CE 433

Chapters 1 & 2 Text
Outline Ch. 1 & 2

- Advantages of Railroad Concept
- Problems Early On
- Economics
- Development of the Country
Classifications

- Class I
- Regionals
- Local/Shortline/Terminal or Switching
Trans

Porto
- Derived Demand
- Supply Chain
- Value Added
- Coal and/or Grain
- Automotive
- TOFC/COFC (Intermodal)
- Merchandise (mixed)
- Cars
  - System
  - Foreign
  - Private

- Interchange
- **Train Types**
  - Unit Train
  - Mixed Train
    (General Merchandise)
Management

- Engineering
- Mechanical (Equipment)
- Transportation (Operations)
Goals of Operating Department

- Safety
- Service
- Economics
- Develop Employees

Labor History
Safety

- Train Accidents
- Personal Injuries
- Hazard Material Releases
- Grade Crossing Incidents & Trespassing
- Freight Damage
Accident Pyramid

- Unsafe Acts
- Close Calls
- Reportable
- Cripple
- Fatality
□ Measure Reliability
  ▪ How Trains Run
  ▪ Terminals
  ▪ Customer Switching

□ Financial Drives
  ▪ Asset Utilization
    ▪ Crews
    ▪ Locomotives
    ▪ Cars
    ▪ Terminals
    ▪ Track & Bridges
  ▪ Operating Ratio
Customer Satisfaction (service)

- Time
- Reliability
- Ease of Doing Business
- Cost (Price)
- Mergers and Spin-Offs
  - Secondary Main Lines
  - Branch
  - Light Traffic
  - Abandonment
  - Regional / Short Lines
  - States
- **Traffic Density**
  - Eliminate Parallel and Branch Lines
  - Concentrate on Main Lines

- **Route Rationalization**
  - Low Density Lines – Local Industry (States)
U.S. Freight Rail Traffic

Year

1920, 410
1930, 383
1940, 373
1950, 589
1960, 572
1970, 765
1980, 919
1990, 1034
2000, 1466
2006, 1772

Revenue Ton-Miles (Billions)