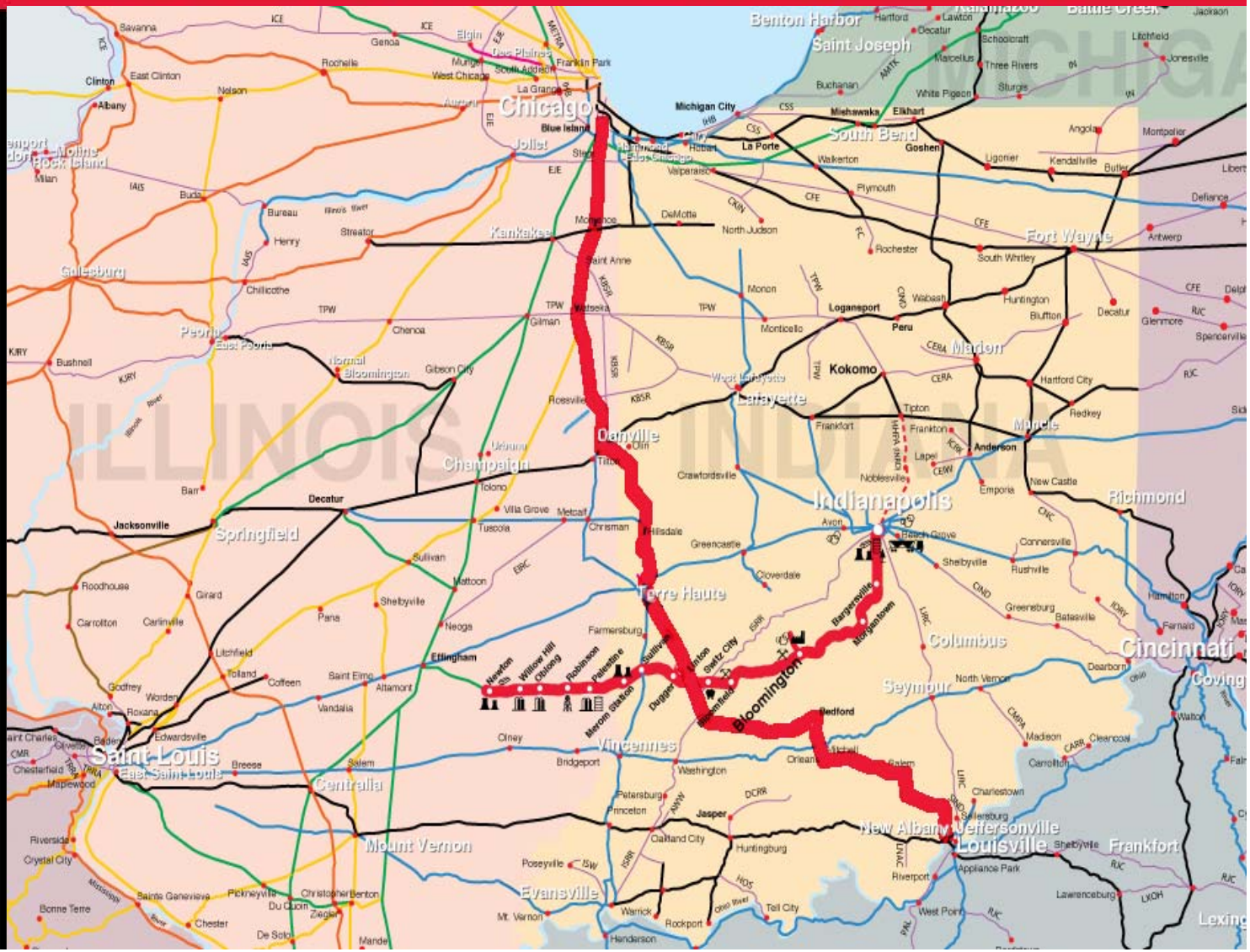
# The Indiana Rail Road Company

## Rebuilding a Railroad with the Help of Technology

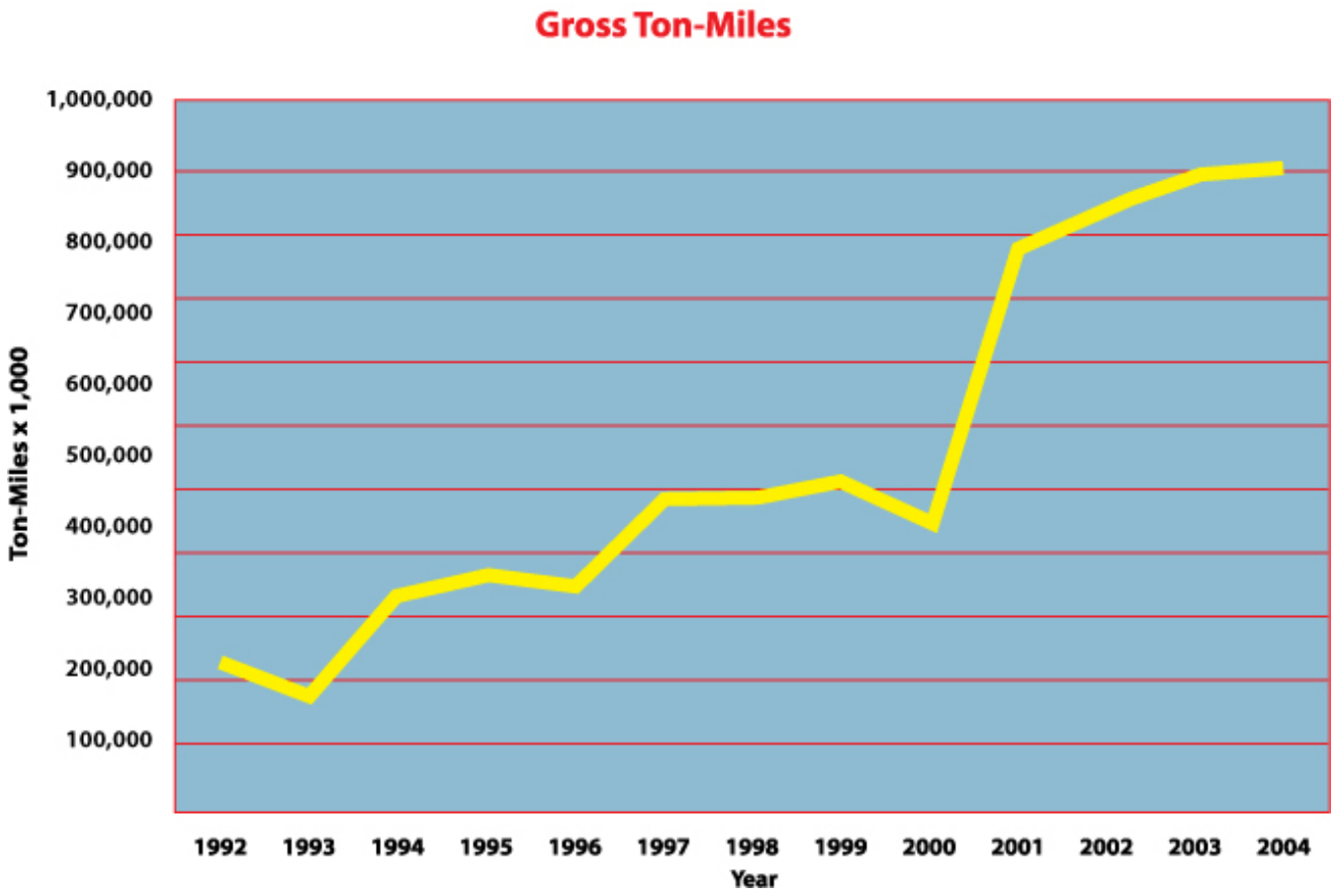
Thomas G. Hoback
President and Chief Executive Officer

