Learning Objectives

- Describe six types of technological solutions available to prevent runovers and backovers
Terminology

• Proximity Detection
• Proximity Warning
• Collision Avoidance
Proximity Detection & Warning
Proximity Detection
Selecting the Best Solution
Camera Systems
Sonar Systems
Radar Systems
Radar or Sonar & Camera
Tag Systems
GPS

Diagram showing the interaction between the central control room, GPS satellite, fleet control, dumping site, safety (automatically stops when detecting obstacle), hauling road, and loading site.
Emerging Technologies
Additional Considerations

• Reduce nuisance alarms and false readings
• Combine operator displays for less distraction
• Use alarms in the best context
• Wearable sensors must be appropriate for work
• Backup systems available for tech failure
Summary

- Alarms
- Cameras
- Sonar
- Radar
- Tagging
- GPS