

JOB **ENTREPRENEURSHIP** **INNOVATION** **COMPETITIVENESS** **REGIONAL INNOVATION CLUSTERS** **MANUFACTURING** **SMALL BUSINESS** **CLEAN ECONOMY** **EFFICIENCY** **INFRASTRUCTURE** **AG EXTENSION OFFICES** **NEW FEDERALISM** **CONOMIC DEVELOPMENT** **STARTUPS** **ECONOMIC ECOSYSTEMS** **21ST CENTURY SKILLS** **MANUFACTURING EXTENSION PARTNERSHIPS** **RURAL DEVELOPMENT** **EXPORT ASSISTANCE** **WORKFORCE TRAINING** **SUSTAINABLE INFRASTRUCTURE** **NEW BUSINESSES** **GREENPRINT** **TRANSPORTATION** **ADVANCED TECHNOLOGY** **NET JOB CREATION** **AG EXTENSION OFFICES** **NEW FEDERALISM** **CONOMIC DEVELOPMENT** **STARTUPS** **ECONOMIC ECOSYSTEMS** **21ST CENTURY SKILLS** **MANUFACTURING EXTENSION PARTNERSHIPS** **RURAL DEVELOPMENT** **EXPORT ASSISTANCE** **WORKFORCE TRAINING** **SUSTAINABLE INFRASTRUCTURE** **NEW BUSINESSES** **GREENPRINT**

AN NPI WORKING PAPER

THE ACCELERATION AGENDA

JOB CREATION, INNOVATION AND ECONOMIC DEVELOPMENT IN THE 21ST CENTURY
SEPTEMBER, 2010



An NPI Working Paper

THE ACCELERATION AGENDA Job Creation, Innovation and Economic Development in the 21st Century

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Abstract/Summary

“The project of the next president is figuring out how do you create bottom-up economic growth, as opposed to the trickle-down economic growth that George Bush has been so enamored with.”

— Candidate Barack Obama, 2/2/08

Few of us are happy about the level of progress we have made in either creating robust employment growth or deploying a new policy and financing architecture that can scale broadly to reach the high road economic vision we all share – be it about manufacturing and job creation, small business entrepreneurship, clean energy market transformation, 21st century infrastructure, local economic development, or export expansion. **This slow progress comes at great cost, as stalled success here is undermining the case for more innovation and investment in US economic competitiveness.**

While debates will rage among economists about whether this is a normal cyclical recession or something more¹, and in Congress about what we can afford to invest in given the deficit, this paper describes a series of low-cost but high-impact steps we can take now to **accelerate** job creation, growth and American competitiveness.

At the core of these ideas is a simple paradigm shift – an emphasis on nurturing bottom-up change rather than top-down dictates. The reason: federal siloed programs and one-size-fits-all solutions don't work as well anymore in meeting the complex challenges of the 21st century economic markets. Growth, job creation and shared

prosperity lies in creating opportunities for entrepreneurs and small companies to find financing, lifting up new clean economy markets, and building new networks to connect innovators, suppliers and customers across traditional geographies. That's where studies show we netted 40 million new jobs from 1980-2005, from young companies less than 5 years old.²

To be clear: this paper does not simply call for more federal revenue-sharing with the states. The changes we need to accelerate private-led innovation in regions and communities do not begin, or end, there.

What we need instead is to create the incentives and architecture for a new **Regional Race to the Top**, for *all* America's regions.

As President Obama understands, our recovery is tentative, and we need creative approaches for public-private collaboration. Change begins with the business sector and local community stakeholders at the center of the conversation – not as an afterthought.

So is the *Acceleration Agenda* a new “industrial policy”? Do such labels matter? We hope not – there is too much on the line for our economy to be bogged down in over-simplified debates from the past.

¹ The idea that the American economy faces long-term structural challenges – a *New Normal* – is a long held view of NDN's New Policy Institute - <http://ndn.org/paper/2007/new-landscape-globalization>

² See (<http://www.nytimes.com/2010/04/04/opinion/04friedman.html> and www.kauffman.org/uploadedFiles/firm_formation_importance_of_startups.pdf). Also see 2010 National Bureau of Economic Research, Working Paper 16300, <http://www.nber.org/papers/w16300>

The 21st Century Economic Moment

Experts from NDN and The New Policy Institute have been saying for some time that the economic challenges that the U.S. faces are unique.

In economic terms, the economic struggle of everyday Americans, the erosion of the middle class, and the consequent effects on US tax base, was happening long before the economic crisis of 2008. The last decade was actually a **lost decade**, with *declining* median incomes and stagnant wages.³

Moreover, the ascendance of new economic powers, people and nations outside the advanced industrialized world, a phenomenon Fareed Zakaria has termed “The Rise of the Rest,” means that America must run harder just to keep up with emerging Chinese and Indian Microsofts. Ending the erosion, let alone creating the jobs of the 21st century to make up for 6 million “made in America” manufacturing jobs lost since 2000, will be impossible unless we **step up** our game.

Yet how? And where? Our view is that the solution set is three-fold.

- In the short-run, the Recovery Act has done its job to keep the economy from entering a free-fall. Long-term employment growth however, will take two more major steps.
- Step two involves continuing and deepening the Administration’s unheralded set of long-term “new foundation” investments designed to fertilize our future – in education and workforce, broadband,

clean energy and so forth – that the President laid out in his April 2009 speech. These critical investments in US competitiveness must continue if we are to stay in the global economic race.

- Step three is what this paper focuses on – creating the right “middleware” to better connect the dots – linking short term and long term federal investment strategies, the public and private sectors, and innovative ideas from the top with the frontline realities of bottom-up and regional implementation.

The news is not all bad: Solutions and strategies are in fact out there; but they are bubbling up across a new network of innovators, implementers and entrepreneurs, who are working across business, government, in communities and in the independent sector. **The problem is that this work is still less than the sum of its parts.** Different issue area innovators – from small business entrepreneurship to infrastructure, from clean energy technology to manufacturing and export assistance – often advocate for the same basic ideas but use different lexicon and work in stove-piped Congressional and agency silos.

The challenge then is two-fold: how do we define a common language of what new economic development middleware is needed and how we accelerate the deployment of this new implementation software to achieve the job creation outcomes we seek.

³ For more facts on the Lost Decade, see <http://ndn.org/essay/lost-decade-everyday-americans>

Defining the Problems We Need to Solve

Many, many important economic challenges lie ahead for the US economy and for the President; suffice it to say here that there are four *systemic and persistent challenges* which demand urgent attention and new software if we are to accelerate our transition to a stronger, 21st century foundation. We need to:

- Lift up young, job-creating companies, seed entrepreneurship, grow worker skills and dynamically re-think the federal economic development pipeline to meet the challenges of the 21st century – to create not just small businesses but *new businesses and new industries*.⁴
- Understand that start-ups alone won't get us there; we must also build what Intel's Andy Grove calls job-centric, effective business ecosystems to drive the **scaling** of new businesses, new industries and US manufacturing opportunities that make economic sense.⁵
- Deeply engage the private sector as a critical solutions partner in addressing these systemic changes, or risk a continuing and negative narrative that these efforts are simply wasteful public sector programs – rather than the next catalytic success in a long line stretching from the Erie Canal to the Internet.
- Overcome current distortions in our economy, both sectoral and regional, many of which we are still coming to understand.⁶ As noted by Alan Greenspan: "Our problem, basically, is that we have a very distorted economy... Large banks, who are doing much better, and large corporations... are in excellent shape. The rest of the economy, small business, small banks, and a very significant amount of the labor force, which is in tragic unemployment, long-term unemployment, that is pulling the economy apart. The average of those two is what we are looking at, but they are fundamentally two separate types of economy."⁷

⁴ NPI's six-state, 750-company analysis of stimulus spending, by company age, suggests we have far to go. See Appendix B-5.

⁵ Grove further notes: "Without scaling, we don't just lose jobs—we lose our hold on new technologies. Losing the ability to scale will ultimately damage our capacity to innovate." See Grove piece here: <http://www.bloomberg.com/news/2010-07-01/how-to-make-an-american-job-before-it-s-too-late-andy-grove.html> and discussion of regional economic ecosystems here: <http://www.eda.gov/NewsEvents/Speeches/NADOSpeech.xml>

⁶ For a great start, see NDN's Rob Shapiro excellent piece examining the sharp relative decline of private sector job creation rates under Bush (2002-2007) compared to the Clinton, Reagan and even Carter expansions. <http://ndn.org/blog/2010/08/how-remain-number-one-economy-china-ascends-number-two>

⁷ Source: http://www.msnbc.msn.com/id/38487969/ns/meet_the_press-transcripts.

Realistic Principles for Reform

So how do we fix the federal-state-local economic development pipeline to water the right beanfields, do more for less, and effectively engage the private sector to deliver job growth for everyday Americans?

Our usual instinct – at least for those who live and die by 24/7 cable – is to demand “the answer” from the White House, or through a “one-size-fits-all” piece of legislation that will fix the problem. The new reality, however, is that **creating the jobs and industries of the future will take innovation and experimentation, a new investment ethic that rewards both effort and results, and a recognition that growth will tend to vary based on local market conditions, renewable energy resources and built capacities – including local leadership and collaborative skills.**⁸

Working at the regional, state and local level, however, is no picnic. Besides the well-known fiscal challenges, we can’t just expect entrenched interests to graciously stand

aside as we propose eliminating agencies and programs in a political flourish. Overcoming 20th century government and creating new bottom-up innovation won’t succeed simply by rearranging the hardware of government on a white board.⁹

We’ll need new thinking and new mechanisms to effectively rewire our economic circuitry, and new collaborative partnerships to drive on-the-ground acceptance.

What does that look like?

The next page lays out the basic principles of reform.

After that, we present our 10-point *Acceleration Agenda*.

⁸ The new Council on Competitiveness Report called “Collaborate” emphasizes the critical role of local leadership as key to economic success and regional innovation. Such leadership needs to be nurtured and engaged. (<http://www.compete.org/news/entry/1385/council-report-says-leadership-is-key-to-regional-development/>)

⁹ See excellent New York Times piece (“Hard Times Spur Ideas for Change”) which profiled some well-meaning attempts to re-arrange government in dramatic new ways (eg, cutting Nebraska’s number of counties in half, eliminating 1,000 township boards in Indiana) and the challenges of doing so. Also see: <http://www.nytimes.com/2010/05/25/us/25remake.html>

Key Reform Principles

BOTTOM UP AND REGIONAL: There is no such thing as a one-size fits all approach to job creation and scaling whole new industries. Regional strengths vary – be it wind resources for renewable energy development, local governments' technical capacity, or the level of private sector engagement.

Conclusion: Government support to catalyze transformation needs to be as flexible as possible given local growth goals and capacity. At minimum, federal agencies should set-aside a 1% innovation budget. Better would be new forms of bottom-up spending authority that better integrates current funding and program silos.

PRIVATE SECTOR ENGAGEMENT: If there is to be a truly “New” New Deal, government cannot go it alone, it can only serve as a key partner and catalyst. Deep private sector engagement is critical to sustained success, and continued public support for innovation.

Conclusion: To drive bottom-up innovation and effectively include the private sector, an implementation vehicle to engage businesses similar to the late Eli Segal’s Welfare to Work Partnership is worth creating. For more, see JobsandInnovationPartners.org.

CLEAR PUBLIC SECTOR GOALS ARE CRITICAL: Major economic change and innovation begins when the public sector sets clear, meaningful, sometimes visionary goals (think connecting Lake Erie with New York Harbor by the Erie Canal, a man on the moon within a decade, etc). Catalytic goals unleash the tremendous innovative and scaling capacities of both the US public and private sectors. We need both working in tandem.

Conclusion: We need ambitious and clear goals for regions to reach toward.

COLLABORATIVE CAPITAL: No single source of capital is enough to carry out the transition to Economy 2.0. In an era of persistent Government deficits, public funding will need to be limited to serve such functions as early stage funding, to attract leveraged capital and to support critical infrastructure, such as workforce and curriculum development and R&D.

Conclusion: Appropriate signals and policies are still needed to attract greater levels of private capital into innovation, and greater investment by public and union pension funds. Distributed implementation mechanisms are critical if we are to open up community-based investment and federal grants for smaller and medium-sized businesses.

EXPERIMENTATION A CORE VALUE: It goes without saying that measurable outcomes and criteria must be a critical component of all transformation and innovation investments. But so must a “rinse and repeat” approach that actually values and encourages experimentation, lest we clip the wings of creativity.

Conclusion: Communicating an effective narrative about the role of the US government in encouraging locally-led innovation and network development is a critical gap.

GO-FAST IMPLEMENTATION CENTERS: Whether they are called innovation hubs, regional solution centers, or job creation “war rooms”, greater investment in public-private-community collaboration *at the point of implementation* is needed. Simple spatial dynamics demands more focus on frontline collaborations, empowering of regional leaders, and the detailing of federal agency staff out of their silos.

Conclusion: While different funding streams and models for federal place-based innovation are taking shape, private sector leaders and community foundations should be encouraged to create Collaboration Centers as soon as possible to seed the ground.

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Solution Set #1: The Fast Five

The Fast-Five require very little funding, limited engagement from Congress and an acceleration of smart federal reforms already in motion. Most important here: mechanisms to encourage private and public sector leaders in the regions to step up and identify and implement what works for them.

1. An Engaged Business Community
2. Bottom Up Acceleration Options
3. Federal Acceleration Options
4. A Federal Economic Innovation Budget
5. Serious Cost-Benefit Analysis: Key to Funding New Investment

Solution Set #2: Deeper Reform and Change

These ideas involve longer-term reforms designed to boost US economic competitiveness. These changes will challenge entrenched interests and old ways of doing business.

6. Smarter Federalism
7. New Innovative Finance Mechanisms To Spur Private Job Creation
8. Transforming Government's Role: Remaking The Map
9. Catalyzing Congressional Change: A Bottom Up Innovation Commission?
10. The Big Idea?

