



**Azores Fuel Tanker Incident Exercise - pg. 6**

## IN THIS ISSUE

- 2** EMPLOYEE SPOTLIGHT: Miguel Sanchez
- 4** EMPLOYEE SPOTLIGHT: Adrienne Brennan, Patricia Bermejo & Anoop Ancha
- 6** EMS RESPONSE TRAINING: Portugal - Euroscut Azores
- 8** EMS RESPONSE TRAINING: North Carolina - I 77 Express
- 10** INNOVATION: Canada - 407 ETR
- 12** INNOVATION: Spain - A 66
- 14** SAFETY CAMPAIGN: Colombia - Ruta del Cacao
- 16** PROCESS IMPROVEMENT: Ireland - M4/M6
- 18** BREAST CANCER AWARENESS MONTH



## Alberto Gonzalez U.S. President, Cintra



I am proud to work for a company that prioritizes the Health and Safety of its employees and customers. One of the keys to continuously improving our health and safety practices is to listen to those that know more about the risks that we face in our operations and, importantly, their ideas to mitigate those, and to empower them to take action in order to put the H&S of our employees and users at the forefront of our activities.

My favorite example is the initiative we undertook in our concessions in DFW to provide improved protection to our employees while doing roadside assistance or working in live traffic. Spearheaded by our roadway maintenance technicians and leadership, the team took upon themselves to design a roadside assistance vehicle equipped with a TMA (truck mounted attenuator) to enhance the safety of our technicians and users while preserving the agility required to arrive to the incidents timely. The design included other safety-oriented features both in the interior and exterior of the vehicle such as arrow boards and dual-access tool and storage space to always ensure technicians can operate safely from the non-traffic side of the vehicle.

That was the origin of the “ARMAD”, a vehicle that was recognized as an industry model by our clients and stakeholders and that has now become the standard in our concessions not only in DFW but we have continued to innovate and improve the design and we are now receiving the first units of a new version of the ARMAD in our I66 project in VA. This is a great example of what we can accomplish when H&S becomes part of our DNA.

We should take no shortcuts when it comes to providing our crews with the resources they need to provide top-notch O&M standards in our projects while they work in safe conditions.

At Cintra we are ALWAYS SAFE, ALWAYS READY!

**Alberto Gonzalez**



# WHO'S IN THE SPOTLIGHT?

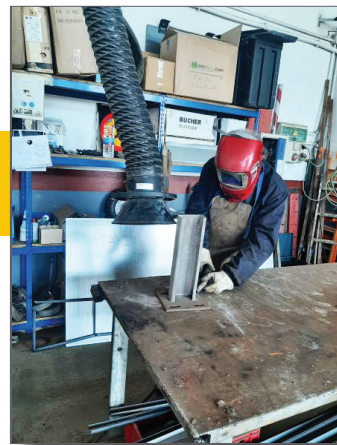


## ARAVÍA SAFETY IMPROVEMENTS MADE BY Miguel Ángel Sánchez García



### 1 Mobile Vacuum Cleaner to Capture Welding Fumes

The smoke vacuum cleaner is combined with a suction arm to maintain good air quality in the shop during welding. It also has an acoustic alarm indicating when the filter is full and a spark deflector plate for added safety.



## ARAVÍA SPAIN

*We thank you for...*

...the effort you make every day to keep the machinery and work equipment in perfect condition, which helps ARAVÍA employees feel more comfortable, efficient and safe.



**Miguel Ángel Sánchez García**  
Shop Manager

### 2 Warehouse Smoke Extractor



When vehicles need to idle inside the shop area, a hose is fitted to the vehicle's exhaust pipe to expel the outgoing gases directly outside.

The warehouse also has a forced ventilation system with a timer to ensure proper air quality in the work area.

### 3 Night Lane Closure Equipment Organized



Miguel organized everything needed for night lane closures in locked cabinets. Workers no longer waste time searching for equipment in different places.

Workers check out the cabinet keys from the Communications Center, are expected to return all equipment to its original storage place and report any operational incident. All materials are inspected weekly for repair or replacement.



### 6 Anchor for Barrier Signals



Signs used at a worksite can be placed on the road using tripods or a similar device.

Since the left shoulder often does not have the space needed to set up these signs, improvements were made to the support tripods so they can be placed on the CPN supports of the metal barrier.

This makes for easy installation and disassembly, keeps the signal out of the way of passing traffic and avoids potentially hazardous situations for coworkers.

### 7 Suitable Stairs

The best way to avoid overexertion and falling is to always use ladders suitable for the work.



### 4 Extra Step to Access Truck Cab



For workers who have difficulty getting in and out of the cab due to height, ARAVÍA installed an additional step to their truck cabs. This was supervised and approved by the manufacturer.

### 5 Light-Duty Trailer with Programmable Pictograms & Adjustable Lights

ARAVÍA added a signal trailer with two separate message displays to its portable warning system. The display has a set of four variable lights for signaling.

**“Proper signs and optimal visibility conditions protects road users and our coworkers when performing infrastructure maintenance work.” - Miguel Ángel**



### 8 Organized Signage Saves Time & Increases Work Efficiency

Avoiding mistakes is the best way to optimize work processes.

How many times has one of your work teams returned to base because they had the wrong or defective signals?

Miguel avoids this problem by sorting and classifying all signs.

