SURFACE TRANSPORTATION BOARD

Keeping America Moving

Why Performance Management Matters, No Matter What Chair You Are In

Presented By

Deb Miller, Vice Chairman, Surface Transportation Board

The STB is an adjudicatory and regulatory body that oversees:

- Railroad rates and service issues
- Rail restructuring transactions (mergers, line sales, line construction, and line abandonments)
- Certain trucking company, moving van, and non-contiguous ocean shipping company rate matters
- Certain intercity passenger bus company structure, financial, and operational matters
- Rates and services of certain pipelines not regulated by the Federal Energy Regulatory
- Amtrak's on-time performance

Although we are part of the U.S. Department of Transportation, the STB is decisionally independent

Our Organization

Surface Transportation Board Organization Chart

Board Members

Debra L. Miller, Acting Chairman
Ann D. Begeman, Vice Chairman
Vacant Member

Office of Public Assistance, Government Affairs, and Compliance	Office of Economics	Office of General Counsel	Office of Proceedings	Office of Environmental Analysis	Office of the Managing Director
Lucille Marvin	William Huneke	Craig Keats	Rachel Campbell	Victoria Rutson	Leland Gardner

# What I found when I asked about Performance Measures at the STB...

Performance Management: RETAC

The **Rail Energy Transportation Advisory Committee (RETAC)** was established by the STB in July 2007 to provide advice and guidance to the Board.

- The RETAC also serves as a forum for discussion of emerging issues, particularly regarding the transportation by rail of energy resources.

- The STB members serve as *ex officio* members of the RETAC, along with representatives from the Departments of Agriculture, Energy, Transportation, and the Federal Energy Regulatory Commission.

- Meetings are held at least twice a year.

Performance Management at Union Pacific
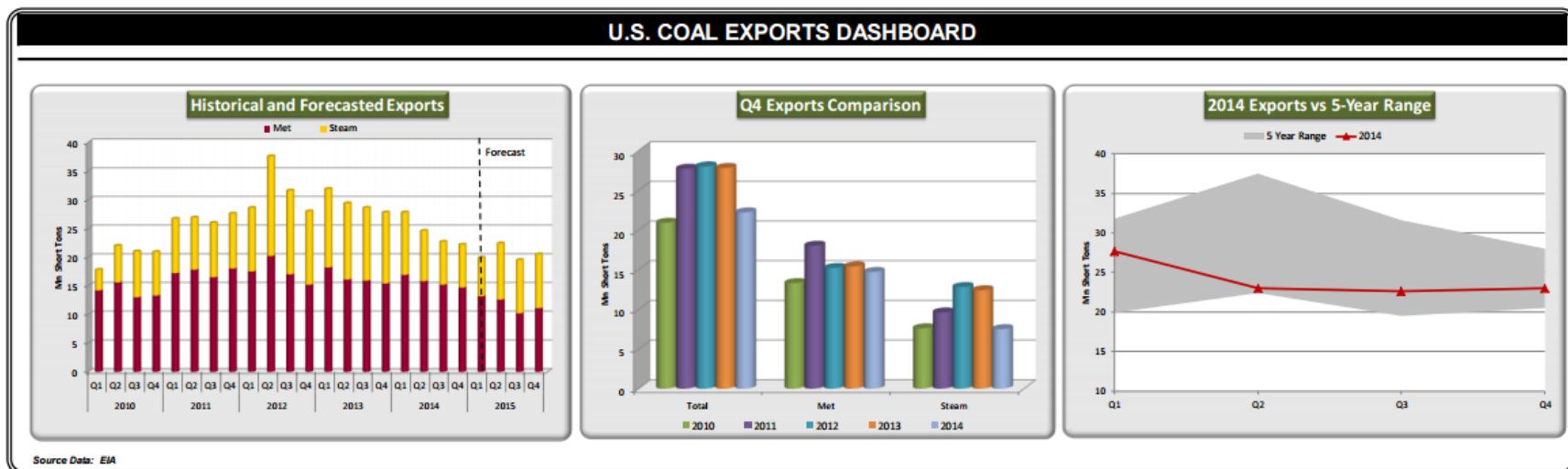
Union Pacific has a multi-pronged approach to performance management, with two key focus areas:

- UP Way
  - The UP Way <u>engages all employees</u> to continuously improve safety, service, and productivity by improving the methods, tools, and processes to standardize work, eliminate variability and waste, and solve problems at their root cause.

