

Real Benefits of Integrating Technology and Safety

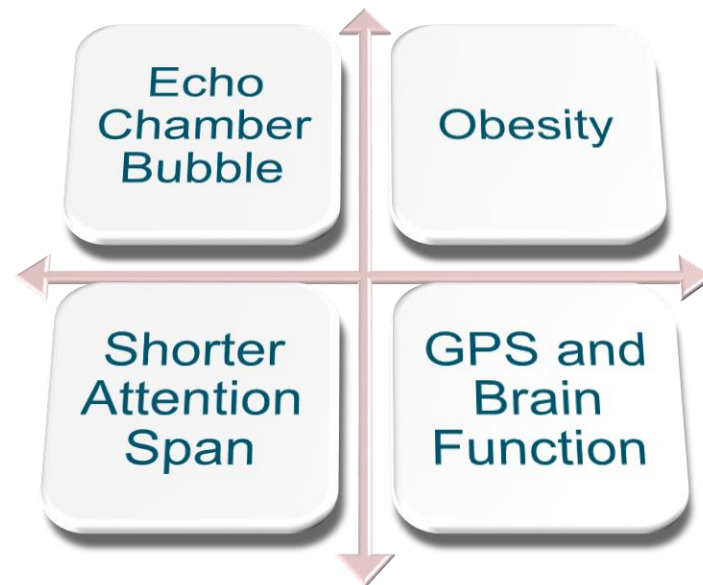
Richard Ecord, CIH, CSP
GZA GeoEnvironmental, Inc.



Is Technology Always Good?