**“Having all the signs arranged and sorted makes it easier for me and my colleagues to work.” - Miguel Ángel**





# WHO'S IN THE SPOTLIGHT?

We thank you for...

## AUTEMA SPAIN



**Patricia Bermejo Quirós**  
TOLL OPERATOR

...demonstrating brave behavior in the face of a burning car in our toll station. Your quick response kept everyone safe and helped Autema avoid potentially huge damages in infrastructure and income loss.

Although Patricia works for a Temporary Employment Agency (TEA), she demonstrated great commitment to our customers, operation and infrastructure by quickly controlling the flames. The car on fire sat under the canopy and close to the toll machinery.

As a result of this incident, Autema, joined with the Health and Safety Department to create a protocol to follow in such situations. The ultimate goal is learning from incidents to keep customers and employees better prepared and safer.

Autema's toll supervisor, toll manager and maintenance personnel all played a role in the positive outcome of this incident.

## M3/M4 MOTORWAY IRELAND



**Adrienne Brennan**  
QUALITY MANAGER

...taking a keen interest in the safety of our customers and employees.

Adrienne is the Safety Representative on the M4 and is proactive in her approach to health, safety and wellbeing.

At the start of the COVID-19 pandemic, she foresaw the supply chain deficiencies. She quickly took action to obtain essential supplies for the safe running of operations. These supplies were hard to come by at the time.

Most recently, she identified loose tiles in the reception area that presented a tripping hazard.

Adrienne worked with our Maintenance Team to accomplish these actions.

## Best Innovative Solution

Anoop Ancha, Operations and Maintenance Engineer for the LBJ Express Lanes in Dallas, Texas, won Ferrovial's Health, Safety & Wellbeing award for Best Innovative Solution.

Anoop led the research, selection and implementation of a fully integrated wireless weather platform called The Freeze Control System. This product provides more accurate and localized real time data to better assess the road conditions and fine tune the operations carried out by our road maintenance technicians. This minimizes the possibility of accidents and incidents. It is now being used across all three of Cintra's Dallas-Fort Worth concessions - LBJ, NTE and NTE 35W.

"This was a collaborative effort between all teams," Anoop said. "We wanted to give more confidence to our technicians, like exact information on what they can expect on the roadway, not just, 'Hey, there's a 10 percent chance of snow.'"



- [1] LBJ's maintenance team installs the Freeze Control System sensors.
- [2] The LBJ teams responsible for installing and monitoring the new system - Intelligent Telecommunication Systems (ITS), Roadway Maintenance and the Engineering Team.
- [3] Anoop Ancha, Operations and Maintenance Engineer.



By integrating the new sensors with the existing NWS weather forecast system, our managers can now tell the technicians exactly what to expect at critical locations on our roadways and what treatment to perform for these road conditions to keep themselves and all drivers safe during bad weather conditions. If we are able to tackle the worst-case points effectively, the whole roadway is going to look good. That's our goal."

After a successful trial run, the team installed 18 Frost Technology devices across the three concessions. The system collects data on both air and pavement temperatures every four minutes, as well as relative humidity (percentage), dew point and real-time imagery. This data is viewed on a graphical dashboard with customizable alerts.

## Anoop Ancha LBJ Operations & Maintenance Engineer



GLOBAL INFRASTRUCTURE  
LOCAL IMPACT





## Azores takes incident response training to the next level



Euroscut Azores emergency response incident training.

Whether it's growing hundreds of indigenous plants in a greenhouse that employees built from scrap material or running ads on prime-time television featuring local celebrities, our Azores concession takes everything it does to a higher level.

And safety is at the core of it all. When **CEO Manuel Cunha** began planning this year's annual emergency response training, he thought about how to make it as realistic as possible.

**"Until this year, we have been doing this training with only our own employees and equipment,"** says Manuel. **"We had the opportunity to organize this in a more realistic way working with other companies that also must also do a simulation test to maintain their certification."**

Manuel took the initiative to talk to the company that distributes fuel throughout Azores. Together with the local police and the fire department, they planned a full-scale simulation of a crash between a vehicle and a fuel tanker, complete with smoke to simulate the fire.

**"It was perfect because the time response was compliant with what we have to do in the contract. The driver of the fuel tanker called the Civil Protection and Fire Department, and they called us immediately and we were able to deploy. We used our variable message boards to signal the event and the detour to users. We didn't inform the normal users of this exercise because we needed to test our teams' response."**

Not only did everything go smoothly, but Manuel said he was especially pleased to see how well his response team inverted traffic.



### WHAT SURPRISED YOU DURING THE TRAINING?

**"For me, it was the massive response of the fire department and how they treated the event. They had to cool down the tanker so it didn't explode at the same time they were putting down a fire and assessing the damages of the vehicles. And then they implemented a massive watering system which created this cloud around the tanker. The tanker dropped like five degrees in just a few minutes."**

### KEY SUCCESSES

#### More realistic and therefore effective drill

**"The result was a much more realistic event which was much more useful for our teams. It was a massive step forward for us and our team loved the drill."**

#### Collaboration

**"This collaboration created a synergy that has led to companies wanting to do more, different and more complex events with us. I think we created by luck a movement that will enable us to do much more realistic events and test other situations like with electric vehicles."**

### LESSONS LEARNED

The concession learned that every tanker has a UN code representing what material it is carrying, which is important information the Control Center can communicate to its teams if an incident occurs.