# Our Route Today

## Chicago Subdivision, May 2006



# Growth and Diversification Through 2004



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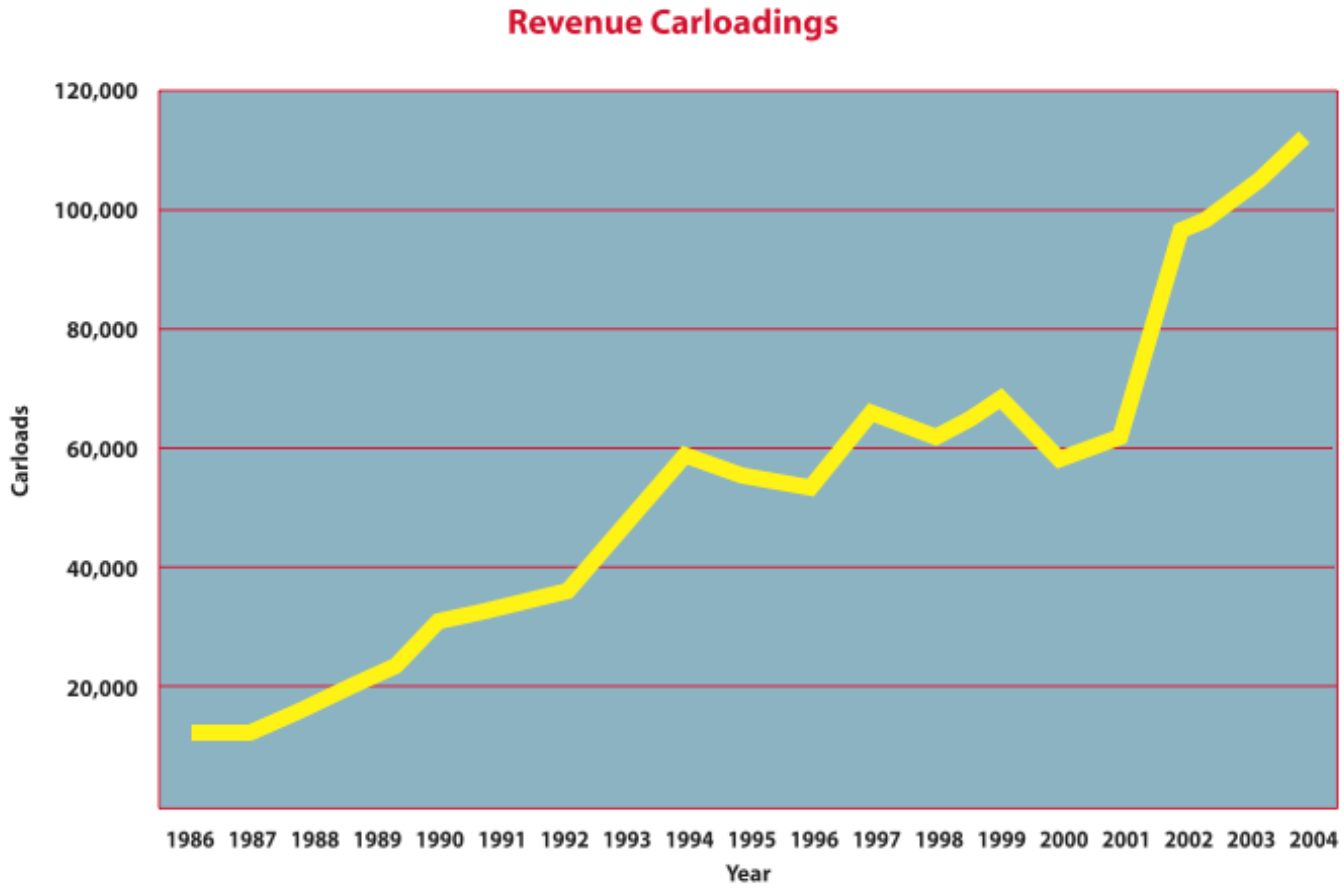

