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Background Report

Challenges, Solutions & Opportunities

Affordable Housing

Workforce Training

Recruitment & Retention of Health Care Professionals

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Challenges, Solutions & Opportunities — *Affordable Housing in Rural Arizona*

“Arizona suffers from a shortage of permanent affordable homes for working families. This condemns more than one in ten households to substandard living conditions; nearly 197,400 Arizona families lack an affordable home.”¹

As unequivocally noted by the Arizona State University Stardust Center for Affordable Homes and the Family, our rapidly growing state faces colossal challenges in the availability and quality of housing. Furthermore, in the state that leads all fifty with the highest annual median home price increase (33% growth from the first quarter of 2005 to the first quarter of 2006), the circumstances are exacerbated in our rural communities. We are struggling to weather the perfect storm of limited land availability, increasing demand (within inadequate inventories), and high construction costs (exceeding \$150 per square foot in many rural communities).

In a state where one can travel for hours through wide open spaces, the shortage of available land for affordable housing seems paradoxical at best. However, many rural communities are “landlocked” by contiguous federally-owned lands that aren’t currently/readily available for housing development. The finite inventory of buildable land is subject to severe demands—unlike many other rural regions that have experienced population declines, all of Arizona’s rural counties grow one percent (Coconino) to thirteen percent (Pinal) in permanent residents per year. Part-time residents exert additional demand on precarious markets—second homeowners predominate home purchases in many rural communities. For example, as reported in the 10/1/05 Kingman Daily Minor, a project containing 69 affordable homes (1,600 square feet for \$180,000; 2,300 square feet for \$230,000) on 10 acres sold out in four hours. The buyers “hailed from places such as Phoenix, Las Vegas, and California, in addition to a sprinkling of local residents.”

The Arizona Department of Housing’s “Stoplight Chart” poignantly illustrates the facts: single-earner retail workers from Springerville to Yuma can’t afford to rent or buy housing. Their neighbors in higher paying professions (police officers, school teachers, firefighters, and nurses) are, in many communities, able to rent housing; however, home ownership currently remains an impossible dream for working families throughout rural Arizona. And, until comprehensive statewide solutions are implemented, the gap between home prices and incomes is likely to increase; from 2000 to 2006, Arizona’s median home sale prices have increased by 74%, while our median family incomes have only grown by 15%.

Due to the home price-household income gap and other factors, many rural Arizonans cannot afford to live in the communities where they work. In Sedona for example, only three officers within the twenty-eight member police force reside in the community. Admittedly, the Sedona scenario represents one extreme of the conundrum. However, as workers in Lake Havasu City travel daily from Kingman, and from Douglas to Sierra Vista, long commutes are becoming common throughout the state. The skyrocketing fuel prices further intensify the financial pressures on home rental and/or ownership.

Many communities in rural Arizona have experienced boom and bust cycles, mostly associated with the mining industry, which have impacted housing availability. Critical short-term housing needs further befuddle the housing enigmas. For example, in St. Johns, City Manager Eric Duthie asserts that the community is in desperate need of rental properties, apartments, and short term housing for the anticipated 200-1200 new construction jobs split between the expansions of two power plants over the next 4 years. “Currently, there are 12 rentals and 14 homes for sale. As for amenities, we have 4 restaurant/diners with no fast food outlets. Additionally, retail shops for clothing and accessories for various personal needs are limitedly available. The community is in desperate need of investor housing and service developers to fill the current void before the guaranteed incoming workforce arrives over the next 6-12 months.”

Similarly, Southern Gila County Economic Development Corporation Director Chris Martin notes the enormous dwelling unit deficit. “In 2006, we identified our county-wide housing shortage at 2,423. This was, of course, prior to the recent surge in the mining industry: 1,000 new/direct jobs and even more indirect jobs.”

Rural Arizona’s tribal communities have experienced chronic housing shortages, resulting in overcrowded living conditions. Moreover, a significant percentage of Indian households lack complete plumbing facilities, electricity, and telephone service. According to the U.S. Commission on Human Rights, the rate of overcrowding and substandard housing in Arizona’s tribal communities is more than 60 percent.²

In spite of the formidable challenges, many communities have developed innovative and responsive solutions. These “best practices” inhabit the general categories of employer assisted housing, shared

equity initiatives, community land trusts, public/private investment pools, and sustainable/community-based construction practices.

Employer assisted housing includes such diverse strategies as financial literacy/homebuyer education, down payment/closing cost assistance, mortgage guarantees, and shared equity homeownership. Remarkable success stories have emerged in rural Arizona and throughout rural America.

Rural employers have realized the importance of quality housing within the fiscal means of their employees. Specifically, employers and employer consortia have provided employees with financial literacy and homebuyer education training programs, development of rental or homeownership units, repayable loans or grants for down payment or closing costs assistance, forgivable loans or grants (that do not have to be repaid if the employee remains at least until the time the loan is forgiven), cash match savings grants, and upfront grants (i.e., hiring bonuses for hard-to-recruit employees).

Tyson Foods, a major employer in rural communities throughout the South and Midwest, has established a remarkable employer assisted housing initiative. Tyson launched a \$50 million Workforce Home Benefit program to assist eligible employees in their homeownership efforts. A partnership between the Tyson Credit Union, Balance (financial counseling), National Credit Union Foundation and Freddie Mac, the Tyson program is one of the largest employer-driven, employer assisted housing programs in the country. The new program provides eligible Tyson employees access to homeownership counseling and flexible mortgage products, including down payment and closing costs assistance when buying a home. The program is available to any Tyson employee that has been employed for a minimum of 2 years at the company, with a maximum household income placed at \$54,500 per year. Further, the program only applies to the purchase of single family, owner-occupied homes. Given that the Tyson program is still in its infancy, measurable results are still forthcoming. However, it has been estimated that 6,000 to 7,000 Tyson employees could be eligible for the program within the 22 states that the company currently has operations.³

As Northern Arizona University economist Ronald J. Gunderson notes, “The burden of affordable housing must be shared by multiple stakeholders as this is a problem that not only exists in more and more communities, but also impacts the ability of employers across all industries to attract sufficient numbers of workers to these communities due to an inadequate number of affordable housing units to support the labor force.”⁴ This concept often applies to employer assisted housing initiatives, as exemplified by the Teacherwise project in Santa Fe. Teacherwise is a partnership between

Homewise—a local not-for-profit organization—and the Santa Fe Public School District, offering teachers the opportunity to purchase or repair homes in Santa Fe. The overarching goal of the program is to improve the quality of life for teachers in Santa Fe, where the cost of living is far too high and incomes too low for teachers to pursue homeownership. Accordingly, the program is designed to help retain and attract educators in an area known for a high turnover rate among teachers. With support from the New Mexico Mortgage Finance Authority, Teacherwise offers low-interest mortgages to school employees in addition to down payment and closing cost assistance. Further, Teacherwise provides homebuyer education and financial counseling, educating teachers on ways in which to build equity. The program also offers low-interest home repair loans for existing homeowners and discounted rentals for new teachers not yet looking to buy.

