

# The Evolution of Tax Credits in Connecticut

A presentation for the Lincoln Institute of Land Policy  
Economic Perspective on State and Local Taxes  
December 7, 2009

Office of Legislative Research  
Connecticut General Assembly



# How do you cover tax credits in 20 Minutes without losing the forest for the trees?



- 33 Corporate Business Tax Credits
  - Five for R&D
  - 12 for Physical Development
  - Four for Energy and Environmental Purposes
  - Six for Developing Property in Targeted Areas
  - Five for Machine and Equipment Purchases
  - 14 for Training and Job Creation
- Some credits address multiple goals
- Some are offered in conjunction with property tax exemptions

# Broader Context



- Credits are one type of economic assistance
- Part of a corporate tax structure
- Part of a larger state and local tax system

# To Switch Metaphors...

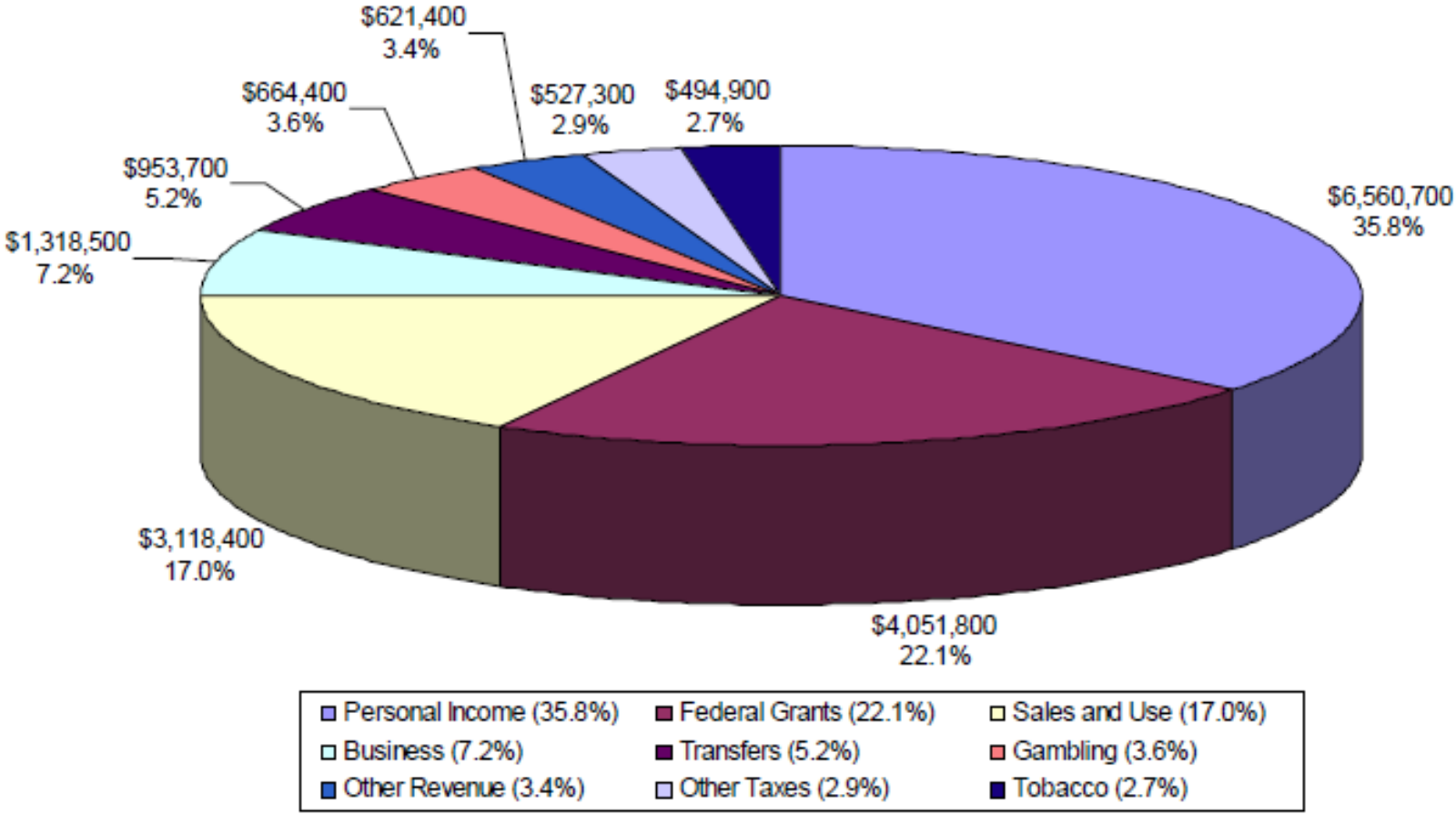
- Tax credits are embedded in a broader economic development policy and state-local tax system