- Critical Element Cascade
  - Critical Elements are the 5-10 key focus areas for each Service Unit
  - The Critical Elements are <u>cascaded through all levels of the organization</u> and "translated" at each level through a "catch ball" process.
  - The "catch ball process" identifies the key metric for the Critical Element at the level and the standard work to ensure consistent and high quality performance.

Critical Element Cascade Example

Kansas City Dwell Time
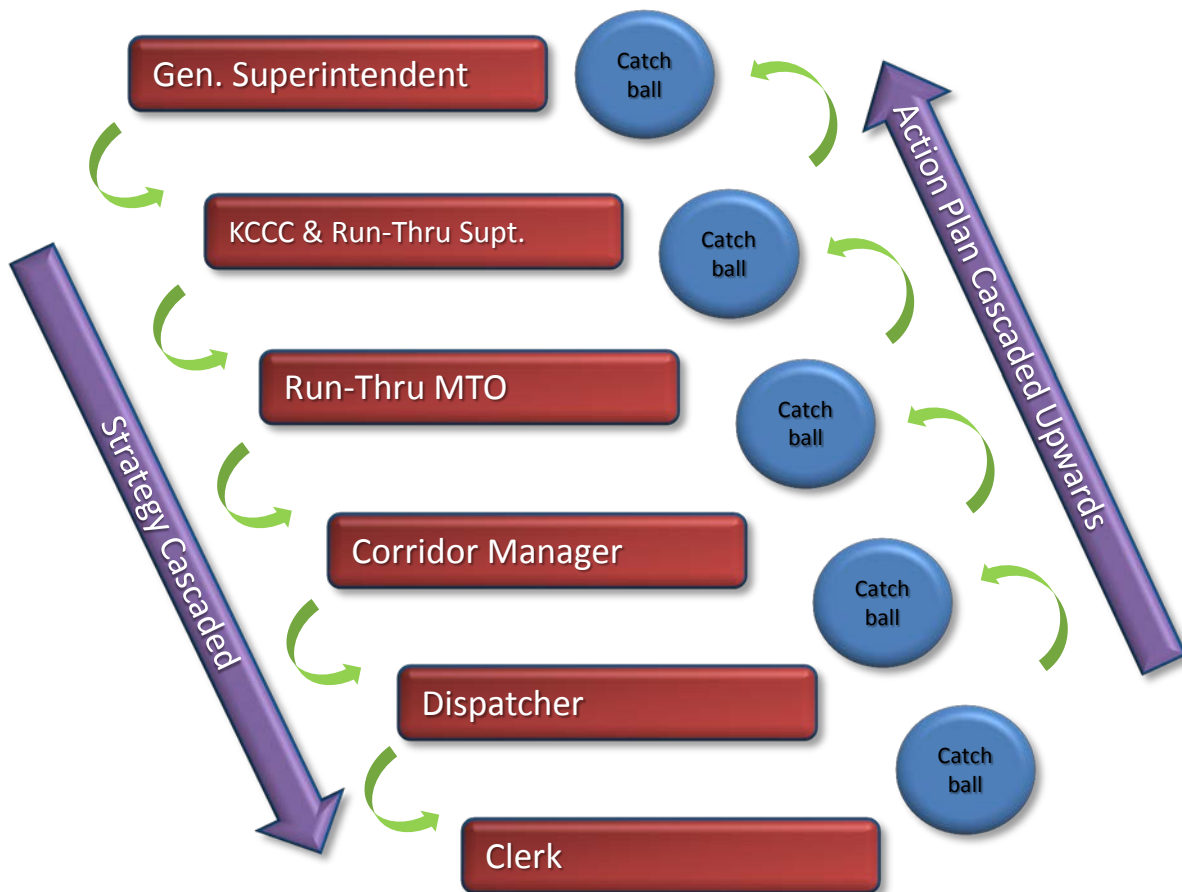
- Dwell Time is a Critical Element for Kansas City.