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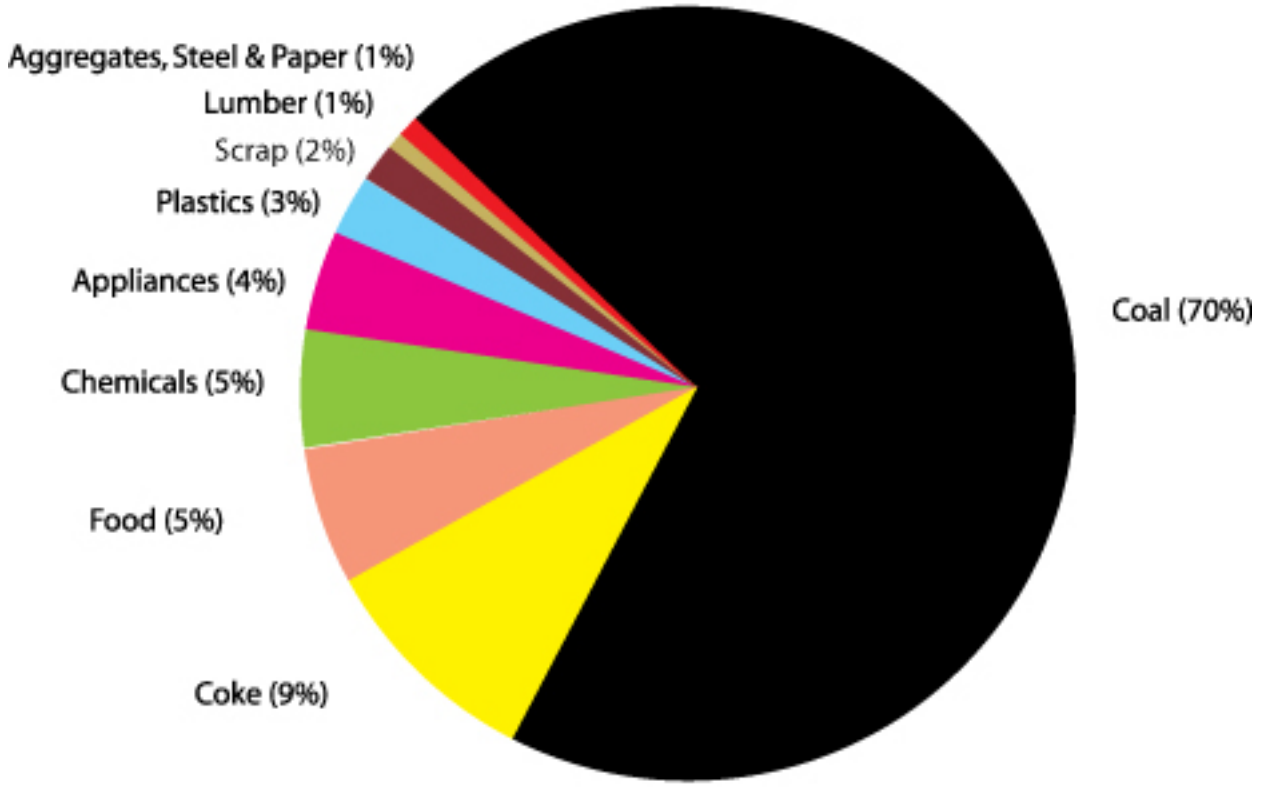
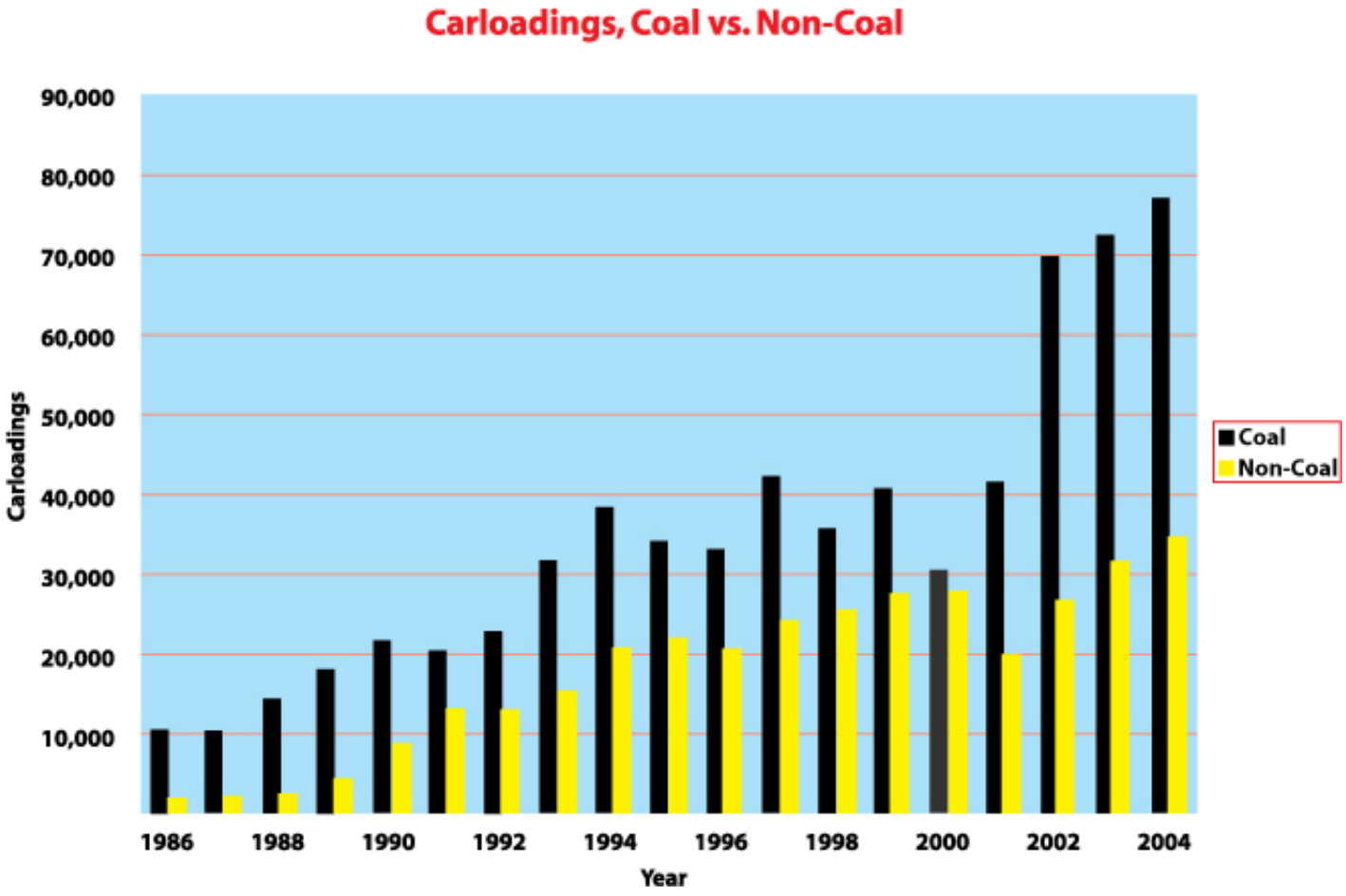



2004 Carloads by Commodity

# Growth and Diversification Through 2004



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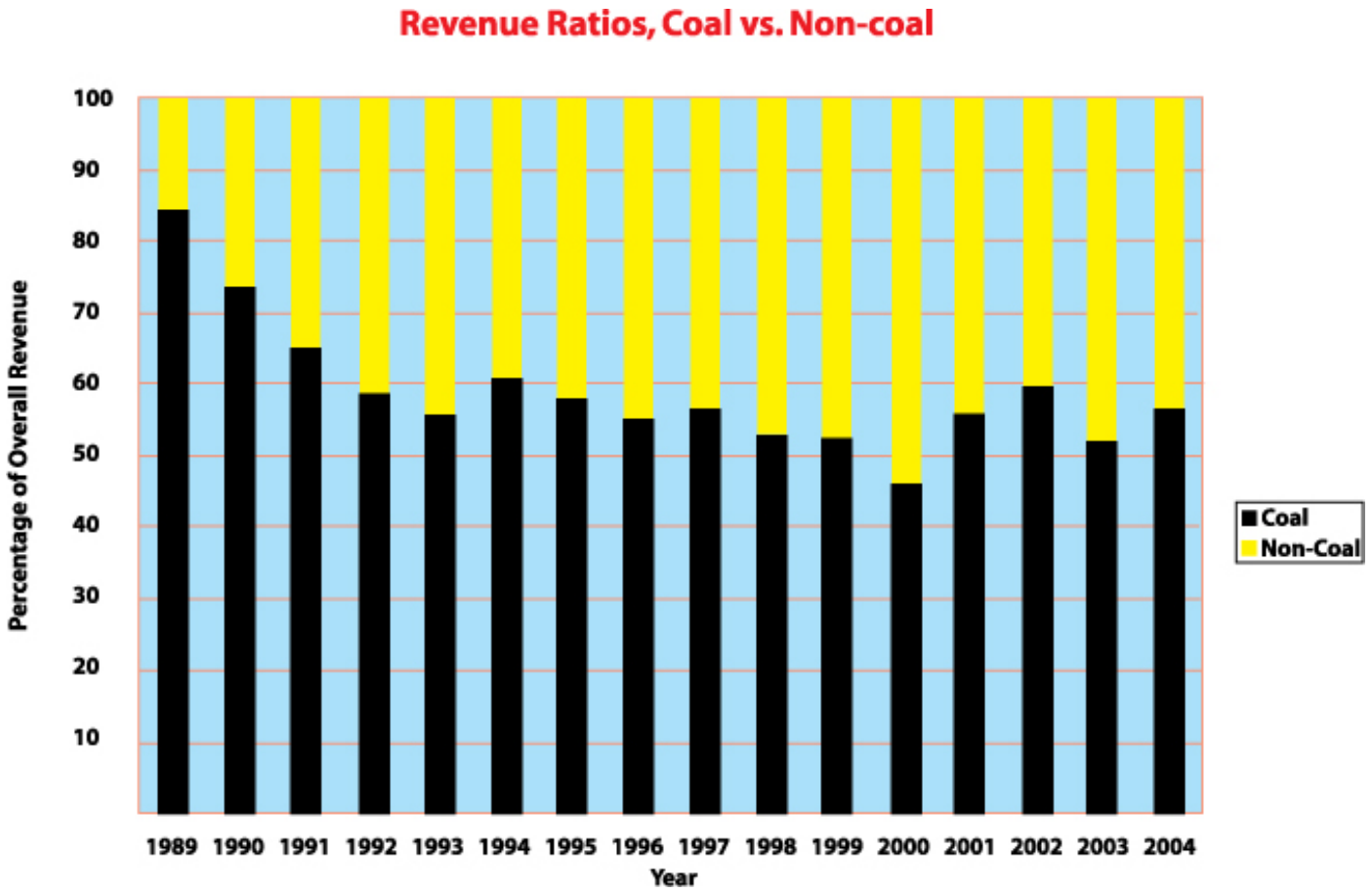


