Expanding UNM’s Role in Economic Development
A New and Expanded Economic Development Role for UNM

Research Universities are now widely regarded as the linchpin to growing modern regional economies. As New Mexico enters its second century, UNM will be called on to play a new, larger, and more strategic role in the development of the state economy.

As a part of UNM President Dr. Robert Frank’s effort to develop his UNM 2020 plan, he commissioned a survey of thought leaders and convened an economic development conference to surface a menu of practical ideas and initiatives from which to build a new economic development role.

Today there are thought to be three strategic approaches to economic development:

- Traditional employer recruiting and expansion industry sector building approach
- Innovation and entrepreneurship (also referred to as the Rainforest approach)
- The general approach of capacity building.

While UNM has an obvious central role to play in driving new job creation by increasing the rate and scale of innovation and new enterprise development, there is much the University can do to help elevate the significant array of state and local efforts currently underway to recruit and expand employers, improve the business climate, and develop a qualified workforce.

The work of evaluating and sorting the hundreds of ideas and recommendations heard at the economic conference into actionable initiatives has begun and action is being taken on those that can be implemented with existing resources and partners.

Others initiatives appear to be substantially developed but require planning, organization, funding and staffing before they can be implemented. Still others require additional research and deliberation before they can be implemented.

Most importantly, expectations have been raised and a new level of discussion is underway inside and outside UNM about an expanded elevated role for the University in growing the state economy.
New Mexico faces unprecedented economic challenges and opportunities in the decade ahead. Record economic base losses from a protracted recession, and looming cuts in federal government employment, means New Mexico will have to take urgent action to restructure its economy in the decade ahead. This effort will require New Mexico’s research universities accepting a bigger and more strategic role in economic development. Incoming University of New Mexico (UNM) President, Dr. Robert Frank, commissioned a thought leader survey and an economic development conference as part of his 120-day listening campaign with the intention to use the results to inform his UNM 2020 plan for the future. The central question posed to thought leaders, interest groups, and conference attendees was, “What could UNM do in the next five to seven years to help the state, its communities, and its employers create more economic base jobs?”

The purpose of the survey work and the conference is threefold:

1. Initiate a new conversation, inside and outside the University, about an elevated role in the economic development of the region.

2. Surface a maximum number of new ideas and existing initiatives from thought leaders inside and outside the University.

3. Begin the process of sorting actionable ideas and initiatives into a short list for implementation and identifying partners.

Ideas and initiatives developed for this report were solicited from over 50 interviews with local and national thought leaders, 10 regional stakeholder charrettes, and deliberations from an economic development conference attended by more than 350 participants. The scope of inquiry focuses on practical, actionable ideas that the University can undertake that would accelerate the development of innovation driven enterprise, accelerate existing economic development efforts around the state, and continue to build workforce capacity.
WHAT IS ECONOMIC DEVELOPMENT? E > P

Economic development is about acting to ensure that the economy of a community or region grows faster than the population.

ECONOMIC > POPULATION

This equation applies whether a community’s population is expected to grow, shrink, or remain the same. Any community where the economy is growing faster than the population, or the economy is shrinking slower than the population, will have more revenue per person and every year. In these cases, the households, local business enterprises, charities, school districts, municipal and county governments should each have more revenue per person to serve than they had the previous year. Over time, everyone in town will have the discretionary investment income to finance their improvement agendas. Any community where the economy is growing slower than the population, or where the economy is shrinking faster than the population, faces the bleak prospect of serving more people every year with less and less revenue. In these cases, the only recourse is to cut services and/or raise taxes.

HOW LOCAL ECONOMIES WORK

For the purpose of discussion, it is helpful to think about the community or regional economy as having two parts or two kinds of jobs: income generating and income retaining.

1. INCOME GENERATING JOBS

Economic base jobs are those where the products and services produced by local residents are sold outside the state. This includes out of state retirees, export services, and federal transfer payments, such as welfare payments, as well as the traditional economic base sectors of tourism, agriculture, mining, oil and gas, manufacturing, disproportional federal employment, and electricity. Also, the local jobs that produce goods and services primarily sold to economic base enterprises for export are income generating jobs. Do not overlook the workers who are self-employed, or free agent workers who work out of their third bedrooms, billing clients or employers who are out of state. The number of economic base jobs, their productivity and wage rates, are what determine the size of a community’s economic pie, because they bring in most of the money on which the economy runs.

