform is a logical step for SDS, since Erville has been sold on telematics for years.

“Mack has been good to our business with its proven reliability to get the job done,” he says. “Mack makes a tough truck, and some of the sea container work we do is rough on a truck. Our Macks don’t seem to mind it at all.”

Erville Ellsworth, Scotian Distribution Services

“Putting the investments in telematics in the beginning is what allowed me to get where we’re at today, he says. “The fuel savings alone by putting the GPS in the trucks paid for it five times over.”

The old ways of doing business are over, he says. “That approach of just hook it up to the trailer and go is dead. Don’t tell me what is good

with a truck, tell me what’s wrong with it. I’m just looking for upfront information.”

SDS’s goal is less downtime and more uptime, and communication helps make that happen, he says.

“We’re looking to Mack to help us achieve that with future purchases.”

The fleet has one employee whose only job is to monitor fuel

usage, which allows SDS to quote more accurate fuel expenses to customers. Data also helps him match the right truck to the load.

“When we’re running our own gear, we’re getting our top mileage. We have happier drivers because they know they’re running good gear, and not someone else’s problem. Profit is not a bad word.” ■

AT WORK



Snow job

Utah DOT plows
ahead with Mack

Story and photos by Jim McNamara



AT WORK

Snow is a big deal for the Utah Department of Transportation. That's not surprising, considering that parts of the Wasatch Range east of Salt Lake City can get up to 500 inches of snow a year, attracting hundreds of thousands of skiers.

"Our biggest job is primarily plowing snow," says Jeff Casper, UDOT equipment operations manager. "That's what we do, plow snow."

Plowing is a punishing application, with repeated shocks to the trucks' chassis and components, exposure to corrosive salt and brine, and demanding engine and transmission cycles. Plus, public safety requires well-plowed roads. Lives may depend on it.

The amount of snow the mountains get, combined with the steep terrain near Utah's world-famous ski resorts, produces significant risk of avalanches washing over some of the heavily traveled roads leading to the slopes. Little Cottonwood Canyon Road to Alta and Snowbird is the most avalanche prone highway in the U.S. — yet it handles thousands of cars every day. In these cases, UDOT operates constantly moving trucks in order to clear the roads and prevent traffic from coming to a standstill. Stationary cars are targets for being buried or even pushed over the side of the road by avalanches. Even UDOT's plow truck drivers wear emergency avalanche beacons, in case their trucks get buried.

So obviously, this calls for a tough and reliable truck. Most of UDOT's 500 Class 8 trucks are Mack® Granite® models. Casper

says the trucks take the punishment of plowing in stride and the drivers like the Granite, too. That's important when the drivers may be working 16-hour shifts during major storms.

"They're nice inside, nice and roomy. We've tried other manufacturers, and it's pretty tight in those. They feel like the driver's sitting right on top of the wheel," Casper says.

The interior of UDOT's Granites gives drivers a clear view over the front plow and to the sides of the hood. Individual trucks are tailored for the demands of their routes, Casper says, with some having wing plows on both sides or only one side. For plowing the interstates, they may deploy both wing plows and a "tow plow" attached to the rear of the truck, so that a single truck can clear two lanes and the shoulder in one pass. The cab is a snow-removal command center, with joysticks for each plow, controls to measure the amount of deicer spread per mile, radios and side camera monitors.

Casper appreciates that Mack's Body Link III wiring allows for plug and play installation of many of these systems, without the complications found in CAN networks.

"Mainly what we're looking for is consistency," he says. "We want a driver to be able to go from one truck to another and



everything looks the same. When he gets in, everything functions the same way, the plow controls work the same, so there's no surprises. We try to match every detail as closely as possible to the other trucks. It improves efficiency and safety."

The drivers appreciate the Mack *mDRIVE*™ HD transmissions the trucks now come with, not least because they no longer have to worry about shifting and can focus on the road conditions and plow controls. This additional focus can be critical, given the dense traffic they frequently find themselves in near the ski resorts and the Salt Lake City metro area.

The fleet is responsible for roads and highways across the entire state, all 84,899 square miles of Utah. When not plowing snow, UDOT maintains the roads, including Interstates, highways, secondary roads, lighted streets, signals and bridges.