Better

Worse

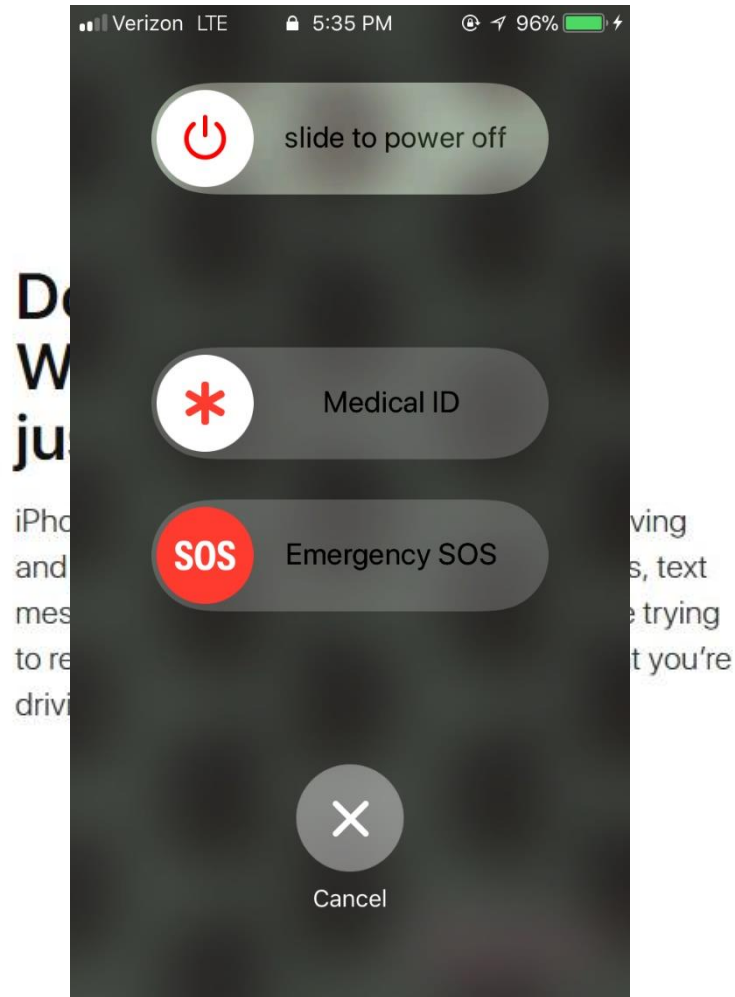


Safety and Technology

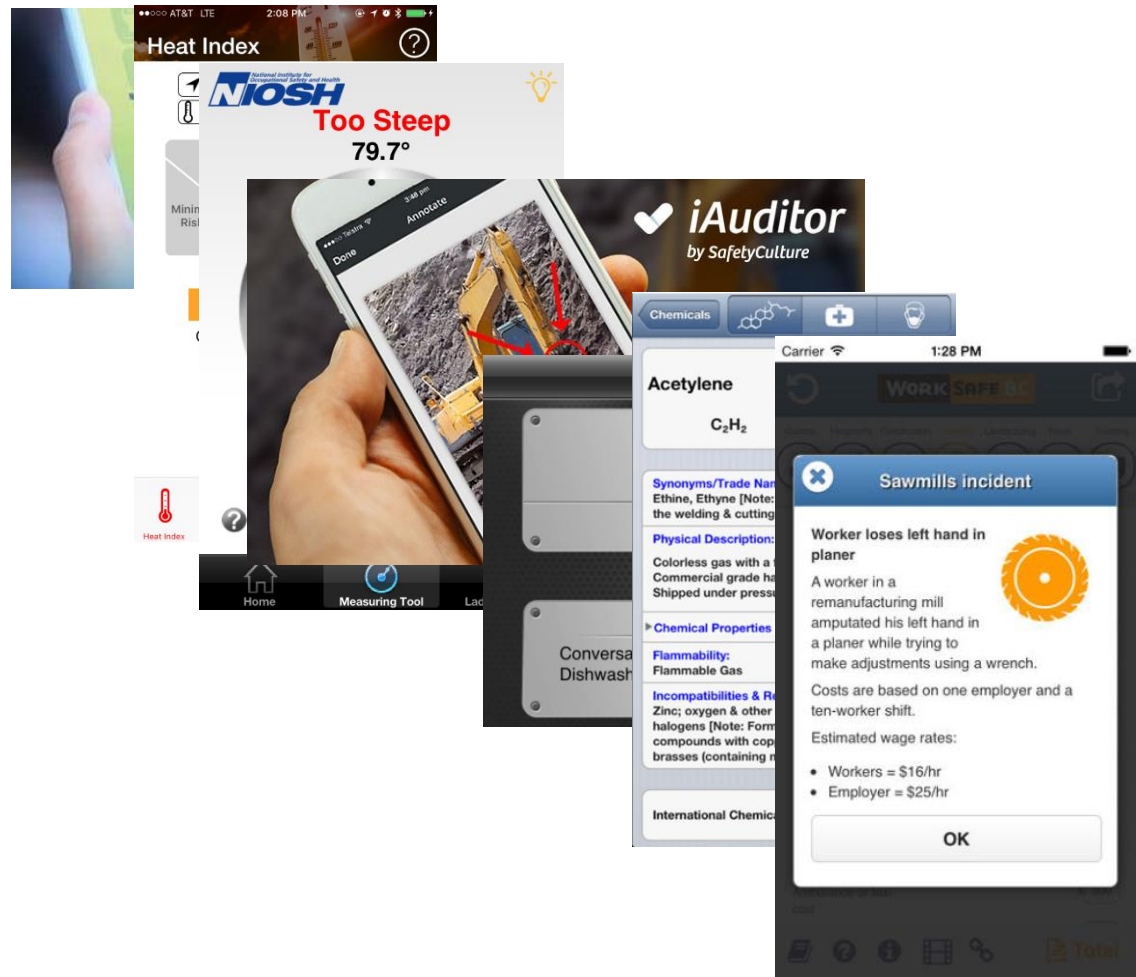


DISCLAIMER

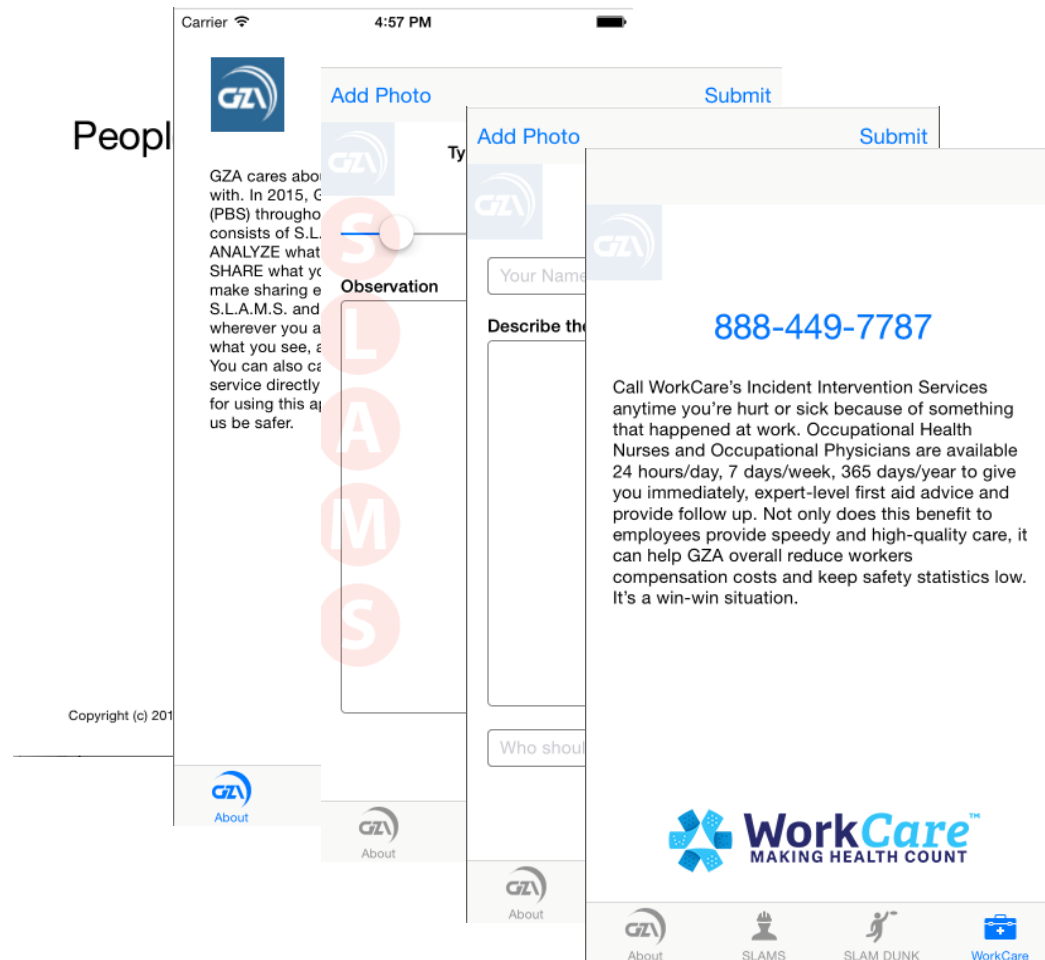
The Obvious



There's an APP for that!



Can't Find an App? Make Your Own!



No seriously, wearables will be a thing

HOW THIS FAST-GROWING SECTOR WILL CHANGE THE WAY WE WORK

Can wearing a computer change the way we work? Google Glass, Fitbit, Jawbone and other early players in this flourishing new category of mobile technology believe it will.

Productivity - BMW is testing a gesture recognition system that quality assurance workers use to identify and document component flaws virtually and in tandem – a process that presently requires a separate trip to a computer.



Speed - Motorola's RS419 is a ring-style scanner that replaces hand-held models, it enables hands-free order checking that is more accurate and comfortable to use.



Safety - "Smart" clothing items, like protective gloves made of a high-tech, toxics sensing textile will change color to signal exposure.



Up to \$50 billion

Recent forecast for wearables (total value in 2018)

\$282 million

Investment in sensors and smart devices (2013)