# Connecticut's Tax Structure

- State
  - Personal Income Tax
  - Corporate and Other Business Taxes
  - General Sales and Use Tax
  - Selected Sales or Excise Taxes
  - Estate and Transfer Taxes
- Municipal
  - Property Tax

# FY 10 Revenue Projection



Office of Fiscal Analysis  
November 18, 2009

# Tax Expenditures

(in millions)

<i>Year</i>	<i>Tax Due Before Credits</i>	<i>Total Value of Credits</i>	<i>Credit % of Tax Due</i>	<i>Tax Due After Credits</i>
2004	\$490.7	\$102.4	20.9	\$388.3
2005	561.3	93.7	16.7	467.6
2006	710.6	125.1	17.6	585.5

Source: Connecticut Department of Revenue Services

# Corporation Tax Structure

Apply Apportionment formulas to determine CT net income and capital base

Determine liability:

<i>Method</i>	<i>Rate</i>
•Net Income	7.5%
•Capital Base	3.1 mil

- Choose higher of the two amounts
- For 09-11 income years, calculate 10% surcharge if
  - CT annual gross revenues over \$100 million
  - Liability exceeds \$250
- (Surcharge amount added in last step)

- Determine the credits' total value
- Adjust the total if it reduces the liability by more than 70% and below \$250

Add the surcharge and pay the total or \$250, whichever is more



# Corporate and Other Business Taxes

- These entities pay the Corporate Business Tax
  - Organized as “C” corporation
  - Doing business in Connecticut
- These business entities pay the Business Entity Tax:
  - S Corporations
  - Limited Liability Companies
  - Limited Liability Partnerships
  - Limited Partnerships
- Insurers pay the Insurance Premium Tax
- Petroleum Products Distributors pay Corporate and Petroleum Products Gross Earning Taxes
- Cable TV companies by Cable TV Tax
- Railroads pay Public Service Company Taxes
- Utilities pay Corporate and Public Service Company Taxes
- Note: Several tax credits apply to corporate and other business taxes

# Credit Structure

<b><i>Structural Element</i></b>	<b><i>Description</i></b>	<b><i>Examples</i></b>
Basis	<ul style="list-style-type: none"> <li>•Income allocable to a facility</li> <li>•Expenditures</li> <li>•Grants</li> </ul>	<ul style="list-style-type: none"> <li>•New facility</li> <li>•R&amp;D expenditures</li> <li>•Grants</li> </ul>
Factor	Rate or percentage Dollar amount	Apprenticeship Training--\$4,800 or 50%, whichever is less
Term	Number of years business can claim credit	New facility—10 years
Claim Schedule	The amount or percent of credit business may claim during term	Insurance Reinvestment--100% over 10 years: 0% in first three years, 10% per year in next four, and 20% in remaining years
Performance Requirement	Dollars spent Jobs created Taxes generated	Urban and Industrial Sites—tax revenues project generates must exceed credit's value

# Historical Periods

<i>Years</i>	<i>Credit Categories</i>
1978-1990	<ul style="list-style-type: none"><li>•Facilities in Targeted Areas—Manufacturing</li><li>•Human Capital</li></ul>
1992-2001	<ul style="list-style-type: none"><li>•Facilities—Financial Services and Entertainment</li><li>•Research and Development</li><li>•Physical and Human Capital</li><li>•Job Creation</li><li>•Small Business Financial Assistance</li><li>•Site Development</li></ul>
2006-2007	<ul style="list-style-type: none"><li>•Job Creation</li><li>•Film Industry</li></ul>

# 1978-1990: Context

## Economic

- Share of manufacturing jobs dropped from 49.6% in 1950 to 26.2% in 1985
- Share of nonmanufacturing jobs rose from 50.4% to 73.8% during same period

## Political

- 1981 special legislative committee:
  - 238,000 jobs 1969-1976 lost due to plant closings
  - Tax credits for hiring displaced workers
- 1990 OLR report:
  - 65 plant closings since 1988
  - Over 10,000 jobs lost

# 1978-1990: Targeting Manufacturers

- **New Facilities Credit**
  - Initially limited to manufacturers in distressed municipalities and enterprise zones
  - Extended to service and retail facilities in zones
  - Reduced number of targeted towns
  - Coupled with property tax exemption
- **Manufacturing Apprentices' Wages Credit**

