

Innovation and Entrepreneurship: The New Drift in Federal Policy



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International Economic Development Council
Washington, DC
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Perspective



Several defining characteristics will shape the post-Great Recession economy

The “next” economy will be **export-oriented**, **lower-carbon**, and **innovation-fueled**

“The rebuilt American economy must be more export-oriented and less consumption-oriented, more environmentally-oriented and less fossil energy-oriented, more bio- and software engineering-oriented and less financial- engineering-oriented and less oriented to income growth that disproportionately favors a very small share of the population.”

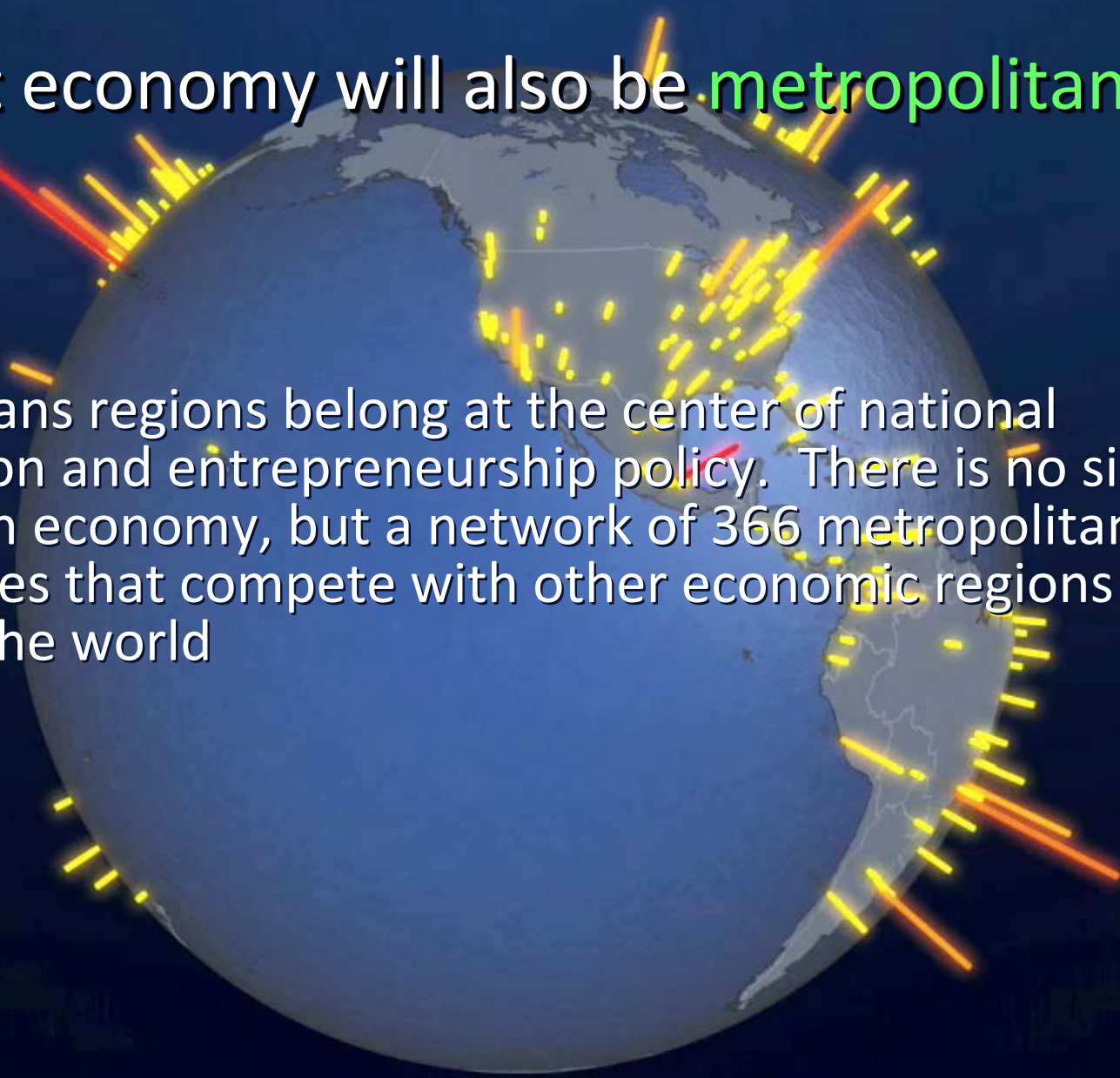
- Director of the National Economic Council,
Lawrence Summers, July 2009



