UTAH DEPARTMENT OF HEALTH

OFFICE OF PRIMARY CARE & RURAL HEALTH

UTAH RURAL HEALTH PLAN

Utah Department of Health

Division of Family Health and Preparedness

Bureau of Primary Care

Office of Primary Care and Rural Health

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ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

Utah is unique among the 50 states for having the youngest population in America, and one of the healthiest. Organized into 29 counties, only four of Utah's counties are classified as "urban", where 75 percent of the population resides. These contiguous counties comprise the "Wasatch Front." Twelve of Utah's counties qualify as "rural" with a population density between 6.1 and 99.9 persons per square mile. Thirteen of Utah's counties qualify as "frontier" because the population density is under 6.1 persons per square mile. Much of Utah is sparsely populated, with correspondingly limited infrastructure.

In response to requirements of the federal-State Office of Rural Health (SORH) and Medicare Rural Hospital Flexibility Program (FLEX), the Office of Primary Care and Rural Health implemented an assessment and rural health meeting to develop this Utah Rural Health Plan. This Plan achieves two things: First, it describes Utah's rural health system, the organizations comprising its health care safety net and the environment in which those organizations provide services. Second, the document identifies prioritized strategy areas obtained from a list of interviewee-identified issues. Issue identification involved a comprehensive rural hospital survey, review of other rural health assessments, and key informant interviews with rural health safety net stakeholders.

Development of this State Rural Health Plan and the prioritization process is funded by the Utah Department of Health. However, the identified barriers and resultant priority areas reflect broad-based input from a variety of agencies. They are not all necessarily priorities of the Utah Department of Health, nor does the Department accept responsibility for addressing the barriers alone. The group expressed appreciation for the opportunity to convene and a commitment to collaborate. The group also articulated that their power to affect meaningful change lies in the diversity of their agencies and resources.

Priority Areas Include:
1. *Strengthening the Rural and Frontier Health Workforce*
2. *Improving Access to Behavioral Health Services*
3. *Improving Coordination and Communication Across Agencies*
4. *Improving Access to Enabling/Support Services*
5. *Improving Access to Telehealth Services*
6. *Improving Access to Specialty Services*
7. *Improving Communication Regarding Health Promotion Activities*
8. *Improving Access to Emergency Medical Services*

In addition, the group made the following decisions:
o Identification of stakeholders who need to be included in future discussions; and who could constitute a Consortium to carry forth these initiatives
o They want to reconvene to continue discussion of implementation and addressing priority areas of need.

PURPOSE

The purpose of this State Rural Health Plan is two-fold: First, it describes Utah's rural health system, the organizations comprising its health care safety net and the environment in which those organizations provide services. Second, the document proposes a framework for stakeholders to convene, refine priorities, and plan the future of Utah's rural health infrastructure. The development of the framework involved a hospital survey, review of other related assessments, and key informant interviews with stakeholders throughout the rural health safety net.

The State Rural Health Plan is a requirement of the federal-State Office of Rural Health and Rural Hospital Flexibility Program, funded through the federal Office of Rural Health Policy. The federal Office of Rural Health Policy requires all states that participate in SORH and FLEX Programs to develop a State Rural Health Plan.

The Utah Hospital Association (UHA) conducted a survey with rural hospitals to determine their primary challenges and priorities. Next, the Utah Office of Primary Care and Rural Health, the UHA, and the Rural Health Association of Utah collaboratively created a list of organizations that participate in the rural health system. They sought collective input from these organizations in understanding the breadth and depth of health services and resources. All 14 interviews focused on identifying barriers to the provision of health care in rural and frontier areas. The integration of those identified barriers and their causal factors provided a basis for discussion in a formal meeting held June 26, 2012 at the UHA offices. Through that process and culminating venue, a Rural Health Consortium manifested with direction. This report describes the process up to and including the inaugural meeting.

Historical Perspective

The Balanced Budget Act of 1997 created the Medicare Rural Hospital Flexibility Program. The FLEX Program intends to strengthen rural health care by encouraging states to take a holistic approach. A major requirement for participation in the FLEX Program is the creation of a State Rural Health Plan. The FLEX Program provides grants to each state; funds are used to strengthen critical access hospitals' (CAHs') operational, financial, and community positions, to encourage the development of rural health networks, to assist with quality improvement efforts, and improve rural emergency medical services. The FLEX Program promotes a process for improving rural health care, using the CAH program as one method of promoting strength and longevity through CAH conversion for appropriate facilities[1].

A CAH is a hospital certified to receive cost-based reimbursement from Medicare. The reimbursement that CAHs receive is intended to improve their financial performance and thereby reduce hospital closures. Each hospital must review its own situation to determine if CAH status would be advantageous. CAHs are certified under a different set of Medicare Conditions of Participation (CoP) that are more flexible than the acute care hospital CoP. As of March 31, 2011, there were 1,327 certified CAHs located throughout the United States. The Flex Monitoring Team maintains a list of CAHs that includes the hospital name, city, state, zip code and effective date of CAH status[2].

The Utah Office of Primary Care and Rural Health serves as the State Office of Rural Health and receives the FLEX Program grant. In this capacity, the Office accepts responsibility for implementing all aspects of the FLEX Program grant, including assistance to hospitals considering conversion to critical access. As of June 2012, Utah had 11 CAHs.

CAHs meaningfully contribute to the stability of Utah's rural health system, but they do not operate in isolation. Federally Qualified Health Centers (FQHCs), Medicare Certified Rural Health Clinics (RHCs), Local Health Departments, public mental health and substance abuse clinics, Utah Telehealth Network, and an Area Health

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[1] Rural Assistance Center, *CAH Frequently Asked Questions*, http://www.raconline.org/topics/hospitals/cah.php#faq (May 27,2012)

[2] Rural Assistance Center Online, CAH Information, http://www.flexmonitoring.org/cahlistRA.cgi?state=Utah (May 2012)

Education Center Programs (AHEC) play pivotal roles. In addition, a myriad of vital programs within the Utah Department of Health and Department of Human Services further connect the system: the Office of Primary Care and Rural Health, the Bureau of Emergency Medical Services and Preparedness, and the Division of Substance Abuse and Mental Health serve as key contributors.

UTAH'S RURAL HEALTH SAFETY NET

See Figure 1: The medical Safety Net Clinics and Resources on the following page.

Office of Primary Care and Rural Health

The Utah Department of Health's Office of Primary Care and Rural Health serves as Utah's Primary Care Office (PCO), and has done so since 1991. Utah's PCO partners with federal, state, and local agencies to serve the underserved and vulnerable populations of Utah by improving access to care and reducing health disparities. PCO activities include the designation of health professional shortage areas, coordination of workforce recruitment programs, provision of technical assistance to organizations and communities with similar goals, and the assessment of community needs, health workforce issues, and health disparities.

The Medicare Rural Hospital Flexibility Program (FLEX Program) aims to improve access to preventive and emergency health care services for rural populations. The FLEX Program requires development of a State Rural Health Plan and planning for improving rural health networks. The FLEX Program puts significant effort into designating Critical Access Hospitals (CAHs) and assists rural communities in integrating emergency medical services into the rural medical delivery systems, building rural hospital networks to exchange information, obtain economies of scale and collective volume, and increase cost efficiency and overall effectiveness by improving quality of care and overall organizational performance.

The State Office of Rural Health (SORH) provides assistance to help rural communities build their health care services through public and private partnerships and initiatives in rural health development. The four main goals of the SORH are: 1) collect and disseminate information on rural health care issues, research findings related to rural health care and innovative approaches to rural health care delivery; 2) provide technical assistance to rural health organizations and communities to meet rural health care needs; 3) help rural health organizations recruit and retain health care professionals and provide high quality care; and 4) strengthen partnerships among federal, state and local organizations invested in rural health.

The Small Hospital Improvement Program (SHIP) provides funds to assist and support quality improvement and investments towards meaningful use of health information technology. The program assists small rural hospital with 49 beds or fewer, to participate in delivery system reforms outlined in the Affordable Care Act: 1) Value Based Purchasing, such as improving data collection activities in order to facilitate reporting to Hospital Compare; 2) Accountable Care Organizations, such as activities that support quality improvement including reduction of medical errors and education and training in data collection, reporting, and benchmarking; and 3) Payment Bundling, building accountability across the continuum of care. SHIP funds also support activities related to Prospective Payment Systems, such as maintaining accurate prospective payment systems billing and coding, updating charge master, or providing training in billing and coding. To help maximize purchasing power through economies of scale, eligible hospitals are encouraged to form networks and pool grant funds for the purchase of goods and services; or to pool SHIP funds through participation in other networks that offer programs and services that support delivery system reforms. In 2012, twenty-two small rural hospitals submitted applications to the Utah SHIP program.

The State Primary Care Grants Program (SPCGP) provides financial resources to public and/or not-for-profit health organizations that offer primary care, mental health, and dental services to underserved, uninsured and underinsured populations. SPCGP funds approximately 30 health care agencies and has provided basic primary care services to approximately 25,000 medically underserved persons annually (12,500 rural and 12,500 urban).

Figure 1: Safety Net Clinics and Resources
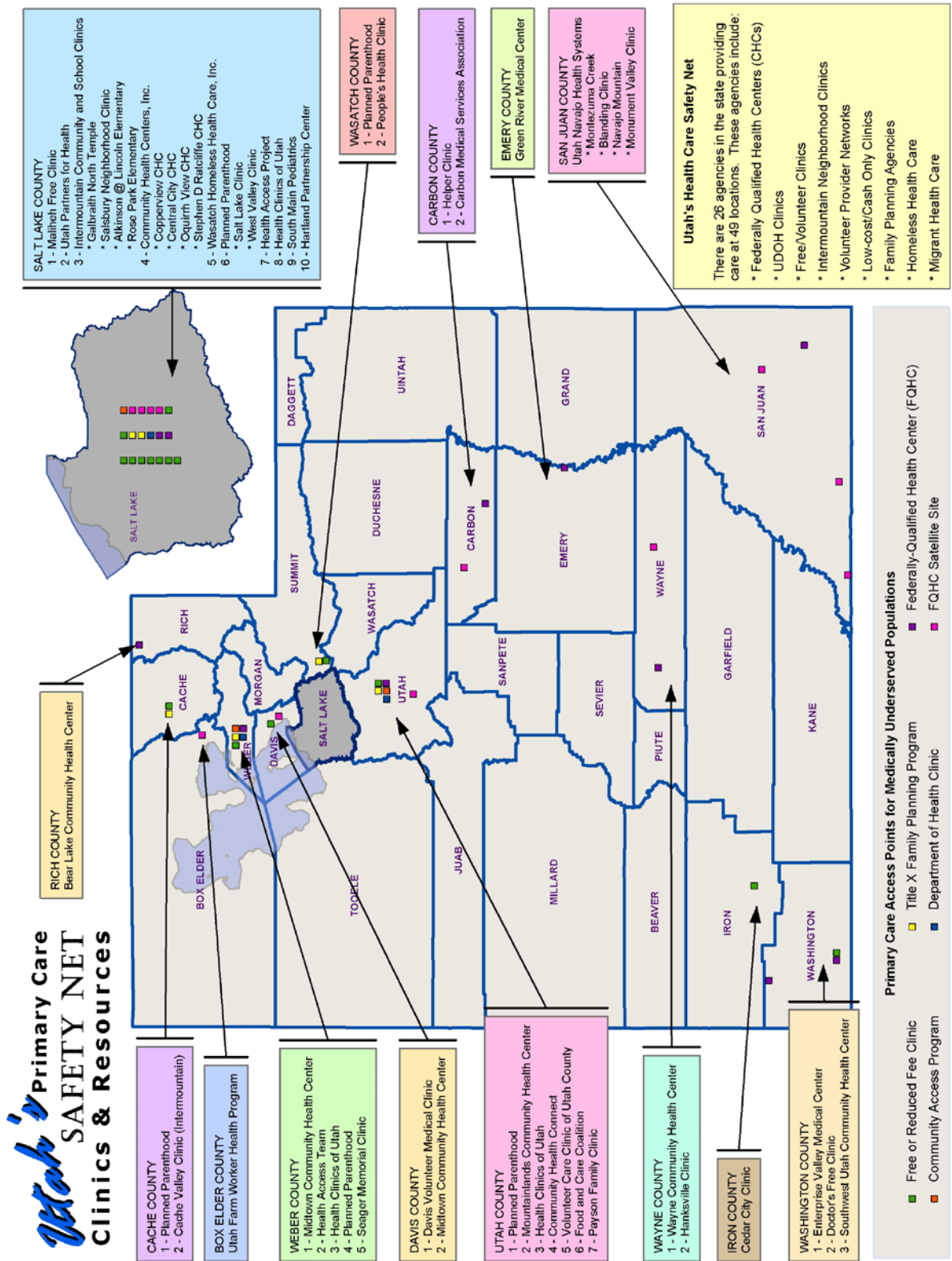
Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012.