"The farther you get away from Salt Lake, the more UDOT actually takes care of," Casper says. More rural areas are taken care of by the state, while larger cities and towns, especially Salt Lake City and nearby towns, have their own public works departments. Large parts of the state are desert.

UDOT has refined the base spec for their Granites to an efficient package: Mack MP®8



Utah Department of Transportation employees Shawn Wright (left) and Jason Winch take a break while keeping the roads to the slopes open, during a typical snowy day in the Wasatch Mountains.



Utah DOT by the numbers

- **84,899** square miles in the state of Utah
- **103,208** miles of roads and highways UDOT is responsible for plowing
- **500** inches of snow per year in some areas
- **4,500** pieces of equipment in UDOT's fleet
- **500** class 8 trucks in UDOT's fleet
- **16-20** years of expected lifespan for plow trucks
- **10** years depending on Mack
- **85** Mack-certified technicians
- **6** shops across the state

engine rated at 455 hp and 1650 torque, mDRIVE HD 13-speed automated manual transmission and auxiliary pusher axles in some configurations. They are expected to remain in operation for 16-20 years.

Since the Granites take so much abuse during their normal operation, UDOT places a premium on technician training. The fleet does all non-warranty repairs on the trucks and has about 85 technicians statewide. There are six regional repair facilities across the state, while the fleet headquarters in West Valley, outside of Salt Lake City is the "hospital" for major repairs.

"Our guys are trained up on the Granites, we pay for factory training directly from Mack. They come train us on parts, their software. So our guys, when they're going out at 2 o'clock in the morning, they feel really familiar and know they're pretty well trained on this. It's easier to fix than trying to go out and learn something in the middle of the night.

"They do everything online, and then twice or three times a year we get with the Mack training people. We haven't quite gotten where everybody's been through every single module, but that's the goal, to work every single technician through that training. It's helped a ton."

"[The Macks are] nice inside, nice and roomy. We've tried other manufacturers, and it's pretty tight in those. They feel like the driver's sitting right on top of the wheel."

Jeff Casper, UDOT equipment operations manager

He's also positive about Mack's Connected Services. GuardDog® Connect telematics and Over the Air software and parameter updates are welcome, since OTA can save a seven-hour one-way drive for a software update.

Casper praised his Mack dealer, Mountain West Truck Center. "They treat us extremely well."

Mountain West and UDOT have worked together over the years to get snowplow specified in and to streamline the process necessary to get such complicated vehicles into service. When Granites are delivered from Mack Trucks, the dealer "pre-inspects" the units before sending to UDOT, who installs some systems, such as wing plow compo-

nents and radios, before the units are sent to the body builder to install the hydraulic systems and the dump body. UDOT installs the rest of the components and "finishing touches," as Casper says. Mountain West then runs the units through a final pre-delivery inspection and signs off on the completed vehicle. Finally, each new Mack Granite is delivered to the UDOT facility it will be domiciled at and placed into service.

Casper likes to point out that Utah has a range of challenges, and attractions. "You can go skiing this morning, get on the freeway, go to St. George (in the southwest corner of the state) and play golf this afternoon." And that's because UDOT will have plowed the roads. ■

AT WORK

BECO delivers



BECO Inc. relies on Mack Anthem® and Pinnacle™ for on-time mail delivery

Bruce Hoger has BECO Inc. dialed in to reliability, on-time performance and fuel economy. The fleet is as dependable as the mail, which is what you expect from a company that delivered its first load for the nation's post office in 1951 and is now the fifth-largest mail hauler in the U.S. It's a market segment that remains in demand.

"While we've seen a decline in first class mail, there's been a huge increase in demand for package deliveries," says Hoger, BECO's general manager. "Everybody shops online now, and it's got to go on a truck."

BECO primarily covers the western U.S. with its headquarters in New Salem, North Dakota, and its main hub in Denver. It is a family-owned company, with Etheleen

Hoovestol its president since her husband Burton passed away in January 2009.

