The Economic Impacts of Integrating Ridesharing and Public Transit

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REMI

what does REMI say? ℠

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what does REMI say? [sm]

About Us

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.*

what does REMI say? ℠

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

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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Background - Ridesharing

-Available in most US metro areas, provides quick, individualized transportation solution

-Allows more flexible connections between residential and industrial areas at scale, but is not priced appropriately to be an everyday transportation solution

-Average US Uber price per mile is $2, average commute time is ca. 16 miles -> average commute by Uber should equal around $32 plus tip

-This is financially untenable for many Americans

-Ridesharing workers' income can be highly volatile, and insurance and depreciation/maintenance costs are entirely borne by drivers

what does REMI say? [sm]

Background - Public Transit

-Currently underperforms in many US metro areas

-However, provides financially accessible commuting solution to many Americans, and allows employers to access larger pools of workers through transit connections

-Public transit also provides a source of quality, stable jobs for transit system operators and their support staff, unlike private ridesharing platforms

what does REMI say? [sm]

Background - Synthesis

-Ridesharing-like services under the aegis of public transit authorities could capitalize on the positive attributes of both systems while mitigating some of their downsides

-Public funding and subsidies could reduce paid prices, allowing residents who live in areas not well connected to conventional public transit systems to commute at a financially sustainable rate

-Creating full-time ridesharing driver roles for transit authorities could increase prevailing wages and benefits packages for ridesharing jobs, and could result in a more reliable service than the "gig" employment scheme currently used by private ridesharing services

-Overall, has potential to combine the affordability and reliability of public transit systems with the flexibility and greater potential reach of ridesharing

-However, will not help cut average emissions relative to a comparable private-vehicle trip unless the vehicles used for ridesharing are more efficient than the average car (potentially hybrid or electric)

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Uber Broader Effects on the Economy

Gross Impact

Net Impact

$17B

$580M

$11M

Gross Domestic Product

Added business productivity

Amenity value

Uber's contribution to the U.S. economy is $17 billion in gross domestic product. This does not include the effect of Uber offices or of the UberEATS business.

The net impact of Uber on the United States economy is $591 million annually. This includes $580 million from added business productivity and $11 million of inflow from visitor spending.

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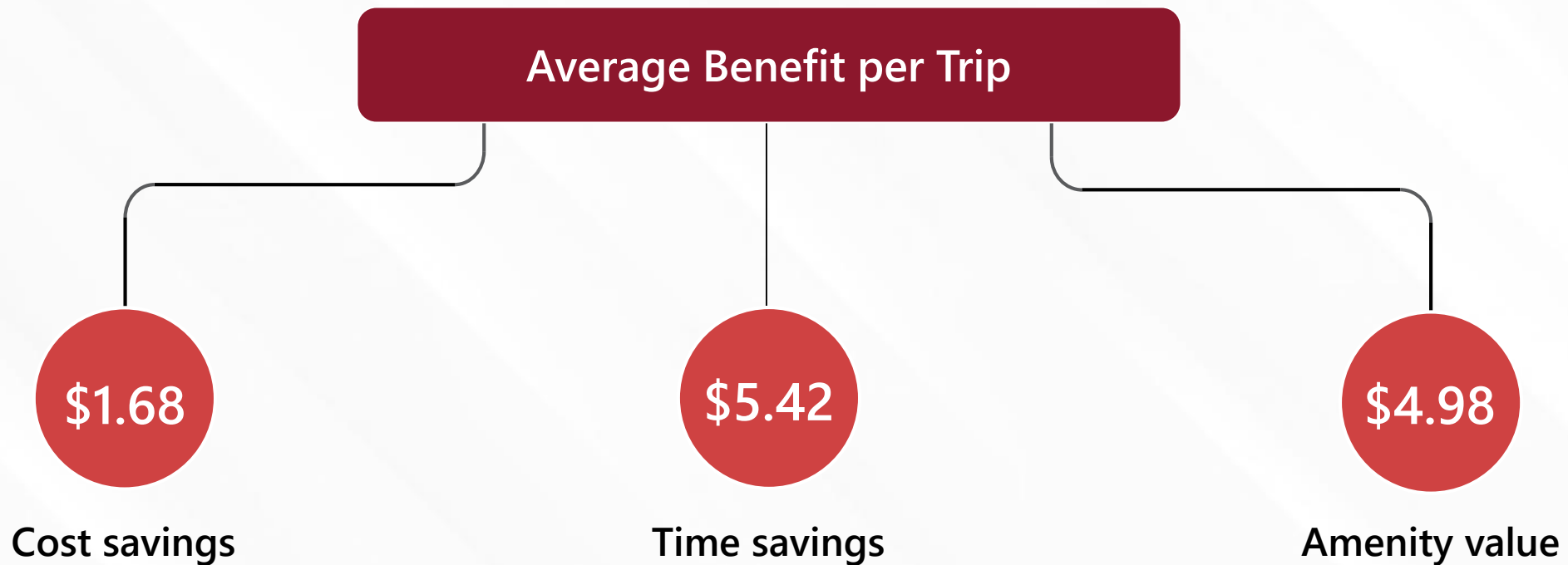
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Uber Rider Impacts and Benefits

