Freight Performance Measures

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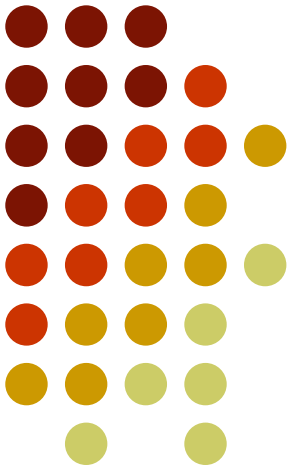


What are Performance Measures?

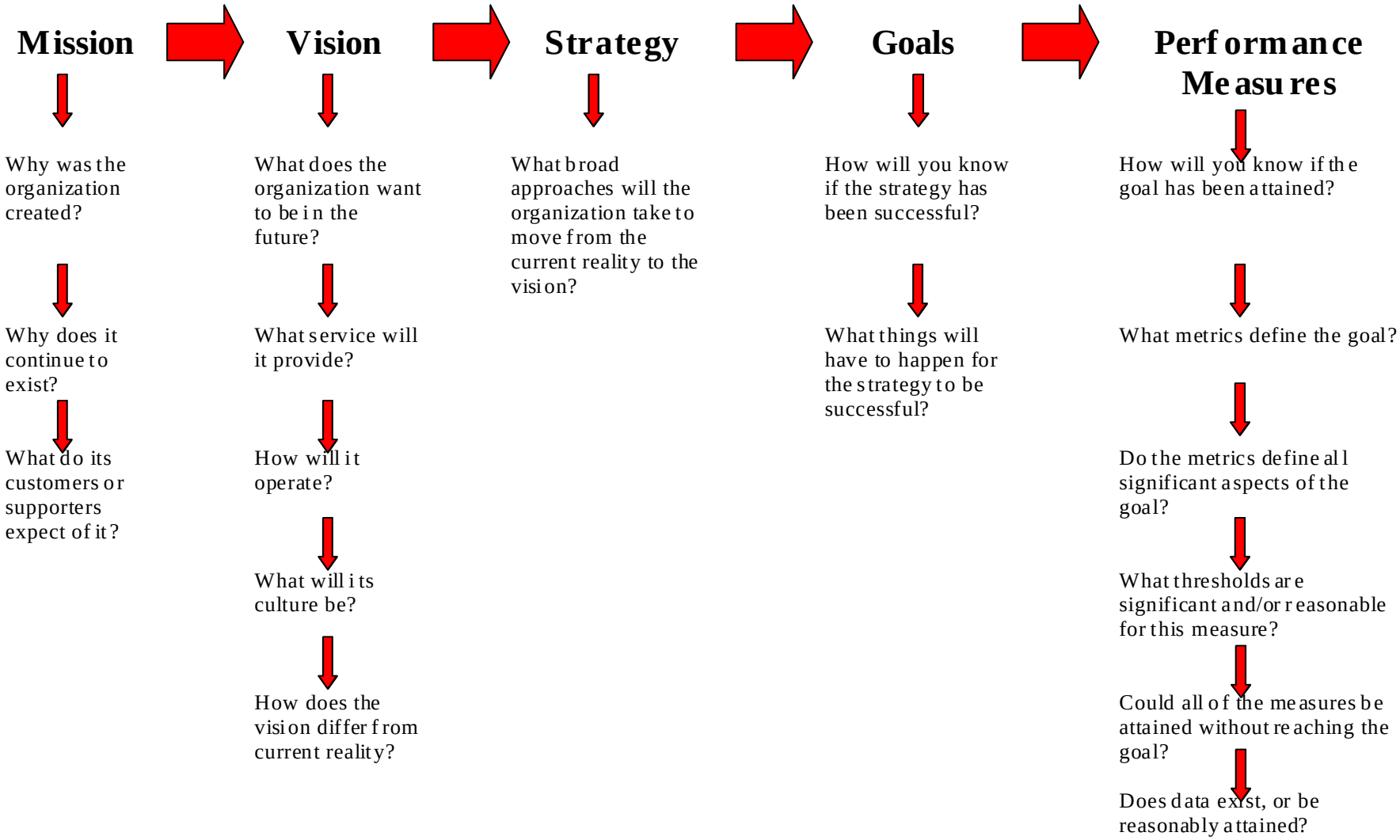
Maine

- Performance measures provide information to decision-makers to hold public agencies accountable for results, to enhance decision-making, and to improve service delivery.
- Performance measures generally track the sequence of an agency's action: from what it invests to what it produces to the results it achieves. For budget and policy discussions, agencies should focus on output, efficiency, and outcome measures.

