

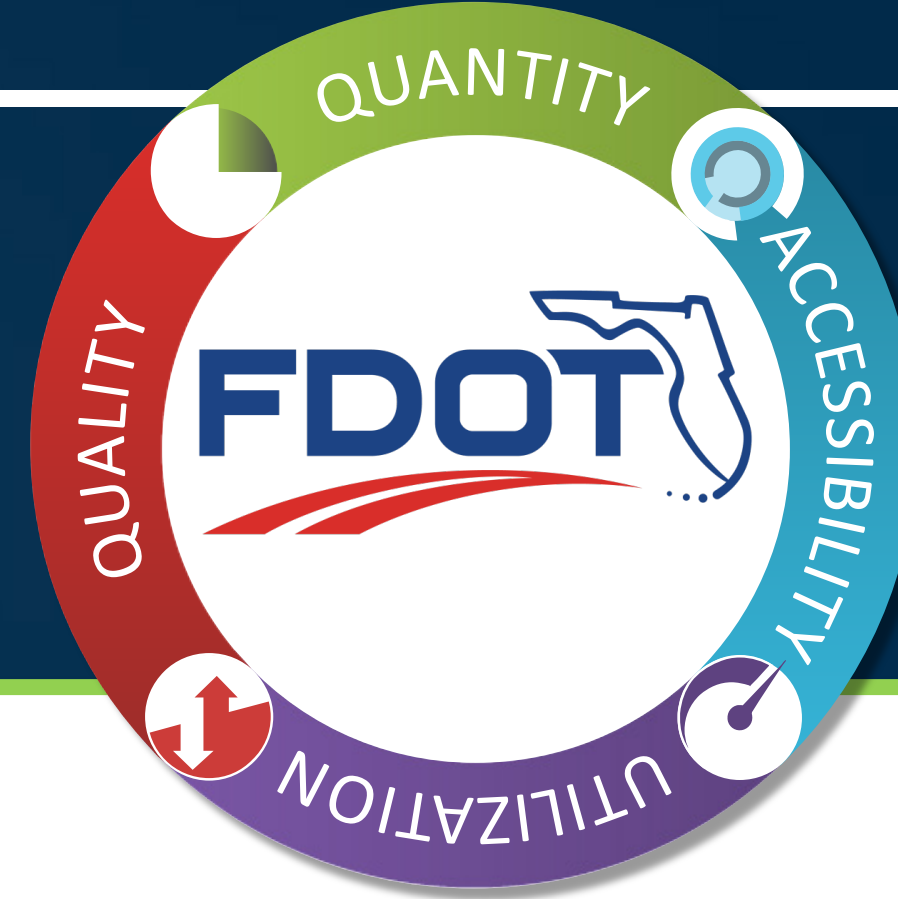
Tools for Mobility Target Setting – The FDOT Approach