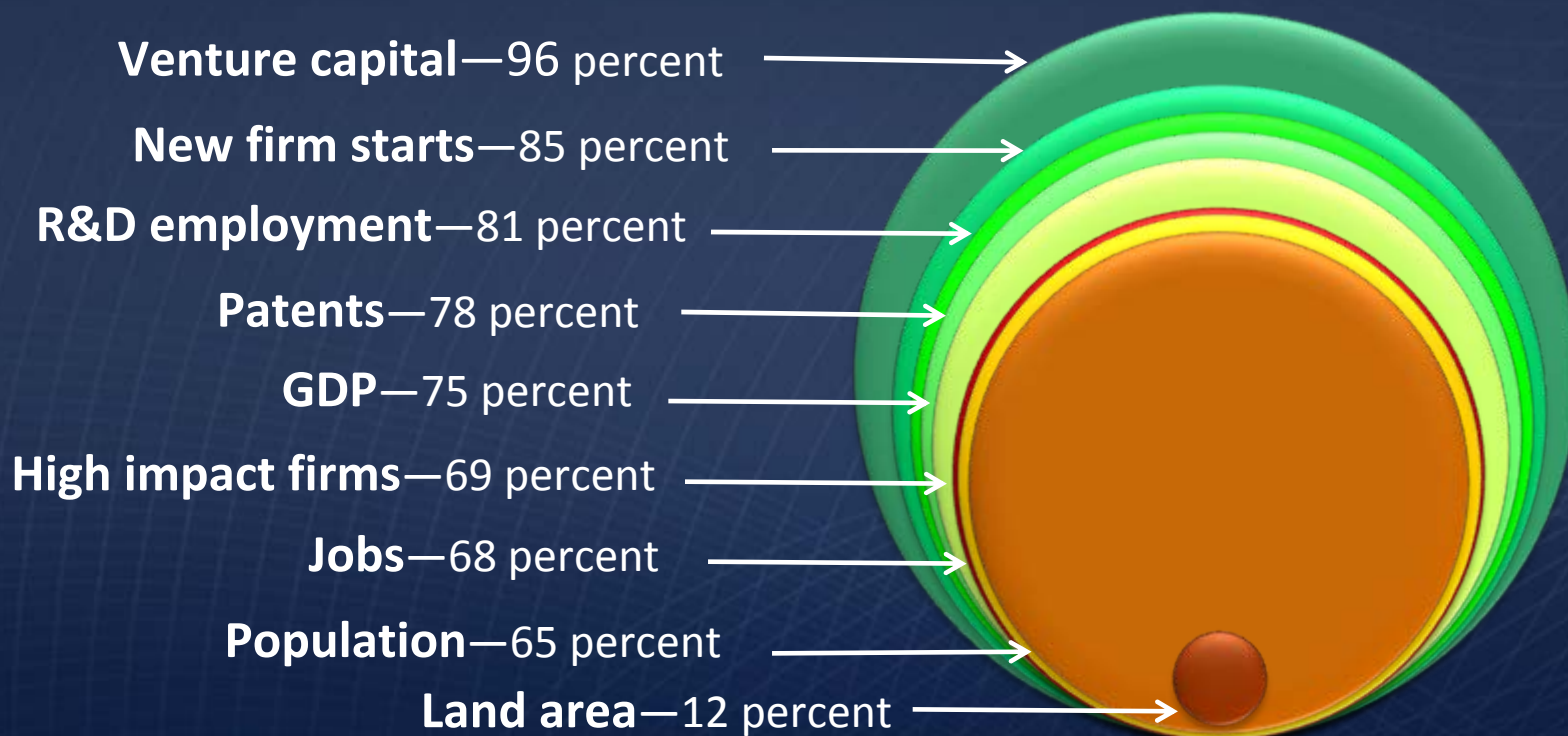


The next economy will also be **metropolitan-led**

Which means regions belong at the center of national innovation and entrepreneurship policy. There is no single American economy, but a network of 366 metropolitan economies that compete with other economic regions around the world