Hospitals

As of May 2012, Utah's 52 hospitals consisted of 41 community hospitals, a Veteran's Administration regional hospital, two children's hospitals, a state teaching hospital, one rehabilitation hospital, two specialty hospitals, three substance abuse/psychiatric facilities, and a state mental hospital. Ten health systems operate in Utah. The UHA serves as the member association and convener for the state's hospitals and health systems.

According to the UHA, member hospitals employ more than 39,000 Utahans in urban and rural areas, consistently one of the top employers in each community. Utah hospitals report more than 5.4 million outpatient visits and more than 224,000 inpatient admissions annually. Utah hospitals record more than 49,000 births annually[3].

Twenty-four rural hospitals are eligible for the activities and services covered by the FLEX Program grant and the State Office of Rural Health grant; and twenty-two rural hospitals are eligible for services and activities covered by the federal Small Rural Hospital Improvement Program grant. These hospitals are shown in Figure 2: Utah's Rural Hospitals on the following page. Eleven of the hospitals are designated Critical Access Hospitals (CAHs).

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are community-based organizations that provide comprehensive primary care and preventive care, including health, oral and mental health/substance abuse services to persons of all ages regardless of their ability to pay. FQHCs operate under a consumer Board of Directors governance structure and function under the supervision of the U.S. Department of Health and Human Services, Health Resources and Services Administration. They bring primary health care to underserved/underinsured/uninsured Americans, including migrant workers and homeless persons. FQHCs provide their services to all persons regardless of ability to pay and charge services on a community board approved sliding fee scale that are based on federal poverty levels that are based on the family size and family income[4]. FQHCs must comply with Section 330 of the Public Health Service Act program requirements.

The Association for Utah Community Health (AUCH) serves as the primary care association for Utah. Members include Federally Qualified Health Centers (FQHC) and other providers who strive to meet the needs of the medically underserved.

There are currently 11 FQHC grantee organizations in Utah, serving approximately 113,000 patients annually. Carbon Medical Service Association, Inc. was the first FQHC in Utah, established in 1952. See Figure 3: Utah's Community Health Centers on the following pages.

As evidenced in Table 1 on the page following the maps, the distribution of patients seen by FQHCs nearly follows the state's population distribution, with 29 percent of the patients located in rural/frontier areas. Looking more closely, greater than 25 percent of the services are provided in rural areas, underscoring the need for subsidized care in geographically isolated regions.

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[3] Utah Hospital Association, Frequently Asked Questions, http://www.utahhospitals.org/ (May 27, 2012) [Original Source: Hospital Statistics, 2012 edition, Healthcare InfoSource]

[4] 2012 Poverty Guidelines, Federal Register Notice, Federal Register Volume 77, Number 17, Thursday, January 26, 2012 http://aspe.hhs.gov/poverty/12fedreg.shtml and 330 Funded Health Centers, U.S. Department of Health and Human Services, Health Resources and Services Administration, Primary Care: The Health Center Program, http://bphc.hrsa.gov/about/index.html

Figure 2: Utah's Rural Hospitals

Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012.

Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012.
Data Source: Association for Utah Community Health, 2012. http://www.auch.org/about-health-centers/health-center-locations

Table 1. Utah Community Health Center Facts, 2012

Patients/Encounters	State	Rural/Frontier	Urban
Patients	112,794	32,603	80,191
Encounters			
Medical	284,117	93,045	191,072
Dental	42,108	19,920	22,188
Mental Health	17,598	6,847	10,751
Vision	547	0	547
Other Professional	4,975	4,816	159
Enabling Services	24,413	0	24,413
Total Encounters	373,758	124,628	249,130

Data Source: Association for Utah Community Health, 2012.

Medicare Certified Rural Health Clinics

Medicare Certified Rural Health Clinics (RHCs) are certified by the U.S. Department of Health and Human Services, Centers for Medicare and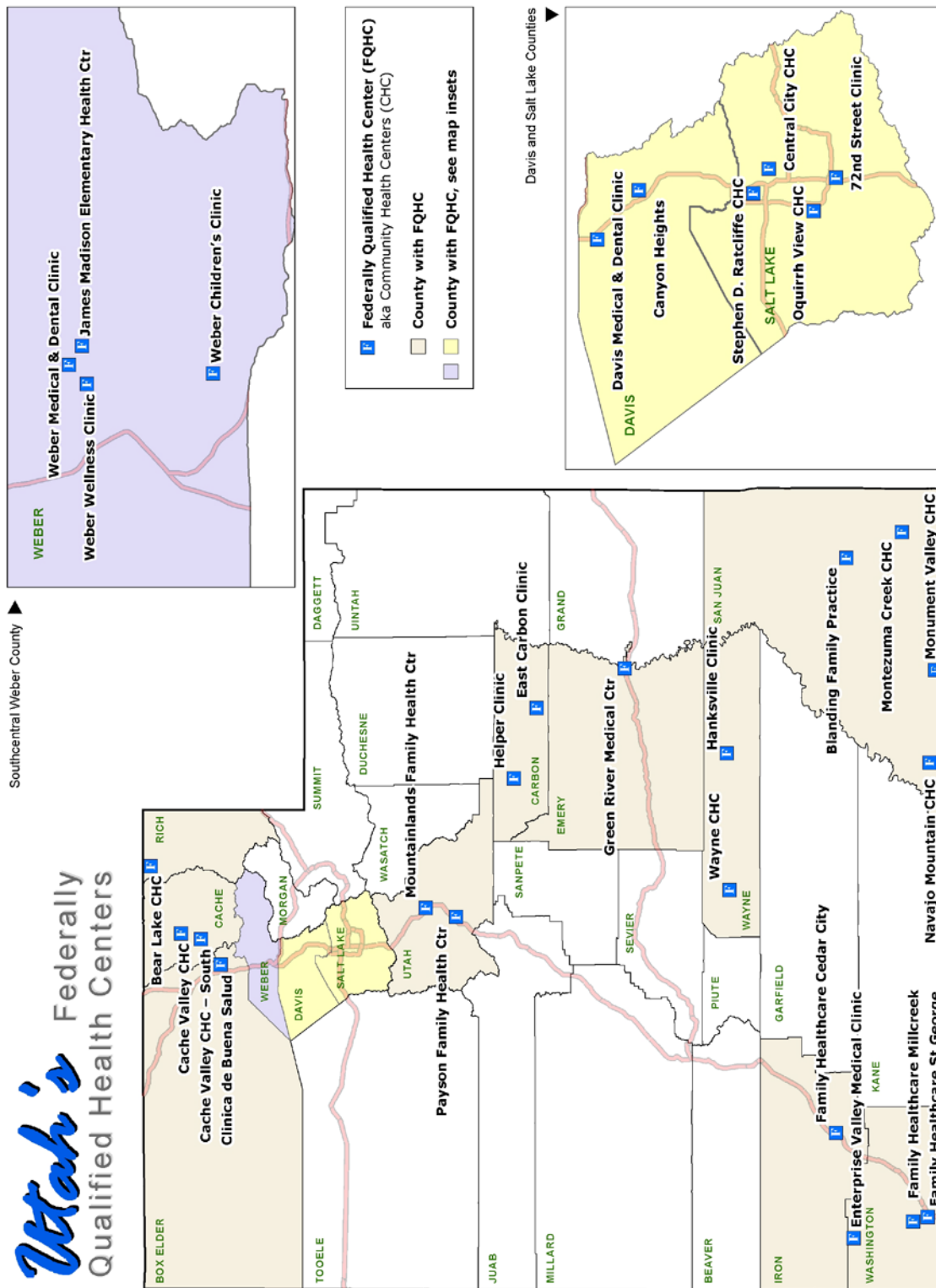 Medicaid Services, to receive special Medicare and Medicaid reimbursement. The purpose of the RHC program is improving access to primary care in underserved rural areas. RHCs are required to use a team approach of physicians and midlevel practitioners (nurse practitioners, physician assistants, etc.) to provide care. The clinic must be staffed at least 50 percent of the time with a midlevel practitioner. RHCs are required to provide outpatient primary care services and basic laboratory services. Medicare visits are reimbursed based on allowable costs and Medicaid visits are reimbursed under the cost-based method or an alternative Prospective Payment System.

As with other states, no state-level membership association exists to serve the needs of or advocate for RHCs. See Figure 4: Utah's Medicare Certified Rural Health Clinics on the following pages.

Area Health Education Centers

Utah's Area Health Education Center Program (AHEC) is housed at the University of Utah, School of Medicine, in Salt Lake City. Consistent with other AHEC Programs across the nation, their mission focuses on increasing access to health care through education. Also consistent with the program nationally, their three focal areas are:

1. Recruit youth from Utah's minority and disadvantaged populations into health-related careers;
2. Provide educational opportunities for students in health professions training programs in community-based clinical settings largely serving Utah's medically underserved residents;
3. Retain health professionals practicing in Utah's medically underserved communities through convenient professional development opportunities and health-related community advocacy and leadership.

Utah's three AHEC Centers include:
o   Northern Utah AHEC at Weber State University in Ogden, Weber County.
o   Crossroads AHEC at Salt Lake Community College in West Jordan, Salt Lake County.
o   Southern Utah AHEC in Southern Utah University's Center for Rural Health in Cedar City, Iron County.

See Table 2 on the next page.

Table 2. Geography of Utah's Area Health Education Centers Program

AHEC/ Date established	Population	Ethnic/ Minority	Square Miles	Counties Served	Full/ Partial HPSA	Rural/ Frontier	(</=) Federal Poverty
Crossroads AHEC (3/2000)	1,420,808	17.5%	12,718	5	67%	65%	10.5%
Northern Utah AHEC (3/2002)	714,552	11.9%	9,401	6	80%	95%	9.5%
Southern Utah AHEC (7/1997)	78,472	16.1%	60,239	18	78%	95%	12.1%

Data Source: University of Utah, School of Medicine, Utah Area Health Education Centers, 2012.

Utah AHEC was created and funded by the Utah Legislature in 1995 in response to a report issued by the Utah Health Policy Commission detailing a shortage of primary care providers in rural Utah. In 2002, the Utah Legislature eliminated all AHEC funding. Three of the rural centers were consolidated into one, the Southern Utah AHEC Center. The Northern and Crossroads Utah AHEC Centers continue with essentially a single FTE focused on high school programs. Their budgets are based on the limited amount of federal AHEC funding (about $74,000 per center per year), but regularly seek additional funding opportunities/sources. The statewide program is coordinated through a Program Office that is housed at the University of Utah, School of Medicine.

At this time, the AHEC's premier program is the Rural Health Scholars. Developed to help rural undergraduate students become stronger applicants to graduate programs (medicine, physician assistant, pharmacy, dental, etc.), the focus on rural students remains relevant and vital.

One measure of AHEC's success is Utah's rural workforce. Rural Utah does not suffer any dramatic health workforce shortages at this time. Many of the rural communities in Utah have providers who have been in one part or another of the AHEC programs. Many of Utah AHEC's student participants are currently pursuing graduate programs in health and/or medicine.

Since the establishment of Utah AHECs in 1995, over 100,000 students have been introduced to health careers and 2,500 students have participated in health career camps; nearly 3,500 graduate students in primary care disciplines have trained in underserved, community-based settings with guidance from over 350 preceptors. See Figure 5: Utah's Area Health Education Centers, 2012 on the following pages.

