

## Post-Pandemic Project Prioritization: How Economic Modeling Assess Socioeconomic Indicators (SEI) for Long-term Planning

## 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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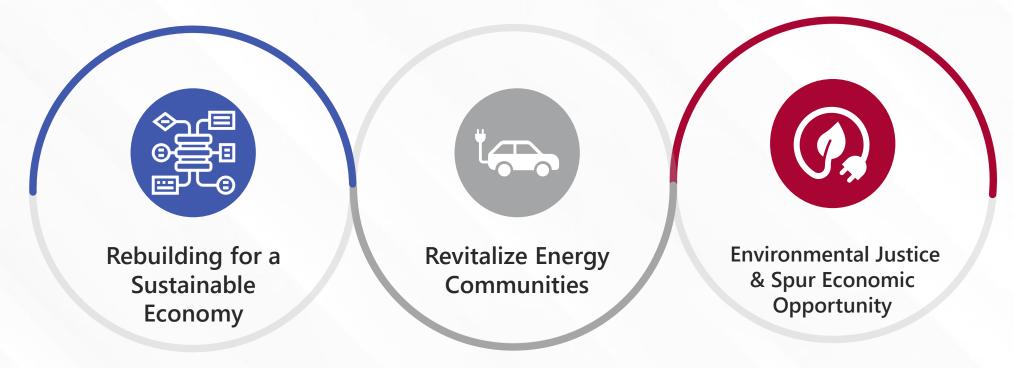
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## Background – The Justice40 Initiative



Goal: To tackle the climate crisis while creating good-paying union jobs, an equitable clean energy future, building modern and sustainable infrastructure, restoring scientific integrity and evidence-based policymaking across the government



Catalyze the creation of jobs in construction, manufacturing, engineering and the skilled-trades for infrastructure investments. **what does REMI say?** sm Coordinate investments and other efforts to assist coal, oil and natural gas, and power plant communities. Develop policies to address the disproportionate health, environmental, economic, and climate impacts on disadvantaged communities.





#### High Value, Low Effort

Projects within this category will allow for organizations to create significant value in a short amount of time.

## for Projects within this category require a

Cost/ Effort

substantial amount of effort, but also have a high value-add.

### Benefit/ Value

#### Low Value, Small Effort

Projects in this quadrant require more substantiated evidence before they are given higher priority.

Low

Small

#### Low Value, Large Effort

Large

The opportunity cost of focusing on projects that expend little value can be substantial in hurting a regions long-term viability.

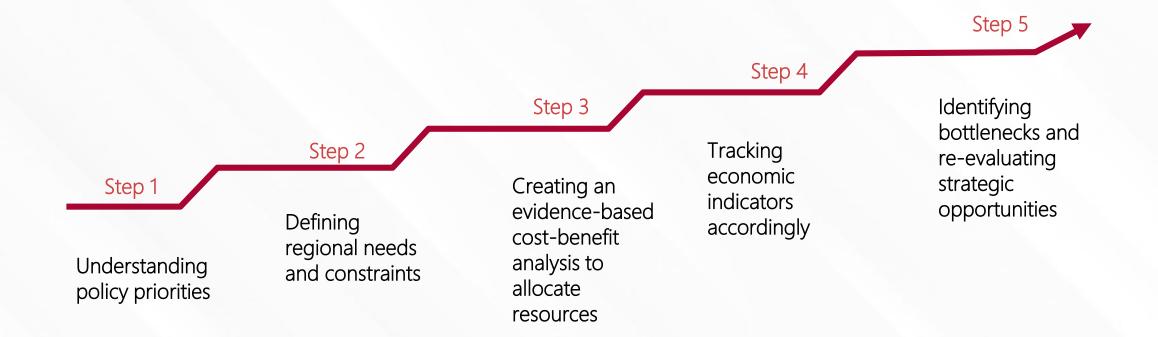
#### Examples of Regional Project Priorities:

- Population and Education
- Technology Investments
- Existing Infrastructure
- Economic Attractiveness

## **Background – Project Prioritization Timeline**



**Economic modeling** enables organizations to **redirect investments**, **create growth-related spending**, **and increase returns on investment** when quantitative insights are gained into socioeconomic indicators for differing project priorities.