Research Universities are economic base jobs employers to the extent that they bring new money into the state from research grants, licensing fees on intellectual property, faculty consulting, out of state tuition, and tourism from sports, entertainment events, and conferences. They can also play a crucial role as an impact partner when the University helps employers, and public and private and communities implement their job creation strategies.
Non-economic base jobs are those where local residents work to produce goods and services sold primarily to fellow residents or non-economic base enterprises. These jobs are important to the local economy in a different way. The number and nature of these service sector jobs profoundly affect how long the money brought in by the economic base employers circulates in the local economy, and how much goes into the local tax base, businesses, institutions and households. Communities that lack a complete spectrum of retail and commercial services send local residents out of town to spend the community’s economic base income much faster than those that do. Adding jobs in the service sector only helps if they produce the goods and services the community is currently going out of town to buy. Adding more fast food restaurants, for example, rarely helps to grow the economy or stop someone from going out of town to eat. It merely divides the community’s fast food market, or slices of the economic pie, into smaller pieces. Otherwise, a community could solve all of its employment problems by opening up 100 new fast food restaurants every year. On the other hand, if the community has no general merchandiser, forcing local residents go to a neighboring economy to do their shopping, recruiting a Target, K-Mart or Wal-Mart would make the local economy bigger, without necessarily increasing the economic base.

In an economic contraction scenario, lost economic base jobs trigger cascading losses in service jobs thereby diminishing the net worth of local residents and businesses and eroding the tax base.
CONCEPTUAL FRAMEWORK

WAYS TO CREATE ECONOMIC BASE JOBS

- Expand and retain existing economic base employers
- Convert local service sector businesses into economic base employers by encouraging them to export
- Start new businesses
- Recruit new employers from outside the region
- Help start up independent and self-employed workers
- Recruit independent and self-employed workers from outside the region
- Convert independent and self-employed workers to economic base by encouraging them to export

THREE PRIMARY PROGRAM APPROACHES

For the purposes of this assignment, ideas and initiatives were organized under three broad approaches of economic development activity.

The Innovation and Entrepreneurship Approach (The Rainforest Approach) is characterized by a regional effort to purpose build an economic eco-system that can produce scale increases in local job creation from innovation and entrepreneurship. This approach is relatively new, less directed, and program methodologies are still evolving. There is a big difference between observing a new pattern in the way economic base jobs are being created in a region and having a program methodology where money and staff resources invested produce new economic base jobs that otherwise would not have occurred. While crucial for the future, this approach alone will be unable to produce enough jobs in the short term to get the state economy growing again.

The Employer Focused or Sector Based Approach is carried out by state and local program efforts targeting certain industry sectors and investing in marketing and capacity building strategies, proactively recruiting, expanding and retaining employers, and developing the cluster efficiencies that create local competitive advantage. While the effectiveness of this approach has been reduced by a slower growing and more uncertain economy, it is still the dominate approach of New Mexico’s state and local economic development apparatus and essential for making the job numbers needed in the short and mid-terms.

The Capacity Building Approach is a more passive, less directed approach, characterized by general efforts to improve the capacity and quality of life of a community. The underlying rationale is the assumption that improving the local education system, infrastructure, tax and regulatory environment, crime rate, housing and/or environment, will make the community more attractive to economic base employers and their workers. While elements of this approach are crucial to both Traditional Employer and Innovation-Based strategies, it is used as the default approach when communities elect not to invest directly in a Traditional Employer or Rainforest effort.
As we mark the Centennial, New Mexico finds itself in the midst of the greatest economic crisis since statehood. After losing between 40,000 and 50,000 jobs, in the worst recession in history, the state is on the brink of a suffering a second, even more devastating cycle of job losses from the downsizing of the federal government operations in New Mexico. The ABQ Metro area is in its 40th consecutive month of job contraction. Communities with UNM sites (Taos, Los Alamos, Rio North, Gallup, and Valencia) are each facing similar economic and demographic crises of their own.

**Job Creation Needs**

After factoring in natural population growth, the New Mexico economy will need to create more than 100,000 net new jobs to recover to pre-recession employment levels by 2022. This would require 40,000 jobs to replace those lost since the recession, and the additional 50,000 jobs to replace those lost from sequestration and the taking of New Mexico’s federal jobs. If another 10,000 additional new jobs are needed to support new population growth in the decade ahead, the state would have to create a total of 100,000 new jobs to return to 2007 employment levels. To achieve this, the state will have to create 40,000 net new economic base jobs to trigger the 60,000 jobs expected to be added in the service sector.

