<table>
<thead>
<tr>
<th>Service Type</th>
<th>Sector</th>
<th>Amount</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Services (except Public Admin.)</td>
<td>Private</td>
<td>350</td>
<td>$13,093,148</td>
</tr>
<tr>
<td>Repair and Maintenance</td>
<td>Private</td>
<td>243</td>
<td>$10,610,305</td>
</tr>
<tr>
<td>Personal and Laundry Services</td>
<td>Private</td>
<td>69</td>
<td>$1,033,128</td>
</tr>
<tr>
<td>Membership Organizations &amp; Associations</td>
<td>Private</td>
<td>38</td>
<td>$1,449,715</td>
</tr>
<tr>
<td>Retail Trade (44 &amp; 45)</td>
<td>State Government</td>
<td>5</td>
<td>$90,071</td>
</tr>
<tr>
<td>Food and Beverage Stores</td>
<td>State Government</td>
<td>5</td>
<td>$90,071</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>State Government</td>
<td>5</td>
<td>$260,782</td>
</tr>
<tr>
<td>Social Assistance</td>
<td>State Government</td>
<td>5</td>
<td>$260,782</td>
</tr>
<tr>
<td>Public Administration</td>
<td>State Government</td>
<td>145</td>
<td>$7,047,602</td>
</tr>
<tr>
<td>Executive, Legislative, &amp; Gen Government</td>
<td>State Government</td>
<td>2</td>
<td>$119,364</td>
</tr>
<tr>
<td>Justice, Public Order, and Safety Activity</td>
<td>State Government</td>
<td>49</td>
<td>$2,622,896</td>
</tr>
<tr>
<td>Administration of Human Resource Program</td>
<td>State Government</td>
<td>36</td>
<td>$1,309,713</td>
</tr>
<tr>
<td>Administration of Environmental Programs</td>
<td>State Government</td>
<td>15</td>
<td>$1,027,141</td>
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<tr>
<td>Administration of Economic Programs</td>
<td>State Government</td>
<td>44</td>
<td>$1,968,488</td>
</tr>
</tbody>
</table>

Source: Department of Workforce Services

Shown below are the dwelling unit permits for Uintah County. Dwelling permits go as the price of oil and natural gas improve, which brings economic activity to the county. Although the dwelling unit permits have increased, as a whole permits are down from the last economic boom.

### Dwelling Unit Permits

<table>
<thead>
<tr>
<th>Year</th>
<th>Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>549</td>
</tr>
<tr>
<td>2013</td>
<td>316</td>
</tr>
<tr>
<td>2014</td>
<td>331</td>
</tr>
<tr>
<td>2015</td>
<td>78</td>
</tr>
<tr>
<td>2016</td>
<td>27</td>
</tr>
<tr>
<td>2017 YTD</td>
<td>35</td>
</tr>
</tbody>
</table>

Change: 35%

Source: Department of Workforce Services
B. Population

The Uintah Basin was originally established as a farming and ranching community by a sparse population of Caucasian settlers around the turn of the end of the 19th Century and did not see a significant increase in population until oil was first discovered in Uintah County in 1948. In the late 1950's and early 1960's the Uintah and Daggett County populations increased dramatically during the construction of Flaming Gorge Dam. The discovery and exploration of oil and natural gas resources caused a large population increase primarily Uintah and Duchesne Counties in the early 1970's.

Source: U.S Census Bureau
POPULATION GROWTH

The Uintah Basin is in a stage of growth. Duchesne and Uintah Counties are seeing more growth than Daggett County due to the price and demand for natural resources. Consistently higher prices of, and demand for, natural resources will continue to spur growth over the next half century. The following tables show the population estimates based on the 2010 U.S. Census and the Utah Population Estimates Committee:

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2025</th>
<th>2035</th>
<th>2045</th>
<th>2055</th>
<th>2065</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State of Utah</strong></td>
<td>2,997,404</td>
<td>3,615,036</td>
<td>4,178,317</td>
<td>4,745,057</td>
<td>5,285,767</td>
<td>5,827,810</td>
</tr>
<tr>
<td><strong>Growth Rate</strong></td>
<td>1.5%</td>
<td>1.4%</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td><strong>Daggett County</strong></td>
<td>1,113</td>
<td>1,232</td>
<td>1,387</td>
<td>1,502</td>
<td>1,603</td>
<td>1,723</td>
</tr>
<tr>
<td><strong>Growth Rate</strong></td>
<td>1.0%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>0.7%</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Duchesne County</strong></td>
<td>20,821</td>
<td>24,277</td>
<td>26,596</td>
<td>29,178</td>
<td>31,205</td>
<td>33,153</td>
</tr>
<tr>
<td><strong>Growth Rate</strong></td>
<td>1.1%</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Uintah County</strong></td>
<td>37,396</td>
<td>42,077</td>
<td>45,978</td>
<td>50,609</td>
<td>54,523</td>
<td>57,766</td>
</tr>
<tr>
<td><strong>Growth Rate</strong></td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.9%</td>
<td>0.6%</td>
<td>0.6%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Governor’s Office of Management & Budget (GOMB)

SOCIO-ECONOMIC

The economy of the Uintah Basin has historically been highly dependent upon natural resource (particularly oil and natural gas) development, which has resulted in “boom or bust” cycles which generally characterize mining. The oil production cycle peaked in 1983 when the combined populations of Daggett, Duchesne, and Uintah counties reached 41,150 as compared to 27,650 just ten years earlier. This cycle reversed as cumulative net out-migration from the region surpassed 10,000 and the 1990 population dropped to 35,536. It was not until 2001 that the economy recovered sufficiently to support a population of 41,639.

The region was originally settled by farmers and ranchers; agriculture (particularly cattle production) still plays a significant role in the area’s economy. Large areas of publically owned land require substantial civilian federal government employment. This public sector employment provides an important source of income to the residents of the Uintah Basin.

Daggett County

The Daggett County resident population remained around 400 from 1940 until the 1960s and the construction of the Flaming Gorge Dam. At the peak of construction, there were an estimated 1,700 county residents. After the completion of the project,
these workers and their families left, with a population of 600 remaining in the county.

Upon completion of Flaming Gorge Dam, Daggett County suffered a tremendous out-migration and lost approximately 60 percent of its population by the end of 1965. Daggett County's population has increased very gradually after the completion of Flaming Gorge Dam.

Subsequently there has been a slow increase in the population of the county to its current estimated level of 1,052. The majority of residents of Daggett County live in unincorporated areas of the counties.