1. An Engaged Business Community – Planning for Jobs, Innovation and Implementation

Every discussion of federal economic development must start with the business sector and community stakeholders at the center of the conversation – not as an afterthought. While suggested reforms to streamline federal and state economic development are a critical piece of the new economic foundation, they are not the “answer” by themselves. The role of federal and state government is essentially to serve as catalyst for seed funding and to undergird the work of the private sector to create new businesses and markets as a driver of workforce development, infrastructure and smart standards.

Another key role that the federal government can play is to catalyze collaborative community and regional business opportunity planning to identify emerging market opportunities, workforce and project needs, and policy barriers to overcome.¹⁰

With the private sector and community leaders at the helm of such efforts, this is not top-down industrial policy but in fact a bottom-up, **low-cost** way for the federal government to leverage and integrate its investments across many different federal programs which touch economic development and innovation. For a private sector culture where quarterly profits are too often the over-weighted metric of success, this strategic pause to think through opportunities for investment, infrastructure development and new partnerships is often a welcome change.

There are several successful models for engaging the private sector in implementing these kinds of bottom up models and building the needed “middleware” to connect government and business in the 21st century economy.¹¹

One effort in particular stands out as a potential analogue to the business engagement and implementation challenge at hand: The Welfare to Work Partnership. Recognizing the challenges facing former welfare recipients in finding a job, The Clinton-Gore Administration actively engaged businesses to do their part to ensure the success of welfare reform. Led by the late Eli Segal, The Partnership was formed in 1997 as a nationwide effort to enlist businesses in hiring former welfare recipients. Over 15,000 businesses hired nearly 650,000 welfare recipients. The Partnership specifically supported and engaged businesses in the systemic implementation challenges of hiring and retaining these new workers by providing technical assistance and toll free support.

We believe that a similar implementation-focused effort, to engage the private sector to build new jobs and innovation partnerships in communities, will be central to accelerating the bottom up economic models we are advocating for here.¹²

¹⁰ From the 2007 report, *Cluster-Based Strategies for Growing State Economies*, “(Government) should look first to the business leaders from within the cluster to help better understand the cluster’s assets, needs, and challenges and to lend their support, often the first step in a mobilization process.” <http://www.nga.org/Files/pdf/0702INNOVATIONCLUSTERS.PDF>

¹¹ Other examples include: Educate to Innovate (<http://www.whitehouse.gov/issues/education/educate-innovate>) and America’s Promise (<http://www.americaspromise.org/>).

¹² For more, see JobsandInnovationPartners.org.

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Job Creation, Innovation and Economic Development for the 21st Century

Obama Administration Actions To Date

To its credit, the Obama Administration has made a significant down-payment towards innovation infrastructure and business support through its National Innovation Strategy (released in September 2009), and over \$100 billion in innovation investment through the recovery.¹³

National Innovation Strategy



http://www.whitehouse.gov/the_press_office/president-obama-lays-out-strategy-for-american-innovation/

Individual agencies have also taken huge strides to engage the private sector through such efforts as:

- The Economic Development Administration's new Jobs and Innovation Partnership and Office of Innovation and Entrepreneurship (<http://www.eda.gov/NewsEvents/Speeches/NADOSpeech.xml>)
- The Small Business Administration's Open Government and collaboration plan (http://sba.gov/idc/groups/public/documents/sba_homepage/sba_open_gov_plan.html) and Michigan Automotive Robotics Cluster pilot (http://contracting.tacom.army.mil/future_buys/FY09/MARC.pdf)
- The Sustainable Communities partnership between 3 key agencies involved in smart growth (HUD-DOT-EPA: <http://www.epa.gov/smartgrowth/partnership/index.html>)
- The DOE's Energy-Regional Innovation Cluster investment.
- See full catalogue of agency efforts to increase program innovation and flexibility in Appendix B.

Looking forward, it is critical that the Obama Administration's Innovation 2.0 strategy shifts the focus of attention from what government is doing to what the private sector can do.

One final point: in building the "middleware" to connect government and business in the 21st Century economy, we must reject the notion that the private sector is represented by only a few voices, or that there is a monolithic voice for business, when in fact there are many new business networks finding their voice and engaging with government in innovative ways.¹⁴

¹⁴ A partial roster of this new eco-system of groups and networks includes the Energy Innovation Network (<http://www.energyinnovationnetwork.org/>), Clean Economy Network (cleaneconomy.net), Clean Economy Development Center (<http://cleaneconomycenter.org/>), Building America's Future (<http://bafuture.org/>), Business for Innovative Climate and Energy Policy (<http://www.ceres.org/bicep>), Chambers For Innovation in Clean Energy, Carbon War Room, National Small Business Association (www.nsba.biz), Council on Competitiveness, Colorado Cleantech Industry Association, New England Clean Energy Council, CleanTech San Diego and LA Business Council.

¹³ <http://www.whitehouse.gov/recovery/innovations/intro>. Also see Appendix B.

2. Bottom Up Acceleration Options

Creating and scaling transformational jobs, industries and success stories is hard to do – it’s even harder using silo’ed federal and state programs and institutions. The fastest way to promote “innovation diffusion” and cultivate regional innovation clusters and other place-based innovation is to reverse engineer success from the bottom-up.

That’s why it is critical that business leaders, community leaders, community foundations and national foundations stop waiting for the federal and state governments to cook up the “answer” – and start organizing themselves now to engage with the government more effectively.

Step 1: A Shared Mental Map

Discussions around job creation and innovation often bog down around different visions and even different policy terminology – which often reflects the original 30-year programmatic funding silos they seek to escape.

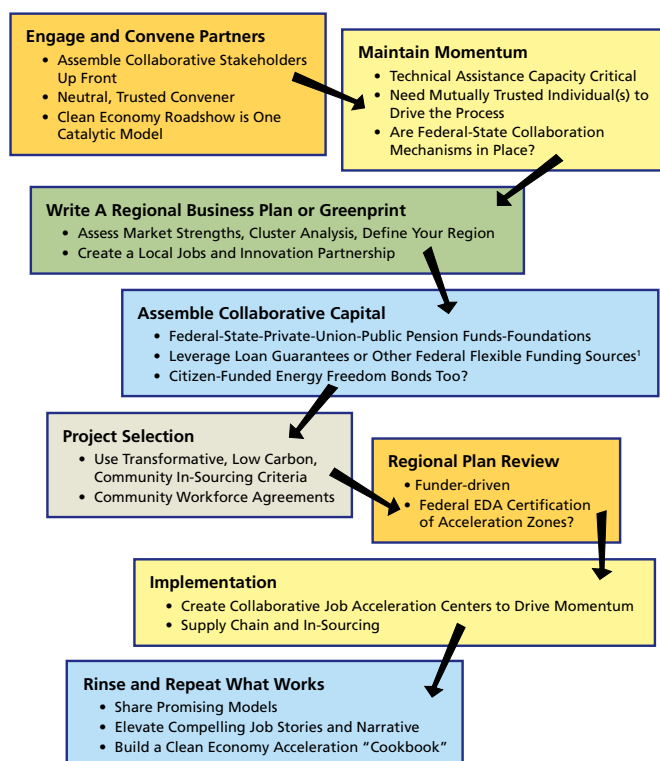
What’s the difference between a small business lending program to stimulate new clean energy entrepreneurship and a local “green bank” focused on clean economy projects? In professional economic development policy-speak, a lot. In practice, at the local level, not much at all.

Here is essentially the process that everyone is talking about, doing in some fashion, and needing to accelerate:

- Create a collaborative process in a neutral setting that includes leaders from the public, private and community sectors.
- Identify the size of your region, its core strengths and write a regional business plan that spells out the key projects and investments you need to make
- Find money make to fertilize your economic ecosystem
- Have a trusted driver to keep the process moving.

Here is the process in a bit more detail, in schematic form. Full size version appears in Appendix A-2.

Bottom-Up Innovation and Job Creation Cycle



THE ACCELERATION AGENDA

Job Creation, Innovation and Economic Development for the 21st Century

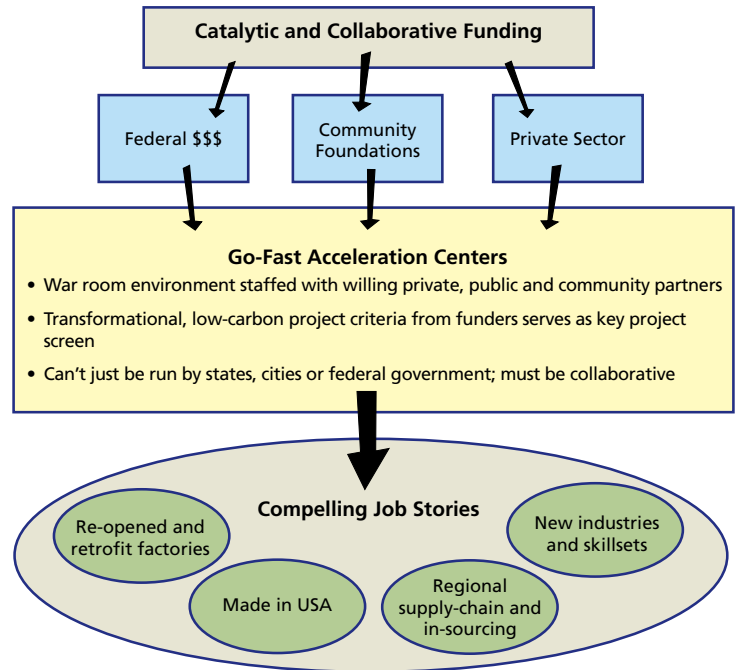
Step 2: Jobs and Innovation Acceleration Networks

The government supports a long catalogue of efforts by the SBA, EDA, DOE, HUD, and other federal agencies to promote community and clean economy development. In time, many of these efforts can be pooled through new community centers for jobs and innovation, chartered to promote innovative, public-private job creation clusters and economic development. These “acceleration networks” would connect entrepreneurs with those who have the resources to create companies, and connect these startups to the opportunities presented by other administration initiatives, such as green economy programs and the National Export Initiative. These centers also would connect job seekers with employment opportunities and training, and offer information and new incentives for companies to in-source locally the key components of their supply chains and workforce development.

But we don’t have the luxury of time. Instead, we should be encouraging the private sector to create “Go-Fast Centers” on their own in partnership with federal, state and the independent sector. A current working example is the Innovation Lab created by McKinstry in Seattle.¹⁵

Note: the full-size “Go Fast” schematic appears in Appendix A-3.

Economy 2.0 A Go-Fast Model?



¹⁵ <http://www.xconomy.com/seattle/2010/08/11/mckinstry-innovation-center-cozies-into-position-as-cleantech-%E2%80%98accelerator%E2%80%99-director-elsa-croonquist-on-what%E2%80%99s-next/>

3. Federal Acceleration Options

Former Bloomington Mayor John Fernandez is doing an excellent job of injecting new life into the Economic Development Administration (EDA). His recent speech before the National Association of Development Officers outlined a new framework, the Jobs and Innovation Partnership, which includes expanded efforts to engage the private sector through the National Advisory Council for Innovation and Entrepreneurship. These moves herald great progress in re-shaping the federal economic development pipeline.

But EDA is only one agency, and there are many federal agencies in the economic development business. While we tackle the important long-term challenge of streamlining these different programs and overlapping jurisdictions (see Appendix A-1, pages 24-25), the big question is: **how can we go faster now?**

Economic Acceleration Zones?

While not currently being proposed, we think that the federal government could accelerate jobs and innovation partnerships among businesses, communities and government agencies across the US – at low-cost – through the validation of special “**Economic Acceleration Zones.**” These Acceleration Zones would need to meet rigorous performance standards.¹⁶

Acceleration Zones would be chosen and validated based on such factors as:

- Completion of EDA regional job creation/cluster blueprints
- Presence of public-private partnerships and Innovative Finance Mechanisms
- Sustainability and high road project investment criteria that other federal agencies would help determine
- Use of “go-fast” service centers for job training, entrepreneurial assistance etc
- Use of 21st century technology to improve actual metrics from job creation to permitting time to energy efficiency to acres restored.¹⁷

The Gulf region is an obvious opportunity to test some of these ideas; and we hope and expect elements of the soon-to-be-released recovery plan from Secretary Ray Mabus will offer a substantial boost for regional innovation.

Place-Based Project Investment and Performance Standards

There are a number of useful past models where the federal government has set project investment and performance criteria but provided substantial flexibility for local project selection and implementation. The Coastal Energy Impact program, and successors, offers many lessons.¹⁸

Under this program which began in the 1970s after the first energy crisis, states received funding for projects to deal with the expected impacts of offshore oil drilling, such as increased worker housing and coastal restoration. The federal government reviewed each state’s strategy to meet the goals of the investment program; the specific projects were up to the locals to decide.

This bottom-up, flexible model could easily be applied to accelerating jobs and innovation efforts in different regions, as well as govern the expansion of economic development program waivers by interested cities and states.

¹⁶ Various performance standards are currently used in community development block grants, Head Start, substance abuse and mental health services administration and other programs (Examples at: NGA Center for Best Practices, The Government Performance of Results Act of 1993, and GAO Reports B-284548, 2/4/2000 and B-277438, June/1998, HUD CPD-03-09, 9/3/2003).

¹⁷ See <http://www.whitehouse.gov/open/documents/open-government-directive-for-emerging-national-efforts> and www.willamettepartnership.org for innovative new ecosystem credit accounting and streambank restoration tools.