<table>
<thead>
<tr>
<th>Economic Base</th>
<th>Service Sector</th>
<th>Total</th>
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<tr>
<td>17,000</td>
<td>23,000</td>
<td>40,000</td>
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<td>20,000</td>
<td>30,000</td>
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<tr>
<td>40,000</td>
<td>60,000</td>
<td>100,000</td>
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*to replace current jobs lost
*to replace future job loss
*to support population growth
*total jobs needed
A combination of thought leadership interviews and interest group charrettes were conducted to surface ideas and initiatives, as well as supplement and inform the conference and breakout sessions. An open invitation for an interview, along with a discussion questionnaire, were extended to 100 thought leaders and 20 key business and community groups, resulting in 53 thought leader interviews and 7 interest group charrettes, prior to the conference. The ideas, initiatives, and insights collected were used to help structure the conference breakout sessions and round out the discussion groups.

To streamline conversations and help organize the range of input on the subject, respondents were asked to sort relevant thoughts and ideas into three general categories or approaches:

A **Rainforest Approach**: What, specifically, can UNM do help accelerate the rate and scale of innovation and entrepreneurship in our communities?

B **Employer Focused or Sector Based Approach**: What, specifically, can UNM do to help the community’s economic development program create more jobs?

C **Capacity Building Approach**: What, specifically, could UNM do to help businesses or organizations add more jobs?

Respondents were also asked to stay focused on specific ideas that the University, more precisely, the new UNM President, could do to create economic base jobs in the next 5-7 years.

Following the Conference, the team met with the President’s Economic Development Advisory Committee and began prioritizing the actionable initiatives for final deliberations for action and inclusion in the UNM 2020 Plan.
A criterion is crucial for evaluating and prioritizing an economic development agenda. There are two questions that drive the selection and prioritization process: What is most important? How soon and how hard is it?

**VALUE CRITERIA - WHAT IS MOST IMPORTANT**

1. Job Creation - Number of economic base jobs, total jobs
2. Enterprise Creation - Number of enterprises created, expanded, attracted
3. IP Created - Number of and value of discoveries, disclosures, patents and licenses
4. Brain Gain - Number of students placed and retained in local jobs
5. Earning Potential - Direct revenue to UNM from outside the state
6. Political Capital - Good will developed from service value delivered
7. Improves Prowess of University - Ranking, reputation, visibility
8. Contributes to Other Goals - International and out of state students, STEM, student success, graduation, time to graduation, NM job placement

**IMPLEMENTATION CRITERIA - HOW SOON AND HOW HARD IS IT?**

1. Presidential Control/Influence – Ability to implement
2. Readiness – Can implement immediately vs requires planning to start
3. Inertia - There is already significant support or momentum
4. Result Horizon – Could see results immediately vs will take time to move
5. Support of Deans and Faculty – Supportive, neutral, mixed, hostile
6. Leverage – There are significant opportunities to partner with others
7. Funding – Shared, grants and appropriations, or UNM discretionary funds
8. But For – It won’t happen without our leadership and involvement
TOP INITIATIVES LIST

RAINFOREST APPROACH

- Develop STC 3x Plan
- Venture Funding Continuum
- UNM First to File Process Advantage
- Rainforest Ecosystem Project - T2VC
- Innovation to Enterprise District
- Live/Innovate/Play Complex
- UNM Low Tech Incubator
- Ideation to Enterprise Campaign

EMPLOYER - SECTOR APPROACH

- UNM Federal Contract Management Initiative
- NM Regional Procurement Collaborative
- UNM Internal Economic Base Growth
- Employer Engagement (Job Creation)
- Health and Bio Med
- Solopreneurs
- Advanced Computing and Cyber Security
- Energy, Water & Environment
- Tourism, Sports & Entertainment

CAPACITY BUILDING APPROACH

- BBER Expansion
- Cultural Conversion Initiative
**DEVELOP STC 3X PLAN**

**Initiative:**
In order for innovation and enterprise development to move the needle on economic base job creation in the region in the near term, a scale increase in the pace and quality of local innovation and subsequent conversion of that innovation to local enterprise must happen. UNM.STC is the region’s primary locus for finding, processing, promoting, and converting local advances in science and technology into enterprises that employ New Mexicans. UNM.STC is working on a plan to elevate and accelerate production of new enterprise starts from 5-7 per year to 15-21.

**Key Components:**
- Venture funding continuum
- First to File process advantage
- UNM Innovation Asset Map
- Employer Engagement Initiative
- Rainforest Complex project
- UNM Ideation Campaign
- Consider broadening the scope of the program to include non-technical and non-UNM ideas.