# Growth and Diversification

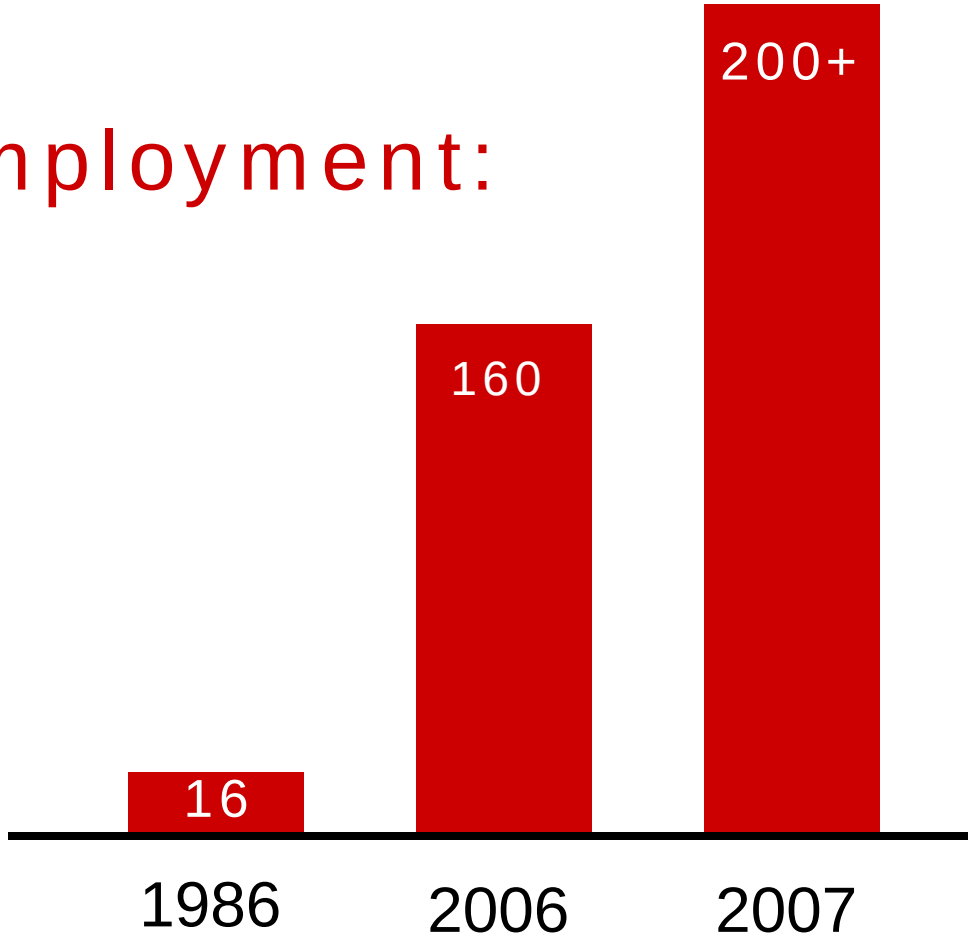
Traffic:

**Illinois Central:**
**1985 – 12,000 carloads**

**Indiana Rail Road:**
**2007 – More than 165,000 carloads projected**

# Growth and Diversification

## Employment:



# 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

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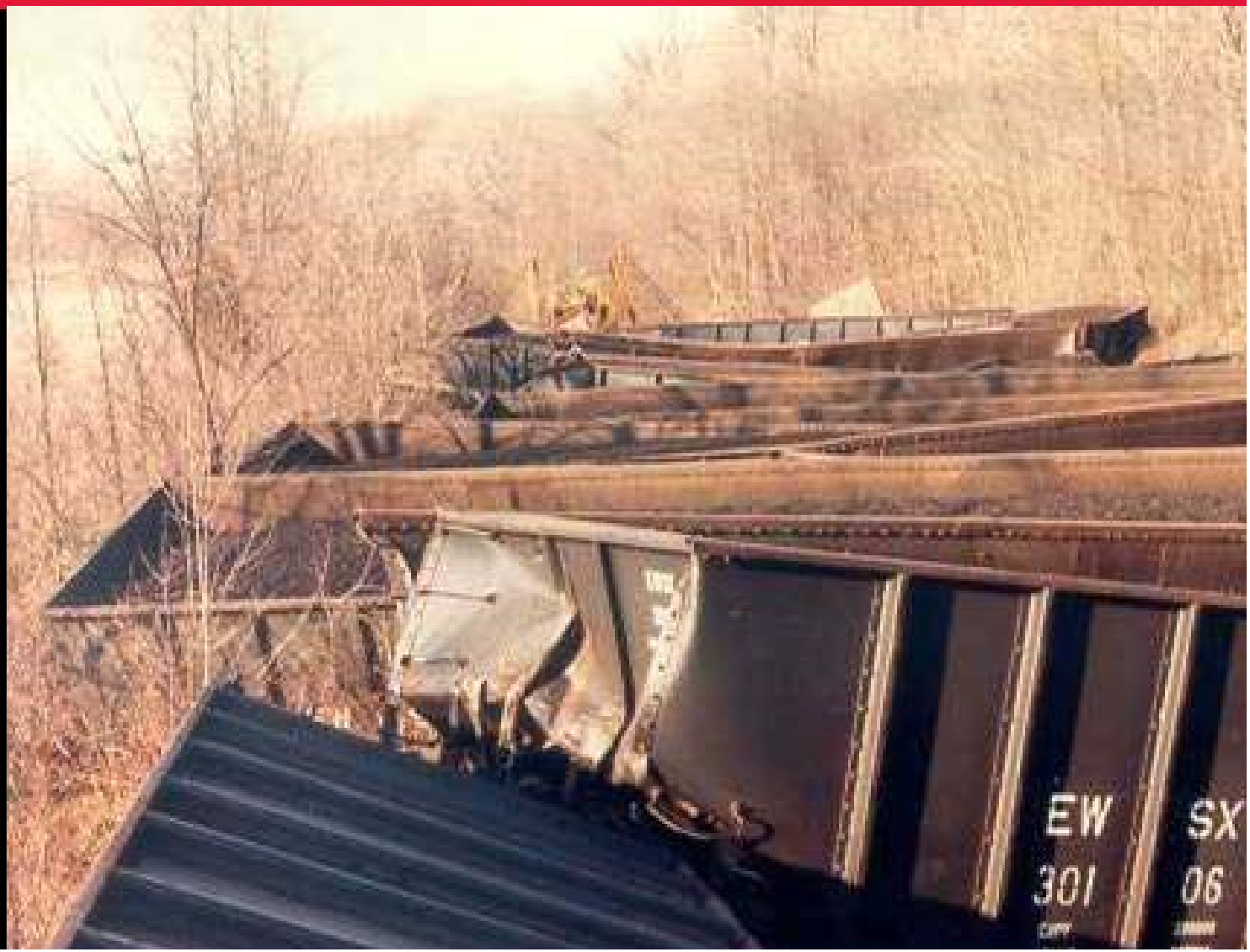