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ransportation Electrification Partnership	Broadband Access Expansion				
Focus Area: Transportation & Infrastructure	<ul> <li>Focus Area: Human Capital &amp; Infrastructure</li> </ul>				
<ul> <li>Goal: To accelerate transportation electrification in the Greater Los Angeles Area to reduce greenhouse gas emissions and promote job growth.</li> </ul>	<ul> <li>Goal: To promote greater mobility, economic competitiveness, sustainability, and improved quality of life.</li> </ul>				

What role does socioeconomics, sustainability, and resilience mean in the long-run?



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## **Model Simulation: REMI SEI**



# REMI SEI

REMI SEI is the premium modeling solution for evaluating the socio-economic indicators (SEI) of project, programs, and policy changes.

Decision-makers employ REMI SEI to understand the relationship between public policies in their industry and the varying economic effects across demographic groups. These core factors that can be assessed using REMI SEI includes:

☑ Jobs by Race/Gender
 ☑ Regional Disparities by County
 ☑ Labor Force by Race/Gender
 ☑ Jobs by Education Level
 ☑ Income by Quintile
 ☑ Inflation Impact by Income

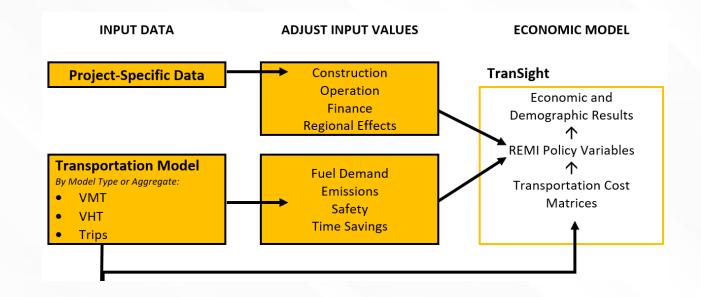
## Model Simulation: REMI TranSight



# 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: Broadband Access Expansion**



Forecast: 2022 – 2040 | Region: Los Angeles County | 70 sector industry | SEI Enabled

Business Costs	<ul> <li>Production Costs</li> <li>All Industries</li> <li>Intermediate Demand</li> <li>Telecommunications</li> </ul>
Household Finance	<ul> <li>Commodity Access Index</li> <li>Consumer Price</li> <li>Non-pecuniary amenity</li> </ul>

Operations & Maintenance

- Industry Sales (Exogenous Production)
  - Construction & Telecommunications
- Production Costs

## **Model Simulation: Transportation Electrification**



Forecast: 2022 – 2040 | Region: Los Angeles County | 70 sector industry | SEI Enabled

	• Fuel Co
Business Costs	• Tru
	me

- st
  - uck Transportation, Couriers and essengers, Transit and ground passenger transportation industries

### Household Finance

- Consumer Price
- Commodity Access Index
- Non-pecuniary amenity •

EV Infrastructure

- Industry Sales (Exogenous Production)
  - Construction & Electrical equipment, appliance, and component manufacturing



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#### ÷ Employment by Industry Quintile Region Comparison Type Comparison Forecast Category Forecast Employment 🛛 % Change SANDAG Methodology Los Angeles County 🕑 Standard Regional Control 🛛 💌 0.05% 0.05% 0.04% 0.04% 0.03% Percent 0.03% 0.02% 0.02% 0.01% 0.00% 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 Lowest 20% Second 20% Middle 20% Fourth 20% Highest 20%



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#### Employment by Industry Quintile