Uber rider benefits in the United States add up to $17.6 billion annually when considering cost savings, time savings, and added amenity benefits.

Average Benefit per Trip

$1.68	$5.42	$4.98
Cost savings	Time savings	Amenity value

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Uber Rider Benefits in the United States

Uber Rider Benefit	Annual Total
Out-of-pocket trip costs: Saving money (48% of riders)	+$4,952M
- Out-of-pocket trip costs: Paying more (52% of riders)	_- $3,643M_
= Savings in net trip cost	+$1,309M
+ Savings in parking cost	+$3,147M
+ Value of time savings	+$4,222M
+ Value of rider convenience/amenity benefit	+$3,879M
+ Value of benefit for added trips	+ $784M
+ Savings in car ownership cost (12% of riders)	+$4,265M
= Direct Traveler Benefit (from survey analysis)	+$17,606M

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Driver Economic Benefits in the United States

Driver Benefits	Annual Total (millions)
Current driver income (from Uber and other sources*)	+$20,724M
- Substitute income if Uber or similar service was not available	*-$17,688M*
= Income gain	+$3,036M
- Driver added cost for vehicle fuel & maintenance	*-$1,654M*
= Net income gain	+$1,382M
+Added value of flexibility and other non-income benefits	+$3,879M
=Total Annual Value of Driver Benefits	$5,660M

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Transportation Impacts

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Mobility Impacts

- Uber enables rides for some people without access to convenient transportation options.
- Uber is being used in situations where riders report that their next best alternative has safety or weather protection issues, or issues regarding its schedule availability or destination access.

Traffic Impacts

- Some travelers use Uber to access public transportation services, which can potentially reduce traffic.
- Other travelers use Uber instead of driving themselves to destinations with high parking costs, which reduces parking demand.

Longer-term Impacts

- Some Uber riders are now deferring car purchases, which should ultimately reduce car ownership rates among this segment of the population
- A more efficient service for times and locations