# 1992-2001:Context

## Economic

- Share of manufacturing jobs dropped from 21.0% in 1990 to 14.1 in 1985
- Share of nonmanufacturing jobs rose from 79% to 85.9%
- Number of insurance jobs drops 12.6% between FY 91 and FY 01
- Emergence of bioscience—16,500 jobs and \$3.6 billion in R&D in 2001

## Political

- Income tax adopted
- Spending cap imposed and bond ceiling reinforced
- Balanced Budget Amendment
- State implements cluster strategy
- ESPN expands after legislature adopts single factor apportionment formula for broadcasters
- Legislature authorizes tax credits for:
  - Warburg Dillon Read expansion
  - insurance business investments
  - Pratt & Whitney R&D
- Tax credits connected with Diageo North America's relocation
- Office of Fiscal Analysis Annual Tax Expenditure Reports

# 1992-2001: Credit Proliferation

<i>Type</i>	<i>No. New Credits</i>
New Facilities	5
Research and Development	5
Physical Capital	4
Human Capital and Job Creation	5
Total	19

# 1992-2001: Credit Proliferation

- Facilities
  - Existing targeted area credit extended to entertainment facilities
  - New credit for constructing financial service facilities in enterprise zone towns and creating jobs
  - New statewide credit for financial service facilities and creating and maintaining new jobs
  - Investments in insurance companies occupying new facilities and creating jobs
  - Investments in developing and redeveloping brownfields and other property



## 1992-2001: Credit Proliferation, continued

- Research and Development credits against:
  - Incremental expenditures over time
  - Grants to colleges and universities
  - Expenditures over threshold amounts
  - Expenditures over threshold amounts for enterprise zone businesses
  - Small businesses (under \$100 million gross revenue)
- Physical Capital Credits
  - Small business incremental expenditures
  - Property taxes on data processing equipment
  - Fixed capital costs incurred during income year
  - SBA loan guarantee fee

## 1992-2001: Credit Proliferation, continued

- Human Capital and Job Creation
  - Apprentice Training Credit extended to plastics and construction
  - Expenditures for job training, work education, day care, and other specified costs
  - Hiring welfare-to-work program participants
  - Displaced workers hired by electric suppliers
  - Corporations created in enterprise zones creating jobs

# Context: 2006-2007

## Economic

- Economic downturn
- Job Losses
- Economic Impact Analyses used for proposed credit projects
- Films and movie studios projects

## Political

- Falling revenues and budget deficits
- Tax increases and surcharges
- Municipal aid cuts
- Increased state borrowing
- Five-year (500 page) strategic economic development plan

# 2006-2007: Jobs, Jobs, Jobs

- Job Creation
  - Hiring displaced workers
  - Creating new jobs
- Film Industry
  - Qualified film production costs
  - Qualified digital animation production costs
  - Physical infrastructure costs

# Connecticut Experience

- Shifted focus
  - 1978-2001—Hold on to what we have
    - Factories in Cities
    - Insurance Companies
    - Manufacturing Jobs
    - Nurturing R&D
  - 2002-Present—Attracting Business
    - Specific types--Film and Digital Animation
    - All types—Job Creation Tax Credits
    - Proposed credits for Angel Investors
- Credits—popular during mid 1990s budget crunch

# Credits' Popularity

- Legislative Setting
  - Electoral system—geographic districts and two-year terms—affects how legislators behave
  - Pressure for fast action
    - Example: Pratt & Whitney announced repair facility closing
- Easy-to-understand tool
  - Cost reducer
  - Sends business-friendly message
  - Doesn't require appropriations or bonds

# Credits' Impact

- Credits complicate budgeting in crunch time
- Cause and effect are not closely related in time and space
  - Credits' impact on recipient business is immediate
  - But their effects on state finances and economy is long-term and complex

An illustration of an iceberg floating in a blue sea. The iceberg is white with black outlines and is partially submerged. The top part of the iceberg is above the water, while the bottom part is below. Three callout boxes with white text and black borders are connected to the iceberg by white arrows. The first callout points to the peak of the iceberg. The second callout points to the side of the iceberg. The third callout points to the submerged part of the iceberg. The background is a solid blue color representing the water.

Event: P&W Announces Plant Closing

Surface Patterns: Is this new?  
Has P&W closed plants before?  
What about other aerospace  
companies?