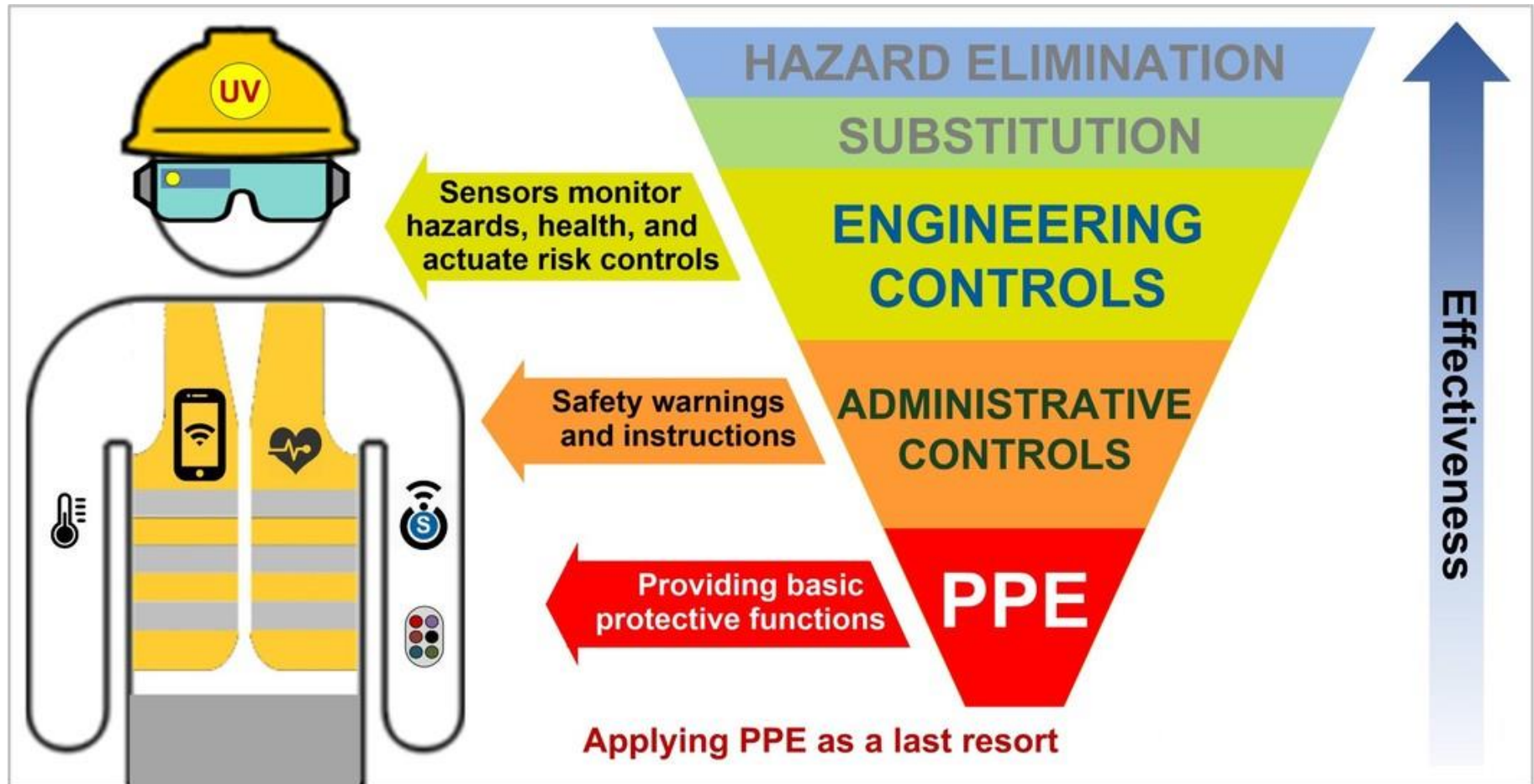
Security - Biometric devices will likely replace key cards for access to secure areas or devices.

Privacy - Kapture, an audio-recording wristband, could help employees take notes while on a job site. It's also emblematic of looming privacy issues with wearables, such as workers inadvertently recording audio/capturing sensitive images, and general infringement on employee privacy.