Figure 4: Utah's Medicare Certified Rural Health Clinics
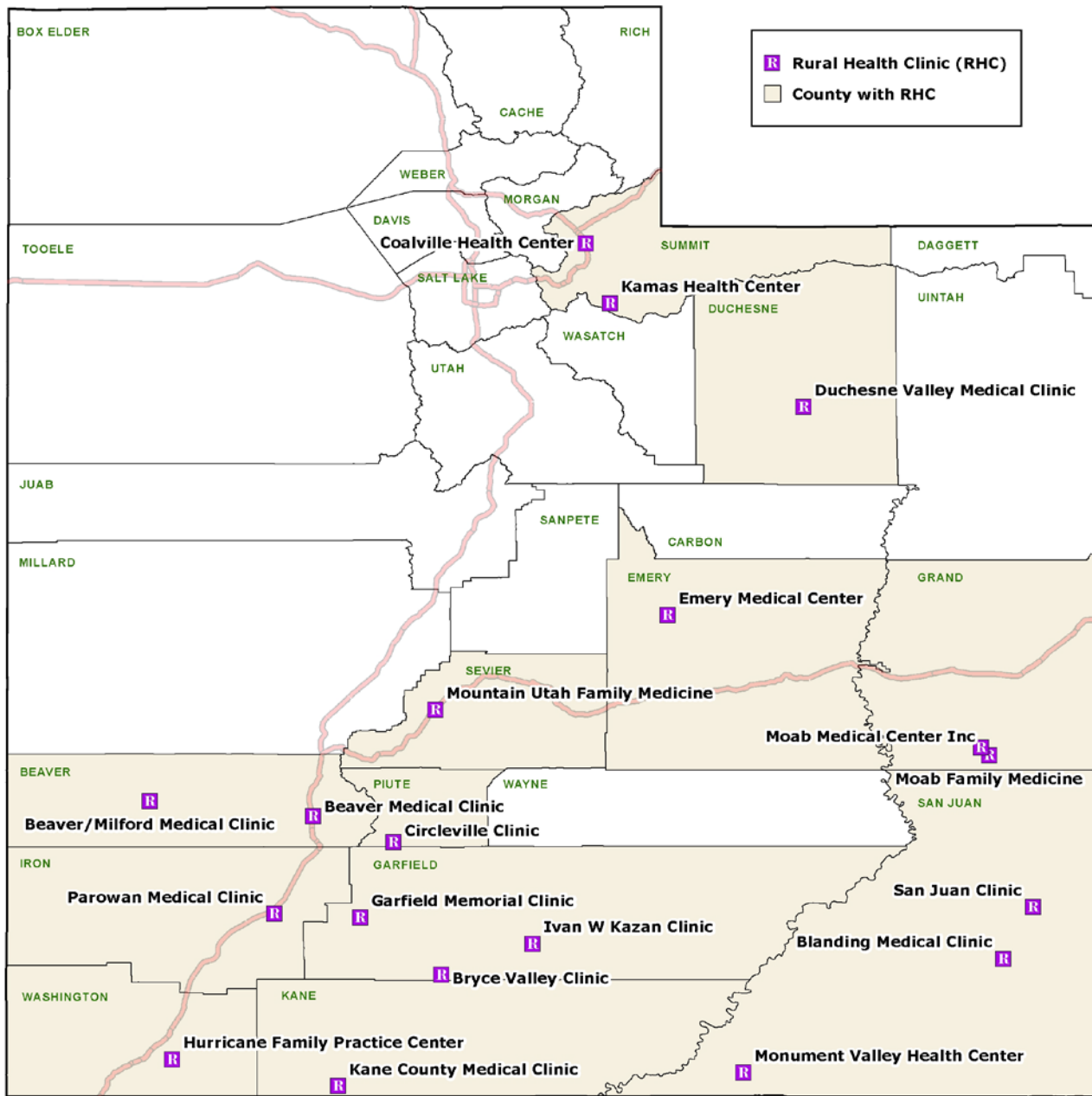
Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012.

Data Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Health Facility Licensing, Certification, and Resident Assessment, 2012, http://health.utah.gov/hflcra/facinfo/alpha.php?FACTYPE=121
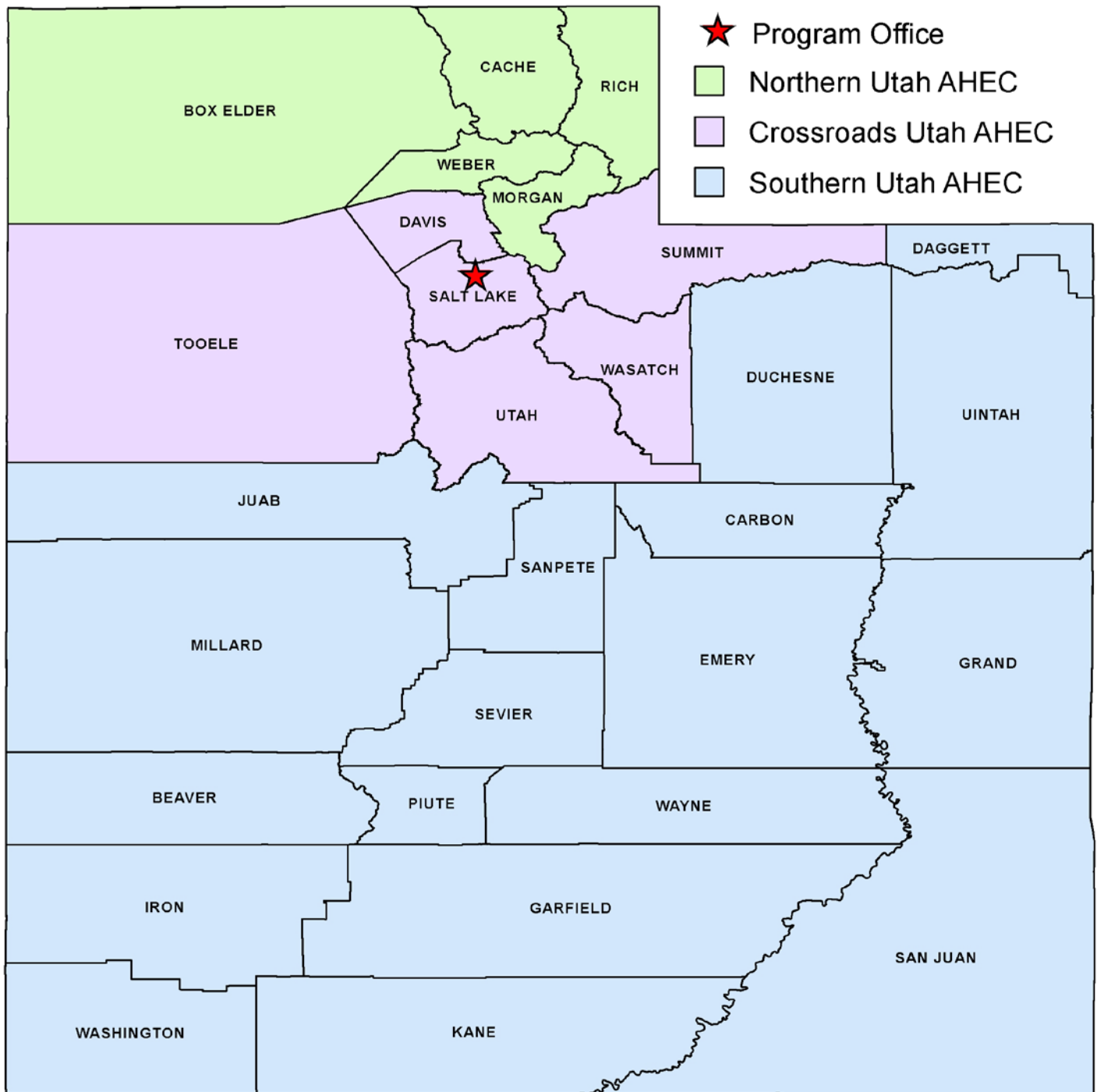
Figure 5: Utah's Area Health Education Centers, 2012.

Source: University of Utah, School of Medicine, Utah Area Health Education Centers, http://www.ahec.utah.edu

Emergency Medical Services

The vast majority of emergency medical services responders in Utah are Emergency Medical Technician Basics and Intermediates. The Bureau of Emergency Medical Services and Preparedness (BEMS) is the lead agency for Utah's Emergency Medical Services System. The BEMS is housed within the Utah Department of Health, Division of Family Health and Preparedness. The BEMS comprises two sections that oversee the Emergency Medical Services System: Emergency Medical Services and Preparedness. To ensure constituent input, the BEMS has three statutory committees, three subcommittees, and various task forces[5].

The mission of the BEMS is to promote a statewide system of emergency and trauma care to reduce morbidity and mortality through prevention, awareness, and quality intervention. As shown below in Table 3, the vast majority of emergency medical services agencies include a mix of volunteer and non-volunteer team members.

Table 3. Organizational Status of Emergency Medical Services Agencies in Utah

Organizational Status	Number of Agencies
Volunteer	42
Non-Volunteer	25
Mixed	75

Data Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Emergency Medical Services and Preparedness, 2012.

The following graph date source is the Utah Indicator-Based Information System-Public Health (IBIS-PH). As expected, time to scene arrival depends on the level of geographic isolation. For the most isolated portions of the state, the "golden hour" is impossible; ambulances must travel over an hour to the scene. The graph only shows averages, making it difficult to see the raw volume of incidents requiring greater than an hour of travel time, even in sub-frontier areas.

Figure 6. Time (Average Minutes) From Dispatch of Emergency Medical Services to Arrival at Scene by County Type, 1996-2010
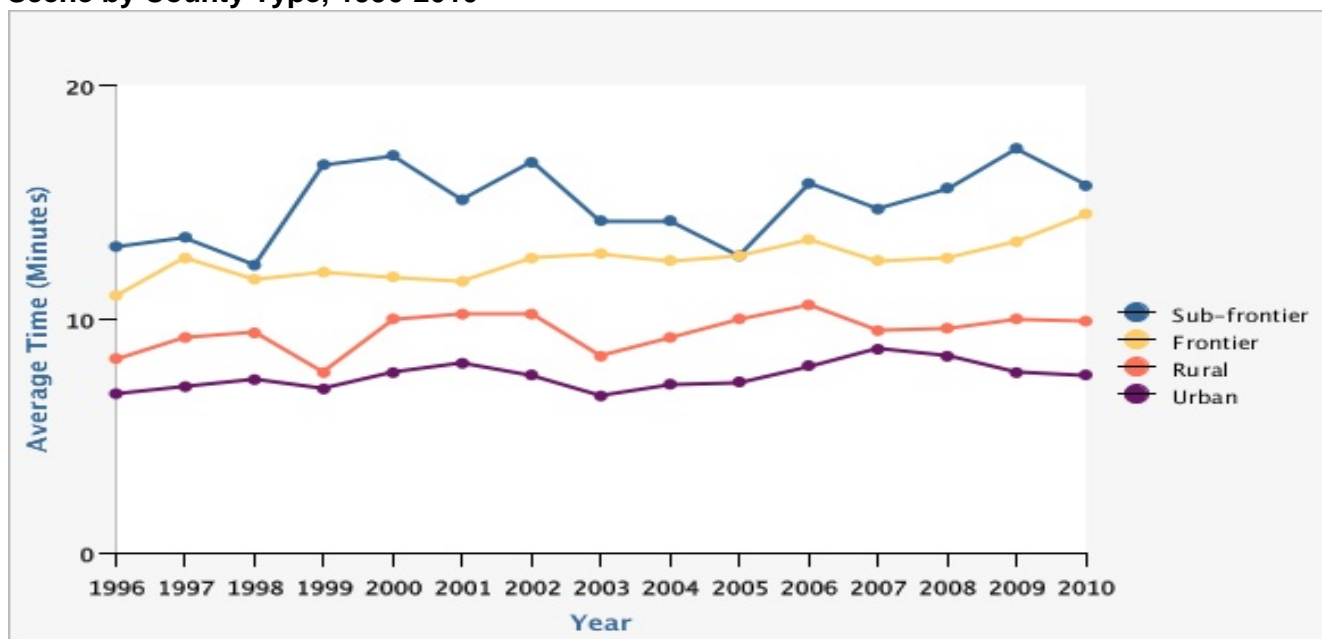
Data Source: Utah Department of Health, Indicator-Based Information System-Public Health (IBIS-PH), 2012,
http://ibis.health.utah.gov/indicator/view/EMSResTim.CntyType.html

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[5] Utah Department of Health, Division of Family Health and Preparedness, Bureau of Emergency Medical Services and Preparedness, http://health.utah.gov/ems/about/ (May 27, 2012)

Data Notes Excludes canceled emergency medical services responses. Excludes inter-facility transfers. Excludes response times that are negative, zero, or greater than 60 minutes. Sub-Frontier: less than 2 persons per square mile. Frontier: greater than 2 and less than 6 persons per square mile. Rural: greater than 6 and less than 00 persons per square mile. Urban: greater than 100 persons per square mile.

Local Health Departments

Utah is organized into 12 local health departments (LHDs). Six of the LHDs are single county districts and the other six are multi-county districts. Their purpose is to protect and promote the public's health. Funded primarily from county contributions and fees to local citizens, they are governed by volunteer boards of health. The multi-county districts each recognize a hub office for administrative leadership, with several community-based satellite offices. The single county LHDs generally have a single site, although Summit County and Davis County provide services through 2 to 3 clinic sites.

At the local level, public health services in Utah are organized into 12 health departments/districts. Six of the 12 local health departments are single county and six are multi-county districts. Local health departments provide many essential health services including investigation of disease outbreaks, regulation of known sources of health hazards such as food establishments, and health education and prevention services such as immunizations and preventive health screenings.

Local health departments are often the front line for reporting communicable diseases and other events, such as signs and symptoms of exposure to biologic agents of terrorism. The Utah Notification and Information System (UNIS), Utah's Health Alert Network, consists of a network of local, state, and private health providers who share information through instantaneous electronic transmission to provide a timely response to disease outbreaks whether natural or the result of terrorism.

Utah's public health capacity is provided by both state and local public health entities, as well as community health centers and community based organizations. See Figure 7: Map of Utah's Local Health Departments on the following page.