¹⁸ See program evaluation of CEIP Dan Derheimera; Jack D. Salmona, Coastal Zone Studies Program, University of West Florida (<http://www.informaworld.com/smpp/content~db=all~content=a903222053>). Also see new Coastal Impact Assistance State Plan Guidelines (<http://www.dmr.state.ms.us/ciap/CIAP-Final-Guidelines.pdf>)

4. A Federal Economic Innovation Budget

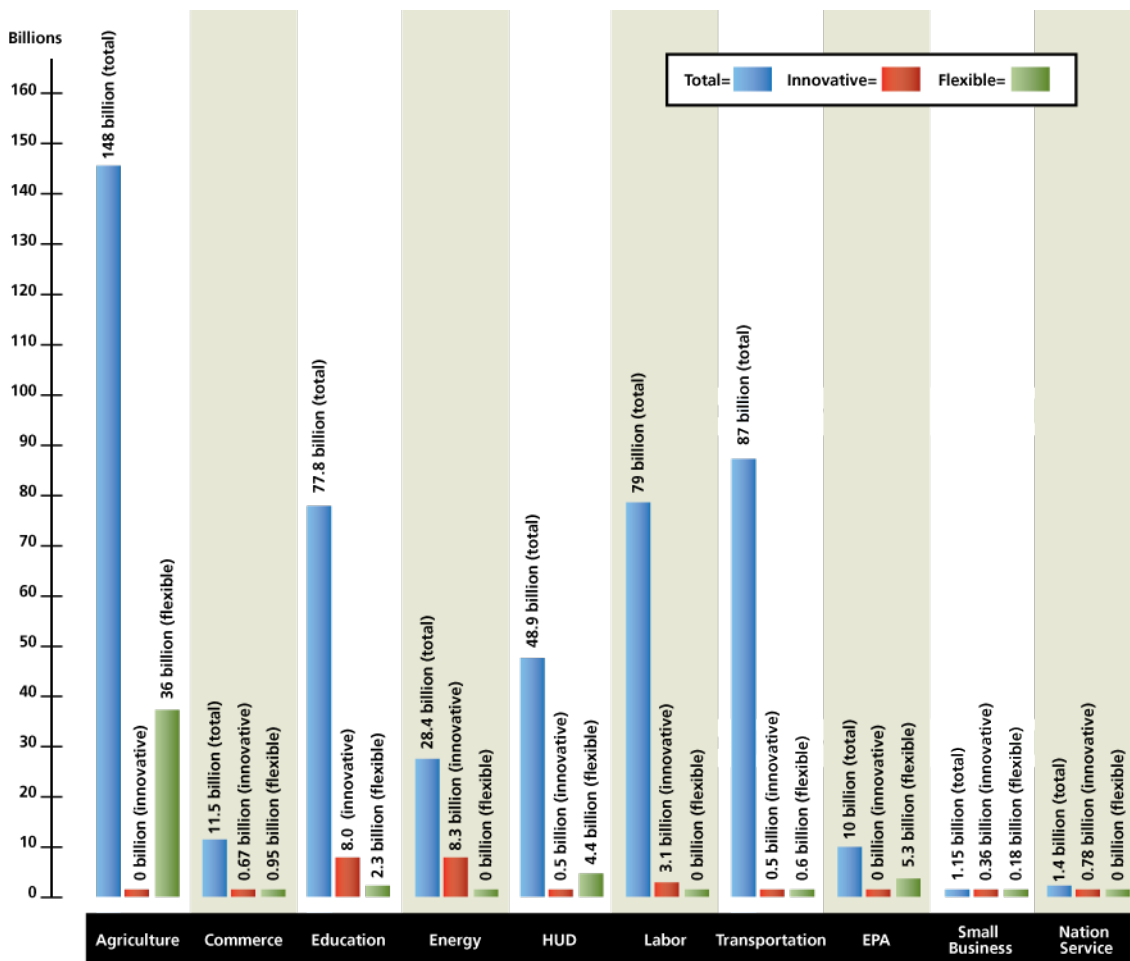
The next critical (but low-cost) step to improve and integrate our economic development system will involve compiling better data to assess and track what specific outcomes taxpayer money is buying – as well as target the spending towards high-impact activities and investments in innovation.¹⁹

There is currently no explicit federal economic innovation budget and no plans for one.²⁰

NPI’s initial assessment of key federal agencies presented below, finds that most agencies currently spend only small percentages of their budget on two key categories for economic acceleration: (1) on innovation; and (2) through flexible local funding procedures rather than through prescribed, top-down formula funding requirements.

The full agency-by-agency breakdown is in Appendix B.

Agency Flexible/Innovation Summary Table



¹⁹ The policy case is very similar to past proposals for the federal government to break out and budget separately for capital investment spending. See Report on President Clinton’s 1999 Commission to Study Capital Account Budgeting. (<http://clinton3.nara.gov/pcscb/report.html>). As noted earlier, NPI’s six-state, 750-company analysis of stimulus spending, by company age, suggests we have far to go. See Appendix B-5.

²⁰ OMB took an important step in this direction in the FY 2011 budget and Vice President Biden has highlighted innovation spending in the Recovery Act in a recent report. See Appendix B for this data. HUD and Dept of Education are also creating innovation set-asides in their formal budgets.

5. Serious Cost-Benefit Analysis: Key to Funding New Investment and Innovation

The President and the Congress now face red ink as far as the green eyeshades can see.

Whether or not we can move beyond the familiar and frustrating confines of the current deficit debate in Washington is a big question we will not address here.²¹

What we do know however is that every federal dollar spent is decidedly not equal. There are billions of dollars in “locked-in” federal spending programs, whose chief virtue is the presence of powerful political constituencies to defend them.

These programmatic incumbents risk straining our ability to invest in high-payoff, long-term efforts to strengthen US competitiveness and accelerate job creation. New investments in innovation will need to go through the “pay as you go” hurdle to justify any new idea or program; older wasteful programs will not.²²

What emerges is not a pretty picture for the 21st century challenges ahead – a federal spending “pie” that is locked up in 20th century politics.

To address that, we would urge the creation of new economic impact assessments to do all the math on

government spending and better assess the total return on all programs and tax expenditures.

Just like the old environmental impact assessments changed state, local and federal decision-making by requiring new analysis and evaluation, a new EIA (*Economic Innovation and Acceleration*) assessment could move the debate to be about the net costs and benefits of all government investments.

Thirty years ago, government decision-making had a quiet transformation when “environmental impact statements” required decision-makers to consider the full scope of costs and benefits. Suddenly certain dams, even to Ronald Reagan’s OMB, didn’t look so smart, given their destructive natural effects.

There are serious policy arguments and precedents to build from, starting with dusting off the Report on President Clinton’s 1999 Commission to Study Capital Account Budgeting and examining new ideas like Alan Jenkins’s calls for opportunity assessments.

This is no-brainer stuff. So let’s find a formal way to make sure we do the math.

²¹ We would highlight for now this important quote supporting new investment by respected deficit-cutter David Walker, Executive Director, Peter G. Peterson Foundation: “*In our view, the answer is to continue to pursue selected short-term initiatives designed to stimulate the economy and address unemployment, but to couple these actions with specific, meaningful actions designed to resolve our long-term structural deficits.*” Testimony before the National Commission on Fiscal Responsibility and Reform, 7/4/01, New York Times

²² Appendix B details a number of such stalled innovation investments in 2010.

Solution Set #2: Deeper Reform and Change

“This is a world in which top down doesn’t work and bottom up doesn’t add up.”

— *International Futures Forum*

It is really impossible to think intelligently about strategies for multi-year policy development without at first acknowledging – at a very deep level – that we are living in a time of massive economic and social realignment, all happening at the speed of Internet and globalization.

It doesn’t matter whether you think the world is flat (Thomas Friedman) or you think it’s spiky and centered in certain metropolitan regions (Richard Florida), or you feel it lies somewhere in between. All of our work proceeds in an environment of turbulent political waters, growing economic insecurity and the cold reality that the old networks and rules that delivered reliable (if imperfect) policy and economic outcomes are themselves being swept around – and sometimes aside.

Foremost is the context that we are living in a time of rampant institutional failure – in our government sectors,

among non-profit charities, among dying businesses and in our politics. Here in the United States, Katrina exposed both how the federal, state and local governments need to work – and that they often don’t. The 2008 financial meltdown only added fuel to this fire of distrust.

As such, the public is no longer impressed by the old reliable “brands” they used to rely on, and are open to new entrants. But they are also skeptical about the explosion of new solutions, brands, companies and causes that make easy promises.

Mindful of this challenging and complex institutional and political environment, how can we accelerate job creation and innovation in a way that makes us more, not less, than the sum of our parts?

6. Smarter Federalism

“Successful economic revitalization is hard to carry out or even to comprehend on a national scale...because of the sheer size and diversity of the economy. Few would trust the federal government to allocate funds wisely or nonpolitically to development projects or programs. Washington cannot mobilize the community support, business-labor cooperation, or coordination that successful development requires. Governors and mayors, however, are closer to the scene. They have more ways to generate business, labor, and community support for development and put together an effective program to increase investment and jobs.”

— Brookings economist Alice Rivlin in her *“Reviving the American Dream: The Economy, the States, and the Federal Government”* (1992)

As experts begin to realize the situation we are in, new calls for federal revenue-sharing are being raised.²³

This not a bad idea – but given the state of state and local governments, simply moving money down from one unit to another unit of government will not suffice as a solution.

We need revenue sharing 2.0 to be smarter, and connect to new public-private collaborations.

Moving money and decision-making down is critical of course. But if reform simply stops with giving states and cities more funding and flexibility, we won’t get as far as we need to. We also need to:

- Create new collaborative financing mechanisms to leverage federal dollars (page 17);
- re-draw the federal economic development map (page 18);
- dramatically re-tool how Congress and federal agencies work together to accelerate jobs, innovation and competitiveness (page 19); and
- tackle our big national economic and social challenges by inspiring the private sector to help us realize big ideas in regions across America (page 20).

²³ <http://www.nytimes.com/2010/08/29/business/29view.html?src=busln>

7. New Innovative Finance Mechanisms to Spur Private Job Creation

Once again, the long-term solution set for economic development must begin first with the private sector. It is *relatively* easy to reform and accelerate the process by which communities, the private sector and government come together to decide on what systemic investments are needed – from infrastructure to workforce development to entrepreneurship training – to drive new business creation and innovation. It is quite another to finance it, given both federal and state budget deficit difficulties and challenges in the private capital and venture capital communities.

Some promising new ideas for financing bottom up job creation that don't depend on costly major bureaucracies to implement are:

Reforming Federal Clean Economy Investment

- Be smarter about how we finance complex clean economy and renewable projects.
- Replace the complicated production tax credit and ITC models with a Balanced Renewable Energy Bond (BREB) model.²⁴
- Create a public-private Enterprise Investment Fund to catalyze clean economy investors and attract private investors who in these challenging economic times, are more concerned about downside risk than huge upside gains.²⁵

Bottom Up Finance: Creating "Dfis"

- The debate over infrastructure investment could be enhanced if the idea for a large National Infrastructure Bank also fostered the deployment of a new generation of bottom-up, "distributed finance institutions" (DFIs) to make available federal support to qualifying local entities and projects requiring hard-to-find local matching funds.
- Consider new ways to leverage the use of federal loan guarantees to unlock new local and private capital. Engage trillions in untapped union and public pension fund assets through federal credit enhancements to drive deep job creation and small business investment long after the federal stimulus runs out.

Small-Scale Citizen Investment: *Energy Freedom Bonds*

- Many Americans want to do more to make America energy independent. Many also sense that there is a "green gold rush" going on and would like to invest in that future, but qualifying investor rules preclude small investor participation. To harness that energy and capital, authorize creation of a patriotic corporation like Red Cross to focus on local clean economy investment projects. Or create a sub-account "US Energy Independence Trust" of the US Savings Bonds programs.

²⁴ The Balanced Renewable Energy Bond proposal is a new effort to design a AAA rated US government backed clean energy bond market. BREB is a proposal of the Absalon Project, a joint venture between Danish financial system and Soros Fund Management. Alan Boyce is CEO of Absalon and a consultant for Soros Fund Management. Contact: aboyce@adecoagro.com

²⁵ See EnterpriseInnovationFund.net

8. Transforming Government's Role: Remaking the Map

How do we begin to fix federal economic development systems without sounding like we are re-arranging deck chairs on the Titanic? It's not easy.

The Need for Regional Mechanisms

The Council on Competitiveness's recent report does an excellent job of framing the challenge:

"Despite the growing need for collaboration, regional action is still the exception rather than the rule....as the economic development profession increasingly recognizes that multi-county areas are the appropriate unit for economic analysis and planning, the necessary collaboration across political and institutional boundaries has not kept pace. The question then becomes, how does collaboration become a reality in regions?"

The challenge, however, is that the United States does not have political jurisdictions that correspond to economic regions. As a result, there are not adequate mechanisms to make decisions on a regional basis."

Regional Liaisons

There are a number of useful models and regional mechanisms being discussed and deployed to catalyze and scale smart locally-based economic development solutions.

But to effectively drive regional efforts, formally or informally, it will take on-scene senior regional political leaders trusted by the Administration who have the skills to nurture and steer these new partnerships – across agencies, across jurisdictions and across old political divides.

One idea that the White House could consider to accelerate this process would be the appointment of Regional Engagement Liaisons to serve as senior-level, regional representatives to work closely with the private sector, Governors, Mayors, community leaders and other stakeholders to advance new initiatives, enhance the effectiveness of the White House, and strengthen two-way grassroots communications with affected and interested constituencies.²⁶

A Department of Jobs & Competitiveness or Local Jobs Centers?

Who in the federal government is in charge of creating jobs? Should we move to create a single place to integrate federal strategies on jobs-workforce-economic development and manufacturing or is this a laughable exercise in moving boxes on an organizational chart?

From a top-down Congressional jurisdictional perspective, this idea seems too imposing to consider. From a bottom-up service delivery perspective, change to make it easier for small companies to work with the federal government can't happen soon enough.