## Key Results – GDP, Output, and Income | Broadband

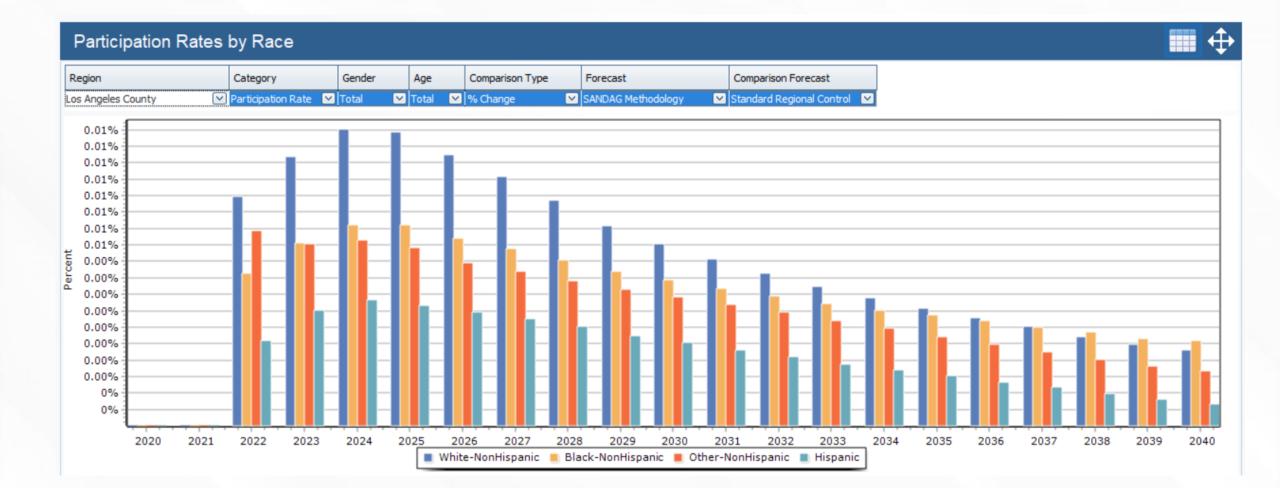






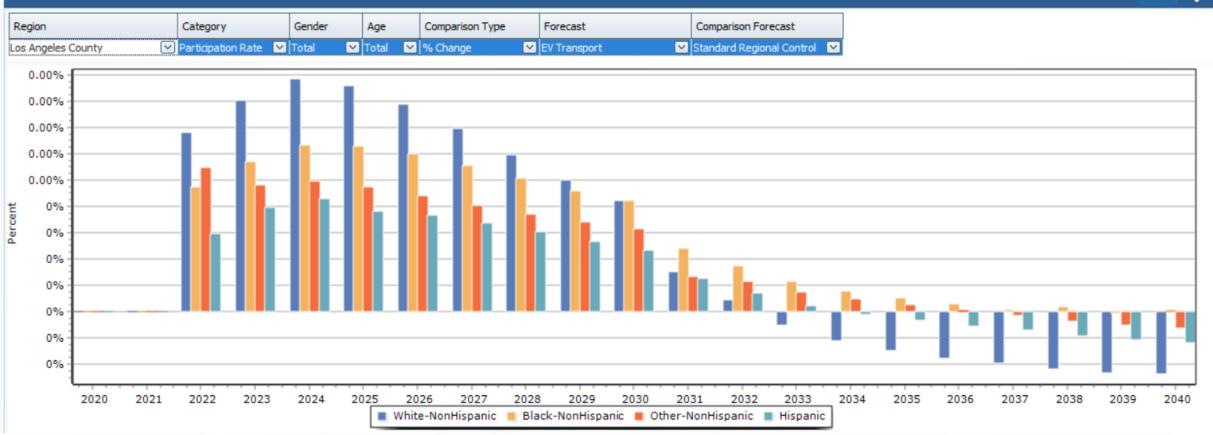


## Key Results – Participation Rates by Race | Broadband





#### Participation Rates by Race

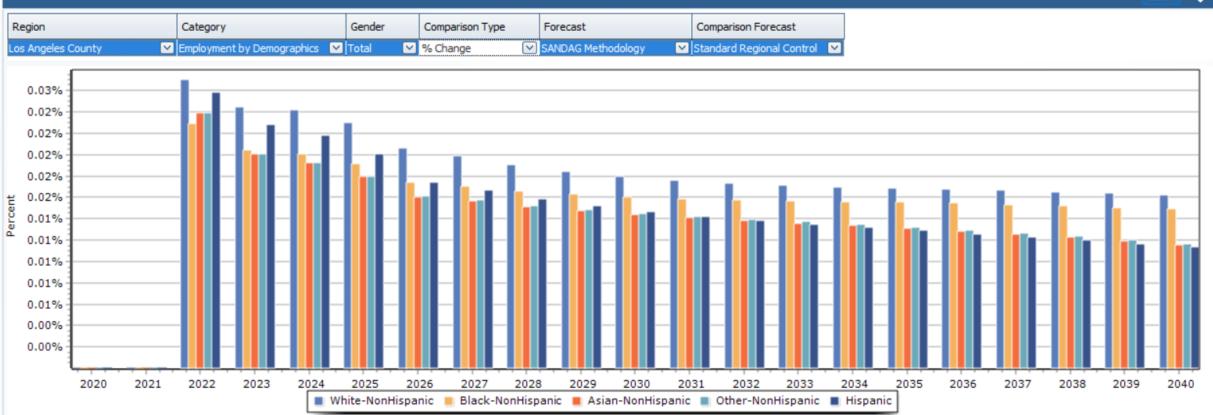


## Key Results – Employment by Race | Broadband



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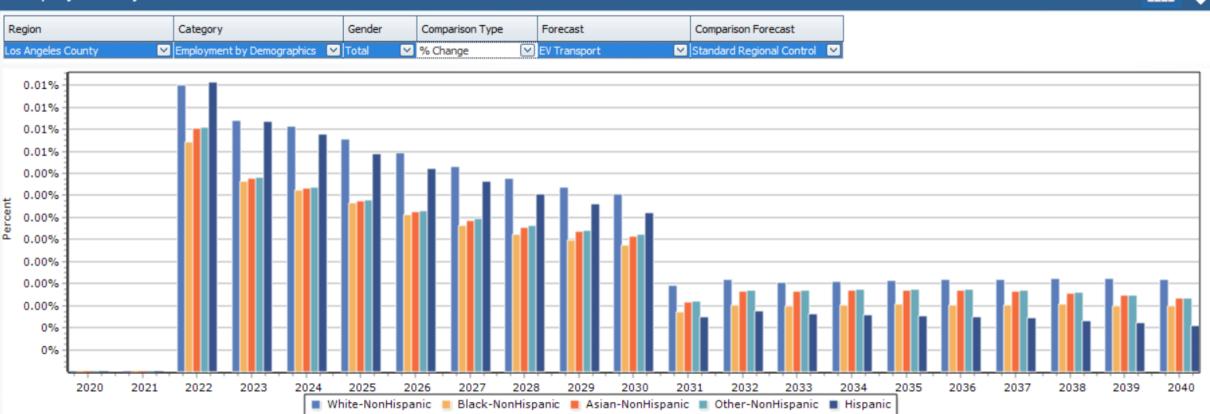
#### Employment by Race





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#### Employment by Race



## Key Results – Employment by Gender | Broadband







#### ÷ Employment by Gender Region Race Forecast Comparison Forecast Category Comparison Type Employment by Demographics 🛛 🖂 All Races ✓ % Change EV Transport Los Angeles County Standard Regional Control 0.01% 0.01% 0.01% 0.01% 0.01% 0.00% 0.00% Percent 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0% 0% 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 🔳 Male 📕 Female



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#### **Broadband Access Expansion**