Figure 7. Map of Utah's Local Health Departments
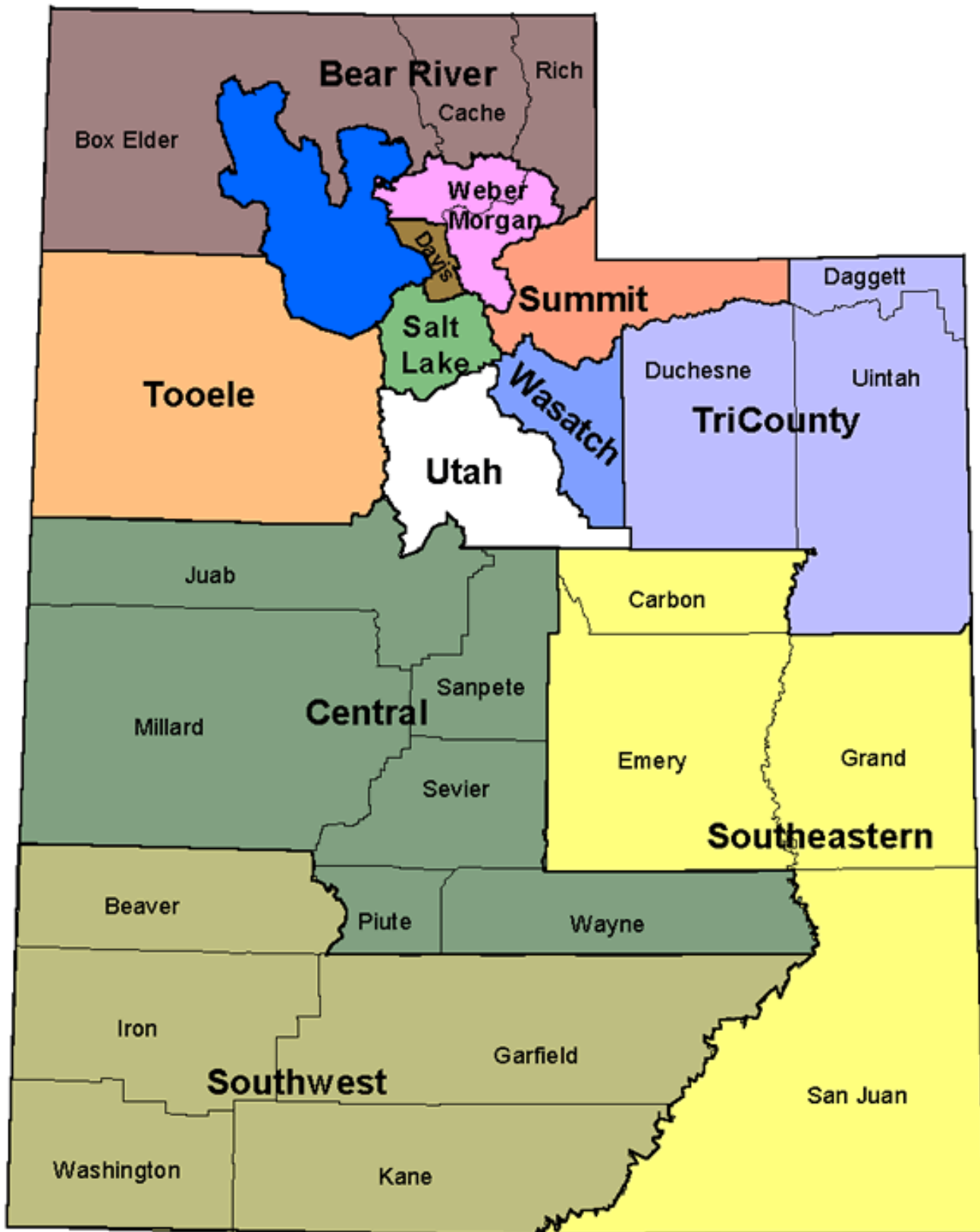
Map Source: Utah Department of Health, Indicator-Based Information System-Public Health (IBIS-PH), 2012, http://ibis.health.utah.gov/home/LocalHealth.html
Data Source: Utah Association of Local Health Departments, 2012, http://www.ualhd.org/lhds.html

Trauma System

According to the American College of Surgeons, trauma is "a term derived from the Greek word for "wound"- it refers to any bodily injury." Injury is defined as "the result of an act that damages, harms or hurts; unintentional or intentional damage to the body resulting from acute exposure to mechanical, thermal, electrical or chemical energy or from the absence of such essentials as heat or oxygen."

Traumatic injuries are time sensitive and preventable. The Utah Trauma System is an inclusive trauma system that recognizes the need for appropriate trauma services in urban and rural communities. While 25 percent of Utah's population lives in rural communities, over 60 percent of deaths from motor vehicle crashes occur in rural areas. This disparity represents the need for an inclusive trauma system in rural and urban areas of the state.

Trauma care represents a coordinated health care delivery system including prevention through acute care and rehabilitation. The coordination of this system requires the cooperation of multidisciplinary trauma care providers in urban, rural, frontier and sub-frontier portions of the state. This systems approach to trauma care recognizes this continuum of care with the goal of reduced costs, disability, and death associated with traumatic injury.

There are currently 18 designated trauma centers in Utah, including two CAHs. Figure 8: Trauma Care Levels, on the following page illustrates the designated trauma centers in Utah.

Tribal Health

While other components in this section on Rural Health Safety Net focus on organizations providing services to rural residents, Tribal Health belongs here as the provider and recipient of services.

Utah's tribal representation includes seven Tribal Governments, 10 Indian reservations and one Title V urban Indian Organization. They are the rural Paiute Indian Tribe of Utah, rural Ute Indian Tribe, rural Navajo Nation, rural Ute Mountain Ute Tribe, rural Skull Valley Band of Goshute, rural Confederated Tribes of the Goshute Reservation, and rural Northwestern Band of Shoshone Nation. The relationship the State has with the Tribes is based on a government-to-government relationship, not one based on race or ethnicity. Salt Lake City is home to one of the 32 Title V (Indian Health Care Improvement Act) Urban Indian Programs across the country. This is an outreach and referral center that provides access to direct services for Behavioral Health, Youth, Health Promotion and Disease Prevention, and Diabetes. They contract with the Community Health Centers of Utah for referral of clients needing direct medical care.

With 45,000 citizens (Governor's Office of Planning and Budget, 2010), they make up 1.4 percent of Utah's entire population, with tribes ranging from 15,000 to 127 (Utah Division of Indian Affairs, 2010). The urban Indian population is ~ 16,000 and is predominately located along Utah's Wasatch Front. American Indian/Alaskan Natives are a very mobile population, moving between reservation and the city several times a year for work, school, or even health care.

The Indian Health Service (IHS) Area Office serving Utah is primarily the Phoenix Area Office. However, other IHS Area Offices that provide care for some of Utah's American Indian/Alaskan Native population include Albuquerque, Navajo and Portland. IHS has only one clinic in the State of Utah, located in the northeastern part of the state between Roosevelt and Vernal.

Tribal governments are working to provide for their citizens and leverage the resources they may have to improve the overall quality of life. However, not all Tribes have equal access to resources simply because the populations differ in number. Often times, resources are based on populations. For example, one of Utah's smaller tribes has no medical services on the reservation. They have an IHS provider from the Ft. Duchesne IHS clinic come to provide care maybe once a week, while programs with one of Utah's larger Tribes have several clinics and providers who are available to provide care when the community needs it. See Figure 9: Utah Indian Tribal Lands on the following pages.

Figure 8. Trauma Care Levels

Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012.

Figure 9: Utah Indian Tribal Lands
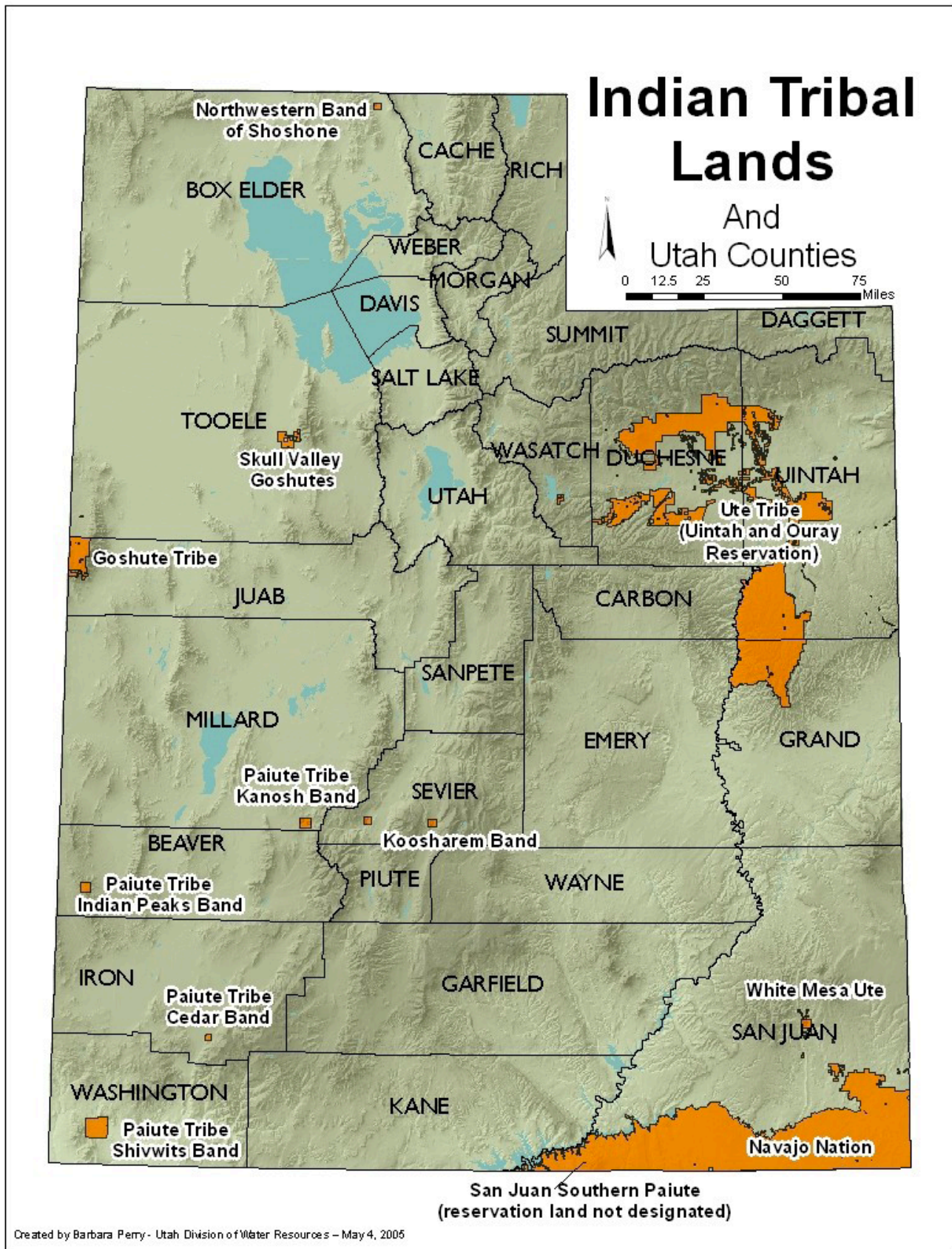
Map Source: Utah Division of Water Resources, 2005.

Substance Abuse and Mental Health

The map, Figure 10: Utah Substance Abuse and Mental Health Catchment Areas, shows the placement of Utah's public behavioral health services, which primarily serve Medicaid patients. As a raw population proportion, 29 percent of the mental health users in 2011 live in rural areas. Otherwise counted, 2.0 percent of rural dwellers used mental health services in 2011, compared with only 1.5 percent of urban dwellers, underscoring the need/demand for mental health services in rural areas.