Anita Vandervalk P.E.
Cambridge Systematics, Inc.
avandervalk@camsys.com

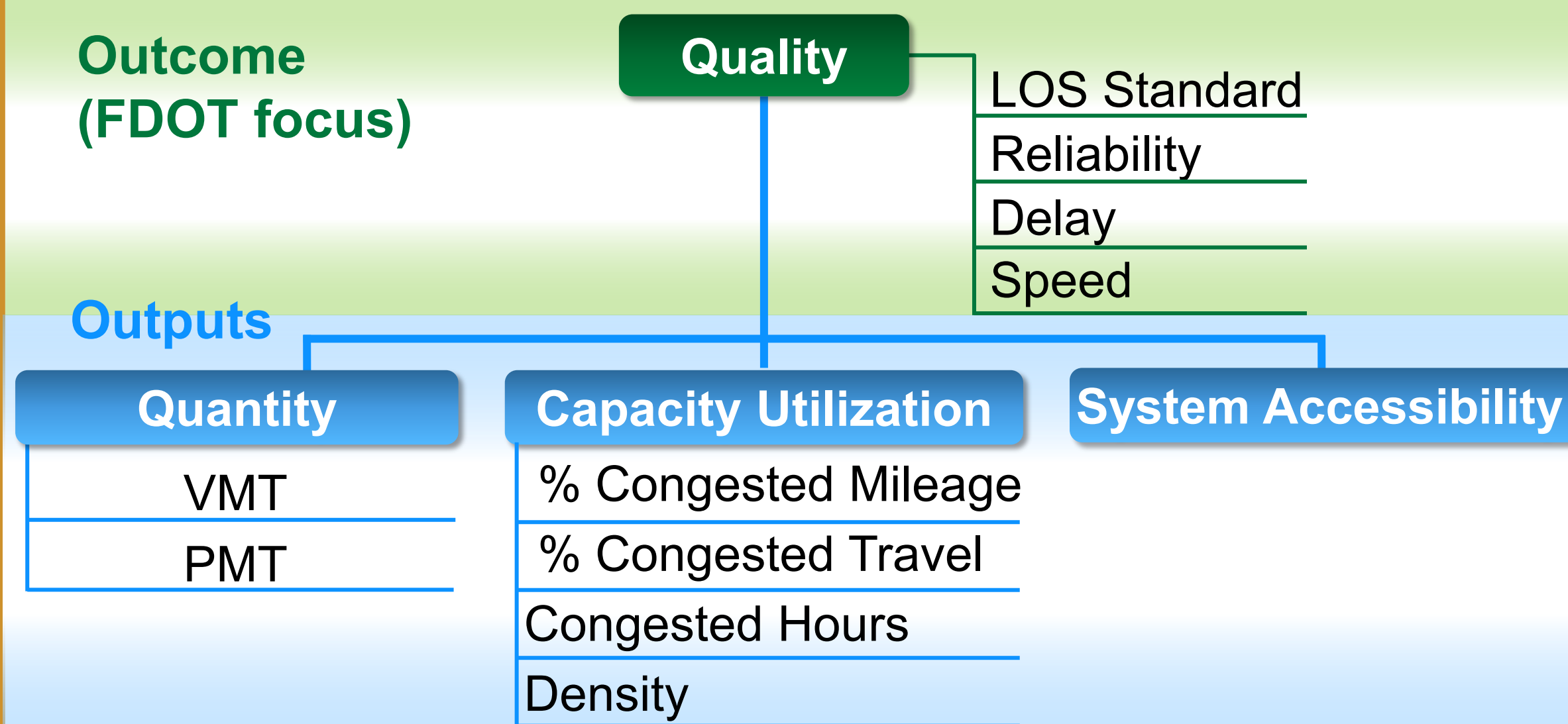
Richard Margiotta
Cambridge Systematics, Inc.
rmargiotta@camsys.com