![Daggett County 1960-2017](image)

**Source:** GOMB

**Duchesne County**

Duchesne County resident population remained flat until 1970. In fact, there was net out-migration for all but one year from 1942 to 1966. Growth accelerated in the early 1970s and the population doubled from 1970 to 1984 with net in-migration peaking in 1972 at an estimated 1,231 residents. From its peak of 14,800, population declined to 12,825 in 1991 through net out-migration. Subsequently, the population has increased slowly and finally surpassed the earlier peak by 2002. The current estimated population is 20,828. Like Daggett County, Duchesne County has a large population living in unincorporated areas of the county. Although there are a few more small towns, it is still a very rural population.
Uintah County

Uintah County's growth from 1960 to 1980 was the direct result of large construction projects--like Flaming Gorge Dam, Central Utah Water Projects, and the start-up phases of the White River Oil Shale facilities and the Deseret Generation &Transmission Power Plant, as well as, the exploration and extraction of oil. Uintah County resident population remained flat until 1970 when the county experienced a fourteen-year run of population increase, and positive net in-migration for all but one of these years. Net out-migration occurred for the next seven years, as the county’s population declined from a peak of 26,000 in 1983 to 22,230 in 1990. This population level was not surpassed again until 2001, and is currently estimated to be 36,613. Vernal and Naples Cities are the two largest cities in Uintah County, but much like Daggett and Duchesne Counties, Uintah also has a majority of the population living in unincorporated areas.
C. GEOGRAPHY

The Uinta Basin and Mountains are located in the northeast corner of the state and are part of a larger physiographic area known as the Colorado Plateau Province. The Uinta Mountains, a folded and faulted anticlinorium (a succession of geological anticlines and synclines), are 150 miles long and are oriented in an east-west direction; they extend from Heber Valley on the west to Cross Mountain in Colorado to the east. The mountain range is thirty miles wide. The mountains receive annually about thirty inches of precipitation. During the Pleistocene era the Uintah’s were extensively glaciated. Lakes formed by this process dominate the mountains. Some of the larger lakes today serve as important reservoirs for the Wasatch Front.

Substantial portions of two major physiographic provinces extend into the three-county area. The Rocky Mountain Province encompasses the northern half of the area, which includes the Uinta Mountains; and the Colorado Plateau province makes up the other half and is more notably called the Uintah Basin Section. The Uinta Mountains are a unique east-west traversing mountain range approximately 150 miles long and thirty miles wide--extending into Summit County which lies east of Daggett County and north of Duchesne County. This mountain range was formed...
anciently by an anticlinal uplift, and was left with outward dipping and out-cropped sedimentary formations. The most noted feature of these mountains is the evidence of glaciation. The Pleistocene era left prominent horns, arêtes, cirques, and glacial troughs. U-shaped valleys have been filled with ground moraine and lateral moraine; and terminal moraines--by forming small natural dams–which have created hundreds of small lakes. The Uinta Mountains have an average elevation of 10,000 feet, with 24 peaks rising over 13,000 feet, and many more over 12,000 feet. The Uinta’s contain some of the highest mountain peaks in the state, Kings Peak being the highest at 13,520 feet.

In addition to the Great Salt Lake, the Uinta Mountains are perhaps the most important physiographic feature in northern Utah and the central inter-mountain region. The Uinta’s are central to the historic and economic development of northern Utah. Three fifths of the water in the state of Utah originates there. Such Wasatch streams as the Weber, Provo, and Bear originate in the Uinta Mountains. There are many streams that contribute to the Green River that have their birth in the Uinta Mountains: Strawberry, Duchesne, Rock Creek, Lake Fork, Uinta, Whiterocks, Big and Little Brush Creeks and Ashley Creek. All of these streams are very important to the Uintah Basin as a source of culinary, irrigation, and industrial water.

The Uintah Basin Section is a synclinal and topographical basin with a central area elevation of 5,000 to 5,500 feet. Most of the Basin consists of broad flats or valleys, choppy hills, benches, and sharp ridges. Extending north of the center of the area, the flats give way to foothills and merge with the Uinta Mountains. Elevations rise gradually as well, when heading south to the crest of the 10,000 foot Roan cliffs. The Uintah Basin has been dissected and deeply cut on its northern and southern edges by the Green River and its tributaries, leaving behind spectacular and breathtaking canyons.
The geology of this east-west running basin consists of 20,000 to 25,000 feet of marine and continental limestone's, sandstones, and shale formations of Paleozoic to Cenozoic age. The Uintah Basin is well known for its Green River formation shale's (Cenozoic age) that consist of vast deposits of oil shale and other hydrocarbons. It is made up of the Ashley Creek, Brush Creek and the Duchesne River drainages. The Uintah Basin is a structural depression that lies between the Uintah Mountains on the north and the Tavaputs Plateau on the south. It is dissected by many streams. The following different kinds of relief are scattered throughout the basin: (1) smooth, gently sloping benches or mesas; (2) alluvial valleys dissected by streams; (3) alluvial fans and foothill slopes that lie between the bases of mesas and the valley plains; (4) rolling uplands; and (5) steep, rough, broken and eroded lands. Most of the basin floor is between 5,000 and 6,000 feet above sea level. The lowest elevation is 4,655 feet at Ouray. The highest elevation at which crops are grown is about 7,000 feet above sea level near Mountain Home. Most of the irrigated land occurs on the lower benches and mesas, and in the alluvial valleys.

The Uinta formation occupies the central and southern part of the Basin and is composed mainly of saline and gypsiferous clay stone, shale, sandstones, and marlstone. This formation is the predominant salt producer in the Uintah Basin. Soil within the Uintah Basin is derived from six different geological formations (sources) strongly influencing their productivity and behavior.

The lack of distinct horizons (layers) within the soil profile indicates the relatively short time that many of the soils have been in place. However, the soils on the benches and mesas with lime hardpans and distinct white layers of accumulated lime indicate these soils have been in place a longer period of time. The low annual precipitation and resultant scant vegetation have produced soils typically found in deserts—low in organic matter content, high in weather-able minerals and associated salts.

The Uintah Basin is dominated by three soil types (or orders): aridisols, entisols, and mollisols. The southern and central portion of the Basin is dominated by aridisols—a thin, light colored, alkaline soil. Along the mountainous areas, stream flood plains and some valley or large canyon bottoms exists entisols—young soils, usually without any discernible horizons. Mollisols exist in the Uintah Basin on the periphery of the centered aridigol area, and mostly in foothill areas. And even though these soils are the most fertile and suitable for crop cultivation, the Basin's mollisols exist in mostly rugged and inaccessible foothill areas that serve as a barrier to their utilization by local farmers.