Figure 10: Utah Substance Abuse and Mental Health Catchment Areas
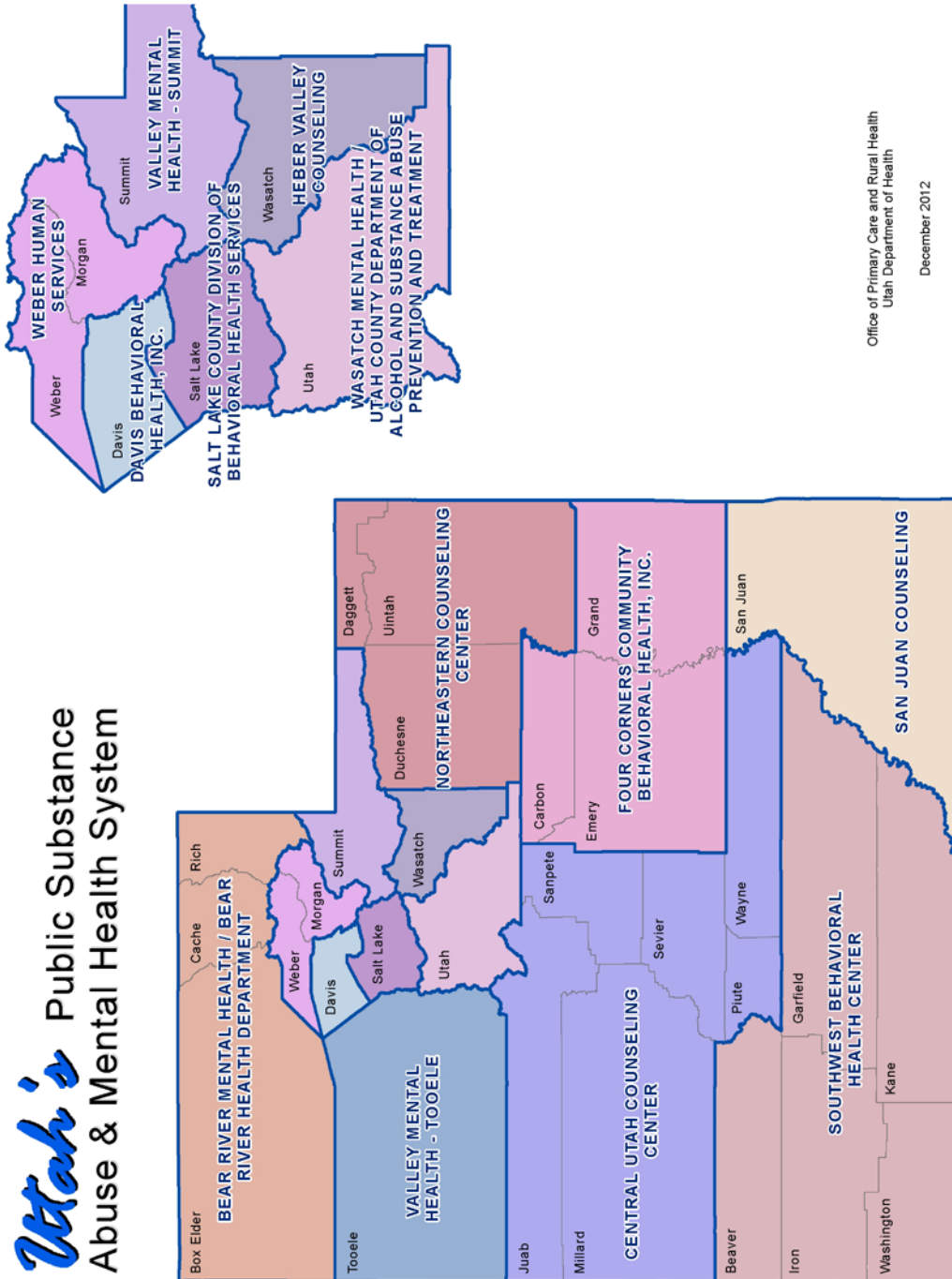
Map Source: Utah Department of Health, Division of Family Health and Preparedness, Bureau of Primary Care, Office of Primary Care and Rural Health, 2012
Data Source: Utah Department of Human Services, Division of Substance Abuse and Mental Health, 2012.

DEMOGRAPHICS
Geography
Located in the Rocky Mountain Region of the United States, Utah is a land of snow-covered peaks, natural rock formations, and beautifully colored canyons. Utah's geography is characterized by three major land areas: the Rocky Mountains, the Basin and Ridge Region, and the Colorado Plateau. Covering 84,904 square miles, Utah is our nation's 13th largest state. One of the three highest states in the nation, the highest point is Kings Peak at 13,528 feet above sea level[6]. Utah is also home to rivers and lakes, including the Great Salt Lake, the largest U.S. lake west of the Mississippi and the fourth largest terminal lake (no outlet) in the world[7].

Organized into 29 counties, only four of Utah's counties are classified as "urban". Twelve of Utah's counties qualify as "rural" with a population density between 6.1 and 99.9 persons per square mile. Further, 13 of Utah's counties quality as "frontier" because the population density is under 6.1 persons per square mile. Practically speaking, much of Utah is sparsely populated, with correspondingly limited infrastructure.

People
As demonstrated in Table 4, tribal populations reside predominantly in frontier areas while Utahans of Black/African, Asian, and Native Hawaiian/Other Pacific Islander race, as well as residents of Hispanic ethnicity, reside in more urban areas.

Table 4: Utah, Population and Race, 2010

Indicator	Total	Urban	Rural	Frontier
Population (2010)	2,763,885	75.4%	20.9%	3.7%
RACE				
White	89.4%	88.6%	92.5%	87.5%
Black/African	1.0%	1.2%	0.5%	0.2%
American Indian	1.2%	0.7%	1.4%	9.4%
Asian	2.0%	2.4%	1.0%	0.4%
Native Hawaiian/Other Pacific Islander	0.9%	1.1%	0.4%	0.3%
Other Race	3.4%	3.8%	2.5%	1.0%
2 or more Races	2.1%	2.2%	1.8%	1.1%
ETHNICITY				
Hispanic	12.3%	13.53%	8.97%	5.91%

Data Source: American Community Survey, 2006-2010. Five year averages provide greater accuracy for low population areas, but numbers will vary from the 2010 Census.

According to the 2011 Utah State Health Profile[8], Utah has the youngest population in the nation (median age 29.2 versus 37.2 nationally); the population is often characterized as one of the healthiest in the nation, partially because of the low incidence of cancer and heart disease among younger people. See Figure 11: Population Age Distribution, Utah and U.S., 2010 on the following page.

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[6] Netstate.com, The Geography of Utah, http://www.netstate.com/states/geography/ut_geography.htm (May 28, 2012) [Original Source: The World Almanac of the U.S.A., by Allan Carpenter and Carl Provorce, Copyright 1998]

[7] U.S. Geological Service, Utah Water Science Center, Great Salt Lake, http://ut.water.usgs.gov/greatsaltlake/ (May 28, 2012)

[8] Utah Department of Health, 2011 Utah State Health Profile, January 2012, http://health.utah.gov/opha/publications/2011StateHealthProfile_FINAL.pdf

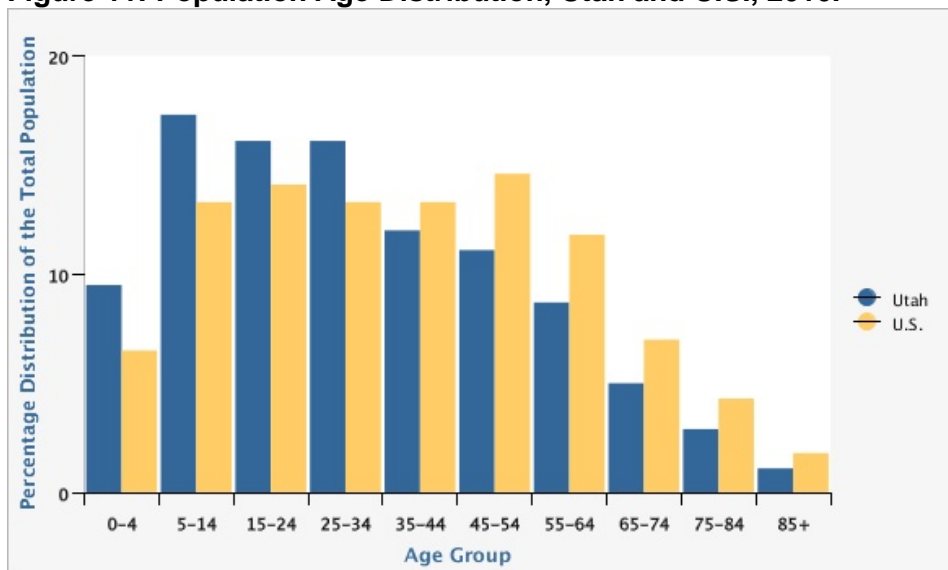**Figure 11: Population Age Distribution, Utah and U.S., 2010.**

Figure Source: Utah Department of Health, 2011 Utah State Health Profile, January 2012, http://health.utah.gov/opha/publications/2011StateHealthProfile_FINAL.pdf and Utah Department of Health, Utah's Indicator-Based Information System for Public Health, 2012. http://ibis.health.utah.gov/indicator/view/AgeDistPop.Ut_US.html. Data Source: U.S. Census Bureau, 2010 Census.

Economy

Building on its bountiful geography and blend of urban and rural areas, Utah's diverse economy stretches from agriculture to mining, manufacturing to services. Over 75 percent of the state's agricultural income is generated by livestock and livestock products, led by beef and milk. Not surprisingly, the largest crop is hay, grown to feed beef and dairy cattle. Petroleum, copper and natural gas make up the most valuable mined products. Computers and electronics lead the manufactured products list, followed by primary metals manufacturing (steel, aluminum and copper). Utah's service sector is centered in metropolitan areas of the state and includes health care, ski resorts, law firms, engineering companies, software development, repair shops, finance and real estate[9].

A variety of recent reports point to Utah's strong economic outlook, sometimes touting it as one of the best in the nation. In April 2012, the American Legislative Exchange Council (ALEC) ranked Utah number one for its economic prospects, the fifth year in a row[10]. According to a recent Governor's report on Utah's economy[11], Utah typically grows more rapidly than the nation after recessions, and this pattern persists in the current recovery. The only industry not gaining employees is Leisure and Hospitality. The same report suggests Utah has the third lowest poverty rate in the nation.

While Utah's economy demonstrates relative strength, pockets of poverty persist and grow. First, consistent with the rest of the country, Utah's minority populations experience poverty at a disproportionately higher rate, often two to three times higher than Whites. Specifically, in 2009, 28.7 percent of Utah's Black/African-American population, 20.8 percent of the Hispanic/Latino population and 31.4 percent of the Native American population lived in poverty, compared to 9.4 percent of non-Hispanic Whites[12]. Interestingly, Utah's minority

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[9] Netstate.com, Utah Economy, http://www.netstate.com/economy/ut_economy.htm (May 28, 2012), [Original Sources: George Hepner and Thomas Alexander, "Utah," World Book Online America's Edition, http://www.worldbookonline.com/wbol/wbPage/na/ar/co/578420, August 15, 2001 and U.S. Department of Agriculture: National Agricultural Statistics Service, "Utah State Agriculture Overview, 2004", January 3, 2006]

[10] American Legislative Exchange Council, April 11, 2012 Press Release, http://www.alec.org/2012/04/new-report-ranks-economic-competitiveness-in-the-50-states/ (May 28, 2012)

[11] Economic Summary, Notes on the Economy 2012, published April 2012, http://www.governor.utah.gov/dea/econsummaries/EconomicSummary.pdf

[12] Utah Community Assistance Program, 2011 Poverty Report, http://www.utahcap.org/uploads/251082_Poverty.pdf (May 28, 2012)

populations are disproportionately aggregated in urban areas, where poverty is masked by pockets of wealth. Second, also consistent with the rest of the country, frontier counties are generally poorer and less educated than their urban counterparts. Nine of Utah's 29 counties demonstrate poverty above the national level of 14.30 percent. Of those nine counties, five of them are also frontier counties, with population density lower than 6 persons/square mile. Another three are rural counties[13]. The following table highlights financial and academic disparities between rural and urban Utah.

Table 5. Income, Poverty, and Education, 2010

Indicator	Rural	Urban	Total
Per-capita income	$27,588	$33,150	$32,517
Earnings/job	$35,538	$43,863	$43,015
Poverty rate (%)	14.6%	13.1%	13.3%
Unemployment	7.6%	6.6%	6.7%
High School only	31.8%	23.9%	24.8%
Finished college	20.4%	30.6%	29.4%

Source: U.S. Department of Agriculture, 2012, Economic Research Service.

HEALTH STATUS

Utah ranks as America's seventh healthiest state and leads the nation in low prevalence of smoking and low prevalence of cancer[14]. Utah's health status presents some interesting anomalies. The youngest state in the Union, Utah's remarkably high health status is partially explained by the relatively low incidence of cancer, heart disease and other ailments of the elderly. Utah's rural and frontier areas appear to demonstrate the same health status as urban areas. Looking at a broad swath of indicators, the urban/rural health divide seems negligible.

Focused inquiries to state and university health experts attempted to elucidate causal factors for the apparent urban/rural equity. Their comments may be summarized as follows. First, 75 percent of Utahans live in four urban contiguous counties, making it essentially an urban state. Within the urban boundaries, huge variations in economic, social and health status exist. Rural populations demonstrate the same diversity, spread over 25 counties. For example, the communities of St. George (Washington County) and Park City (Summit County) enjoy strong economies, health insurance coverage and corresponding health status. Really, the strongest indicator of health status is not geography, but social and economic status (SES profile), which varies markedly in different urban and rural areas.

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[13] American Community Survey, Bureau of the Census, Utah, 2009.