Transportation Impacts

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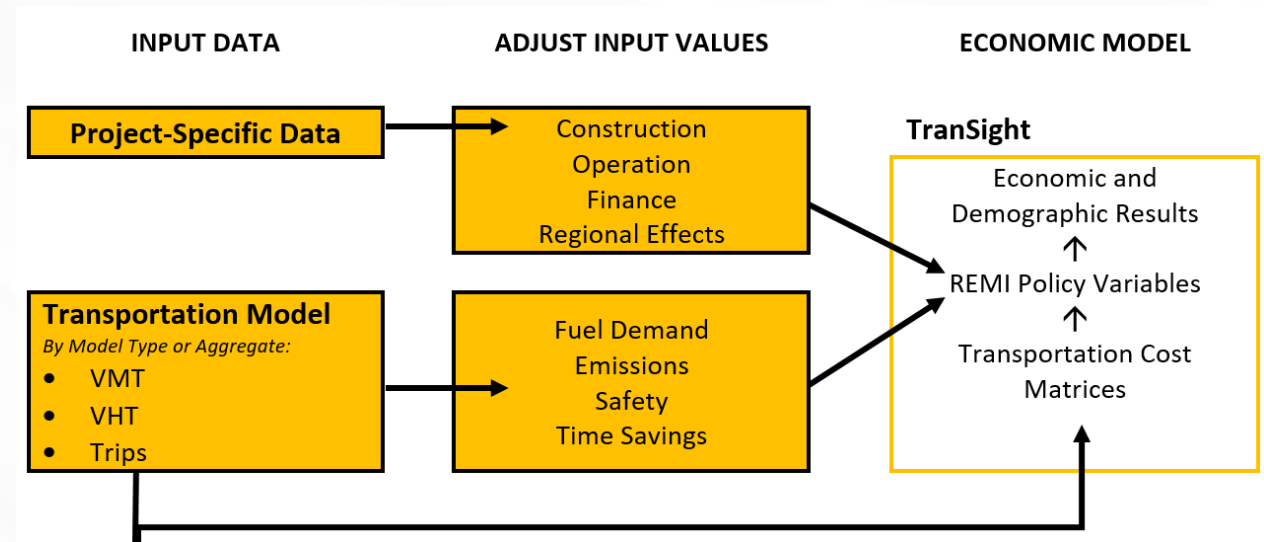*what does REMI say?*[sm]

Model Simulation: REMI TranSight

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TranSight

- Demo – City, Suburbs & Rural

- 3 Region 70 Sectors

- History 2001 - 2019

- Forecast 2020 - 2060

Urban Counties
Suburban Counties

Rural Counties
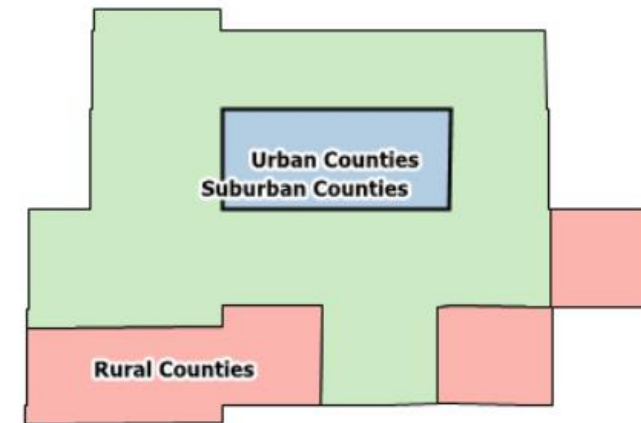
Model Simulation: Variables and Levers

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Consumer Price in Ground Transportation

- Consumer price reduction for motor vehicle transportation
  - -3% in forecast years

Consumer Spending: Motor Vehicles and Parts

- Ridesharing integration reduces car ownership
  - -9% in forecast years
  - New motor vehicles, Net purchases of used motor vehicles, Motor vehicle parts and accessories

Consumer Spending: Other Categories

- Increased by difference between Consumer Spending on Motor Fuels and Electricity
- Creates net zero change in consumption levels in the economy

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Model Simulation: Variables and Levers

