

# What Should the Trump Administration's Manufacturing Strategy Look Like?

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# About ITIF

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- Independent, nonpartisan research and education institute focusing on intersection of technological innovation and public policy, including:
  - Innovation and competitiveness
  - IT and data
  - Telecommunications
  - Trade and globalization
  - Life sciences, agricultural biotech, and energy
- Top science and tech think tank in the U.S., number two in world, according to University of Pennsylvania *Go To Think Tank Index*

# Relevant ITIF Reports

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- “Trade vs. Productivity: What Caused U.S. Manufacturing's Decline and How to Revive It”
- “Ten Principles to Guide the Trump Administration's Manufacturing Strategy”
- “The Myth of America’s Manufacturing Renaissance: The Real State of U.S. Manufacturing”
- “A Critique of CRS’s ‘U.S. Manufacturing in International Perspective’”
- “Worse Than the Great Depression: What the Experts Are Missing About American Manufacturing Decline”
- “Calling Out China’s Mercantilism” (*The International Economy*)

# Today's Presentation

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- 1 Understanding Key Debates on Manufacturing Policy
- 2 10 Principles for a Smart U.S. Manufacturing Strategy

# Why Have We Lost Manufacturing Jobs?

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- Establishment blames technology and automation, taking onus off trade. *Washington Post* stories in one week:
  - “The simple story is that we don't need as many people to make as much stuff.” (Matt O'Brien, January 30)
  - “Trade is not a major cause of job loss...the main cause is automation.” (Robert Samuelson, January 29)
  - “Automation, not trade, is the real culprit in manufacturing job loss.” (Editorial Board, January 24)
  - “Automation has been a bigger factor than trade in the loss of U.S. factory jobs” (Christopher S. Rugaber, January 23)

# Newer Research Shows Trade Played Bigger Role

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- David Autor, MIT: estimates 2.4 million jobs lost due to Chinese import competition from 1999 to 2011.
- Will Kimball and Robert Scott, Economic Policy Institute: estimates that 55% of manufacturing job losses between 2001 and 2013 (2.4 million) are due to the rising trade deficit with China.

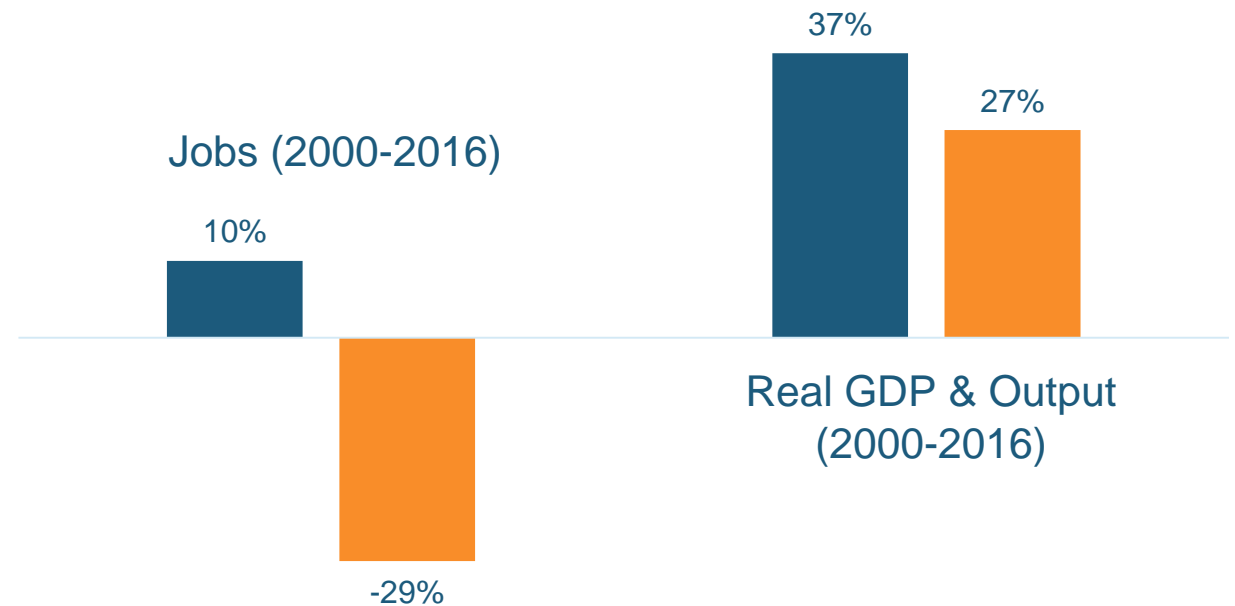
# Why Have We Lost Manufacturing Jobs?