All five of the major vertical vegetation zones exist within the Uintah Basin. The Sonoran zone (below 5,500 feet) includes such vegetation as juniper and pinion pines, sagebrush, shad scale, greasewood, and salt grass. The transition zone (5,500-8,000 feet) contains mountain brush and ponderosa pine. The Canadian zone (8,000 - 10,000 feet) includes lodge pole pine, Douglas fir, and aspen trees. Within the Hudsonian zone (10,000-11,000 feet) exists bristlecone pine, blue
spruce, and fir. And in the highest (above 11,000 feet) arctic-alpine zone there are short, sparse grasses and carex.

**Precipitation Summary**

The average annual precipitation for the Uinta Basin is less than 8.5 inches, with a smaller area around Ouray and Leota receiving less than 6 inches annually. Nevertheless, the basin is well watered. The Strawberry River drains the eastern slope of the Wasatch Mountains. The south flank of the Uintah is drained by Current Creek, the Duchesne River, Lake Creek, the Uinta River, Ashley Creek, and Big and Little Brush Creeks.

The southern portion of the Basin contains fewer streams and is much smaller in volume than those of the northern point. Green River slices through the Uintah at Split Mountain and flows through the Uinta Basin in a southwesterly direction.
D. Workforce Development

Education will always play a major part in workforce development in the Uintah Basin. According to the Utah System of Higher Education, in 2016 Daggett County had 23 students enrolled in Utah's Universities, Duchesne County had 424 students and Uintah County had 499 students. That is not to mention the students that are enrolled locally at the Utah State University – Uintah Basin Extension. USU-UBRC offers 5 Associates Degrees, 29 Bachelor’s Degrees, 24 Masters Degrees, and 1 doctorate degree.

The economic impact of Utah State University Uintah Basin Campus is significant. Presently over fifty percent of Basin high-school graduates go on for some type of post high school schooling. The average cost per year of schooling away from home: tuition, fees, books, room and board, is $9,000 to 12,000. Students who stay home and go to school can do so for $5,000 to 6,000. This generates a savings of $2.75 million to Basin residents. Many Basin residents, just as their forebears, could not afford college were it not for the Uintah Basin Campus.

<table>
<thead>
<tr>
<th>County</th>
<th>Adults 25+ with a H.S. Diploma</th>
<th>Adults 25+ with a Bachelor's Degree or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daggett</td>
<td>81.90%</td>
<td>18.50%</td>
</tr>
<tr>
<td>Duchesne</td>
<td>84.50%</td>
<td>16.80%</td>
</tr>
<tr>
<td>Uintah</td>
<td>84.70%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Utah has set the goal of having sixty-six percent of its working age population with a post-secondary degree or certificate by 2020. To achieve this goal, Utah must increase degrees and certificates awarded by an additional four percent each year. This requires a bold, new approach in creating a highly-educated workforce. A central component of the statewide strategy is to increase degree and certificate
production in economic areas identified as high-demand and high-wage including in science, engineering, and health professions.

The Uintah Basin is doing its part to achieve this goal. With expansion of both the USU Uintah Basin Campus and the Uintah Basin Technology College, it has opened up new avenues for those who are seeking an affordable education in the area.

The State of Utah has made a strategic investment to drive economic growth through regional workforce development by participation in the ACT’s Certified Workready Communities Academy. This partnership between the Department of Workforce Services, UCap, Higher Education, Career and technical education, public education, the chambers of commerce and EDCUtah will provide a framework for aligning education and workforce development in order to advance economic development at the regional and community level. The community will benefit in several ways; irrefutable proof of the quality of the workforce, a process to measure and close the foundational skills gaps, and systemic alignment to state and regional economic development.

With the Uintah Basin Technical College, the Uintah Basin area is working towards the state’s plan of investing in education to develop an educated workforce. Along with the Utah State University Uintah Basin branch campus, the two have formed a great partnership to ensure that anyone living in the Uintah Basin can get an affordable education right here at home.
Business Expansion and Retention (BEAR) Program

A useful tool in workforce development is the Business Expansion and Retention Program (BEAR). Economic gardening begins by visiting and surveying businesses through a local BEAR program. BEAR programs meet face-to-face with businesses and learn first-hand about the concerns and opportunities of local businesses and of the business community. BEAR programs make businesses aware of resources that can help them address their concerns and seize their opportunities. It also identifies specific company needs, like workforce development and training, and provides a real macro view of the local economy.

The BEAR program is designed to reach out to our "value-added" businesses, meet face-to-face to create a working relationship and to learn about their needs, challenges, and opportunities available to them. Based on this understanding of specific businesses and their specific situations, resources can be tapped, networking can be facilitated, business to business alliances can be formed, and the possibility of improving the health of these businesses can be increased. This is the essence of a Business Expansion and Retention (BEAR) program, and it's the heart and soul of a successful economic gardening strategy.

Utah Science Technology and Research (USTAR) Initiative

The Utah Science Technology and Research initiative (USTAR) is a measure provided funding for strategic investments at the University of Utah and Utah State University to recruit world-class researchers and build state-of-the-art interdisciplinary research and development facilities and to form first-rate science, innovation, and commercialization teams across the State.

This initiative seeks to generate more technology-based start-up firms, higher paying jobs, and additional business activity leading to a state-wide expansion of the Utah's tax base.

USTAR is comprised of three program areas - Research Teams; Research Building Projects; and regional Technology Outreach.

USTAR focus areas are based on existing university strengths and aligned with GOED’s economic clusters, addressing vast commercialization opportunities and strategic global markets by leveraging Utah’s industry strengths. These areas are:

- Energy
- Bio-Device and Bio-Pharma
- Medical Imaging and Brain Medicine
- Nanotechnology
- Digital Media
- Space Innovations
Research Buildings: At the heart of USTAR’s efforts to transform the state’s economy are the James L. Sorenson Molecular Biotechnology Building–a USTAR Innovation Center at the U of U and its sister facility–the USTAR Bio-Innovations Center at USU. These centers mark the beginning of a new era of interdisciplinary translational research, scientific discovery and technology commercialization.

The program is led by directors deployed across Utah with a regional focus. Each director heads an Outreach Center located at one of the State’s higher educational institutions.