- Dwell Time is cascaded to all levels of the organization.

- "Catch ball" occurs when each level identifies the key metric for the Critical Element at that level, and the standard work around it.

- The communication flows both ways in "Catch ball" as each level above approves the "translation."

Critical Element Example

Kansas City Dwell Time

Gen. Superintendent
- KC Command Center (KCCC)
- Capital projects
- Review performance daily

KCCC & Run-Thru Supt.
- BNSF / KCS reviews
- Maintenance planning
- Review CTTA daily
- Rapid response
- Review Mechanical performance

Run-Thru MTO
- Communicate expectations
- Crew in van 20 min.
- Display metrics daily

Corridor Manager
- Space Parson work trains
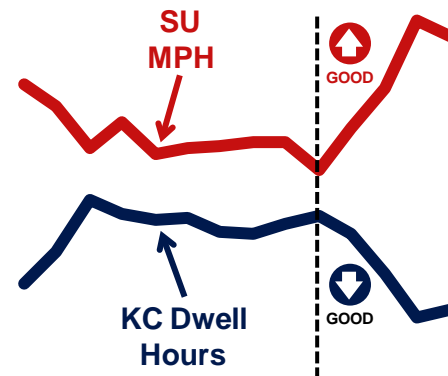- Plan Trenton sub trains
- Coordinate rapid response

Dispatcher
- Hit CTTA window
- Communication: Other desks & mechanical issues

Clerk
- Print paperwork
- Van ready

KANSAS CITY RESULTS

SU MPH

GOOD

KC Dwell Hours

GOOD

"65% of all the trains in the Portland Service Unit run on the Portland Sub each and every day. The Portland Sub is also the most constrained route on my service unit. If this subdivision does not run as scheduled, my entire service unit will suffer - and it will be impacted quickly."

- John Turner, Superintendent of Portland Service Unit regarding one of his Critical Elements:

"If Critical Elements are cascaded cross functionally – this informs, engages and directs signal, car, locomotive, track, dispatch, CMS, and service unit personnel. It takes the entire group down a path of unique initiatives and standard work that will drive the success of the service unit. "

- Cameron Scott, EVP, Operating

"Bang for the Buck"

- Simulations provide data to assess relative performance benefits of each project and combinations of projects
  - Train delay
  - Train speed
  - Fuel Consumption
- Benefits are weighted against cost
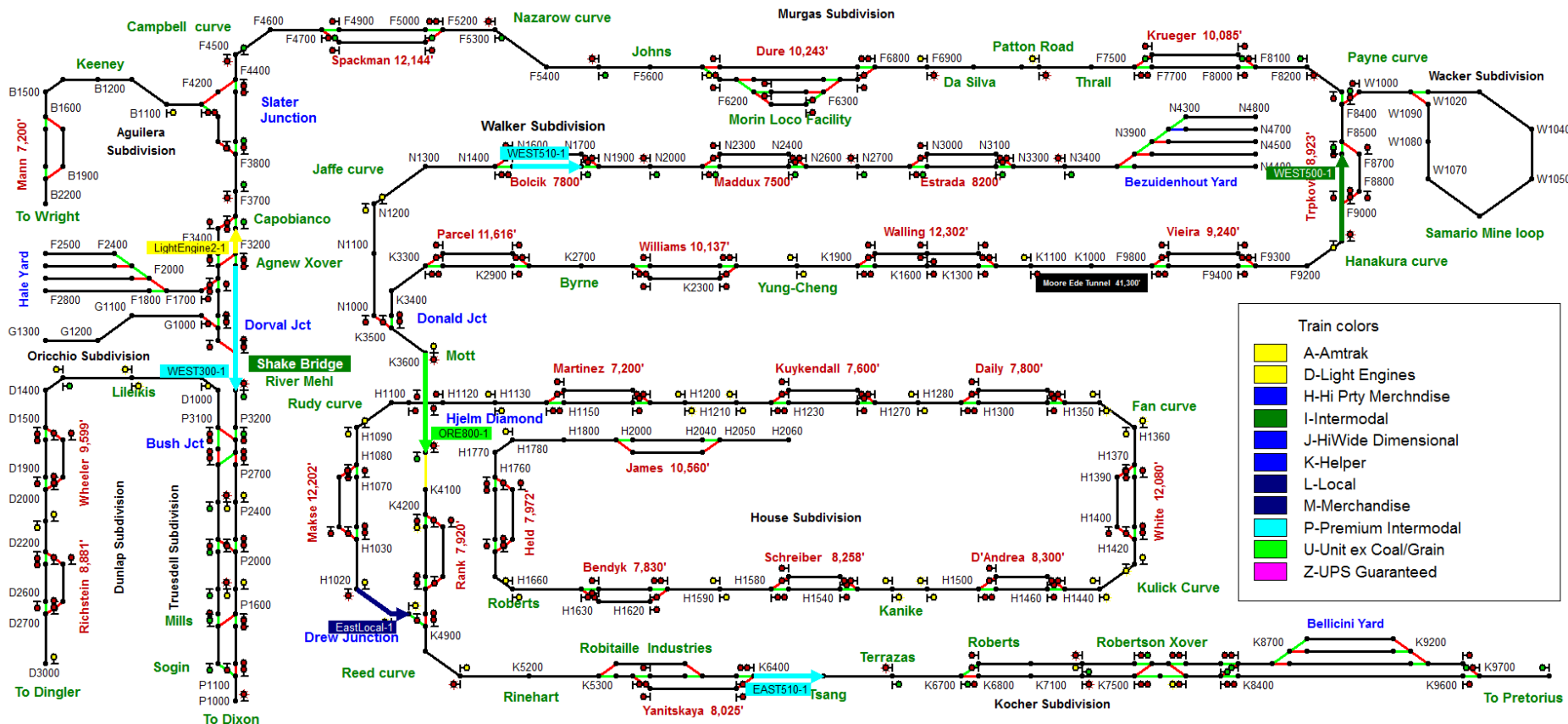- "Bang for the buck" = $\dfrac{\text{Delay reduction}}{\text{Cost}}$