Steven Pickrell
Cambridge Systematics, Inc.
spickrell@camsys.com

Doug McLeod
Florida Department of Transportation
douglas.mcleod@dot.state.fl.us



Which Measures Need Targets: FDOT's Mobility Dimensions



Options for Target Setting

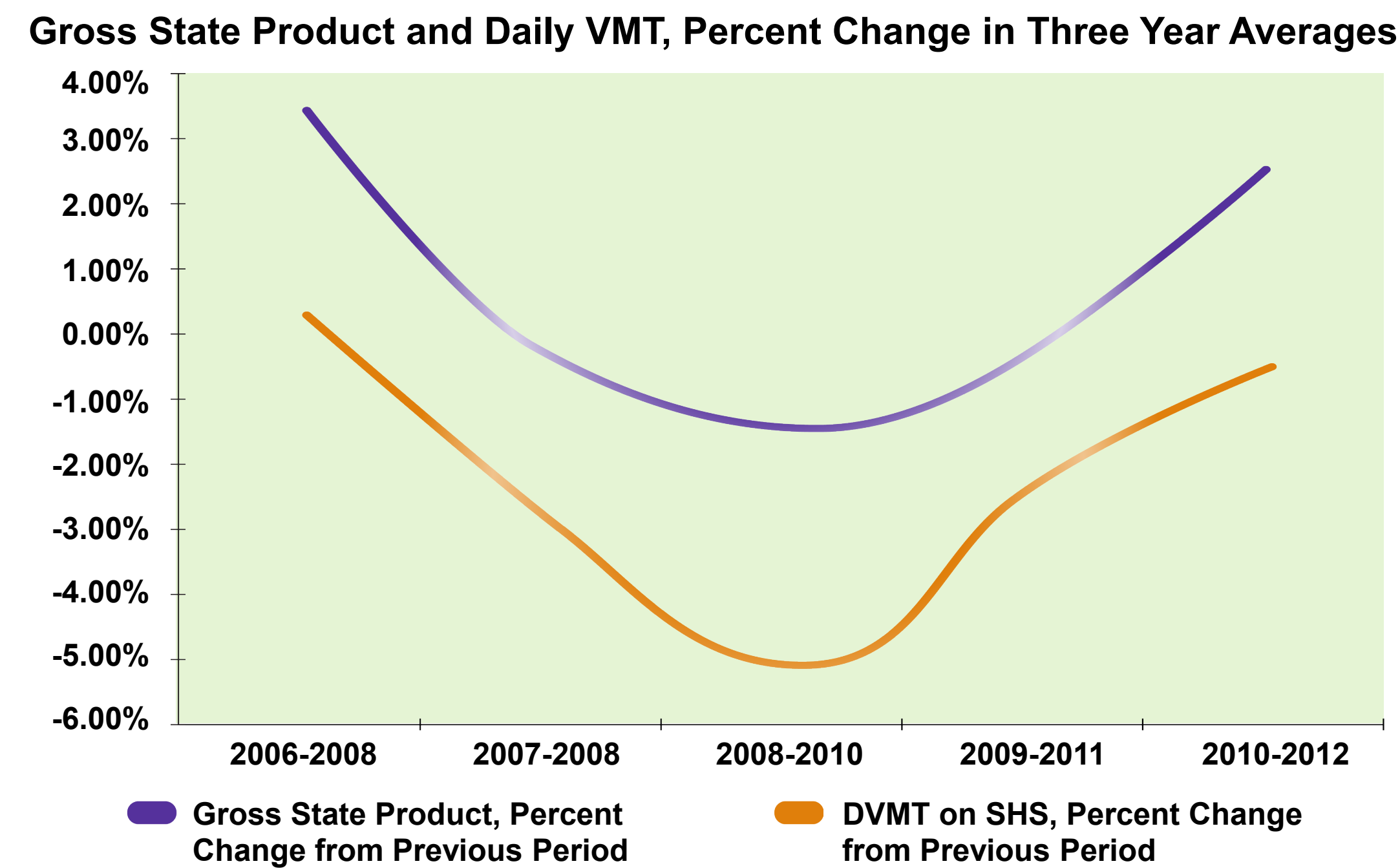
- Set hard targets.
- Set "percent change" targets.
- Set hard or change targets adjusted for economic growth/decline.
 - Uses the fact that exogenous factors drive demand, which in turn drives congestion.
 - So, demand scenarios can be used to study economic growth assumptions.
- Set stretch targets (e.g., zero fatalities).

