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Reclaiming Prosperity: Repositioning Southern Nevada for the Next Economy
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Introduction

Thank you, Neal, for that kind introduction and your inspiring leadership in difficult times.

In addition, I would like to thank Brian Greenspun, whose pride in Southern Nevada is infectious both in town, as well as at Brookings board meetings in Washington

And the Lincy Foundation, Lindy and Jeff, whose vision and resources have allowed my colleagues Rob Lang and Mark Muro to intensify the work they started in this region with the report "*Mountain Megas*" through the start-up of Brookings Mountain West and our deepened engagement at the Metropolitan Policy Program.

This has been an auspicious development for all of us.

As Nevada knows all too well, the "Great Recession" has been a wake-up call.

It unveiled an economy dangerously out of whack: frenzied with consumption, wasteful in its use of energy, more adept at increasing inequity than sharing prosperity, more successful at exacerbating, rather than easing, divisions between Wall Street and Main Street.

It is time to get back on track and lay the foundation for a radically different kind of growth both in Southern Nevada and in the nation.

In that spirit, I will make the following propositions:

First, the shape of the next American economy must be export-oriented, low carbon, and innovation-fueled. This is a vision where we export more and waste less, innovate in what matters, produce and deploy more of what we invent. This is the kind of productive and sustainable economy which must emerge from the rubble of this recession.

Second, Southern Nevada can play in the next economy, but this will require hard choices and a deliberate decision to move beyond an economy fueled by real estate consumption. Las Vegas has an important export strength (Yes, you export!) in its convening sector, strong international connections, solar and geothermal energy sources, and a growing set

of efforts in renewable energy production. These strengths are augmented by the region's proximity to Southern California.

Finally, to build the next economy, the United States must connect the macro vision to metro reality—the “Macro to the Metro.” We need to leverage the market energy and creativity found in metros like Las Vegas with smart, game-changing federal and state actions. And we need a full-court press on delivering an educated and skilled workforce, which can drive the next economy and must benefit from it. The next economy must be **opportunity-rich** as well as export-oriented, low carbon, and innovation-fueled.

All this will not be easy.

We compete in a fiercely competitive world where established nations like Germany and rising nations like China, India, and Brazil are moving forward. These and other countries are making seismic and ultimately transformative investments in renewable energy, in modern ports, in high-speed rail, in metropolitan transit.

And America? We seem stuck in political polarization and hyper-partisanship in both the federal government and, as you know well, in state governments.

Your challenge, America's challenge, is to convert the dynamism in this metropolis, and others like it, into solutions that are pragmatic, far-reaching, and critical to this moment. We must move as quickly as possible to change the mental map of our nation from a constitutional union of 50 states to an economic network of highly connected, hyper-linked, and seamlessly integrated metropolitan areas.

So let me begin by offering a vision for the next American economy... one that is export-oriented, low carbon, and innovation-fueled.

Imagine an economy where more firms in more sectors trade more goods and services seamlessly with the world, particularly with the rising nations that are rapidly urbanizing and industrializing. As President Obama said in the State of the Union, “The more products we make and sell to other countries, the more jobs we support right here in America.”

For the past several decades, the U.S. economy has been driven by imports rather than fueled by exports.

According to the World Bank, exports make up only 11 percent of the GDP of the U.S., compared to 40 percent in China, 36 percent in Canada, 22 percent in India, 16 percent in Europe, and 16 percent in Japan.

As Howard Rosen of the Peterson Institute recently summarized, exporting is almost an unnatural act in the U.S.: Only 4 percent of U.S. companies export. Less than 0.5 percent of U.S. companies operate in more than one country.

Can we get back into the export game? The answer is decidedly “yes.”

For the first time in recorded history, more than half of the world’s population lives in urban and metropolitan areas. By 2030, the metro share will surpass 60 percent. Across the globe, metropolitan economies are driving demand for increased trade and commerce, only temporarily abated by this downturn.

The U.S. can play in this expansion. We still manufacture a range of advanced goods that the rest of the world wants including aircraft, spacecraft, electrical machinery, precision surgical instruments, and high-quality pharmaceutical products.

