

## Investing in American Transit and Water

### Regional Economic Models, Inc.

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what does REMI say? sm



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We are the nation's leader in dynamic local, state and national policy modeling.

From the start, REMI has sought to improve public policy through economic modeling software that informs policies impacting our day-to-day lives.

We were founded in 1980 on a transformative idea: government decision-makers should test the economic effects of their policies before they're implemented.

At REMI, we're inspired by a single goal: *improving public policies*.





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Our models are built for any state, county, or combination of counties in the United States.

#### **Our Representative Clients**

Our model users and consulting clients use REMI software solutions to perform rigorous economic analysis that critically influences policy.





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#### What is the INVEST in America Act?







Water and Climate Investments	Infrastructure Improvements
Improving road efficiency can significantly reduce car-induced emissions Investing in water infrastructure can improve health outcomes and reduce the economic drain caused by lead poisoning	<ul> <li>Improving transit infrastructure and roads can help employers access more workers and input goods, resulting in higher productivity and lower real prices</li> <li>Improving regional interconnectedness can help some "left-behind" regions become more competitive</li> </ul>



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Funding Item	Funding Level (billions USD)
General Roads/Motor Transit	288.5
Bridges	32
Decarbonization, mitigation, green materials	14.5
EV Charging	4
Reconnecting Communities	4



Funding Item	Funding Level (billions USD)
General	109
Rural/High-poverty Transportation	\$50 million per year, in perpetuity



Funding Item	Funding Level (billions USD)
General Rail	63
Amtrak	32



Funding Item	Funding Level (billions USD)
Drinking Water State Revolving Fund	53
Replacing Lead Water Lines	45
Water Bill Assistance	8
Water Bill Debt Relief	4
Other Drinking Water	7



Funding Item	Funding Level (billions USD)
Clean Water State Revolving Fund	40
Water Pollution Control	4.5
Alternative Water Sourcing	1
Other Wastewater	5.75



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#### Model Simulation: REMI TranSight



# TranSight

TranSight is the premier software solution for comprehensive evaluations of the total economic effects of transportation policy.

Grounded in over 20 years of modeling experience, decision-makers depend on TranSight to forecast the short- and longterm impacts of transportation investments on jobs, population, income, and other economic variables



#### Model Simulation: REMI E3<sup>+</sup>



# E3+

E3<sup>+</sup> is the premier software solution for analyzing the macroeconomic and demographic impacts of any initiatives related to the energy and environmental sectors.

Decision-makers depend on E3<sup>+</sup> to provide comprehensive evaluations of the total economic impact of altering electric rates, introducing new power sources, investing in the production of energy, and other policy changes.





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#### Key Results – GDP by region



#### GDP by Region



#### Key Results – GDP by region (capital costs counterfactual)



#### GDP by Region



#### Key Results – Output by Industry



#### Output by Industry Region Comparison Forecast Category Comparison Type Forecast Regional Simulation 1 Standard Regional Control Output ✓ % Change All Regions 16% 15% 14% 13% 12% 11% 10% 9% Percent 8% 7% 6% 5% 4% 3% 2% 1% 0% -1% 2022 2038 2040 2042 2044 2046 2020 2024 2026 2028 2030 2032 2034 2036 2048 2050 2052 2054 2056 2058 2060 Wholesale trade All Industries Forestry, fishing, and hunting Mining Manufacturing Utilities Construction Wholesale trade Transportation and warehousing Retail trade $\overline{\mathbf{v}}$ Information ~ Finance and insurance Real estate and rental and leasing Professional, scientific, and technical services Administrative, support, waste management, and remediat... Educational services; private Arts, entertainment, and recreation — Health care and social assistance Other services (except public administration) Accommodation and food services Federal Military Federal Civilian Farm

#### **Key Results – Population by Region**



#### Population by Region



#### **Key Results – Relative Delivered Price**



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#### Relative Delivered Price



#### Key Results – Energy Consumption







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#### Overall

- The INVEST In America Act created significant gains in GDP, employment, and wages relative to the baseline
- Prices reduced over long-term due to better commodity and labor access

#### Industries

- Benefits most industries, but creates relative winners and losers
- Manufacturing and wholesale/retail trade fare well. Capital-intensive industries like extraction do not benefit much, employment services lose somewhat

#### Regions

- The Midwest (Great Lakes, Plains) gained significantly, along with the South
- Richest, highly built-up regions (New England, Far West, Mideast) gain the least

#### Energy/Environment

- Energy demand in all sectors increased (no change in Mwh/\$GDP modeled)
- Carbon reductions from EV generation and infrastructure materials changes may be overwhelmed by increased energy demand from larger economy, barring additional clean energy investments

#### **Economic Modeling: Why does it matter?**



Clarify

- Understand economic, fiscal and demographic implications of policies before implementation
- Ensure that public policy serves the broad-based interests of the public

• Make predictions about the effects of policies before implementation

Predict

- Avoid unwanted negative impacts
- Make effective use of resources

 Inform policy with standard metrics rather than ideology or intention

Inform

• Address stakeholders with evidence that communicates how policy benefits or disadvantages their communities broadly



#### Our Approach

You need a *software solution* that can clarify, calculate and communicate a *quantitative narrative* to policy makers and the general public about policies for your economy.

#### **Rigorous Economic Analysis**

- Since 1980
- Peer Reviewed
- Multiple Reputable Data Sources
- Public Equations



#### Why Economic Modeling?



- Economic policy modeling can help agencies forecast the effects of policies before they are implemented
- Guide Policy-making Process
  - Formalize your decision-making process
  - Get policy right
  - Pass/Block legislation
  - Modernize and advance your agency
- Bidders for grants, contracts from the infrastructure bills will want to demonstrate that their proposals will have a positive economic impact in host communities and remain competitive
- Policy organizations and regional planners can use models to add quantitative rigor to their proposals, making the benefits more clear to stakeholders and decision-makers





### Thank you for attending!

## For more information, please contact info@remi.com