Funding for Teacherwise is derived from land that developers in Santa Fe are required to provide to the school district; when this land is not needed for new schools, it is sold with the proceeds going directly into the capital fund that finances Teacherwise. In the first year and a half since the program was established, 22 teachers purchased homes with the assistance of Teacherwise.⁵

Multiple stakeholders also accomplished an outstanding affordable housing project in Soquel, a rural community in California. The Farm is the fortunate result of a compromise that matched community goals with those of a private developer and a non-profit sponsor of affordable housing. What began as a proposal by the owner/developer of an 11.5-acre former farmstead to develop the property into single family houses and a limited number of affordable rental apartments, ended with a development that provided the same amount of housing with 87 per cent of it affordable, a new park, a child care center, and lots for single family houses that were built for sale at market rate to help fund the affordable housing.

The original proposal failed to gain approval because it did not preserve the character of the area or the rural setting with its grasslands, views of oak woodlands, and riparian vegetation along a creek. As an alternative, the Mid-Peninsula Housing Coalition (MPHC), working with Green Farm Limited Partners, the owners of the 11.5-acre site, and the Santa Cruz County Redevelopment Agency proposed a master plan for the property. The redevelopment agency purchased most of the site; the Lion's Club provided funds for a childcare center and construction; and other agencies assisted in various ways. The old farmhouse stands across the street from the new white-painted, wooden buildings with gable roofs and front porches that reflect its architecture character.

This was the first major new rental housing development for families with low incomes in the area since 1989. Applicants living or working in Santa Cruz County were given preference, and all those now living at The Farm were already residents of the county. The thirty-nine units are mainly in two- and three-bedroom townhouses with separate entrances leading to semi-private yards and/or to front porches. The common open space was configured to provide a view corridor to the riparian landscape east of the development. Smaller buildings with two- bedroom units occupy sites visible from Cunnison Lane and Soquel Drive; larger apartment buildings with six units are located toward the back of the development area where they are less visible from the streets. Differences in building size are minimized visually by articulating their forms in similar ways.



The architects held meetings with interested neighbors and members of the community to address their concerns. The initial opposition to the development vanished when people saw and liked the design. Since its completion The Farm has won several awards for design excellence and is perceived by neighbors as being attractive and well-managed. The single- family houses that were built as part of the master plan sold easily for good prices, demonstrating that the prospect of affordable rental housing did not devalue the neighborhood. One neighbor commented that her attitude toward housing for people with low incomes had changed because of her experience with the development:

“Before we moved into the neighborhood we wanted to consider the potential effect of The Farm on property values, crime, and so forth. Mid-Peninsula Housing arranged for us to visit five of their similar housing developments. We met with residents and property managers and got a very good idea of the way the housing was managed and the type of people they housed. I also worked closely with my realtor to research recent sales in the areas around those developments. We discovered that in all cases property values remained the same or increased--the situations were no different than in areas without affordable housing. So we felt very comfortable purchasing a house next to The Farm.”⁶

A project broader in scope but similar in concept to The Farm is underway in Arizona. Sierra Vista’s “Crystal Garden” project, under the auspices of the Arizona Department of Housing, will substantially increase the inventory of affordable housing in this fast-growing community.

Community land trusts have proven to be quite successful in rural America’s affordable housing efforts. Vermont’s “Central Vermont Community Land Trust” is one of the premier examples of this

strategy. Rural Vermont offers both the state's wealthier residents and out-of-state residents many opportunities for escape to a pristine landscape. During the 1970's, a state law was enacted (Act 250) to attempt to counteract the rapid proliferation of subdivision development and short term speculation, by heavily penalizing property owners who tried to make a quick dollar on the purchase and sale of Vermont land. Some developers, however, uncovered loopholes in Act 250, and larger developments again emerged during the 1980's. Central Vermont's housing market heated up during 1987, partly due to a population increase and partly due to second home development. Low-income residents, clients of the Central Vermont Community Action Council, found few housing opportunities still available to them at prices they could afford. It became apparent that land and housing prices would need to be controlled for those households most in need. From this concern emerged the Central Vermont Community Land Trust (CVCLT) with strong support from the community action agency.

Like most if not all community land trusts (CLTs), the CVCLT organized as a 501(c)(3) tax-exempt organization. The CVCLT receives its operating funds from several sources, most prominently the Vermont Housing and Conservation Fund, created in 1987 legislation with a \$3 million appropriation for the express purpose of preserving existing affordable housing and existing farmland. The Fund not only capitalizes developments, but also provides capacity grants to encourage the growth of local organizations. The CVCLT is receiving \$30,000 per year over a four year period to cover its administrative costs.

In addition to the Housing and Conservation Trust grant, accounting for about one third of the CVCLT's budget, project development fees obtained upon completion are expected to cover another third of the operating budget, and the final third is obtained from management fees on the CVCLT's rental developments. The community land trust also has received some funding from the Central Vermont Community Action Council.

Operating in a region rather than a locality, the Central Vermont Community Land Trust has been called upon to respond to diverse needs and diverse opportunities. Among these are single-family homes financed by the Vermont Housing Finance Agency, a planned development of single-family homes by Habitat for Humanity on CVCLT-owned property, and a senior shared housing program on farmland property in which the land trust has a remainder interest. Since its inception, CVCLT has created homes for over 450 Vermont families, and has provided homeowner education programs for over 900 families.⁷

In spite of formidable challenges, Rural Arizona communities have achieved considerable success in their efforts to provide affordable housing opportunities. On a broad/statewide scale, the “Homes for Arizonans Initiative” has provided nearly \$15,000,000 in down payment and closing cost assistance to over 1,200 rural Arizona families. The Initiative is a joint effort between the Arizona Housing Finance Authority (AzHFA) and the Arizona Department of Housing (ADOH), and is restricted to buyers in rural counties of the state (residents of the Phoenix and Tucson areas are not eligible).⁸

The Initiative also includes two other funding sources, the Mortgage Revenue Bond (MRB) Program and the Mortgage Credit Certificate (MCC) Program. The MRB program offers qualified buyers mortgage financing at one percent below market rates while the MCC allows certificate holders to receive a tax credit of up to 20 percent of annual mortgage interest payments as long as the property is used as the principal residence of the borrower. Beneficiaries under each of these programs remain eligible for down payment and closing cost assistance at the same time. As of 5/10/2007, the MRB has provided over \$72,000,000 in loans to 688 families; as of 5/15/07, MCC has provided over \$19,000,000 in tax credits to 145 families.⁹

The Town of Ajo embarked upon a very innovative, community-based affordable housing project. The historic Curley School is being renovated into affordable live/work rentals for artists of all media and creative home businesses. Former classrooms are becoming rental residences, including studio, 1-bedroom, 2-bedroom and 3-bedroom units. All have spacious open floor plans, high ceilings, spectacular light and rents ranging from \$295 to \$595 per month. The housing project is a key component within a larger rural development initiative, which also includes workforce development (business management and technology training) and destination tourism. The Curley School project exemplifies an effective private sector-public sector partnership, and has received funding from the Arizona Department of Housing, the U.S. Department of Housing and Urban Development, the Tohono O’odham Nation, Arizona Community Foundation, National Bank of Arizona, and several other sources.¹⁰

The White Mountain Apache Tribe has established “Apache Dawn,” an exemplary affordable housing project. The Tribe’s Housing Authority has partnered with the U.S. Department of Housing and Urban Development (HUD) to provide 300 affordable homes for tribal members. In addition to helping relieve the huge housing demand (there are currently over 1,000 families on the Housing Authority’s waiting list), the project is creating jobs by contracting with tribally-owned businesses to

construct the homes. To promote homeownership, the homes are made available to tribal members on a lease purchase basis. After the first 10 years, families have the option to purchase the home and are provided that opportunity each year thereafter. Alternatively, families may choose to continue monthly payments for 30 years in order to purchase their home.