An existing rail corridor is congested. Several potential projects are identified to increase capacity.

Typically 100 - 300 miles

Rail
Terminal

1   2   3   4

Rail
Terminal
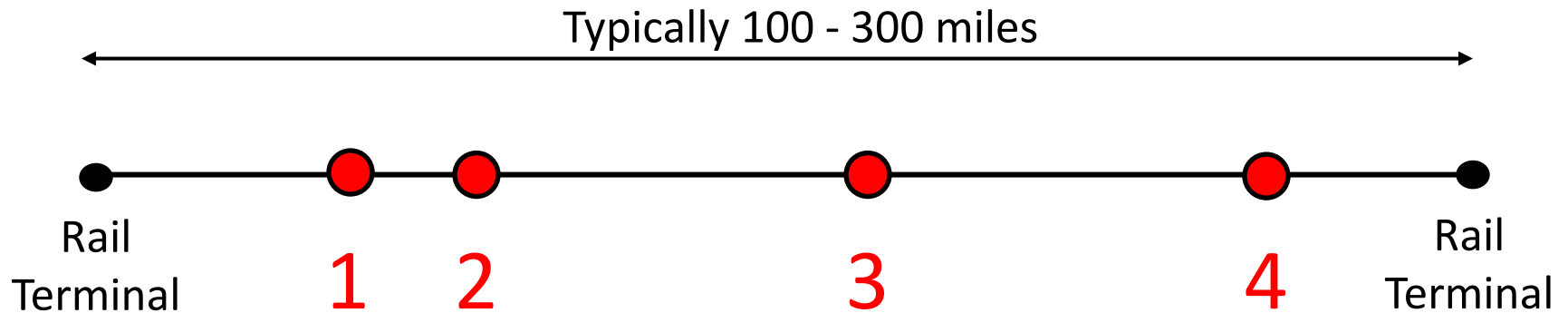
Performance Management at Norfolk Southern

Projects are run through a series of simulations to determine which are the most effective