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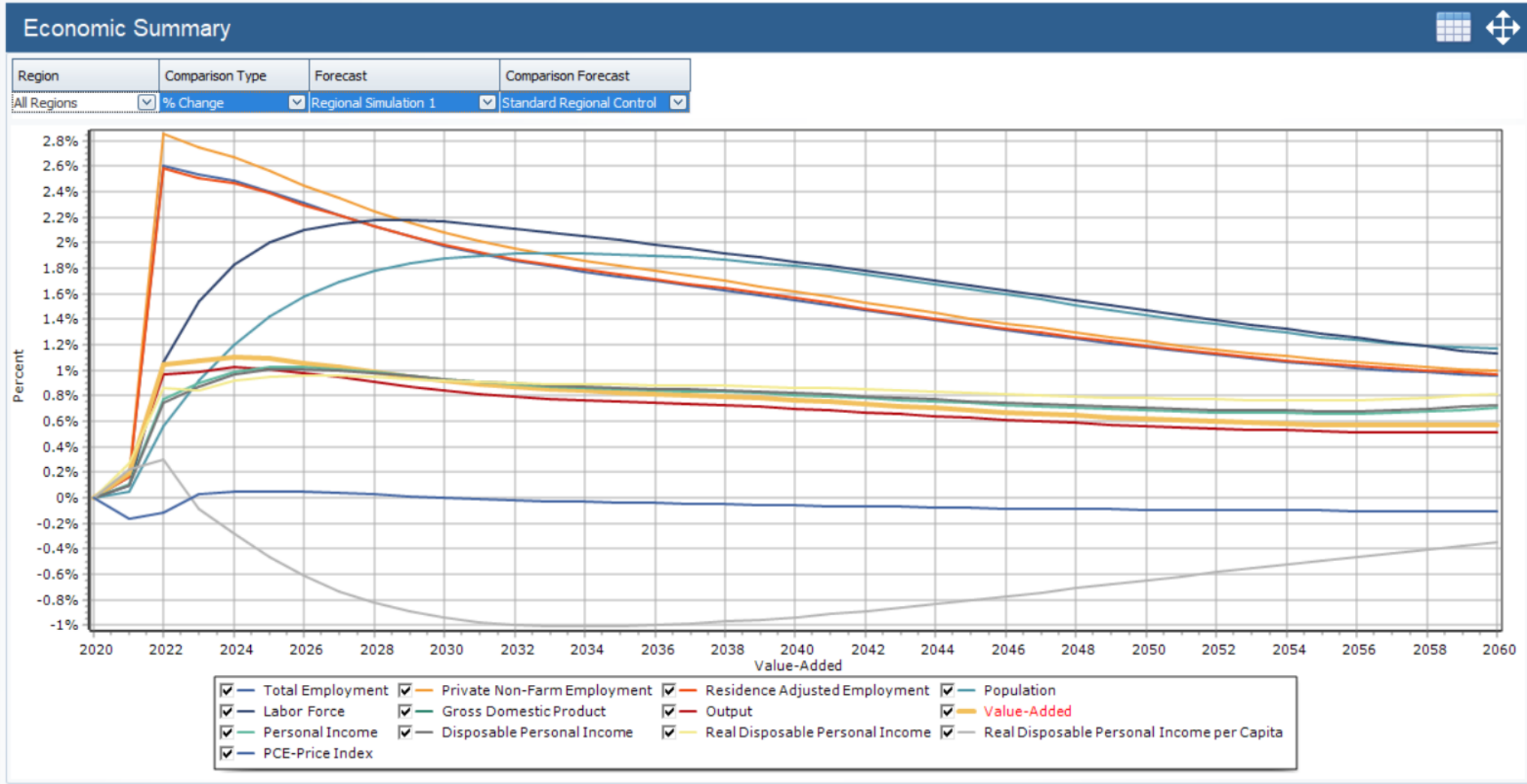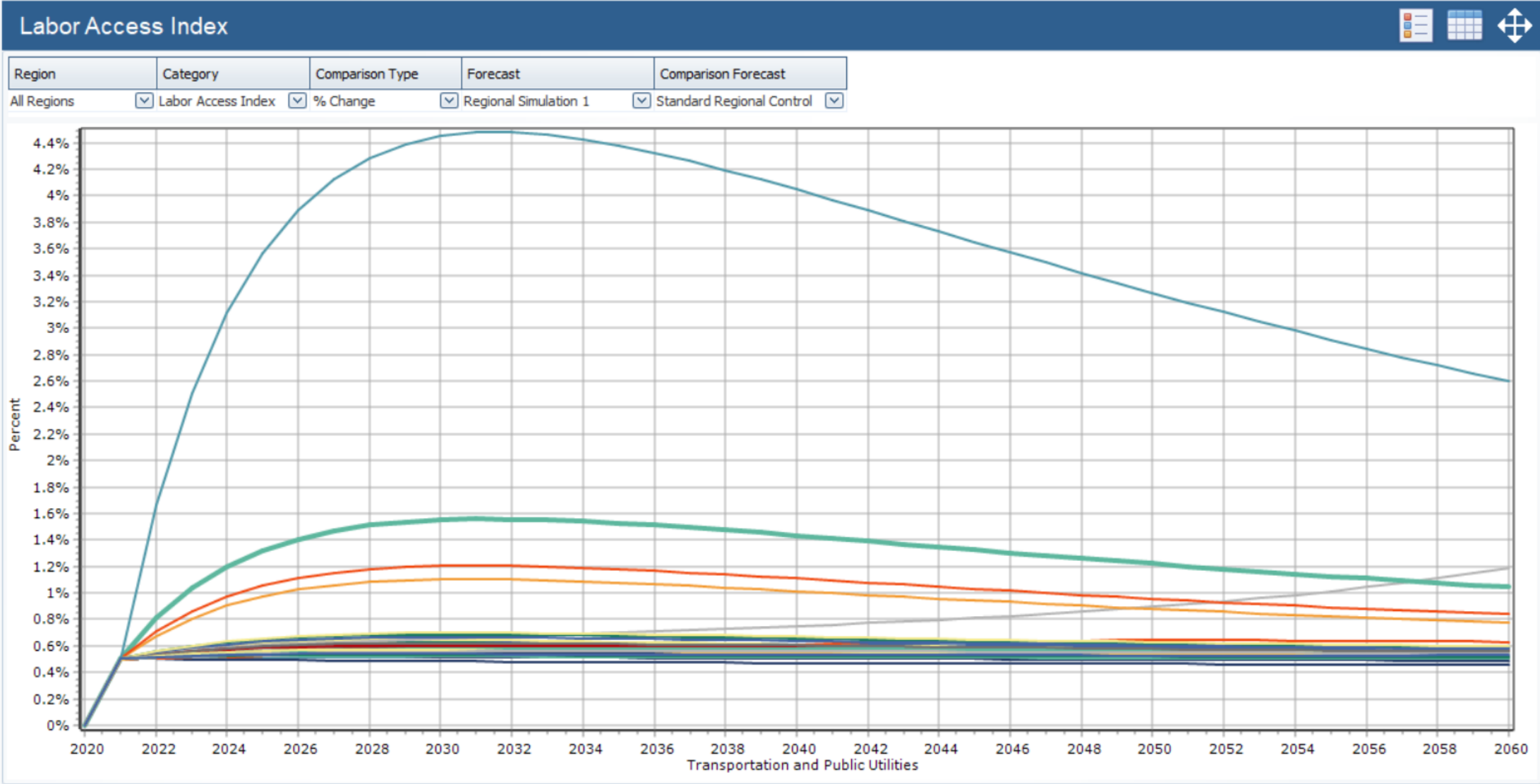| Government Demand: Transit and Ground Passenger Transportation	• $1.5 billion for all forecast years, spread by population
Labor Access Index	• +.5% for all years
Government Demand: Motor vehicles, bodies and trailers, and parts manufacturing	• +3% for all years