By contracting with tribal businesses for the construction of much of Apache Dawn, the Housing Authority has lowered its per-unit costs by 30 percent and provided 150 new jobs for tribal members. In addition, the Housing Authority obtains nearly 85 percent of its lumber from the Fort Apache Timber Company and all necessary concrete from the Tribal Public Works Division. Since the Housing Authority adopted its “buy local” policy, both tribal enterprises achieved profitability.

To fund the project, the Housing Authority assembled a unique partnership that includes the federal government, tribal government, and private lenders. Funding for the project has come from a blend of tribally issued tax-exempt bonds (the first by a Native American housing authority), HUD Section 184 guaranteed loans, and Indian Housing Block Grant funds.

“The White Mountain Apache Housing Authority is paving the way as a model for other tribes in fully obligating and leveraging its Indian Housing Block Grant funds,” said Aneva Yazzie, a management consultant working closely with the Housing Authority. “We’ve been traveling to conferences around the country to let other tribes know about what we’ve done.”¹¹

Following in the footsteps of Vermont, community land trusts are also taking root in rural Arizona, most notably in Flagstaff. More than 40 units are expected to be offered by the Flagstaff land trust program in the next two years. The basis for the program is the 99-year, renewable ground leases that come with the purchase of houses. Because the city retains ownership of the land, the housing will be permanently affordable while building equity for owners. Although prices have not been announced, the houses are expected to be affordable for those making below 150 percent of the area median income, which means roughly \$57,000 for a single person. When an owner wants to sell, the house must be offered to another qualified buyer enrolled with the city’s land trust program, who will buy it at the new appraised value. In a worst case scenario, the city would buy the property back if no qualified buyers were available.¹²

Some rural Arizona communities (specifically, portions of Pinal and Gila Counties) are exploring the concept of “job centers.” These regional plans will place affordable housing opportunities in close proximity to adequate jobs, thus reducing costly commutes and enhancing the communities’ economic

sustainability. The initiative, spearheaded by the Central Arizona Association of Governments, will also mitigate the trend of communities (e.g., Apache Junction, Coolidge, Florence, Casa Grande, and others) becoming “bedroom communities” for the Phoenix and Tucson metro areas.¹³

As affordable housing projects in rural Arizona are planned and developed, density considerations (i.e., the number of dwelling units per acre) are progressively more significant. The “Cozy Communities” concept, as applied by the ASU Stardust Center, entails a collaborative/participatory design process. Accordingly, neighbors, prospective buyers/occupants, and other community members are engaged in the planning dialogue. Within this context densities of 25 or more dwelling units per acre can be “personalized” and affordable. As density increases, the infrastructure costs-per-dwelling unit decreases, thus mitigating the other expenses associated with affordable housing development and construction.¹⁴ In addition to the Stardust Center’s efforts, the University of Arizona’s Office of Arid Lands Studies has been instrumental in density planning for affordable housing projects in Cochise County.

Ultimately, home ownership for working families should be the goal for rural Arizona’s housing initiatives. Not only is home ownership fundamental to the American Dream, it’s a vital engine for economic development. Homeowners provide their employers and communities with high levels of commitment and stability. Employer and community investments that foster home ownership are amply returned via first-rate employee retention and productivity.

Challenges, Solutions & Opportunities — *Workforce Training in Rural Arizona*

“Conservative estimates suggest dozens of high-paying manufacturing jobs are open today in Flagstaff but recruiters are hard-pressed to find qualified candidates.”

“We have 300 jobs that we can’t fill right now. Our workers just don’t have the necessary skills.”

From Flagstaff to Nogales, Arizona’s rural communities experience formidable challenges in their efforts to maintain an adequately skilled workforce. Along with “Infrastructure” and “Investment,” “Workforce” is the third pillar of Economic Development. Essentially, successful economic development can’t occur without all three pillars; if a community has good infrastructure (transportation, utilities, facilities), sufficient investment capital (debt and equity financing), but lacks a well-trained workforce, the economic engine grinds to a screeching halt.

Workforce training generally fits into two categories, incumbent worker training (improving the skills of the people already on the payroll) and prospective worker training (predominantly, preparing future workers with requisite entry level skills). Since most of rural Arizona (including tribal communities) are either in early stage or transitional economic development, workforce readiness and core competencies comprise the principal training needs. Prospective employees are “workforce ready” when they display all of the characteristics and behaviors that employers require: positive attitude, attendance/timeliness, appropriate appearance/decorum, listening—in general, an awareness of workplace expectations and the ability to fulfill them. “Core competencies” consist of the essential skills of job performance: communication (verbal and written), reading/literacy, applied math, and, ever increasingly, technical skills.

The most prominent workforce training challenge in rural Arizona is the availability of training providers and resources. Although most Arizona counties are within community college service districts, many students travel considerable distance(s) to the campuses and extension sites. Distance learning programs via the Internet and videoconferencing somewhat mitigate the logistical hurdles; however, many communities lack the telecommunications infrastructure (e.g., broadband) for effective instructional delivery. Furthermore, industrial and technical training activities require learning environments with specialized equipment and facilities.

Consequently, many rural communities depend upon their local school districts to prepare high school students for the workforce. Unfortunately, many districts lack the staff and resources to effectively address workforce training outcomes. Thus, most rural employers provide on-the-job training (OJT) for entry level workers. Employers often find themselves competing for trained/trainable workers within tightly-constrained populations. OJT is not only a business necessity, but is also a recruitment incentive. Essentially, the businesses with the most attractive training and compensation packages are best able to fulfill their staffing needs.

Tribal communities experience workforce training barriers that are amplified by severe logistical challenges (e.g., significant distances, poor transportation links), deficient/non-existent telecommunications infrastructure, scarce resources, and insufficient access to training providers. On-the-job training opportunities are also exacerbated by the overall reticence of major employers to invest in tribal communities; workforce development issues are a significant portion of the overall problem, along with other constraints resulting from land ownership and infrastructure development.

In communities with especially constrained labor pools, competition for trained workers can be fierce. Delicate balances are frequently disrupted by the entry of a larger employer into a local rural marketplace. For example, when a Super Wal-Mart opens in a new town, it requires 300-400 employees.¹⁵ This can create labor market deficiencies in workforce quality and quantity.