**"This was something that came from the debriefing where we were asked if we have any particular concerns with some of the other products being transported throughout the island. We now have this information for us to put in our Control Center for workers to see immediately."**

### WHAT'S NEXT FOR 2023?

#### Simulating an incident involving electric vehicles and a fuel tanker

**"The personnel who tend to the road accidents don't have experience with electric vehicle fires and we have in Azores many, many electric vehicles because they represent 60 percent of the market share and are government subsidized (vehicles and charging stations)."**

Manuel, who drives an electric car to serve as an example in the company, said his choice helped him better understand the technology and the different issues it brings into operation of the infrastructure. That's why the Euroscut team (road operations and control center) has been educated in electric vehicles, their technologies and risks.

**"Our field personnel, those who could interact with these vehicles, received a revised PPE list to include, for example, the correct type of gloves. The Control Center is now alert to what type of vehicles are involved and communicates the presence of an electric vehicle to the first response authorities so the appropriate response and precautions can be taken."**





## I-77 headquarters turns into a Hollywood scene for EMS Training



I-77 Express conducts large-scale emergency response incident drill.

### LIGHTS, CAMERA, ACTION!

For four hours, the parking lot of the I-77 Express headquarters in Charlotte, North Carolina, swarmed with EMS first responders, area police officers, firefighters, sheriff deputies, highway police officers and I-77 employees, each playing their role in a large-scale emergency response drill complete with a flipped school bus, make-shift landing pad and medivac.

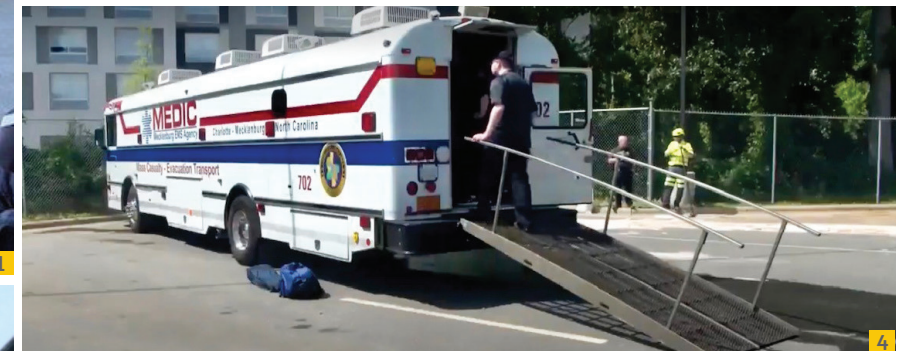
Employees acted out their roles as school children with specific injuries trapped in an overturned school bus while first responders pried open the back doors using the jaws of life. They then pulled the mock victims out and either placed them on a stretcher for helicopter evacuation or sent them to a medic for evaluation.

This kind of run-through is critical because it allows all players to see which operations took place smoothly and what can be improved. For example, making sure they can safely and quickly use the jaws of life to evacuate victims and how to safely establish a helicopter landing site on the side of the roadway. One of the suggestions that resulted from this exercise is the need to designate potential helicopter landing spots along the roadway.

**“Seeing the amount of space needed for everyone to do their role efficiently and safely underlines the importance of the ‘Move Over Law,’”** says I-77 Mobility Partners CEO Jose Espinosa. **“We have to get a lot of people on the ground and drivers are still passing us at 60, 70 miles an hour.”**

**“A well-run scene can make the difference between life and death,”** says Aaron Vickers, Cintra Global Health & Safety Director.

The event was organized and planned by I-77’s safety team and Rob Boisvert, Corporate Affairs Director. This exercise was designed to improve the efficiency, communication and cooperation between first responders and the concession’s Express Safety Service Patrol (SSP) technicians during a large-scale roadway incident.



[1] Former medic Tim Hayes lost both of his legs when he struck by a semi-truck at the scene of a crash while trying to save a victim. Hayes spoke about his experience at the event. **“Not only do we want to save the patient, but we want to go home to our family at the end of the day as well,”** says Hayes. [2] EMS first responders break a bus window to extract the mock victims. [3] Employees play the role of school children caught in the overturned bus. [4] Those (mock) victims who need assistance were taken to the mobile medic. [5] All participants in the exercise pose in front of the hospital helicopter brought in to create an even more realistic simulation of an emergency response.

Rob said this exercise proved to be a tremendous knowledge process and coordination learning opportunity. **“I think everyone walked away feeling better prepared to respond to a large-scale incident.”**

For more information on the agenda and how this event was coordinated, email [healthandsafety@cintra.es](mailto:healthandsafety@cintra.es).





## 407 ETR ahead of the curve

For the last 15 years, the 407 ETR in Canada has custom designed its own bucket trucks so technicians have a safer and more efficient space within the cab to work.

We're talking about a first-class cab, complete with a workstation, ergonomic chair, shelving, toolbox, heating and air conditioning. Instead of straining their backs bending over and bumping their heads looking for tools, the 407 ETR crews can stand up, move around and actually work in the truck all day as they make their site stops.

**Victor Diamante, Manager of Tolling Maintenance**, was there when it all started.

**"Before we were on our hands and knees trying to get tools and devices,"** Victor said. **"And then one day we started seeing these new ambulances running around and we thought, 'Hmm, it's wider, longer and you can almost stand in it. What if we put a bucket on that?'"**

With a green light from management, Victor and his team did just that.