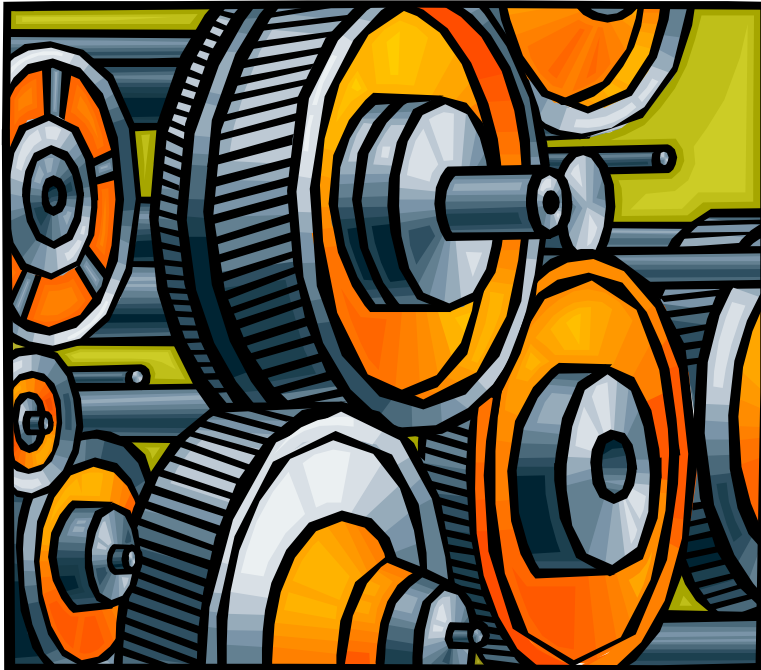
Underlying Systemic  
Structure: Why are plants  
closing?

Does our economic development policy  
address the underlying systemic  
structure?



# Systemic Structures are Complex

Detail Complexity



Machines

Dynamic Complexity



Weather

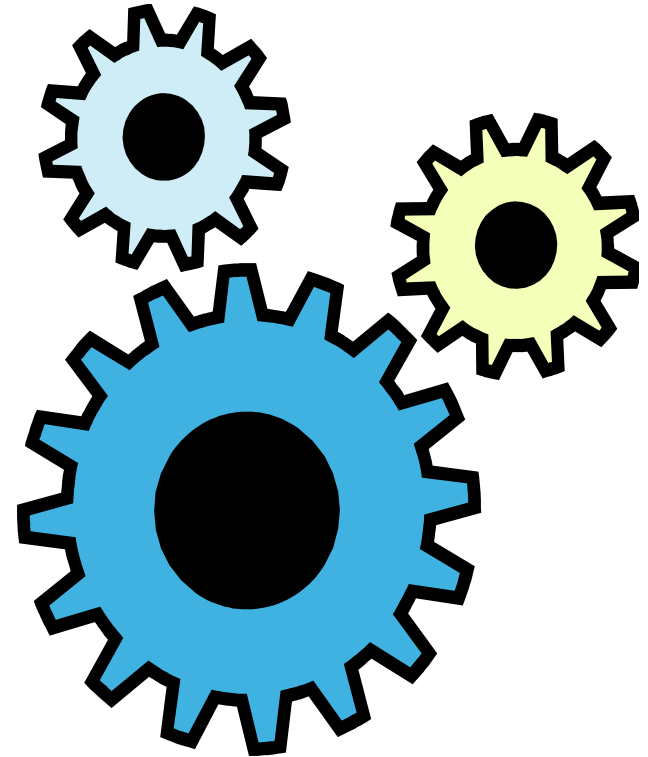
# Dealing with Complexity

- General Huba Wass de Czege:
  - Complicated systems have many moving parts, but predictable parts
  - Complex systems involve many relationships and feedback mechanisms, which make the system unpredictable
- Peter Senge:
  - Detail complexity involves things like with many moving parts, like cars
  - Dynamic complexity involves situations where causes and effects are subtle and it's hard to see the all the effects of interventions