Rural Arizona communities also face competition for trained workers from urban/metro areas throughout the Southwest. When communities and employers invest in workforce training (especially in the higher-skilled trades), trained employees will move to where the money is. Community investments in welding, machine tool, automotive, and information technologies are costly, and wages are typically far below the urban levels. For example, according to 2005 data from the U.S. Bureau of Labor Statistics, the median hourly wage for welders in Navajo County was \$10.72; in the Phoenix-Mesa MSA welders earned \$14.02.

Very few rural communities develop and deploy comprehensive workforce training plans. Many training activities occur on an ad-hoc, as needed basis—from a reactive posture. Training projects are initiated by an individual employer, or an industry cluster. Training providers develop and deliver the training activities, largely in response to the request/need.

Successful rural workforce training initiatives originate from comprehensive, well-executed plans that are fully integrated with the community/region's overall economic development strateg(ies). The most effective plans proactively address training needs across the "pre-K to Gray" continuum. These efforts result in a healthy, established workforce that, along with well-developed infrastructure and readily-available investment resources, provides a fertile environment for business attraction and expansion.

Many states, regions and communities have established exemplary workforce training programs that proactively address current and projected training needs. The State of Iowa has distinguished itself with a comprehensive and competitive array of workforce development programs. Specific programs address the needs of new and incumbent workers, with a unique emphasis on skills assessment, testing/evaluation, and job-related counseling. Additionally, the state has established The Iowa Careers Consortium, a unique public-private partnership created to meet Iowa's growing need for highly skilled employees. Through creative marketing strategies, it attracts qualified, skilled workers to Iowa by raising the awareness of the state's professional opportunities. The Consortium includes Iowa businesses, communities, educational institutions, professional associations, Iowa Workforce Development, and the Iowa Department of Economic Development.¹⁶

Under the leadership of an effective Workforce Investment Board, Lancaster County, Pennsylvania (www.jobs4lanaster.com) has established a very progressive workforce training system. The 40 member board (comprised of 21 private sector members, as well as representatives from labor, education, social services, and elected officials) has led the county-wide effort to establish and prioritize industry clusters (including health care, construction, food processing, biotechnology, communications, metal/fabrication, and automotive). Well-planned training efforts target the growth of these clusters; priorities are assigned to local industries that have a chance for long-term growth and success because they have some sort of local competitive advantage, and local industries with a competitive advantage that grow "gold-collar" (high skill, high pay, high demand) jobs. Lancaster County's training initiatives are supported by the "Centers of Excellence," which serve as repositories of information about new technologies, best practices about business models, and intelligence about market technologies. They encourage innovation by supporting local inventors. Additionally, they facilitate the collaboration of a network of firms and their managers that encourages companies to share ideas on how to improve operations and profitability. Some Centers provide advisory services or perform industry-related research and development. Finally, Centers work with local educational institutions to design training for new and incumbent workers that is relevant to current industry

needs. The specific work program of each Center is dependent on the needs of the partners and available resources.¹⁷

The City of Grand Junction, Colorado achieved considerable success with a community-wide implementation of a workforce “skill credential certificate.” In a town with that hosts a Mesa State College and Western Colorado Community College, many employers told local educators that they were not seeing enough high-quality job applicants. Meanwhile, applicants at the Mesa County Workforce Center struggled to get employers’ attention. Also, Colorado School District 51—comprised of 39 schools—was looking for a tool to help get students ready for the workforce. Ultimately, the community decided to create a certificate system that would help residents demonstrate their skills to employers. Utilizing ACT WorkKeys (a nationally recognized standard for job profiling and workplace skills assessment), more than 2,000 residents were certified for their proficiencies in Applied Mathematics, Reading for Information, and Locating Information—critical skills in the local economy.¹⁸

Another rural community, Mount Crawford, Virginia, implemented ACT WorkKeys to assess and enhance workforce skills associated with the expansion of the major local employer, Morningstar Foods. The Mount Crawford facility underwent a rapid space and employee base expansion—from 90 to 280 employees in just four years—along with a conversion from “short shelf life” milk gallon production to “extended shelf life” products that include soy, organic, and flavored milks. Faced with the need to change its production technology to meet the new product line and its sudden demand for new employees, Morningstar’s Mount Crawford facility needed an effective selection and employee development system. A review of the changing job skill requirements indicated that employees would need an entirely new set of critical thinking skills similar to those tested by WorkKeys assessments. In early 2003, Morningstar partnered with nearby Blue Ridge Community College to profile four plant jobs. Profiles indicated that the jobs required skills in five WorkKeys skill areas: Applied Technology, Applied Mathematics, Locating Information, Reading for Information, and Observation. By the end of 2003, Morningstar had profiled two more plant jobs. When applying for job transitions, incumbent employees were required to achieve the WorkKeys scores indicated by the profiles. Ultimately, Mount Crawford’s WorkKeys initiative resulted in a 50% reduction in training time (equivalent to \$3,700 per hourly employee), lower turnover rates (a 35% reduction in turnover once WorkKeys pre-screening became mandatory), and an increased investment (\$130 million) in the Mount Crawford facility by Morningstar’s parent company, Dean Foods.¹⁹

Rural Washington provides an example of an effective partnership between a tribal community and the local community college. The Tulalip Tribal Employment Rights Office (TERO) Training Center has collaborated with Edmonds Community College to develop and deliver a 16-week pre-apprenticeship construction program. The training targets individuals who were previously unemployed or working in low-paying service sector occupations. The curriculum includes foundational math, and provides hands-on experience by requiring students to read blueprints, calculate dimensions, understand ratios, and become proficient in the competencies of the construction trade. According to instructor Randy Silbey, “students learn everything there is to know about constructing a house in the four day-a-week course - from plumbing to electrical, pouring concrete to framing. There will be plenty of local work for graduates, as the tribe’s expansion plans over the next few years include a water treatment plant, second major retail facility, water theme park, RV park and golf course.”

In 2002, the program received a grant from the Snohomish County Workforce Development Council, and, in 2003, funding from the Native American Vocational Technical Education Program (NAVTEP) - one of only 35 programs nationally to be funded. That same year, the program was nominated for a Workforce Development Best Practice Award that is presented annually to innovative work programs by the State of Washington Workforce Training and Education Coordinating Board.²⁰

Rural Nebraska has emerged on the forefront of a nationwide (including Arizona) workforce training initiative, HomeTown Competitiveness (HTC). Six years ago, the founding partners of what is now known as HTC – The Heartland Center for Leadership Development, Nebraska Community Foundation, RUPRI Center for Rural Entrepreneurship, and the Center for Rural Affairs – decided to work collaboratively to change the landscape of rural Nebraska. They decided that a developmental initiative was needed that builds on small towns’ existing resources and assets, many of which go unrecognized. HTC’s goal is to assess a community’s current situation and capacity, then build on four key elements:

- Developing and mobilizing leadership capacity;
- Capturing wealth transfer through charitable giving;
- Energizing entrepreneurship; and
- Attracting and engaging young people.

