

*Solving New Mexico's  
Small Business Challenges*

New Mexico Small Business  
Assistance Program

**PERSPECTIVES**  
**2007**



“ We spent a year in the development stages of the handle before we had the opportunity to work with the NMSBA. With their help, we were able to create a better product in roughly 20% of the time, we are so lucky to have had the chance to work with the folks at the NMSBA, they gave our company the successes we now enjoy. ”

– Nate Zich,  
Co-owner, Brown La Salita



Dear Governor Richardson and New Mexico State Legislators,

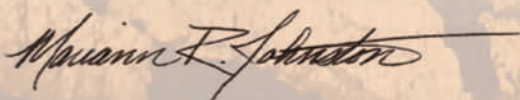
We are pleased to share with you the 2007 Annual Report for the New Mexico Small Business Assistance Program.

The program achieved record results that benefited companies throughout New Mexico in this initial year of Los Alamos National Laboratory and Sandia National Laboratories working jointly. Laboratory staff shared their expertise and resources with 315 assistances to help 288 small businesses solve their technical challenges. The small businesses represented 22 counties across the state. The State of New Mexico and national laboratories invested nearly \$2,650,000 to accelerate New Mexico's economic future.

The numbers only tell part of the story: chile farmers in southern New Mexico received assistance to destem chile in a more efficient and cost effective manner. Two young entrepreneurs in central New Mexico worked with Lab engineers to develop a more hygienic trash receptacle being used in area restaurants. Lab scientists are modeling watershed and river channel sediment transport to better understand the effects of saltcedar removal for water management strategies in the Middle Pecos Basin.

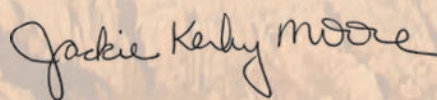
We truly appreciate your ongoing leadership in support of the New Mexico Small Business Assistance Program, and we look forward to collaborating with you during the coming year to strengthen our small businesses and to create economic wealth for the great State of New Mexico.

Sincerely,



Mariann Johnston

*Los Alamos National Laboratory*



Jackie Kerby Moore

*Sandia National Laboratories*

“ Our collaboration with SNL and LANL helped us to learn how to use cutting edge technology cost effectively. ”

– David Meurer,  
Business Development Officer, Albuquerque Armed Response Team

## 1. BUILDING NEW MEXICO’S ECONOMY

In 2000, the New Mexico Legislature established the New Mexico Small Business Assistance (NMSBA) Program to help small businesses throughout the state by providing technical support from Sandia National Laboratories (SNL). In 2007, the Legislature amended the program’s enabling legislation to expand the NMSBA Program and add Los Alamos National Laboratory (LANL) as a program partner.

The NMSBA Program has provided thousands of businesses expert guidance on technical issues. The program delivers a cost-effective means for economic development through business creation, sustainability, expansion, and workforce development. In the last 8 years, the NMSBA Program has assisted more than 2,077 small businesses with more than 2,179 projects.

NMSBA administers an annual economic impact survey with the program participants, conducted by Research and Polling. Since its inception, the NMSBA Program participants have created 495 jobs across the state. Small businesses also utilized assistance to decrease their operating costs by over \$6,951,900 and increase their revenues by more than \$11,969,700.

Additionally, nearly \$5,462,870 has been invested in expansion efforts and purchases of local goods and services.

The Mission of the NMSBA Program is to have a state-wide impact by solving small business critical challenges through customizing and leveraging national laboratory technical expertise and resources to:


- ▼ Enable New Mexico small business to access cutting edge technology
- ▼ Increase New Mexico small businesses’ technical sophistication and capabilities
- ▼ Share knowledge and resources between laboratory personnel and small businesses to address issues and develop real-world applications

The NMSBA Program is committed to achieve three strategic objectives:

- ▼ Solve small business critical challenges with national laboratory expertise and resources
- ▼ Influence New Mexico business development by building capacity, capabilities, and competencies
- ▼ Act as an advocate for small businesses through an entrepreneurial culture

**Table 1. Business Benefits from the NMSBA Program (2000-2006)**

	2000 - 2006
Jobs Created/Retained	495
Mean Salary (\$)	38,731
Increase in Revenue (\$)	11,969,700
Decrease in Operating Costs (\$)	6,951,900
Investment in NM Goods / Services (\$)	5,462,870



In 2007,  
the NMSBA  
Program  
provided nearly  
\$2.7 million in  
technical  
assistance to  
New Mexico  
small businesses





**Table 2. 2007 Project Tax Credit**

	Rural		Urban		Total	
	Companies	Tax Credit	Companies	Tax Credit	Companies	Tax Credit
SNL	163	\$1,812,071	99	\$487,590	262	\$2,299,661
LANL	24	\$332,842	2	\$15,271	26	\$348,113
Both Laboratories	187	\$2,144,913	101	\$502,861	288	\$2,647,774

As New Mexico's population continues to increase, so does its economic prosperity and the benefits that accompany economic growth. Small businesses are the engine that drives job creation in New Mexico. In 2007, there were 315 NMSBA projects that invested nearly \$2.7 million in technical assistance for 288 New Mexico small businesses. Table 2 shows the breakdown of urban and rural companies assisted and the tax credit taken in 2007. The NMSBA Program has had a measurable state-wide impact spanning all regions of New Mexico. Both rural and urban businesses benefited from the program, with rural businesses accounting for 65% of the assistance provided. Since 2000, the NMSBA Program has helped businesses in 31 New Mexico counties.

Figure 1 illustrates the number of companies assisted by county for the life of the program. NMSBA has helped companies to reduce costs, hire new employees, and make businesses more profitable. This creates higher gross revenues and increases tax receipts for the state.

**Figure 1. Number of Companies Assisted from 2000-2007**



“The NMSBA Program established a clear baseline to find our limiting factors, which helps keep water flowing to 6,000 customers.”