**Expected Results:**
- A Scale increases in the number of and the value of enterprises started
- Jobs created
- IP developed
- Program investment,
- Program ROI
- New programs, resources
- Improved regional and national reputation, etc.
### Rainforest Approach

**Top Initiative Abstracts**

#### Venture Funding Continuum

<table>
<thead>
<tr>
<th>Initiative:</th>
<th>Create a venture-funding continuum that serves as a central clearinghouse for funding the emerging “innovation to enterprise” sector of the NM economy. Design and build a new public/private organization that would consolidate, coordinate and accelerate current efforts to seek out, fund and develop economic opportunities flowing from basic and applied research and technology transfer between research laboratories and firms. The organization would provide seed capital for new, innovative firms and their products, and help recruit key scientific, technical and management talent.</th>
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| Key Components: | • Revival or re-activation of the state’s commitment of severance tax funding support. Review the existing Severance Tax Permanent Fund unutilized/under-utilized economically targeted investment formulas for re-direction. There are currently over $1.5 billion in existing, legislatively approved (and designated for economic development) targeted investment pools under the $3.5 billion Severance Tax Permanent Fund (STPF). Without reducing the corpus, over $1 billion of these designated resources are not currently being utilized or deployed.  
  • An integrated program framework similar to Oklahoma’s Center for the Advancement of Science and Technology. ([www.ok.gov/ocast](http://www.ok.gov/ocast))  
  • An independent review board of science and industry capital providers to assess proposals.  
  • A UNM Foundation driven seed funding consortia of NM foundations and angel investors that run a “Venture Light” program, where individuals pitch ideas for $5,000 to $10,000 in early seed funding.  
  • An EB-5 regional center as a conduit for non-recourse, foreign direct investment.  
  • A second stage maturation fund. |
| Expected Results: | More projects funded, more retained in NM over the maturation process, a return of between 3:1 and 11:1 on the resources invested, $1 billion commitment over 10 years, which could mean more than an additional $6 billion invested in NM’s economy over the next decade, and an incremental jobs impact of more than 40,000 new high wage jobs created. |
UNM FIRST TO FILE PROCESS ADVANTAGE

Initiative: In the wake of escalating risk and uncertainty, resulting from the new AIA first to file patent rule changes, STC.UNM should research and develop a proprietary process, built around a low-hassle, encrypted protocol enabling digital journaling of collaborative contact. It could deter IP theft (defections), enhanced investor reliance, attract new IP traffic from outside the state and enhance the University prowess within the global innovation to enterprise community.

Key Components:
- Digital verification of collaborative activity could support the application of “sanctions” within the system. The objective is to create a “trusted dome” or a kind of virtual Bell Labs within which to collaborate in relative IP safety.
- System’s “enforcement structures” must be designed to gain both initial UNM investigator acceptance now and external investigator acceptance later. Imposing collaborative “frictions”, far more stringent than today’s PI journals, must be weighed against conclusions regarding their contribution to your system’s added reliability to prospective private and public investors.
- With respect to such a system’s licensure as a platform on which to collaborate post AIA patent prosecution of that process (likely as a business method) should be initiated immediately, while everyone is still operating under the existing, more reliable FTI format.

Expected Results: Innovators will bring their IP and enterprise development activity to STC.UNM, creating a scale increase in number and value of IP, resulting in a scale increase in local enterprise activity.
RAINFOREST APPROACH

### RAINFOREST ECOSYSTEM PROJECT - T2VC

| Initiative: | UNM should capitalize on an emerging strategic relationship with innovation and entrepreneurship thought leader, Victor Hwang, and his venture capital firm, T2VC and Rainforest Architects Institute, to help New Mexico develop a formal approach to building the ecosystem required to achieve scale increases in the rate and quality of innovation driven entrepreneurship. |
| Key Components: | Talent Registry, Funding Continuum, External Outreach, Ideation Campaign, Cultural Conversion Curriculum, I>E District |
| Expected Results: | Increased access for New Mexico entrepreneurs to venture capital from T2VC and their allies. |
| | Increased access to world-class keystone players, i.e. marketing, management, and technical talent. |
| | Increased access to new enterprise opportunities from his rapidly expanding global network of innovators. |
| | Special access to international world-class students, faculty and thought leaders. |
| | A global marketing platform to promote the academic and entrepreneurial prowess of UNM and the State. |
| | Leverage his international reputation and acumen as a thought leader to educate and motivate state and local business leaders and policy makers on the opportunities and the importance of developing this crucial sector. |
### INNOVATION TO ENTERPRISE DISTRICT