In time, piloting the creation of more federal one-stop service centers, such as SBA's Michigan robotics effort,²⁷ and building on the existing network of 70 Manufacturing Extension Partnership centers (<http://www.nist.gov/mep/>), agricultural extension offices (<http://www.csrees.usda.gov/Extension/>) and EDA district offices makes good sense.

Full scale map is in Appendix A-1.



²⁶ The need for these kinds of trusted, on-scene information brokers and "barrier busters" was described in Linn Kahn's *Results at the Edge*, analyzing lessons learned from the Reinventing Government initiative.

²⁷ http://contracting.tacom.army.mil/future_buys/FY09/MARC.pdf

9. Catalyzing Congressional and Agency Change: A Bottom Up Innovation Commission?

What does accelerated and regional implementation of a new jobs and innovation strategy really look like? How do we find ways to scale the best ideas – from federal waivers to flexible funding to private sector engagement – by overcoming Congressional jurisdictional and federal agency bottlenecks and similar top-down hurdles?

A Bottom Up Innovation Commission could identify the most promising reforms, implementation mechanisms and tough choices ahead for 21st century government, much like the successful base-closing commission.

Situation

The ongoing effort to revitalize the economy is challenging enough given the recession; but using federal programs that are a generation old (or two or three), and overcoming Congressional structure and local-state jurisdictional battles is a daunting task. Especially if we use *top-down* models rather than new, *distributed* forms of implementation.

There are a number of great ideas, innovative initiatives and creative inter-agency efforts addressing the key questions around bottom-up implementation, from infrastructure finance to community service to sustainability policy to public-private-philanthropic financing. For that reason, it may be wise to create an

outside mechanism to help aggregate these various conversations and generate deeper policy coherence up the road, and outside the political arena, and also track which innovations and experiments are delivering the best results.

The Staged Solution

Building on the Administration's Open Governance Initiative effort and other smaller-scale innovation pilots now underway, the Commission would focus on the most coherent strategies to build the right implementation architecture to integrate (1) "up-down" citizen engagement and innovative service and outreach with (2) efforts to reform and modernize place-based intermediary institutions that critically affect front-line implementation and scaling – from county commissions to states to emerging regional approaches. *In essence, we could use such a commission to chart out a multi-year strategic roll-out and conversation about better government.*

For high-profile leadership, one might start with Tom Brokaw whose surprising piece²⁸ last year called for "cutting anachronistic and expensive local government structure that dates to horse-drawn wagons, family farms and small-town convenience."

²⁸ <http://www.nytimes.com/2009/04/20/opinion/20brokaw.html>. Also see this revealing piece on the effects of the recession on local government reorganization and mergers: <http://www.nytimes.com/2009/05/31/nyregion/31merger.html>

10. The Big Idea?

“If you tell people where to go, but not how to get there, you’ll be amazed at the results”.

— George S. Patton, Jr.

We all know about the WPA (Works Progress Administration) and the CCC (Civilian Conservation Corps).

In sepia tones, we can see the old images of millions of Americans at work in the 1930s, building bridges and other legacy community assets we still have today.

What about a 21st Century WPA? For some, the idea conjures up positive images of Americans pulling together to retrofit homes and schools and tackle the new challenges of our time while putting idle hands to work. For others, the idea conjures up the worst of wasteful government we don’t need.²⁹

So how do we tackle the big economic development problems we have without pulling away, because the idea isn’t shiny new enough or the politics feels old? We have big problems that need scalable solutions:

- Millions of unemployed aging boomers with obsolete skills.
- Millions of emerging millenials with nowhere to get their first job experience.
- Thousands of rural communities in deep distress.

If we can’t deliver big answers from Washington, can we build them bottom-up?

Yes we can.

A Race to the Top For All America’s Regions

We can define and accelerate the private and public economic outcomes we want through a series of big, aspirational regional projects.

What “moon” we will reach in each region will be decided by local leaders in a process catalyzed by the federal government. In this new race to the top, regions **won’t** be pitted against each other. They will each have access to the same starting pool of capital and the same rules. They will compete against each other for bonus funding, based on reaching the performance standards and outcomes they have pledged to achieve.

The basic formula for a smarter 21st century federalism to grow and scale will be:

- Shared public-private goals.
- Clear outcomes and accountability.
- Flexible implementation rules and funding sources.

The new effort to revitalize and restore the Gulf region (soon to be released in a plan from Secretary Ray Mabus) offers a working laboratory to think and work at this scale. Can other regions organize themselves and their resources to follow suit? The time seems right to remake the map and create a race to the top... for **all** America’s regions.

Race to the Top for All America’s Regions

What does that look like?

See map on following page



²⁹ For the record, NDN polling indicates that by a wide margin (55%-26%), Americans favor “government actively trying to solve problems” rather than “staying out of society and economy”. (June 2010, mirroring similar results a year earlier)

Race to the Top for *All* America's Regions

Big Regional Goals and Public-Private Partnerships Drive Jobs and Innovation



Closing Summary

“The correct response to these dynamic, decentralized, emergent problems is to create dynamic, decentralized, emergent authorities: chains of local officials, state agencies, national governments and international bodies that are as flexible as the problem itself.”

— David Brooks, 4/27/09

Obamaism at its core is largely about bottom-up change rather than top-down dictates. The reason: federal silo'ed programs and one-size-fits-all solutions don't work well anymore. The key to building new, innovation-driven programs, especially to turn around our economy, is finding, nurturing and scaling the best private and public outcomes at the point of effective delivery – in regions and communities.

Growth, job creation and shared prosperity lies in creating opportunities for entrepreneurs and small companies to find financing, university researchers to find private collaborators and suppliers to find customers in virtual or real networks outside the DC Beltway.

Do we need, therefore, greater focus on the middleware to connect the dots between bottom-up local job creation and top-down mandates that are missing the mark?

That is the argument we are making.

To jumpstart America, do we need to set big goals and achieve them together? To weave together a national economic strategy across a series of major aspirational and regional projects?

That is the argument we are making.

Do we need to stop looking for magical answers at an imaginary “Window A” in the White House, or be surprised that Congress can't pass perfect bills, and instead be moving without the ball?

That is the argument we are making.

The Good News... The Process Has Already Begun

An expanding network of innovation-minded leaders are already advancing ideas to create new, bottom-up pipelines for economic development, explore new mechanisms to catalyze “cluster-driven” economics and industry creation, and accelerate in-sourcing of smart manufacturing that focuses on local chain and workforce programming that effectively builds on local business strengths.

We hope this paper, *The Acceleration Agenda* can kick-off another round of thinking and discussion, both inside and outside the Beltway, to champion these needed changes and to communicate a new lens which puts

regional business leaders at the center of the conversation defining what we can do.

We also hope that we can talk about big goals and aspirations, which Americans want, without bogging down in old debates about whether industrial policy is good or not.

We can either have a smart industrial-innovation-job creation policy to compete and win globally, or not. To deny the role of government in creating the platform and infrastructure for American progress and growth is to deny history.

In the end, as President Obama understands, our recovery is tentative, and we need more creative thinking to jumpstart small business growth, bottom up jobs and accelerate private-led innovation.

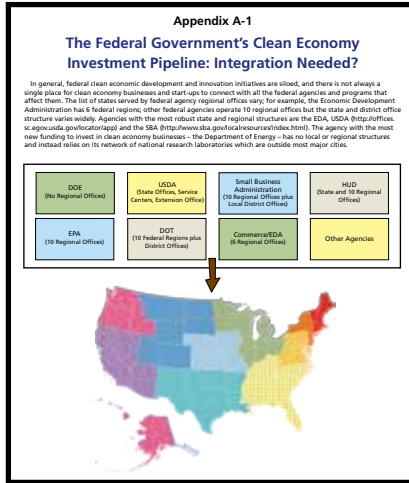
In policy layman's terms, the basic strategy we are proposing to modernize federal-state-local systems involves these basic steps:

- Enable bottom up business plans.
- Create go-fast job-creation centers across the country to accelerate the deployment of a new, public-private pipeline for economic development and help America leapfrog past obsolete and silo ed 20th Century systems.
- Charter, fund and deploy a new generation of distributed finance institutions (DFIs) to drive our economic transition and directly support small-scale business and sustainable infrastructure projects with less federal red-tape.
- Engage trillions in untapped private assets and union and public pension fund assets through federal credit enhancements to drive deep job creation and small business investment long after the federal stimulus runs out.
- End top-down decision-making by just a few officials in Washington DC and empower front-line regional leaders through performance- and outcome-based budgeting.

We invite you to continue the conversation here:
www.JobsandInnovationPartners.org

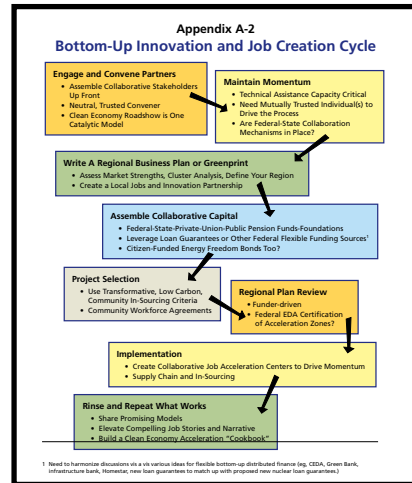
Appendix A Economic Acceleration Schematics

1.) The View From the Top



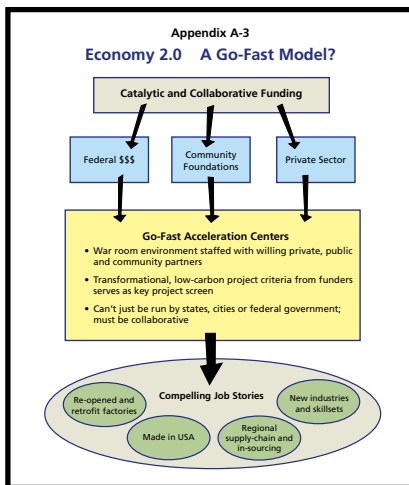
The siloed federal economic development system.

2.) The Bottom-Up Job Creation and Innovation Cycle



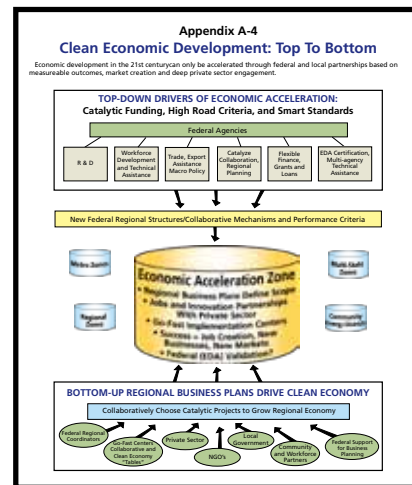
What needs to happen. Faster.

3.) Go-Fast Centers



The fastest way to break down silos and link together public and private sector partners – in communities.

4.) The New View?

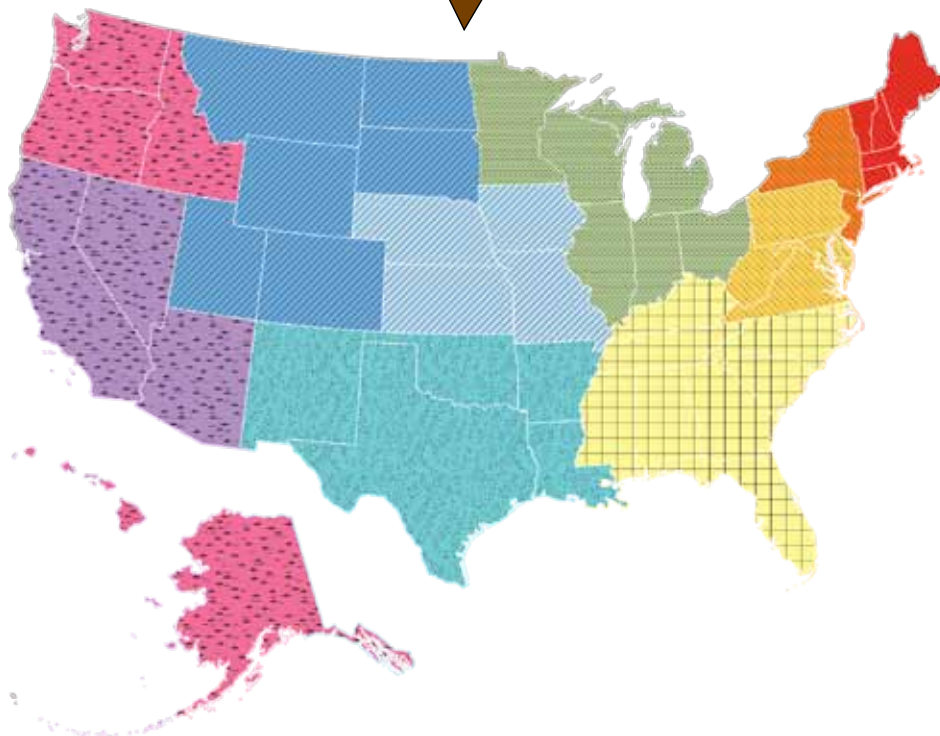
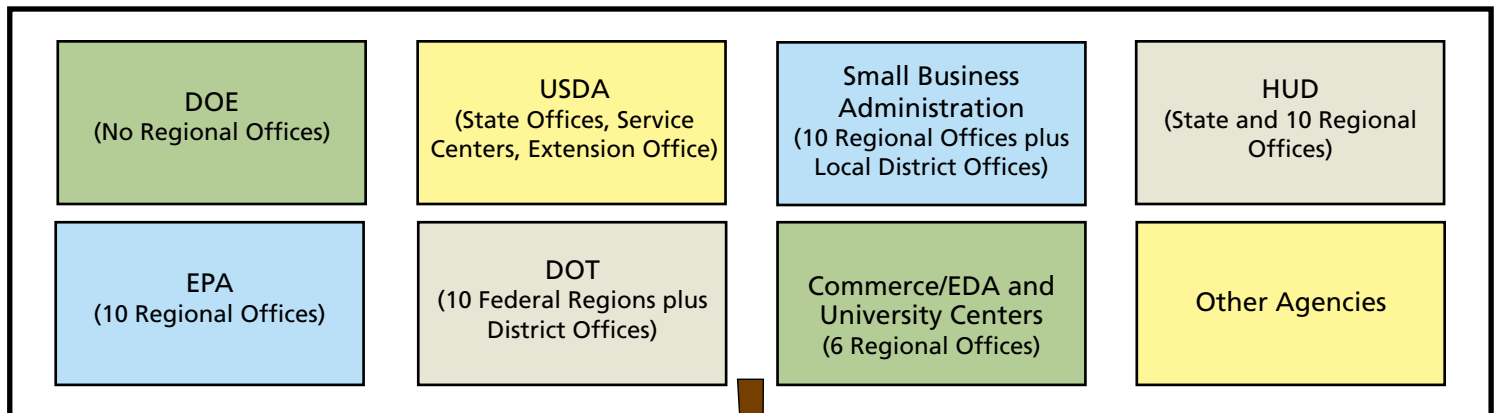


Integration. Convergence. Acceleration. Top to Bottom.