[14] United Health Group State Health Rankings, 2011 edition

Table 6: Selected Health Status Indicators

Local Health District	Population	Insurance Coverage[15]	Health Status Excellent/Very Good[16]	BMI less than 25 (normal)[17]
Urban	2,154,677	89.12%	88.19%	40%
Davis County LHD	312,918	92.94%	88.73%	36.04%
Salt Lake Valley LHD	1,059,955	86.57%	87.25%	40.88%
Utah County LHD	540,541	88.86%	90.80%	38.85%
Weber-Morgan LHD	241,263	95.96%	85.77%	41.32%
Rural	693,220	89.72%	87.60%	40.26%
Bear River LHD	168,823	93.51%	87.79%	41.84%
Central Utah LHD	77,731	84.13%	84.18%	39.76%
Southeastern Utah LHD	56,693	82.72%	82.41%	36.68%
Southwest Utah LHD	214,377	89.92%	88.27%	43.13%
Summit County LHD	41,146	89.2121*	94.97%	46.26%
Tooele County LHD	60,129	92.45%	87.38%	33.05%
TriCounty LHD	50,484	90.23%	89.09%	31.81%
Wasatch County LHD	23,837	88.75%	88.29%	38.99%

Note: Many indicators were excluded due to the low sampling frame, resulting in highly unreliable data for many of Utah's sparsely populated counties. Binge drinking did provide solid numbers; however, the rate is low for all but Summit County, further underscoring the healthy habits statewide.

WORKFORCE

As referenced elsewhere in this report, challenges exist in the recruitment and retention of health providers in rural and frontier Utah; however, the climate is rarely classified as "dire." From a workforce preparation perspective, it is important to remember that Utah is primarily an urban state. As a result, academic health programs focus heavily on preparing health care workers for urban environments. No rural residency tracks currently exist and clinical rotations to rural areas are relatively limited. As a result, workforce shortages can be viewed as a maldistribution rather than a general dearth. On a related note, three years ago the University of Utah, School of Medicine reduced class size from 102 students to 82 students.

The University of Utah, School of Medicine, prior to 2009 drew down federal Medicaid money for medical education. It did so for nearly eight years until the Centers for Medicare and Medicaid Services reported to the Utah Department of Health that medical education no longer qualified. The University of Utah, School of Medicine, lost 30 percent of its total funding, on top of the nine percent State cut. The University of Utah School of Medicine then requested $10 million, not to "restore funding" cut by the State, but rather to fill-in for lost federal money. The University of Utah, School of Medicine, due to the funding cuts, felt that their only choice was to reduce the student body by 20 students beginning the fall of 2010. At that time, it was not clear exactly what the cuts would be and what could be back-filled with one-time money, principally from the rainy day funds. [18]

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[15] 2008 Healthcare Access Survey, Office of Public Health Assessment, Utah Department of Health, December 2009. http://health.utah.gov/opha/OPHA_UHAS.htm *Low sample size causes standard error to exceed 30%`
[16] Healthcare Access Survey now called the Utah Behavioral Risk Factor Surveillance System (BRFSS) survey, 2010.
[17] Utah Behavioral Risk Factor Surveillance System (BRFSS) survey, 2010. http://health.utah.gov/opha/OPHA_BRFSS.htm'
[18] The Senate Site: Unofficial Voice of the Utah Senate Majority, http://senatesite.com/blog/2009/08/u-of-u-medical-school-funding.html

The Legislature also cut "match" funding for a federal health care professional educational loan repayment program, which resulted in the elimination of the State Loan Repayment Program in the 2009 Legislative Session. These funding decisions impact rural and underserved urban areas alike.

Health Professional Shortage Areas

Health Professional Shortage Area (HPSA) is a designation given by the U.S. Department of Health and Human Services, Health Resources and Services Administration, indicating insufficient capacity for the delivery of health care. As demonstrated in Figures 12, 13, and 14 on the following pages, 25 of Utah's 29 counties continue to be classified with HPSA designations for primary medical care, dental care, and mental health. Unfortunately, the HPSA scores are not high enough to qualify for many National Health Service Corps loan repayment and scholarship recipient placements.
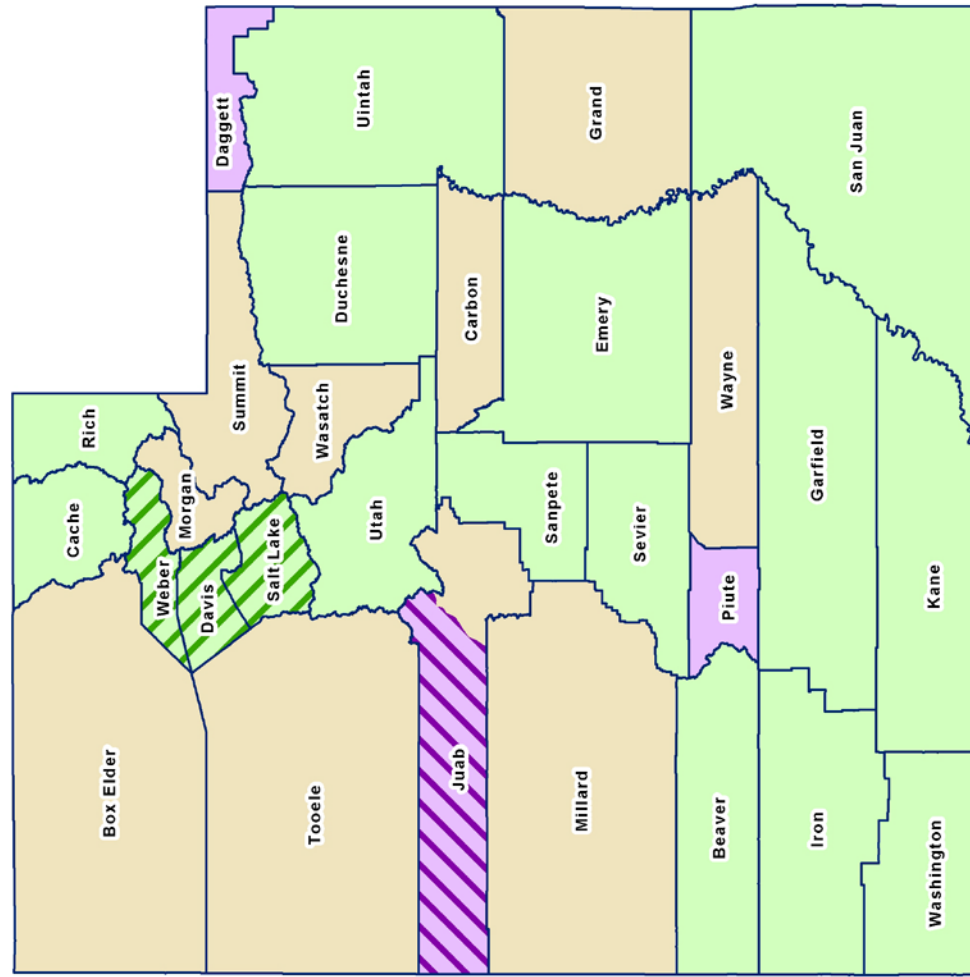
**Figure 12. Primary Care Health Professionals Shortage Areas**

Figure 13. Dental Care Health Professionals Shortage Areas

Utah Dental Care HPSAs[1]
by County and Type of HPSA

- □ Geographic area, full-county
  Population-to-dentist ratio >= 5000:1

- ▨ Geographic area, partial-county
  Population-to-dentist ratio >= 5000:1 using census
  county divisions (CCDs) or census tract (CTs) groups

- □ Low-income population, full-county
  Low-income population-to-dentist ratio >= 4000:1
  AND % of low-income population >= 30%

- ▨ Low-income population, partial-county
  Low-income population-to-dentist ratio >= 4000:1
  AND % of low-income population >= 30%

- □ Undesignated
  Undesignated areas are reviewed regularly for possible
  designation.

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Updated: July 2012

[1] A HPSA is a Health Professional Shortage Area. A dental care HPSA is a measure of the shortage of dental providers serving the underserved population in a county, a group of census county divisions, or a group of census tracts. Shortage area designations are updated on a 3-year cycle.

Office of Primary Care and Rural Health, Bureau of Primary Care, Division of Family Health & Preparedness, Utah Department of Health

Figure 14. Mental Health Care Health Professional Shortage Areas
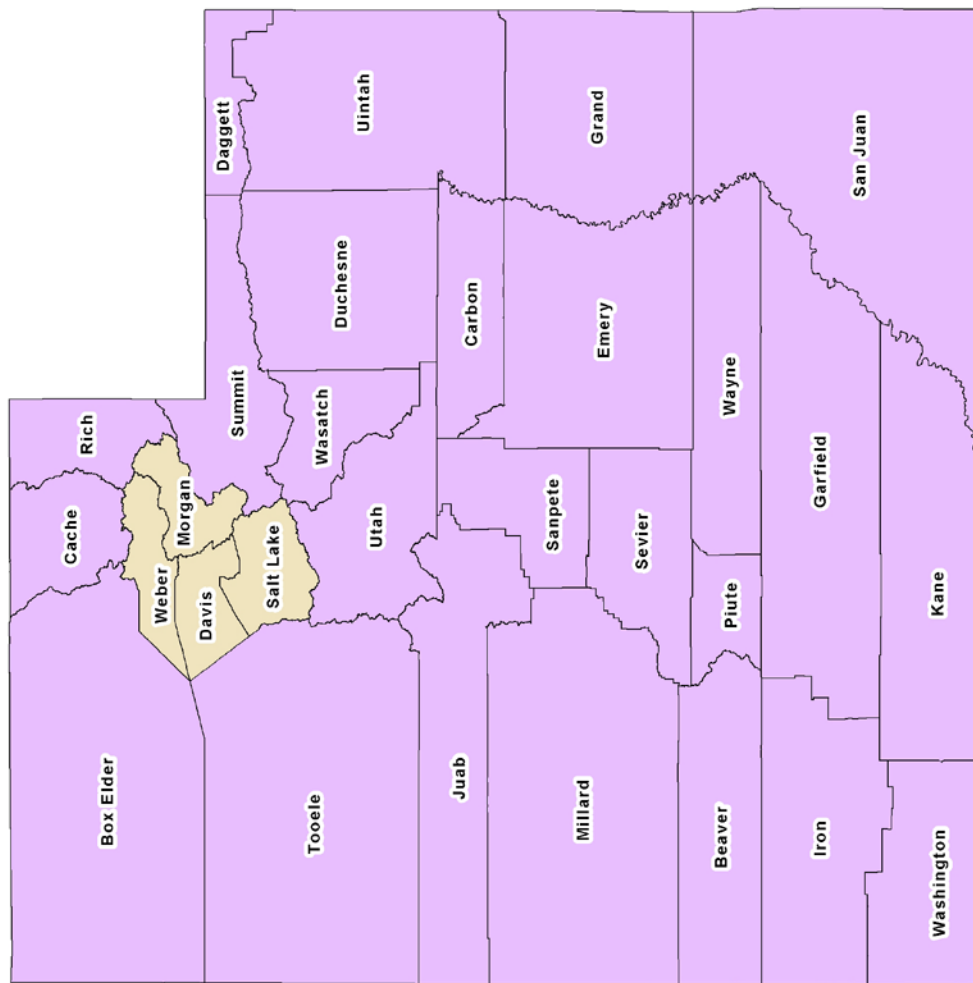
Utah Mental Health Care HPSAs[1] by County and Type of HPSA
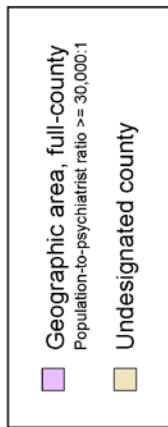
Legend:
- Geographic area, full-county — Population-to-psychiatrist ratio >= 30,000:1
- Undesignated county

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Updated: July 2012

[1] A HPSA is a Health Professional Shortage Area. Utah's mental health HPSAs are based on the shortage of psychiatrists serving the medically underserved populations. A HPSA is updated every 3 years.

Office of Primary Care & Rural Health, Bureau of Primary Care, Division of Family Health & Preparedness, Utah Department of Health

Geographic Distribution of Physicians in Utah

The Utah Medical Education Council (UMEC) conducts periodic assessments of its health workforce, a terrific resource for understanding and responding to gaps. This report focuses on two health provider types, physicians and pharmacists, because those data are relatively recent. Information on other providers may be accessed on the UMEC website.

All information in this section comes from a recent Physician survey report by UMEC[19].

In 2010, 21 percent of all Utah physicians (including residents and fellows) were female compared to 29 percent nationally. In 2010, 37 percent of all survey respondents who are trainees (residents/fellows) were female compared to 20 percent of all practicing physicians. This suggests that the future physician workforce may have a larger percentage of female physicians. However, medical schools (both in Utah and across the nation) are seeing a decline in the percent of female applicants and matriculants since 2003. This change will be reflected in Utah's future workforce and needs to be monitored.