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<th>Initiative:</th>
<th>Establish an Innovation to Enterprise District Development Organization to drive the Rainforest approach to economic development in the area. The District would be a public-private consortia of the current players in the I&gt;E space, and would include STC.UNM, UNM Main Campus, Medical Campus, South Campus, CNM, Downtown Albuquerque, Nob Hill, Mesa del Sol, Sandia Science and Tech Park, and WESST, as well as private operations, such as the Bio Tech Center.</th>
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<td>Key Components:</td>
<td>The Initiative Would Endeavor To</td>
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<td>• Map and organize the diverse and currently disintegrated efforts to stimulate innovation that causes new enterprise development.</td>
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<td>• Develop a plan to produce scale increases in jobs created in the area driven by innovation and new enterprise development.</td>
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<td>• Identify gaps in the continuum of programs and resources and work together strategically expand and improve.</td>
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<td>• Serve as a central point for leveraging private and public support for the Rainforest approach to economic development.</td>
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<td>• Measure individual and collective production of the region’s I&gt;E sector program efforts.</td>
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<td>Expected Results:</td>
<td>Enterprises started, jobs created, IP developed, program investment, program ROI, new programs, new resources, improved regional and national reputation, etc.</td>
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### Initiative
Design, develop and manage an extended stay, mixed-use complex, where students and community members keystone players can reside, innovate and collaborate on building enterprises and recreate in a purpose built supported environment for innovation and entrepreneurship. Space would be reserved for active innovators, entrepreneurs and “Keystone Species.”

### Key Components:
- Resident dorms for students trying to start businesses
- Resident hotel, apartments and condos
- Collaborative work space, solopreneurs co-working space
- Enterprise development suites
- Rapid prototyping, 3D printing fab
- Business planning and development services
- Retail amenities
- Concierge service

### Expected Results:
A global showcase for UNM’s ability and program commitment to driving innovation and its conversion to commerce.
UNM LOW TECH INCUBATOR

Initiative: Establish an on campus Low Tech Incubator to encourage innovation and enterprise development of new economic base enterprises, which are not science or technology based and or do not require extensive intellectual property protection. The program would promote entrepreneurship among faculty, students and community members in areas such as health services, manufacturing, sports, tourism, education, applied research, consulting, social services, art and culture, government services, public administration, environmental services, architecture, logistics, etc. The Low Tech Incubator could function as a sister organization to STC.UNM or a stand-alone operation.

Key Components:
- Conduct an expanded on campus ideation campaign to increase the number and quality of new enterprise starts.
- Establish a network of ideation Labs (could start with a campus wide business idea contest with a roving Ideation lab)
- Tourism, Sports and Entertainment Lab
- Independent Consulting Services Lab
- Health Services lab
- Energy, Water and Environment Lab

Expected Results: A scale increase in the number of new business and job created from non-technical innovation from UNM.
IDEATION TO ENTERPRISE CAMPAIGN

**Initiative**
Build an on-campus campaign to promote innovation and new economic base enterprise development from UNM faculty, students and community members. The campaign is envisioned as an expanding series of small brainstorming events and cross discipline mixers around campus, where problems are discussed, new products and services are conceived and enterprise teams are formed. The ideas produced are fed into a series of high profile presentation events, where the most promising are invited to participate in compressed weekend business planning retreats.

Science and technology based innovations requiring patent protection would be routed to the STC.UNM, while low or no tech projects would be worked through an allied non-tech incubation program for development and launch.

**Key Components:**
- Informal, cross discipline mixers, where faculty and students from one department host an innovation mixer from another.
- Friday’s open ideation session conducted in the Student Union Food Court held weekly from 3-5 pm.
- Weekend business planning workshops and retreats.
- Monthly UNM-hosted Ignite presentation programs feeding an annual or semi-annual TEDx Innovation Event at Popejoy Hall.
- A “Best in the World” promotion campaign that celebrates UNM faculty who have risen to the top of their field.

**Expected Results:**
- A scale increase in the number of economic base enterprises started at UNM
- A scale increase in the number of ideas for starting new economic base business feeding business incubation programs
- Improved faculty and student culture for innovation and entrepreneurship,
- Improved communication between academic departments
- Increased awareness of UNM’s role in innovation driven economic development.
## UNM FEDERAL CONTRACT MANAGEMENT INITIATIVE

### Initiative:
UNM develops the capacity and the teams required to compete for win and hold of the major federal management contracts, with significant economic impact on the economic base of the state, such as Sandia National Labs, Los Alamos National Labs, Waste Isolation Pilot Project, etc.