– Bill Ahrens,  
Manager, Carlsbad Irrigation District



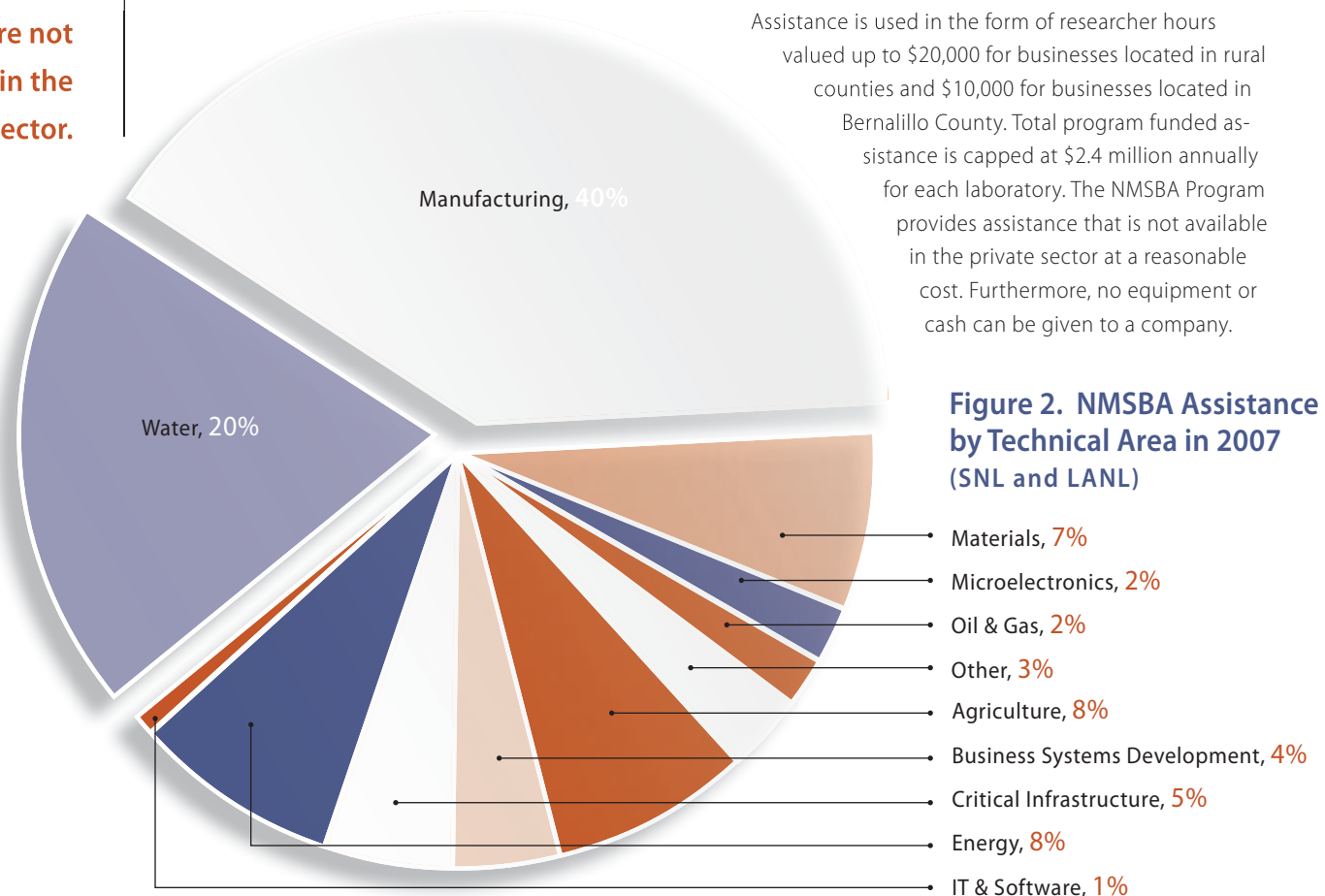
The NMSBA Program gives NM small business access to technologies and expertise that are not available in the private sector.

## 2. MEETING THE SMALL BUSINESS ASSISTANCE CHALLENGE

The Laboratory Partnership with Small Business Tax Credit Act defines small business assistance as assistance rendered by a national laboratory related to the transfer of technology, including software, manufacturing, mining, oil and gas, environmental, agricultural, information technology, and solar as well as other alternative energy source technologies.

“Small business assistance” also includes non-technical assistance related to expanding the New Mexico base of suppliers, business assistance in developing business systems to meet audit, reporting and quality assistance requirements, and other supplier development initiatives for individual small businesses. Figure 2 shows the breakdown of 2007 NMSBA assistance projects by technical area.

Assistance is used in the form of researcher hours valued up to \$20,000 for businesses located in rural counties and \$10,000 for businesses located in Bernalillo County. Total program funded assistance is capped at \$2.4 million annually for each laboratory. The NMSBA Program provides assistance that is not available in the private sector at a reasonable cost. Furthermore, no equipment or cash can be given to a company.



**Figure 2. NMSBA Assistance by Technical Area in 2007 (SNL and LANL)**



Small businesses can participate in the NMSBA Program through three different types of projects:

### Individual Projects

Individual projects involve a single New Mexico for-profit small business. Projects address challenges specific to the business that can be solved with national laboratory expertise and resources. Technical assistance challenges are wide ranging, and the majority of projects include: testing, design consultation, and access to special equipment or facilities. Requests for individual projects are accepted year round.

### Leverage Projects

Leverage projects allow a group of small businesses that share technical challenges to collectively request assistance with issues that are too large or complex

to solve through an individual project. Proposals for leverage projects are reviewed once a year by the NMSBA Program and its advisory council.

