

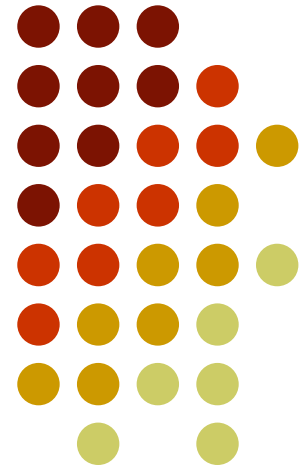
Freight Performance Measures

Ernie Wittwer

Midwest Regional University Transportation Center

University of Wisconsin-Madison

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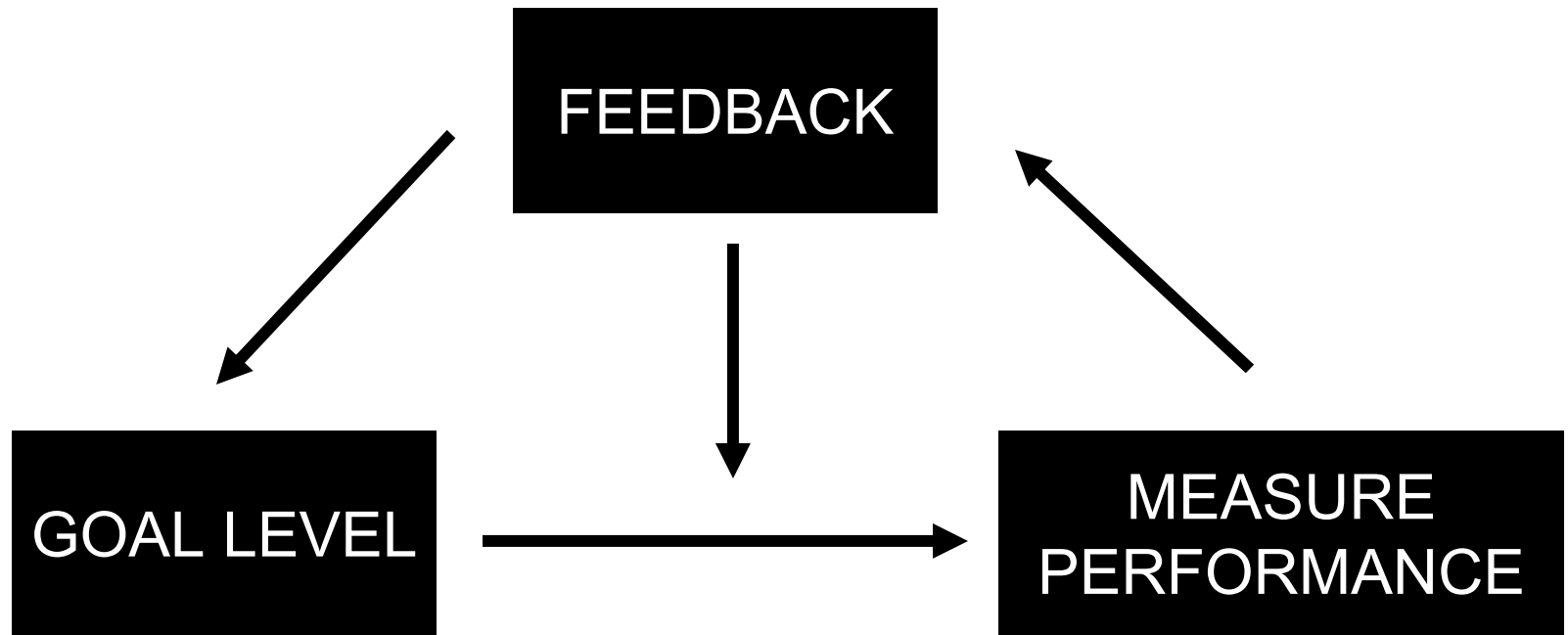
What are Measures?

*“The use of statistical evidence to determine progress toward specific defined organizational objectives.”
(NCHRP Synthesis 311)*

Why do Measures?

- To rise above an anecdotal understanding of system performance
- To improve communications
- To focus efforts
- To improve.