Together, these four essential elements create a synergy that can significantly impact the future prospects of rural areas experiencing out-migration and economic decline. HTC is drawing significant

attention in Nebraska and nationally because rural leaders and practitioners recognize that even the most distressed community has, to some degree, each of the necessary elements to launch the initiative.

The impacts of HTC in Valley County, Nebraska, which lost 10 percent of its population in the 1990s, have been promising. When Valley County first partnered with HTC, the county had a strategic plan with 26 diverse priorities and it focused its attention on industrial attraction. Now the county has prioritized business succession and growing local entrepreneurs as its two key strategies for economic transformation.

With the help of the HTC team, Valley County has identified a number of entrepreneurial enterprises, of which 10 to 15 have growth potential. In addition, succession planning for several Main Street businesses is bearing fruit. A leadership development program, now in its third year, is drawing both adults and high school youth. An article that ran in *USA Today* may best sum up the county's success: "In three years, Valley County (population 4,647) has graduated 70 from a leadership class; set up an endowment with \$1.2 million willed by a local couple; and hired a business development coordinator. Ord, the county seat, has made seven small-business loans from a one cent sales tax fund. The county must attract 27 percent of its high school's average graduating class of 67 to stabilize the population by 2010."²¹

In spite of its challenges, rural Arizona has achieved significant workforce training victories. In Navajo County, an innovative partnership between Northern Arizona Vocational Institute of Technology (NAVIT, the county-wide joint technical education district), Northland Pioneer College, Arizona Public Service (APS), Tucson Electric Power, Salt River Project (SRP), and Abitibi Consolidated has resulted in a very successful "Industrial Maintenance and Operations" training program. With a focus on 11th and 12th grade students at high schools within the NAVIT district (Alchesay, Blue Ridge, Holbrook, Joseph City, Mogollon, Payson, Round Valley, Show Low, Snowflake, St. Johns, and Winslow), trainees complete classroom instruction at the high schools. They also complete a "capstone" on-site learning experience at the power plants. Graduates are nationally certified through the National Center for Construction Education and Research (NCCER), although most are employed at the local plants, at starting salaries ranging from \$14 to \$30 per hour.

In Mohave County, the COalition YOuth TEam (COYOTE) is a community partnership dedicated to youth development and employment. The program provides readiness skills and job experience for youth, ages 14-21. COYOTE serves out-of school youth (drop outs and graduates) and in-school

youth. The program is managed by the County's Community and Economic Development Department, and has placed over 200 students county-wide in local jobs. COYOTE was recently (May 2007) recognized by the White House Conference on Faith-Based and Community Initiatives as a best practice in youth development.

Also in Mohave and La Paz Counties, the Lake Havasu School District successfully completed a WorkKeys certification initiative very similar to the project in Grand Junction. School district officials wanted to give students an advantage when seeking local jobs. They teamed up with the local Partnership for Economic Development, which includes the local economic development boards, community colleges, workforce development boards, and business partners. The result was a "career readiness certificate" that encompasses the two counties. And, like Grand Junction, the certificate addresses three WorkKeys assessments: Applied Mathematics, Locating Information, and Reading for Information. As of early 2006, 429 high school students have received certificates through Lake Havasu High School. Many community businesses are accepting the certificates when hiring. One of the first was Coach-Net—a technical and roadside assistance company for recreational vehicles—which now accepts certificates from applicants and incumbent employees. Coach-Net CEO Henry Stroup said the costs of hiring and training employees at the company can top \$5,000. He said the credentials give the company an effective screening tool, as applicants who have certificates in hand are proven to be trainable. "We understand the value of the certificates," Stroup said. "It's not just about money."²²

In Coconino County, the Coconino Youth Workforce Council sponsors annual Teen Job Fairs. The Fairs address two compelling issues for local employers: the diminishing quality and quantity of the applicant pool, and the dilemma created by the fact that 70% of high school grads leave the area seeking employment and training opportunities in metropolitan areas. The Fairs are unique in that they are planned by teens for teens, with the support of the Youth Workforce Council. Community partners, e.g., the Flagstaff Chamber of Commerce, Coconino County Career Center, Coconino Community College, and numerous employers help ensure the event's success. In May 2007, 41 employers had tables at the event, 318 teens and 102 parents attended; many teens were hired on the spot.

Arizona's tribal communities have taken a critical collaborative step, and formed the Nineteen Tribal Nations Workforce Investment Board. The Board has made noteworthy progress in the planning of programs and services for the state's neediest youth populations. Fully implemented, the programs will

help prepare young workers to meet the demands of business, especially in high-growth industries and occupations.

At the state level, the Arizona Department of Commerce has achieved considerable success with its Job Training Program. Essentially, the program supports the design and delivery of training plans that meet unique industry standards and challenges. Under the “Net New Hire” portion of the grant program, businesses can apply for grants that return up to 75% of the costs of training net new employees in jobs that meet wage criteria. The “Incumbent Worker” portion of the grant program will allow for training that upgrades the skills of current employees. The Incumbent Program can reimburse employers up to a maximum of 50% of allowable training costs. To date, the program has been very effective throughout Arizona’s rural communities. In FY 2006, approximately \$3.2 million was awarded to businesses in rural areas, and the number of grants awarded, 38, increased by 46% over the FY 2005 total.²³

In a state with broad geographical and cultural diversity (as well as often-severe scarcities of resources), Arizona’s rural communities face considerable challenges in their efforts to train a competitive workforce. Success can only be attained through regional alliances (primarily among service providers and the business community), comprehensive planning, and strategic resource allocation. Once success is achieved, it will indeed be quantifiable—as measured by improved employee retention, productivity and income.

Challenges, Solutions & Opportunities —
Recruitment & Retention of Health Care Professionals in Rural Arizona

Like many rural areas in the United States, rural Arizona faces a critical shortage of health care workers. Statistics from 2004 show that rural Arizona counties have far fewer physicians per capita than the state’s urban counties. The U.S. average number of physicians per capita is more than twice that of rural Arizona. Table 1 lists the number of physicians per 100,000 residents in each Arizona county, as well as cumulative statewide, national, urban, and rural averages. With the exception of Coconino County, all rural counties have physician to population ratios significantly lower than the state average.

Table 1 - Physicians per 100,000 Inhabitants by County²⁴

US	283
Pima	276
Coconino	249
Urban	231
Maricopa	220
Arizona	207
Yavapai	161
Gila	161
Mojave	138
Rural	124
Yuma	121
Cochise	111
Navajo	96
Greenlee	84
La Paz	80
Santa Cruz	76
Pinal	67
Graham	61
Apache	48

Rural areas are best served by primary care physicians, whose general knowledge of medicine serves as a first point of contact for most community medical needs. Unfortunately, these general practitioners are becoming less prevalent in the workforce. Primary caregivers in rural areas tend to face greater workloads and receive less professional support from other physicians than their urban counterparts. They also tend to receive lower compensation due to the economic conditions in rural communities. Rural populations are more likely to lack health insurance, which can lead to unpaid bills and putting off treatment until a condition becomes critical. They also have a higher rate of such coverage as Medicare and Medicaid, which pay lower rates than private insurance.