Why Do Freight Measures?

- Communication
  - Public-Public
  - Public-Private
- Improvement
  - Define “Problems”
- Focus
  - Address “Problems”

A Performance Measures Model



Applying This Model

With Reasonable Assumptions

Mission

- Provide safe and efficient transportation facilities and services.

Most DOTs have missions that look something like this

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

Performance Measures

Goals:

Cost-competitive

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

Measures

Goal:

Safe for workers and other travelers

- 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

Measures

Goal:

Environmentally sound

- Diesel fuel consumption in the region
- Penetration of advanced engine designs in regional fleet

Measures

Goal:

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

Measures

Goal:

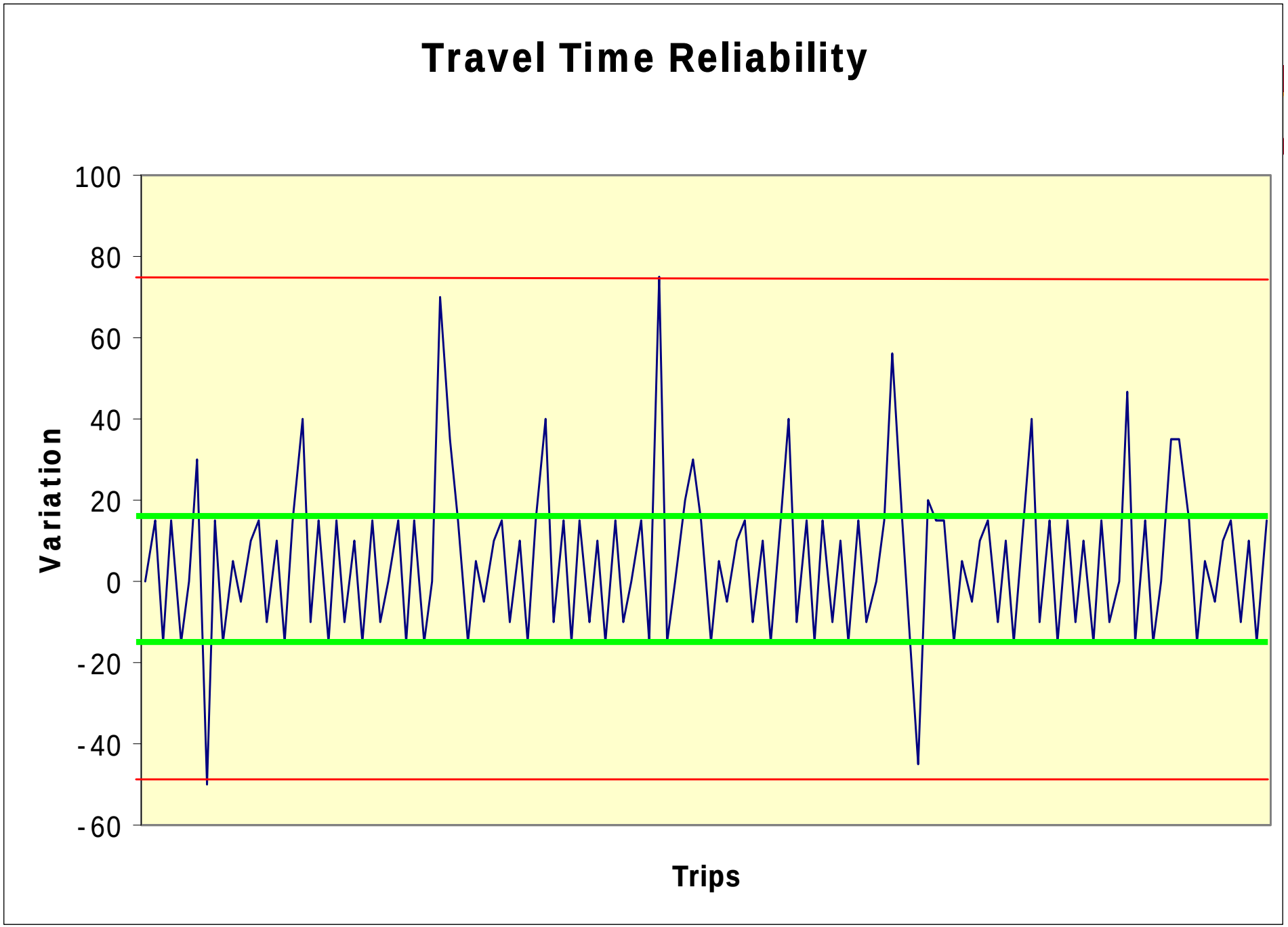
Reliability

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

X=Expected travel times

Y=Acceptable variation

Standard=X+/-Y, with Z confidence


Travel Time Reliability
100
80
60
40
20
0
-20
-40
-60
Variation
Trips

Other Measures
FHWA

- **Cost of highway freight per ton-mile**
- Cargo insurance rates
- **Point-to-point travel times on selected freight-significant highways**
- **Hours of delay per 1,000 vehicle miles on selected freight-significant highways**
- Crossing times at international borders
- Condition of connectors between NHS and intermodal terminals
- Customer satisfaction