# Capital Improvements

- $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.**

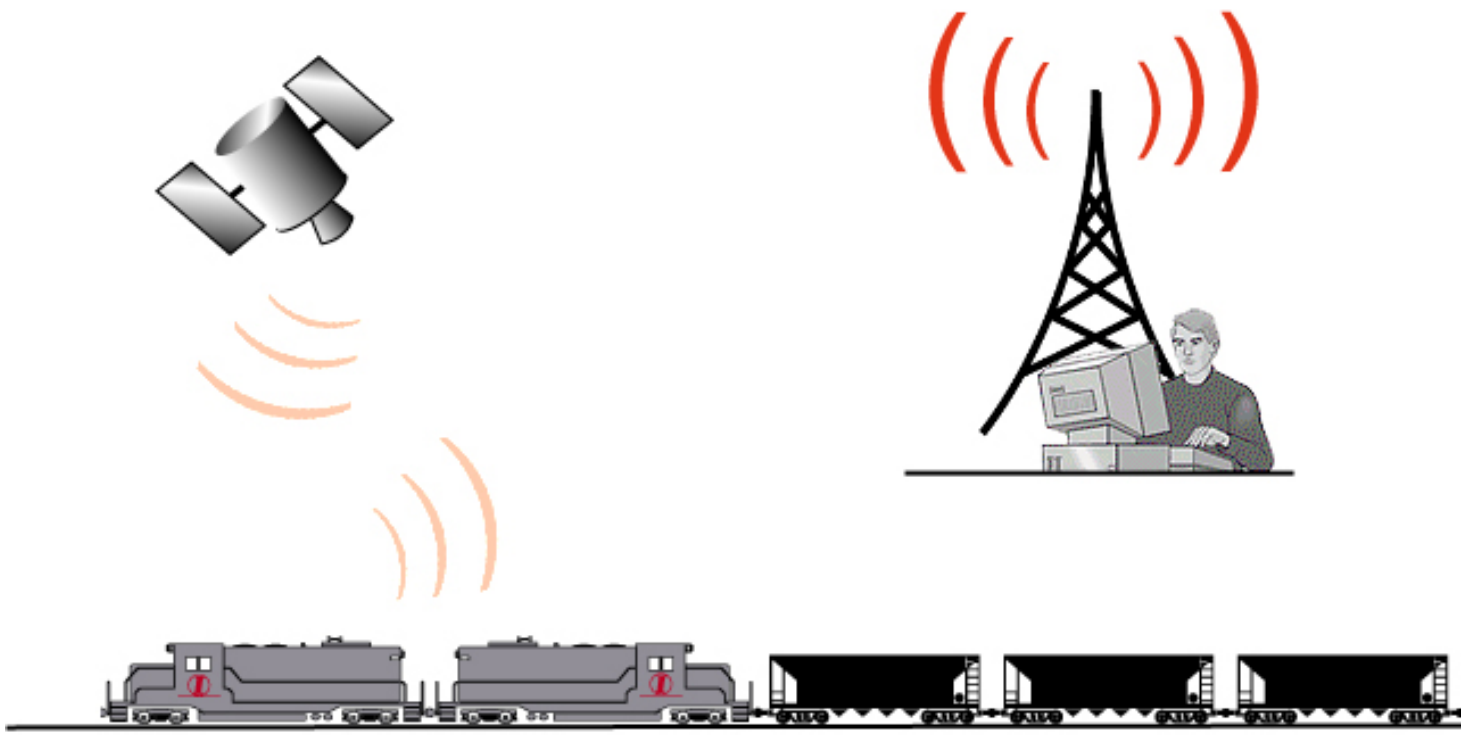
# Voice-Over-Data

## Supports one-person crew operations

**2. GPS signals are interpreted as geographic waypoints (i.e. mileposts) and relayed to dispatcher.**

# Voice-Over-Data

## Supports one-person crew operations

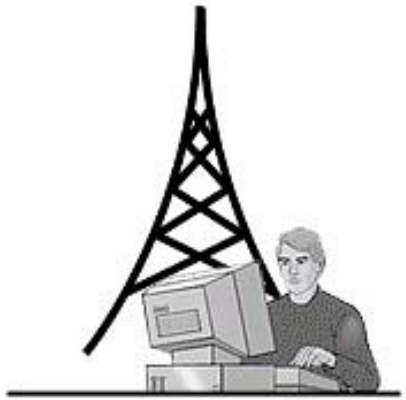


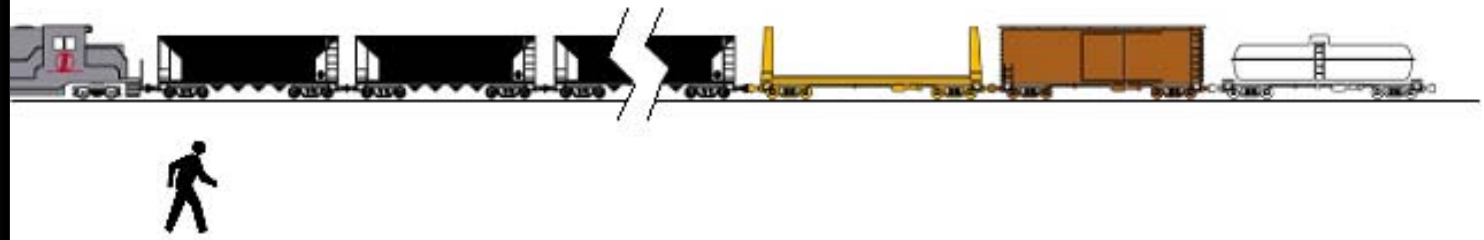
**3. Dispatcher receives train position report.**

# 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

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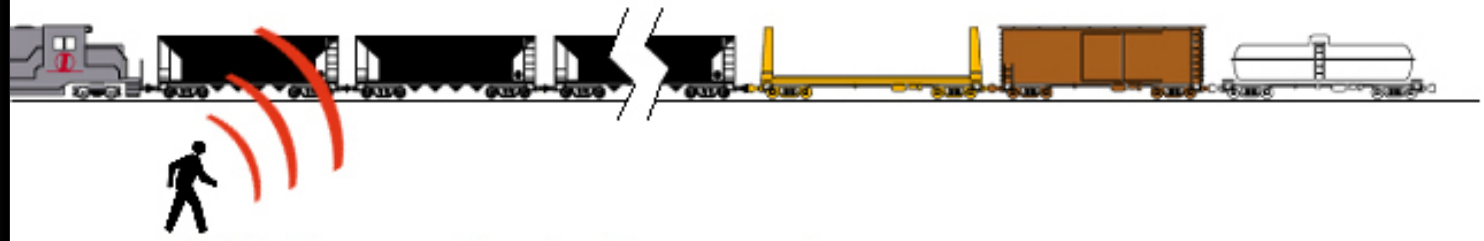
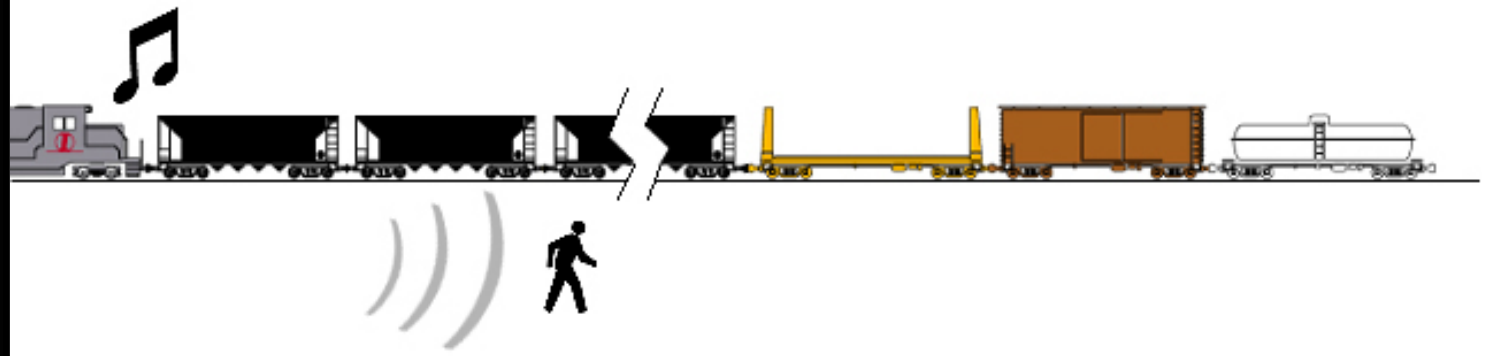