**Workforce Innovations in Regional Economic Development (WIRED)**

The WIRED, or Workforce Innovations in Regional Economic Development, is an exciting State-level Science, Technology, Engineering and Math (STEM) initiative that provides workforce development support to the life science industry. It is anticipated that the needs for a robust and diverse “pipeline” of talent will grow as USTAR matures and supports the creation of companies in Utah. The WIRED initiative, and its related activities, is funded by a $5.16 M grant from the US Department of Labor and the Employment and Training Administration. The success of the WIRED initiative is largely due to the highly collaborative nature of the program. The WIRED partners include representation from public and higher education, government and philanthropic or community groups. Industry plays a key, integrative role by defining the current and future needs of the life science industry. Thus, all activities and programs that are a part of the WIRED initiative reflect the input of industry.

The partners engaged in the WIRED initiative work to develop and implement programs and activities that focus on outreach and recruitment, training and education. The outreach activities target the “K-grey” audience recognizing that if Utah is to meet the future needs for a science and technology literate workforce then outreach activities must have a broad impact. The WIRED initiative has launched several outreach programs for K-12 students that fully engage students in learning how STEM applies to many of their own interests such as sports and fitness, cooking, digital media or gardening. The education and training programs being supported by WIRED are breaking the boundaries of traditional education programs. The have a dual focus of bringing conceptual and applied knowledge to students. As a result, graduates of these programs are “workplace ready” for both existing life science companies as well as those that are a result of USTAR’s efforts.

**Department of Workforce Services (DWS)**

The Department of Workforce Services (DWS) works closely as a partner of the Governor’s Office of Economic Development. Its mission is to provide employment and support services for its customers to improve their economic opportunities.
The best decision is an informed decision, and the source for information on Utah’s labor market is the Utah Department of Workforce Services. DWS, in partnership with the U.S. Department of Labor’s Bureau of Labor Statistics (BLS), collects and analyzes a wide array of labor market information to describe the dynamics of Utah’s labor market. If considering Utah for your relocation or expansion plans, localized economic information such as occupational wages, industry and occupational outlook, unemployment rates, population statistics, and job growth rates can aide in making the right decision for your company.

Locally, the DWS is a partner with the UBEDD. They have a local representative that sits on both the UBEDD Board and the CEDS Committee. They are an important part of local workforce training and employment. They work to make sure local employers can find well trained employees.

**E. Transportation Access**
The major highway route traversing the Uintah Basin is the east-west U.S. Highway 40. This Highway passes through Vernal, Roosevelt, and Duchesne Cities. U.S. Highway 40 extends to the east through northeastern Colorado connecting with Interstate 70 near Denver, and extends to the west connecting with Interstate 80 near Park City. Two other routes lend north and south access to the area. U.S. Highway 191 heads northward from Vernal to Dutch John, connecting with Utah Highway 44 to Manila, and further with Wyoming Highway 414 and 530 to Fort Bridger/I-80 and Green River/I-80 respectively. U.S. Highway 191 also heads south from Duchesne City connecting with U.S. Highway 6 near Helper, Utah.

### DISTANCES FROM VERNAL TO MAJOR WESTERN U.S. CITIES

<table>
<thead>
<tr>
<th>CITY</th>
<th>DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque</td>
<td>560</td>
</tr>
<tr>
<td>Billings</td>
<td>780</td>
</tr>
<tr>
<td>Boise</td>
<td>480</td>
</tr>
<tr>
<td>Cheyenne</td>
<td>375</td>
</tr>
<tr>
<td>Denver</td>
<td>325</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>500</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>830</td>
</tr>
<tr>
<td>Phoenix</td>
<td>725</td>
</tr>
<tr>
<td>Portland</td>
<td>905</td>
</tr>
<tr>
<td>Rock Springs</td>
<td>140</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>145</td>
</tr>
<tr>
<td>San Francisco</td>
<td>900</td>
</tr>
<tr>
<td>Seattle</td>
<td>990</td>
</tr>
</tbody>
</table>

**Freight - Semi-Tractor Trailers**

Because of the Basin’s rural and somewhat isolated location, local residents and business men must deal with costly distances. In order to access major Intermountain and Western U.S. markets businesses and industries within the Uintah Basin usually need to transport to Salt Lake City first. With no major rail line servicing the area, nearly all materials produced or manufactured must be trucked in or out of the area by semi-tractor trailers. Salt Lake City serves as the nearest and most effective connection for rail and major air (freight or passenger) service to other U.S. markets.
Airports

There are four major airports serving the three-county area. The largest and most developed facility is located in Vernal. The Vernal Regional Airport is a commercial and general aviation facility serving the air transportation needs of the citizens of Uintah, Duchesne, Daggett, Utah and Rio Blanco, Colorado counties. The airport has 2 paved runways, one 6201 feet long and the other 4108 feet long and handles approx. 27 flights per day. The Vernal Regional Airport is used by pilots and passengers for commercial and business air traffic, and recreational flying activities. The Airport also offers among other things: charter flights and flight instruction, air freight movement thru DHL and United Parcel Service, emergency medical evacuation and medical transport for patients, blood and transplant organs, Interagency Fire Center (US Forest Service, Bureau of Land Management, Utah State Lands, US Parks Service, and Bureau of Indian Affairs) fire suppression operations, and crop dusting. The Airport, aside from offering the community aviation-related as well as economic services and benefits, is a symbol of pride for the City of Vernal and Uintah County and its citizens. It is representative of the regions desire and commitment to move forward and to progress.

Vernal Airport

Source: Don Green Photography
The Roosevelt Municipal Airport is equipped with a 6,500-foot paved runway, beacon, medium intensity runway lights, and one hangar, and facilitates 58 flights per week. It also has both instrument and visual approach equipment and is equipped with a Unicom Advisory Station. Both jet fuel and standard aviation fuel are available seven days a week.

Roosevelt Airport

Duchene’s Municipal airport has a 5,800-foot paved runway and a 4,400-foot unpaved runway. It also has a beacon, runway lights, a hangar, and is usually unattended.

Duchesne Airport
The Manila Airport utilizes a 5,300-foot paved runway, beacon, and runway lights, and is usually unattended. Dutch John utilizes a 7,455-foot turf runway.