The U.S. already has a trade surplus in services—\$144 billion in 2008—and we are poised for a quantum leap in the export of high-value services.

Our exports to China of management, consulting, and public relations services increased 38-fold from 2002 to 2008. Our exports to India in construction, architectural, and engineering services increased 41-fold over the same period.

America’s—and Southern Nevada’s—potential for exports is hidden in plain sight. President Obama’s challenge, to double exports in five years, is exactly the kind of ambitious, far-reaching goal we need at this moment.

Low carbon is the second related hallmark of the next U.S. economy. America could not only lead the global transition to sustainable growth but use breakthroughs in technology and practice to spark a renewable energy manufacturing revolution in Nevada and other Intermountain West states.

We have a long way to go.

The United States has been slow to embrace the potential of the green economy, despite having twice the per-capita carbon dioxide emissions of other industrialized nations.

China is seeking to dominate the race to green, dedicating \$221 billion of their recent stimulus package on renewable energy and other green investments, compared to \$94 billion in the United States.

Make no mistake: The transition to a low-carbon economy is fundamentally about markets.

The energy we use will migrate from an almost exclusive focus on carbon-based fuels to a more sustainable mix: natural gas, solar, wind, hydro, geothermal, ocean waves, and biomass.

The infrastructure we build will shift from 20th century models of transport and energy transmission to rapid bus, ubiquitous broadband, congestion pricing, smart grid, distributed power generation, high speed rail, and intelligent transport.

The products we buy will move from high-carbon gas guzzlers and fluorescent lights to sustainable goods: electric vehicles, energy efficient appliances, smart meters, LED lights, and local food.

And the homes we live in and the school, office, and retail buildings we frequent will be more sustainable in design, more efficient in their use of water and energy, and better arrayed so that people can spend less, walk more, and live a higher quality of life.

Need job creation? The low carbon economy will be delivered by millions of new workers: financiers to finance, scientists and engineers to invent, entrepreneurs to take to market, laborers to build and install new infrastructure, facilities, and products.

This leads naturally to a discussion of innovation... the historic catalyst and fuel for economic growth. The United States must strive to be the world's "Innovation Nation," a hothouse of ideas and invention and the platform for advanced production.

For decades, innovation has been the driver of American productivity and growth. Innovations in computers and telecommunication enabled the information revolution. And advancements in health care sparked growth in pharmaceuticals and medical devices.

But American leadership on R&D investment and key indicators of science innovation is slipping.

More generally, the next American workforce is ill equipped to drive innovation. African Americans and Hispanics lag on critical indicators. Yet these groups will constitute nearly 40 percent of our national workforce by 2050, up from 25 percent today.

And the U.S. lags on the conversion of innovation into home grown production. We have gone from running a trade surplus in advanced technology products in the mid 1990s to running a trade deficit this decade.

Going forward, we will innovate less if we do not produce more.

It is time to rediscover our innovation mojo: in our research labs, on our factory floors, in the trade-able sectors that drive wealth creation and sustainable growth.

This leads to my second proposition: Las Vegas has strengths, some longstanding, some nascent, that can help it play in this next economy.

On exports, you are starting in a weak position: Las Vegas ranks 84th among the top 100 metros in export intensity, with just 8.4 percent of your gross metropolitan product coming from exports, compared to an average of 11.2 percent in the nation's large metros.

The exports you do have are concentrated in services, particularly in convening and the related services—designated as a “travel service.”

But growth in service exports, which outpaced economic growth between 2003 and 2008, was driven by a diversifying set of professional services, such as financial and management and consulting services, albeit from small bases, in addition to travel.

Las Vegas is unique: You built an iconic metropolitan area of nearly two million people through gaming, as well as entertainment, dining, and shopping. Your proven ability to reinvent and sell this place will be critical for the export economy.

CityCenter is an example—it represents just the latest morphing of a once low-end motel room town to a major global city that attracts higher-end travelers from around the world to a cosmopolitan, dynamic urban experience.

And with the Consumer Electronics Show becoming a permanent fixture here, Las Vegas will emerge as a standing deal mart in a huge industry.

