

# UNDERSTANDING TRANSPORTATION POLICY WITH TRANSIGHT

# Agenda



□ Introduction

Overview of TranSight

□ Model Demonstration

□ Q & A

### **About REMI**



# Regional Economic Models, Inc. (REMI) is a World Leader in Economic Policy Modeling

#### **Software**

- REMI PI+ is the state of the art for policy analysis.
- Other Customized Models
  - TranSight
  - Tax-PI
  - E3+

#### **Support**

- REMI licenses include unlimited telephone and email technical support.
- REMI users have access to vast resources to enhance their understanding and skill in the model.

#### **Services**

- Macroeconomic impact consulting
- Analysis of prominent state and federal legislation
- Led by REMI's team of highly experienced and qualified research economists

## **About REMI**



# Answers to "what-if...?" questions about the economic and demographic effects of events and policies

#### **■** Economic Results:

- Employment by Industry and/or by Occupation
- Output by Industry
- Gross Regional or State Product
- Personal Income
- Total wages, compensation, earnings

### Demographic Results:

- Population, by 808 age-ethnicity-gender cohorts
- Migration, by 808 age-ethnicity-gender cohorts

# **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**

Regionalized interindustry relationships

#### **Econometrics**

Behavioral responses to a changing economy

#### **General Equilibrium**

Understanding how supply and demand affects markets over time

#### **Economic Geography**

Effects of geographic concentration of labor and industry

**Integrated REMI** economic modeling approach



DEPARTMENT of REVENUE



Community Development







Iowa Department of

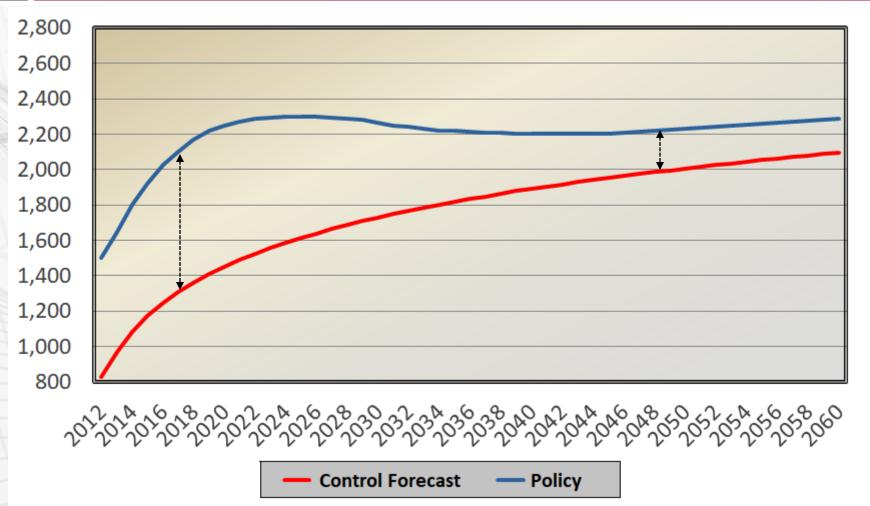






# **Dynamic Analysis**





# Understanding Transportation

- Two benefits to improving transportation infrastructure
  - Industry: easier to move goods, services, and inputs between markets
  - Labor: easier for workers to access labor markets

# What is TranSight?



- □ **TranSight** the next generation platform for estimating the total economic effects of changes to transportation systems.
- TranSight allows users to understand how transportation networks increase economic competitiveness.

TranSight is also constructed with extensive data on:

**Safety Valuation Factors** 

**Fuel Efficiency** 

**Emissions Factors** 







# **TranSight Process**



- VMT (by mode)
- VHT (by mode)
- Trip Counts (by mode)

**Inputs: TDM Indicators** 

#### **TranSight Calculations**

- Accessibility Costs
- Commuting Costs
- Transportation Costs
  - Parameterization

- Employment
  - GDP
- Personal Income
- Economic Migration

Outputs:
Macroeconomic
Results

# Static vs. Dynamic Analysis



### **Static Analysis**

Construction spending
 O&M spending

### **Dynamic Analysis**

#### **Transportation Metrics**

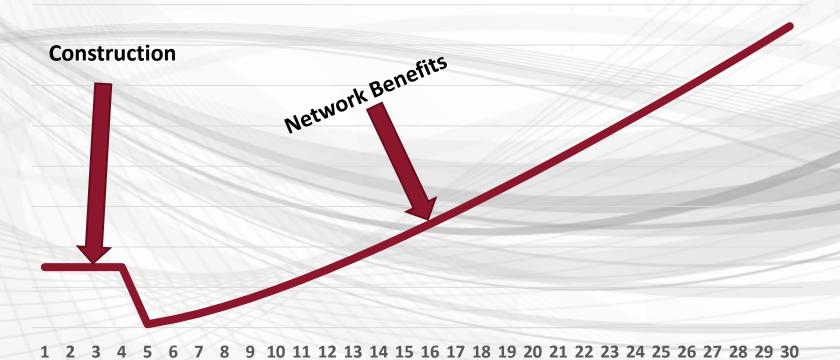
- 3. Travel time savings
- 4. Network speed improvements
  - 5. Access to Labor
- 6. Access to intermediate inputs

### **Associated Metrics**

- 7. Financing Options
- 8. Emissions savings
- 9. Safety improvements
- 10. Fuel and Non-fuel VOCs11. Value of Leisure

# **Economic Impact Over a Project's Life Cycle REMI**

### **Sample Project**



what does REMI say? sm

# **TranSight Applications**



### Strategic Transportation Planning

- Long Range Transportation Planning
- Corridor, Freight, Highway, Rail Studies
- Transportation Improvement Program (TIP) Analysis

#### **Project Prioritization**

- Cost-Benefit analysis
- Compare Key Performance Indicators
- New Project Prioritization Dashboard to Rank Projects by effectiveness

### **Economic/Demographic Forecasting**

- Federal Grant Applications (TIGER/BUILD grants)
- Industry Cluster and Operational Footprint Analysis
- Hazard Mitigation and Resiliency



# **Model Demonstration**