In order to combat this deficiency of service providers, state and federal agencies have established designations for underserved areas. Once an area fits into a certain designation, it becomes eligible for participation in a number of programs. Major designations that enable areas in Arizona to use certain programs are Federal Health Professional Shortage Areas, Federal Medically Underserved Areas, Federal Medically Underserved Populations, and Arizona Medically Underserved Areas.

Health Professional Shortage Areas

An area with a shortage of dental, mental, or primary health care providers can earn the designation of federal Health Professional Shortage Area (HPSA). In order to qualify as an HPSA, an area must meet three criteria: it must be rational for delivery of health services, it must have a ratio of persons per physician of at least 3,500, and health care resources in surrounding areas must be unavailable because of distance, heavy usage, or access barriers. As of February, 2007, there were 60 areas and 13 facilities within the state with Primary Care HPSA designations. Thirty-two areas are considered Dental HPSAs, and four areas qualify as Mental HPSAs.²⁵

The State of Arizona has implemented programs aimed at the acquisition and retention of qualified health care workers in HPSAs. Programs include the Arizona Loan Repayment Program, the Arizona Primary Care Area Program, the Arizona State J-1 Visa Waiver Program, the National Health Service Corps, and the Arizona Medical Student Loan Program.

Arizona Medically Underserved Areas

The Arizona Medically Underserved Area (AzMUA) designation is used to establish an area's eligibility for a variety of state programs, including the Arizona Medical Student Loan Program and the Tobacco Tax Primary Care Program. All primary care HPSAs are considered AzMUAs.

Medically Underserved Areas/Medically Underserved Populations

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) are federal designations that qualify certain areas for various federal benefits. These include enhanced eligibility for federal grants, for federal funding and reimbursement for the development of various health care centers, for the use of the J-1 Visa Waiver Program, and for use of the Arizona Medical Student Loan Program. These designations are based on numbers of physicians per capita, infant mortality rates, poverty statistic, and numbers of senior citizens. As of March 8, 2005, 47 areas in Arizona had MUA or MUP designations.

State Efforts

Because recruitment of medical care providers is difficult in many rural areas of the country, countless incentive programs have been attempted with mixed results. They take a variety of approaches in addressing a number of problems. Some of these are practiced in Arizona, and a number of states have been successful implementing them.²⁶

High School Recruitment

States have found some success in recruitment of high school students. By generating interest in a medical career prior to college, they can offer long-term loans and support to future medical students who agree to practice in rural communities after graduation. This is more of a long-term solution, which increases the risk, but successful programs around the country have proven that it can work.

A program in Pennsylvania selects 150 high school juniors each year to attend a five-week summer program meant to generate interest in primary care in rural communities. Participants are introduced to the advantages and unique opportunities available to a rural practitioner. Upon entering their senior year, these students are put in contact with local health provider mentors, with the expectation that their interest will continue.

A program in Texas offers educational loans to rural high school students willing to commit to serve in their home communities after graduating from medical school. The loans are forgiven when the recipients return to fulfill their obligations.

Develop Relationships between Schools and Rural Service Providers

Most medical education is disseminated in larger university communities. As a result, a majority of field experiences expose students only to urban health situations. This means a lack of exposure to the realities of rural, primary care practices. Many students graduate without a firm understanding of the requirements of a general physician in a rural setting. Studies have suggested that when medical students undergo primary care training in rural settings, they are more likely to choose a career in such an area than if they had no such experience. Some states have begun to require exposure of this type to their medical school graduates.

Texas has passed laws requiring all primary care residents to have the option of a field experience a rural setting. Additionally, all third year medical students must complete a family medicine clerkship.

Loan Repayment

Loan repayment is a common way to attract recent graduates into service. Many states have taken differing approaches to the practice. Usually an annual lump sum payment is offered and can be renewed in subsequent years.

Idaho's loan repayment program focuses on recruiting caregivers in their final year of school. This creates a more immediate workforce supply, as the recipients will soon be out of school and eager to pay off loans. The program focuses on medical students who were raised in rural areas, and are therefore more likely to agree to practice in a similar setting. Those enrolling in the program must commit to two years of service. Communities that have benefited from the program are overwhelmingly supportive of it, and a majority of the providers have expressed willingness to stay in rural areas after the repayment period is over.

Nebraska's successful program also attributes much of its achievement to targeting students from rural areas. The state offers loans in exchange for service in an area with a deficit of providers. The trade-off is generally one year of loans forgiven for every year of practice in a qualifying area.

Recruitment Databases

Programs intended to improve states' abilities to coordinate recruitment efforts are used across the country. Online databases can provide easy access to job postings. Awareness of incentive programs can also be increased with these tools. Many states provide partial funding to organizations that provide such services. A wide variety of national programs are also available, profiling jobs and job candidates in many states.

The Kansas Department of Health and Environment, Office of Local and Rural Health, provides financial support to the Kansas Recruitment Center (KRC). The KRC helps rural areas of Kansas recruit and retain health care providers. It provides an online job board, a quarterly newsletter, promotions at conferences, and ads in national journals. It also assesses candidates through interviews in order to match them with appropriate job openings.

Examples of both national and tribal database programs will be discussed later.

Practice subsidies and income incentives

Some states encourage communities to subsidize the high start-up costs required when health workers start independent practices. For most medical school graduates, the costs of starting a practice would be prohibitive. Even veteran physicians would have trouble starting a new practice without help. Many communities that lack a clinic or a local physician would be eager to assist in business start-up if they would gain a local doctor.

Texas has implemented a fine example of such a program. The Medically Underserved Community-State Matching Incentive Program provides start-up costs for establishing physicians' practices.²⁷ Communities must contract with an eligible physician for at least two years, and provide at least \$15,000 in matching funds. The program will then provide up to \$25,000 in state funding.

Malpractice Immunity and Insurance Premium subsidization

Malpractice suits and the cost of malpractice insurance often serve to limit physicians' actions. Since rural physicians face higher amounts of Medicaid and Medicare patients, insurance is often less affordable. In addition, the threat of malpractice lawsuits is a disincentive for physicians to offer free care. It also discourages providers from performing high-risk procedures.

A study from 2005 proved that caps on malpractice lawsuit awards corresponded with a higher number of rural care physicians. For example, from 1975 to 2000, states with malpractice award caps of \$250,000 had a 9% higher growth rate in the median number of rural physicians than states with caps over \$250,000.²⁸

The state of Alabama has increased reimbursement for doctors and clinics serving Medicaid patients. This ultimately makes a provider more able to afford malpractice insurance premiums.

Arkansas' Retired Physician Immunity Act provides retired physicians and surgeons who offer free and voluntary medical services with immunity from civil damages. The act is meant to encourage doctors to provide service without the risk of malpractice suits. Also in Arkansas, the Volunteer Licensed Health Care Professionals Immunity Act provides the same protections to non-retired care providers who offer free care.²⁹

Many states offer reduced malpractice premiums or provide insurance free of charge. Each ties these incentives to actions according to specific needs. These states include Washington, Alabama, Louisiana, Illinois, Maine, West Virginia, and Texas.