**Manila Airport**

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**Basin Transit Association (BTA)**

The Uintah Basin Public Transit Business Plan was initiated by the Uintah Basin Economic Development District in conjunction with the Homeless Coordinating Committee and was funded by UBAOG through grants from Revitalization, the Governor’s Office of Planning and Budget, and the Utah Department of Transportation (UDOT).

In May of 2011, the BTA began operations along Highway 40, the main corridor of the Uintah Basin, from Duchesne, through Roosevelt, to Vernal; the three major cities in the Uintah Basin.
Since 2011, the BTA has provided over 200,000 trips to residents of the Uintah Basin. It has been a successful project that has saved residents countless dollars while providing a way for them to get to work in an efficient manner.

**Uintah Basin Energy and Transportation Study**

In early 2013, Uintah County and Duchesne County partnered with the Utah Department of Transportation to fund the Uintah Basin Energy and Transportation Study. Its goal is to determine the transportation resources that are available to the Uintah Basin, what is needed to improve those resources, and what the cost is to the Uintah Basin by not having adequate transportation access.

The study’s context has four main focuses. They are that the Uintah Basin:

- Has significant oil and gas resources
- Has higher quality and shallower wells
- Has strong potential for job creation and economic growth
- Has competition from other locations.

The three main objectives of the study are as follows:

- What is the likely path of growth for energy production in the Basin?
- Is transportation capacity limiting this growth?
- If so, what is the opportunity cost of failing to address transportation constraints?

The aforementioned study is still relevant to the transportation issues within the region.
The oilfield downturn affected the expected outcome of the study, but has still maintained relevance to the original statement: the remote area lacks adequate transportation to handle it.

Unless that problem is solved, $30 billion worth of oil and gas may go undeveloped there over the next 30 years. It could cost Utah’s economy $10 billion, and prevent creation of nearly 27,000 jobs.
F. Resources

Governor’s Office of Economic Development
The Governor’s Office of Economic Development charter is based on Governor Herbert’s commitment to economic development statewide. The mandate for this office is to provide rich business resources for the creation, growth and recruitment of companies to Utah and to increase tourism and film production in the state. The Governor’s Office of Economic Development accomplishes this mission through the administration of programs that are based around industries or “economic clusters” that demonstrate the best potential for development. The Governor’s Office of Economic Development utilizes state resources and private sector contracts to fulfill its mission. The UBEDD is working closely with the GOED to ensure the needs of the Uintah Basin are addressed. Currently, the UBEDD and the UBAOG is working with the GOED on developing a statewide Broadband Plan.

www.business.utah.gov/rural

World Trade Center
World Trade Center Utah (WTC Utah) helps businesses across the state think, act and succeed globally. From identifying potential foreign markets to making connection on the ground, WTC Utah is the gateway resource to all things international business. Whether exporting is in a company’s near or distant future, WTC Utah can help them prepare now to succeed in the international economy.

www.wtcutah.org

Governor’s Office of Management and Budget
The Utah State Data Center program is a valuable public information resource. The State Data Center program is the principle source of economic and demographic information from the U.S. Census Bureau, and it is charged with disseminating data from the Census Bureau to local and regional governments in the State of Utah. The UBEDD receives data resources from the GOMB and the U.S. Census Bureau at no cost. Not only is this information utilized for grants, it is also disseminated to anyone requesting it.

https://gomb.utah.gov/

Department of Commerce - Economic Development Administration
The Uintah Basin Economic Development District has been the recipient of numerous planning grants for the last three decades, and a Title IX Revolving Loan Fund. Besides EDA’s role in providing funds, EDA staff provides training and technical assistance. Through the use of funding many valuable projects have been completed and jobs created.

www.eda.gov
Department of Community and Housing – State of Utah
The Department of Community and Housing administers the Community Development Block Grant Small Cities, Permanent Community Impact funds (federal mineral lease funds dispersed competitively by impacted communities); Olene Walker Housing Loan Fund, Community Services Program, Emergency Shelter, Weatherization.
www.jobs.utah.gov

Uintah Basin Association of Governments
The Uintah Basin Association of Governments (UBAOG) is overseen by a Board of Directors consisting of County Commissioners from each County and Mayors from their respective entities. The Board’s primary purpose is to coordinate and study regional problems of common interest and concern, to develop policy recommendations, implement actions to mitigate those problems, and to serve as a regional clearing house for applications submitted for federal funds. UBAOG administers Federal and State grant subsidies, and planning and technical assistance program for the three-county area. Programs administered by UBAOG include: Community Service Block Grant, Weatherization Assistance, Area Agency on Aging, Community Development Block Grant, Social Services Block Grant, Self-Help Housing, Home, Foster Grandparent Program, Retired Senior Volunteer Program, Emergency Shelter, FEMA, HEAT, Emergency Food Network, Office of Education Nutrition Funds, Emergency Home Repair, and Home, Regional Planning, Economic Development District (EDD), Community Development (CD), and Rural Development (RD) Revolving Loan Fund.
www.ubaog.org

CIB Regional Planning
The Association of Governments and Economic Development District assists area communities and officials with comprehensive plans, capital facilities scheduling plans, community surveys, funding research and writing, and other activities as deemed necessary. The two agencies administer and coordinate grant and loan programs for community and economic development projects. Community Development Block Grant funds are allocated to the region each year and subsequently distributed to numerous community development projects on a competitive basis.
http://www.ubaog.org/index.php/programs/planning

UBEDD / UBAOG / RLF Advisory Board's, Revolving Loan Fund Program
The RLF program plays a crucial part in the local economy. The major objective of the RLF program is to enhance business development. The objective states that the RLF Board will seek to assist area businesses in securing public development financing in an effort to stimulate the local economy and create new permanent jobs. The Revolving Loan Fund is perfectly suited to address and achieve these goals and objectives. The RLF portfolio will be used to create or save approximately seventy to eighty-five jobs in the Uintah Basin. Because the RLF will only be used for
a maximum of thirty percent of the total financing, the total number of jobs created through the combination of the RLF and private lenders will actually be much higher. Priority will be given to those worthy projects that can produce the most long-term jobs. All programs that the UBAOG and UBEDD provide target unemployed, underemployed, low-income, elderly, disabled and minorities. [http://www.ubaog.org/index.php/programs/economic-development/revolving-loan-fund]