### Contracted Projects

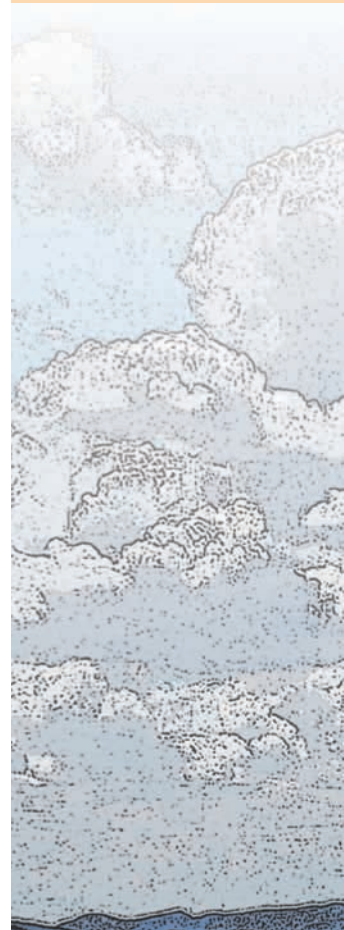
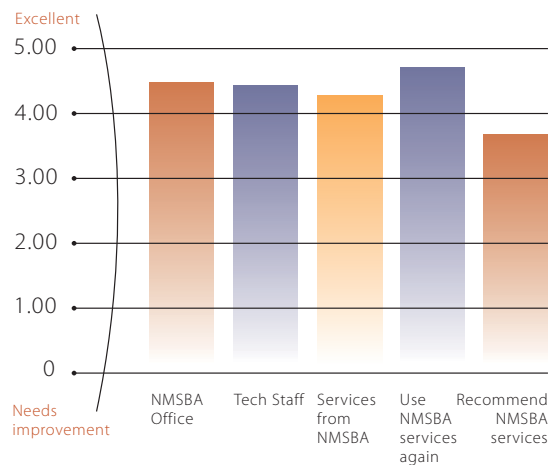
The NMSBA Program is allowed per legislation to contract with entities that have the capability to provide small business assistance services that are not available in the private sector at a reasonable cost. Current contracts include the New Mexico Manufacturing Extension Partnership to provide training and assistance in the areas of quality and lean manufacturing principles, and the University of New Mexico's Anderson Schools of Management and Management of Technologies Program to provide technology road mapping and assessments.

## 3. REALIZING THE SUCCESS OF THE PROGRAM

The New Mexico Small Business Assistance Program has enabled small businesses in New Mexico to acquire essential knowledge and to flourish. Los Alamos National Laboratory and Sandia National Laboratories have provided small businesses access to cutting edge technology resources. Each small business uses the NMSBA Program's assistance in a different way, but they all use it as a means to grow their business.

NMSBA enables small businesses to make products ready for commercial use, reach development goals, and increase profitability. Small businesses receive guidance and consulting in all business areas and are given suggestions on business alternatives taken from the laboratories technical expertise. Alternatively, some businesses are looking for performance and design optimization. The NMSBA Program's ability to meet small business needs is exemplified by the high customer satisfaction ratings from New Mexico businesses, shown in Figure 3.

**Figure 3. 2007 Customer Satisfaction (SNL and LANL)**





“The NMSBA Program provides a unique capability to businesses to have access to not 1, but 2 national laboratories’ expertise.”

– Sig Silber,  
Super Cooled Liquid Cloud Water Inventory Program

## The Small Business Impact

The following program participants exemplify the various ways NMSBA projects around the state are beneficial and critical for the success of the small business community.

### Archeobotanical Services – Abiquiu Project Overview

Archeobotanical Services conducts analyses to bring color to the black-and-white of human history. The assistance provided to Archeobotanical centered on the evaluation of archeological artifacts for the signatures that might be attributable to an intentionally fermented food product based on corn.

#### Economic Impact

Using the same techniques as in antiquity, Archeobotanical performed experiments which yielded data that could only be recovered by the special equipment at Sandia Labs. This data and the laboratory protocol developed to produce them promise to revolutionize archeological thinking about the use of fermented foods and beverages in antiquity. The benefits of fermented maize products, if re-introduced into native cuisine, have the potential to enrich the traditional diet of people living today.

The press reports of this fermentation study have generated interest from archeologists internationally who want to know if their samples might show evidence of fermentation. Archeobotanical Services will submit the research for publication in *Science*, *Nature*, or the *Proceedings of the National Academy of Science* in the next year, which will enhance Archeobotanical Services’ reputation and bring new projects to Sandia Labs.

David Meurer, Albuquerque  
Armed Response Team

### Armed Response Team – Albuquerque Project Overview:

Armed Response is a commercial security firm located in Albuquerque that provides security solutions for large exterior sites such as construction sites, secured vacant buildings, storage yards, etc. The technical challenge for Armed Response was to find perimeter security technologies for large areas that would be effective, practical, and economical. By incorporating the most up-to-date security approaches and increasing the effectiveness and scope of their business, the NMSBA Program assisted in developing innovative, cost effective solutions for economically difficult video transmission and power supply issues.

#### Economic Impact:

The NMSBA Program’s services saved Armed Response between \$20,000 and \$40,000 in research and development, reduced their experimental material needs and man power, and decreased timeline for this project by at least 6 months. Some construction projects in New Mexico have seen as much as a several hundred thousand dollar decrease in theft because of this technology. Armed Response has also experienced is an increase in total employment by 30% because of this new technology. Permanent full time positions have been added to assist in the growing need to keep theft and intrusions low and the best technicians and specialists out in the field.



Archeobotanical dried malted corn porridge



**NMSBA**  
enables small  
businesses to  
grow their  
business.





## Brown La Salita – Albuquerque

### Project Overview

Brown La Salita formulated an idea for a handle attached to commercial-scale garbage can lid that gives the customers and employees the ability to reduce their exposure to the lid flap. John Brown and Nate Zich approached the NMSBA Program with a 3-D image file and rough models of their new product, the “Helping Handle”. The NMSBA Program’s technical team turned the computer model into a format that Sandia’s rapid prototype machine could interpret.



The innovative design of the Helping Handle prevents messy spills, saving time and money.



### Economic Impact:

Brown La Salita used the prototypes to make hundreds of sample products and installed the handles in several restaurants in Albuquerque. The NMSBA Program helped in decreasing development time by approaching the project from several new angles. If Brown La Salita did not have the opportunity to work with the labs, both the time line and costs would have increased exponentially. With the help of the NMSBA Program, Brown La Salita is slated to sell several thousand units in the coming fiscal year. Brown La Salita was able to hire a sales team that promoted this product to new customers. Brown La Salita is releasing these products nationally, thanks to NMSBA Program.