Increased Pay and *locum tenens* relief

One disadvantage to rural practice is the isolation from research and education facilities. While an urban doctor may be able to learn new methods through evening classes or seminars, those in a rural setting may be too distant from a sufficient population to participate in such an activity. *Locum tenens* refers to the act of replacing a physician temporarily, enabling him or her to pursue professional development training. States often provide this service.

In Tennessee, up to four weeks of *locum tenens* is provided by the state.

The Washington State Rural *Locum Tenens* Program matches qualified substitute providers with rural clinics, hospitals and health care professionals. The program screens applicants and verifies licensure before referring them to communities and organizations.³⁰

Indian Health Service

The Indian Health Service (IHS) is a division of the U.S. Public Health Service that provides health care and health advocacy for Native Americans. The IHS' Division of Health Professions Support (DHPS) is charged with recruiting, assigning, and retaining health care professionals. The DHPS is divided into the IHS Loan Repayment, IHS Scholarship, and IHS Recruitment Divisions. These programs benefit more than 250,000 Native American residents of Arizona, the majority of whom live in rural areas.

The IHS Loan Repayment Program (LRP) offers loan repayment for health professionals in a variety of fields. Up to \$20,000 per year of tuition loans may be paid off in exchange for at least 2 years of professional service at an IHS facility. The LRP also covers a portion of the federal taxes incurred when a provider receives these taxable loan repayments.³¹

The IHS Scholarship Program (ISP) offers scholarships to American Indians or Alaskan Natives who are enrolled in a health professions school within the U.S. These scholarships are available for up to four years (or eight years for part-time study). ISP scholarship recipients must agree to serve one year at an IHS-approved facility for every year of aid they receive.³²

The IHS Recruitment Division provides a vehicle for potential job applicants to find openings in IHS, tribal, and urban Indian health programs. Any opening in these programs can be posted to the Recruitment Division's web site. New vacancies are posted daily, covering dozens of health-related jobs in many locations. On June 11th, 2007, 1143 job openings were posted on the site.³³

National Programs

Many national programs are in place in order to increase rural recruitment and retention. Some, such as the designations for HPSAs, MUAs, and MUPs are meant to designate eligibility for a number of benefits. Others are directly-provided services that may mirror those offered by states. The more successful of these programs, such as the National Health Service Corps, serve as excellent models for more localized programs.

National Rural Recruitment and Retention Network

The National Rural Recruitment and Retention Network (3RNet) is a collaboration of non-profit organizations dedicated to helping professionals find medical practice opportunities in underserved and rural areas. The involved groups include state offices of rural health, AHECs, cooperative agreement agencies, and state primary care associations. These organizations provide information regarding the practice sites in their areas in order to help place job seekers in the right areas.

The 3RNet website (www.3rnet.org) features job postings from around the country. Opportunities are listed by each individual state. Information regarding various geographical divisions within each state is available. By accessing the site, a job-seeking medical professional discover multiple job opportunities and learn about the areas where they are located.³⁴

National Health Services Corps

The National Health Service Corps (NHSC) is a 35-year-old program dedicated to recruiting health care professionals to serve where they are most needed. The success of the NHSC has established it as model for other organizations seeking to improve the number of health care providers in underserved areas. The NHSC uses tools including scholarships and loan repayment programs to recruit practitioners for federal HPSAs.

Examples of the success of the NHSC are abundant and can be found in the underserved areas of most states.³⁵

Chambersburg, Pennsylvania's Keystone Dental Center is a qualified NHSC practice site. It is located in a city of only 17,000, but serves over 40,000 from the surrounding county. The center opened in response to a high demand for dental services, but the supply of dentists was low in the community. One of the first dentists to be recruited was Jacqueline Hughes, who had previously practiced in her home village in the Philippines. She had applied to the NHSC loan repayment program while looking for a practice in Pennsylvania. The NHSC put her in contact with Keystone Dental Center, and she took the opportunity. Even after her loans were paid off, she decided to stay, partially because the rural atmosphere reminded her of her home in the Philippines.

Emery Medical Center in Castle Dale, Utah, serves about 8,000 patients from mining and farming backgrounds. It is located in a federal HPSA. A physician named Scott Hardy had recently graduated and was seeking a rural area to practice medicine. After discovering that Castle Dale was a good fit for him and his family, Hardy learned that the medical center qualified for NHSC loan repayments. In his case, the NHSC fit perfectly with his plans, so he was able to erase his loans while providing the life he wanted for his family. Emery was able to use the NHSC loan to secure Hardy's services, and it had the duration of his obligation to convince him to stay.

Leoti, Kansas, with a population of 1,700, is remote enough that recruiting and retaining medical service providers is a challenge. At times it has had a doctor, but currently it only receives bi-weekly visits from traveling doctors. The town was able to meet Marie McEntee, a former nurse's aid who had trained to be a physician's assistant with the help of a NHSC scholarship. McEntee had committed to two years of service in exchange for the scholarship. The Leoti community convinced her to serve them out as its only full-time practitioner. As a result, she was able to fill a needed position, satisfy her own need to make a difference in a community, and experience a dynamic and exciting work environment. After the two-year commitment had expired, she decided to continue working in Leoti, signing a 3-year contract. She remains the backbone of the town's clinic, county health center, rest home, and emergency room.

National Association of Rural Health Clinics

The National Association of Rural Health Clinics (NARHC) attempts to improve the services Medicare and Medicaid recipients receive in rural and underserved areas. When a clinic in a rural area receives Rural Health Clinic (RHC) certification, it becomes eligible to receive special Medicare and Medicaid reimbursements. The benefit for both providers and patients is an increase in funding from

government sources. This translates to more consistent treatment for patients. It also provides the financial incentives that encourage providers to stay in operation.³⁶

Federally Qualified Health Center

A Federally Qualified Health Center (FQHC) receives certain grants and provides services based on Medicare and Medicaid statutes. These centers must be non-profit or government entities that provide primary care services and sliding-scale fees. The recruitment and retention benefits of FQHC designation include enhanced Medicare and Medicaid reimbursement, malpractice coverage, access to the NHSC, and eligibility for or access to a number of other programs and grants.

Arizona’s Current Incentive Programs

The state is currently using a variety of incentives designed to recruit and retain health care workers in underserved populations. Based on the designations described above, these measures will hopefully serve to draw qualified professionals the communities that need them the most. Most of these programs have proven successful in other states and are still being used with positive results around the country.³⁷

Arizona Loan Repayment Program

The Arizona Loan Repayment Program provides funds to repay the qualifying education loans of primary care providers and dentists in return for practicing in an HPSA. Recipients must be citizens of the United States, have an employment offer in an HPSA, contract to work full time for at least two years, and have the appropriate licenses and certifications. Additionally, the program only applies to non-profit organizations that accept AHCCCS and Medicare assignments and have a sliding fee scale.