The top 100 U.S. metros are America's economic engines





Metropolitan regions concentrate, amplify, and align the economic inputs that matter most

Infrastructure

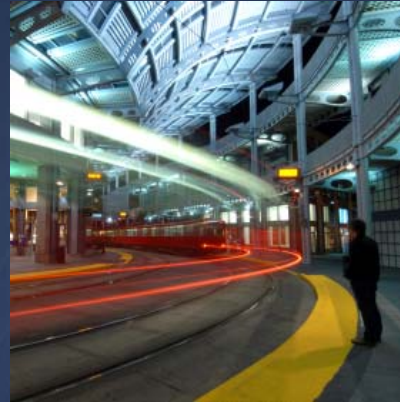
Innovation

Human Capital

Sustainable, Quality
Places

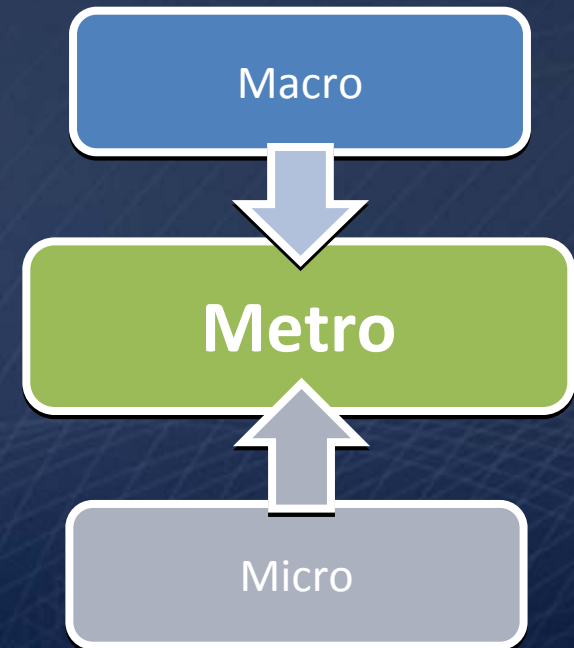
+

Improved governance
networks



However, Washington lacks a middle or “meso” strategy that strengthens regional economies

- Federal economic policy focuses on the one hand on “**macro**” conditions and the general business and regulatory environment
 - fiscal and monetary policy
 - tax policies
 - public investments
 - rule of law, regulations
- On the other hand federal policy targets firms and workers—the “**micro**”
 - loan guarantees; SBIR grants
 - technical assistance, individual worker training programs
 - procurement policies
- Consequently, there’s a “**missing middle—**” an ignored opportunity to join the macro and the micro at the metro for growth