Image sources: Motorola Solutions, Inc., kaptureaudio.com

Smart PPE



Functions of Smart PPE in relation to the Hierarchy of Risk Controls

Smart PPE

Cell modem 4G LTE M1/N1 fallback 2G

SMARTER SAFETY APPAREL



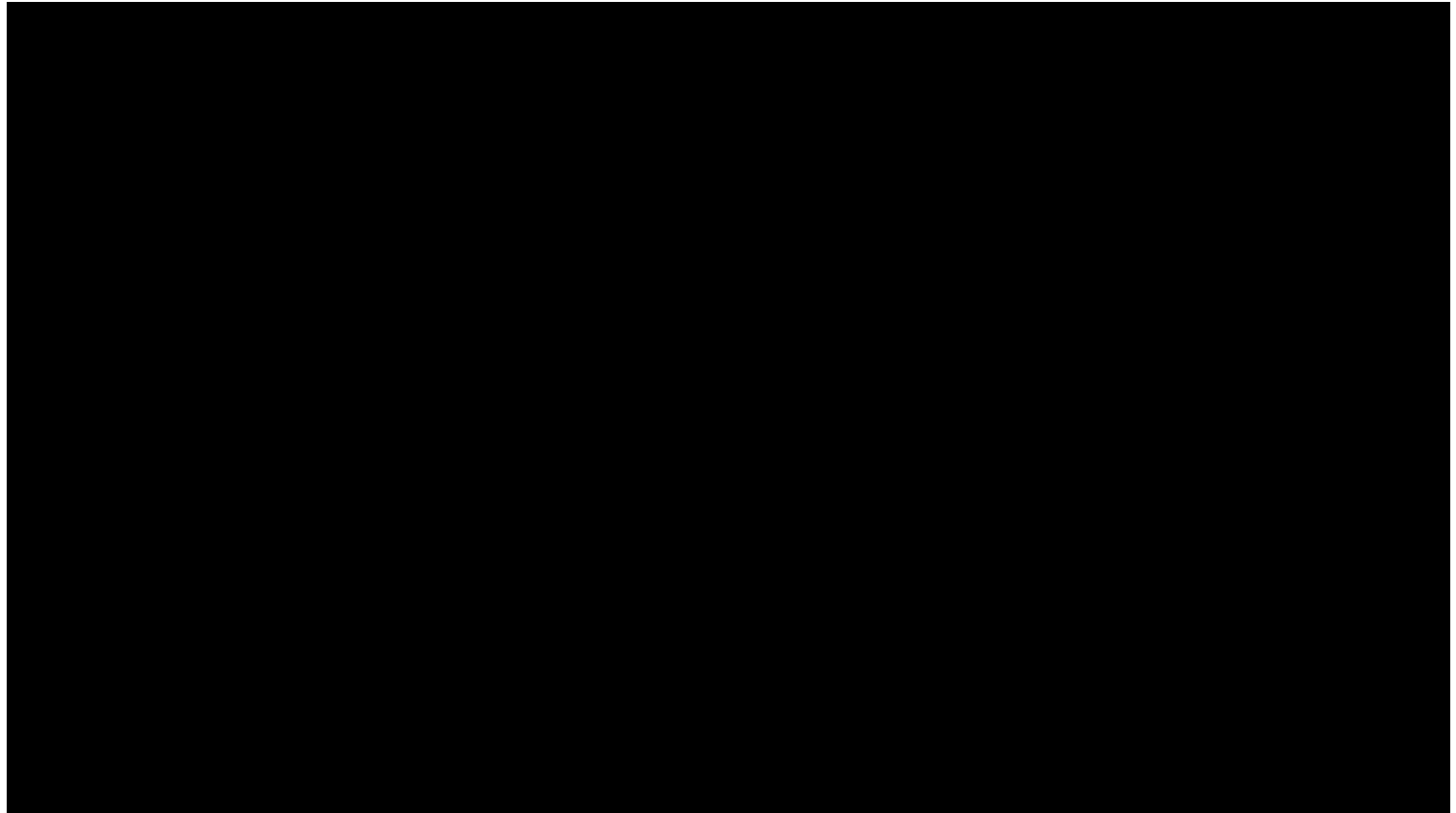
COLOR CODED ROLE IDENTIFICATION



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Lithium Polymer Battery 1000 mAh

Ice Cap



Lone Workers

Traveling Employee



Exoskeletons



Jobsite Safety

AUTOMATIC HEADCOUNT



Spot-r Clips Identify the number and location of workers on site at any point in time, providing crucial visibility that's accessible from any smart device.

SAFETY ALERTS



Automatic, location-based fall notifications and worker-generated alerts improve response to possible injuries or near-misses.*

SITE-WIDE EVACUATION



100 decibel alerts and flashing LED lights notify workers of a situation that requires evacuation to the muster point, augmenting current procedures.

OPERATOR IDENTIFICATION



Know when your equipment and machinery is being operated and by whom, improving compliance and minimizing risk.