Table 2 – Reimbursement rates from Arizona’s Loan Repayment Program³⁸

Physicians and Dentists:				PA's, NPs, and CNMs:		
<u>Contract Year</u>	<u>Priority 1</u>	<u>Priority 2</u>	<u>Priority 3</u>	<u>Priority 1</u>	<u>Priority 2</u>	<u>Priority 3</u>
1st year	\$20,000	\$18,000	\$16,000	\$7,500	\$6,000	\$5,000
2nd year	\$20,000	\$18,000	\$16,000	\$7,500	\$6,000	\$5,000
3rd year	\$22,000	\$20,000	\$18,000	\$9,000	\$7,500	\$6,500
4th year	\$25,000	\$22,000	\$20,000	\$10,500	\$9,000	\$8,000

Table 2 lists the tuition reimbursement available to various practitioners each year of their practice. The amount varies based on the need of the area. Higher priority areas are in greater need or are geographically isolated and thus offer larger reimbursements.

During 2005, 15 health care providers were contracted under this program. Ten of those were located in rural communities.

J-1 Visa Waiver Program

The J-1 Visa Waiver Program is meant to recruit foreign medical graduates for practice in underserved areas. Every year, up to 30 physicians are selected for this program.

J-1 Visas allow foreign students to pursue graduate medical training in the United States. When their studies are complete, the students (now referred to as J-1 physicians) are required to return to their home countries and practice for two years before becoming eligible to apply for a permanent visa. The J-1 Visa Waiver Program allows a J-1 physician to waive the two years of home-country practice in exchange for practicing in an HPSA.

The employer of the J-1 physician must use a sliding fee schedule based on federal poverty guidelines, and must have been in operation for six months prior to the beginning date of the J-1 Visa Waiver Program. The physician must contract to work at least 40 hours per week.

Arizona Medical Student Loan Program

The Arizona Medical Student Loan Program provides medical students with loans which are repaid by practices in underserved areas. In-state resident students seeking an M.D. degree at The University of Arizona College of Medicine, a D.O. degree at Midwestern University's Arizona College of Osteopathic Medicine, or a D.O. degree at A.T. Still University's College of Osteopathic Medicine – Mesa may be considered for this program.

To receive funding through this loan program, applicants must agree to provide service as a licensed physician for a minimum of two years in an eligible area of the state. Areas must be rural, medically underserved, or an Indian reservation. Students are eligible for the loans for up to five years, and must commit to at least one year of service for every year of funding.³⁹

Arizona National Interest Waiver Program

The National Interest Waiver (NIW) Program is a federal program meant to encourage talented foreign workers with advanced degrees to work in the United States. Selected candidates are exempt from the labor certification process administered by the U.S. Department of Labor. Physicians applying for a NIW must agree to work within a rural, federally-designated HPSA, MUA, or MUP community.

To qualify, physicians must have obtained a J-1 Visa waiver from the U.S. Citizenship and Immigration Services (USCIS). A candidate must have completed at least one year of practice as a J-1 primary care physician immediately prior to applying to the NIW Program.

Since this program was re-opened in Arizona in June, 2005, seven foreign physicians have been selected for the waiver.

U of A medical student programs

The University of Arizona (U of A) operates a number of programs intended to encourage its graduates to practice in rural communities. Programs through the U of A also work with rural areas in order to increase recruitment and retention.

Arizona Area Health Education Centers

The Arizona Area Health Education Centers (AHEC), administered by the U of A and headquartered in Tucson, use several approaches to increase numbers and maintain health care professionals in underserved areas. Five geographically dispersed AHECs focus on sewing interest in young people, educating medical students about rural practice, and providing continuing educational opportunities for current practitioners.

The AHECs use a variety of approaches to generate interest in middle school and high school students in underserved areas, since medical professionals from rural areas are more likely to return to a rural setting. They establish health career clubs in rural and underserved high schools, and sponsor summer enrichment programs and health career fairs. Students who demonstrate interest in health careers are offered tours of health science colleges and universities. They receive mentoring and job-shadowing opportunities, and are encouraged to become involved in community health education projects. Nearly 5,000 students are reached by these programs annually.

Current medical students are exposed to the unique characteristics of rural practice in the hopes that the experience will encourage them to take such a job upon graduating. About 275 students a year choose to participate in an AHEC program that places them in clinical rotations in rural communities.

Retaining health care professionals who practice in isolated areas is encouraged by lessening their sense of isolation. The AHEC offer continuing education and health care workshops, which provide practitioners with up-to-date knowledge and a chance to network with others in their field. These courses and conferences reach about 3,600 medical professionals each year.

The Rural Health Professionals Program

The Rural Health Professionals Program (RHPP) provides medical students who have an interest in rural practice a series of rotations in rural settings. A student completing the program finishes 11 weeks or more of rural rotations over the course of four years.

The students who complete the RHPP are more likely to choose a primary care career than their classmates, at a rate of 75% compared to 56%. After graduation, physicians must spend 3-7 years in residency. Of those who have completed residency, 31% are currently practicing in rural Arizona, and 8% are practicing in rural areas of other states. An additional 17% are working in urban underserved areas.

Medcamp

Medcamp is a three-day summer health careers camp for juniors and seniors interested in medical careers. Each school in Arizona nominates one male and one female student. Participants are housed in dorms, supervised by medical students. They are exposed to career possibilities, look at what is going on in the industry, tour hospitals, and talk with and observe professionals. Medcamp has been successfully recruiting students for 15 years.⁴⁰

The Arizona Telemedicine Program

The Arizona Telemedicine Program, administered through the U of A, uses telecommunications systems to provide clinical services to rural areas. Data can be transferred in real time or stored in order to be played back later. The benefits of this technology are mainly in the support it can provide for physicians and others in rural areas. With the added information and knowledge that can be communicated over direct communication lines, practitioners can gain important new knowledge, and

use the expertise of others who cannot be present. With such aid, currently practicing professionals are more likely to be comfortable practicing in remote areas.⁴¹

Rural Health Office & the Arizona Rural Health Plan

The Rural Health Office promotes the health of rural and medically underserved individuals, families, and communities through service, education and research.

Among the many programs operated by the RHO is the 3RNet. The RHO also helps to produce the Arizona Rural Health Plan, a publication that analyzes and suggests steps for improving the health of rural Arizonans. Among its many topics, the 2005-2007 Rural Health Plan addressed the issue of recruitment and retention, and made a number of key recommendations.

Many of the recommendations are being implemented in various forms; others may be worth implementing in the future. Some of these points are:

- Providing regional in-services and continuing education through telemedicine and site visits
- State income tax incentives for medical service providers
- Expansion of J-1 Visas in rural areas
- Increased availability and publicity of scholarships, loan repayment plans, subsidies, or malpractice insurance offsets
- Improved compensation
- Updated equipment and technologies
- Implement recruitment and retention bonuses
- Increase commitment to recruitment among communities⁴²

Arizona's Prospects

The problem of rural medical service provider recruitment and retention is not unique to rural Arizona, nor is it an unsolvable problem. The programs currently in place are providing progress toward eliminating the deficit. The various federal programs available are also helpful. Add to these resources the successful efforts put forward by other states, and the problem will continue to diminish. Solving this problem requires working actively to understand it as it evolves, and continuously applying a variety of solutions.

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