## Carlsbad Irrigation District (CID) – Eddy County

### Project Overview

The CID and its members are concerned that saltcedar removal in the Pecos River Basin is causing bank

destabilization and silting-in of Brantley Reservoir near Carlsbad. Researchers from SNL and LANL are modeling watershed and river channel sediment transport to evaluate the potential sedimentation risks and mitigation strategies associated with removal of saltcedar in the Middle Pecos Basin.

### Economic Impact

SNL and LANL provided firm baselines for salinity and sedimentation in the water flowing through the Brantley Reservoir, which serves 25,000 acres of farm land. Farming accounts for nearly \$15 million per year in gross receipts in the CID. Water deficiencies would decrease crop yields and damage the district’s economy. Without the NMSBA Program’s assistance, the CID would not have accurate baselines for salinity and sedimentation levels. Managing these levels extends the useful life of the dam. Economic benefits are very significant, as costs to replace the Brantley dam are estimated to be \$500 million.

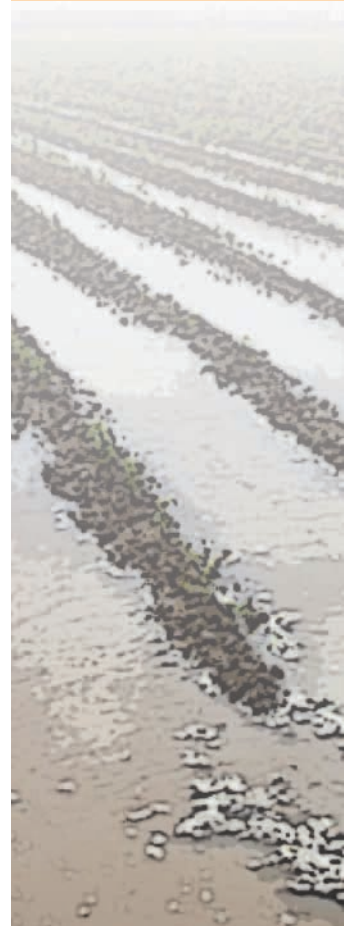
## Liste De Technologies – Los Lunas

### Project Overview

Liste de Technologies (Liste de) sells electronic testing and measuring instruments and systems for measurement of physical parameters. As part of its expansion and diversification plan, Liste de is in the process of starting a solar product testing and certification lab, which will be able to meet the demands of the aggressively growing solar industry by providing on-time testing and certification services. A Technological Assessment study by the University of New Mexico provided an internal audit benchmarking the company’s technological competencies, managerial capabilities, and provided a snapshot in time of their ability to provide value to a user community.

### Economic Impact

The worked performed under this program enabled Liste de to identify more adequately their market and potential global competitiveness. With the help of the NMSBA Program, Liste de’s marketing development time was cut from 6 months, to 3 months. Liste de’s program will have a market edge by not carrying the current burden of 6 to 9 month waiting time for certification. Liste de plans to gross \$5 million a year within 5 years.





The NMSBA Program provides small businesses with the tools for improving productivity and gain a competitive advantage in the marketplace.

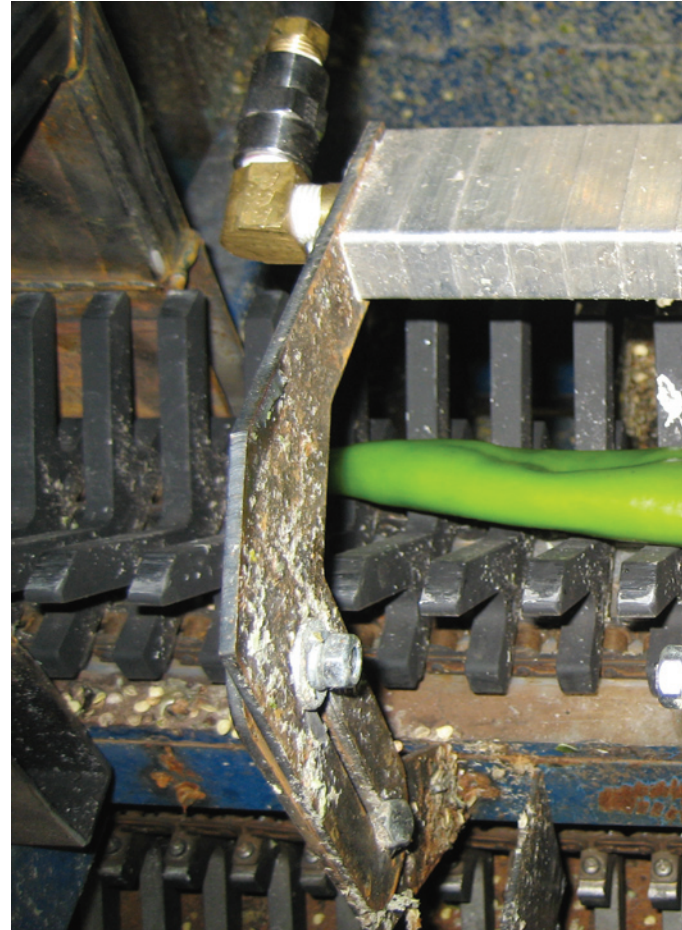
## New Mexico Chile Association – Doña Ana County and Luna County

### Project Overview

The New Mexico Chile Association (NMCA) is a non-profit organization composed of chile growers and producers who are fighting to ensure the \$325 million, 4,000 full time employee and 10,000 part time employee chile industry remains and prospers in New Mexico. NMCA and the NMSBA Program focused on developing an automated chile destemming technology. Sandia's primary responsibility was to construct sensor technology to allow for mechanical destemming.

### Economic Impact

Almost all of processed green chile, some dried red chile, and cayenne peppers require pods to be destemmed for processing. Traditionally pods were destemmed in the field during hand picking. Availability of labor to perform this operation is diminishing on both sides of the US/Mexico border. Successful completion of this project will allow New Mexico processors to accept more readily available stemmed pods manually or machine harvested from both sides of the border. This will maintain the market for New Mexico growers and allow New Mexico processors to remain competitive in the global market.



Automated chile destemming technology



## Sunland, Inc. – Portales

### Project Overview

Working with dozens of growers and 147 full-time employees, Sunland takes great pride in every step of the process that brings Valencia peanuts to market.