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Results: Economic Summary

Results: Employment by Industry
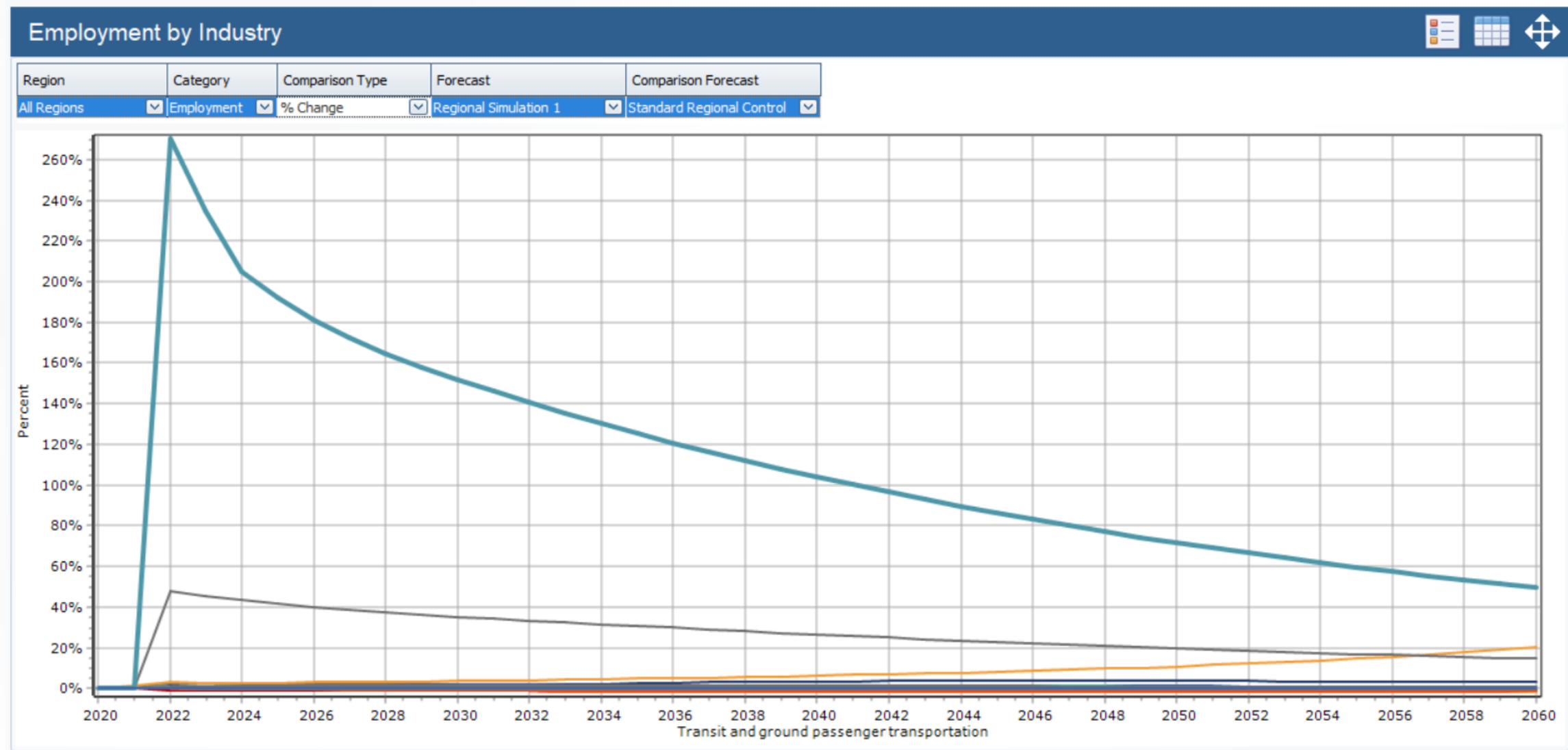
what does **REMI** say? *sm*