Appendix A-1

The Federal Government's Clean Economy Investment Pipeline: Integration Needed?

In general, federal clean economic development and innovation initiatives are siloed, and there is not always a single place for clean economy businesses and start-ups to connect with all the federal agencies and programs that affect them. The list of states served by federal agency regional offices vary; for example, the Economic Development Administration has 6 federal regions; other federal agencies operate 10 regional offices but the state and district office structure varies widely. Agencies with the most robust state and regional structures are the EDA, USDA (<http://offices.sc.egov.usda.gov/locator/app>) and the SBA (<http://www.sba.gov/localresources/index.html>). The agency with the most new funding to invest in clean economy businesses – the Department of Energy – has no local or regional structures and instead relies on its network of national research laboratories which are outside most major cities.













THE ACCELERATION AGENDA

Job Creation, Innovation and Economic Development for the 21st Century



SBA Federal Regions

-  Region I
-  Region II
-  Region III
-  Region IV
-  Region V
-  Region VI
-  Region VII
-  Region VIII
-  Region IX
-  Region X

US EDA Regions

-  Philadelphia
-  Atlanta
-  Chicago
-  Austin
-  Denver
-  Seattle

USDA State Office



DOE National Labs

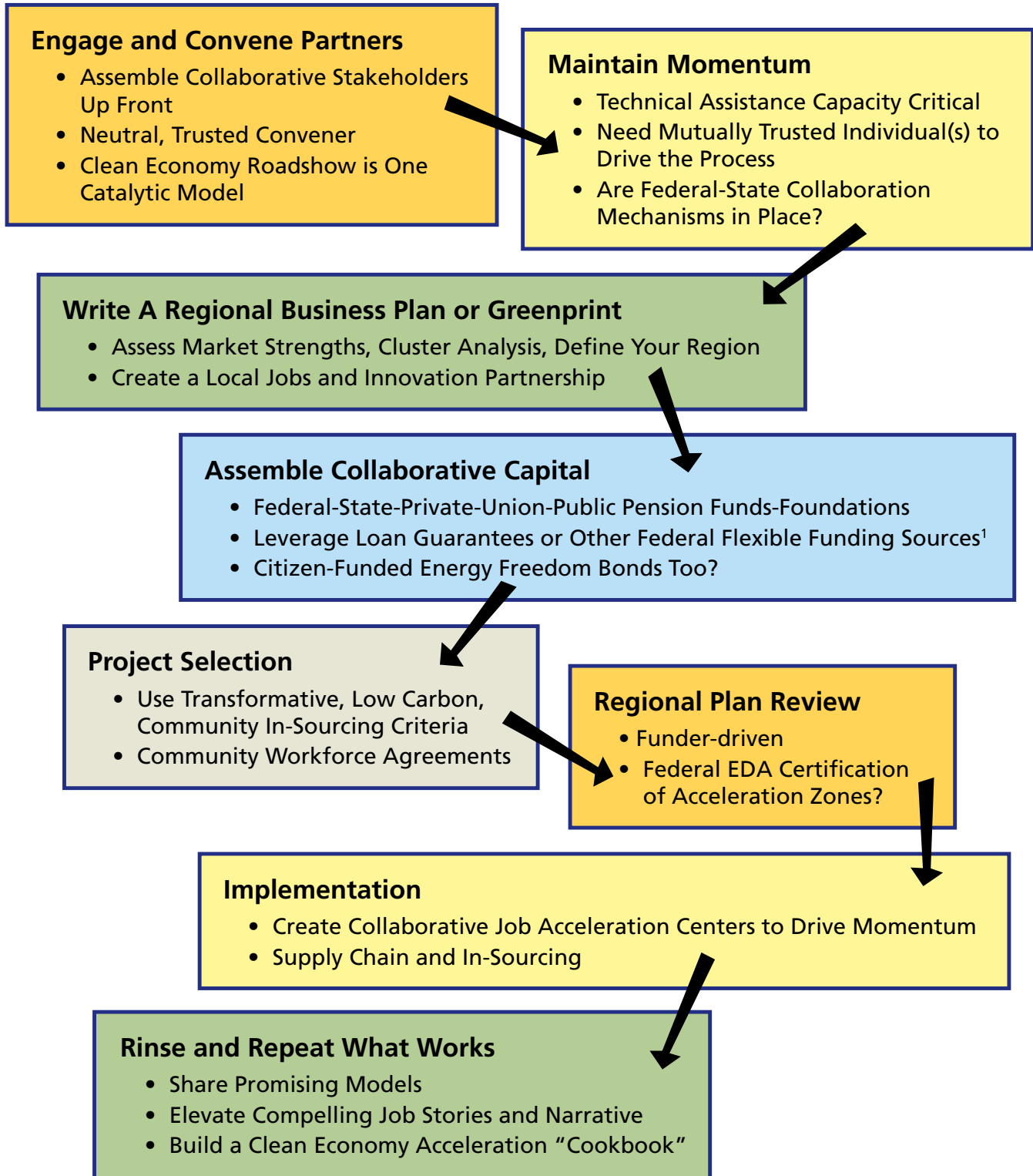
1. Ames National Lab - Ames, IA
2. Argonne National Lab - Lemont, IL
3. Brookhaven National Lab - Upton, NY
4. Idaho National Lab - Idaho Falls, ID
5. Lawrence Berkeley National Lab - Berkeley, CA
6. Lawrence Livermore National Lab - Livermore, CA
7. Los Alamos National Lab - Los Alamos, NM
8. Oakridge National Laboratory - Oakridge, TN
9. Pacific Northwest National Laboratory - Richland, WA
10. Savannah River National Laboratory - Aiken, SC

Other Misc. DOE Labs/Institutes

11. Fermi National Accelerator Lab - Batavia, IL
12. SLAC National Accelerator Lab - Menlo Park, CA
13. Thomas Jefferson National Accelerator Facility - Newport News, VA
14. Princeton Plasma Physics Laboratory - Princeton, NJ
15. New Brunswick Laboratory (NBL) - Argonne, IL
16. NREL, CO
17. Sandia National Laboratories - Staten Island, NY

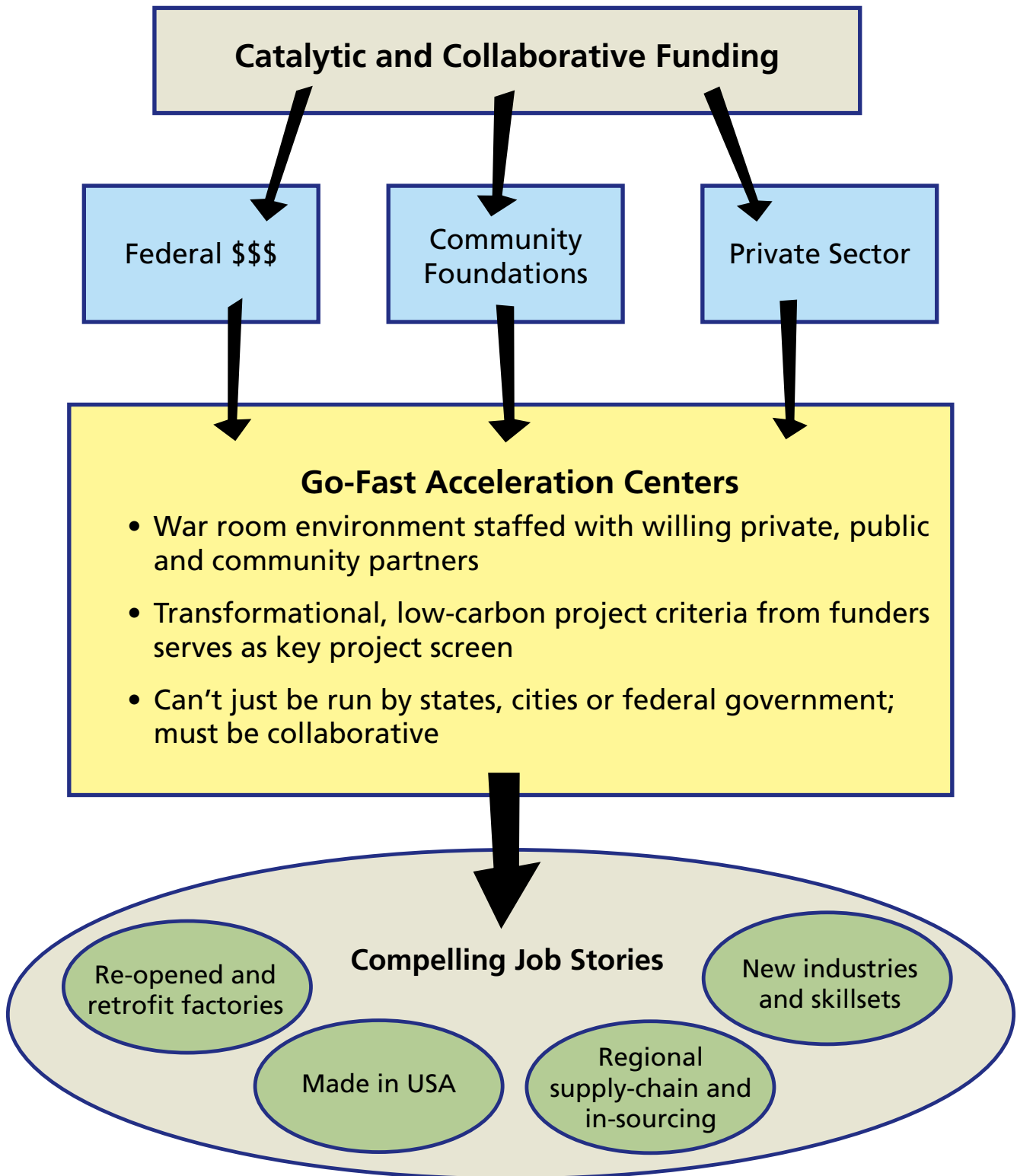
Appendix A-2

Bottom-Up Innovation and Job Creation Cycle



¹ Need to harmonize discussions vis a vis various ideas for flexible bottom-up distributed finance (eg, CEDA, Green Bank, infrastructure bank, Homestar, new loan guarantees to match up with proposed new nuclear loan guarantees.)

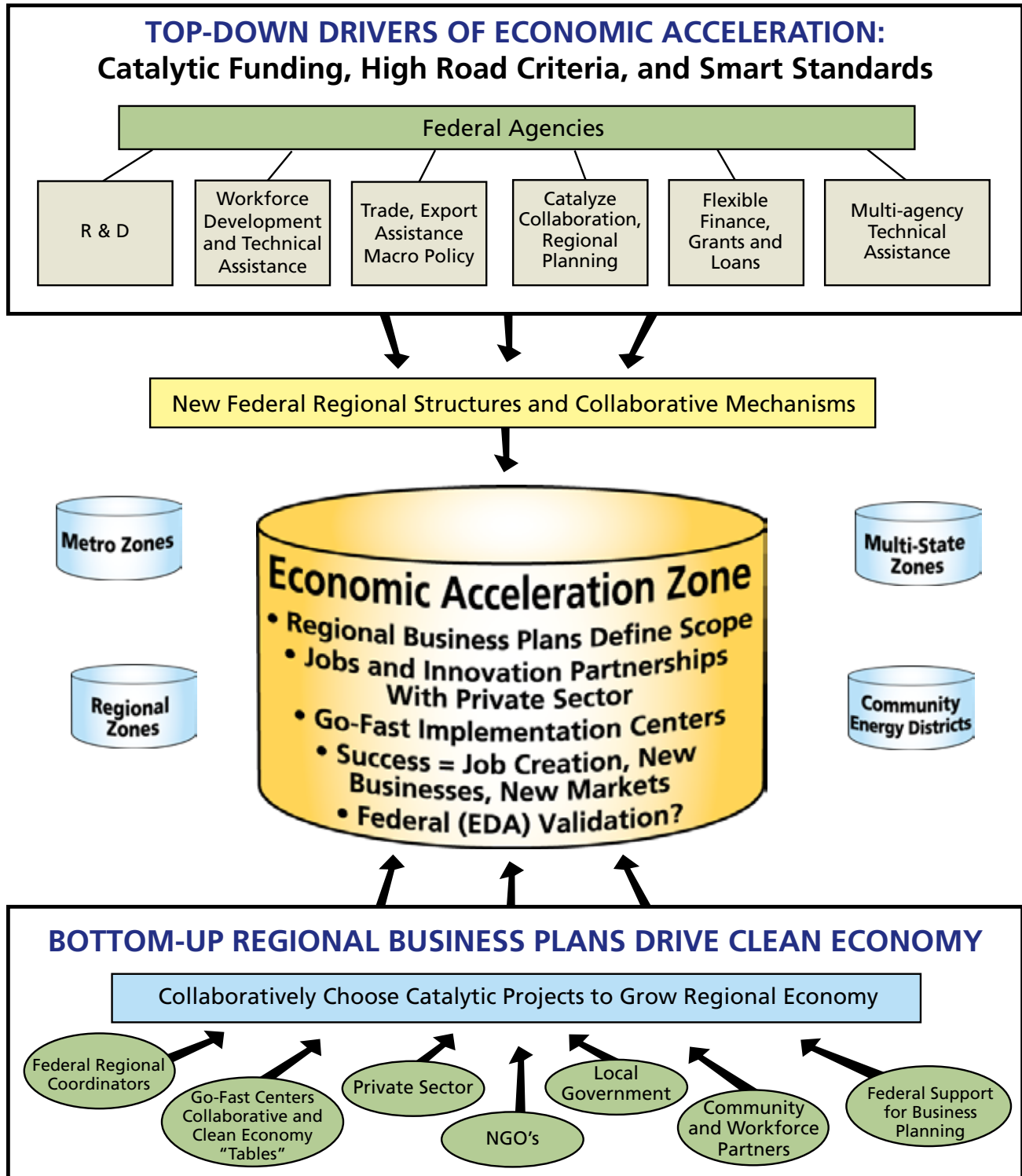
Appendix A-3 Economy 2.0 A Go-Fast Model?