### Key Components:
- A regularly scheduled quarterly meeting of UNM President and Lab directors to strategize on downsizing issues and economic development opportunities
- A Program Management Pursuit team
- A mutual post doc exchange program

### Expected Results:
Stop loss of the administrative transfer of thousands of economic base jobs and contracts from New Mexico to other states with stronger congressional delegations. (1,000-3,000 jobs)
**NM REGIONAL PROCUREMENT COLLABORATIVE**

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<tr>
<th>Initiative:</th>
<th>Organize the region's major purchasing vendors to book more business from the region's major procurement sources, allowing local enterprises to grow faster and create more local jobs. UNM would help grow the program by partnering with the City of Albuquerque's ABQ Thrive program and other similar efforts underway in the region, such as NM Bio's Purchasing Collaborative Initiative, Sandia National Lab's Vendor Matching Program, and Rio Rancho EDC’s procurement program. The program would endeavor to systematically subscribe, connect and promote business transactions between the major buyers and suppliers in the region, through a DEX online registry.</th>
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| Key Components: | - Marketing – media campaign  
- Supplier contact and registration campaign  
- Supplier side registry - DEX online system  
- A major buyers collaborative  
- Vendor-buyer matching conferences  
- Marginal procurement volume and job creation |
| Expected Results | More projects funded, more retained in NM over the maturation process, a return of between 3:1 and 11:1 on the resources invested, $1 billion commitment over 10 years, which could mean more than an additional $6 billion invested in NM's economy over the next decade, and an incremental jobs impact of more than 40,000 new high wage jobs created. |
### UNM INTERNAL ECONOMIC BASE GROWTH

**Initiative:** UNM is an economic base employer, in its own right, when research, education, applied research and services are paid for by out of state taxpayers, students or customers. Jobs added by UNM, as a result of out of state income employment, grows the economic base of the region and causes a proportional increase in local service sector jobs. The University should develop a strategy to systematically develop, track its economic base contribution to the region over time and communicate it to state and local government leaders and the public.

**Key Components:**
- An internal UNM economic base development plan
- External media relations and communications program to promote results

**Expected Results:**
- A scale increase in the number of new jobs funded by out-of-state revenue sources
### Employer - Sector Approach

**Initiative:** More closely align the interests of UNM and employers in the community. Organize the University to systematically engage the region's private and public employers to match practical academic and research assets to needs of employers. An employer engagement strategy will serve a broad spectrum of mutual objectives in areas including: development of new products, services and markets, technological and process improvement, marketing, state and local expansion and retention efforts, workforce development, student success and job placement, cultural conversion, political capital, development, applied research work, fundraising, etc.

**Key Components:**
- A comprehensive employer engagement plan, beginning with documenting and tracking current engagement activity
- A campus wide expansion of Anderson School’s Speakers Bureau Program
- An in-house marketing and booking agent to promote, manage and track engagement
- Systematic engagement with the 350 plus trade associations in the region
- Expansion of existing UNM/employer engagement initiatives targeting Lobo owned or operated economic base employers in the region.
- Employer internship and mentorship opportunities development tied to future job placement
- Partnerships with state and local expansion and retention programs
- Partnerships with employers being recruited by state and local economic development organizations
- Research and technology/business solutions matching services

**Expected Results:** Increased economic base job creation, new economic base employer expansions and attraction transactions, stronger community relations, increased applied research and value faculty consulting revenue, stronger alignment of curriculum to the local job market, improved graduation rates, higher placement and retention of graduates, etc.
Health and Bio Med

Initiative: UNM Health Services and the Albuquerque Chamber of Commerce work to develop a comprehensive, regional economic development strategy. UNM is in a unique position to lead the planning, development and execution of a strategy to help New Mexico communities plan for and develop the additional new service delivery enterprises, and the qualified workers needed to staff them. UNM’s bio-medical science and engineering schools and applied research faculty are in a position to invent and bring to market new products and services.

Key Components:
- Apply UNM’s leadership position in economic analysis, public health research education and delivery, to define the opportunity and unify key players behind a strategic planning effort.
- An enterprise development strategy designed to help communities expand, retain, recruit and start up additional healthcare deliver service enterprises.
- A workforce development strategy designed to help communities develop, retain and attract the thousands of new healthcare workers needed.
- Restart of NM Bio Tech and advancement of their mission to collaborate with groups, companies, students, professional organizations.
- Participation in Thrive ABQ’s regional procurement program.

Expected Results: Accelerated expansion of existing healthcare employers, creation of hundreds of new businesses.
### SOLOPRENEURS

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<th>Initiative:</th>
<th>Develop a program to attract, start up and expand economic base jobs, one at a time, by focusing on people who work independently. This is one of New Mexico’s fastest growing economic base sectors, and it is completely ignored by existing job creation strategies. Freelancers, consultants and other independent workers, currently account for 18,000 economic base jobs in NM (more than manufacturing) and 16 million workers nationwide. Looming cutbacks of federal spending in NM will produce a windfall of highly educated unemployed local residents who could be converted into independent 1099 contractors, consultants and solopreneurs.</th>
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| Key Components: | • A compelling value proposition of incentives and support services  
• A shared services platform, co-working space and incubator capacity for those working independently  
• An online membership marketing and services delivery system  
• Program for systematic conversion of local unemployed and underemployed residents into high value independent work  
• Recruiting of high value solopreneurs from out of state through tourism alliance with residential real estate and home building industry  
• Increasing the productivity and earnings of existing independent workers |
| Expected Results: | • Thousands of new jobs created from a proliferation of independent worker economic development programs around the state  
• Retention of local science, technical and management talent  
• Planning and organization of a statewide economic development program  
• Establish a pilot program for laid off and gradually retiring federal workers |
### ADVANCED COMPUTING AND CYBER SECURITY