# Technological Change

Donald Schon

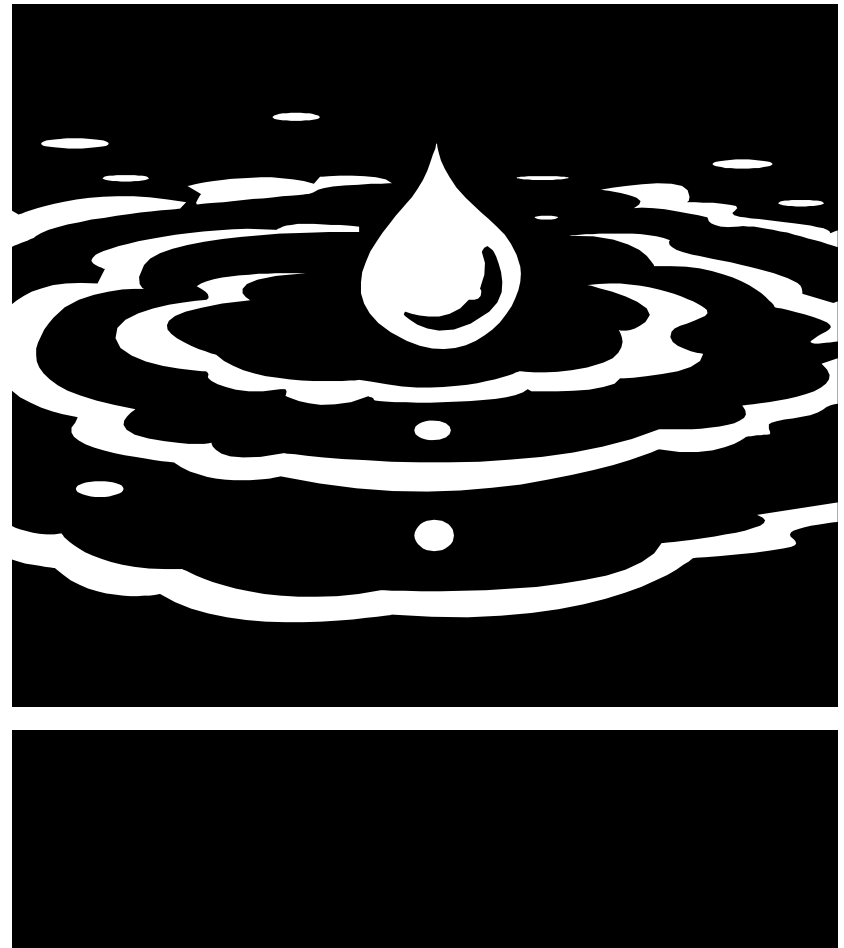
- Technological change is like the gear that turns other gears
- The other gears represent how we think and act
- Consequently, technological change often changes the way we think and act
- The pace of technological change has increased dramatically the mid 1800s