Appendix A-4

Clean Economic Development: Top To Bottom

Economic development in the 21st century can only be accelerated through federal and local partnerships based on measurable outcomes, market creation and deep private sector engagement.



Appendix B-1

Innovation Funding in the 2011 Federal Budget:

Small Business:

- **\$165 million** in subsidy costs to support \$17.5 billion in Small Business Administration 7(a) loan guarantees.
- Includes proposal to increase the maximum 7(a) loan size from \$2 million to \$5 million.
- **Extend for another year the policy of allowing companies to immediately deduct 50% of their qualifying investments.**
- **Extend for another year the Recovery Act provision for small business write-offs up to \$250,000 of qualified investment.**
- Proposal to **completely eliminate the capital gains tax on small business stock.**

Research and Development:

- **\$61.6 billion** in civilian research and development funding.
- **\$170 million** for bioenergy research in USDA.
- **\$300 million** for the Advanced Research Projects Agency-Energy within DOE
- **\$6 billion** to continue to expand research related to cancer.
- **\$143 million** to expand research related to Autism Spectrum Disorders.

Education:

- **\$5.7 billion** for Race to the Top
- **\$300 million** for states to develop and implement instructional practices that improve teaching and learning in science and math.
- **\$150 million** within the Investing in Innovation Fund to competitive grants for school districts, nonprofits, and other organizations to test, validate, and scale strategies to improve teaching and student learning in STEM subjects.
- **\$103 million** to promote study of science and technology among undergraduates at historically Black, Tribal, and Hispanic-serving colleges and universities.
- The president has signed the **\$2,500 American Opportunity Tax Credit** for college into law and is now working to make it permanent to give families **\$10,000 over four years for college.**
- **\$12 billion** for an American Graduation Initiative to help improve community colleges.
- **\$74 million** for the RE-ENERGYSE education effort to inspire young Americans to pursue careers in clean energy.

Infrastructure:

\$4 billion to create a National Infrastructure Innovation and Finance Fund.

\$7.2 billion will be allocated to expand broadband deployment.

\$418 million in USDA loans and grants will be made available to gain access to broadband services.

Social Innovation:

\$60 million for the Social Innovation Fund.

Investing in Innovation to Create the Industries and Jobs of Tomorrow

The Federal Budget Fiscal Year 2011

Having steered the economy back from the brink of a depression, the Administration is committed to moving the Nation from recession to recovery by sparking job creation to get millions of Americans back to work and building a new foundation for the long-term prosperity for all American families. To do this, the 2011 Budget makes critical investments in the key areas that will help to reverse the decline in economic security that American families have experienced over the past decade with investments in education, clean energy, infrastructure, and innovation.

But even as we meet the challenge of the recession and work to build an economy that works for all American families, we must also change the way Washington does business – ending programs that don't work, streamlining those that do, cracking down on special interest access, and bringing a new responsibility to how tax dollars are spent. At its core, the President's budget takes the steps to help jumpstart job creation, works to strengthen the economic security of American families, and makes the tough choices to put our Nation back on the path to fiscal responsibility.

Innovation is a central part of job creation in the 21st century economy. To spur innovation, the Budget will:

Boost Investment in Civilian Research and Development (R&D). Investment in science and basic research is critical to long-term economic growth. That's why the Budget invests \$61.6 billion in civilian research and development, an increase of \$3.7 billion, a 6.4 percent increase, and an amount that continues the commitment to double funding for three key basic research agencies—the National Science Foundation, the Department of Energy's Office of Science, and the National Institute of Standards and Technology. This funding includes \$1.8 billion for research in basic energy sciences to discover novel ways to produce, store, and use energy to address energy independence and climate change and \$300 million for the Advanced Research Projects Agency-Energy, to accelerate game-changing energy technologies in need of rapid and flexible experimentation or engineering. The Budget includes increased funding for research to help create the foundation for the industries and jobs of the future, such as nano-manufacturing, advanced robotics, and new tools for the design of biological systems.

Make the R&E Tax Credit Permanent. The 2011 Budget's proposed permanent extension of the research and experimentation tax credit will spur private investment in R&D by providing certainty that the credit will be available for the duration of the R&D investment.

Support Transformational Clean Energy Research. The 2011 Budget builds upon substantial clean energy R&D investments in the Recovery Act and 2010 appropriations to forge a comprehensive approach to transforming energy supply and slowing global climate change. R&D funding will support renewable energy and energy efficiency technologies such as advanced batteries, solid-state lighting, solar, biomass, geothermal, and wind power. The 2011 Budget supports research and development of advanced coal-fueled power systems and carbon capture and storage technologies as well as science-based nuclear energy R&D programs to advance nuclear technologies and improve their market competitiveness. The Budget also proposes \$170 million for bioenergy research in USDA and \$300 million for the Advanced Research Projects Agency-Energy within

DOE to support transformational discoveries and accelerate the development of clean energy.

Increase Funding for Biomedical Research. To accelerate progress in biomedical research, the Budget continues to support research both on the campuses of the National Institutes of Health (NIH) and for approximately 300,000 scientists and other research personnel at institutions across the country. Investments will focus on priority areas including genomics, translational research, science to support health care reform, global health, and reinvigorating the biomedical research community. The Budget also includes \$6 billion to continue to expand research related to cancer, and \$143 million to expand research related to Autism Spectrum Disorders. Finally, under the President's Executive Order and subsequent NIH Guidelines for Human Stem Cell Research, NIH approved 40 responsibly-derived stem cell lines—nearly double the previous number of lines available—for path-breaking research. Additionally, NIH will pursue the discovery, development, and pre-clinical testing of novel compounds for the prevention and treatment of symptoms associated with Alzheimer's disease.

Recognize and Reward Excellence Through the Race to the Top. In July 2009, President Obama issued a national challenge to reshape America's educational system to better engage and prepare our students for success in a competitive 21st century economy and workplace. Designed to spur innovation and the adoption and use of effective policies and practices, the Race to the Top is a comprehensive vision for school reform backed by a historic, \$4.35 billion investment. Not every state will receive an award under the Race to the Top but the competition has already generated an overwhelming response, with 41 states in the running and over 12 states that have altered laws or statewide policies to enhance their competitive edge and better align their practices to the competition. This year, President Obama will invest an additional \$1.35 billion in his FY 2011 budget to continue the Race to the Top among states, and to expand the program's reach through a separate competition for school districts. To develop, identify and bring to scale what works, the Obama Administration will also continue to support the Investing in Innovation Fund, the companion program to the Race to the Top.

Restore America to First in the World in College Completion. President Obama has set a national goal of once again having the highest proportion of college graduates in the world. To reach that goal, he has proposed nearly doubling the amount of Pell grant scholarships available to 9 million students since he took office. He signed the \$2,500 American Opportunity Tax Credit for college into law and is now working to make it permanent to give families \$10,000 over four years for college. He will ensure that student loans remain affordable by limiting payments to 10 percent of income above a basic living allowance. Any remaining debt will be forgiven after 10 years of payments for borrowers in public service and 20 years for all others. He has proposed a \$12 billion American Graduation Initiative to help community colleges improve their quality, work with businesses, improve transfer rates, and support working students. And he is investing in access and completion programs and expanding low-cost Perkins loans.

Invest in the Next Generation of Scientists and Engineers. Our Nation's eighth graders are scoring below their peers

THE ACCELERATION AGENDA

Job Creation, Innovation and Economic Development for the 21st Century

from many Asian and European countries, and we are neither adequately closing the achievement gaps in math and science nor providing adequate opportunities for many students from diverse backgrounds. The Budget reflects the Administration's investment in improving science, technology, engineering, and mathematics (STEM) outcomes and creating the next generation of scientists and engineers who can help drive economic growth in the coming decades. The Budget provides \$300 million in new grants to States to develop and implement instructional practices and improve teaching and learning in science and math aligned to new high standards. The Budget also dedicates \$150 million within the Investing in Innovation Fund to competitive grants for school districts, nonprofits, and other organizations to test, validate, and scale promising strategies to improve teaching and accelerate student learning in STEM subjects. The Department of Education will work with the National Science Foundation and other Federal agencies to identify the most effective interventions that can help States, schools, and teachers improve STEM outcomes. The Budget also supports NASA programs that are designed to meet the goals of the President's "Educate to Innovate" campaign in Science, Technology, Engineering and Mathematics education. NASA's Summer of Innovation, for example, will work with thousands of middle school teachers and students to engage students in stimulating, evidence-based math and science-based education programs.

Broaden Reach and Increase Funding to Promote Study of Science and Technology. The Budget proposes to launch a comprehensive science and technology workforce program through the National Science Foundation to engage undergraduates at Historically Black, Tribal, and Hispanic-serving colleges and universities by realigning and building on existing programs. Funding for these activities would increase by over 14 percent to \$103 million.

Create a National Infrastructure Innovation and Finance Fund. The 2011 Budget includes \$4 billion to create a National Infrastructure Innovation and Finance Fund to invest in projects of regional or national significance. This marks an important departure from the Federal Government's traditional way of spending on infrastructure through grants to specific States and localities. The Fund will allocate resources based on demonstrable merit and analytical measures of performance. The Fund will provide planning, feasibility, and analytical capacity to help sponsors identify high-value projects from around the country and then carefully select the most worthwhile projects.

Expand Access to Broadband. During 2011, the Department of Commerce and USDA will focus on administering the \$7.2 billion program to expand broadband deployment, as well as programs to improve broadband adoption and data collection, which were funded by the Recovery Act. In addition, the Budget expands access to broadband services by offering \$418 million in USDA loans and grants to move rural communities into the modern information economy.

Inspire Students to Pursue Clean Energy Careers. The Department of Energy and the National Science Foundation will partner on a \$74 million RE-ENERGYSE education effort to inspire tens of thousands of young Americans to pursue careers in clean energy.

Promote Opportunities for American Exporters in New Markets. The Budget provides \$534 million, a 20 percent increase, to the Department of Commerce's International Trade Administration (ITA). As part of the National Export Initiative, a broader Federal strategy to increase American exports, ITA will strengthen its efforts to promote exports from small businesses, help enforce free trade agreements with other nations, fight to eliminate barriers to sales of U.S. products, and improve the competitiveness of U.S. firms.

Help Entrepreneurs and Small Businesses Build New and Vibrant Enterprises that Lead to New Jobs and Economic Growth. One of the lingering difficulties of the recession is that it is difficult for many small businesses to access the capital they need to operate, grow, and create new jobs. The Budget provides \$165 million in subsidy costs to support \$17.5 billion in Small Business Administration 7(a) loan guarantees that will help small businesses operate and expand. It also proposes to increase the maximum 7(a) loan size from \$2 million to \$5 million.

- **Provide Incentives for Additional Investment.** As another aspect of his jobs plan, the President is proposing an additional year of allowing companies (large and small) to immediately deduct 50 percent of their qualifying investments, a step that will lower the cost of making investments today, encouraging job creation today and innovation for tomorrow.
- **Extend Enhanced Small Business Expensing.** The Recovery Act allows small businesses to immediately write off up to \$250,000 of qualified investment in 2008 and 2009, providing an immediate tax incentive to invest in plant and equipment and create jobs. The President is proposing a one-year extension. This provision is estimated to cut small business taxes by over \$1 billion in 2009 and 2010.
- **Permanently Eliminate Small Business Capital Gains.** The Recovery Act encourages investment in small businesses by excluding from taxation 75 percent of the capital gains for investors in small businesses who hold their investments for five years. This provision will save small business owners nearly \$1 billion over 10 years. The President's Budget proposes to completely eliminate the capital gains tax on small business stock.

Encourage Innovation to Address Our Nation's Great Social Challenges. The Budget proposes \$60 million for the Social Innovation Fund, to identify and invest in innovative solutions that are increasing economic opportunities for Americans, transforming schools and improving access to health care. For the last several decades, the rate at which we are making progress on our nation's great challenges has been too slow. Yet, there are powerful, innovative ideas being developed across the country that can make a dramatic difference on these problems. The Social Innovation Fund will find and fund nonprofit organizations that have developed innovative solutions that are demonstrating impact and are ready to move these solutions to more communities of need.

Facilitate Public Sector Innovation. The Budget includes funding to expand the White House Open Government Initiative, which focuses on modernizing government information technology and designing technology platforms that foster openness across the Executive branch. The Initiative has achieved many important milestones, including:

- Publishing government data online to make it easy for anyone to remix and reuse,
- Challenging thousands of Federal employees to propose ideas for slashing the time required to process veterans' disability benefits,
- Releasing information on Executive branch personnel and salaries, and
- Launching the IT Dashboard, a one-stop clearinghouse of information that allows anyone with a web browser to track government spending on technology.