**Initiative:** Establish an Advanced Commuting - Cyber Security Innovation and Enterprise Center to leverage the local concentration of computer science expertise, telecom infrastructure and computing power present in the region to capitalize on the surge in public and private sector investment in protection of proprietary systems, databases, financial transactions and personal identities. The initiative would create a regional Advanced Computing innovation and enterprise development platform that would allow state and local, public and private interests to be used by the University, business and government public and private sector interests will invest billions in cyber security, in the decade ahead, creating a major opportunity.

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<th>Key Components:</th>
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<td>• An open commercial platform for research and development, enterprise development and education</td>
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<tr>
<td>• Formation of a 501(c)3 and application of the Local Economic Development Act (LEDA) to transfer publicly owned equipment and enable local government start up support</td>
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<th>Expected Results:</th>
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<tbody>
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<td>Thousands of new economic base jobs, new economic base enterprises, increased cyber security for UNM, New Mexico institutions, and local businesses, national recognition for UNM.</td>
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</tbody>
</table>
**Initiative:** Establish a multi-discipline research and development center to focus on developing and exporting expertise, systems solutions, products and services at the intersection of energy, water and environment. The center would endeavor to create expanding sources of new economic base jobs, by building on the region's wide array of research, development and entrepreneurship initiatives currently underway, to solve the world's challenges related to energy, water and environment.

**Key Components:**
- An expanded EPSCoR NSF funding initiative
- The Rio Grande Watershed Collaborative as a local in situ Lab for research, development demonstration

**Expected Results:** Economic base job growth from the start up, expansion and recruiting of enterprises that serve the global solutions market in energy, water and environment.
### Initiative:
Develop a tourism, sports and entertainment corporation focused on elevating and expanding receipts from UNM’s and New Mexico’s tourism activities and creating new jobs. The program envisions an innovation lab specializing in development and launch of new tourism businesses and events and development of management talent.

### Key Components:
- **UNM Tourism Lab:** Establish an ideation to enterprise lab to stimulate the development of new tourism attractions, amenities and peak experience destinations throughout the state. Use the lab to create new tourism attractions and experiences and help bring them to market. Provide consulting for rural communities. Operate and market programs through branch campuses.
- **Recreation Tourism Lab:** Develop recreational tourism by encouraging local entrepreneurs to develop a range of fee-based recreation and visitor experiences including stargazing, wildlife watching, geology, paleontology, ecotourism, birding, wilderness experiences, archaeology,
- **NM Cultural Tourism Institute:** Establish a cultural tourism education and enterprise development Institute to promote the development of cultural tourism in the state.
- **NM Regional Sports Corporation.** Form a regional not-for-profit sports and entertainment company.
- **Albuquerque sports district:** Create a district that helps raise the visibility of the city the University and the state by focusing on sports tourism.
- **UNM international soccer invitational:** Host an annual international soccer tournament between for men’s teams and for women’s teams. Goals laid New Mexico’s global exposure through sports and by teams from Mexico and other Latin American company countries.

### Expected Results:
Hundreds of thousands of new visitors, hundreds of new businesses, thousands of new jobs, millions in new revenues to UNM, and the region.
### BBER EXPANSION

<table>
<thead>
<tr>
<th>Initiative:</th>
<th>Expand and strengthen the capacity of the BBER to do market research, economic and demographic analysis and strategic planning for state and local job creation, workforce development and business climate improvement efforts.</th>
</tr>
</thead>
</table>
| Key Components: | • Clarification and promotion of a common conceptual framework, nomenclature and methodology for deliberations on economic development at the state and local level.  
• Research and development of a new suite of data sources and predictive analytical tools that help spot local economic and demographic trends to help community and business leaders respond earlier and more strategically.  
• Analytical and reporting tools to help employers, students and prospective workers, education and training institutions and local leaders make better strategic decisions.  
• A think tank to develop and test new job creation and workforce development program approaches.  
• A strategic planning and Community Leadership Institute to help educate and prepare local leaders for a new era in economic development. |
| Expected Results: | Clearer more productive deliberation's on economic development issues state-wide, coherent strategic planning and accountability for economic development and workforce development efforts, better accounting for return on incentives, stronger economic development marketing, sales and closing results. |
## CULTURAL CONVERSION INITIATIVE