**"We actually contacted the ambulance company up here in Canada and the supplier of the bucket ladder and basically put them together asking, 'Can we install this on your ambulance?'"**

Although they first agreed, the ambulance company eventually backed out deciding it was too costly to build just one. But the 407 didn't give up on its vision.

A vendor they work with put Victor in touch with Wilcox Bodies, a custom bodybuilder in Mississauga. Within two years, the ETR had their first **6 x 6.5 x 6 foot** custom utility cab built of structural aluminum on an existing Ford chassis. Since then, the ETR has cycled through nearly 20 cabs and currently has a fleet of seven on Dodge Ram 5500 chassis. The largest aluminum body design measures **14 feet long by 6.5 feet wide by 6.5 feet tall**.

**"Our design was really specific for what we do. We wanted a place to sit down, just like you're sitting at your desk. Now we have a whole workstation in there so when we're on the road we can do all our electronic reports. We can log into sites, do diagnostics, and then we're surrounded by tools and spare parts. And we can stand!"**

How much does a custom cab like this cost? Victor says pre-pandemic, it cost CAN \$200,00 and a year's wait to build a cab from scratch and CAN \$100,000 to \$120,000 to re-chassis an existing truck. But it's not just a cab – it's a 365/24-hour workspace that allows technicians to fix problems faster while keeping themselves safer to keep the toll revenue flowing.



### DOES THE CUSTOM CAB MAKE WORK SAFER?

It checks all the boxes for improved safety, health and wellbeing!

Victor says their technicians are more efficient because they have everything they need at all times with them and team members are happier because they're more comfortable.

**"They don't have to keep running back to the shop to pick up something no matter where they are on the road."**

- Technicians can be on-site for extended periods of time. Configuring the cabs with ergonomic comfort improves technician efficiency and reduces their exposure to ergonomic hazards.
- The lighter-weight cab allows for improved vehicle handling. Hazards associated with accelerating, braking and steering functions are reduced.
- Using a one-ton, dual rear tire truck chassis allows for increased stability when the technicians use the aerial bucket attachment.

### HOW DOES A LIGHTER CAB SAVE THE CONCESSION MONEY & REDUCE ITS CARBON FOOTPRINT?

- Average weight reduction of **30%** when compared to a steel cab which reduces wear and tear on mechanical truck/chassis components.
- Average of **12%** reduction in fuel consumption which lowers emissions and fuel costs.
- Improved durability – aluminum is rust resistant which improves the life cycle.
- Reduces fuel emissions by reducing consumption.
- Cabs can be repurposed on new truck/chassis as many as three times and recycled at their end of their life cycle.



### TAKING IT TO THE NEXT LEVEL

The 407 ETR management took a bold step recently by decided all future utility truck purchases need to be electric.

**"I'm waiting for the suppliers or the car makers to come out with something that's heavy duty enough that's all electric. Right now, the half-ton trucks coming out are too light and the big trucks require an operator license and \$300,000. I need something in the middle,"** says Victor.

Until that happens, the 407 ETR is taking measures to cut its fuel usage by **25% by 2030**.

### HOW WILL THEY MEET THIS GOAL?

- Convert the utility van into a hybrid to eliminate the need to idle for hours on end at job sites to power the ladder hydraulics, computers, light and other systems.
- For \$25,000, they can install lithium batteries and a special inverter that allows the driver to simply pull into a site, shut the truck off and plug it in with an extension cord. This will power everything they need to do without idling.

### VICTOR'S ADVICE TO CONCESSIONS CONSIDERING A CUSTOM CAB

- Look at the vehicle you're driving now and imagine what it could look like if you redesign it to meet all your job needs.
- Consider possible problems that may arise and the equipment you'll want to have on board to fix them.
- Find a custom truck outfitter.





## Highway A 66 implements a safer way to fix guardrails



Our A 66 concession identifies a safety risk and designs a solution.

Our Highway A 66 team in Spain recognized a safety risk installing and removing guardrails and decided they could do something about it.

**“Highway A66 is constantly innovating to improve all processes and reduce hazards to our employees; protecting our professionals comes first,” says CEO Francisco Moreno Merino.**

They implemented a proprietary idea that reduces risks and increases the safety of maintenance workers. Their idea is the result of the vision and ingenuity of an entire concession team. This team designed, built, installed and certified a proprietary system of two new tools that can be attached to a backhoe excavator to install and remove guardrails. This system decreases the amount of time workers are exposed to roadway risks, helping to avoid accidents during repairs.

**“As well as demonstrating the team’s creativity and drive to improve maintenance processes, this idea contributes to increasing everyone’s safety,” says Francisco. “Now, guardrail maintenance work requires much less exposure on the part of our workers.”**

The system consists of two tools – one for driving posts and the other for removing them.

### POST DRIVER

The post driver is an exchangeable accessory for driving standard posts for guardrails. It consists of a steel block, a swivel hook, grapples, bow shackles and chains. It is designed to be anchored manually on the hydraulic hammer installed on a backhoe loader. With this ingenious innovation, the worker places the steel block on the post that will be driven into the ground, secures it to the hydraulic hammer of the backhoe with the hooks and chains, and then withdraws to a safe place while the backhoe operator drives the post into the ground.