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- Lagging competitiveness plays a big role
- Strong growth in computers and electronics (222%) masked weak performance overall:
  - 10 of 19 manufacturing sectors produced less in 2015 than in 1999
  - 2015 output 7% below 2007 levels

## Fewer Jobs, Weaker Output

■ U.S. ■ Manufacturing Sectors

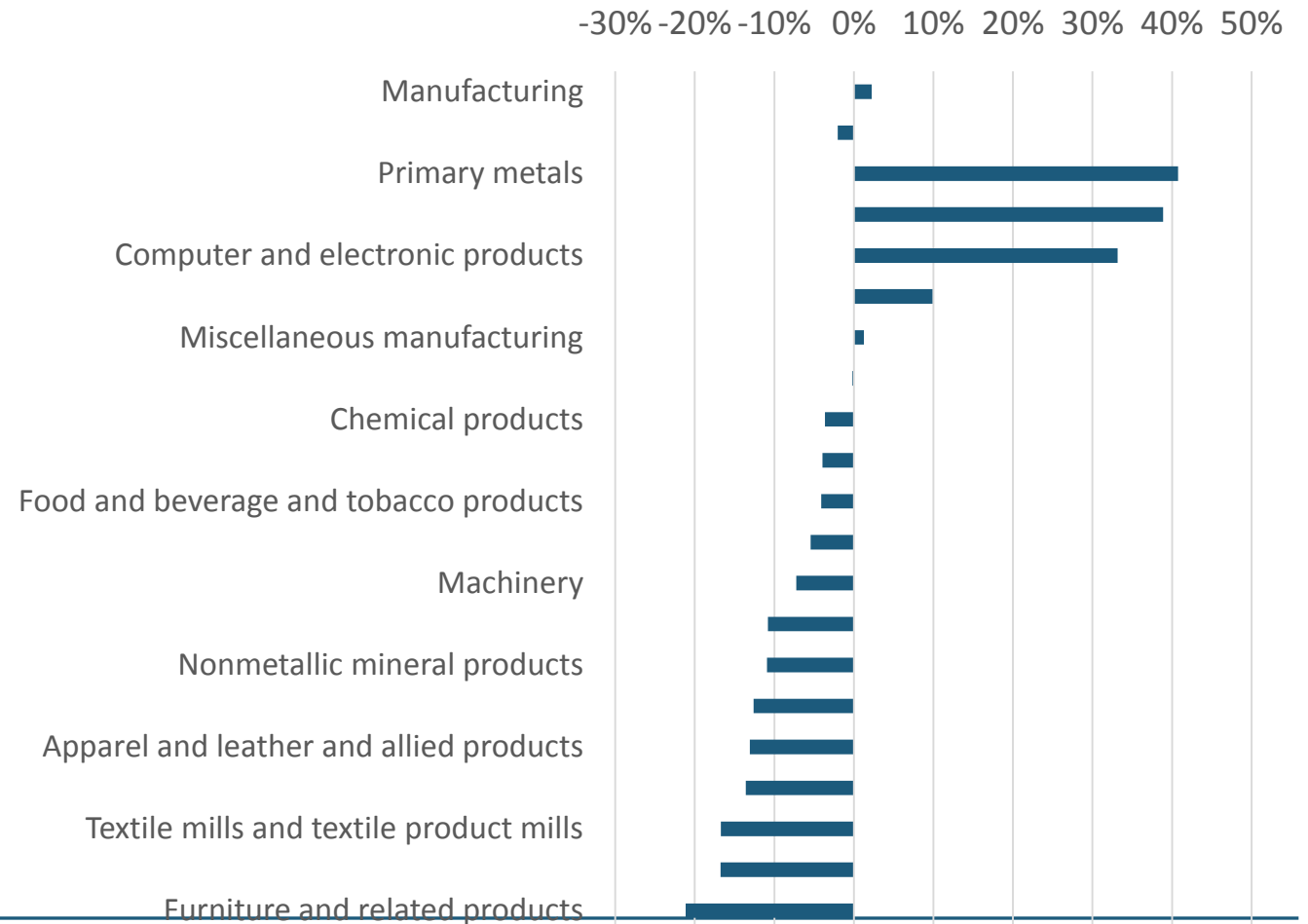






# Most Industries Are Producing Less

- Real manufacturing value added grew 2% from 2008 to 2015
- Rest of the economy grew 11%
- 14 of 19 manufacturing sectors lost output



# Why Did Manufacturing Jobs Go Overseas?

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- Establishment says free market / voluntary “division of labor,” which lowers prices and lets us focus on other things
- Realities:
  - Aggressive “innovation mercantilism”
  - High U.S. corporate tax rate
  - Limited industrially relevant R&D
  - Poor workforce training
  - Limits on export financing



# How Much Manufacturing Should the United States Have?

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- Panglossians say  $N = N$