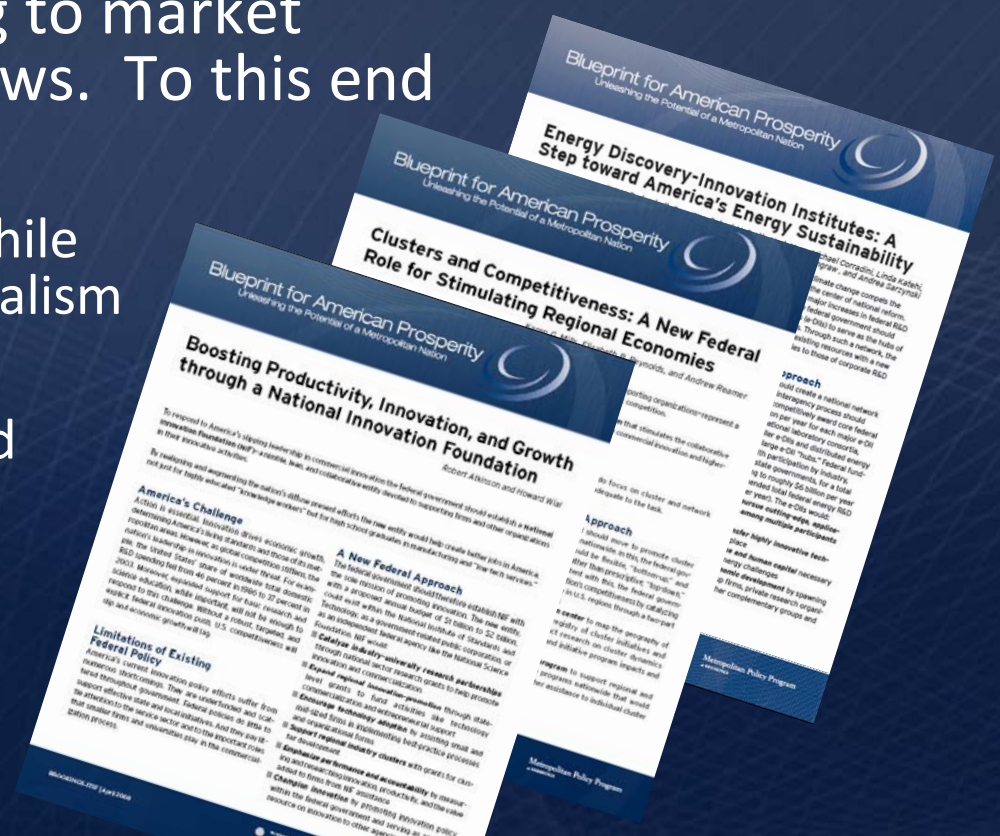


Therefore, Brookings has developed a suite of innovation-related innovation proposals

These proposals assume America's innovation leadership has slipped but that we can do something about it

Along these lines, our proposals offer **discrete, actionable policy options** for responding to market failures and federal policy flaws. To this end they:

- Urge federal leadership while celebrating bottom-up localism
- Focus on regions
- Suggest organizational and institutional reforms



A **National Innovation Foundation** would lead national innovation promotion strategies

This idea assumes federal innovation activities have been historically underfunded, fragmented, and narrow with too little focus on partnerships and commercialization

Therefore, NIF would be a **new, lean, nimble collaborative entity** that unifies, coordinates and boosts current federal efforts. It would:

- Champion innovation broadly
- Catalyze industry-university research partnerships
- Expand regional innovation promotion
- Encourage technology adoption
- Support regional industry clusters
- Emphasize data collection

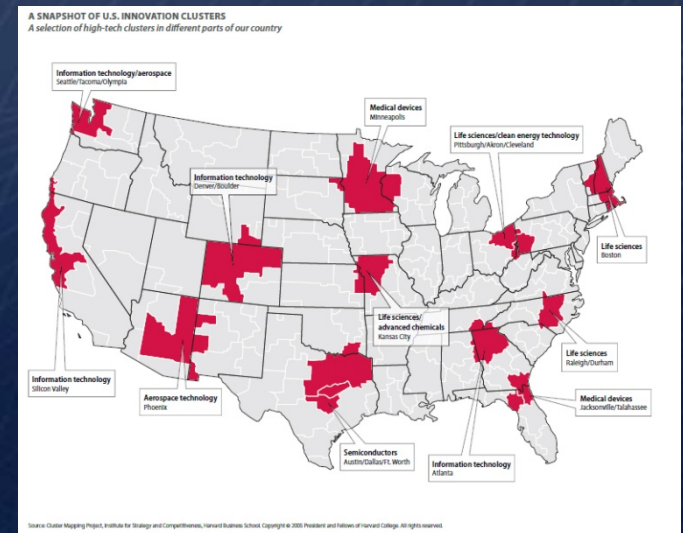


A federal **CLUSTER** program would stimulate regional industry clusters from the bottom-up