Sunland peanut plant in Portales, New Mexico

In addition to processing raw, roasted, salted and unsalted peanuts, Sunland is the only manufacturer of peanut butter in the state of New Mexico. Using NMSBA Program resources, the New Mexico Manufacturing Extension Partnership (MEP) was able to provide Sunland, Inc. with a variety of solutions, including workshops to improve employee productivity and to learn the principles of lean manufacturing, which eliminates waste and increases profitability.

### Economic Impact

One of Sunland's most notable accomplishments as a result of their work with MEP has been the changes made in the peanut butter plant. Previously, it took up to two hours to change from one type of peanut butter and jar size to another. Now this process takes only 30 minutes. Productivity is increased by at least 5% and at least 3 hours of labor are saved each week. Employee seminars that increase productivity and im-





to provide services for a worldwide market that will be interested in developing similar information for their geographies.

**Economic Impact**

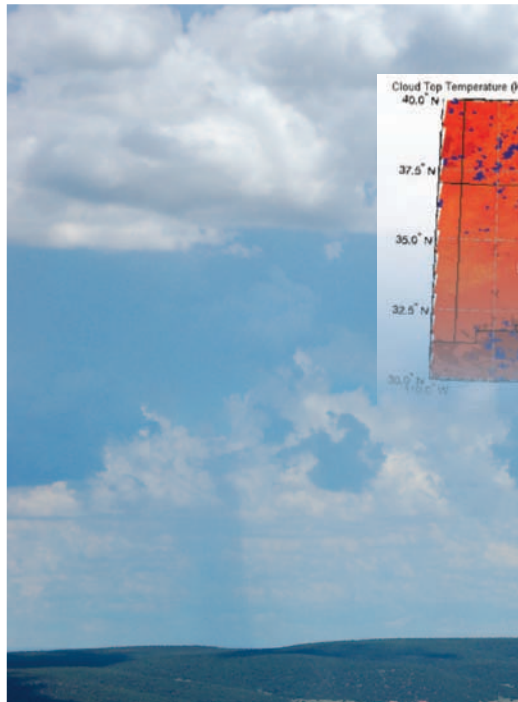
Sponsors see a yet unquantified business opportunity for themselves as well as refinements to their business plans which will enhance their business' success. New Mexico will also benefit as the cost to offset aquifer depletion in New Mexico will likely exceed \$250 million this year. The cost of cloud seeding is 1% of the cost of pumping water from an aquifer and does not have the same detrimental effects to the ecosystem.

prove interaction with Sunland's customers have also been important to Sunland. The NMSBA Program has helped Sunland Inc. to gain a competitive advantage in the marketplace.

**Super-Cooled Liquid Cloud Water Inventory– Santa Fe**

**Project Overview**

Given the recent drought and projections of a 400,000 acre-feet water deficit for New Mexico in 2040, several businesses are very concerned about the sustainability of available water into the future. The group is studying the opportunity for a liquid cloud water inventory in New Mexico, including both the technology and the benefits to the sponsors of this project, as well as exploring the use of this technology to increase precipitation in the state. The sponsors anticipate using the information and model to refine their business plans and see opportunities



Liquid cloud water inventory study in New Mexico

This technology can save the state nearly \$500 million by decreasing drought conditions, increasing land productivity, and continuing to provide for the people of New Mexico. The surveys will also help to predict the impact of climate change on winter snow water storage in mountainous areas, as well as having applications for aircraft safety de-icing, preparing for climate change, controlling fog at airports, suppressing damaging hail, decreasing fire probability, increasing natural irrigation, and recharging New Mexico's aquifers.



“NMSBA Program in association with UNM’s Anderson business school has helped us evaluate our business and understand our standing in the market, in an expedited process.”

– Chethan Parameshwariah,  
Liste de Technologies

## 4. FUTURE DIRECTION

The New Mexico State Legislature created NMSBA as an economic development tool that focuses on the backbone of the New Mexico economy, small business growth. Thanks to the legislators, the strong support from the Governor, and other advocates of business in New Mexico, the state is capturing the many benefits from the program. This partnership among the small business community, the State of New Mexico, Los Alamos National Laboratory, and Sandia National Laboratories has enabled business development, creation of high wage jobs, and increased tax revenues.

Since the integration of Los Alamos National Laboratory in the most recent program year, New Mexico is fortunate to have the expertise

of two national laboratories supporting the small business community. In the coming program year, the NMSBA Program will continue to work to utilize fully the program at both laboratories and help small businesses meet their technical challenges.

It is important to the program that all New Mexico businesses have access to the world class technology located at the state’s two national laboratories. In 2007, nearly two thirds of all businesses were located in rural areas. The NMSBA Program will continue to provide high quality services to New Mexico small businesses.

## APPENDIX 1. PROJECT LISTS

### 2007 Leverage Projects

Lab	Project	Description	Business Participants	Counties	Technical Area	Funding
SNL	Algae to Biodiesel	Provide reference and resource information, assessment, evaluation, and recommendations for approaches, systems, and processes for using algae to produce bio-fuel and other co-products in conjunction with treatment of dairy wastewater.	Ag2Energy, LP; Dairy Producers of New Mexico; Natures Dairy, Inc.; Par 5 Dairy; Pecos Valley Biomass; Three Amigos Dairy; Vaz Dairy	Chaves	Energy	\$76,000
LANL / SNL	Angel Fire Wildfire Study	Conduct a collaborative study on wildfire potential in the Angel Fire community related to forest fuel density, topography, moisture content and weather factors. Determine high hazard areas and the effects of tree thinning to reduce fire potential. Provide information on biomass availability from thinning efforts.	Arthur Insurance; Bella Tierra of Angel Fire; Coldwell Banker; First National Bank of NM; Four Seasons Real Estate; Hacienda Club Real Estate; Monte Verde Realty, Inc; Mountain Sports; Prudential Angel Fire Real Estate	Colfax	Critical Infrastructure	\$80,000 / \$92,000