Causal Factors for Mobility

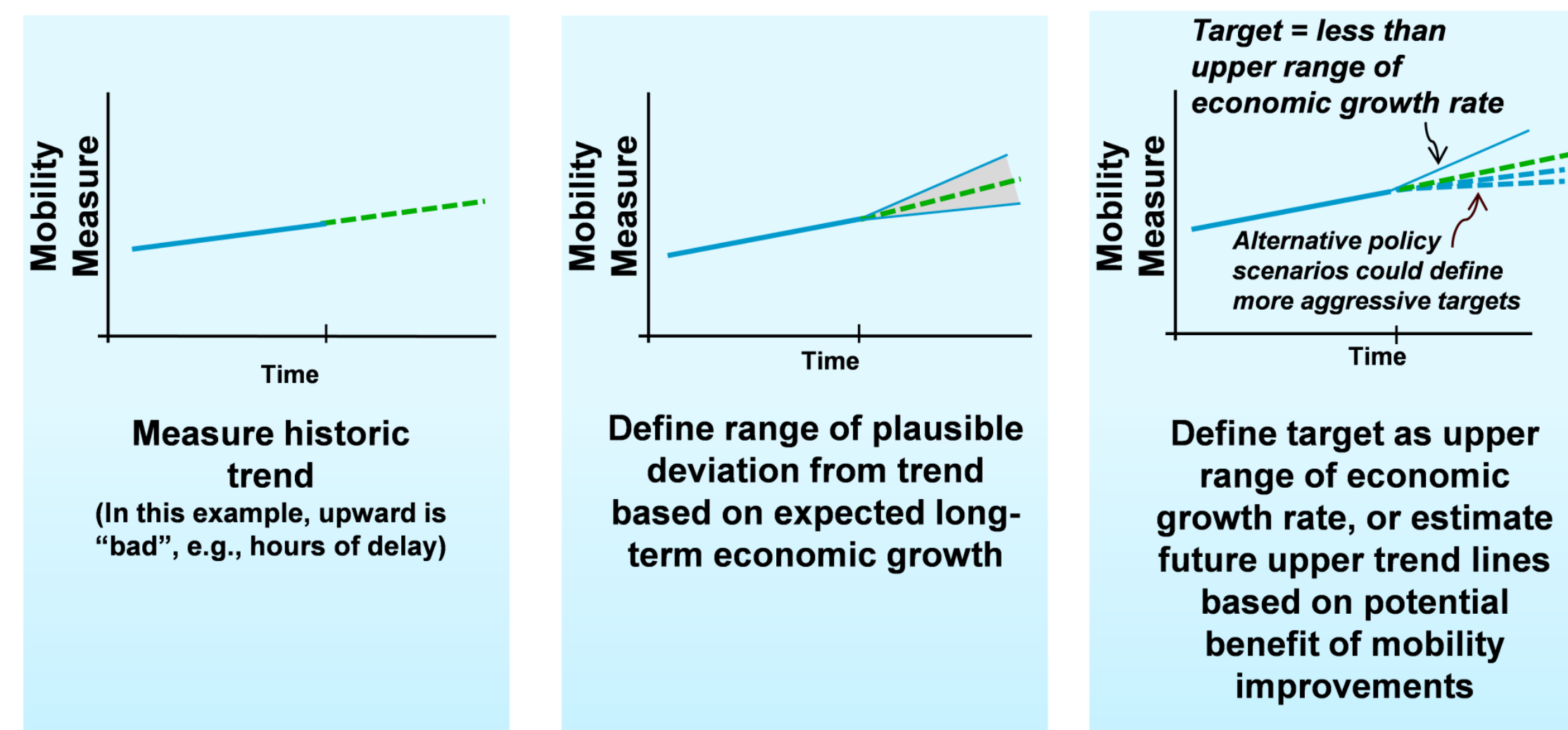
We use Gross State Product as a surrogate for most factors affecting demand