But to become the truly international metropolis that this place can be, Las Vegas must go beyond its gaming and consumption-focused roots to develop complementary specializations in particular professional services, information science, health sciences, and selected sustainability technologies. This will require modern and efficient connectivity with regional metros and countries across the world.

McCarran Airport is a critical asset in this respect: It is the seventh busiest airport in the nation; it serves one the most heavily traveled short-haul air corridors in America between here and L.A.; and maybe most importantly, it has been indispensable in raising Vegas’ global profile, seeing a 21-fold increase in international flight arrivals since 1990.

But your regional road and rail connections remain weak:

As my colleagues Mark Muro and Rob Lang have noticed before, Las Vegas and Phoenix remain the nation’s two largest metropolitan areas not connected with an interstate highway.

And I-15—the crucial link between Vegas and L.A.—provides just two lanes in critical areas.

And you lack intercity rail lines that are critical to move people and freight, as well as to provide transportation options and reduce the pressure on McCarran. Clearly achieving a significant, relatively high-speed rail connection to the California mega-economy must remain a top priority for the region.

On low carbon, this region is surprisingly well positioned, due to geography and often-enlightened state policy.

Nevada was one of the first states to adopt a renewable portfolio standard for power generation in 1997. Strengthened standards adopted last year require 25 percent of the state's electricity to come from renewable sources by 2025 up from 10 percent now.

The region's incredible geographic assets give it a head start:

Plentiful sunlight and geothermal resources have made Nevada the second largest state in production of both geothermal and solar energy (behind California), as illustrated with early investments in geothermal power and the world-class solar facility at Nellis Air Force Base.

But while the renewable energy generation sector is showing great promise in this region, it has not yet netted Nevada significant employment—a recent report estimated that the state has just 3,641 clean energy jobs.

Fully realizing your potential in this sector requires modernizing your electric grid and expanding beyond generating power into new areas in clean energy.

The recent announcement of a wind turbine facility in Las Vegas, for example, shows promise for a new manufacturing foothold for this region in this industry. The plant will provide as many as 1,000 jobs and will meet increasing demand for wind turbines throughout North and South America.

On innovation, Las Vegas does not fare well by traditional measures: This metro records only 2.1 patents per 10,000 employees, compared to 7.1 for the top 100 metros.

And the share of employment in research and development here is less than a third of the top 100 metro average, with just 13 of every 10,000 workers doing R&D, compared to 43 per 10,000 for the nation's large metros.

But again Las Vegas' unique location gives it unique positioning: Regular weather and lack of natural disasters makes it the ideal location for state-of-the-art data centers, which must have uninterrupted connections around the country and the world.

For example, because Enron wanted to concentrate massive broadband connectivity near California but in a safe place, the region now boasts one of the biggest, fastest, best-connected data processing facilities in the world: the SuperNAP data center at Switch Communications, which is now becoming a magnet for Fortune 500 companies' information back-offices and potentially higher-end design and engineering.

This new specialty, as well as the gaming sector could be the basis of innovative growth in fields like cloud computing, high-tech design, high-end back-office support, electronic games, advanced security.

And Las Vegas has the capacity to find a foothold in growing innovative sectors, as shown with the Cleveland Clinic's \$70 million partnership with the Lou Ruvo Center for

Brain Health which opened last July which could be the beginning of a broader relationship between greater Las Vegas and the world-class hospital.

That leads to my final proposition: to build the next economy at scale, the U.S. must connect macro vision to metro reality—the Macro to the Metro.

The United States is not China. We are not, thankfully, a planned economy, deciding which sectors should grow in which places, and then aligning infrastructure, innovation, human capital, and other investments to make it happen.

To build the next economy, the U.S. needs a playbook that is uniquely aligned to our entrepreneurial nation and its regions, where quality growth and jobs emerge from the DNA of metropolitan America: private firms, regional industry networks, research institutions, universities and community colleges, governments, trade associations, philanthropy, and labor.

The federal and state governments, of course, *should lead where they must* given the need for common markets and transformative investments.

At the same time, networks of metropolitan leaders *must innovate where they should* given their distinct clusters and competitive advantages and special responsibilities for developing quality places and educating the next workforce.

What does this look like in practice?