- In reality,  $N = \text{Productivity vs. Output}$ :
  - If manufacturing productivity grows faster than non-manufacturing productivity, then employment should decline
- The real question is how much manufacturing output do we need relative to GDP?
  - Answer: enough to pay for imports without running a trade deficit

# Can Manufacturing Return to U.S. Shores?

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- Establishment says it's a fool's errand / would lead to higher prices, anyway
- But we can and should bring back some kinds of manufacturing jobs:
  - Complex, high-value-added
  - Not repetitive, low-skill



# Today's Presentation

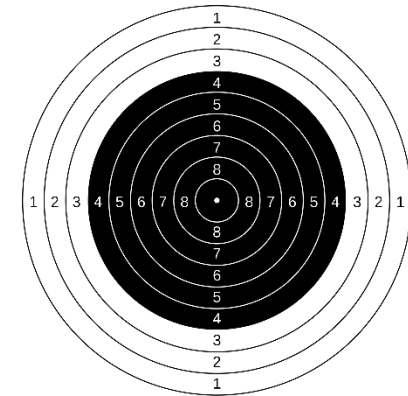
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# What Kind of Strategy?

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- **Scattershot** (“Shoot anything the flies; claim anything that falls.”)
  - Seek any and all manufacturing by raising import costs (e.g., tariffs) or reducing domestic production costs (eliminate regulations).
- **Targeted**
  - Focus on industries America has a sustainable competitive advantage in that raise U.S. living standards.





