THE NEXT GENERATION OF SAFETY
The World’s 1st Autonomous TMA Truck
THERE ARE 764 DEATHS PER YEAR IN WORK ZONES

Source: Fatality Analysis Reporting System (FARS) 2016 ARF. NHTSA
TOP 3 REASONS TO REMOVE A TMA TRUCK DRIVER

#1 Save the driver from injury or death
#2 Remove human instinct
#3 Remove human error
TOP THREE TMA TRUCK BEST PRACTICES

- Ballast Technique
- Attenuator Type
- Air Brakes
AUTONOMOUS TMA TRUCK BENEFITS

- Increase Safety For Workers
- Cost Reductions
- Safer Work Site
- Work Zone Optimization
- Use For Rolling Operations
TWO CURRENT PROGRAMS USING THE NEW TECHNOLOGY

Colorado Department of Transportation | Fort Collins, CO

Colas Ltd. | London, UK

AFTER 2000 MILES OF TESTING – NOW IN OPERATION!
ATMA LEADER/FOLLOWER SYSTEM – HOW IT WORKS!

INSTALLATION

Leader Vehicle Kit

Operator Control Unit
Vehicle Control Module
GPS & Datalink Antenna

ATMA Kit

Steering Actuator
Brake/Accel. Actuators
Vehicle Control Module
GPS Antenna
Obstacle Detection
Data Link Antenna
Operator Control Unit
E-Stop
The beginning of an aggressive 5 year program to protect every CDOT mobile maintenance operation.
SCOPE OF WORK
The group will fund research and development efforts to achieve the program goals, with initial proposed research focusing on:

- Improvements on existing ATMA/AIPV platforms (Autonomous Truck Mounted Attenuator/Impact Protection Vehicle)
- Expansion of use of ATMA/AIPV platforms beyond striping
  Refining policy and operational procedures for autonomous work vehicles.
- Investigate additional applications for autonomous vehicles in maintenance operations
- Other New Technology
ROYAL NEXTGEN ATMA SYSTEM 2018

ADDED CAPABILITIES

- Advanced Navigation: Dead Reckoning for GPS denied environments
- Side View Obstacle Detection
- System Redundancy: Navigation, Obstacle Detection and Radios
- V2V Communications: Encrypted and Frequency Hopping
- Advanced User interface
THANK YOU

Keep updated on the ATMA by visiting:

www.royaltruckandequipment.com/autonomous