**While inspecting train, operator remains in continual radio contact with dispatcher via handset.**

# Voice-Over-Data

## Supports one-person crew operations

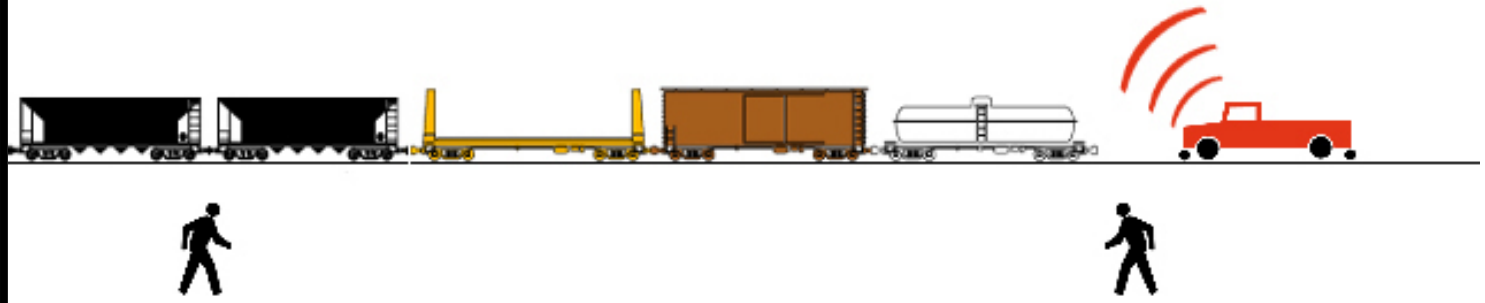
**If radio contact lapses, dispatcher can signal operator by sounding locomotive horn.**



# Voice-Over-Data

## Supports one-person crew operations

**Dispatcher can send additional personnel to assist operator if necessary.**



# Power Switches

## Yard applications

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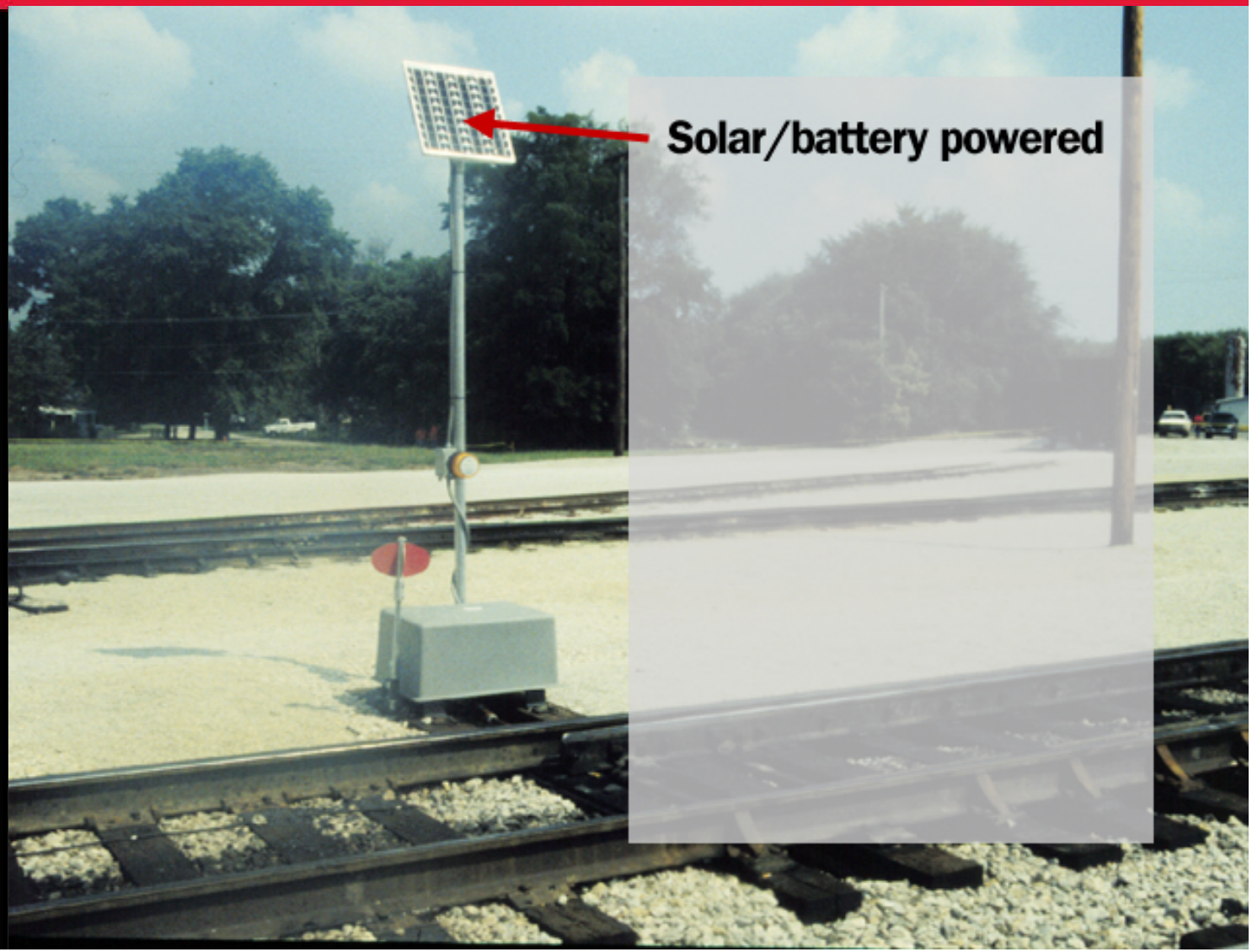