# 1. Focus on Traded Sectors, Not Just Manufacturing

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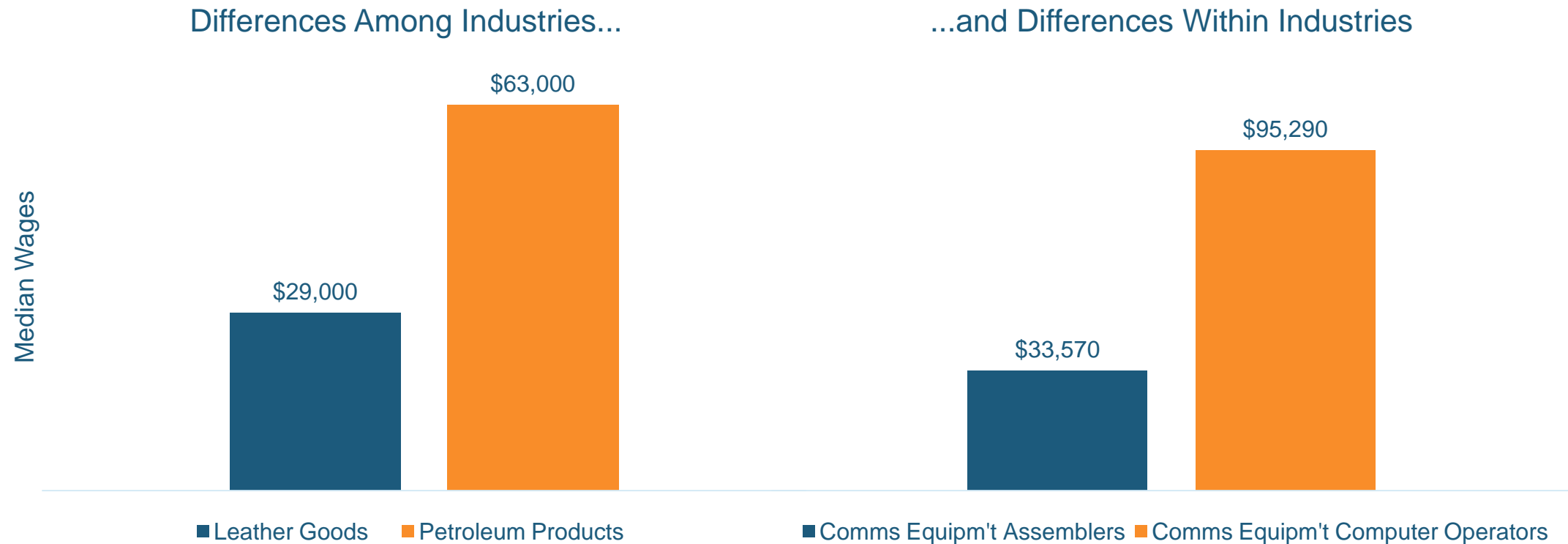
- Traded sectors include manufacturing, plus:
    - Services such as software, Internet, and engineering
    - Content (e.g., movies, music)
    - Natural resources
  - They pay well / drive exports
  - Capture global market share
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## 2. Focus on High-Value-Added, Defensible Sectors & Functions

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- Not all sectors and functions provide the same value:





### 3. Focus on the Trade Deficit, Not Jobs per Se

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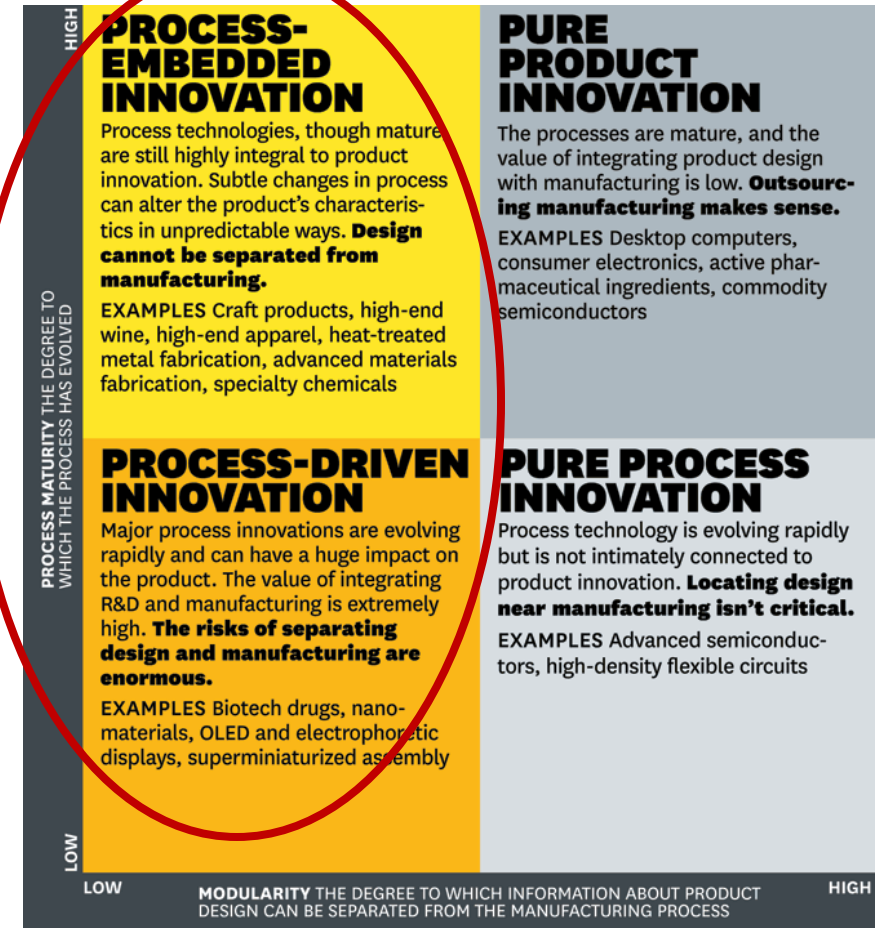