This idea assumes federal policy has generally failed to tap into the power of clusters to facilitate knowledge transfer, innovation, workforce development, and improved productivity

Therefore, a new federal **CLUSTER** (Competitive Leadership for the U.S. Through its Economic Regions) program would:

- Provide competitive grants to cluster initiatives to foster “bottom-up” innovation and collaboration in regional industry clusters of all sorts
- Create an information center to map cluster geography, track cluster performance, and research and disseminate cluster best practices



A national network of **energy discovery-innovation institutes (e-DIIs)** would introduce a new region-based paradigm for accelerating RD&D

This idea assumes federal energy innovation activities have been too isolated in “siloes” labs and too far removed from the regional market dynamics of commercialization

Therefore, we urge the creation of a distributed network of 20 to 30 good-sized interdisciplinary, multi-sectoral business-university-lab-run **innovation centers**. Each e-DII would:

- Foster partnerships to pursue cutting-edge, applications-oriented research
- Develop and rapidly transfer highly innovative technologies into the marketplace
- Build the knowledge base necessary to address the nation’s energy challenges
- Encourage regional economic development by spawning clusters of start-up firms, private research organizations, suppliers, and other complementary groups and businesses





Federal responses



The Obama administration has been warming to a new, more region-oriented style of innovation policy

Initial policy offerings were tentative

But as we moved through the first year and into the FY 2011 budget cycle we saw an **increased recognition** that metros matter—and more appetite for addressing the “missing middle”





ARRA was not noticeably regionalist but did contain catalytic items

- **ARPA-E's** \$400 million for “disruptive” R&D sought to stimulate intense collaboration among private firms, universities, labs, and research institutes
- \$750 million for **worker training** in high-growth and emerging industries sought to spur regional approaches to supporting high-value clusters, especially around energy efficiency and renewable energy



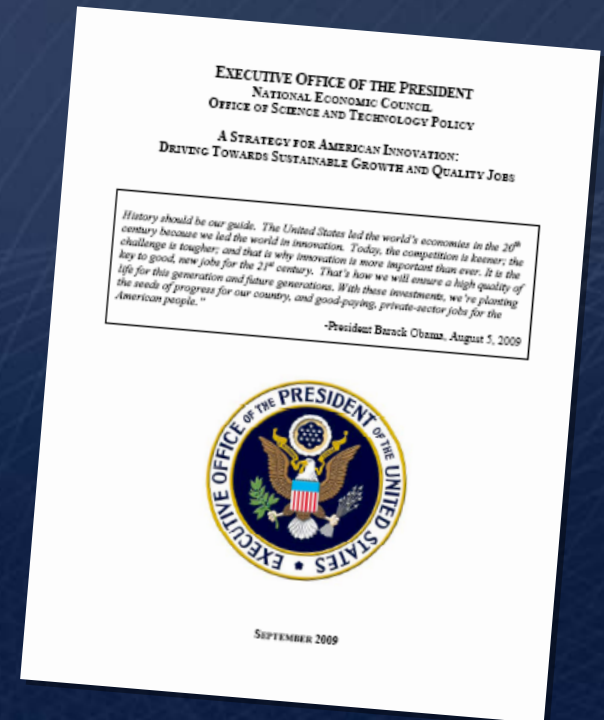


The **2010 budget**, however, rolled out some unmistakably regionalist ideas

- **EDA** proposed a small but symbolic \$50 million program to award grants that foster and strengthen local cluster initiatives
- **DOE** requested \$280 million to fund the establishment of eight new Energy Innovation Hubs aimed at supporting “cross-disciplinary research and development”