Vernal Area Chamber Of Commerce
The Vernal Area Chamber of Commerce is the largest Chamber in the three counties. Within Uintah County there are many resources available to businesses that are just beginning, currently in operation or have plans to expand. The Economic Development program supports and assists commercial enterprise through networking with the businesses community, local and state government, and as necessary, federal programs. Examples of the organizations that are available to assist businesses include the Vernal Area Chamber of Commerce, Utah State University Business Development Center, Uintah Basin Applied Technology Center, and the State of Utah Division of Business & Economic Development to name a few. In addition, there are programs available that provide financial incentives, such as, Enterprise and Recycling Zone Tax Credits, Uintah Basin RLF low interest rate loans, job training programs, and access to the Utah Industrial Assistance Fund. [http://www.vernalchamber.com/]

Duchesne County Area Chamber of Commerce and Economic Development
The Duchesne County Area Chamber of Commerce is organized for the purpose of uniting the Uintah Basin in developing local business cooperation, and to expand its business community within; to attract business interest into the area that would complement and enlarge those already here; to acquire, preserve and distribute industrial, commercial, agricultural, tourist and civic statistics and information; and to take part in city, state, and national organizations and activities of importance to the economy. The purpose of these groups is to coordinate business sector activities; encourage customers to purchase goods within the local business sector; discuss local, regional, and state policy issues, and promote the area to travelers and visitors. [http://www.uintabasin.org/]

Uintah County Economic Development and Tourism
Uintah County Economic Development provides many opportunities for all types of businesses to flourish because of its business-friendly atmosphere and its commitment to economic expansion and business retention. It continually evaluates and plans upgrades to infrastructure to allow new business to locate here and existing businesses to expand. It also supports policies that promote multiple uses of public lands which provide economic stability for our area as well as opportunities for many different kinds of recreation including but not limited to
hunting, fishing, biking, and hiking. Our spectacular mountains, blue ribbon fisheries, and breathtaking desert landscapes make Uintah County the right place to live work and play. One of the great assets to the residents of Uintah County is the area’s thriving education system. Higher education has had a strong presence in the area for many years, reflecting a statewide commitment to educate its residents. They believe in this vision and support two higher education institutions: Uintah Basin Applied Technology College and Utah State University. Although each entity has a distinct mission, both have found that cooperation and collaboration bring tremendous strength and growth.

http://www.dinoland.com/

Utah Office of Tourism
The Utah Office of Tourism mission is “to improve the quality of life of Utah citizens through revenue and tax relief, by increasing the quality and quantity of tourism industry including marketing and advertising, research, publications, information services, media relations and cooperative marketing programs.

www.visitutah.com

Daggett County Economic Development
The Daggett County Economic Development Office was established in the summer of 2005 by the Daggett County Commission. It was established to give a greater emphasis and better coordination of efforts of the many groups trying to build the area’s economy. The International Economic Development Council defines Economic Development as “a program, group of programs, or activity that seeks to improve the economic well-being and quality of life for a community by creating and/or retaining jobs that facilitate growth and provide a stable tax base.”

The County Economic Development Board has been around for many years. The Board was re-established in 2003 and has worked hard to develop an Action Plan to guide the County’s economic development efforts.

www.daggettcounty.org

Uintah Impact Mitigation Special Service District
The Uintah Impact Mitigation Special Service District (SSD) was established by the Uintah County Commission in 2006 to broaden the efforts of economic development to all cities and residents of Uintah County. Research and higher education were included as fundamental aspects of the entity along with business expansion and retention. In addition, natural resources and energy especially the extractive industries are of significant importance to the economy of the County and the Uintah Basin collectively.

In partnering with the Uintah Basin Association of Governments and participating with Duchesne and Daggett Counties in the Economic Development District and the Uintah Basin Revolving Loan Fund along with the many other opportunities available through this partnership, the SSD is able to provide full business services,
resources and incentives to assist local businesses with their development needs, whether they be education, expansion, retention or diversification.

**UB Tech – Custom Fit Program**

Uintah Basin Technology College’s (UB TECH) commitment to helping individuals obtain quality job skills is stronger than ever. In addition their continued pledge to focus on ways to improve our community and the quality of life for its citizens, we remain equally steadfast in our promise to deliver job-ready employees to area employers. Adaptability to meet the market driven needs of employers positions UBATC stands out as one of the state’s most innovative, high-technology training facilities.

Uintah Basin Technology College has the unique ability to customize a program, to train new employees or upgrade the skills of your current workforce. They also offer the state’s Custom-Fit which can help defer some of the training cost for company’s upgrading their employee’s skills. UBATC believe in working with businesses with the result of a dynamic partnership between Utah’s vocational/technical education institutions and the business community. Its mission is to provide flexible technology education and skilled training in order to encourage individual and employer growth in partnership with the communities they serve. They also work closely with all three school districts to provide technical training programs for their students as well.

[www.ubtech.edu](http://www.ubtech.edu)

**Workforce Services**

The mission of the Department of Workforce Services is to provide quality, accessible, and comprehensive employment related and supportive services responsive to the needs of employers, job seekers, and the community. The Department of Workforce Services offer a wide array of services to help ensure the employment search is as smooth as possible: Workforce Services offer Job search assistance; Labor Market Information; Occupations in demand; Future Economic Outlook; Current wage analysis of the Tri-County area; Job referrals; Vocational assessments; Career counseling; Resume preparation; Job interview preparation; Job keeping Skills; On the job training opportunities; Educational assistance; Apprenticeships/Internships; Mentoring; and Short-term training. Other Supportive Services include: The Family Employment Program; Food Stamps; Employment supported child care; Medical assistance; and Unemployment insurance. Workforce Services also has a representative on the Economic Development Board of Directors.

[www.jobs.utah.gov](http://www.jobs.utah.gov)

**Ute Indian Tribe**

The Ute Tribe is governed by six council members, two from each of the three original bands (Uintah, Whiteriver, and Uncompahgre). The council works closely with the Superintendent at the Bureau of Indian Affairs to direct the activities and the progress of the Uintah and Ouray reservations as they strive to hold onto the traditions of the past while incorporating the changes of the present.
**Dinosaurland Resource Conservation & Development**

Resource Conservation & Development is a unique program that helps people care for and protect their natural resources in a way that will improve the area’s economy, environment, and living standards. To carry out this concept, diverse groups of local volunteers are brought together in a unique partnership to find solutions to their problems. Local people are best able to determine needs and create solutions for their community. The strength of RC&D is in the commitment of people to solve their problems.


**USDA Rural Development**

The mission of USDA Rural Development is to enhance the ability of rural communities to develop, to grow, and to improve their quality of life by targeting financial and technical resources in areas of greatest need through activities of greatest potential. By working in partnership with the many public and private organizations involved in rural development, USDA is increasing its focus on community development while continuing to fund development projects aimed at creating quality jobs, housing, and services in rural areas.