### EXTRACTOR

The extractor is an accessory designed for removing posts. It consists of a claw, swivel, yoke and bow shackle. Like the post driver, the machine is designed to be anchored manually on the hydraulic hammer installed on a backhoe loader. Once the equipment has been installed, the operator places the grapple on the post to be extracted and withdraws to a safe location.

The machine operator then extracts the post in a controlled manner, without the post swinging back and forth when it emerges from the ground. Both tools have no power source as they are operated entirely by the backhoe driver.

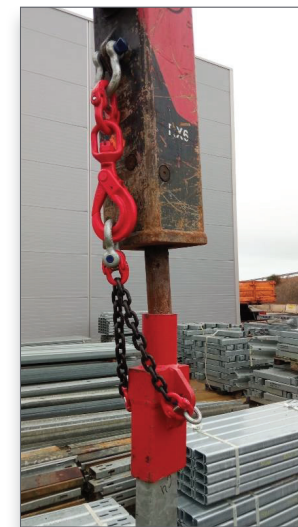
**“This is the sort of initiative we support – projects that meet a need while also avoiding accidents,” says Aaron Vickers, Cintra’s Global Health and Safety Director. “These small improvements driven by human ingenuity can save lives.”**

The tools successfully passed all certification tests. They were designed, manufactured, inspected and tested in accordance with the requirements of the Machinery Directive 2006/42/EC. They also meet the requirements of the ISO 12100:2012 standard.

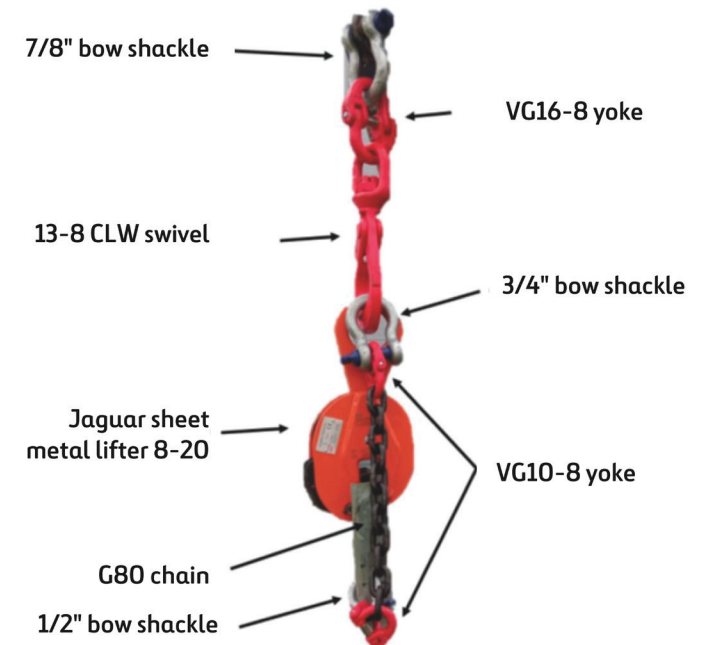
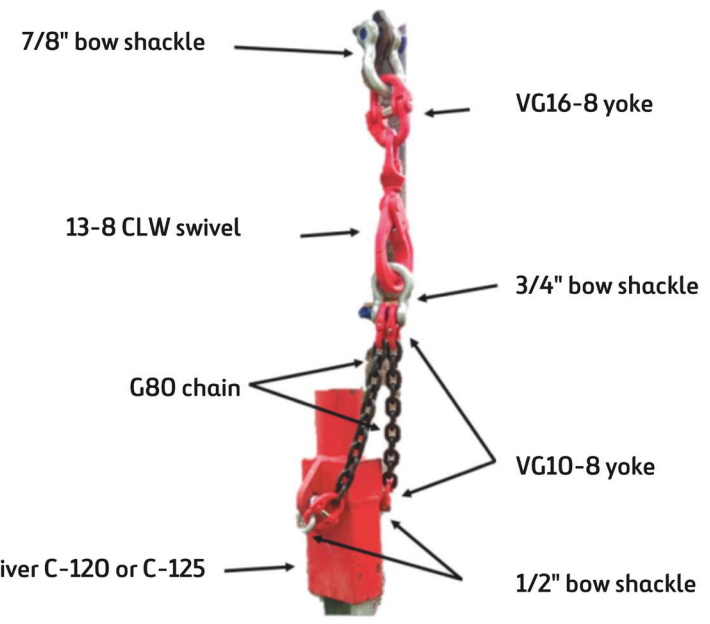
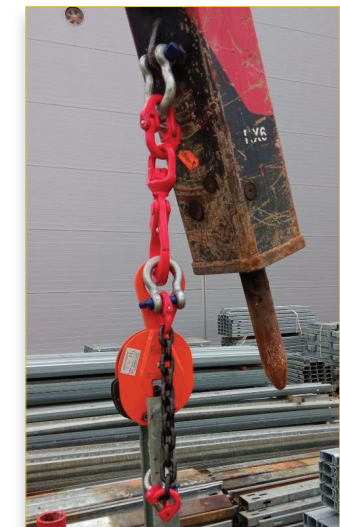
Once the tools obtained the CE mark, which required instruction manuals to be written, workers were trained in their use.

**Congratulations to the entire team for this successful innovation!**

POST DRIVER



EXTRACTOR





## Ruta del Cacao's road safety campaign reduces accident rates

**“WE ARE ALL SISO”**



Ruta del Cacao launches a successful internal safety campaign.