OPTIMIZE RESOURCES

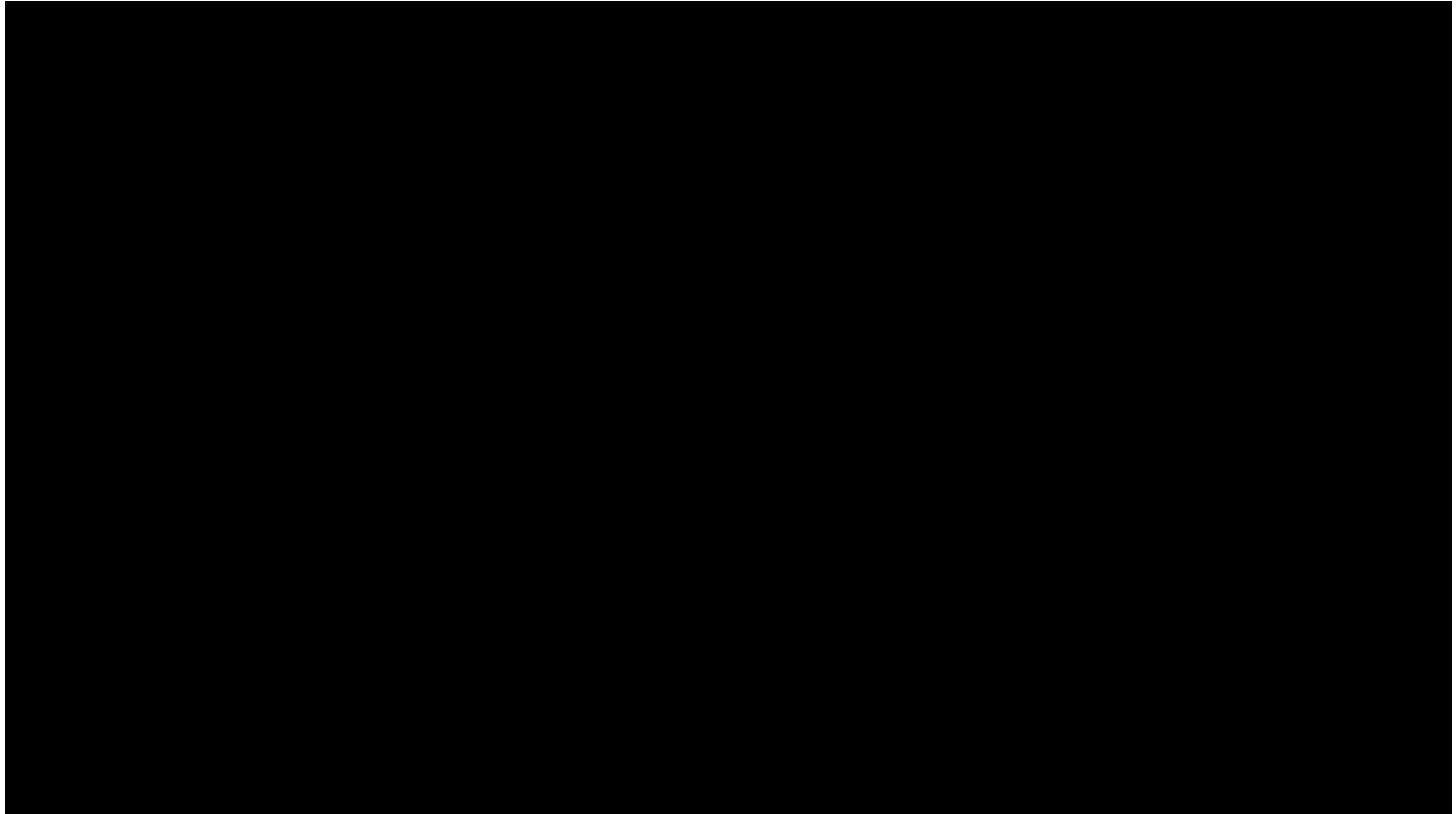


See how often equipment is being used at your jobsite by worker, trade, sub, and project zone, minimizing downtime and maximizing machine rentals.

ACTIONABLE INSIGHTS



On-going and historical aggregate workforce, equipment, and safety data - at your fingertips - enables proactive, improved project management and execution.



Jobsite Safety

SiteZone Options and Enhancements

SiteZone PWS is used across a wide range of industries and applications. To ensure it meets these requirements a range of additional options have been developed.



SiteZone EasyFit

Installed in typically less than 30 minutes the SiteZone EasyFit meets the requirements of the UK building and civil engineering market where most mobile plant is hired as required.



