

1

# Standardized Regulatory Impact Assessment (SRIA) Workshop

Estimating Economic Impacts of State Policy

Sacramento, 30 May 2018



# Agenda

- Introductions
- Major Regulations Overview
- Components of a SRIA
- Example SRIAs
- Discussion

# Standardized Regulatory Impact Assessment





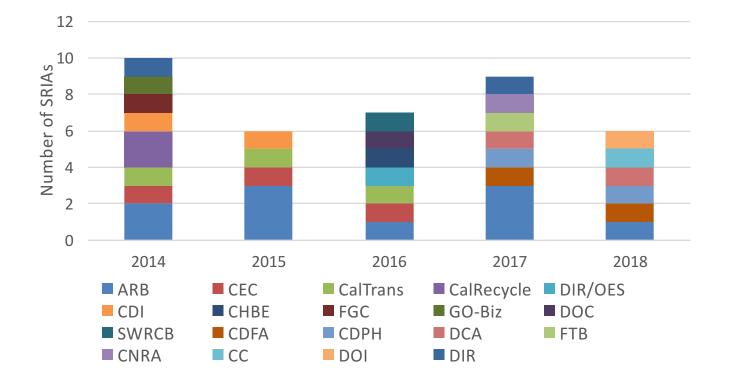
SB 617 requires state agencies to conduct a standardized regulatory impact assessment (SRIA) for all "major regulations"

A major regulation is a proposed reg that is expected to have more than \$50 million in economic impact in a "fully implemented" year or in 12 months after the reg is adopted

A SRIA must be completed prior to filing a Notice of Proposed Action with the Office of Administrative Law (OAL)



#### SRIAs to Date



#### 38 SRIAs from 19 agencies

### Components of a SRIA

- Threshold Analysis
- Cost-Benefit Assessment
- Macroeconomic Assessment
- Fiscal Impacts
- Regulatory Alternatives





# Threshold Analysis

- A SRIA is only required if the *economic impacts* of the proposed regulation are expected to **exceed \$50 million** in a "fully implemented" year
- Economic impact refers total costs + total benefits... You cannot "net out" costs and benefits
  - \$26 million in benefits and \$25 million in costs = \$51 million in economic impact
- Recommendations for Threshold Analysis
  - Start with either costs or benefits.
  - Approximate the number of workers or entities impacted by the proposed regulation
  - Determine a "reasonable" average incremental cost or benefit per worker
  - Multiply affected workers/entities by the average incremental cost
  - Indirect and induced impacts can be as large or larger than the direct impacts



### **Cost-Benefit Analysis**

- Cost-benefit analysis is a widely used economic method to compare the total costs of a program/policy/regulation to the total benefits in a common metric (\$\$)
- For SRIAs costs and benefits should be the *incremental* costs and benefits of the agencies proposed regulation
- In other words, costs and Benefits should be estimated relative to a baseline where the regulation is not implemented



#### **Direct Costs**

- Direct costs are the first round costs of a proposed regulation
  - New equipment purchases necessary for a business to come into compliance
  - Additional licensing and labeling fees businesses in the adult use cannabis industry
- Identify who bears the costs of the proposed regulation
  - Employment Development Department (EDD) Data Library is a good source of industry information
  - Agency experts are an excellent source of information!
  - Public engagement with potentially affected groups is required
- Identify the incremental costs of the proposed regulation
  - Sources of information could be agency expertise, literature, industry experts
  - Costs can reflect the **minimum cost necessary to achieve compliance**



### **Direct Benefits**

- Direct benefits are the first round benefits of the proposed regulation, including the "health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life"
  - Public/occupational safety benefits from improving elevator safety
  - Societal benefits from reducing greenhouse gas emissions
  - Individual benefits from improving access to health care
- Direct benefits should be monetized when feasible.
  - Non-monetary benefits should also be discussed qualitatively or measured with a non-monetary *benefit-relevant indicator*



# Monetizing Benefits

- Benefits can have a market value (e.g. lower cannabis prices from market legalization) but often times government regulations produce non-market benefits.
  - Example: Worker safety improvements, environmental benefits
- Options for monetizing benefits
  - Literature search for studies on willingness to pay for non-market good or service
  - Values in peripheral or correlated markets
  - Value of a statistical life (averted mortality)



#### **Other Direct Impacts**

SRIAs must also address the following categories of economic impacts, either quantitatively or qualitatively:

- The competitive advantages or disadvantages for businesses currently doing business within the state
- The increase or decrease of investment in the state
- The incentives for innovation in products, materials, or processes
- Small business impacts





- SB617 requires that the agency identify the impact of the regulation on:
  - Gross State Product (GSP)
  - Employment by Sector
  - Exports and Imports
  - Personal Income
  - Business Output
- To estimate these impacts, the analyst must use an economy-wide macroeconomic impact assessment model