Figure 15. Physician Gender Distribution, Utah 2010 vs. U.S. 2008
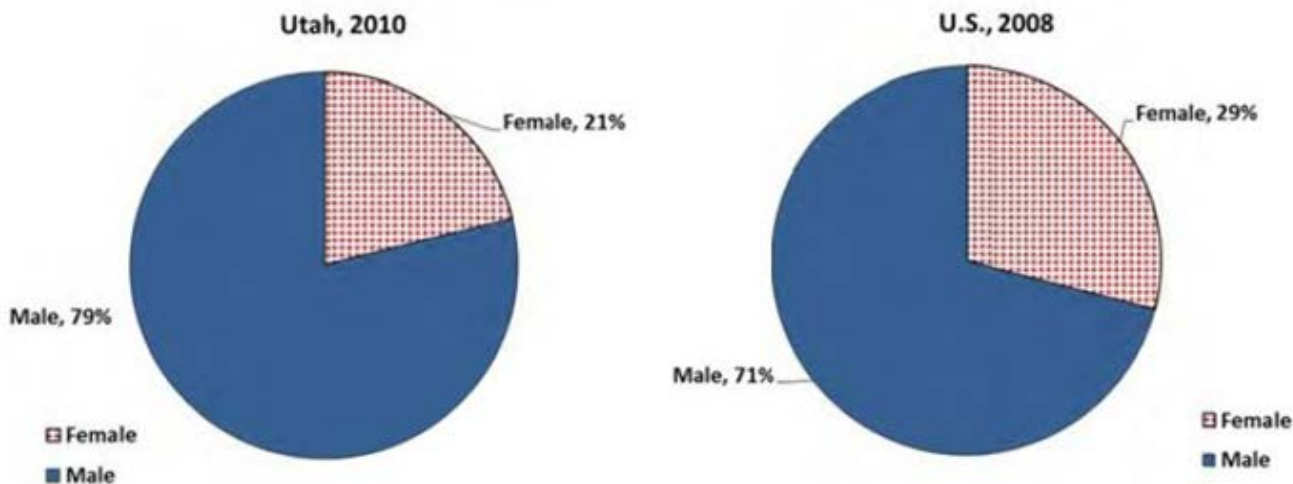
The percentage of female medical school (allopathic) applicants and matriculants in the nation has seen a steady growth until 2003. In 2003, the Association of American Medical Colleges (AAMC) reported that for the first time ever, the percentage of female medical school applicants (50.8%) exceeded the percentage of male applicants (49.2%). Since 2003, the nation and Utah have seen a steady decline in this statistic (see Table 7, Figure 16, and Figure 17 below). Currently, the percentage of female applicants has dropped to 47.3 percent (AAMC, 2010).

Table 7: Gender Distribution of Graduates at the University of Utah School of Medicine, 2003-2010

Year	Percent Male	Percent Female
2003	57.4%	42.6%
2004	63.8%	36.2%
2005	63.1%	36.9%
2006	63.1%	36.9%
2007	68.9%	31.3%
2008	64.1%	35.9%
2009	63.9%	36.1%
2010	68.7%	31.3%

Data Source: University of Utah,
School of Medicine, 2012.

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[19] Utah Medical Education Council, 2012. Utah's Physician Workforce, 2010: *A Study of the Supply and Distribution of Physicians in Utah*. http://www.utahmec.org/utah_workforce_studies.php.

Figure 16. Percent Female Applicants and Matriculants to U.S. Allopathic Medical Schools, 1999-2010
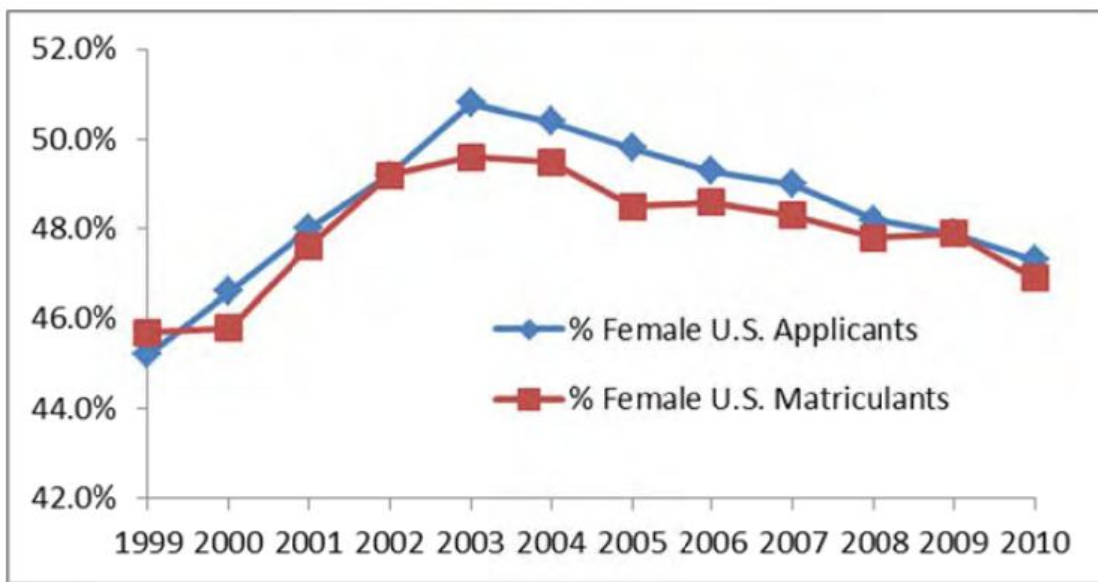
Figure 17. Percent Female Matriculants to U.S. and Utah Allopathic Medical Schools, 2003-2010
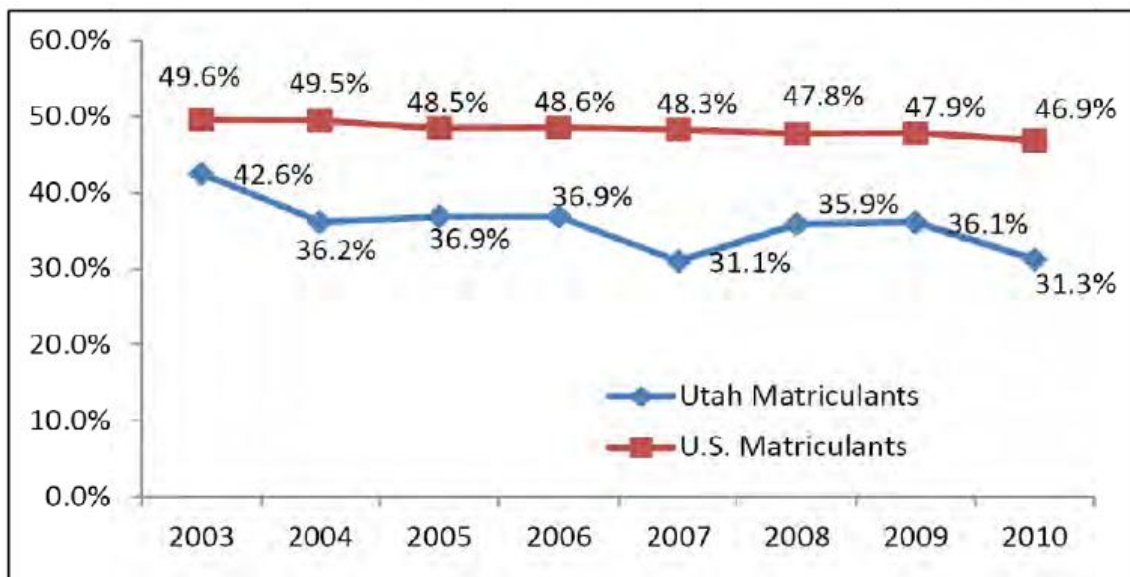
The primary care physician workforce (family medicine, internal medicine, pediatrics, obstetric/gynecologic) in the state seems equitably distributed geographically. In 2010, approximately 15 percent of Utah's population lived in rural counties, while 12 percent of the primary care physician workforce provided services in those areas. Despite this equity, 25 of the 29 counties in Utah still had some form of Primary Care Health Professional Shortage Area (HPSA) designation, suggesting that other forms of maldistribution, such as overwhelming physician patient loads.

About 31 percent (130) of rural physicians are 55 years or older, and are likely to retire within the next ten years. The difficulty of attracting physicians into rural areas is attributed to a variety of factors. One common deterrent is a physician's unfamiliarity with the rural environment. According to the 2010 survey data, only 20 percent of the physicians in Utah grew up in a rural area, while the rest were raised in urban or suburban communities. The lack of exposure to rural environments leads many physicians to believe that rural areas are undesirable places to practice. Many physicians fear that they will be isolated from the medical community and inhibited in their access to the latest medical technologies, while others are concerned about family life, or reimbursement of educational debt, all of which can contribute to a decision to choose urban/suburban over

rural practice. On the other hand, a rural area might not have the patient base required to sustain certain specialist practices. Therefore, more efforts are being made for attracting primary care providers to rural areas.

Geographic Distribution of Pharmacists in Utah[20]

All data in this section comes from a recent Pharmacist report by the Utah Medical Education Council (UMEC).

Traditionally, rural and frontier regions have been affected by shortages of health care workforce more than the urban and suburban regions. The 2005 UMEC Pharmacist survey indicate that 22 of Utah's 29 counties employ less than 2.0 percent (33) of the pharmacist workforce in Utah. Only eight of the 29 counties have a pharmacist-to-100,000 population ratio equal to or greater than the state average of 64.3. According to the UMEC data, 83.0 percent (1,349) of the pharmacists actively providing services in Utah practice in urban counties where 75.6 percent (1,913,806) of the state population lives, suggesting an increased concentration of pharmacists in the urban counties.

Workforce Recommendations

In March 2012, the Utah Medical Education Council (UMEC) submitted a report to the Governor recommending four strategies to strengthen Utah's health workforce. The full report can be requested from UMEC. In summary, the report suggests:

> *"Health care professionals have a direct impact on the costs and quality of health care. An inadequate or an abundant supply of health care professionals are both detrimental to the cost and/or quality of the health care delivered. A sustainable and an adequate supply of professionals need to be maintained to ensure a successful health care reform. While adequacy of workforce is an issue, access to care issues due to workforce maldistribution is a more pressing issue and needs to be addressed as part of the workforce development strategy.*
>
> *In addition to having a sustainable and adequate health care workforce supply, it is vital that the workforce be trained to meet our future needs - to function as a patient centered health care team. Such training, if accomplished through the formal education process of these professionals, is expected to minimize turf battles, and to improve the quality and efficiency of care. A coordinated training effort can also be tailored to alleviate workforce shortages caused due to maldistribution."*

Innovations/Strategies

Four key strategies are identified to develop an adequate and sustainable, team based health care workforce in Utah.

Strategy 1 – Clinical Training Coordination

Open a clinical rotation coordination entity in the state. Such an entity can act as a clinical rotation information center that lists the available clinical rotation opportunities across the state. In addition to avoiding turf battles and payments for the available rotation opportunities, such an entity can help identify areas where students from multiple disciplines can train together and connect students looking for a clinical training opportunity with areas in need of health care workforce in the state – specifically rural and underserved.

Strategy 2 – Interdisciplinary Health Care Team Development

Interdisciplinary training models need to be incorporated into our health care education system, and should not be pursued only after all formal training of our professionals is completed. Accreditation and program models need to change, which is often difficult. Technological advances like simulation techniques should be employed efficiently in our training modules, followed by training in clinical settings. Team based training will also avoid turf wars, and competition for clinical rotation opportunities. The U.S. Department of Health and Human Services' Teaching Health Centers program is a model that we could look at to develop our interdisciplinary training program.

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[20] Utah Medical Education Council (2009). Utah's Pharmacist Workforce, May 2009. Based on 2005 data.

Strategy 3 –Training and Retention Programs Development
Loan reimbursement, incentive development to improve retention of our health care program graduates, and programs that will link the identified workforce need areas with graduating trainees need to be developed in the state.

Strategy 4 – Timely and Coordinated Workforce Needs Assessment
Data collection needs to be improved and workforce datasets require standardization to enable data sharing among agencies with similar workforce goals and objectives.

SUMMARY OF RECENT RURAL HEALTH ASSESSMENTS

Rural Hospital and Community Needs Assessment Survey

In early 2012, the UHA conducted an extensive survey with administrators of 22 of the 24 rural health facility members, for a response rate of 91.6 percent. Of the participants, 13 hospitals were system based, with the remaining nine hospitals being independent. While findings can be sliced in many ways, the six biggest overall challenges included:

1. Mental health/substance abuse services
2. Community economics;
3. Limited grant writing resources;
4. ACA Reform "readiness;"
5. Reimbursement issues; and
6. ICD-10 conversion,

The main areas for Community Health Care Improvement were specialty services and health education services. The top community health concerns included:

1. Substance abuse/mental health.
2. Diabetes.
3. Cancer.
4. Obesity.

In seeking legislative assistance, requests were highest for:

1. Medicaid funding.
2. State Loan Repayment Program.
3. State Rural Medicaid Reimbursement Differential

Assessment of the Availability and Accessibility of Essential Health Care Services in Rural Utah

As a follow up to the 1997 Assessment of Essential Health Care Services in Rural Utah project, this 2003 study was designed to re-evaluate the availability and accessibility of health care services in rural and frontier areas of Utah and to extend the scope of the study to include areas outside of the 19 original sites and to include every rural county in the State. A steering committee was formed in October of 2002 that reviewed the parent project, made process recommendations, and advised on adjustments to the survey instrument. Via this discussion, 13 Essential Health Care Services were defined along with various Benchmark Services which were deemed "collectively essential to adequately provide minimal levels of care" for each Essential Service. These Essential Services include:

1. Primary Ambulatory Care.
2. Hospital and Pre-Hospital Based Emergency.
3. Maternal and Child Care Services.
4. Basic Diagnostic Services-Laboratory Services.
5. Basic Diagnostic Services-Imaging Services.
6. Hospital Services.
7. Dental Care Services.