Operational efficiency is very important in BECO's hub-and-relay system, Hoger says. "For example, we run from Denver to Seattle. We have a driver who will leave here and go to Ogden, Utah. He gets out and another driver gets in and takes it to Hermiston, Oregon. He gets out and another driver from Hermiston will take it to Seattle and right back out while the guy from Ogden is taking his 10-hour break. It's a system that works really well."

Denver is the main hub for the mail operation, with two main U.S. Postal Service facilities within a mile of the fleet's yard. "We haul anywhere from 75-80 loads of mail in and out

of Denver every day. That's 75 to 80 out-bound, and 75 to 80 inbound every day."

BECO operates about 240 trucks and has about 350 employees. Roughly 180 drivers are based out of Denver, with relays and terminals in New Salem, Phoenix, Albuquerque, Ogden, Salt Lake City, Billings, Missoula and Omaha. In addition to hauling mail for the USPS, the fleet has a smaller truckload dry freight division.

The fleet has relied on Mack® Pinnacle™ models for years and recently started taking delivery of Mack Anthem® models. The long-haul mail runs give trucks a workout every day, as BECO day cabs average about 220,000 miles a year. Some units rack up as much as 350,000 miles per year on certain



Story and photos by Jim McNamara

routes but get rotated out on an accelerated basis.

Obviously, there is great pressure for mail to be delivered on time and without problems. So Hoyer cites durability, performance and lack of downtime as critical elements of the fleet's success.

Fuel economy also plays a major role in BECO's operations, and Hoyer has honed his specs to get the best results: Mack MP®8 415E engine with 3:08 rears and full aerodynamics, with close attention to a tight trailer gap on the 180-inch wheelbase. "I change the kingpin setting on my trailers to suck the trailer up farther to the back of the truck."

Some of his recent trucks have been spec'd with Mack's 6x2 liftable pusher axle to



reduce weight and improve fuel economy. "Those work well," he says. "Fuel mileage is probably a half to three-quarters of a mile to the gallon better than a 6x4." In the summer, the 6x2 trucks can make it from Denver to Tucson and back on one tank of fuel.

The results fleet-wide are impressive, especially considering the altitude, terrain and temperature extremes the trucks encounter throughout the course of a year.

BECO handles all maintenance in-house, with warranty work going to their Mack dealers. He finds Mack's Uptime Services effective and makes use of the features on GuardDog® Connect and ASIST for managing service events. The fleet is also using Mack Over The Air for remote software and parameter updates without having to take the truck out of service to go to a dealer.

In recent months the company has added about 20 Anthems to the fleet, and the models have been popular, Hoyer says. The truck's visibility, safety and driver comfort, along with Anthem's bold looks, are selling points for drivers. It's a bit of a change, but it is a big help with the intense driver shortage.

"Drivers like them, I like them. They're smooth, they're quiet. They're very driver friendly. Used to be that you didn't care what you spec'd for a truck, as long as it got fuel

mileage and made it back and forth. Now, with the shortage of drivers, you've got to spec them for what the drivers like. It changes your philosophy on how your operation works with the driver demands right now.

"Up until this year, I never spec'd a truck with a refrigerator in it. Now I am, just because of driver needs. It attracts drivers."

The USPS has strict standards for who can and can't handle mail and who can drive a mail truck. All drivers have to be screened to get a postal ID badge. With the exception of a few minor misdemeanors, anyone who has a criminal record can't have access to the mail.

There are a few things that work in BECO's favor. "Most of our drivers are home every day or every other day; that's a benefit. And hauling U.S. mail is relatively easy on the driver," since the cargo doesn't require much handling on the part of the driver or detention at facilities.

Work is done under bid, but he says that once you get the postal contract

and do a good job, the USPS doesn't usually don't take the contracts away, so driver retention is not much of an issue.

BECO has held some of its mail contracts for decades, some even for as long as 50 years.

"BECO has a very good reputation with the postal service and we're looking all the time to expand," Hoyer says. ■



"Drivers like them, I like them. They're smooth, they're quiet. They're very driver friendly."

Bruce Hoyer, general manager

Road masters

Mack Trucks dominates road building with Granite[®], Pinnacle[™] and TerraPro[™] models.

By Olivia McMurrey

Perhaps nowhere is the reliability, durability and productivity of Mack[®] trucks more apparent than in road building.

