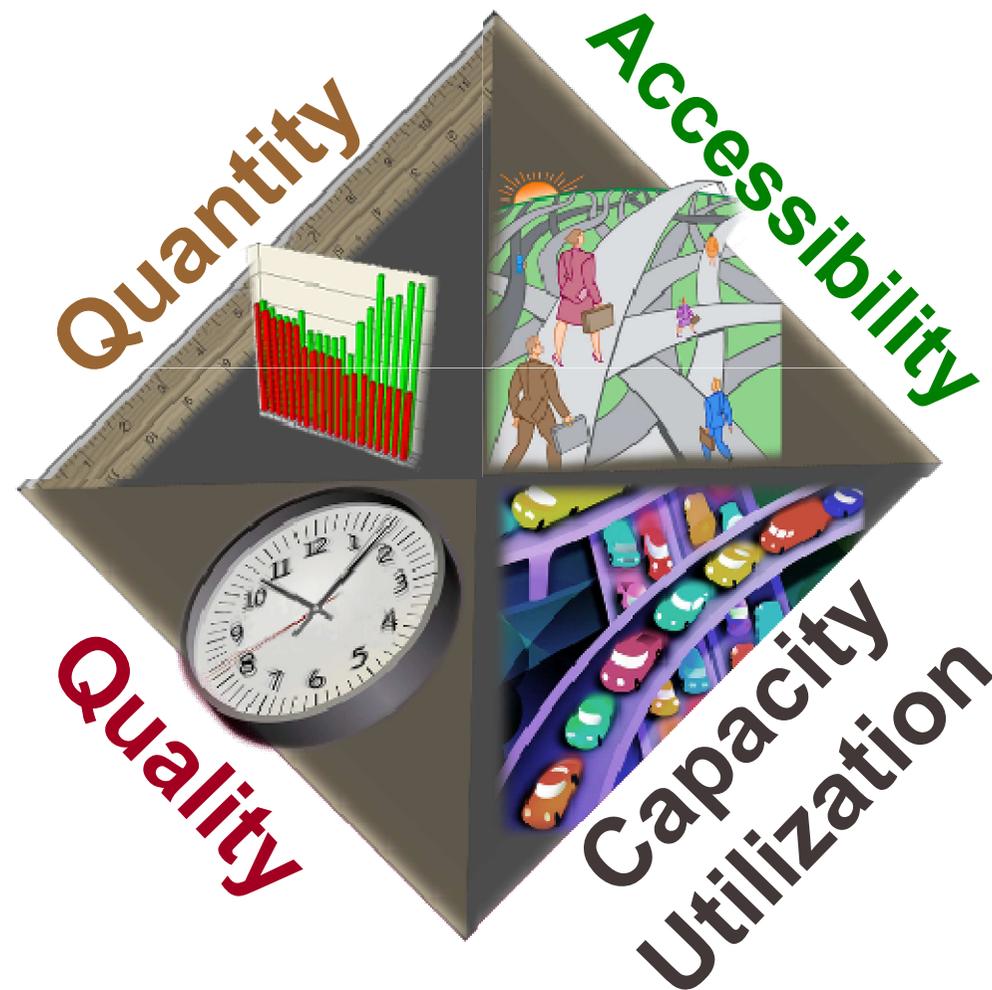


Introduction to Mobility Performance Measures



Importance of Mobility

“Providing mobility for people and goods is transportation’s most essential function.”