Improvement through Goal Setting, Measurement, and Feedback



Work Points to These Categories:

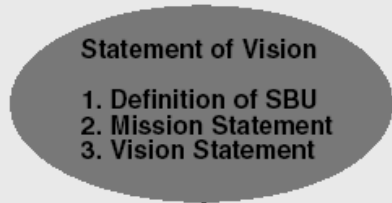
- Safety of both employees of the transportation firms and of the general traveling public
- Economic development that might be fostered by freight movement
- Economic efficiency, as measured by larger economic trends
- Economic efficiency, as measured by the costs of moving freight
- Environmental degradation
- Congestion, reliability and time

Performance Measures Should:

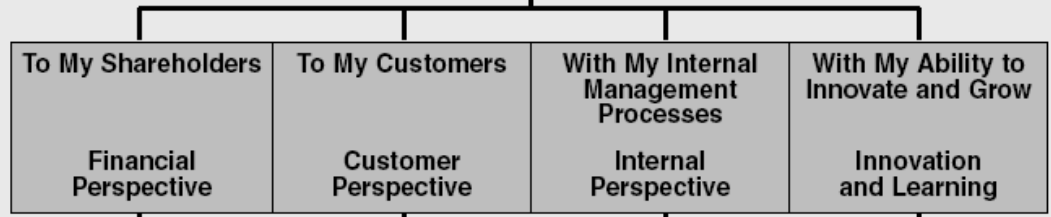
- Be closely related to the organization's strategic goals
- Reflect the range of things important to the organization
- Reflect the significant aspects of an issue
- Be chosen carefully
- Be understood
- Be used correctly

Begin by Linking Measurements to Strategy

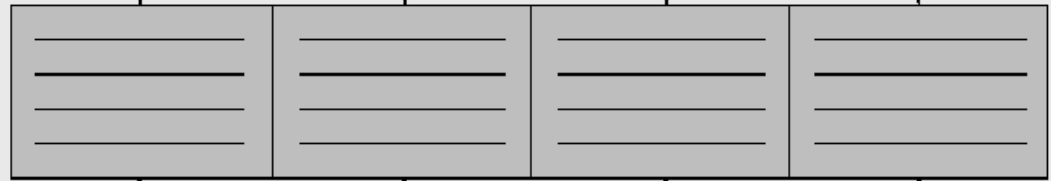
What is My Vision of the Future?



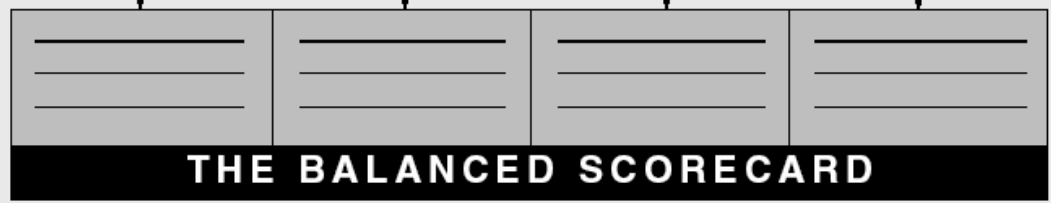
If My Vision Succeeds, How Will I Differ?



What Are the Critical Success Factors?



What Are the Critical Measurements?



Source: Kaplan & Norton, HBR

Performance Measurement Model



Mission

- Why was the organization created?
- Why does it continue to exist?
- What do its customers expect from it?

Visions

- What does the organization want to be in the future?
- What services will it provide?
- How will it operate?
- What will its culture be?
- How does its vision differ from the current reality?

Strategy

What broad approaches will the organization take to move from the current reality to the vision?

Goals

- How will you know if the strategy has been successful?
- What things will have to happen for the strategy to be successful?

Performance Measures

- How will you know if the goal has been attained?
- What metrics define the goal?
- Do the metrics define all significant aspects of the goal?
- What thresholds are significant?
- Could the measures be attained, but not the goal?
- Is data available?

Mission

Provide safe and efficient transportation facilities and services.

Vision

Keep industries of the Upper Midwest competitive by facilitating the safe, efficient, and reliable movement of freight.

Strategy

Work cooperatively across the region to identify and implement tools, programs and procedures, acceptable to each state, that will facilitate the movement of freight.

