Available today:

- ABS
- Electronic engines
- Up to 600 hp
- Automated transmission
- Extended warranties
- Large, integrated sleeper
- Collision warning
- Multiplexed electrical system
- Wireless communications
- Lightweight materials
- Aerodynamic tractor
Freight Transportation Modal Share (2002 Tonnage)

- Truck: 68%
- Rail: 13%
- Pipeline: 10%
- Intermodal: 1%
- Water: 8%
- Air: 0%

Total Tonnage: 8.9 billion tons

Source: U.S. Freight Transportation Forecast...To 2014
Courtesy of ATA
Distribution of Motor Carriers Operating a Given Number of Power Units

- 6 or Less: 81%
- 7 to 20: 12%
- More than 20: 7%

About 1.2 million interstate and intrastate U.S. motor carriers

Courtesy of ATA
Future Trucks

Safety
Security
“Green”
Fuel efficiency
Transportation efficiency
Comfort and convenience
• Driver aids
  – Night vision
  – Stability enhancements
  – Lane change monitoring
  – Back-up alarms
  – Adaptive cruise control
• Car and pedestrian friendly
• Driver fatigue management
  – Monitoring
  – Intervention
  – Rest areas
2007 Emissions

Particulate - g/hr-hr

NOx - g/hp-hr

2002/04
1998
1994
1991
1990
1988
2007/10

PACCAR Inc
National On-Highway Average Diesel Fuel Price
($/Gallon)

Average Price 1994 to Present
($1.23/gallon)

Source: Department of Energy
Courtesy of ATA
Higher Diesel Prices Lead To More Trucking Bankruptcies

Trucking Bankruptcies

National Avg. Price of Diesel Fuel

Source: A.G. Edwards & ATA
Courtesy of ATA
Hybrid Electric Concept Truck

- Series Hybrid
- 6.8L CNG Engine
- 80kW Generator
- 100kW Drive Motor (140kW peak)
- Two-speed Gearbox
Adhesive-bonded aluminum panels

Sheet-molding compound

Vinyl ester/balsa wood floor
Carbon fiber composite

Tailor welded Al blanks

Aluminum hydroformed parts
Caterpillar MorElectric system

Courtesy of Caterpillar
Enhanced Freight Transportation
Safety
Security
“Green”

Fuel efficiency
Logistics efficiency
Comfort

PACCAR Inc