Results: Labor Access by Industry

Results: Total Employment by Region
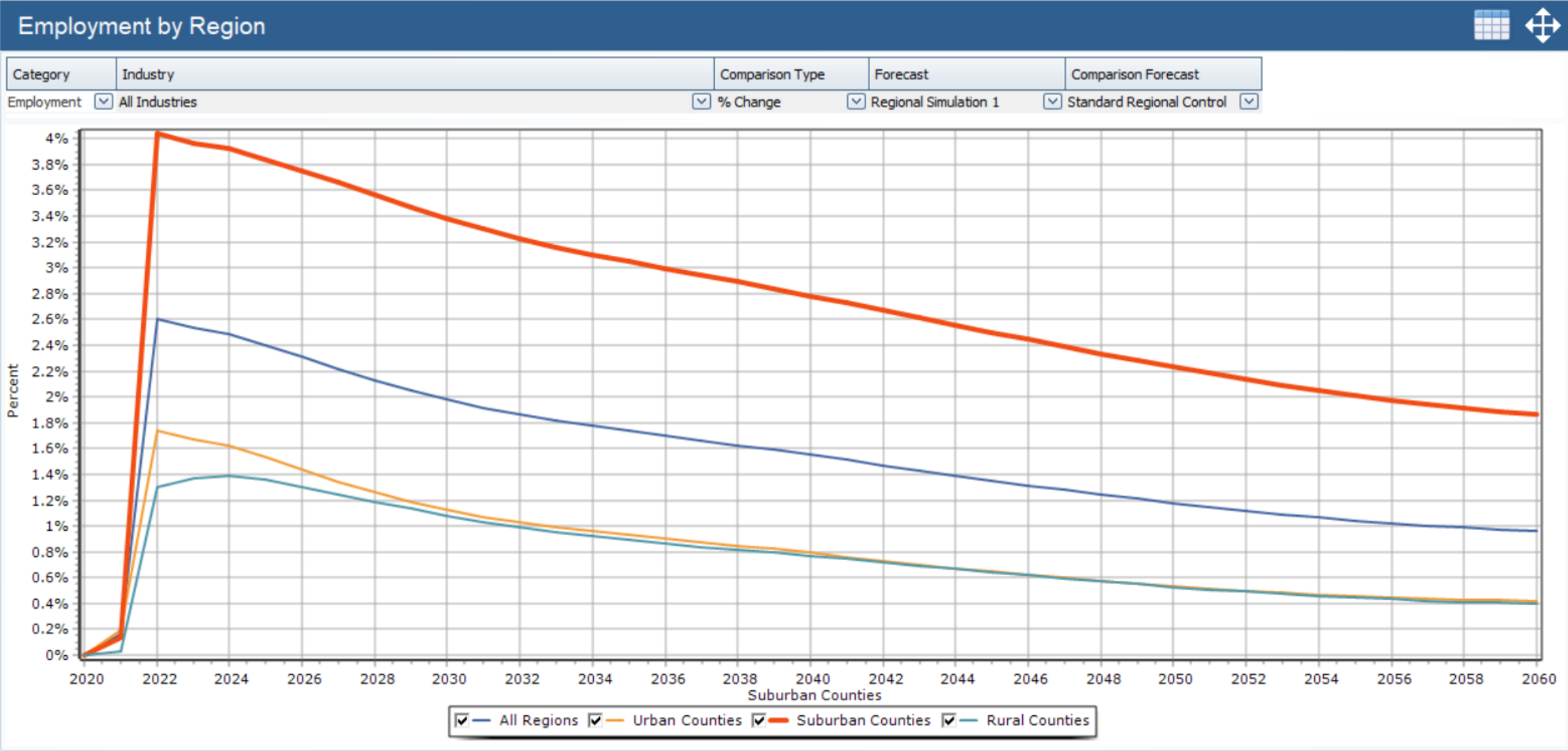
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Economic Modeling: Why does it matter?