“When contractors have everything lined up, there’s no room for a truck to break down along the way,” says Tim Wrinkle, construction product manager for Mack Trucks.

Trucks also have to maneuver in tight quarters and stand up to rugged terrain and harsh conditions on road-building jobsites, yet Mack excels at this application with the Mack[®] Granite[®] and Granite MHD (using dump, concrete mixer and pump bodies), the TerraPro[™] (for concrete pumping) and the Pinnacle[™] (end dump and flatbed/lowboy trailers for hauling heavy equipment).

Visibility

Visibility is crucial on road-construction sites. Drivers need to watch out for equipment, workers, pedestrians and other vehicles, and they need to know how much operating space they have.

“The more visibility you have, the less likely

you are to have an accident,” Wrinkle says. “It also helps maneuverability to see, for example, that you have 5 more feet to back up and turn around.”

Granite and Pinnacle models provide exceptional visibility. “The sloped hood and large-size mirrors both on the hood and side deliver maximum visibility,” Wrinkle says. “There’s also the peep window in the passenger side near the floorboard, so from the driver’s side you can see near the ground and eliminate blind spots on the right side of the truck.”

The Granite sports a large rear window and backup-camera support through an optional infotainment system, Wrinkle says. The cabover TerraPro boasts best-in-class forward and side visibility, with a large windshield, low-profile dash, side and rear mirrors and ergonomic seat position.

Maneuverability enhanced by mDRIVE[™]

Maneuverability challenges pervade road-building jobsites. There might not be

room to turn a truck around, and simply not getting vehicles stuck in soft, muddy ground can be difficult.

The mDRIVE[™] HD automated manual transmission ensures drivers don’t get bogged down with these conditions.

“A lot of times you have to back up long stretches because there might not be room to turn around,” Wrinkle says. “So the truck has to reverse for sometimes miles to get to where it needs to be. One thing our mDRIVE has is multispeed reverse gears, so they can reach a desired fast speed in reverse and not lose time.”

Keith Cates, director of fleet service at Concrete Supply Company in Charlotte, North Carolina, says mDRIVE is especially useful in reverse and downhill operations. “That’s one of the reasons I got them,” he says of his company’s 16 Granite trucks with mDRIVE HD 14-speed transmissions.

Cates also says the mDRIVE HD’s quick shifting helps keep trucks moving over muck and sludge. One recent job “was a mud hole, and they performed well,” he says.

Mack rear axles also improve traction with an automatic interaxle power divider that



Versatility galore

Mack trucks can be configured and upfitted for any road-building application.

The Granite comes in true set-forward and set-back front axle positions, allowing customers to spec both bridge formulas and standard concrete mixers and to build dump trucks specific to their needs. Each Granite chassis is built with application-specific crossmembers and frame rails offered in various thicknesses.

The TerraPro – available in single, tandem and tri-drive configurations – can be customized with multiple steer, drive and auxiliary axle combinations.

The axle-forward Pinnacle provides a longer wheelbase to optimize weight distribution and maximize payload capacity. The Pinnacle also offers several suspension options, including high-articulation mechanical suspensions such as the Mack *mRIDE*[™] or Camelback and durable, lightweight air suspensions such as the Mack AL.

Mack trucks leave the factory ready for upfitting, and the Mack Body Builder Support Group is composed of experts who promptly answer questions during the upfit process.

Mack's clean, back-of-cab chassis packaging makes more space for the body.

The BodyLink III wiring harness simplifies body installation because it permits body builders to integrate communication from the body to the truck electrical control unit without the need for wire splicing, which can compromise the integrity of the system and void warranties.

"It's already hooked up and runs through the cab floor, so a body builder can just plug in whatever wires they need to that connector," Wrinkle says. "The body builders we've talked to all say the Mack system is the best and easiest to work with." This helps customers save money on installation costs, he adds.

Granite mixers are primed for upfitting with a rear-engine power take-off (and an additional access panel in the cab floor to service it); a special mixer crossmember designed for mounting the mixer barrel pump; and frame rail transition plates for strong mixer body mounting.