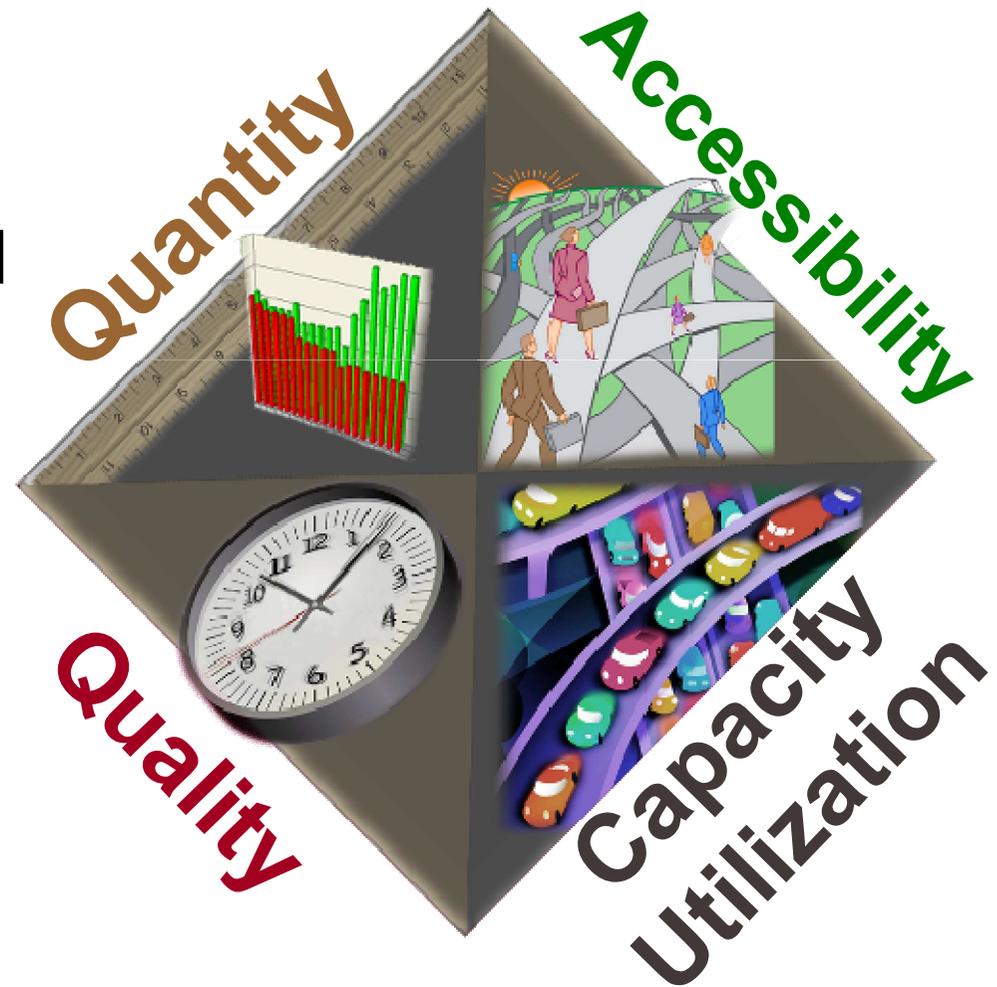
Desire for Performance Measures

- **Mobility performance measures make the most sense**

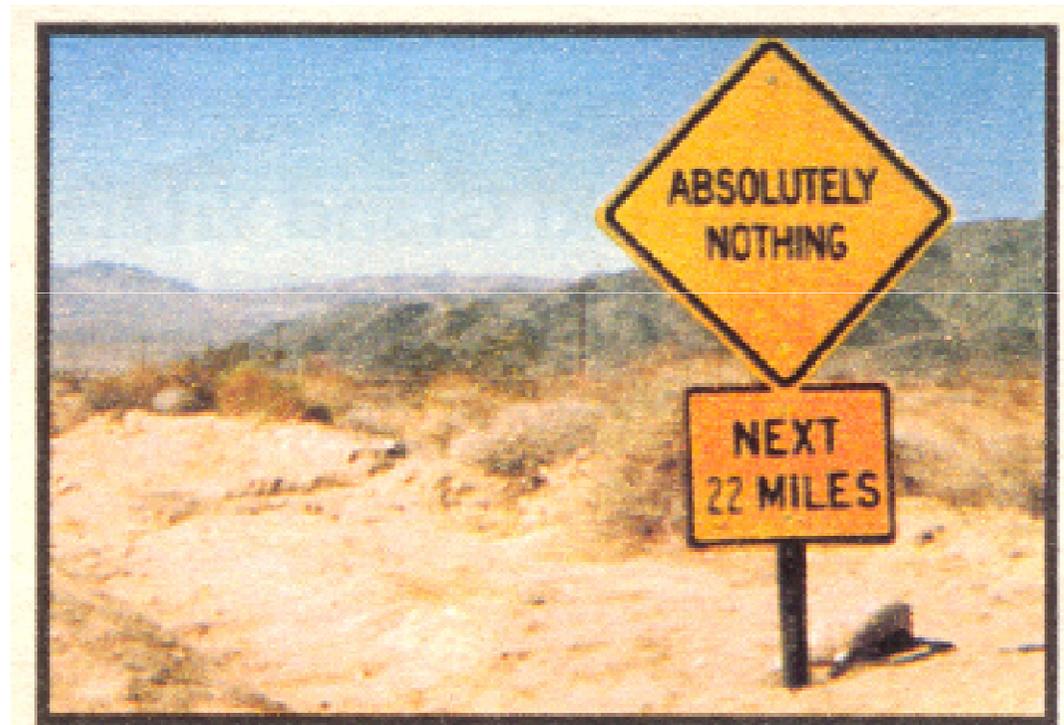


Dimensions of Mobility

- To adequately address mobility, **all four dimensions** should be emphasized and multiple performance measures used.