The Ruta del Cacao concession in Colombia is reaping the rewards of a new safety campaign focusing on identifying the hazards front-line workers face at work and implementing strategies to mitigate these risks.

The concession's accident rate fell by close to **34 percent** in 2021 compared to 2020, making the “TODO SOMOS SISO” (“We are all Industrial Safety and Occupational Health Management”) campaign a resounding success.

With Ferrovial's “Always Safe, Always Ready,” message in mind, the concession developed a campaign to involve every employee in his/her own safety.

**“This campaign enabled us to bring all the front-line personnel into a culture of active participation, where each member contributes to the safety of the entire team,”** says Edinson Candela, Director of Quality, Environment and Risk Prevention. **“As a company, we are proud to present this strategy and thank all Ruta del Cacao employees for their commitment.”**

CEO Antón Maese attributes much of Ruta del Cacao's success to its culture of encouraging teamwork, a crucial factor in avoiding accidents. **“A good work environment, communication and collaboration are all vital here at Ruta del Cacao,”** says Antón.

### BEST INNOVATIVE IDEAS BY EMPLOYEES

As part of this campaign, Ruta del Cacao asked employees to offer their ideas to make the workplace safer.

The 2021 winning ideas implemented this year came from employees **Daniel Velásquez, Cristian Motta, Martin Uriel Mazo, Durfay Osorio, Jawin Valderrama, Jaime Navarro, Amparo García and Edward Toloza.** Their suggestions contributed to improving the safety of the team as a whole.



Health & Safety Supervisor Isabel Amaya, Operator Christian Adolfo Motta and Edinson Candela, Director of Quality, Environment & Risk Prevention.

**“I am delighted to acknowledge the team's hard work and willingness to support additional workplace safety measures,”** says Antón. **“This concession is committed to supporting and facilitating any professional who reports unsafe working conditions, it encourages staff to make proposals for improvement, and it is willing to implement the ideas and solutions that they propose.”**

### KEY TO THIS SUCCESSFUL CAMPAIGN

- Robust advertising strategy.
- Leadership commitment to provide the activities and resources required to execute the campaign.

### ACTIONS THAT HELPED REDUCE ACCIDENTS & IMPROVE SAFETY

- Distribution of protective equipment - face masks with a filter, helmet sun shade and high-knee safety boots protect against snake bites and scorpions.
- Reduction of biological risk (insect bites) with beekeeper protective equipment.
- Installation of helmet lamps for operation and maintenance personnel.
- Distribution of solar protection equipment for operation and maintenance personnel.
- Replacement of safety equipment, such as high-top safety boots, for maintenance personnel.
- Reduction of physical risk (visual fatigue) through improved office lighting.

- Distribution of jack stands as an additional back-up system to avoid entrapment and crush injuries.
- Installation of lighting fixtures at the weighing station.
- Delivery of heavy lifting equipment at the control center and in tunnels.
- Implementation of a specialized vehicle lift device for mobile workshop trucks.

Ruta del Cacao's new safety campaign has resulted in continuous improvements in workplace accidents since it started. For information on how to replicate their campaign, please email [healthandsafety@cintra.es](mailto:healthandsafety@cintra.es).



**Recuerda mejorar la seguridad y salud en el trabajo, haciendo tus reportes de condiciones inseguras y sugerencias. ¡Muchas Gracias!**



[1] Employee Luz Dary Riaño Flórez participates in the ad, which says: “Remember to improve safety and health at work by reporting unsafe conditions and making suggestions.” [2] Health & Safety Supervisor Isabel Amaya, COO Juan David Navarro, Truck Driver Emanuel Archila, Supervisor Edgar Mantilla, Tow Operator Olver Aguilar and CEO Antón Maese.

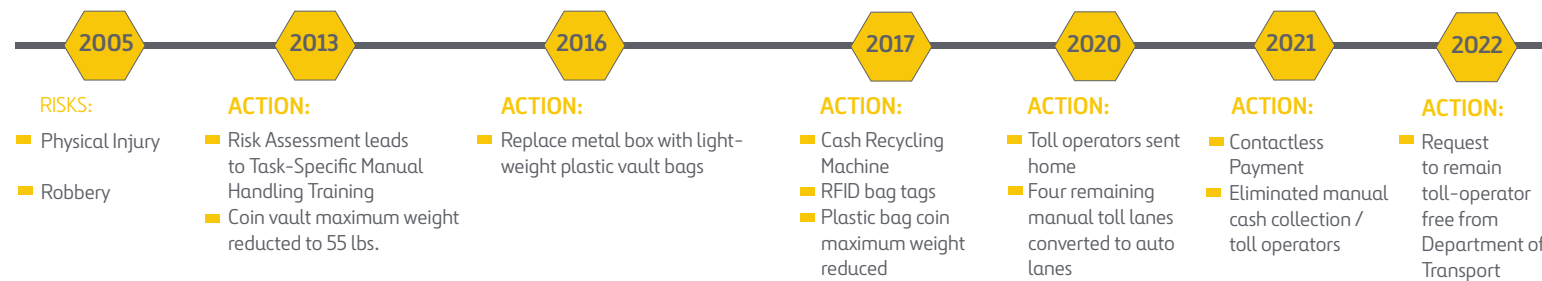


## Steadfast Persistence: A Lesson in Continuous Process Improvement from the M4/M6



The M4/M6 toll plaza and administrative building.