8. Retail Pharmacy Services.
9. Mental Health/Substance Abuse Services.
10. Home Health Services.
11. Long-Term Care Services.
12. Rehabilitation Services.
13. Public Health Services.

Key Informants from 39 communities representing 25 rural Utah counties were recruited to participate in the study based on their knowledge and expertise in specific health care fields. In all, 474 Key Informant surveys were collected between January and April of 2003. Data was gathered via written survey and, whenever possible, face to face interview as well.

Several findings were of interest in this study. First, evidence was gathered that supported reports that a health care provider shortage was a major problem in rural and frontier areas. Some professions (medical technologists, nurses, and physicians) seemed more impacted than others and the study included recommendations for ameliorating those shortages.

Next, the researchers examined the availability and accessibility of each Essential Health Care Service. In general, most of the Essential Care Services were available in the majority of the community sites surveyed. However, for each service, there were barriers and issues that needed to be addressed in order to ensure that residents in rural and frontier Utah receive essential health care services. In general, the most common issues were financial. Recommendations were developed accordingly and can be found in Chapter 3 of the report[21].

AREAS OF UNMET NEED: IDENTIFIED BARRIERS

In June 2012, 14 phone interviews were conducted with rural health stakeholders, half of them in rural/frontier areas. Each respondent answered the question "From your perspective, what are the biggest barriers to the delivery of health care in Utah's rural and frontier areas?" Over 20-30 minutes, individuals described barriers and examples. The interviews included stakeholders from the following perspectives:

1. Association for Utah Community Health Centers and Federally Qualified Health Centers.
2. Medicare Certified Rural Health Clinics.
3. Utah Area Health Education Centers Program.
4. Utah Association of Local Health Departments and Local Health Departments.
5. Utah Department of Health – primary care and rural health, emergency medical services and preparedness, trauma system, tribal health.
6. Utah Hospital Association and Hospitals.
7. Utah Human Services Department – substance abuse and mental health

In addition, interviewees were encouraged to delve into the root causes for the identified barriers. This comprehensive list was then integrated into a single map with barriers linked to their antecedent conditions. That map includes 85 barriers.

Many of these root causes are beyond the direct and immediate control of the stakeholders. Therefore the map was initially stripped of barriers and causal factors entirely beyond the scope of the group, such as issues dependent upon the U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, Congress, or the Supreme Court. Also, ten identified barriers could be merged with a cause or omitted because of their strong linkage to a condition. That is to say, they were useful to understanding causal factors, but lost much of their value in isolation. For the remaining 36 barriers and antecedent conditions, it was

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[21] Assessment of the Availability and Accessibility of Essential Health Care Services in Rural Utah, October 2002.

necessary to employ a systematic approach for prioritizing those root causes that Utahans can reasonably expect to impact during the agreed upon five year timeframe.

On June 26, 2012, a rural health stakeholder group convened to prioritize root causes. Attendees at that meeting included:

o Alan Pruhs, Executive Director, Association for Utah Community Health
o Deb LaMarche, Associate Director, University of Utah, Utah Telehealth Network
o Dennis Moser, Director, Southern Utah Area Health Education Center and Rural Health Association of Utah
o Don Wood, Director, Utah Department of Health, Office of Primary Care and Rural Health
o Donna Singer, Chief Executive Officer, Utah Navajo Health Systems, Inc.
o Doug Thomas, Deputy Director, Utah Department of Human Services, Division of Substance Abuse and Mental Health
o Greg Rosenvall, Rural Hospital Improvement Program Director, Utah Hospital Association
o Mark Allen, Administrator, Sanpete Valley Hospital
o Sandra Marsh, Associate Director, University of Utah, Area Health Education Centers Program
o Steve Ipsen, Bureau Director, Utah Department of Health, Bureau of Primary Care

Attendees organized the subset of issues into two categories:

1. Issues they perceive can be meaningfully impacted within five years;
2. Issues they perceive cannot be meaningfully impacted within five years.

For items that individuals labeled both ways, a brief conversation ensued to determine where to categorize the issue. Once resolved, the remaining thirty-one barriers remained for further prioritization. Of the total of 58 benchmark services, those twenty-seven included were:

1. No Golden Hour/EMS more than an hour away.
2. No local ambulance.
3. Inadequate access to primary care.
4. Inadequate access to specialty services.
5. Not enough Telehealth.
6. Inadequate access to behavioral health.
7. Inadequate integration of primary care and mental health.
8. Left out of health promotion activities (due to geographic and bandwidth isolation).
9. Insufficient workforce.
10. Difficult for rural sites to recruit/retain workers.
11. Not enough health professions students being trained.
12. Not enough loan forgiveness or repayment programs.
13. Rural students not recruited (or not enough of them).
14. Not enough rural training programs.
15. Legislative cuts impacting rural workforce.
16. Hispanic population: Cultural and linguistic barriers.
17. Inadequate access to enabling/supportive services.
18. Small rural sites perceived as lower quality.
19. Difficult to support HIT capacity.
20. Every day there is a new HIT-related system to learn/create/maintain.
21. Lack of long distance referral networks.
22. Hospitals don't always understand what the mental health authority can do, no harm hand-off.
23. Lack of coordination – no venue for people to come together.
24. Inadequate resources for mental health early intervention (merged with) Children with mental health challenges who are ineligible for Medicaid fall through the cracks.

25. Hospitals increasingly burdened with mandated quality measures (merged with) inadequate depth/expertise for mandates.
26. If hospital/MD relationships weak, patients are shipped to facilities far away.
27. Rural tax base does not support recreation centers and places to exercise.

Each attendee ranked their top five issues, with five points for first choice and one point for last choice. Attendees ranked them as follows, with actual points in parentheses:

1. 22 points   Inadequate access to behavioral health.
2. 18 points   Inadequate integration of primary care and mental health.
3. 18 points   Not enough loan forgiveness and loan repayment programs.
4. 16 points   Difficult for rural sites to recruit/retain workers.
5. 12 points   Lack of coordination – no venue for people to come together,
6. 11 points   Not enough Telehealth.
7.   7 points   Inadequate access to enabling/supportive services.
8.   6 points   Inadequate resources for mental health early intervention.
9.   6 points   Hospitals don't understand what mental health authority can do, no harm hand-off.
10. 5 points   Inadequate access to specialty services.
11. 5 points   Not enough rural training programs.
12. 4 points   Rural students not recruited (or not enough of them).
13. 4 points   Left out of health promotion activities (due to geographic and telecommunication isolation).
14. 4 points   Hispanic population: Cultural and linguistic barriers.
15. 3 points   No local ambulance.
16. 2 points   Insufficient workforce.
17. 2 points   Legislative cuts impacting rural workforce.

PRIORITY AREAS TO ADDRESS COLLABORATIVELY

Development of this State Rural Health Plan and prioritization process is funded by the Utah Department of Health with funds provided by the federal Rural Hospital Flexibility Program and the federal State Office of Rural Health grant awards from the U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, grant award numbers H95RH000129 and H54RH00050. The project would not be possible without their resources and their commitment. However, the identified barriers and resultant priority areas reflect broad-based input from a variety of agencies. They are not all necessarily priorities of the Utah Department of Health. Further, the Utah Department of Health does not accept responsibility for "fixing" the barriers alone. The group expressed appreciation for the opportunity to convene and a commitment to collaborate. They also articulated that their power to affect meaningful change lies in the diversity of their agencies and resources.

The top 17 issues selected by the stakeholder group can be organized into eight topic areas.

1. <u>Strengthening the Rural and Frontier Health Workforce.</u>
    1.1. 22 points   Inadequate access to behavioral health.
    1.2. 18 points   Not enough loan forgiveness and loan repayment programs.
    1.3. 16 points   Difficult for rural sites to recruit/retain workers.
    1.4. 5 points   Not enough rural training programs.
    1.5. 4 points   Rural students not recruited (or not enough of them).
    1.6. 2 points   Insufficient workforce.
    1.7. 2 points   Legislative cuts impacting rural workforce.

Workforce is by far the highest priority area for collaborative effort. And because antecedent conditions/causal factors were selected, a type of roadmap exists for actions to address it. Support for this need is demonstrated in the Workforce section of this report, including the various HPSA maps and recommendations to the Governor.

2. Improving Access to Behavioral Health Services.
   - 2.1. 22 points   Inadequate access to behavioral health.
   - 2.2. 18 points   Inadequate integration of primary care and mental health.
   - 2.3. 6 points   Hospitals don't understand what mental health authority can do, no harm hand-off.
   - 2.4. 5 points   Inadequate access to specialty services.

Behavioral health is clearly the second priority area identified by this group. Support for this need is demonstrated in the Mental Health HPSA map. The rural hospital survey ranked mental health/substance abuse as their biggest challenge across categories.

3. Improving Coordination and Communication Across Agencies.
   - 3.1. 12 points   Lack of coordination – no venue for people to come together,

Several interviewees mentioned this barrier, albeit in various contexts. First, the issue relates to community-level coordination of mental health services. Second, it relates to the development of networks. Finally, some interviewees viewed it globally, referring to the lack of statewide collaboration on rural/frontier health issues.

4. Improving Access to Enabling/Support Services.
   - 4.1. 7 points   Inadequate access to enabling/supportive services.
   - 4.2. 4 points   Hispanic population: Cultural and linguistic barriers.

Enabling and support services refers to the range of services requisite for the provision of care where cultural and linguistic barriers exist, such as translation, transportation and/or referrals to local social service agencies.

5. Improving Access to Telehealth Services.
   - 5.1. 11 points   Not enough Telehealth.

While only one causal factor is associated with this topic area, interviewees linked it to other barriers. Specifically, it is seen as a mechanism for improving access to a range of services otherwise only available in more populated areas, a tool devised in response to "communities too small to support dedicated capacity" in any number of arenas.

6. Improving Access to Specialty Services.
   - 6.1. 5 points   Inadequate access to specialty services.

While this issue did not garner a high volume of prioritization "points", three attendees did give it some value. It could arguably be merged under Improving Access to Telehealth Services, but merits standalone status because other mechanisms could also be engaged to address it.

7. Improving Communication Regarding Health Promotion Activities.
   - 7.1. 4 points   Left out of health promotion activities (due to geographic and telecommunication isolation).

Some communities, often tribal, suffer such extreme isolation and low population densities that cell phone and Internet access are not feasible. While cell phone/Internet access was excluded from the responsibility of the group, the resultant barrier affects the provision of preventive services. Extremely small and isolated communities lack tools to learn about regional programs, activities or services, further prohibiting their participation or access.

8. Improving Access to Emergency Medical Services.
   - 8.1. 3 points   No local ambulance.

The term "golden hour" refers to the timeframe for assessment and treatment when someone suffers a serious or life-threatening injury. For communities residing more than an hour from the nearest emergency medical

services/ambulance service, it is understood that their probability of survival from a serious accident is compromised dramatically. The Utah Department of Health maintains statistics on access and response time statewide. One such graph is included in this report, although considerably more information is available. Most regions of the state do not suffer this isolation implication, thus reducing the number of "points" this barrier received.

Following this prioritization process, attendees reviewed and affirmed their collaborative commitment to meaningfully impact the priority areas.

1. *They identified stakeholders who need to be included in future discussions*, specifically Kathy Froerer of the Utah Association of Local Health Departments (who was unable to attend), a representative from HealthInsight, a Medicare Certified Rural Health Clinic, a legislator or staff person, a representative from the Utah Association of Counties, and a representative of the Utah Medical Association.

2. *They proposed an identity that would be enduring, such as a "Consortium*" or perhaps a direct linkage to the Rural Health Association of Utah. They want the group to be action-oriented.

3. *They met again in August 2012. Greg Rosenvall of the UHA coordinated and hosted the* meeting. The group invited additional members, made decisions regarding their identity/structure, frequency of meetings, and developed strategies for addressing some of their identified priority areas.

4. *Two subcommittees were formed and are currently active at this time.* The subcommittees address strengthening the heath care workforce and access to behavioral health services in frontier and rural Utah.