Appendix B-2

Innovation and Flexible Funding in the 2011 Federal Budget

<i>Agency, Office/Program, Activity</i>	<i>Budget Outlays (US\$Millions)</i>	<i>% Agency Budget</i>	<i>Flexible/ Innovation</i>	<i>Functional Area*</i>
Agriculture	\$173,336	100%		
Farm Services Agency (FSA)	\$27,843	16%		
Farm Loan & Grant Programs	\$4,797	3%	Flex	Inf/TA
Conservation & Other Programs	\$2,154	1%	Flex	Inf/TA
Rural Development (RD)	\$24,059	14%		
Rural Utility Service Loans & Grants	\$6,833	4%	Flex	TA/ED
Rural Housing Service Loans & Grants	\$15,563	9%	Flex	TA/ED
Rural Business - Cooperative Service Loans & Grants	\$1,431	1%	Flex	TA/ED
Natural Resource Conservation Service (NRCS)	\$3,993	2%		
Resource Conservation & Development	\$0	0%	Flex	TA/Inf/R&D
Farm Security & Rural Investment Programs	\$3,029	2%	Flex	Inf
Agricultural Research Service (ARS)	\$1,224	1%	Flex	R&D
Bioenergy Research	[\$170]	0%	[Flex]	R&D
National Institute of Food & Agriculture (NIFA)	\$1,494	1%	Flex	Comm
Economic Research Service (ERS)	\$87	0%	Flex	ED/R&D
Total Innovation Spending	\$0	0%		
Total Flexible Spending	\$36,612	21%		
Commerce	\$11,501	100%		
Economic Development Administration (EDA)	\$286	2%		
Economic Development Assistance Programs (EDAP)	\$246	2%	Flex	ED/TA
Regional Innovation Clusters	[\$13]	0%	[Flex]	ED/TA
Minority Business Development Administration (MBDA)	\$32	0%		
Minority Business Development	\$32	0%	Flex	ED/SBD
Nat'l Telecomm. and Information Admin. (NTIA)	\$22	0%		
Telecommunication & Sciences Research	\$8	0%	Innovation	R&D
Broadband Technology Opportunities Program (BTOP)	\$24	0%	Innovation	R&D/ED
National Institute of Standards & Technology (NIST)	\$922	8%		
Industrial Technology Services	\$210	2%	Flex	R&D
Holling's Manufacturing Extension Partnership	\$130	1%	Flex	R&D
NIST Laboratories	\$488	4%	Innovation	R&D
Technology Innovation Program	\$84	1%	Innovation	R&D
Total Innovation Spending	\$673	6%		
Total Flexible Spending	\$950	8%		
Education	\$77,787	100%		
Office of Innovation & Improvement (OII)	\$8,011	10%	Innovation	Inf
Race to the Top	[\$1,350]	2%	[Innovation]	Inf/Comm
Investing in Innovation	[\$500]	1%	[Innovation]	Inf
Excellent Instructional Teams	[\$3,855]	5%	[Innovation]	Inf
Teacher and Leader Innovation Fund	[\$950]	1%	[Innovation]	Inf
Institute for Education Science (IES)	\$739	6%		
Research, Development & Dissemination	\$332	3%	Flex	R&D
Regional Education Laboratories	\$70	1%	Flex	R&D
Office of Special Education & Rehabilitation Services (OSERS)	\$16,618	21%		
Rehabilitation & Disability Research	\$3,084	4%		
Workforce Innovation Fund	\$30	0%	Innovation	Inf/R&D
Education Improvement Programs	\$1,890	2%	Flex	TA/Inf
Total Innovation Spending	\$8,011	10%		
Total Flexible Spending	\$2,321	10%		

THE ACCELERATION AGENDA

Job Creation, Innovation and Economic Development for the 21st Century

<i>Agency, Office/Program, Activity</i>	<i>Budget Outlays (US\$Millions)</i>	<i>% Agency Budget</i>	<i>Flexible/ Innovation</i>	<i>Functional Area*</i>
Energy	\$28,400	100%		
Office of Renewable Energy & Energy Efficiency	\$2,355	8%	Innovation	R&D/Inf
RE-ENERGYSE	[\$50]	0%	Innovation	Inf/Comm
Office of Science	\$5,121	18%	Innovation	R&D
Small Business Innovation Research	\$0	0%	Innovation	R&D
Advanced Research Projects Agency-Energy (ARPA-E)	\$300	1%	Innovation	R&D
Innovative Tech. Loan Guarantee Program - Title 17	\$500	2%	Innovation	R&D
Energy Regional Innovation Clusters (E-RIC)	\$22	0%	Innovation	R&D/Inf
Advanced Tech. Vehicle Manufacturing Program (ATVMP)	\$10	0%	Innovation	R&D/ED
Total Innovation Spending	\$8,309	29%		
Total Flexible Spending	\$0	0%		
Housing and Urban Development	\$48,913	100%		
Community Planning & Development (CPD)	\$8,425	17%		
Community Development Block Grant (CDBG) Funds	\$4,380	9%	Flex	ED
Entitlement/Non-Entitlement	[\$3,983]	[8%]	[Flex]	ED
Catalytic Investment Competition	[\$150]	[0%]	[Flex]	ED/Inf
Sustainable Communities	[\$150]	[0%]	[Flex]	ED/Plan
Neighborhood Initiative Program	[\$0]	[0%]	[Flex]	ED/TA
University Community Fund	[\$25]	[0%]	[Flex]	ED/Plan
Brownfield Economic Development Initiative	\$0	0%	Flex	ED
Rural Housing & Economic Development Program	\$0	0%	Flex	ED
Housing Programs (Housing)	\$10,306	21%		
Energy Innovation Fund	\$0	0%	Innovation	Ed/Plan
New & Cross-Cutting Initiatives	\$410	1%	Innovation	ED/Plan
Policy Development & Research	\$87	0%	Innovation	R&D
Total Innovation Spending	\$497	1%		
Total Flexible Spending	\$4,380	9%		
Labor	\$79,113	100%		
Training & Employment Services	\$4,050	5%		
Grants to State/Innovation Funds	\$3,179	4%	Innovation	Inf/Plan
Adult Employment - WIA Innovation Fund Reserve	[\$45]	0%	[Innovation]	Inf/Plan
Dislocated Workers - WIA Innovation Fund Reserve	[\$63]	0%	[Innovation]	Inf/Plan
Youth Activities - Youth Innovation Fund Reserve	[\$153]	0%	[Innovation]	Inf/Plan
National Programs	\$255	0%		
Green Jobs Innovation Fund	\$85	0%	Innovation	Inf/Plan
Career Pathways Innovation Fund (formerly CBJTG)	\$0	0%	Innovation	Comm
Total Innovation Spending	\$3,179	4%		
Total Flexible Spending	\$0	0%		
Transportation	\$86,578	100%		
National Infrastructure Innovation & Finance Fund	\$476	1%	Innovation	Inf/Plan
Federal Aviation Administration (FAA)	\$16,409	19%		
Research, Engineering & Development	\$190	0%	Flex	R&D
Federal Transit Administration (FTA)	\$14,122	16%		
Livable Communities	\$307	0%	Flex	Plan/ED
Greenhouse Gas & Energy Reduction	\$53	0%	Flex	Inf/R&D
National Research & Technology	\$30	0%	Flex	R&D
Office of Secretary	\$1,059	1%		
Livable Communities	\$20	0%	Flex	Plan/ED
Research Innovation & Technology Administration	\$17	0%	Innovation	R&D
Total Innovation Spending	\$493	1%		
Total Flexible Spending	\$600	1%		

THE ACCELERATION AGENDA

Job Creation, Innovation and Economic Development for the 21st Century

Agency, Office/Program, Activity	Budget Outlays (US\$Millions)	% Agency Budget	Flexible/ Innovation	Functional Area*
Treasury	\$560,863	100%		
Build America Bonds (BABs)	\$3,462	1%	Flex	Inf/ED
Grants to States for Low-Income Housing Projects	\$2,265	0%	Flex	Inf/ED
Grants to States for Specified Energy Property	\$4,464	1%	Flex	Inf/ED
Making Work Pay Tax Credit	\$21,429	4%	Flex	Inf/ED
Total Innovation Spending	\$0	0%		
Total Flexible Spending	\$31,620	6%		
EPA	\$10,020	100%		
Science & Technology (S&T) Research	\$524	5%	Flex	R&D
Hazardous Substance/Superfund	\$1,293	13%	Flex	R&D
Research	\$22	0%	Flex	R&D
Super Fund Programs	\$1,258	13%	Flex	TA/Inf
Oil Spill Response Research	\$0.7	0%	Flex	R&D
State & Tribal Assistance Grants (excluding categorical grants)	\$3,505	35%	Flex	TA/ED
Total Innovation Spending	\$0	0%		
Total Flexible Spending	\$5,322	53%		
Small Business	\$1,152	100%		
Entrepreneurial Development Programs	\$189	16%		
Small Business Development Centers	[\$130]	11%	Innovation	ED/SBD
Emerging Leaders Initiative	[\$4]	0%	[Innovation]	Com/SBD
Development of Regional Innovation Clusters	[\$14]	1%	[Innovation]	ED/SBD
Regional and District Office Programs	\$18	2%	Flex	TA/SBD
7(a) Loan Guarantees - Subsidy Costs	\$165	14%	Innovation	SBD
Small Business Innovation Research (SBIR) Program	\$2	0%	Innovation	R&D
Total Innovation Spending	\$356	31%		
Total Flexible Spending	\$18	2%		
National & Community Service	\$1,416	100%		
Innovation, Demonstration & Assistance Activities	\$77	5%	Innovation	TA/Comm
Social Innovation Fund	[\$60]	[4%]	[Innovation]	TA/Comm
Innovation, Demonstration & Other	[\$6]	0%	[Innovation]	TA/Comm
Volunteer Generation Fund	[\$10]	1%	[Innovation]	TA
AmeriCorps Volunteers in Service to America (VISTA)	\$98	7%	Flex	Inf/TA
AmeriCorps National Civilian Community Corps (NCCC)	\$35	2%	Flex	Inf/TA
AmeriCorps State & National Grants	\$488	34%	Flex	Inf/TA
Learn and Serve America	\$40	3%	Flex	Inf/TA
Training & Technical Assistance	\$13	1%	Flex	Inf/TA
Total Innovation Spending	\$77	5%		
Total Flexible Spending	\$674	48%		

Innovation/Flexible Spending Report

Total US Government Spending (only above agencies)	\$1,079,078	100%
Innovation Spending	\$21,595	2%
Flexible Spending	\$82,497	8%

* Functional Area Abbreviations:

Inf	Infrastructure
ED	Economic Development
TA	Technical Assistance
Plan	Planning
R&D	Research & Development
Comm	Commercialization
SBD	Small Business Development

Source: NPI estimates using agency budget submissions.

Appendix B-3

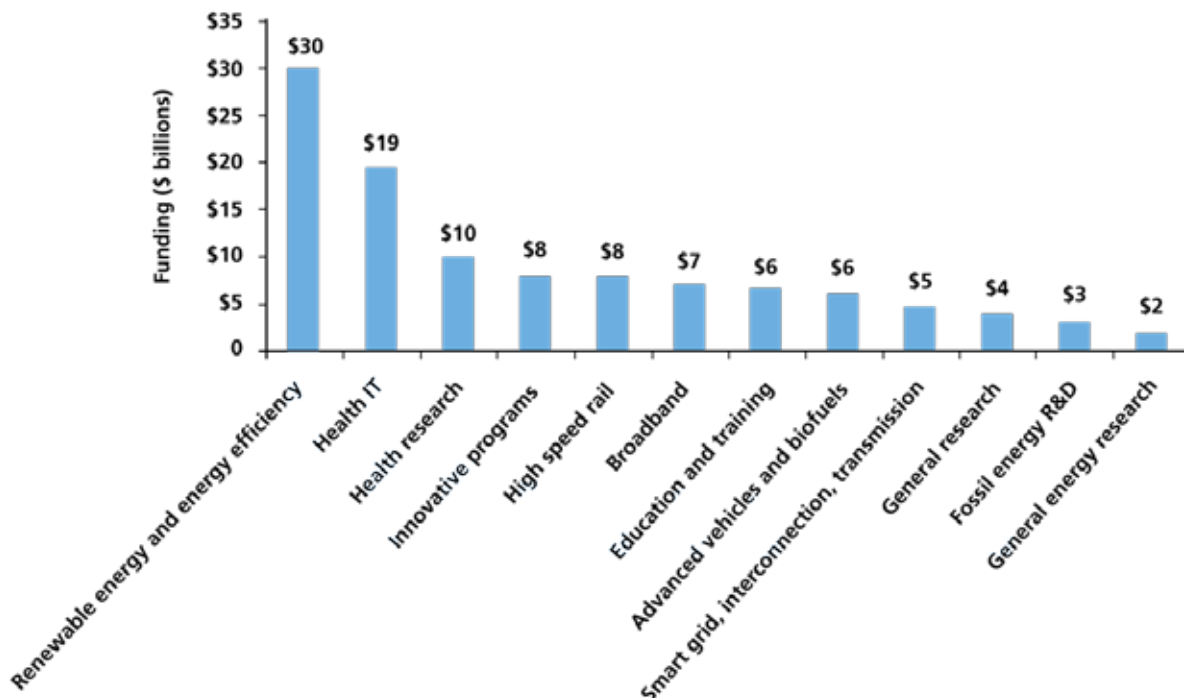
The Recovery Act: Transforming the American Economy Through Innovation

With over \$787 billion in funding, the American Recovery and Reinvestment Act is one of the single boldest and largest investments in the U.S. economy in the nation's history. The Recovery Act's design was three-fold: to rescue a rapidly deteriorating economy; put the country on a path to recovery by putting Americans back to work quickly; and reinvest in the country's long-term economic future, building a foundation for a new, more robust, and competitive American economy.