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Clarify

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

Predict

- Make predictions about the effects of policies before implementation
- Avoid unwanted negative impacts
- Make effective use of resources

Inform

- Inform policy with standard metrics rather than ideology or intention
- Address stakeholders with evidence that communicates how policy benefits or disadvantages their communities broadly

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The REMI Model: Our Studies & Applications
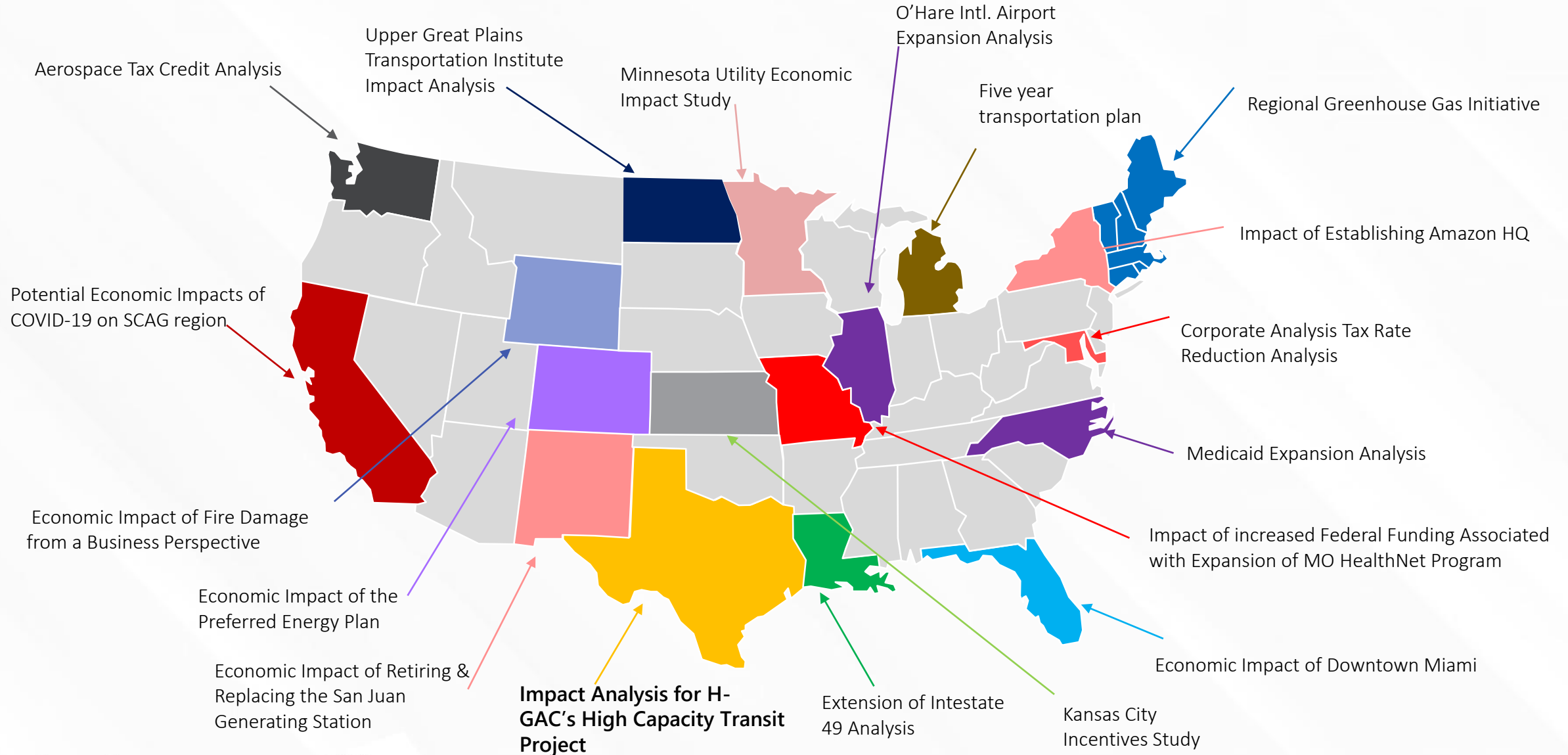
Why Economic Modeling?

- 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.

- 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 and contracts 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 clearer to stakeholders and decision-makers

what does REMI say? [sm]

Thank you for attending!

For more information, please contact
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