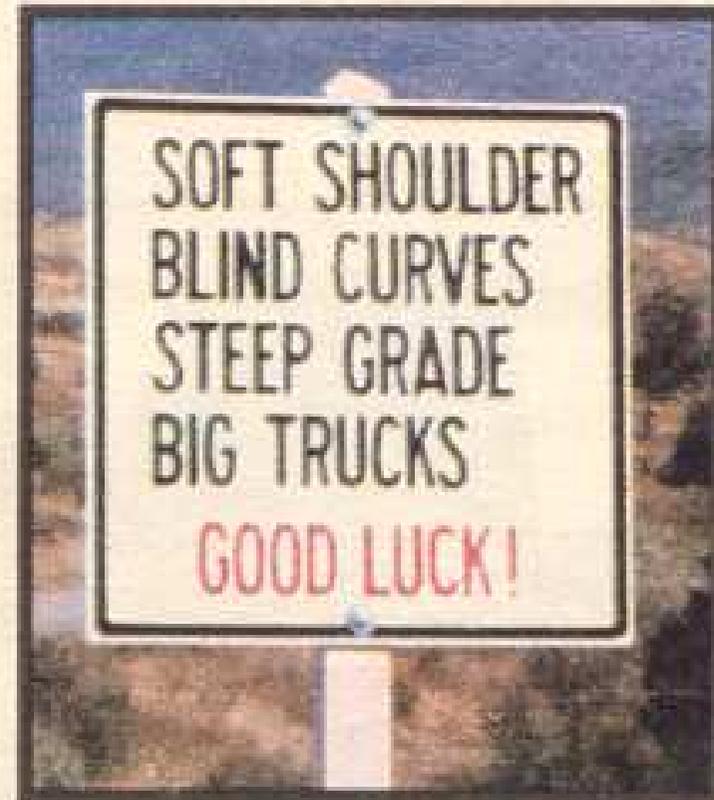


Quantity



▲ Joseph Scupien of Colonial Heights, Va., snapped this in the Mojave Desert —then he probably put away his camera.

Quality

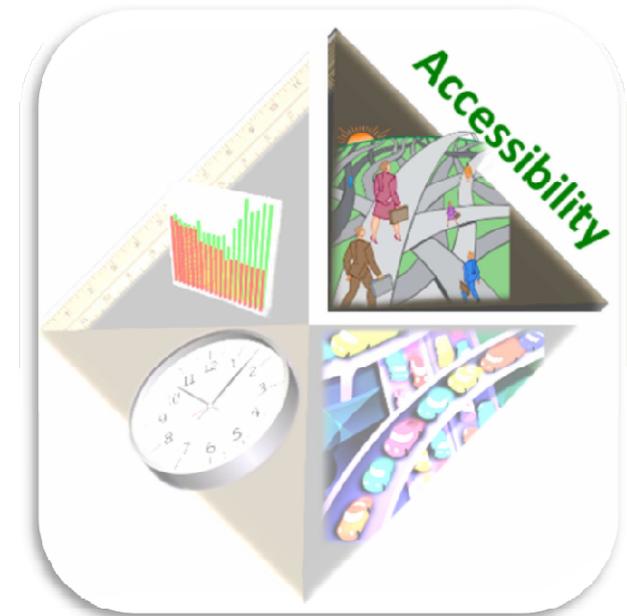


▲ Walter Youngquist of Eugene, Ore., saw this in central Oregon. He was lucky (or he turned around).