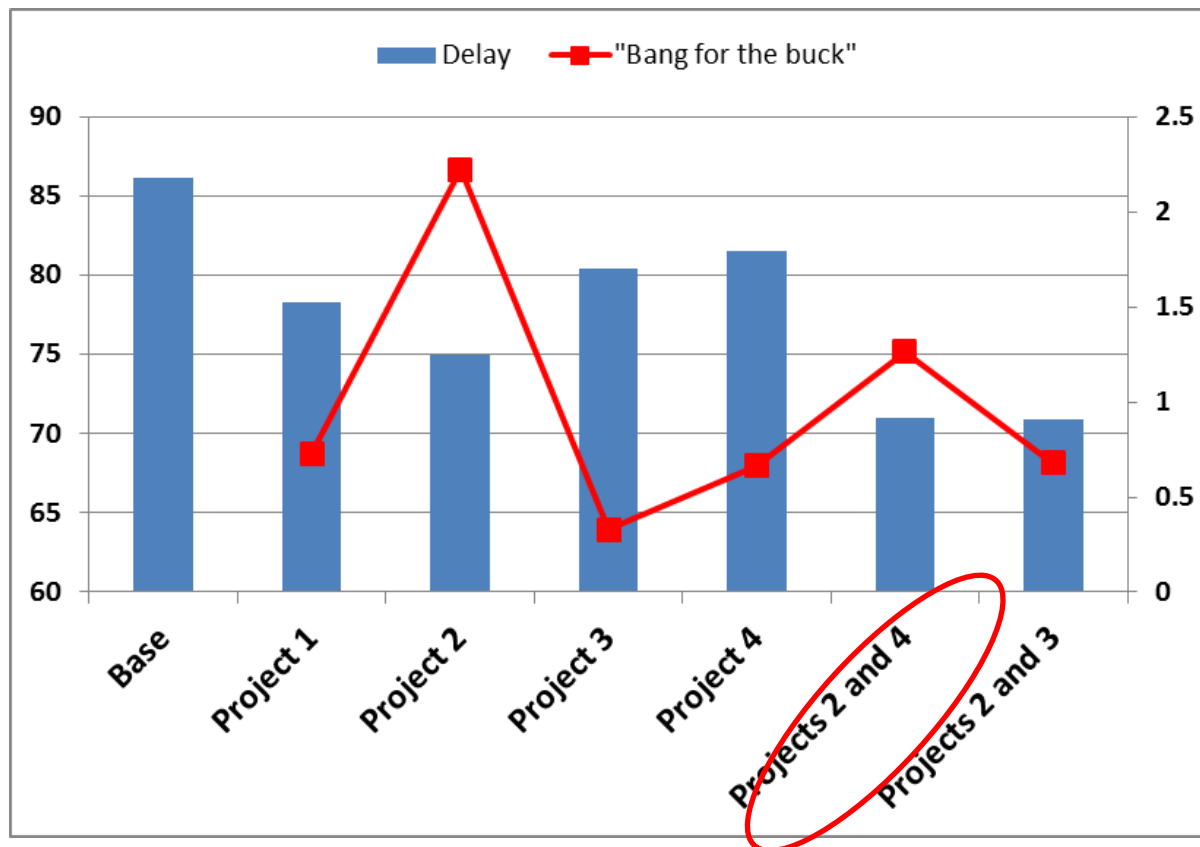In this case, a combination of Projects 2 and 4 meet the required performance goals and capital constraints

Minutes of delay per 100 train miles

Rail Service Issues: Data Collection

Response to deterioration in rail service 2013-2014

Require Class 1 Railroads to Submit Weekly Data Reports

- Goal is to facilitate recovery

- Provide stakeholders with actionable information

- Improve transparency

Rail Service Issues: Data Collection

- Interim Data Order
  - Requires Class I industry to submit performance data, including:
    - System Average Train Speed by Train Type
    - Cars Online by Type
    - System Average Dwell Time and Dwell at 10 Largest Terminals
    - Average Dwell Time at Origin
    - Trains held by Train Type and Cause
    - Grain Service (Orders, Filled, Cancelled, Backlog)
    - Coal Service (Plan versus performance)

- STB is tracking and reviewing the data
  - Monitor improvement coming out of the service crisis
  - Develop "baseline" for comparative purposes
  - Spot incongruities potentially indicative of service issues
    - Significant spikes or drops
  - Inform topics for monthly calls with Class I railroads
  - *Predict future service challenges*

Performance Management & the Railroads

"It is in the interest of both shippers and railroads to have a transparent, timely and accurate performance data base. Not only would shippers be able to better plan and manage their logistical supply chain needs, including the imposition of rail demand rationing and the use of alternative modes, during times of tight railroad capacity, but railroads would also be able to accurately benchmark their own performance against their competitors' and manage their own interchange relationships."