- The broadband expansion created The created significant gains in GDP, output, and middle-income industries relative to the baseline.
- Personal disposable income increased steadily .02-.03% relative to the baseline over long-term due to better commodity and labor access.
- The decision to invest in broadband access would have positive significant distributive effects on Los Angeles County.

what does **REMI** say?<sup>sm</sup>

#### Vehicle Electrification

- The Vehicle electrification has low to moderate gains in GDP, output, and income with gains averaging a little over .01% relative to the baseline.
- Primarily benefited the uppermiddle class (fourth 20%) income industries, though gains were saw in the middle-income (second 20%) industry during the infrastructure construction phase.

## **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

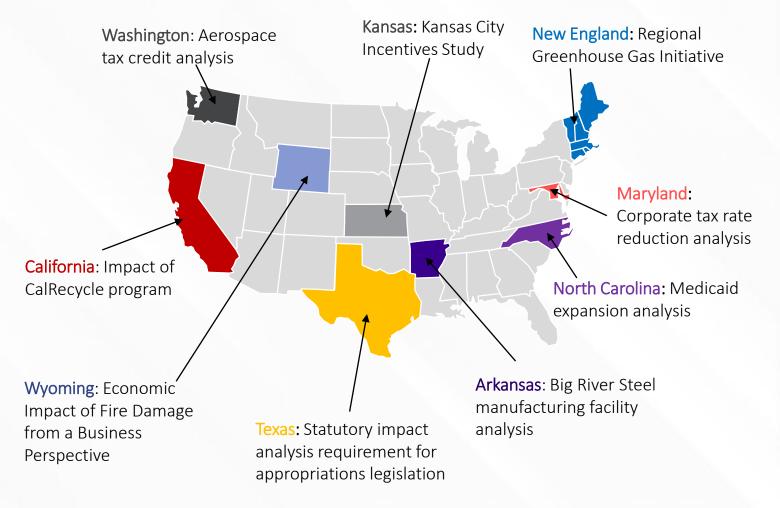


#### Our Approach

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