SNL	Controlled Environment Agriculture for Water Conservation	Investigate and establish conditions for greenhouse forage production viability by conducting operational performance, forage product quality and suitability, and economic tradeoff assessments.	Continental Exchange Trust; Curtis & Curtis; Gonzalez Dairy Inc.; Indio Hispano Youth Corps; Los Poblanos Organics, LLC; Ross Gardens; Soil Secrets LLC; Soilutions; SouthWest BioEnergy, LLC; Wilderness Flowers	Bernalillo; Curry; Dona Ana; Santa Fe; Torrance; Valencia	Agriculture	\$96,000
SNL	Desalination Technology for Coal Bed Methane (Natural Gas) Produced Water Treatment	Evaluate desalination of brackish produced water from coal bed natural gas wells and the possibility of using the desalinated water beneficially.	Biosphere Environmental Sciences and Technologies, LLC; Four Corners L & B; McDonald Enterprises	Sandoval; San Juan	Water	\$58,000
SNL	Development of a Decision Support Model to Support a Regional Water Resource Plan	Identify data sources and begin development of conceptual water model for Lincoln County.	PowerPlus Car Wash; Ruidoso News; Seasons Nursery; State National Bank	Lincoln	Water	\$55,000
SNL	Hydraulic Testing and Analysis Technology Transfer	Increase the utilization of water well service providers in the data collection and hydraulic testing activities in the Upper Hondo imparting valuable experience in a hydrogeologically complex environment.	Bentle's Water Well Svc Inc; Carriaga Machine; Eagle Creek Drilling; Fulfer Oil & Cattle Co., LLC	Eddy; Lea	Water	\$59,000
SNL	Hydrogel Efficacy and Applications Project - Increasing Irrigation Efficiency by Improving Hydrodynamic Soil Properties	Fabricate and employ a variety of hydrogel soil conditioners, and then qualify their ability to improve soil hydrodynamic properties on crop fields.	Calvani Farms; Farmer's Daughters, LLC; Guadalupe Carrasco; L. R. Hinojos	Eddy	Agriculture	\$59,000
LANL	Las Vegas Wildfire Fuels Management Study	Investigate the ramifications of various fuel management practices in the wild lands near Las Vegas, New Mexico through the use of the computational tools, HIGRAD/FIRETEC. Idealized and realistic simulations using fuel loads, topography, and representative winds from the Las Vegas Area will be used to provide critical information about the relationship between fuel loads/conditions and fire behavior in the area.	Barela Timber Management; Healthy Buildings	San Miguel; Santa Fe	Critical Infrastructure	\$40,000
SNL	New Mexico Chile Association Chile Destemming Project	Complete the testing and refinement of modified sensor system for use in chile destemming. Test and conduct evaluation and refinement of final lab sensor system.	Cervantes Enterprise; Diaz Farms; New Mexico Chile Products; Rancho La Frontera; W.R. Johnson & Son	Luna	Agriculture	\$53,000

SNL	Quantitative Interpretation of Seismic Reflection Data for Subsurface Fluids via Full-Waveform Modeling	Full-waveform numerical modeling of seismic wavefields, utilizing SNL's existing suite of 3D seismic wave propagation algorithms appropriate for acoustic, elastic, and poroelastic media. Quantitative interpretation and analysis of both field-recorded and synthetic seismic data, with the goal of inferring subsurface fluid distribution and properties.	Aspen Company LLC; Ch-4Net.com; GeoScience Technologies; Rio Magdalena Investment Corp; Sun Valley Energy; Triton Group	Chaves	Oil & Gas	\$77,000
SNL	Spatial Distribution of Hydraulic Parameter Estimates Salt Basin	Fill data gaps as identified by stakeholders and continue to review existing geological, hydrological, and geochemical data relating to the water-bearing units in the Salt Basin and assimilate the new information that is generated as a result of this investigation into the larger body of information.	George Rauch Ranch; Jones Ranch; Rauch Welding & Pump Supply; S/4 Ranch; Slash Triangle Ranch	Eddy; Otero	Water	\$70,000
LANL / SNL	Systems Approach to Watershed Management: Pecos River Riparian Zone	Develop a systems-level understanding of sedimentation risks associated with past, present, and potential future management practices of saltcedar control in the Pecos River riparian zone with the goal of developing strategies that prevent increases in sediment loading to the river system and accumulation in Brantley Reservoir.	Bar W Farms; C & R Landscaping; Craft Farms; Dane Williams Farms; Draper Brantley Jr Farms; Forrest Farms; Hayden Kimbley Farms; Johnny Reid Farms; Pardue Limited Co.; Reed Kimbley Farms	Eddy	Water	\$55,000 / \$105,000
SNL	Text Mining for Organizations Supporting the Developmentally Disabled	Design a reusable and distributable system to form the infrastructure for text mining.	EASi Therapy & Diagnostic Services; iTeam Consulting, LLC; Meyners & Company, LLC; Nancy Bartley Behavior Therapy	Bernalillo; Eddy	Information Technology & Software	\$44,000
SNL	Water Quality and Quantity for Rio Nambe and Nambe Reservoir	Assess the effects of increased sedimentation within the Rio Nambe to the vitality of the Nambe Reservoir.	Gene Perez; Gloria Trujillo; Mirabal Farm; Povi Ovei Farms; Trujillo Farms	Santa Fe	Water	\$81,000

## 2007 Co-sponsored Projects (Collaborative projects of \$20,000-30,000 worth of assistance)

Lab	Project	Description	Business Participants	Counties	Technical Area	Funding
SNL	Altela	Optimize a desalination process using Sandia's unique DEW1DS software specially developed for desalination applications.	Altela, Inc; Pacheco Trucking Inc; Sandia Storage & Strut	Bernalillo	Manufacturing	\$29,000
SNL	Arsenic Removal	Evaluate the feasibility of a SNL technology directed at removing arsenic from drinking water supplies with daily water usage of 20,000 gallons or less	Desert Plastics; Rodgers Water Well Co, Inc	Bernalillo	Water	\$20,000



