The Indiana Rail Road Company

Rebuilding a Railroad with the Help of Technology

Thomas G. Hoback
President and Chief Executive Officer
Growth and Diversification Through 2004

Revenue Carloadings


Carloads: 20,000, 40,000, 60,000, 80,000, 100,000, 120,000
Growth and Diversification Through 2004

2004 Carloads by Commodity

- Coal (70%)
- Coke (9%)
- Food (5%)
- Chemicals (5%)
- Appliances (4%)
- Plastics (3%)
- Scrap (2%)
- Lumber (1%)
- Aggregates, Steel & Paper (1%)
Growth and Diversification Through 2004

Carloadings, Coal vs. Non-Coal

- Carloadings: 10,000, 20,000, 30,000, 40,000, 50,000, 60,000, 70,000, 80,000, 90,000
- Coal and Non-Coal graph
Growth and Diversification
Through 2004

Revenue Ratios, Coal vs. Non-coal

Year

Percentage of Overall Revenue
100 90 80 70 60 50 40 30 20 10 0

Coal
Non-Coal
Growth and Diversification

Traffic:

Illinois Central:
1985 – 12,000 carloads

Indiana Rail Road:
2007 – More than 165,000 carloads projected
Growth and Diversification

Employment:

- 16 in 1986
- 160 in 2006
- 200+ in 2007
Managing Our Capacity

- Robust growth projected
- Operating a lean physical plant
- An ounce of ingenuity is worth a pound of capital
- Optimization before augmentation
Early Challenges
Early Challenges

- Substantial business risk
- Virtually every mile had to be rebuilt
- Illinois Central derailment history
- FRA Embargo
Early Challenges

- Heavy IP&L unit trains
- Limited mixed freight; most had gone to trucks long ago
- Power: 11 secondhand locomotives
- Cabooses? Not for long
- Track: 90# stick rail, rolled 80 years prior
March 1987
- $80+ million from cash flow in 20 years
- Upgraded main line; 286 compliance
- Palestine yard rebuilt from subgrade
- Dixie siding: IP&L express service
- Midland Subdivision
- Upgraded locomotive fleet
Technology Investments

- Remote control locomotives
- Computer aided dispatching system
- Voice-over data communication
- GPS train position tracking
- Mainline power switches, radio controlled
- AEI readers
Remote Control
Enhancing safety, optimizing labor
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Voice-Over-Data
Supports one-person crew operations

- Reports key information to dispatcher:
  - Train speed
  - Train location via GPS
  - Emergency brake application
  - Alerter status
    - Monitors operator vigilance
    - Stops train if lapse detected
Voice-Over-Data
Supports one-person crew operations

Position Reporting
Voice-Over-Data
Supports one-person crew operations

1. Locomotive’s on-board microprocessor receives signals from GPS satellites.
2. GPS signals are interpreted as geographic waypoints (i.e. mileposts) and relayed to dispatcher.
Voice-Over-Data
Supports one-person crew operations

3. Dispatcher receives train position report.
Voice-Over-Data
Supports one-person crew operations

Dispatcher can monitor safety of operator while on the ground for routine situation (i.e. loss of brake pipe pressure/burst hose).
Voice-Over-Data
Supports one-person crew operations

While inspecting train, operator remains in continual radio contact with dispatcher via handset.
Voice-Over-Data
Supports one-person crew operations

If radio contact lapses, dispatcher can signal operator by sounding locomotive horn.
Voice-Over-Data
Supports one-person crew operations

Dispatcher can send additional personnel to assist operator if necessary.
Power Switches
Yard applications

Solar/battery powered
Power Switches
Yard applications

Solar/battery powered

Reduces back and muscle injuries
Power Switches
Yard applications

Solar/battery powered

Reduces back and muscle injuries

Strobe lamp indicates jammed points or failure
Power Switches
Yard applications

Solar/battery powered

Reduces back and muscle injuries

Strobe lamp indicates jammed points or failure

Protection loop prevents switch from actuating beneath train
Power Switches
Mainline applications
AEI Readers
Real-time car movement data
Stability

- Tenfold growth in employment
- Focus on excellent customer service
- Award-winning safety record
- Competitive pricing
- Diversified business/customer base
Managing Capacity
Improving Service

- Running a scheduled railroad!
- Realignment of customer service functions
- Cultivating teamwork: Customer and RR mutually accountable
- Getting out of the car storage game; encouraging customers to create more capacity on their property
Managing Capacity
Improving Service

- Use of ShipperConnect and M-Crew to process work orders and billings
- Pilot PTI program developed to address service issues encountered with Marathon Ashland refinery in Robinson, Illinois
- Rolling out system wide within 30 days
Run it like a business, not like a railroad.