<table>
<thead>
<tr>
<th>Initiative:</th>
<th>Lead a cultural conversion of New Mexico's academic, business and government communities to prepare for an economy driven by innovation and entrepreneurship.</th>
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</thead>
</table>
| Key Components: | • Employer engagement program  
• Celebration of faculty and student entrepreneurs  
• Communication of UNM contributions to regional economic development  
• Cognitive skills curriculum  
• Design curriculum  
• Entrepreneurship curriculum  
• Economic development curriculum  
• Ethics curriculum  
• Inter-department design, innovation and entrepreneurship mixers |
| Expected Results: | • More employers hiring UNM graduates and interns  
• Stronger employer recruiting, expansion and enterprise development results, more economic base jobs created |
While the President and his leadership team have begun acting on a short list of high priority projects, the majority of the ideas, initiatives and recommendations surfaced during the listening campaign must continue to be sorted, evaluated, prioritized and scheduled for action. Many of the high impact initiatives currently under consideration lack the budget, staffing and formal partnership relationships needed for implementation. Implementation, given today’s budget environment, will require generating maximum synergy and leverage from allied program efforts. This will require a new level of cooperation, commitment and engagement inside and outside the University. It is the President’s intent to implement the University’s economic development agenda without creating an additional bureaucratic subdivision within the University.

President Frank formed an Economic Development Advisory Group to help process the ideas and initiatives that have been generated, and provide advice on development of a program of work. The next step is for the President’s executive leadership team and the Economic Development Advisory Group (EDAG) to finish prioritizing and sorting the initiatives under consideration.

EDAG MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
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<tbody>
<tr>
<td>Doug Brown (Chair)</td>
<td>Dean Anderson School of Management, UNM and STC Board Member</td>
</tr>
<tr>
<td>Sandra Begay-Campbell</td>
<td>STC Board Chair and SNL Tribal Energy Program</td>
</tr>
<tr>
<td>Barbara Brazil</td>
<td>Deputy Cabinet Secretary, EDD, State of New Mexico</td>
</tr>
<tr>
<td>John Chavez</td>
<td>President, New Mexico Angels</td>
</tr>
<tr>
<td>Terri Cole</td>
<td>President, Greater Albuquerque Chamber of Commerce and STC.UNM Board Member</td>
</tr>
<tr>
<td>Robert (Bob) Curtis</td>
<td>CEO, Respira Therapeutics</td>
</tr>
<tr>
<td>Dale Dekker</td>
<td>Principal, Dekker/Perich/Sabatini</td>
</tr>
<tr>
<td>Robert Fisher</td>
<td>Founder, Fisher Leadership Strategy Execution</td>
</tr>
<tr>
<td>Richard Gill</td>
<td>CEO, TruTouch, member of LaunchPad investors</td>
</tr>
<tr>
<td>Lisa Kuuttila</td>
<td>President &amp; CEO, STC.UNM</td>
</tr>
<tr>
<td>Mark Lautman</td>
<td>Founder, Community Economics Lab</td>
</tr>
<tr>
<td>John T. McGraw</td>
<td>Professor and Vice President for Research and Economic Development, UNM</td>
</tr>
<tr>
<td>Eric Prossnitz</td>
<td>UNM Inventor, faculty member, is leading the Biodesign program at HSC, and is chair of the HSC COI committee</td>
</tr>
<tr>
<td>Catalin Roman</td>
<td>Dean, School of Engineering, UNM</td>
</tr>
<tr>
<td>Mathis Shinnick</td>
<td>Principal, Hanserd Holdings Limited</td>
</tr>
<tr>
<td>Gary Tonjes</td>
<td>President, Albuquerque Economic Development and STC. UNM Board Member</td>
</tr>
<tr>
<td>Chuck Wellborn</td>
<td>Former President, Science &amp; Technology Corporation @ UNM, Retired</td>
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**HIGHEST JOB CREATION IMPACT**

- Health and Bio Medical
- Program Management
- Procurement Maximization
- Advanced Computers & Cyber Security
- Solopreneurs
- Tourism, Sports and Entertainment
- Employer Engagement
- Venture Funding Continuum

**WEEK ONE**

- Regional Procurement Effort
- Jan- June Ideation Campaign
- Project Refinement Meeting Schedule
- UNM STC Begin Asset Mapping Project
- Begin Employer Engagement UNM

**EASIEST, FASTEST, CHEAPEST**

- Regional Procurement Initiative Pilot
- Employer Engagement
- 1st to File
- BBER Expansion
- Ideation Campaign