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## 4. Recognize What Should Stay and What Shouldn't

- Prioritize high-value-added, “sticky” activities
- Links to other high-value-added activities in the U.S. make them less likely to go offshore
- Keep what HBS Profs. Pisano and Shih call process-embedded and process-driven innovation:
  - Innovation where design can't be separated from manufacturing
  - Innovation where risks of separating design and manufacturing are high



## 5. Understand That Succeeding Overseas Can Help U.S. Employment

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- Foreign affiliates complement U.S. activities:
  - Increased global market share
  - Increased employment in U.S. HQ and operations
- Same with U.S. affiliates of foreign multinationals:
  - Increased input purchases
  - Increased exports



## 6. Focus on Attraction, Not Compulsion

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- Make America the world's most attractive market for manufacturing
- Step up the fight against “innovation mercantilism,” and eschew such practices in the United States

Attraction	Compulsion
✓ Conducive tax and regulatory policy	✗ Forced tech transfer
✓ High-skill talent	✗ Forced IP handovers
✓ Technology	✗ Local content requirements
✓ Trade	✗ Etc.
✓ Digital and physical infrastructure	



## 7. Move Beyond One-Off Deals and Low-Cost Business Climate

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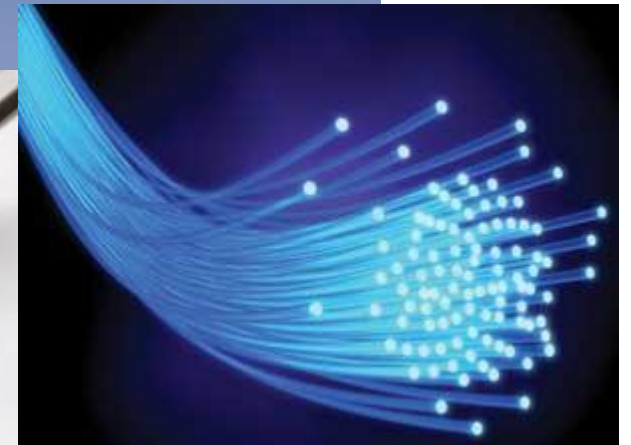
- Government must do more than just “get out of the way”
- Need better manufacturing business climate—plus better manufacturing-support infrastructure:
  - Manufacturing Extension Partnership
  - Manufacturing USA
  - Manufacturing Universities
  - Manufacturing Communities
  - Export-Import Bank



## 8. Change the Playing Field Through Technology

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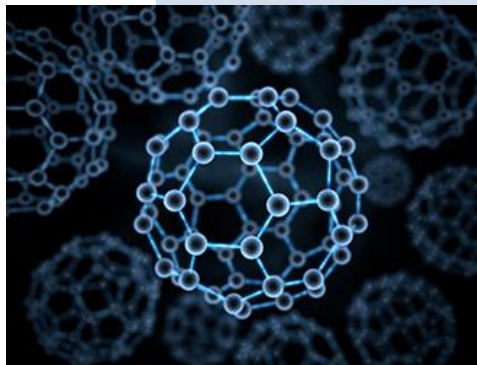
- Expand funding for federal R&D
- Expand R&D tax credit