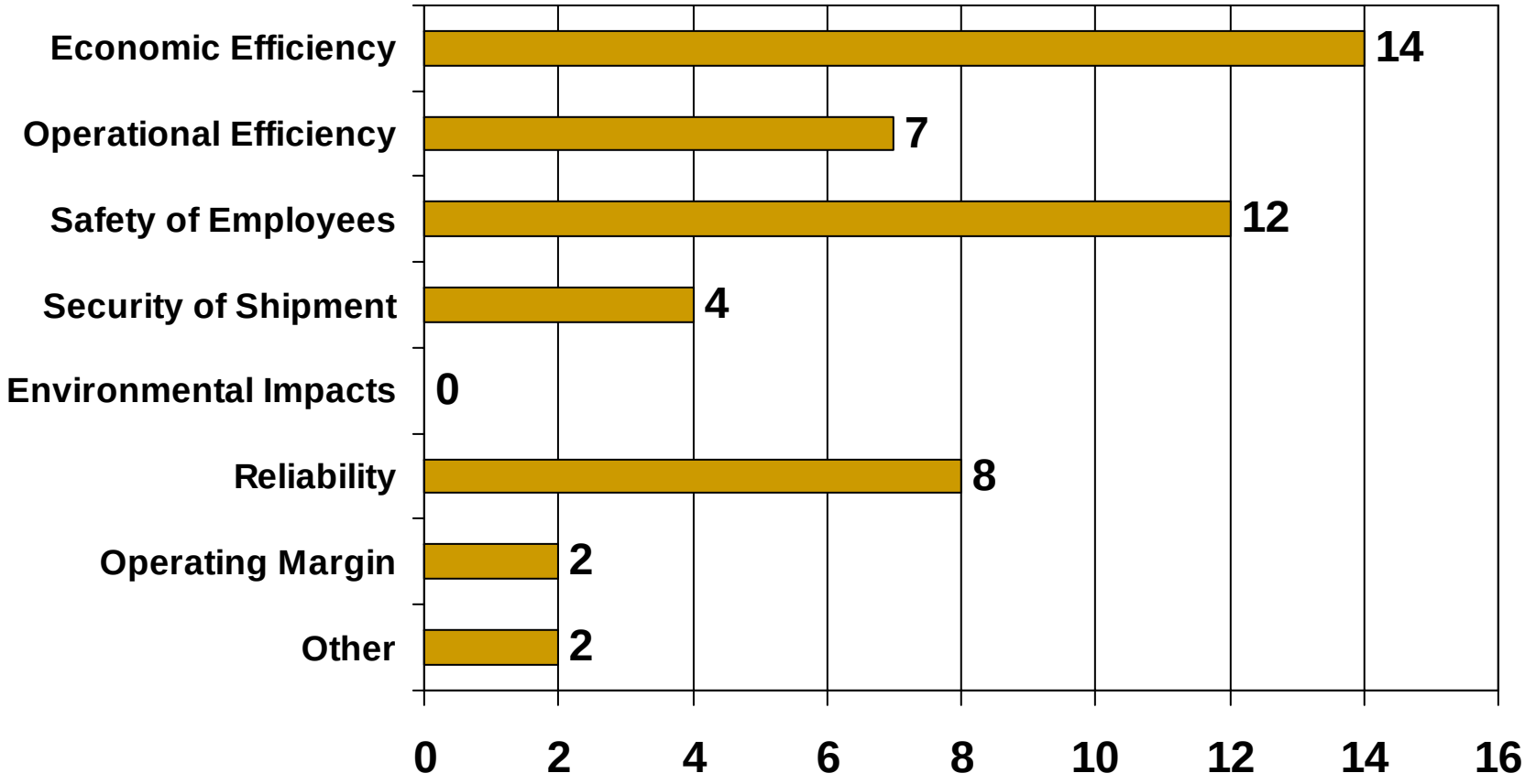
Other Measures
SCAG

- **Cost of service**
- **Door-to-door travel time**
- **Reliability of service**
- Loss and damage levels
- Frequency of service
- Number of service options available
- Accessibility of facilities
- Connectivity of major shipping centers and receiving centers