Let's start with exports. To double U.S. exports by 2015, Obama's challenge, we need our federal government to act smart on trade and currency, the macro levers for export growth. But those actions alone will not do the trick.

Anyone who travels within or among our major metropolitan areas knows that we are a first-class economy with a third-class infrastructure, literally stuck in traffic.

We need, therefore, a new **National Infrastructure Bank** to invest in regionally and nationally significant, high-value projects for the future: inter-modal facilities at our ports as they're doing in China, high speed passenger rail as in Germany and France, consumption pricing as in the U.K., and the electricity grid as in Ireland.

This would have critical import for the intermountain west which will grow substantially in coming decades. It is in the national interest to ease the stresses on this system that already lacks in capacity.

For example, we've already identified several extremely busy corridors in the Intermountain west that are critical links in the nation's air system and good candidates for investments to fulfill the nation's commitment to high speed rail development such as the triangulation between metropolitan Las Vegas, Phoenix, and Los Angeles.

Yet the federal government alone cannot deliver an export economy.

In a global economy, the heavy lifting will be done by metro areas, which concentrate the large companies, small and medium enterprises, research institutions, specialized services, skills providers and business associations necessary for international competitiveness.

The region, working with the state, needs to systematically go about building a more diversified portfolio of competitive, distinctive export sectors—not invented whole cloth, but derived by exporting key high-value activities adjacent to its current expertise.

These high-value segments might well be the higher-value convening and associated professional services Rob Lang talks about, or niche specializations in security technology or video gaming or health and life sciences. Increasingly it's looking like there may be a potential to assemble high-end processing and design work thanks to the massive and low-cost data processing capacity that represented by Switch Communications.

In any event, you need to bring the same degree of focus and strategy to building new specializations and sources of growth that the Las Vegas Convention and Visitors Authority has brought to building a world-class tourism hub.

So those are steps to take on exports. What about the low carbon economy?

Beyond setting a price on carbon, we need a step-change in advanced R&D. We recommend a national network of **Energy Discovery-Innovation Institutes** or hubs. We want to be the country that “cracks the code” on solar technologies, nuclear energy, materials science, “smart grid,” modeling and computing, geothermal production, carbon sequestration, and bio fuels.

These institutes would not generate ideas in a vacuum. They would connect closely to and accelerate cutting-edge university work such as at your Harry Reid Center and Center for Energy Research, established and start up Nevada firms, suppliers and producers to accelerate the cycle of invention, financing, commercialization, and deployment. That's why it is on target for UNLV and its partners to be proposing the funding of a significant new Solar and Technology Innovation Center in Las Vegas to work across sectors to generate clean energy breakthroughs and jobs.

Like infrastructure, this is a radical departure.

The federal government's non-defense energy-related R&D funding of about \$5.4 billion per year is a 33 percent decrease from 1980 in real dollars, and an 80 percent decrease when taken as a share of GDP. My colleague Mark Muro has proposed that the nation grow our investment to \$20 billion per year, placing energy innovation on a comparable level with health care and defense.

Here again, federal interventions are not enough. All metros can take steps to develop livable, efficient places and economies that wring out waste emissions, move away from sprawling, distended urban forms—Mark and Rob call it the “autoscape”—and move to connect jobs, housing, and transport for people and firms. Efficient “green” metros may well have an advantage in deploying in the green economy and then innovating close to home.

Some of the Mountain Metros are already on the case. Denver has made significant local investments in its light rail and rapid bus system and is concentrating mixed-use facilities around the transit stations. Salt Lake and Phoenix have also recently opened up light rail lines. Your brand-new bus rapid transit system is a step in the right direction.

Changing how places grow will reduce greenhouse gas emissions and could create U.S. grown industries for street cars, light rail transit, and rapid buses.

Finally, what about innovation? We desperately need a national innovation policy if our metro areas and our nation are going to stay one step ahead of our competitors.

No such national vision exists today. Innovation efforts are scattered throughout the government. Unlike Germany and China, innovation activities are divorced from manufacturing and export considerations. And there is little focus on the metropolitan origins of growth, and services innovation, and commercialization, although those hold great promise.