SNL	ColorRad	In relation to the ColorRad device prepare a chemical solution that is stable and will change color at preset radiation doses.	Caldera Pharmaceutical; Leo S. Gomez Consulting; Noel Savignac Consultants	Bernalillo, Los Alamos	Materials	\$40,000
SNL	Consortium to Exploit Responsive Digital Media in Business Venues (RIB)	Facilitate experiments with human interface devices by writing glue software to integrate them into the platform; fabricate a second experimental system in Santa Fe; exercise one application.	Paradigmension; Redfish Group	Santa Fe	Other	\$38,000
SNL	CuerVex Solar Power	Creation of a solar power interface and Computational Fluid dynamics (CFD) analysis and flow calculations.	Adam & James Consulting; CuerVex; Performance Imports, Inc; Santa Fe Word Processing; Sierra Data Services	Bernalillo, Santa Fe	Energy	\$19,000
SNL	Cumbres Toltec	Perform elemental analysis on several metal samples provided by requester in support of the Cumbres Toltec railroad	Ed & Mikes Paint and Body	Rio Arriba	Critical Infrastructure	\$6,000
LANL	Deep Brackish Water in the Espanola and Albuquerque Basins	Determine whether extensive deep, confined aquifers (those not in communication with overlying shallow, fresh-water aquifers) exist in the Española basin.	Dougherty Real Estate	Santa Fe	Water	\$19,000
SNL	Geophysical Assessment of Geologic Controls on Groundwater Distribution, Recharge and Salinity in the Estancia Basin, East Central New Mexico	Characterize the groundwater resources of the Estancia Basin through the application of nSIGHTS, the MIATA laboratory, and electromagnetic imaging to assess the vulnerability of the potable water resources to water quality degradation as a result of brackish groundwater withdrawal.	Autrey Cattle Co.; Corbin Consulting, Inc.; Entranosa Water & Wastewater Assoc.; Hawley Geomatters; Moonbeam Ranch; Osita Ranch; Schwebach's LLC	Bernalillo, Santa Fe, Torrance	Water	\$91,000
SNL	Last Chance	Explore the feasibility of applying micro-gravity geophysical techniques as a means to quantify the specific yield (storage) of groundwater systems.	Last Chance Water; Y Bar Ranch, LLC	Lincoln	Water	\$26,000
SNL	Methane Detection	Test portable methane detection system.	International Metrics; International Metrics Consulting	San Juan	Manufacturing	\$40,000
SNL	Northern New Mexico Biomass	Test various slush material from thinning at Sandia's Thermal Test Complex to look at soot production and conversion efficiencies. This will help to determine what types of waste are useable for conversion.	Canon Forestry; Jefferson Natural Resources	Taos	Energy	\$38,000

SNL	Ricochet Shield	Perform experiments that will provide insight to the best combination of requester's materials for protection from both small arms and projectile-producing explosives.	Duke City Fueling Inc; Hydraulic Systems of New Mexico; MicrosoftCut Corp	Bernalillo	Materials	\$30,000
LANL	Supercooled Liquid Water Inventory Project	Focus on Proof of Principle in the development of a super-cooled liquid water inventory application over NM.	Chapman Realty; Paynes Nurseries; Walton Chapman Builders	Santa Fe	Water	\$38,000
SNL	Water Resource and Ground-water System Characterization Upper Hondo Basin Water Providers	Review existing geological, hydrological, and geochemical data relating to the water-bearing units in the Upper Hondo Basin focusing on the area around the Rio Bonito watershed.	Alto Weed Control; CDS Rainmakers; Equibest Equestrian Center	Lincoln	Water	\$44,000
SNL	Water Treatment	Assist qualified water utilities in their evaluation of water treatment technologies for compliance with new water quality standards. Also assist small water treatment technology businesses in improvement of innovative technologies	Arid Solutions; Miox Corporation; Paakweree Village Water Coop; WaterMart of NM	Bernalillo	Water	\$39,000

## 2007 Individual Projects (Listed by county, by technical area)

### **Chaves**

Creative Pultrusions, Inc	Manufacturing
Dean Baldwin Painting	Manufacturing
Frontier Door Manufacturing	Manufacturing
Impact Confections	Manufacturing
JGT HR Consulting	Manufacturing
Prudential Grieves Group	Manufacturing
Select Milk	Manufacturing
Ag Services Construction	Water

### **Cibola**

Sunnyland Farms	Energy
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### **Colfax**

Stolar Research Inc.	Manufacturing
Dos Amigos Anglers	Water

### **Curry**

Glenco	Manufacturing
Leslie Candy	Manufacturing
Mental Health Resources	Manufacturing
Mill & Elevator Supply	Manufacturing
Southwest Cheese	Manufacturing

### **Dona Ana**

Chui Chai, LLC	Business Systems Development
Acme Mills Company	Manufacturing

ADC Broadband	Manufacturing
Antix	Manufacturing
Calculex	Manufacturing
EMI Technologies	Manufacturing
Foamex Products, Inc.	Manufacturing
Mallory Metal Products	Manufacturing
Northwire Technical Cable	Manufacturing
Ottensen Machine Works	Manufacturing
Samson Equipment, Inc.	Manufacturing
Southwest BioLabs	Manufacturing
Sunland Nursery Co.	Manufacturing
Rosewater Technologies	Other

### **Eddy**

Cetane Energy	Energy
MBAR Services	Energy
Apache Canyon Trading Post	Water
J and J Pipe and Supply LLC	Water
Jurva Farms	Water

### **Lea**

RMS Foods	Manufacturing
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### **Lincoln**

Stirling Spencer Ranch	Water
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**Los Alamos**

Affordable Alcohol Monitoring	Materials
Sci Tac, LLC	Materials
Research Applications, Corp.	Other

**McKinley**

Blue Mountain Enterprise	Manufacturing
High Desert Realty	Manufacturing

**Otero**

Alfredo's Restaurant Equipment Co.	Manufacturing
Arquin Corporation	Manufacturing
Heart of the Desert Pistachios	Manufacturing
M6 Management Corp	Manufacturing
Waverly Duggar Ranch	Water

**Rio Arriba**

Mike's Mini Mart	Critical Infrastructure
Archeobotanical Services	Other

**Roosevelt**

Sunland Inc	Manufacturing
BJ Polishing & Small Engine	Manufacturing
Hampton Farms	Manufacturing
J. D. Heiskell & Co	Manufacturing
Southwest Cannery	Manufacturing