USDA's Rural Development mission area includes these agencies: Rural Utilities Service (RUS) addresses rural America’s need for such basic services as clean water, sewers, waste disposal, electricity, and telecommunications. The Rural Housing Service (RHS) addresses rural America’s need for single-family and multi-family housing for its low-income families, and also helps rural communities build or improve essential community facilities such as health clinics, fire and police stations, schools, and day care centers. The Rural Business-Cooperative Services (RBS) helps meet the need for new economic opportunities in rural America, and helps businesses and cooperatives remain viable in a changing economy. Example: Water and Waste Disposal Loans/Grants: To develop water and waste disposal (including solid waste disposal and storm drainage) systems, also to reduce water and waste disposal costs to a reasonable level to rural users. The funds are available to public entities such as municipalities, counties, special-purpose districts, Indian Tribes, and corporations not operated for profit. Grants may be made for up to seventy-five percent of eligible projects in some cases.

[www.rd.usda.gov/ut](http://www.rd.usda.gov/ut)

**Small Business Development Center - Utah State University**

The role of small business in our state’s economy continues to grow. The opportunity to own and operate a small business has never been better. Advances in information technology have increased the potential for success in starting a small business. The Utah Small Business Development Centers (SBDC) exist to assist small business owners in achieving maximum potential by providing one-on-one counseling, business skills training and loan packaging. Through a network of twelve regional centers located throughout the state, the SBDCs can provide professional assistance in all areas of small business development. The Utah Small Business Development Centers also offer workshops, conferences and seminars to help you learn practical business management skills. Training includes everything
from introductory business start-up seminars to all-inclusive business courses. All of the classes and seminars are designed to provide practical, hands-on business management training.

The Utah Small Business Development Center provides free one-on-one customized business consultation to help you manage your business more effectively. Consultation may include: Needs Assessments; Business Planning; Market Research and Market Strategy; Financial Statement; Cash Flow Analysis & Financial Projections; Debt and Equity Funding

The local Utah Small Business Development Center is located in the Utah State University Uintah Basin Branch Campus both in Roosevelt and Vernal. This agency also has the Business Resource Library for Uintah County.

www.utahsbdc.org

Northeastern Housing Partnership
A coalition that consist of the Uintah Basin Association of Governments (UBAOG), Duchesne County Justice Complex (DCJC), and the Uintah Basin Applied Technology Center (UB ATC) with the primary goal of constructing affordable housing units for the residents of the Uintah Basin. Through the utilization of the "Occupational Training Outreach Program" at the UB ATC (carpentry classes) and the student/inmates that are housed at the DCJC labor cost are minimal. Through a revolving loan fund provided by the State of Utah, Community Development Division and administered by the UBAOG, materials are supplied for the construction of modular housing units.

Procurement Technical Assistance Centers
PTAC is proud to provide services to businesses located in rural areas of Utah to navigate and attain contracts with the federal government. With offices located throughout the state, PTAC is a go-to source for all things government contracting.

www.business.utah.gov/ptac

Broadband Outreach Center
By providing mapping and broadband consultation services, the Broadband Outreach Center helps rural businesses locate utilities and broadband providers throughout Utah.

www.broadband.utah.gov

Manufacturing Extension Partnership
MEP works with manufacturers to identify and implement best practices that lead to increased profitability through training, certification and advising.

info@mep.utah.gov

Office of Outdoor Recreation
In addition to the natural resources that make Utah a great fit for outdoor business, Utah offers a variety of support services designed specifically to meet the needs of an outdoor company. Our department provides market expansion services,
international export advice, rural manufacturing incentives, business relocation incentives, innovation grants, product testing, and patent support
www.business.utah.gov/outdoor

**Utah Film Commission**
The Utah Film Commission markets the entire State of Utah for film, television and commercial production by promoting the use of local professional cast & crew, support services, locations and the Motion as a liaison to production companies filming in the state.
www.film.utah.gov

**Department of Agriculture and Food**
The Utah Department of Agriculture and Food is focused on creating opportunities for Utah agriculture and food businesses to be successful in local, national, and international markets. As a member of WUSATA, we assist companies entering the global market by participating in trade activities that include trade missions, trade shows, and inbound buying missions.
www.ag.utah.gov

**Office of Rehabilitation**
USOR is committed to helping Utah businesses find solutions to disability related issues such as: locating a talent pool of skilled candidates, retaining valued employees whose job is affected by illness, injury or disability, finding ways to make your business accessible to customers and employees with disabilities, linking you to resources to assist with disability and employment and other disability related issues as necessary.
www.usor.utah.gov

**Office of Energy Development**
OED seeks to enhance rural economic development opportunities by providing industry assistance for Utah’s energy and minerals sectors, and engaging in policy, planning, outreach and education focused on maintaining an affordable and reliable energy supply. In particular, OED’s Agricultural Energy Efficiency program works to expand audits and facilitate efficiency upgrades at Utah’s agricultural operations, and it’s newly created High Cost Infrastructure Tax Credit program is expected to be a significant boon for rural economic development of all kinds.
www.energy.utah.gov

**Local Businesses**
Local businesses are major contributors to various economic programs with financial assistance, as well as providing services. By us partnering with local businesses they get a better idea of the services we provide and what they can do to assist their communities.
Partnering with the above named agencies has provided the UBEDD Board of Directors and staff with the resources needed to implement economic development planning by assisting businesses, local agencies, counties, cities and towns.
G. Environment

The Uintah Basin is rich in natural resources especially in oil and gas production that is valuable to the global economy. Finding a reasonable balance between jobs and the environment is always difficult, but when the project has federal lands or funds tied to the project, then environmental safeguards apply.