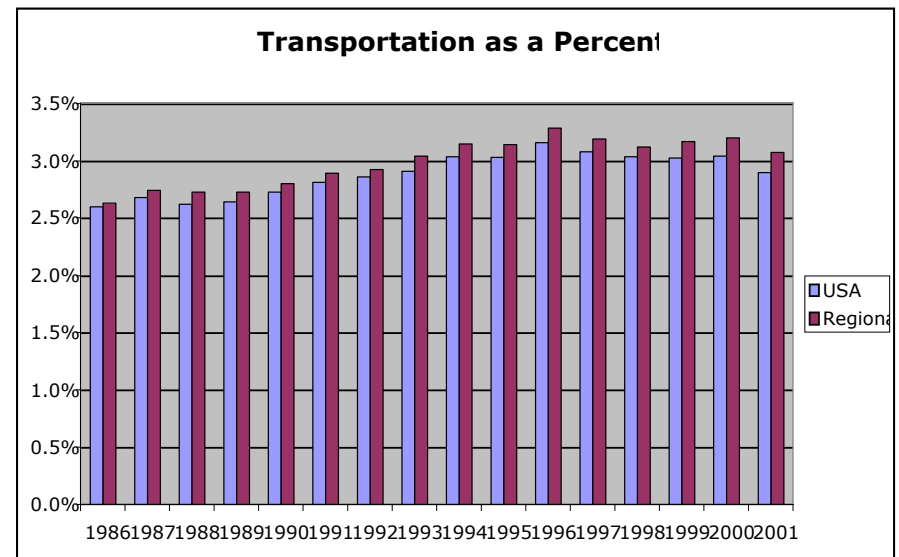
Goals

Provide Freight Transportation that is:

1. Cost-competitive
2. Safe for workers and other travelers
3. Environmentally sound
4. Timely
5. Reliable

Cost competitive

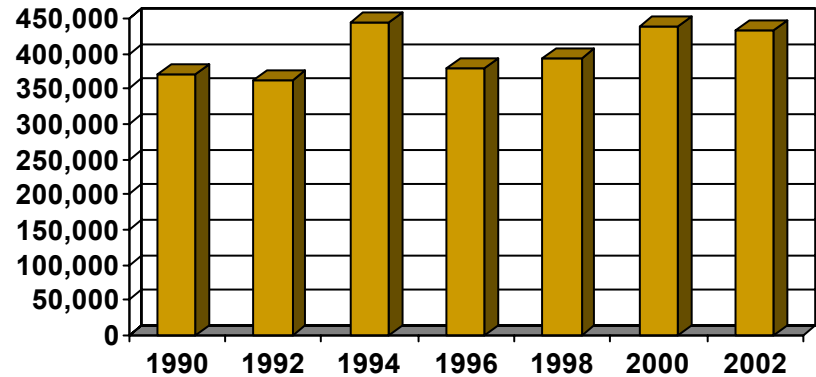
- Economic performance
 - Transportation as a percent of regional GDP
 - Regional Freight Index
- Cost
 - Published trucking, rail and package rates



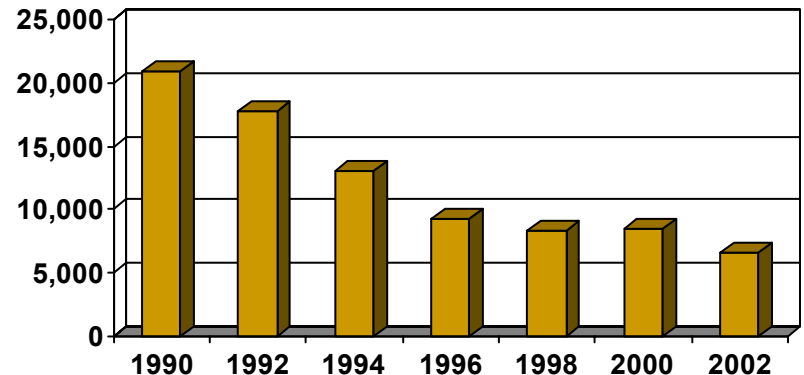
Safe for Travelers and Employees

- Regional truck crash and severity rates
- Rates and numbers of crashes and severity by major regional links
- RR-Hwy crossing crashes in region
- Class one derailments in region

U.S. Large Truck Crashes (1990-2002)