**San Juan**

CV Flooring Solutions	Business Systems Development
Herbert's Welding	Manufacturing
Morningstar Minerals	Manufacturing
San Juan Compression	Manufacturing
Nott, Ltd.	Other

**San Miguel**

Mike Garcia Company	Business Systems Development
Land Logic	Energy

**Sandoval**

Hemp Elegance	Business Systems Development
JSA Photonics	Energy

VawtPower Management Inc	Energy
AeroParts Manufacturing & Repair	Manufacturing
ClingZ, Inc.	Manufacturing
CWW Feed Store	Manufacturing
Deluxe Engraving & Screen Print Service, Inc	Manufacturing
Loretto Vet Clinic	Manufacturing
MB Oil Ltd Co.	Manufacturing
Native Resources Inc	Manufacturing
Product Without Limits	Manufacturing
Thompson Engineering	Manufacturing
Trail House Grocery Store	Manufacturing
NMTL	Materials
Senspex Inc.	Materials
Santa Maria Resource Development	Microelectronics
Giggling Star LLC	Water

**Santa Fe**

Falcon Industries	Manufacturing
La Puerta Originals	Manufacturing
WeckTech	Manufacturing
Apjet	Materials
Deer Moon Rising	Materials
Southwest Archaeological Consultants	Other
Gordon Construction	Water

**Taos**

P & J Hospitalities dba Salsa del Salto	Business Systems Development
Private Label Select	Manufacturing
Xylo Energy	Materials

**Torrance**

Sierra Blanca Brewing Company	Manufacturing
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**Valencia**

Liste De Technologies, LLC	Business Systems Development
El Salvador Fabrication & Design	Business Systems Development
Pro-Fab, Inc.	Manufacturing
Calkins LHP Inc	Materials

**2007 Urban Individual Projects  
(Listed by county, alphabetical)**

**Bernalillo**

3D Low RAD	Microelectronics
Advanced Medical Optics	Manufacturing
Advent Solar, Inc.	Manufacturing
Aegis Technologies	Business Systems Development
Analytical Solutions, Inc	Microelectronics
APM Bands	Manufacturing
Applied Sciences Inc.	Microelectronics
Armed Response Team	Critical Infrastructure
Artistic Tile & Granite	Manufacturing
Aurora Publishing	Manufacturing
Aztec Discount Supplies	Manufacturing

Azuelas, Inc.	Manufacturing
Bio-Tec Environmental	Materials
Black Mesa Coffee	Manufacturing
Bogue Machine Company	Manufacturing
Brown La Salita	Manufacturing
Castillo Group, LLC	Materials
Catalyst RP, Inc.	Manufacturing
Century Sign Builders	Manufacturing
Chamelions LTD	Materials
CIC Photonics	Manufacturing
Computational Analysis	Business Systems Development
Concise Motion Systems	Materials




Coronado Machine Company	Manufacturing
CVI Laser Corporation	Manufacturing
Desert Paper & Envelope	Manufacturing
Embraced in Grace Record	Business Systems Development
Epic Internationale, Inc	Manufacturing
Esparza Advertising	Manufacturing
Excel Manufacturing	Manufacturing
Help U	Business Systems Development
IC Tech	Manufacturing
Incitor, LLC	Materials
InSync, Inc	Microelectronics
Jaguar Precision Machine	Manufacturing
Jaynes Corporation	Manufacturing
Kendal Precision Machining	Manufacturing
Lean Project Pros, LLC	Manufacturing
Lynn Technical Services	Manufacturing
Martha's Body Bueno	Manufacturing
Matador Real Estate	Manufacturing
MCT Industries, Inc.	Manufacturing
MPS Inc, dba Formulab	Manufacturing
Nano Pore	Manufacturing
Nextek Mobility Corp	Manufacturing
Noor Mfg Company	Manufacturing
Office Alternatives	Business Systems Development
OGB Architectural Millwork	Manufacturing
Optomec Design Company	Microelectronics
Pacific Mutual Door & Window	Manufacturing
Perfect to the Home Improvement	Manufacturing
Precision Fabrication, Inc.	Manufacturing
Precision Grinding, Inc.	Manufacturing
Precision Solar	Manufacturing
Rio Grande Radiological Physics	Manufacturing
Roadrunner PediCab	Manufacturing
Santa Fe Custom Works	Manufacturing
Santa Fe Door	Manufacturing
Sennheiser	Manufacturing
Serycon Inc. dba Academy Reprographics	Manufacturing
Solar System Works	Manufacturing
Sparton Technology	Manufacturing
Standard Machine Company	Manufacturing
Sun Country Industries	Manufacturing
SWS Technologies	Manufacturing
Taycar Enterprises	Manufacturing
Technology Intergration	Manufacturing
The Bell Group	Manufacturing
Tse Ndeeshglish	Energy
Ulibari Construction	Manufacturing
Unirac, Inc	Manufacturing
United Seating & Mobility	Manufacturing
Water Lady	Water

## APPENDIX 2.

### 2007 NMSBA Program Projects by county

County	SNL	LANL	Total
Bernalillo	99	2	101
Chaves	21	0	21
Cibola	1	0	1
Colfax	7	4	11
Curry	6	0	6
Dona Ana	16	1	17
Eddy	18	6	24
Lea	3	0	3
Lincoln	10	0	10
Los Alamos	1	3	4
Luna	4	0	4
McKinley	2	0	2
Otero	8	0	8
Rio Arriba	2	1	3
Roosevelt	5	0	5
San Juan	8	1	9
San Miguel	2	1	3
Sandoval	16	2	18
Santa Fe	19	5	24
Taos	5	0	5
Torrance	4	0	4
Valencia	5	0	5
<b>Total</b>	<b>262</b>	<b>26</b>	<b>288</b>



The 2007 NMSBA Advisory Council follows the NMSBA Program's mission to have a statewide impact on small business critical challenges. All the council members bring their own expertise and resources to enable New Mexico small businesses to access cutting edge technology, to increase technical sophistication and capabilities, and to share knowledge and resources to address issues and develop real-world applications.

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