### M4/M6 OPENS



The M4/M6 concession in Ireland opened in 2005 with a physical challenge. How do you transport cash and coins from the off-site toll plaza to the CIT (Cash in Transit) depot without physical strain and injury to employees, not to mention robbery?

Little by little, with steadfast persistence, the concession has put in place actions, processes and equipment to decrease injuries from manual cash collection, eventually eliminating it altogether.

“Normally you would have a tunnel going from the plaza to the building and you would drop the cash down the tunnel and transport it to a cash room in the Administration building for collection by the CIT company” said Enda Tyrrell, Operations Manager. “But during the construction phase of this project the tunnel was eliminated.”

For the first 10 years, cash and coins were collected from the lanes on the toll plaza in metal boxes called coin vaults, which weighed **20.9 pounds** (9.5 kg) empty and **88 pounds** (40 kg) full. Each toll

lane contained two of these heavy boxes, which had to be pulled out of the machine horizontally along the ground, then pulled up on one end and manually carried about **six feet** (2 m) to a nearby toll booth and later another **30 to 50 feet** (10-15m) to the lane where the CIT contractor collected it. This happened daily, exposing personnel to potential robbery during the process.



The heavy metal vault used beginning in 2005 is replaced in 2016 with a light-weight plastic bag with a locking mechanism.

“It was a very difficult manual handling operation,” says Enda. “Lifting them up, they’re 40 kilograms (88 pounds) and people are dropping them on their toes, banging them against their legs. There were a lot of back injuries and muscular injuries. That was the system we inherited, and we’ve been making improvements and changes ever since to keep our staff safe and improve the efficiency of the plaza.”

### M4/M6 PROCESS IMPROVEMENT TIMELINE

#### 2013: INDEPENDENT RISK ASSESSMENT CONDUCTED ON COIN VAULT WEIGHT

##### RESULTS:

- Reduced maximum carrying weight of coin vault to 55 lbs.
- Developed and trained staff on a specific manual handling process to reduce injuries.

“Employees felt the company cares about their health and safety, so that was a positive,” says Enda.

#### 2016: PLASTIC VAULT BAGS REPLACE METAL BOXES

##### RESULT:

- These light-weight bags with a locking mechanism reduced overall bag weight by **22 lbs** (10 kg).

#### 2017: CASH RECYCLING MACHINE PURCHASED

##### RESULTS:

- Reduced bag weight to 33 lbs (15 kg). This enabled toll collection staff to carry the coin bags in backpacks from the plaza to the Administration Building cash room throughout their shift.
- Cash Recycling Machine equipped with an RFID reader that reads the RFID tag on each cash collection bag, thereby also serving as a cash reconciliation system. The **\$49,000** (€50,000) investment was recouped within three years.
- The night supervisor’s role was expanded to emptying the coin bags into the coin recycling machine and re-bagging coins for use in the hoppers. This state-of-the-art coin and note processing and recycling system eliminated the need to buy back \$1.16 M (€1.2 M) of coins each year from the CIT, reducing the daily CIT cash collection in the lanes to twice a week from the Administrative Building.
- The concession now counts and recycles coins and cash internally.

#### 2020: COVID FORCED TOLL COLLECTORS HOME

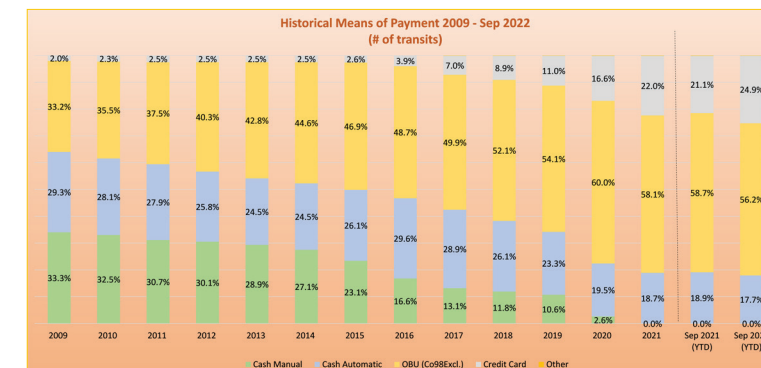
##### RESULTS:

- With this action by the Irish government, the concession closed its two manual cash collection lanes per bound and has operated the plaza in fully automatic mode since then.
- In 2021, the remaining four manual lanes were converted to automatic mode resulting in a fully automatic plaza with nine lanes per bound.

#### 2021: CONTACTLESS PAYMENT READER IN EACH LANE

##### RESULTS:

- The fear of catching COVID from handling cash increased credit card transactions from **11% of ADT in 2019 to 25% in 2022** and reduced cash transactions from **34% in 2019 to 17% today**.
- Tags and credit cards now represent about **80%** of all transactions.



#### 2022: CONCESSION REQUESTS TO CONTINUE OPERATION WITHOUT TOLL COLLECTORS

##### RESULT:

- Approximate savings of **\$294,000 (€300,000)** a year.

“Traffic is back to normal levels, so we’re demonstrating that there’s no need for toll collectors,” says Enda. “Overall, we have seen no downside. Staff are happier, the system works better, reduction in cash handling has led to a reduction in accidents. Efficiencies can lead to safer working conditions and the drive to making the workplace safer can lead to efficiencies.”