Uptime

Because scheduling is key in the road-building business, uptime is a must. If a load of aggregate, concrete or asphalt doesn't arrive on time or a concrete pump truck fails to show, an entire project can be compromised. Mixer-truck operations face additional consequences since the short shelf life of the product they haul means concrete might have

diverts as much as 75 percent of power to wheels with grip.

The *mDRIVE* HD transmission, offered with 13- and 14-speed creeper gears, also assists with multiple road-building tasks, providing improved startability while maximizing fuel economy and reducing driver fatigue.

The 14-speed has an extra-deep 32:1 gear ratio that allows for the low-speed creeping needed for curb-pouring mixer applications and controlled dumping. In paving applications, Rolling Start allows drivers to go directly from neutral to drive without applying the service brake. This eliminates bumps in paving surfaces when dump trucks are providing asphalt to paving machines. Another feature, Grade Gripper, keeps the truck's position steady on an incline for up to three seconds after the brake is released, which is key for safety and control on a grade, Wrinkle says.

Mack engineers also considered ground-clearance requirements for trucks maneuvering highway-construction sites. The Granite's Cornerstone chassis has a constant frame rail height that provides maximum ground clearance. And Mack rear axles have

unique, top-mounted carriers for superior ground clearance as well.

The TerraPro's compact cab design, 58-inch BBC, makes the concrete pumper relatively easy to maneuver into tight spaces on road-building jobsites. Mack's maintenance free Unimax[®] axles give drivers exceptional front wheel cuts, clearance and turning radius. Likewise, Pinnacle's chassis is configured to support heavy, demanding loads on any terrain.

Legendary power

Mack MP[®]7 and MP[®]8 engines power Granite, Pinnacle and TerraPro models. The engines tune their strength for consistent speed and torque across the wide operating range required for road-building applications. The Mack Maxidyne[®] engine offers extended rpm ranges and high torque rise for off-road and jobsite use, and the MaxiCruise[®] engine offers both power and economy for off-road and on-highway operations.

Through Mack's integrated powertrain, engines, transmissions and rear axles work together to provide the best fuel economy possible.

APPLICATIONS



to be wasted or chiseled out of the drum if a truck doesn't arrive at its destination as planned.

Mack's GuardDog® Connect telematics platform is an uptime solution that monitors trucks in real time for potential issues and starts the support process immediately. GuardDog alerts OneCall® of any maintenance or repair needs, and OneCall leverages Mack ASIST to give drivers, dealers and Uptime Center staff access to repair information — all while the truck is still working.

Wrinkle says GuardDog's recently launched Over The Air updates are making a big difference for customers in the road-building industry.

With OTA updates, drivers can schedule vehicle software updates anywhere they have a cellular signal — on a jobsite, at the company yard — instead of taking trucks to service centers.

"A truck might need a software update, and even though it's only a 30-minute update, previously you had to drive the truck to the dealer and wait for them to get to you," Wrinkle says. "You also had to shuttle drivers, so there were resources tied up along with the truck." OTA eliminates these headaches and downtime.

Driver comfort

In road-building applications, drivers spend a lot of time working and waiting in the cab, Wrinkle says, and they want to spend that time in a comfortable, well-designed space.

The interiors of the Granite and Pinnacle



were updated with automotive styling in 2018.

The driver is positioned in close proximity to all frequent-use buttons and switches, Wrinkle says, and easy-to-read gauges bring important information to the forefront. The Mack® Co-Pilot™ 5-inch, full-color digital display is simple to navigate.

Ergonomic improvements include a flat-bottom steering wheel that provides more

clearance for entry and exit and premium, Mack-exclusive seats that feature air suspension, an optional swivel base and more than 30 feature and fabric combinations.

Robert Thompson, owner of Advanced Pumping LLC in Victoria, Texas, says the comfort level inside the cab of the Granite he put into service last summer is phenomenal. "My driver thinks it's a Cadillac inside," he says. ■

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To the rescue



Mack dealer RDO Truck Centers helps nonprofit Farm Rescue provide flood relief to Midwest ranchers

By Olivia McMurrey



After the Midwest suffered unprecedented flooding in March, Farm Rescue — a nonprofit that helps family farms and ranches bridge crises — sprang to action, with help from its Mack dealer, RDO Truck Centers.