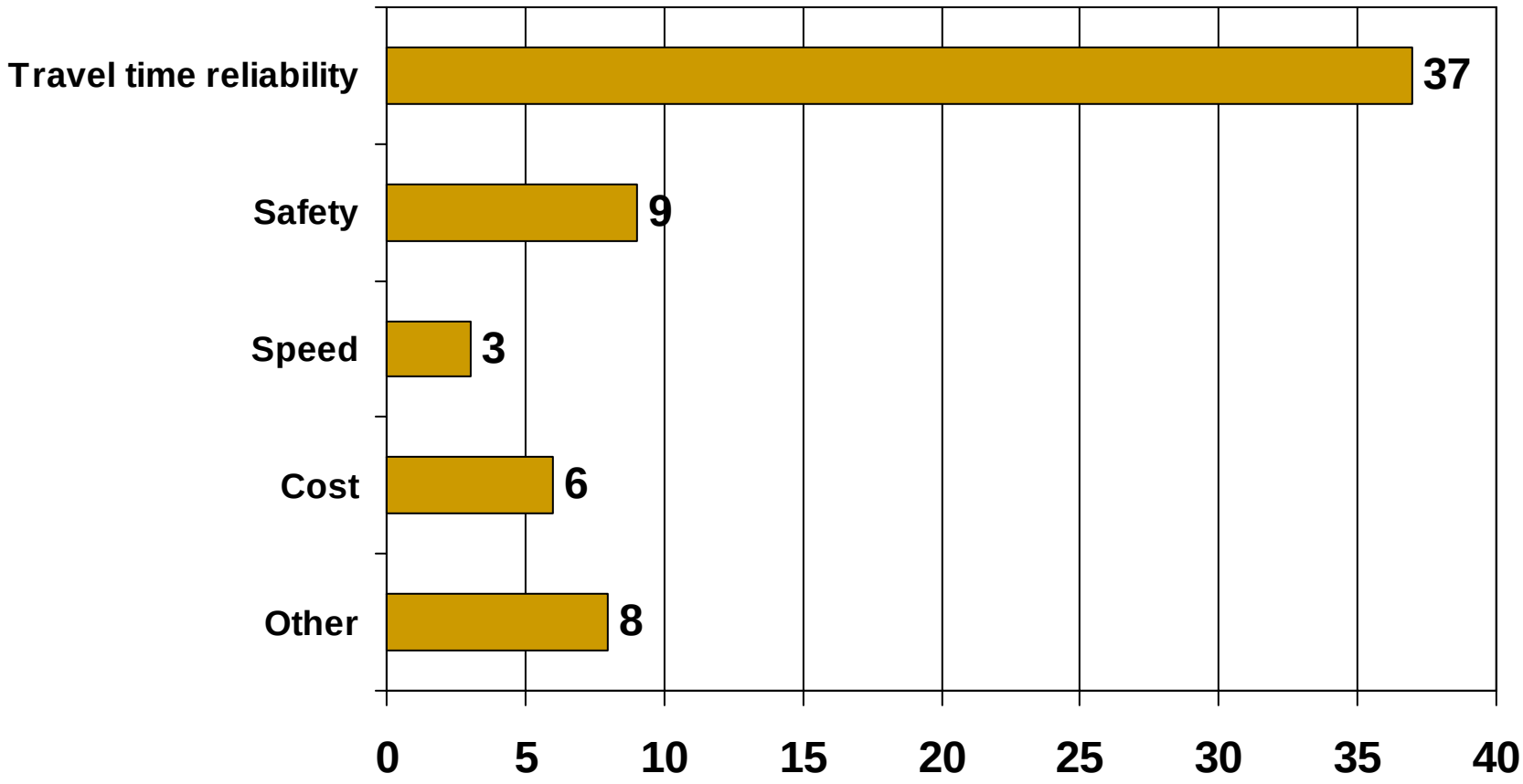
Other Measures
SCAG

- **Economic impact indictors (employment and income impacts, regional economic competitiveness)**
- **Energy consumption impacts**
- **Air quality impacts**
- Congestion impacts
- **Safety impacts**

Private Sector
Appropriate Government Focus



Public Sector
Critical Success Factors



Process

- Agree to measure
- Put Measures into Model Framework
- Define measures and standards
  - Agency process
  - Industry process
  - Political process
- Identify agency to “keep” measures
- Refine data sources and analytics
- Publish regular results