The concession retains seven toll supervisors to run the day-to-day needs of the plaza.





## Did you know men can get breast cancer?

About **1 out of every 100 breast cancers** diagnosed in the United States is found in a man. The most common kinds of breast cancer in men are the same kinds in women.

# PINK OCTOBER



United Against Breast Cancer



### WHAT IS BREAST CANCER?

Breast cancer is the second most common cancer among women, after skin cancer. It is a disease in which cells in the breast grow out of control.

### MOST COMMON WARNING SIGNS

- A lump or swelling in the breast.
- Redness or flaky skin in the breast.
- Irritation or dimpling of breast skin.
- Nipple discharge.
- Pulling in of the nipple or pain in the nipple area.
- Any change in the size or the shape of the breast.
- Pain in any area of the breast.

Since these symptoms can happen with other conditions that are not cancer, see your doctor if you experience any of these symptoms.

### WHAT ARE THE RISK FACTORS?

An important way to prevent and detect cancer early is to know your risk factors.

**MEN & WOMEN:** Getting older. Most breast cancers are found after age 50.

**MEN & WOMEN:** Genetic mutations. Inherited changes (mutations) in certain genes, such as BRCA1 and BRCA2, increase breast cancer risk.

**MEN & WOMEN:** Family history of breast cancer.

**MEN & WOMEN:** Radiation therapy treatment to the chest.

**MEN:** Hormone therapy treatment. Drugs containing estrogen (a hormone that helps develop and maintain female sex characteristics), which were used to treat prostate cancer in the past, increase men's breast cancer risk.

**MEN:** Klinefelter syndrome. Klinefelter syndrome is a rare genetic condition in which a male has an extra X chromosome. This can lead to the body making higher levels of estrogen and lower levels of androgens (hormones that help develop and maintain male sex characteristics).

**MEN:** Certain conditions that affect the testicles. Injury to, swelling in, or surgery to remove the testicles can increase breast cancer risk.

**MEN:** Liver disease. Cirrhosis (scarring) of the liver can lower androgen levels and raise estrogen levels.

**MEN:** Overweight and obesity. Older men who are overweight or have obesity have a higher risk of getting breast cancer than men at a normal weight.

**WOMEN:** Reproductive history. Starting menstrual periods before age 12 and starting menopause after age 55 expose women to hormones longer, raising their risk of getting breast cancer.

**WOMEN:** Dense breasts. Dense breasts have more connective tissue than fatty tissue, which can sometimes make it hard to see tumors on a mammogram. Women with dense breasts are more likely to get breast cancer.

**WOMEN:** Family history of ovarian cancer and personal history of breast cancer or certain non-cancerous breast diseases. Women who have had breast cancer are more likely to get breast cancer a second time.

**WOMEN:** Previous treatment using radiation therapy. Women who had radiation therapy to the chest or breasts before age 30 have a higher risk of getting breast cancer later in life.

**WOMEN:** Exposure to the drug diethylstilbestrol (DES). DES was given to some pregnant women in the United States between 1940 and 1971 to prevent miscarriage.

(Source: Center for Disease Control & Prevention.)

### EARLY DETECTION OF BREAST CANCER IN MEN

There are many similarities between breast cancer in men and women, but there are some important differences that affect finding it early.

#### BREAST SIZE

The most obvious difference between the male and female breast is size. Because men have very little breast tissue, it is easier for them and their health care professionals to feel small masses (tumors).

However, because men have so little breast tissue, cancers do not need to grow very far to reach the nipple, the skin covering the breast, or the muscles underneath the breast. Even though breast cancers in men tend to be slightly smaller than in women when they are first found, more often they have already spread to nearby tissues or lymph nodes. The extent of spread is one of the most important factors in the prognosis (outcome) of breast cancer.

## Join the Pink October Challenge with Hasavi

Breast cancer prevention starts with healthy habits, such as limiting alcohol consumption, staying physically active or eating a healthy diet. We encourage you to participate in this new challenge through our United Heroes platform and help us raise awareness about the importance of cancer prevention. It's simple:

- You can score points with any activity you do.
- All teams will work together to score points.
- Your efforts will be rewarded. Stay tuned!

## Play the "Instant Win" Challenge



Take part in the special "Instant Win" challenge to celebrate Ferrovial's global **Safety, Health & Wellbeing Week**.

From October 24-28, earn 300 points by practicing any activity and you will be entered into a sweepstakes where you can win prizes through the **United Heroes** lottery system.

**WALK, RUN, BIKE, SWIM... TO EARN POINTS!**

If you win, please contact [hasavi@ferrovial.com](mailto:hasavi@ferrovial.com).



# We want to hear from you

## HSW News

Email your suggestions and recognitions for the next issue to:  
[healthandsafety@cintra.es](mailto:healthandsafety@cintra.es).

## Cintra Health, Safety & Wellbeing web page

Cintra created this safety page on its external website so all employees, contractors and subcontractors can access our safety information.



Change the face of men's health

Join the global community of fired up Mo Bros and Mo Sisters  
– aka rock stars making a difference in mental health and  
suicide prevention, prostate cancer and testicular cancer.

**Know your risk factors. Make your health a priority.**

ALWAYS SAFE, ALWAYS READY!

“I’m in. Are you?”