We suggest a **National Innovation Foundation**, modeled on successful efforts in Korea and Finland, to bring under one roof and ramp up the government’s fragmented efforts to boost commercial innovations in fields such as precision manufacturing, information technology, and clean energy. And we continue to advocate for the federal government to make available resources to be deployed—in a competitive, bottom-up, self-organized way—by regions like Las Vegas to strengthen the critical regional innovation networks and clusters that remain the context of job creation.

Yet that’s just the federal role. To complement a sharpened national focus, metros must get their acts together. They need to identify and intentionally foster emergent, high-potential clusters, whether in the health sciences or computing or cleantech. And they need to strengthen their existing centers of innovation, in public and private research institutions, with UNLV at the center, of course, but a whole array of actors pushing hard, from NV Energy to Switch Communications to the Nevada Cancer Institute and your impressive Water Authority to the Lou Ruvo Center for Brain Health. These institutions form the heart of your regional innovation system and are magnets for job-generating private and public sector investment.

But this is not just about high-profile institutions. Local community colleges, post-secondary technical schools, and skills providers, will deliver the bulk of the next American workforce. Tomorrow I plan to visit Culinary Local 226’s Culinary Training Academy, which is literally at the cutting edge of workforce training here in Las Vegas.

An innovative economy can only be built if we have the educated and skilled workers to build it.

Growing an innovation-fueled economy, in short, requires strengthening those institutions which disproportionately supply the fuel... and ensuring that qualified individuals have access to those institutions.

So, those agendas—ways to move toward a more export-oriented, lower-carbon, innovation-driven future—deal with the economic direction but not what in the end will enable it all or undercut it. Southern Nevada needs to create an opportunity-rich, inclusive economy and the best way to do that is to tend to your human capital—your people.

Right now, your metropolitan area is hobbled in many respects by its disturbingly low education attainment rates and dramatic inequality.

And so an urgent, all-hands-on-deck, federal-state-local push on human capital development is essential in Southern Nevada.

Washington is sending signals that urban education in challenged areas should be accompanied by systemic reform. This is a smart way to proceed.

Beyond that, the president has called for an American Graduation Initiative, a \$12 billion investment over 10 years to double the number of community college graduates. That is a critical priority, even at a time of constrained resources.

But education and education funding remain ultimately top responsibilities of states.

This in turn will likely require significant state government finance reform—reform that honors the region's desire for lean government yet ensures the state achieves a sustainable, adequate finance system for essentials such as a top-caliber education system.

It is for that reason a good thing that the state now beginning a push toward significant tax reform. The state has evolved past its tax structure and even a return to robust growth may not ensure the fiscal solvency needed to finance significant education reform and improvement—let alone anything else.

Let's go back to our playbook for the next economy.

What I've just described is a radically different vision for federal and state leadership and metro innovation.

At the federal and state level, it is a 21st century vision of investment that is delivered by smaller, leaner, more entrepreneurial entities like the Infrastructure Bank or Innovation Foundation or distributed networks like Energy Discovery-Innovation Institutes. This is

a stark departure from yesterday's Washington, which invested without any broad vision or coherent strategy. We may have gotten away with this kind of unfocused spending in the 1970s and 1980s. It will not work for this century.

At the metro scale, it is a 21st century vision of networks that can, synergistically, leverage natural economic clusters, connect transport and housing, and strengthen institutions that deliver innovation and education. This vision treats metros not as fragmented collections of governments, but as collections of leaders and institutions that link across disciplines, across jurisdictions, across sectors, so that the whole is greater than the sum of the parts.

Conclusion

Let me end where I began.

The Great Recession set the conditions for the kind of historic national reset that we witness once or twice a century.

In Southern Nevada, as in the nation as a whole, we need to get about the business of restructuring our economy, toward exports and low carbon, in favor of innovation, so we can compete globally and place this state back on the path to prosperity. This path runs directly through Las Vegas, and links up metro, state, and federal efforts.

It will not be easy. The tremendous changes in the world economy over the last 18 months have not been kind to Las Vegas, so it is understandable if Nevadans are wary of promises of the "new" and the "next," but the fact is that the next economy is happening, like it or not. The question is: will Las Vegas benefit from and help drive it, or not?

Given your resources and metropolitan assets, the answer should be a resounding "yes."