RDO is leasing a new Mack Anthem® high-way tractor with a sleeper cab to Farm Rescue at a significantly reduced rate. Farm Rescue is using the Anthem, along with its five other Mack® trucks, to deliver hay to desperate ranchers, mainly in Nebraska, who were able to save cattle from the flood waters, but not their food supply.

“This is the worst natural disaster in Nebraska’s history,” says Levi Wielenga, operations manager for Farm Rescue. Three-quarters of that state’s 93 counties declared emergencies, and damage costs surpassed \$1.5 billion (including \$800 million in farm/ranch losses) in late March, according to state officials. “It would not shock me if the final estimate is \$2 billion to \$2.5 billion in losses,” Wielenga says.

While ranchers lost both cattle and the hay that sustains the animals over winter, they lost more of the latter because hay is often stored in low-lying areas that aren’t productive for farming. Many ranchers had time to open gates and usher cattle to higher ground, but not enough time to transport hay supplies, Wielenga says.

Farm Rescue is using its own trucks and trailers, and coordinating volunteers with trucks to haul hay from states such as North Dakota, South Dakota and Minnesota to drop sites in Nebraska and parts of Iowa, and to deliver bales from drop sites directly to ranches. The organization had helped deliver approximately 1,300 hay bales by April 9.

Wielenga says the Mack Anthem — a demo unit with only 5,000 miles on the odometer — has been crucial to Farm Rescue’s efforts.

“Having that Anthem with the sleeper is wonderful,” Wielenga says. “None of the other trucks in our fleet have sleeper cabs. It makes a huge difference not having to worry about finding the driver a place to stay every night, and it’s a huge cost savings, too. We

Photos by Dan Erdmann of Farm Rescue

TAILLIGHTS



are really appreciative. And it's a brand-new Anthem. What's not to love about that?"

Farm Rescue also helps families plant and harvest crops when members are affected by injuries, illnesses or natural disasters. Since 2005, the North Dakota-based organization has assisted more than 600 farm and ranch families, planted more than 250,000 acres and harvested more than 200,000 acres.

Wielenga expects Farm Rescue will be assisting flood victims through June. Ranchers will need hay deliveries until their flooded fields begin producing grass. The No. 1 need going forward will be fencing materials, he says, since tens of thousands of miles of fence were destroyed. Farm Rescue will be delivering those materials using Mack trucks and assistance from RDO as well.

The relationship between RDO Truck Centers, which has eight locations in Nebraska and North Dakota, and Farm Rescue began in 2008. RDO leases a Mack truck to Farm Rescue every fall at a special rate and also provides the organization with maintenance and repair discounts.

"We are proud supporters of their mission," says Justin Okeson, vice president of RDO.

Farm Rescue volunteers, Jamie Bos and his daughter Kylie of Rockford, Michigan, arrive in Vertigre, Nebraska, with a load of donated hay.

TOP: Farm Rescue volunteer Keith Barkema of Klemme, Iowa, prepares to deliver a load of hay near Vertigre.

"They do a lot of good for the community. That's why we feel compelled to give them a high level of support every year."

The qualities that make Mack valuable to so many customers have come into play in this crisis. Wielenga says Farm Rescue relies on Mack trucks and RDO due to the quality of both the product and the customer service. The organization owns a 2010 Titan by Mack and four Mack Pinnacle™ models.

"I think the trucks are built to a higher standard," he says. "There's a lot to the saying 'built like a Mack truck.' The cabs don't squeak and rattle, you don't have issues with stuff falling apart. These trucks seem to be built very tough."

And that's something Farm Rescue needs because of its operating conditions.

"We're going in and out of fields and maneuvering in tight locations," Wielenga says. "It's more of a construction-site setting than over-the-road. We're pushing them. It puts a lot more wear and tear on the truck than just going down the road and dock to dock."

Wielenga also values Mack's integrated powertrain. "I like it because you've got one dealership that really knows all the different components of the truck, and there just seems to be a pride that comes in with that," he says.

Service-center staff at RDO communicate well and conduct smart scheduling, prioritizing jobs that take little time, Wielenga says. "They're there for us," he says. "They want to get things done and get them done right." ■



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