# **Options for Macro Models**



- Input-Output Multiplier Models
  - RIMS II
    - Pros: Free (purchased by DOF), fairly easy to learn
    - Cons: Simplistic methodology not suitable for more complex regs
  - IMPLAN
    - Pros: Widely used, detailed data, graphical user interface, good online resources,
    - Cons: Not free, simplistic methodology, requires some training
- REMI PI+: I-O Model plus structural equations
  - Pros: More sophisticated modeling framework, convenient to use once trained, dynamic
  - Cons: Expensive, requires some training
- BEAR CGE Model
  - Pros: Most advanced and detailed assessment tool, customizable for specific regs
  - Cons: Model not currently for sale (as a service only)

	RIMS II	IMPLAN	REMI	BEAR
Model Type	I-O	I-0	I-O + Structural Equations	CGE
Number of Sectors	369	536	160	up to 536
Dynamic/Static	Static	Static	Dynamic	Dynamic
Price Effects?	No	No	Yes	Yes
Producer Behavior	Leontief	Leontief	Cobb-Douglass	User specified
<b>Regional Characteristics</b>	5			
I-O Table	BEA	BEA	BEA	BEA
Method for I-O	Location	Multiple	Regional Purchase	Same as
regionalization	Quotient	Options	Coefficients	IMPLAN
Baseline Calibration	None	None	Yes, REMI forecast	Yes, based on DOF Forecast
Model Outputs Require	d for SRIAs			
Gross State Product	Yes	Yes	Yes	Yes
Employment	Yes	Yes	Yes	Yes
Household Income	Yes	Yes	Yes	Yes
Gross Output	Yes	Yes	Yes	Yes
Investment	No	No	Yes	Yes
Fiscal Impacts	No	Yes	No	Yes
Energy System	No	Yes	No	Yes
Usability				
User interface	No	Yes	Yes	No

BERKELEY ECONOMIC Advising and research

Н

Ш



# Fiscal Impacts

- SRIAs must estimate the fiscal impacts of the proposed regulation on state and local governments
  - "Personnel needed to perform a line function or activity prescribed in the regulation"
  - "Any additional equipment which will have to be purchased or leased in order to comply with the regulation"
- Important to consult with other agencies that could be impacted directly or indirectly by your regulation.



# **Regulatory Alternatives**

- The agency must analyze two regulatory alternatives in addition to the proposed regulation
  - "An alternative that could achieve additional benefits beyond those associated with the proposed major regulation" (High Cost Alternative)
  - "A next-best alternative that would not yield the same level of benefits associated with the proposed major regulation, or is less likely to yield the same level of benefits" (Low Cost Alternative)
- All cost-benefit and macroeconomic assessment must be done, if possible, for both regulatory alternatives
- Regulatory alternatives are intended to be reflective of a stakeholder process for other possible ways to achieve the desired outcome.

#### Two Case Studies Department of Industrial Relations



- Residential Fall Protection
  - SRIA for lowering the "trigger height" at which fall safety equipment is required from 15 feet to 6 feet
- Occupational Lead Exposure
  - SRIA for lowering the "Permissible Exposure Limit" for occupational exposure to lead from 30  $\mu$ g/m<sup>3</sup> to 10  $\mu$ g/m<sup>3</sup>

# **Residential Fall Protection**



- Direct costs: increased equipment costs for personal fall protection gear, scaffolding, etc.
  - 2 sectors directly affected: residential roofing and residential framing
  - Source of cost info: industry, original research, DIR expertise
- Direct Benefits: reduced injuries and fatalities from falls
  - DIR review of accident reports (# of deaths/injuries that would be avoided)
  - DIR worker's compensation database (cost of an injury)
  - U.S. EPA estimate of the value of a statistical life





# Occupational Lead Exposure

- Who is exposed to lead at work?
  - Multiagency collaboration to identify which sectors use lead (100+), how many workers are exposed (100,000+), the exposure profile of workers, the estimated blood lead level of the workforce
- What are the incremental costs f
- What are the benefits of reducing lead exposure?
  - Review of epidemiology literature to determine the reduction in morbidity and mortality
  - Review of public health literature to determine the morbidity cost of each associated disease



#### Some observations about process

- Consult with DOF often and ask questions if they arise
  - Notify DOF by February 1<sup>st</sup> if a SRIA is anticipated in that calendar year
  - Notify with threshold analysis
  - Discuss methodology and baseline
  - Informal draft review before formal submission
- SRIA, DOF response, and agency response are all required for the *Initial Statement of Reasons* (ISOR) submitted to OAL.
  - The process is not complete once the SRIA is submitted

### **Contact Information**



- David Roland-Holst (<u>dwrh@bearecon.com</u>)
- Sam Evans (<u>sevans@bearecon.com</u>)
- Tom Brooks (tbrooks@bearecon.com)

**General SRIA Inquiries** 

SRIA@bearecon.com