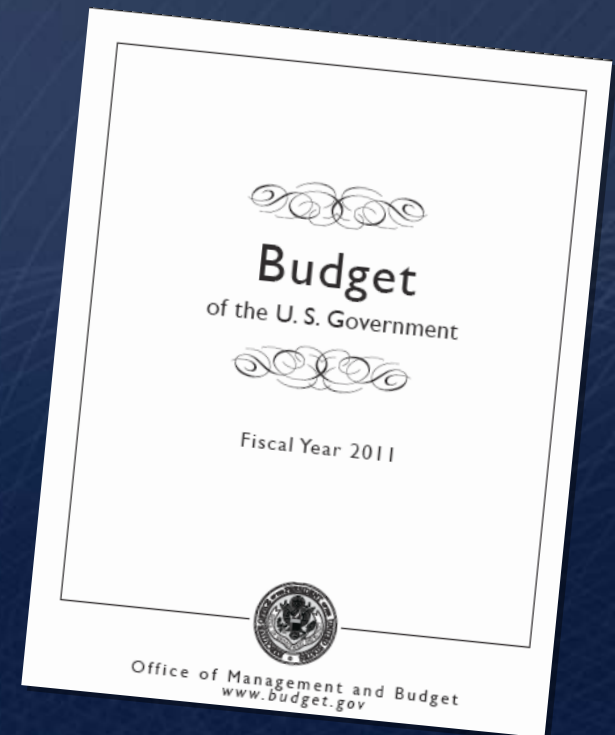
By last fall the administration was announcing a significant **innovation strategy**

- President Obama gave a good speech in Troy, NY and released a **white paper** on innovation and sustainable growth
- DoC Sec. Locke announced an **Office of Innovation and Entrepreneurship** within the Department of Commerce and created National Advisory Council on Innovation and Entrepreneurship



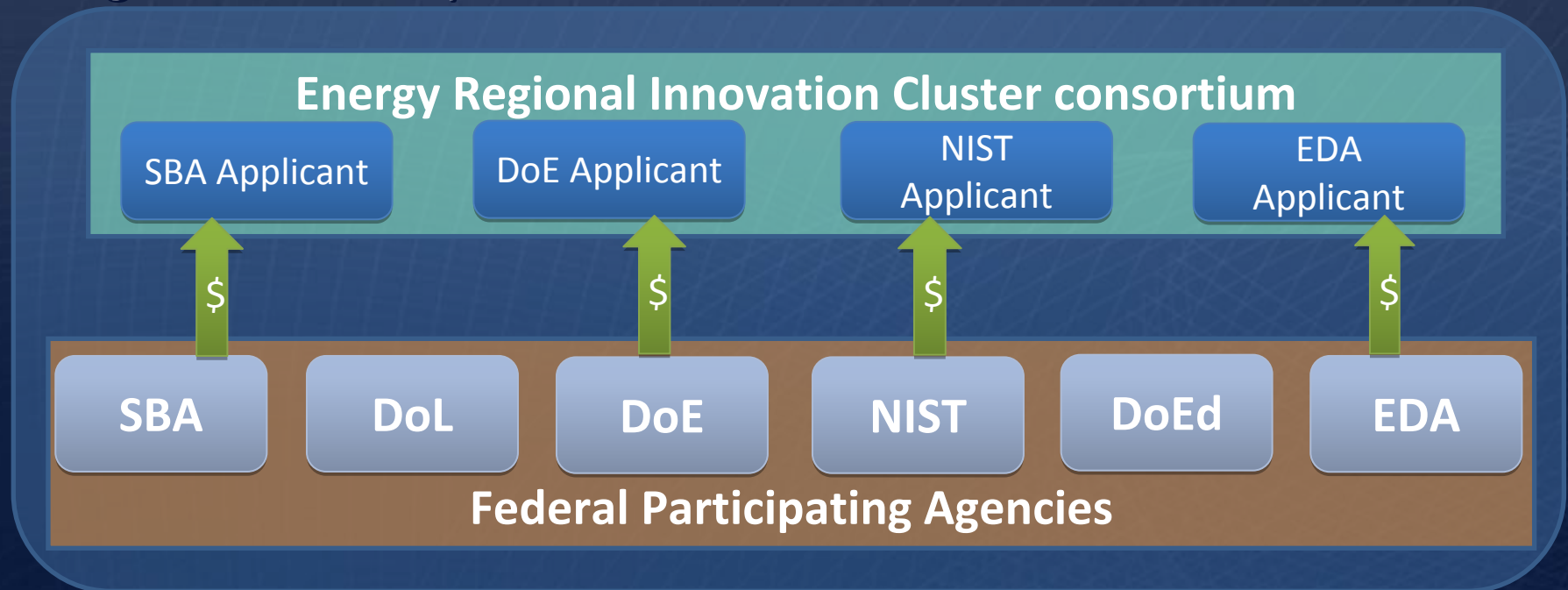
And this year the **2011 budget** release has defined a serious new orientation toward regions and institutional reform