BucketZone

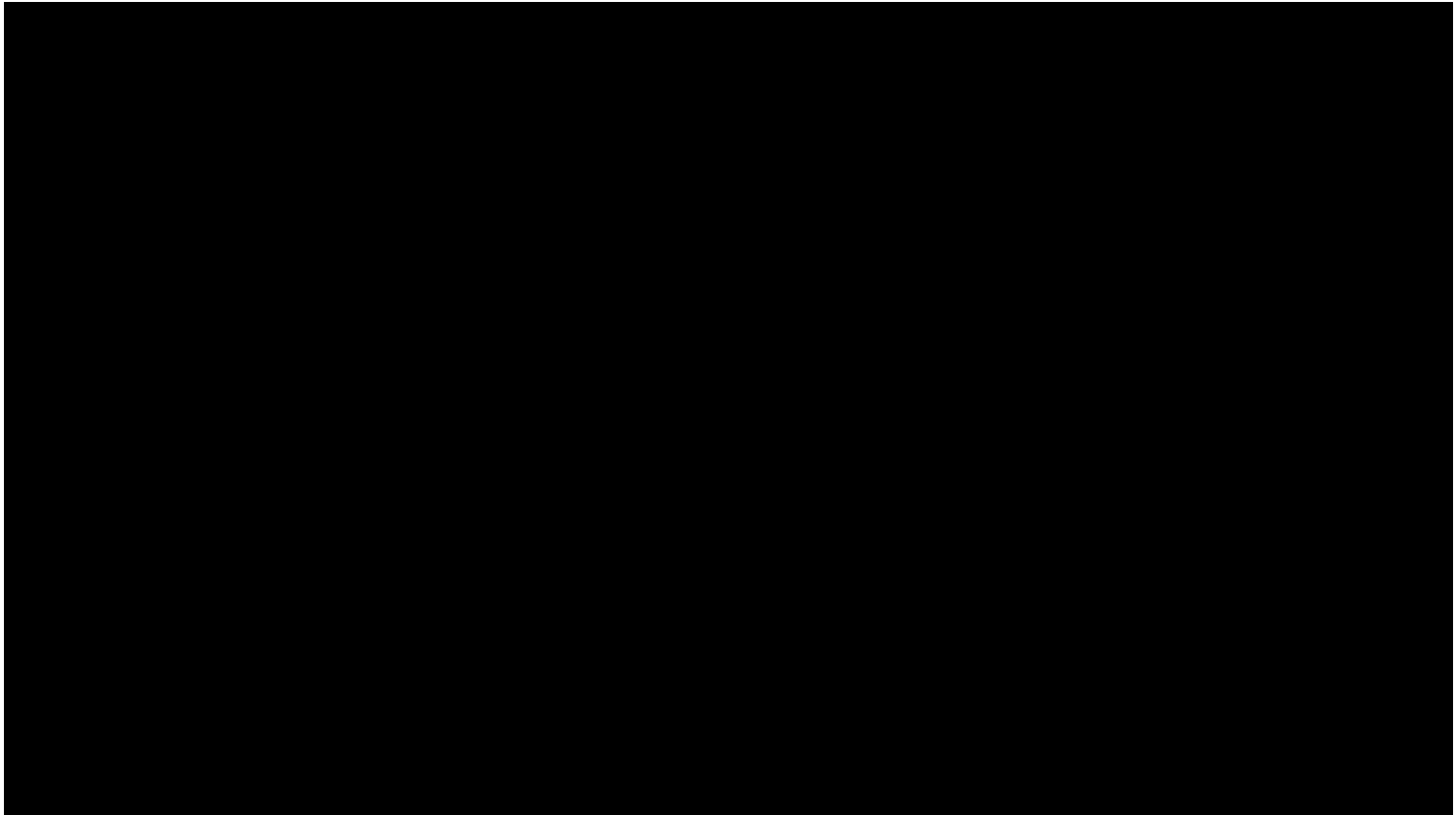
BucketZone allows for the creation of a separate detection zone around the working equipment of the machine. This can make the system more practical in certain applications. Useful for plant such as material handlers and loading shovels.