# Tempo of Technological Change

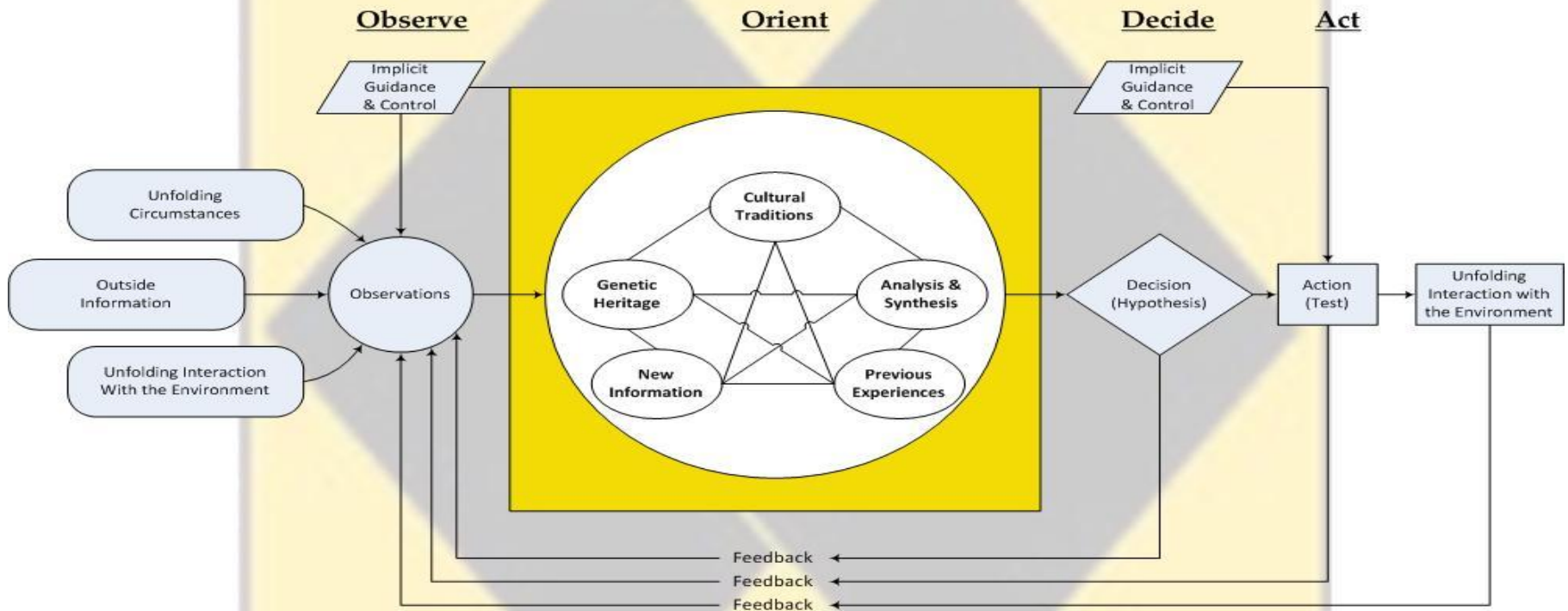
## Dynamic complexity

- New technology hits society like a rock hitting a pond
- It creates waves rippling through out the pond
- Fast-paced technological change accelerates the ripple effect



# Tempo's faster than our capacity to understand, process, and react

## Boyd's Decision Cycle (OODA Loop)



**Black Diamond  
Transformation**

Tempo is often associated with a mental process known variously as the "Decision Cycle," "OODA Loop," or "Boyd Cycle," after retired Air Force Colonel John Boyd who pioneered the concept in his lecture, "The Patterns of Conflict." Boyd identified a four-step mental process: observation, orientation, decision, and action. Boyd theorized that each party to a conflict first observes the situation. On the basis of the observation, he orients; that is, he makes an estimate of the situation. On the basis of the orientation, he makes a decision. And, finally, he implements the decision—he acts. Because his action has created a new situation, the process begins anew. Boyd argued that the party that consistently completes the cycle faster gains an advantage that increases with each cycle. His enemy's reactions become increasingly slower by comparison and therefore less effective until, finally, he is overcome by events (Fleet Marine Force Manual-1, 1989 (revised to MCDP-1, 1997)).

# Are our economic development “mental models” up-to-date?

## Mental Model:

- Internal images about how the world works and why
- Some are tacit and hard to see
- Shape how we think and act
- Determine policy options

# Dealing with Mental Models

## Barriers

- “Causefusion”—confusing the causes of complex events
- “Static Cling”—refusing to accept that things have changed
- “Loss aversion”—avoiding possible losses
- “Diagnosis biases”—blindness to opposite data

## Remedy:

- Left-Hand Column
  - Shows how we protect our mental models
  - Surfaces hidden assumptions
  - Shows the gap between espoused and applied theories
- Microworlds—simulating potential changes

# Perils of Complacency



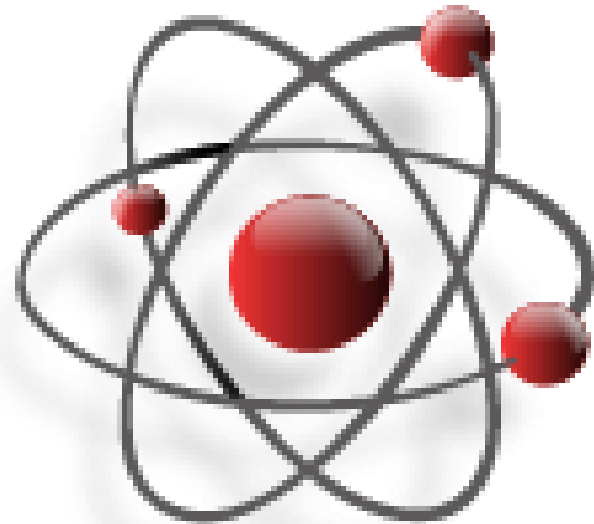
For the great enemy of the truth is very often not the lie—deliberate, contrived, and dishonest—but the myth—persistent, persuasive, and unrealistic. Too often we hold fast to the clichés of our forebears. We subject all facts to a prefabricated set of interpretations. We enjoy the comfort of opinion without the discomfort of thought.



# Credits: a Nuanced Approach

- “Flatview” arguments—credits are all good or all bad
- Dynamic Approach
  - Nature of the business
  - The types of taxes a business pays
  - Stages in a business’ life cycle
  - State’s economic climate
  - Credits long-term effects

## Dynamic Situation



# Sources

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- Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War*, 2002
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