"Without uniform, relevant and timely railroad performance data, there can never be (a) accurate understanding of the problem or (b) appropriate performance accountability."

- Texas Trading and Transportation Services, LLC

Rail Service Issues: Data Collection

Railroad: Union Pacific	Year: 2015
1. System-Average Train Speed by Train Type for the Reporting Week (MPH)	
Intermodal	30.3
Grain unit	23.9
Coal unit	26.8
Automotive unit	24.8
Crude oil unit	23.2
Ethanol unit	21.6
Manifest	22.0
All Other	19.2

2. Weekly Average Terminal Dwell Time Measured in Hours Excluding Cars on Run Through Trains	
System Average	28.1

2. Weekly Average Terminal Dwell Time Measured in Hours for 10 Largest Terminals In Terms Of Railcar Capacity	
1 Chicago (Proviso), IL	43.8
2 Fort Worth, TX	26.3
3 Houston (Englewood), TX	32.7
4 Livonia, LA	28.8
5 North Little Rock, AR	26.5
6 North Platte East, NE	29.0
7 North Platte West, NE	35.4
8 Pine Bluff, AR	31.8
9 Roseville, CA	28.7
10 West Colton, CA	31.3

Railroad: CN	Year: 2015
1. System-Average Train Speed by Train Type for the Reporting Week (MPH)	
Coal	26.05
Crude	29.21
Ethanol	27.86
Grain	26.68
Intermodal	26.97
Manifest	23.39
Other Unit	22.29

2. Weekly Average Terminal Dwell Time Measured in Hours Excluding Cars on Run Through Trains	
U.S. Average	14.38

2. Weekly Average Terminal Dwell Time Measured in Hours for 10 Largest Terminals In Terms Of Railcar Capacity	
BATON ROUGE	10.84
CHAMPAIGN	17.50
FOND DU LAC	22.54
GEISMAR	12.46
JACKSON	10.87
KIRK YARD	26.09
MARKHAM	12.90
MEMPHIS	18.96
PROCTOR	8.39
STEVENS POINT	19.63

- Examples of the required data Class I carriers provide to the Board on a weekly basis

- Shippers better able to anticipate by looking at several different measures, to include:
  - Average speed
  - Average Dwell Time
  - Cars Online by Type
  - Trains held and Cause
  - Grain Service (Orders, Filled, Cancelled, Backlog)
  - Coal Service (Plan versus performance)

- But What About STB's Metrics…

Performance Management and the STB

No Performance Management System at the STB

But now we have a Working Group!

The Working Group's goals are:
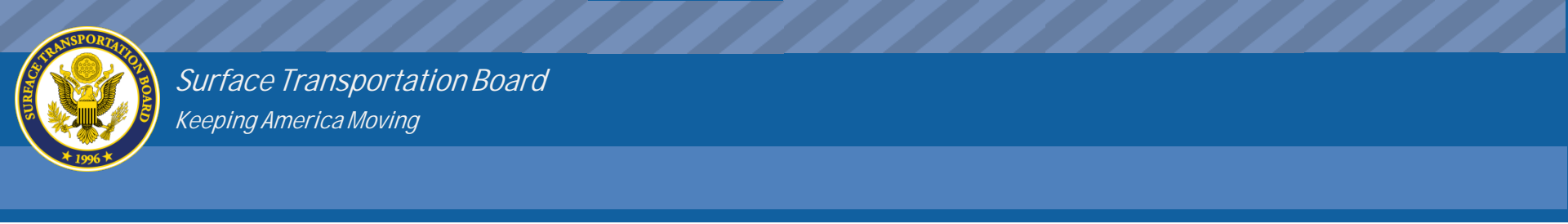
- Improve work flow

- Ensure timely decisions

Questions?

BACK UP SLIDES