## 9. Support the Defense Industrial Base

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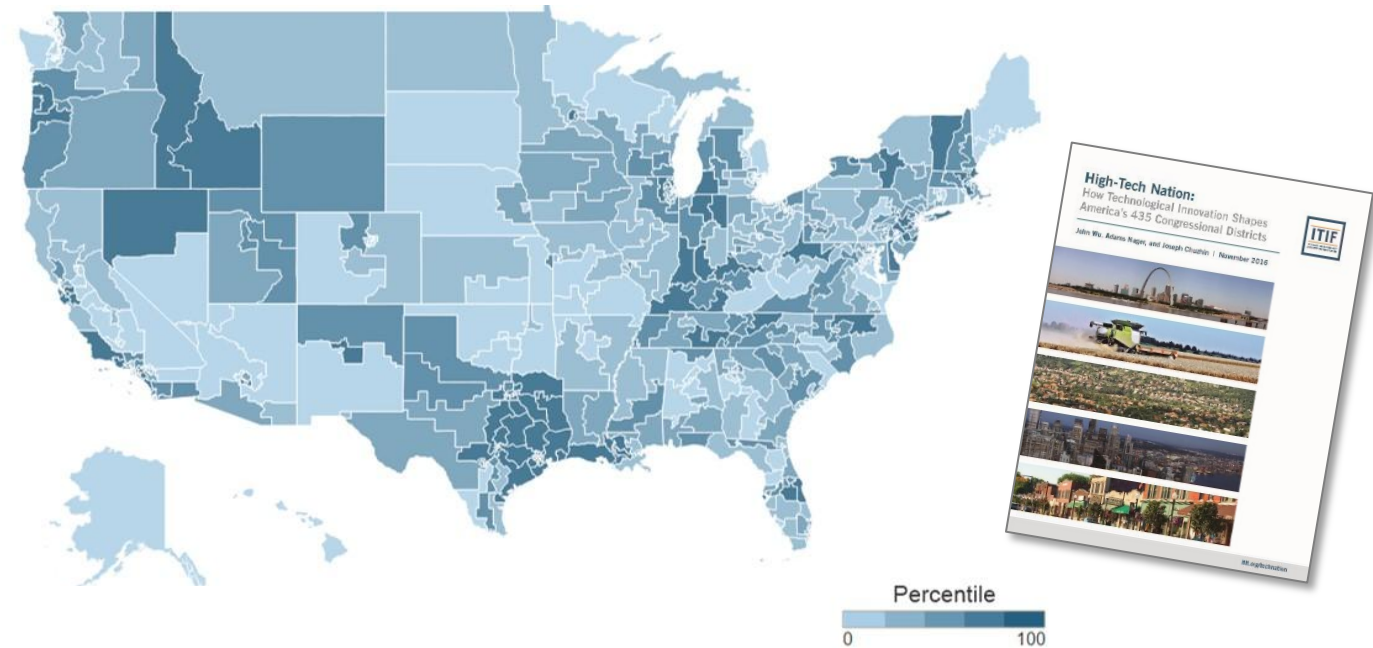
- Wars are won with advanced manufacturing, not services
- America must be at the forefront:
  - Nanotechnology
  - Advanced batteries
  - Sensors
  - Autonomy



# 10. Pay Attention to Where Advanced Production Is Located

- Any national traded-sector strategy needs a regional component:
  - Increased funding for Economic Development Administration
  - Establish a Rural Development Corporation
  - Institute a reshoring tax credit

High-Tech Manufacturing Exports by District



For more, see: [itif.org/technation](http://itif.org/technation)



# Thank You!

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