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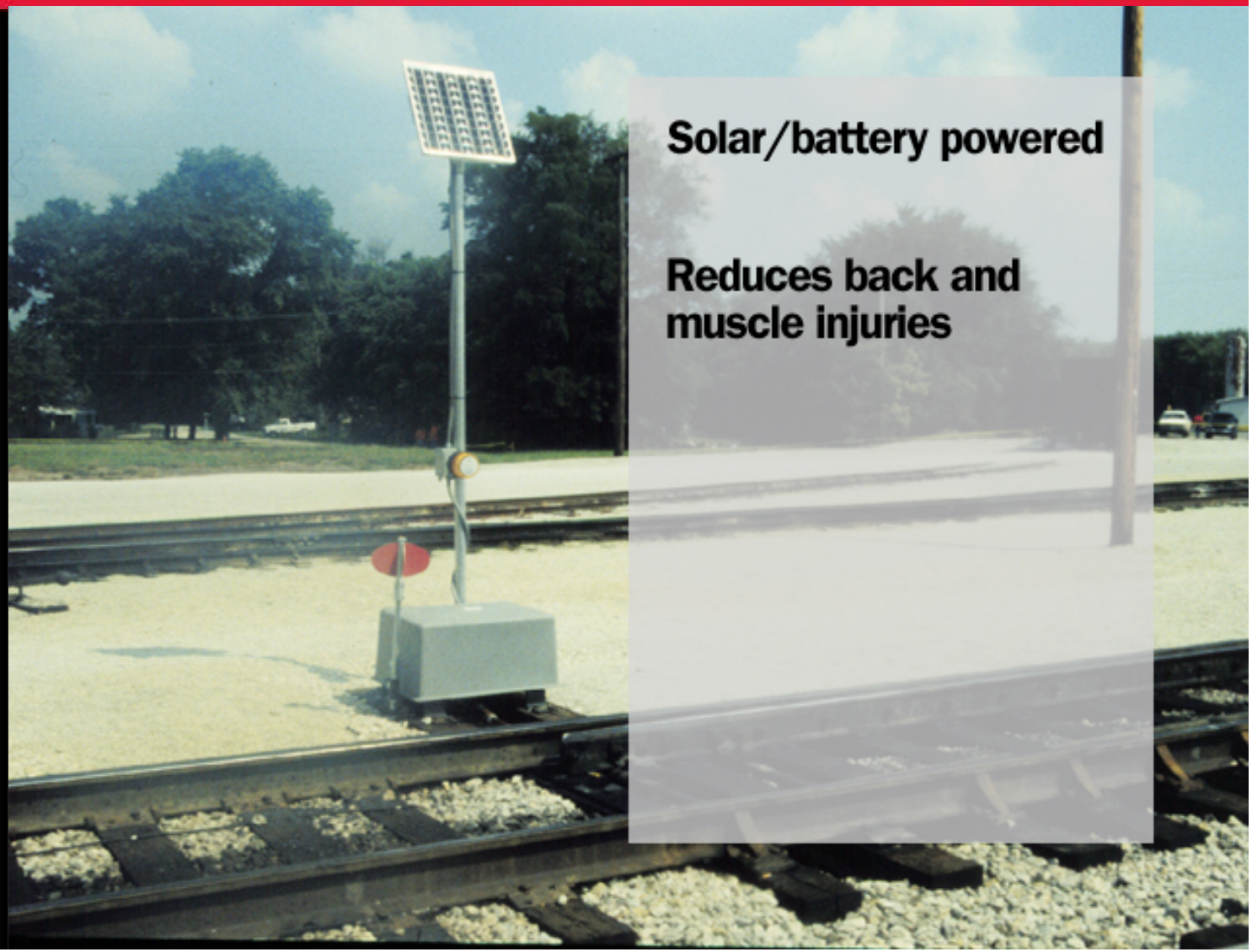

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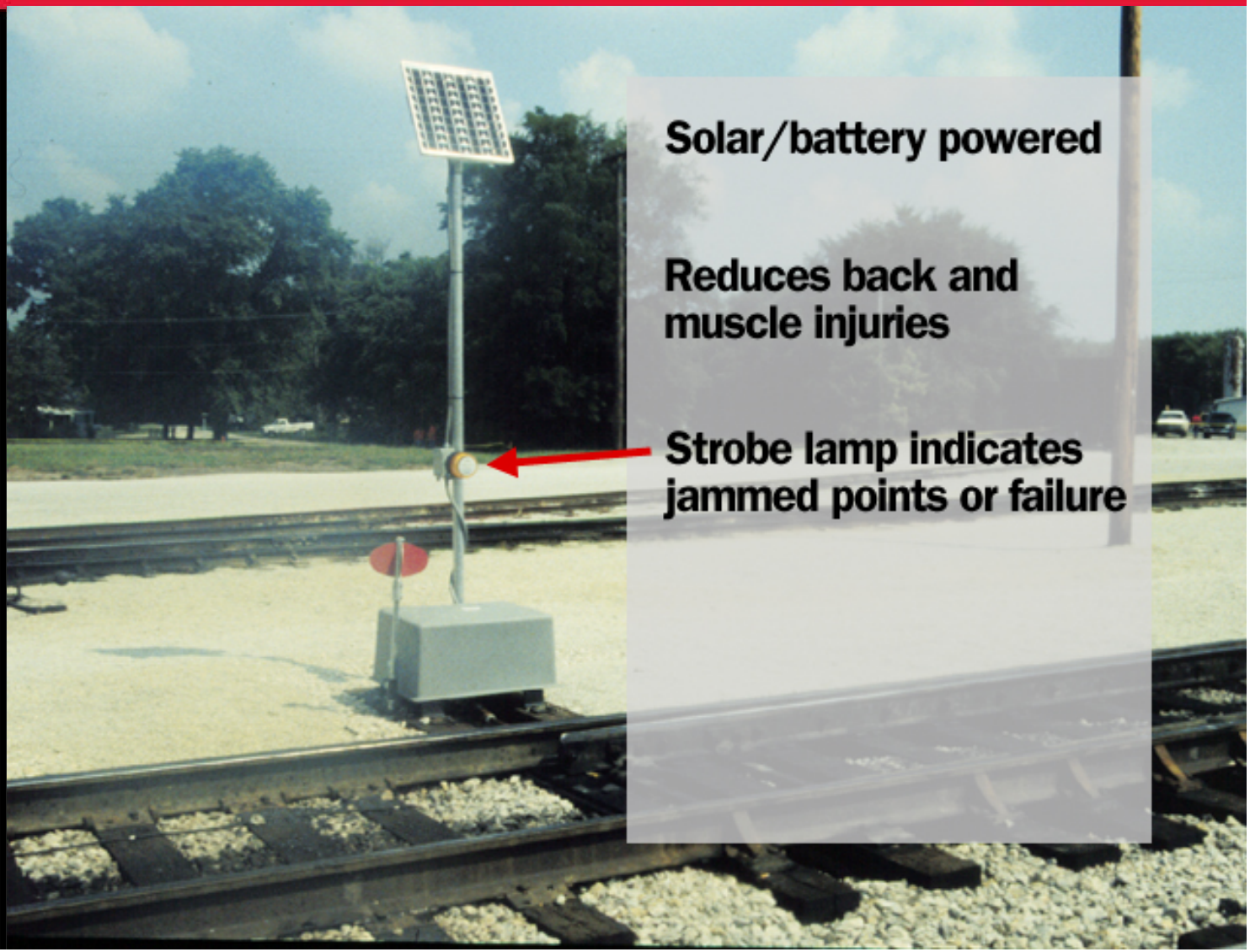