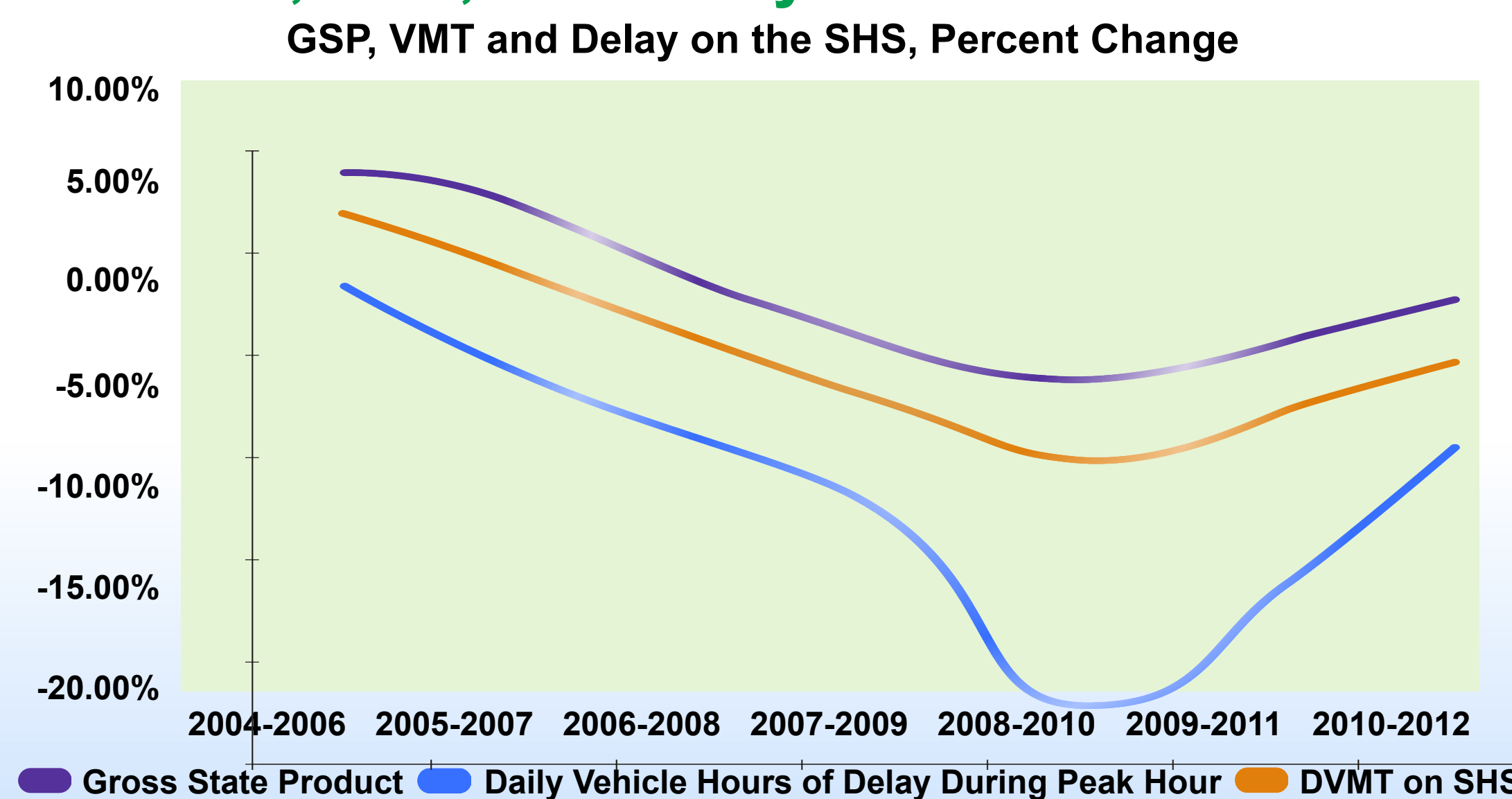
Gross State Product versus VMT (Florida)



Technical Framework for Target Setting



GSP, VMT, and Delay Trends in Florida



Proposed Tools for Target Setting

- Use measured data to establish historical trends.
 - Forecast off of current year using models, calibrated to match current year.
- FDOT Source Book of performance measures provides the base (now transitioning to vehicle probe data).
- Run alternate demand scenarios that can be tied to changes in economic activity.
- Estimate costs of achieving targets.
- Reach consensus on targets after review of results.

Target Setting at Three Levels

Forecasting Method			
Level	Data	Demand	Performance Measures
Statewide	Roadway Inventory or HPMS	Growth Rates	Modified HERS procedures
Regional	Regional Network Demand	Travel Demand Model	Modified SHRP 2
Project	Roadway Inventory	Travel Demand Model or Growth Rates	Updated HCM procedures

Risk-Based Sensitivity Analysis for Forecasts