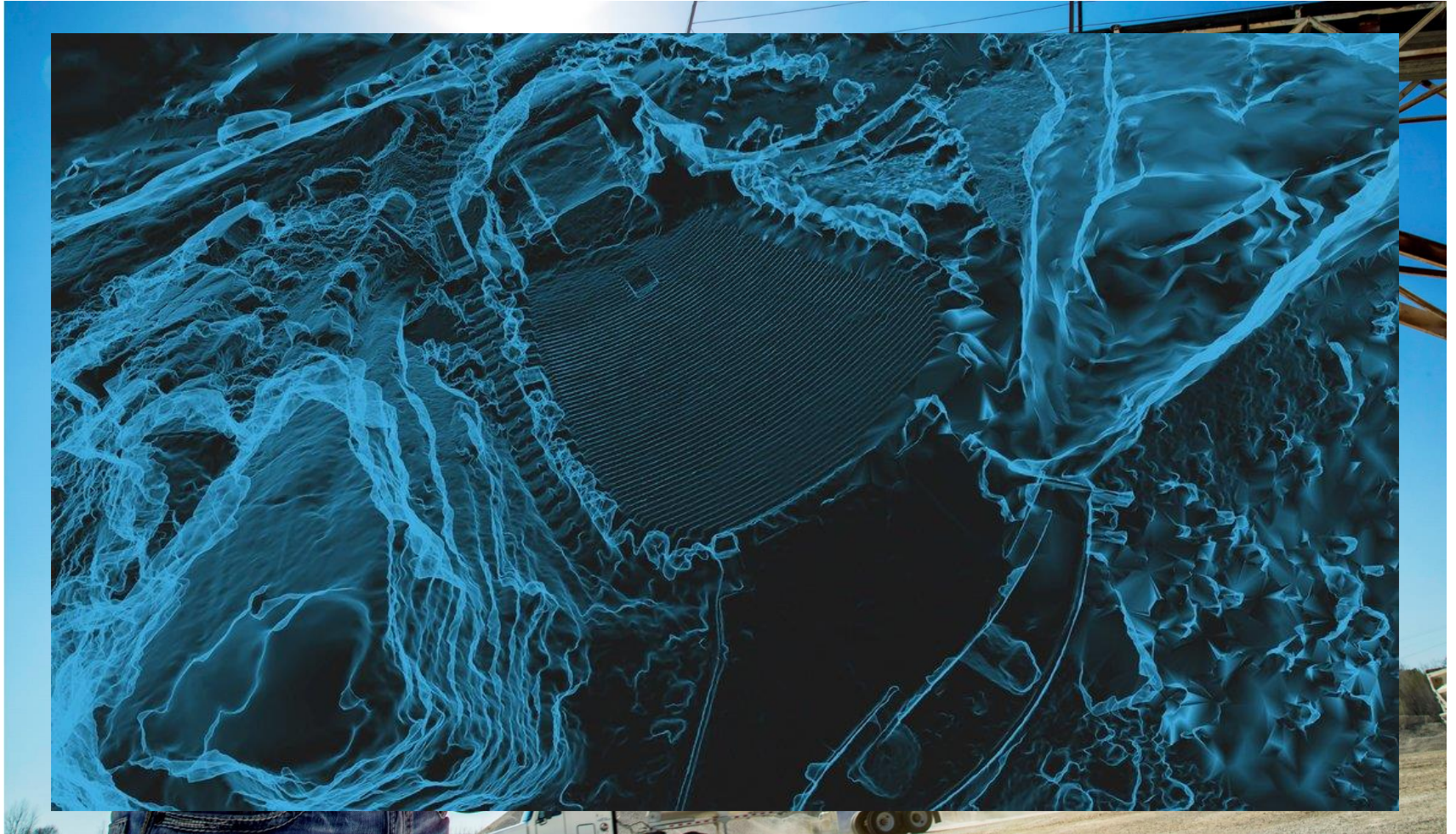
Zone Selector

Allows two preset ranges to be set on installation. The zone selection is via a supervisor key switch, allowing management controlled zone selection.





Jobsite Safety



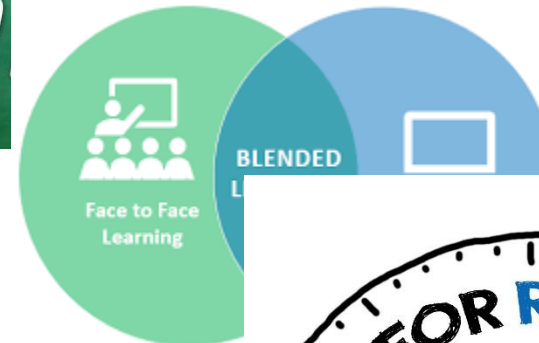
Safety Training



Safety Training



OSHA
Occupational
Safety and Health
ARE YOU



Learning Management



HELP

need help?

Email the Site Administrator

ALERTS

Showing 2 of 2

- Performance Appraisal Testing is Ready
- Plan "Learning Plan" has been activated


View all alerts

MESSAGES

No messages

Messages

FEATURED LINKS





LAST COURSE ACCESSED

8-Hour OSHA HAZWOPER Refresher

100%

UPCOMING CERTIFICATIONS

No certifications due

CALENDAR

September 2018

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

UPCOMING EVENTS

-  Deltrek 2018 Training
Deltrek Training 2018
September 26, 2018, 12:00 PM - 2:00 PM (time zone: America/New_York)
[Sign-up](#)
-  Introducing Reality into Multi-Municipal Plan Enables MGP Cleanup
Wednesday, September 26, 4:00 PM

CURRENT LEARNING

-  Avoiding the 7 Common Mistakes of Construction Management 0%
-  Construction Manager's Guide to Purchasing Insurance 0%
-  Demolition Safety Awareness 0%
-  Excavation Safety Awareness 0%
-  Hand and Power Tool Safety 0%
-  Project Management for the Construction Manager 0%

Displaying 1 - 6 of 6 results

MY REPORTS

Ready for Virtual Reality?

