

DEVELOPING ECONOMIC FORECAST SCENARIOS FOR COVID-19 USING THE REMI MODEL

Objective



- Simple, quick-to-implement new state/regional forecast based on COVID-19 repercussions
- Easily modified for best-case, worse-case, etc.
- Allows for “what-ifs?” either as shocks or as policy decisions that a Governor wants to look at
- For example, “what if” international college student enrollment drops by 25% in the fall; or “what if” the Governor cancels events, closes restaurants

About REMI



REMI's 40-year history of rigorous academic research and software development has led to the development of the the industry standard in macroeconomic research methodology:

Input-Output

Close analysis of inter-industry relationships

Econometrics

Advanced statistical analyses underpinning the model

General Equilibrium

Estimate of long-run stability of the economy allows for analysis of policy decisions

Economic Geography

Effects of geographic concentration of labor and industry



Integrated REMI economic modelling approach



Iowa Department of REVENUE



what does REMI say? sm



Methodology: Overview



1. Modify Baseline National Forecast to Reflect National COVID-19 Slowdown/Recession Scenario
2. Use COVID-19 National Forecast to Drive State/Regional Forecast
3. Additional Modifications/What-Ifs for State/Region

Methodology: Details



- User has new national GDP growth forecast from Moody's, IHS, RSQE, etc., or has exogenous growth assumptions (annual, Q2 – important for states)
- User creates “New National Control” in Tax-PI or PI+ to create a national forecast scenario
- This COVID-19 national forecast is the new driver for an updated regional forecast
- Further adjustments to “New Regional Control” to reflect relative differences from nation (e.g. Auto Manufacturing in AL, Restaurants in OH)

National Forecast Updates



- UCLA Anderson: -0.4% (Q2 -6.5%, Q3 -1.9%)
- IHS Markit: -0.2%
- Moody's: Q1 -1.6%, Q2 -2.5%
- Morgan Stanley: Q2 -4%
- Deutsche Bank: -1% (Q2 -13%)
- Pantheon: Q2 -10%
- Note: GM, Ford, Fiat Chrysler, Honda, Toyota temporarily shutting down North American plants

COVID-19 Impacts



- Loss of Productivity/Absenteeism/Shutdowns
- Consumer spending
- Supply chain disruption
- Decline in global demand
- Increase mortality rate