Accessibility



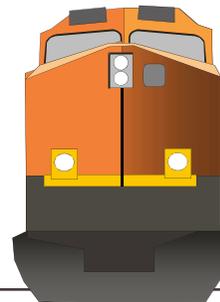
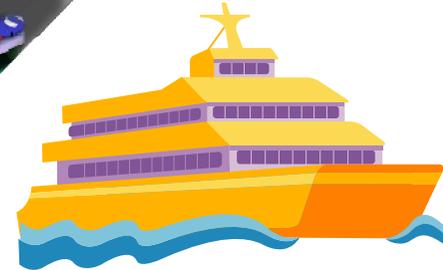
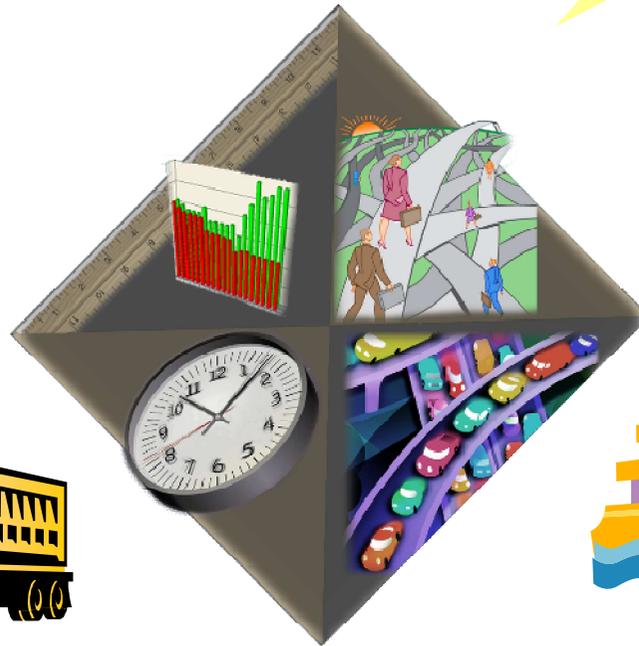
▲ Mary Meyer of Redfield, S.D., found this warning near her city. It may have stopped the game, but not the fish.



Capacity Utilization



Applicability to All Modes



FDOT's Recommended Mobility Performance Measures

- **FDOT has been tracking most of these for 10+ years**
 1. Quantity
 2. Quality
 3. Accessibility
 4. Capacity utilization

Mobility Performance Measures Resources *(if needed/desired)*

- **FDOT**
 - McLeod/Morgan TRB paper – Florida’s Mobility Performance Measures and Experience
 - Florida Highway Data Sourcebook
- **NCHRP 8-36 Task 102: Assessing Alternative Methods for Measuring Regional Mobility in Metropolitan Regions**

Prospective Mobility Performance Measures



Quantity:

- **Magnitude of use of a facility or service**
 - **More people and goods transported, the better**

Vehicle miles traveled

Person miles traveled

Truck miles traveled

Transit ridership

Prospective Mobility Performance Measures



Quality:

- **Traveler satisfaction with a facility or service**
- **User experience is usually most important to the traveling public**

Average travel speed

Vehicle delay

Person delay

Level of Service

Prospective Mobility Performance Measures

Accessibility:

- **Ease with which travelers can engage in desired activities**
- **It may not matter how good the service is if it is hard to get it**



Proximity to major transportation hubs

Percent urban miles with sidewalks

Percent urban miles with paved shoulders /
bicycle lanes

Prospective Mobility Performance Measures

Capacity utilization:

- **Quantity of operations relative to capacity**
- **Indicates how efficiently resources are being used; should be neither too high (no allowance for increased demand) nor too low (wasted resources)**



Vehicles per lane mile

Percent of miles heavily congested

Percent of travel heavily congested

Duration of congestion