Within the Reinvestment spending of the Recovery Act, over \$100 billion is invested in innovative and transformative programs. This report explores four areas within those innovative programs in which game-changing breakthroughs are being sought, and in some cases, new American industries are being born:

- Executive Summary
- An Introduction to Innovation: How and Why the Recovery Act Invests in Innovation
- Modernizing Transportation: Investments in Advanced Vehicle Technology and High-Speed Rail
- Promoting Clean, Renewable Energy: Investments in Wind and Solar
- Building a Platform for Private Sector Innovation: Investments in Broadband, Smart Grid, and Health Information Technology
- Fostering Groundbreaking Medical Research: Investments in the National Institutes of Health

Funding for Innovation and Technology Deployment in the Recovery Act



Appendix B-4

Innovative Spending Stuck in Congress

Bill Num.	Bill Title	Sponsor	# Co-Sponsors	Date Introduced	Proposed Funding (\$Millions)	Committee Referral	Latest Action/Date
HR 260	21st Century Energy Independence Act	Sheila Jackson-Lee [D-TX18]	0	7-Jan-2009	\$250	Subcommittee on Energy and Environment	No further action
S 177	Strengthening Our Economy Through Small Business Innovation Act	Russell Feingold [D-WI]	0	8-Jan-2009	\$*	Committee on Small Business and Entrepreneurship	No further action
HR 3028	First Responder Innovation and Support Act	Benny Thompson [D-MS2]	3	24-Jan-2009	\$600	Committee on Transportation and Infrastructure	No further action
HR 513	New Manhattan Project for Energy Independence	Randy Forbes [R-VA4]	4	14-Jan-2009	\$24,000	Subcommittee on Energy and Environment	No further action
HR 558	Achievement Through Technology and Innovation Act	Lucille Roybal-Allard [D-CA34]	25	15-Jan-2010	\$6,000	Committee on Education and Labor	No further action
HR 3030	Fostering Independence Through Technology Act	Timothy Walz [D-MN1]	1	24-Jan-2009	\$*	Committee Energy and Commerce	No further action
HR 932	Community Regeneration, Sustainability and Innovation Act	Timothy Ryan [D-OH17]	51	10-Feb-2009	\$422	Committee on Financial Services	No further action
S 453	Community Regeneration, Sustainability and Innovation Act	Charles Schumer [D-NY]	4	23-Feb-2009	\$422	Committee on Banking, Housing and Urban Affairs	No further action
S 457	Fostering Independence Through Technology Act	John Thune [R-SD]	5	24-Feb-2009	\$*	Committee on Finance	No further action
S 726	Promoting Innovation and Access to Life-Saving Medicine Act	Charles Schumer [D-NY]	9	26-Mar-2009	\$1,000	Committee on Health, Education, Labor, and Pensions	No further action
HR 1382	Innovative Vehicle Act	Brian Billbray [R-CA50]	14	9-Mar-2009	\$*	Committee on Energy and Commerce	No further action
S 968	Secondary School Innovation Act	Harry Reid [D-NV]	9	4-May-2009	\$3,000	Committee on Health, Education, Labor, and Pensions	No further action
HR 2239	Secondary School Innovation Act	David Loebsack [D-IA2]	9	4-May-2009	\$3,000	Subcommittee on Early Childhood, Elementary, and Secondary Education	No further action
S 966	National Health Care Quality Act	John Rockefeller [D-WV]	1	4-May-2009	\$1,230	Committee on Finance	No further action
HR 2250	Energy Independence Now Act	Dan Burton [R-IN5]	0	5-May-2009	\$235	Subcommittee on Readiness	No further action
HR 2300	American Energy Innovation Act	Rob Bishop [R-UT1]	0	7-May-2009	\$11,316	Subcommittee on Energy and Mineral Resources	No further action
HR 1427	Promoting Innovation and Access to Life-Saving Medicine Act	Henry Waxman [D-CA30]	16	11-May-2009	\$1,000	Committee on Judiciary	No further action
S 596	Nanotechnology Innovation and Prize Competition	Ron Wyden [D-OR]	1	16-May-2009	\$3	Committee on Commerce, Science, and Transportation	No further action
HR 2663	TIFIA	Eddie Johnson [D-TX30]	0	2-Jun-2009	\$1,740	Subcommittee on Highways and Transit	No further action
HR 2828	American Energy Innovation Act	Rob Bishop [R-UT1]	73	11-Jun-2009	\$11,316	Subcommittee on Energy and Environment	No further action
HR 2965	SBIR/STTR Reauthorization Act	Jason Altmire [D-PA4]	9	19-Jun-2009	\$30	Subcommittee on Technology and Innovation	Passed House/July 8, 2009
HR 4271	Workforce Investment Improvement Act	Brett Guthrie [R-KY2]	8	10-Dec-2009	\$85	Committee on Education and Labor	No further action
HR 5095	Protect Medical Innovation Act	Erik Paulsen [R-MN3]	37	21-Apr-2009	\$*	Committee on Ways and Means	No further action
HR 3973	Early Learning Innovation Act	James Himes [D-CT4]	15	29-Oct-2009	\$350	Committee on Education and Labor	No further action
HR 3130	Time for Innovation Matters in Education Act	Donald Payne [D-NJ10]	1	8-Jul-2009	\$2,110	Committee on Education and Labor	No further action
S 1419	Time for Innovation Matters in Education Act	Edward Kennedy [D-MA]	6	8-Jul-2009	\$2,110	Committee on Health, Education, Labor, and Pensions	No further action
HR 3134	Healthcare Innovation Zone Program Act	Allyson Schwartz [D-PA13]	0	8-Jul-2009	\$25	Committee on Energy and Commerce	No further action
HR 3664	Healthcare Innovation Zone Pilot Act	Allyson Schwartz [D-PA13]	17	29-Sep-2009	\$25	Committee on Ways and Means	No further action
HR 3684	American Small Business Innovation Act	Joe Sestak [D-PA7]	0	30-Sep-2009	\$56	Subcommittee on Finance and Tax	No further action
HR 4709	E 2 for Innovation Act	Paul Tonko [D-NY21]	16	25-Feb-2010	\$578	Subcommittee on Early Childhood, Elementary, and Secondary Education	No further action
HR 4907	Energy Innovation Hubs Authorization Act	Russ Carnahan [D-MO3]	8	22-Mar-2010	\$860	Committee on Science and Technology	No further action
S 3228	Small Business Innovation to Job Creation Act	Charles Schumer [D-NY]	0	20-Apr-2010	\$2,000	Committee on Small Business and Entrepreneurship	No further action
HR 5132	Mine Communications Technology Innovation Act	Jim Matheson [D-UT2]	0	22-Apr-2010	\$*	Committee on Science and Technology	No further action
HR 5116	America COMPETES Reauthorization Act	Bart Gordon [D-TN6]	101	22-Apr-2010	\$7,481	Committee on Commerce, Science, and Transportation	Passed House/5-28-10
HR 5140	National Economic Competitiveness and Innovation Strategy Act	Rush Holt [D-NJ12]	0	26-Apr-2010	\$*	Committee on Science and Technology	No further action
HR 5181	Small Arms Competition and Innovation Act	Michael Arcuri [D-NY24]	3	29-Apr-2010	\$*	Subcommittee on Readiness	No further action
HR 5257	Internet Investment, Innovation, and Competition Preservation Act	Clifford Stearns [R-FL6]	10	11-May-2010	\$*	Committee on Energy and Commerce	No further action
HR 5325	America COMPETES Reauthorization Act	Bart Gordon [D-TN6]	0	18-May-2010	\$7,481	N/A	Failed Passage in House
S 3605	America COMPETES Reauthorization Act	John Rockefeller [D-WV]	0	15-Jul-2010	\$7,481	Committee on Commerce, Science, and Transportation	Reported by Committee/7-22-10

* Proposed budget appropriations not included in original draft of bill.

Appendix B-5

NPI Draft Analysis

Stimulus Spending, By State and Company Age

NPI reviewed stimulus data for 6 states to gauge how well younger companies — a key source of net new job creation — were being served.

Colorado

Total Companies Receiving Funding: 236
Average Total Sales: \$55,185,531.80
Median Total Sales: \$1,300,000
Average Age: 19.06 years
Median Age: 15 years
Number of Companies < 5 Years Old: 31
Percentage of Companies < 5 Years Old: 13.1%

Nevada

Total Companies Receiving Funding: 50
Average Total Sales: \$84,790,851.9
Median Total Sales: \$1,800,000
Average Age: 17.52 years
Median Age: 16.5 years
Number of Companies < 5 Years Old: 2
Percentage of Companies < 5 Years Old: 4.0%

Florida

Total Companies Receiving Funding: 203
Average Total Sales: \$283,412,117
Median total Sales: \$2,500,000
Average Age: 20.40 years
Median Age: 14 years
Number of Companies < 5 Years Old: 24
Percentage of Companies < 5 Years Old: 11.8%

New Hampshire

Total Companies Receiving Funding: 44
Average Total Sales: \$8,808,939.59
Median Total Sales: \$545,000
Average Age: 24.5 years
Median Age: 17.5 years
Number of Companies < 5 Years Old: 6
Percentage of Companies < 5 Years Old: 13.6%

Indiana

Total Companies Receiving Funding: 89
Average Total Sales: \$370,812,330
Median Total Sales: \$1,600,000
Average Age: 21.95 years
Median Age: 14 years
Number of Companies < 5 Years Old: 13
Percentage of Companies < 5 Years Old: 14.6%

Ohio

Total Companies Receiving Funding: 154
Average Total Sales: \$ 79,568,011.6
Median Total Sales: \$1,820,947
Average Age: 20.5 years
Median Age: 16.5 years
Number of Companies < 5 Years Old: 13
Percentage of Companies < 5 Years Old: 8.4%

Sources/Analysis: Companies and grants were available at Recovery.gov. Company age and annual revenues as reported to Dun and Bradstreet. Note: A small percentage of companies that received stimulus funding did not have a DNB profile. Also note that young companies are served by the SBA and other federal programs, as well as by the stimulus.

Appendix C — Links and Resources

White House Innovation Strategy, September, 2009

http://www.whitehouse.gov/assets/documents/innovation_three-pager_9-20-09.pdf

National Service Strategic Plan

http://www.nationalservice.gov/pdf/ppt_strategic_plan_8610.pdf

NPI/NDN Globalization Initiative

<http://ndn.org/programs/globalization-initiative>

Remarks, National Association of Development Officers Annual Conference

<http://www.eda.gov/NewsEvents/Speeches/NADOSpeech.xml>

Jobs and Innovation Partnership

www.jobsandinnovationpartners.org

OECD's Ministerial Report on Innovation Strategy

Excerpts Attached

Ministerial Report on the OECD Innovation Strategy

Innovation to strengthen growth and address global and social challenges

Key Findings (Excerpts)

<http://www.oecd.org/dataoecd/51/28/45326349.pdf>

The search for new sources of growth comes however at a time when many countries have stagnating or declining populations and face diminishing returns from labor inputs and investment in physical capital. Future growth must therefore increasingly come from innovation-induced productivity growth. Innovation the introduction of a new or significantly improved product, process or method holds the key to boosting productivity.

While R&D remains vitally important, many highly innovative firms do not engage in R&D at all. Increasingly, firms in services and manufacturing create value through a wide range of complementary technological and non-technological changes and innovations.

Such changes in the innovation process present a challenge to existing national policy frameworks. The focus on strengthening public research and on providing incentives for firms to invest in research and development is important, but it is not enough. A more strategic approach to fostering innovation is needed, one which considers the full spectrum of policies to create, diffuse and apply knowledge.

Human capital is the essence of innovation. People generate the ideas and knowledge that power innovation, and they apply this knowledge and the resulting technologies, products and services in the workplace and as consumers.

Businesses, especially new and young firms, are the main source of job growth from innovation.

About NPI

The New Policy Institute is a non-partisan think tank based in Washington D.C. Our mission is to imagine and build a 21st century America capable of meeting the challenges of our time.

We believe that to replicate our 20th century success in the 21st century, we will need to do three things:

- Offer ideas that tackle the challenges of our time
- Master the new media and technology that are changing the way people communicate with one another

- Understand the changing demographics of our country and engage new Americans

The New Policy Institute conducts research and builds solutions that address all three of these areas. We work to provide insightful analysis and detailed strategies that will help America succeed in the 21st century.

The New Policy Institute is an affiliate of the advocacy organization NDN and a project of The Tides Center.

—Simon Rosenberg, President and Founder

About The Author

Dan Carol is a Senior Fellow for Innovation and Clean Economy at NPI, where he serves as a strategic adviser to NDN's Electricity 2.0 and 21st Century Economy projects, focusing on bottom-up and regional innovation. Carol also serves on the adjunct faculty for the University of Oregon's Public Policy School. Most recently, Carol served as the Content & Issues Director for the Obama for President Campaign, where he guided the launches of Obama's NewEnergyforAmerica.com plan and Clean Tech and Green Business Leaders for Obama (CT40). Carol also co-founded the Clean Economy Network.

A long-time catalyst and evangelist for building new approaches for clean economic development, Carol spearheaded the creation of The Apollo Alliance (www.apolloalliance.org), an early, post 9/11 effort to promote

a "moon mission" national commitment to energy independence and unite Americans of all political stripes in a common purpose. Before that, Carol was an environmental and energy budget analyst at the Congressional Budget Office, a Presidential Management Fellow, a non-profit technology entrepreneur, and a trend consultant for the Congressional Institute for the Future.

Carol earlier served as Research Director for the Democratic National Committee during the 1992 presidential cycle, where he directed staff work on the Party's national platform and worked in Little Rock on the Clinton-Gore debate team. Carol was co-editor of an early analysis of collaborative efforts in government, *Managing Land Use Conflicts*, published by Duke University Press (1987).