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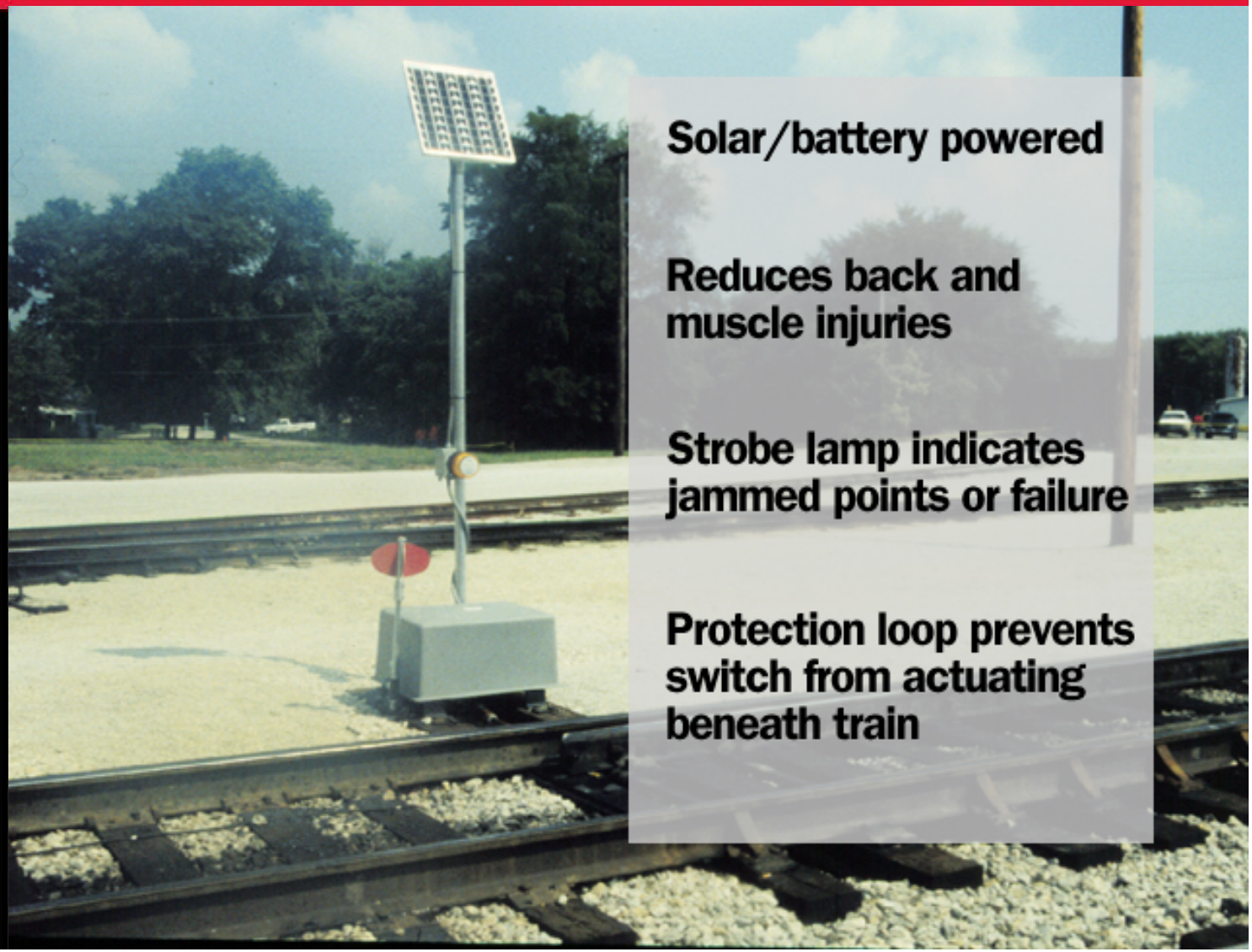


- Solar/battery powered
- Reduces back and muscle injuries
- Strobe lamp indicates jammed points or failure
- Protection loop prevents switch from actuating beneath train

# 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

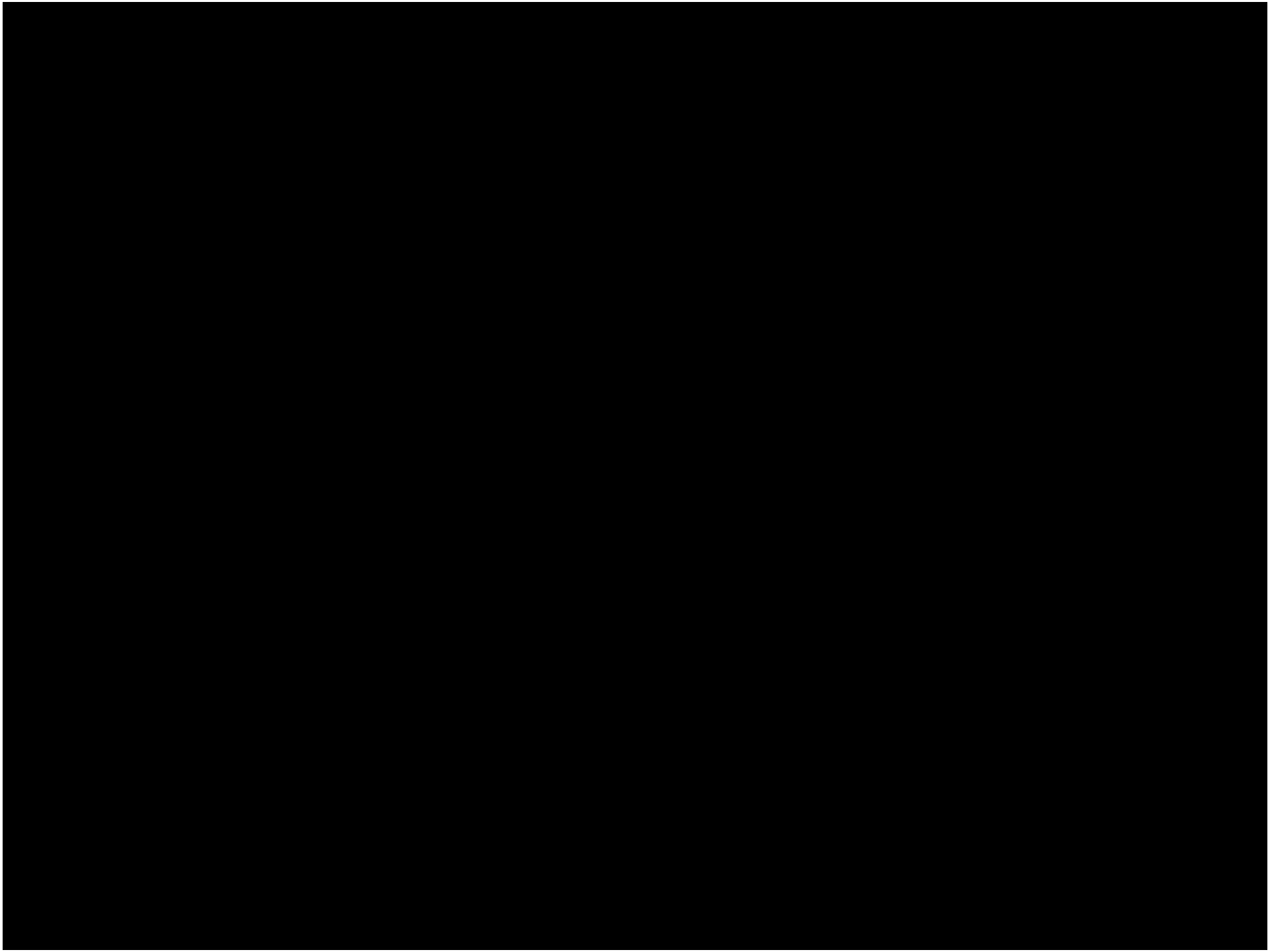
PRECISION TRANSPORTATION INITIATIVE

- 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

PRECISION TRANSPORTATION INITIATIVE

- 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.