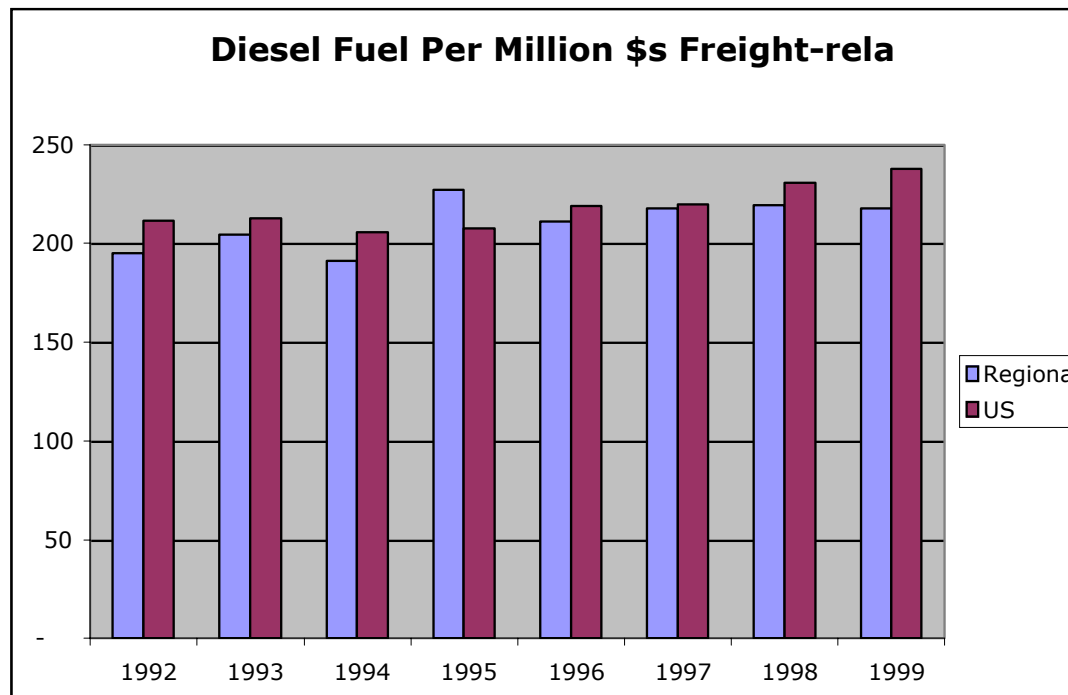


U.S. Railroad Employees Injured (1990-2002)



Environmentally Sound

Diesel fuel consumed relative to GDP



Timely

- Class one published delivery times between major points and on-time statistics
- Parcel carrier published land delivery times between major points and on-time statistics

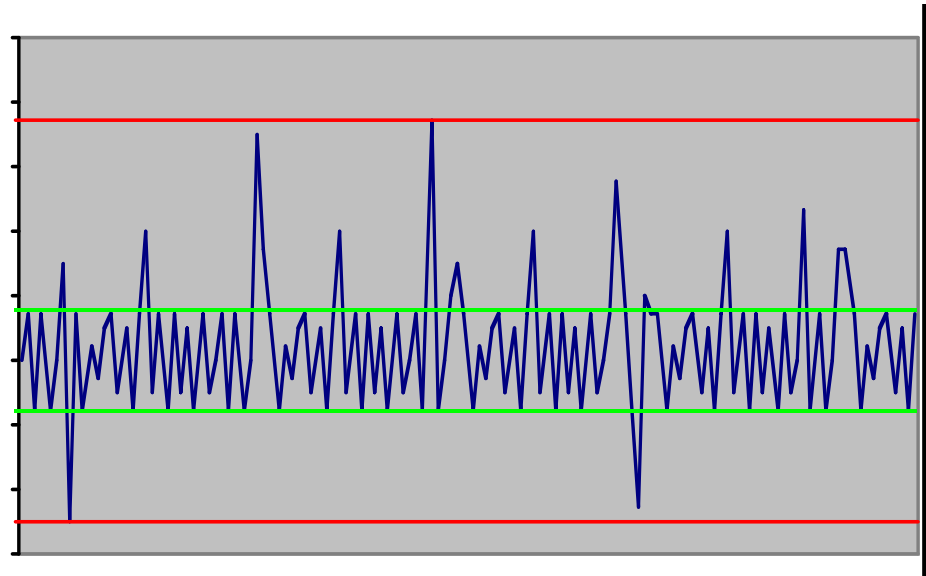
Reliability

Expected versus actual time experienced on major rural and urban links at various times, with defined confidence levels

X=Expected travel times

Y=Acceptable variation

Standard= $X \pm Y$, with Z confidence



Data Sources

- Bureau of Transportation Statistics, Bureau of Labor Statistics, state-maintained data will do some
- Automated traffic recorders, CVISN technologies, traffic management systems may help
- Much work remains to develop regional data sources and make them timely and accurate

Doing Measures

- Strategic planning process
- Identify who will keep measures
- Agree on reporting times and audiences
- Start small
- Expand as deemed appropriate