- At least five agencies are now engaged in a multi-agency embrace of clusters:
 - **EDA's** proposed \$75 million Regional Innovation Clusters program would provide regional planning and matching grants
 - **SBA** would support EDA's effort by directing a \$11 million toward promoting greater small business participation
 - **DOL** would use up to \$108 million for its newly proposed Workforce Innovation Fund
 - **NSF** plans to invest \$12 million to promote new "NSF Innovation Ecosystems"
 - **USDA** calls for a Regional Innovation Initiative to align federal resources to promote more economic opportunities in rural communities



In addition, a cross-agency push seeks to turn the efficient building sciences DOE energy innovation hub into a true regional innovation center (E-RIC)

- Regional innovation networks are officially named in a multi-agency funding announcement
- Six federal agencies (DoE, EDA, NIST, SBA, DoL, and DoEd, with support from NSF) are collaborating to add additional funding and support to embed the technology effort in regional industry and workforce currents





Concluding observations



Federal economic development policies are entering a new era

In its purest form, the emerging new stance:

- Puts regions at the center



- Addresses the “missing middle”

- Fuses national leadership and “bottom-up” empowerment





However, much **more change is necessary**

- The new programs remain small
- Agency uptake remains variable
- Congress remains tentative

Meanwhile, there is still far **too much fragmentation** in federal innovation efforts

- The federal government's seven principal innovation programs are run by four different agencies
 - For regional economic development the fragmentation is even greater: 250 programs in 14 agencies!
- Recent efforts do not focus on streamlining and with so many federal players in the game, it is difficult to overcome stovepiping

Region-based actors working with ARRA, for example, need to consider some 30 different programs administered by six agencies in the energy efficiency realm alone

	HUD	EPA	ENERGY	LABOR	COMMERCE	TREASURY
National Competitive Grants	Assisted Housing Green Retrofits	Brownfields Job Training Grants Diesel Emission Reduction Program	Renewable Energy Projects Energy Efficiency and Conservation Block Grants Transportation Electrification Alternative Fueled Vehicle Pilot Grant Program Smart Grid	WIA - Worker Training High Growth	Economic Development Administration Grants	New Markets Tax Credits Advanced Energy Investment Credit and Energy Grants in Lieu
Regional Competitive Grants				WIA - Youth Activity WIA - Adult Training WIA - Dislocated Worker Assistance	Economic Development Administration Grants	
State Formula Grants			State Energy Efficiency Program Grants	Workforce Investment Act		
Local Formula Grants	Community Development Block Grants Public Housing Capital Fund		Energy Efficiency and Conservation Block Grants Home Weatherization Assistance Program			
Direct to Consumers or Businesses	American Opportunity Education Tax Credits	Plug-in Electric Drive Vehicle Credit	Tax Credits for Energy-Efficient Improvements to Existing Homes Extension of Bonus Depreciation	Tax Credits for Alternative Retooling Property	Long-term Extension or Modification of Renewable Energy Tax Credit	Incentives to Hire Unemployed Veterans and Disconnected Youth Remove Dollar Limitations on Certain Energy Credits

Source: City of Seattle

Source: Implementing ARRA: Innovations in Design in Metro America. Brookings Institution. July 2009



Going forward, regions represent an **on-ramp** for the next generation of smart development programs

- This administration already embraces the importance of regional economies:

“We need to recognize that competitive, high-performing regional economies are essential to a strong national economy.”

- (Page 20 of the FY2011 federal budget)

- Regions represent the right point and scale of intervention for federal efforts to purposefully catalyze entrepreneurship and high-growth firms

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