Land Ownership

Daggett County - - - - - - - - - - - - - - - - - - - 461,440 acres
Federal land - - - - - - - - - - - - - - - - - - - -359,039 - 80.2%
BLM - - - - - - - - - - - - - - - - - - - - - - - 13,740 acres
Natl. Parks - - - - - - - - - - - - - - - - - - - - Not Applicable
Forest Service - - - - - - - - - - - - - - - - -166,304 acres*
Natl. Rec. Areas - - - - - - - - - - - - - - - - -8,995 acres

Duchesne County - - - - - - - - - - - - - - - - - - - 2,086,400 acres
Federal land - - - - - - - - - - - - - - - - - - 924,134 - 44.7%
BLM - - - - - - - - - - - - - - - - - - - - - - -206,476 acres
Natl. Parks - - - - - - - - - - - - - - - - - - - - Not Applicable
Forest Service - - - - - - - - - - - - - - - - -453,871 acres*
BLM USFS Wilderness - - - - - - - - - - - - - - -263,787 acres

Uintah County - - - - - - - - - - - - - - - - - - - 2,856,320 acres
Federal land - - - - - - - - - - - - - - - - -708,693 - 59.4%
BLM - - - - - - - - - - - - - - - - - - - - - 1,379,598 acres
Natl. Parks - - - - - - - - - - - - - - - - - - -50,685 acres
Forest Service - - - - - - - - - - - - - - -269,435 acres*
National Wildlife Refuge - - - - - - - - - - -8,975 acres
*Wilderness - - - - - - - - - - - - - - - - - - -456,705 acres
Federal Lands Planning and Management

Since a large portion of the land within the Uintah Basin is owned by the Federal government, Federal land management and their resource planning efforts have important implications on the direction of local planning efforts. In short, local and federal planning interfaces each other, and all involved have to work together. These lands support tourism and outdoor recreation; protect watersheds for the economy based on agriculture; harbor and supply timber and mineral resources; guard the wildlife habitat; and sustain grazing areas. Planning and policy decisions on the extent of resource use, access, harvest, fees, and rules of conduct are generally based on scientific studies and finds, budgets, staff capacities, and statutory and federal policies, and are subject to considerable public review and comment.

The Bureau of Land Management (BLM) manages public lands and resources under the Federal Land Policy and Management Act (FLPMA). Resource Management Plans (RMPs) are the primary mechanism for implementing the “multiple use” and “sustainable yield” principles outlined in FLPMA. Each RMP provides management direction and guides future actions over a ten-year period for an area of BLM land called Resource Area (RA). RMPs also contain standard and criteria to govern subsequent allotment-specific decisions.

Under the National Forest Management Act (NFMA), the Forest Service prepares Forest Plans at the national forest or ranger district level. The Forest Plan represents the selected alternative based on various considerations which have been addressed in an Environmental Impact Statement (EIS). Forest Plans have an effective life of ten to fifteen years. The Forest Plan may be revised or amended whenever the Forest Supervisor determines that conditions or demands in the area covered by the plan have changed significantly.

The primary planning document of the National Park Service (NPS) is the General Management Plan (GMP). The governing principle is a single-use policy that emphasizes preservation and scenic beauty precepts. The GMP is prepared and implemented at the individual national park level and generally has a ten-year cycle. A GMP follows a similar format as outlined in FLPMA or NFMA, but without a management emphasis on multiple use or sustained yield.

Other National Park Service plans include a Development Concept Plan (DCP) and Resource Management Plan (RMP). The DCP has no time frame and is equivalent to a specific plan that is written at a city or county level, addressing land and resource management issues of a specific area within a national park (e.g., visitor facilities or in-park operations). The RMP is a performance-budget plan and is updated every three years. Additional plans which are often sub-components of a GMP include a Cultural Resource Plan, a Statement of Management (completed every two years), a Backcountry and a Wilderness Plan.
During the planning process Daggett, Duchesne and Uintah Counties have worked diligently with the BLM and Forest Service to participate and assist in the updates of their plans, while coordinating their own County Land Use Planning. Both are on a balancing act of complying with environmental policies, yet protecting businesses, jobs and the economy.

**Natural Resources**

To manage the Uintah Basin’s diverse natural resources is to balance the values of economic development and environmental protection for all residents. It is recognized that the wildlife, parks, forest, and fragile deserts are part of a given environment that deserves protection. It is also understood that water development, extraction of mineral resources, grazing, and other natural resource uses are critical to maintain a balanced environment.

**Water, Floodplains, Wetlands, Farm Lands**

Water is always a large part of local environmental issues and the area defends its water resources fiercely. Within the Uintah Basin there is major planning for balancing water development by structural methods, (reservoirs, wells, pipelines) and with nonstructural methods (water conservation, water pricing). All water entities are encouraged to prepare a water conservation management plan. We recognize the efforts of the agencies within the Uintah Basin that are involved in the Colorado River Salinity Control Act. Through their efforts they have reduced the salt load to the Green River by 76,600 tons annually. Water management and land treatment measures also improve crop yields and make better use of irrigation water supplies. The net increase in river flow is 20,200 acre-feet annually.

The quality of water entering the Uintah Basin from major streams is excellent. However, once the water is used for irrigation, there is sharp increase in the mineral content. This is especially true where the Uintah Geologic Formation is exposed because; the formation contains many beds of gypsiferous salts that readily dissolve in water.

Minor streams originating in the southern part of the Basin (Book Cliffs region) consistently carry sodium sulfate. Additional sodium sulfate salts are picked up from the floodplain of the Duchesne River.

Daggett County has not been mapped for floodplains; Duchesne County has two sites, while Uintah County has numerous areas that set in a floodplain. Prior to beginning a project the FEMA website is consulted. Much of the riparian and wetland habitat exists because of agricultural development. In some areas of the Basin the irrigation supported wetland habitat is all that is available, and little or no natural wetland habitat remains.
The riparian and wetland habitats found in and around the irrigated lands and those associated with the river bottoms probably receive the highest use by wildlife. The diversity of water, trees and moist areas contribute to the species diversity of the area. It is estimated that over 60 percent of all the birds found in the Uintah Basin use this type of habitat.

The Uintah Basin is a diverse, as well as large ecosystem and the variations in climatic conditions, elevations, and land uses provide habitat for a variety of wildlife species. The area is characterized by cropland, pasture, upland and desert rangeland, some woodland, riparian and wetland habitats. There are about 90 mammal species known to occur in the basin.

Wildlife is not the only significant asset associated with wetlands in the Basin. Wetlands are valued as catch basins after spring runoffs, heavy rains, and thunder storms. They serve as flood retention basins that absorb water slowly into the ground and thus act as ground water recharge areas, from which many residents rely on for their culinary water and other uses. Riparian and forested bottom lands adjacent to the various rivers and other waterways delay the force of moving water, thereby reducing the erosive energy of high stream flows and permit sediments to be filtered. The vegetation associated with these catch basin areas also usurp and use the various nutrients that are transported and trapped in these regions after periods of heavy runoff.
Threatened and Endangered Species

The following is a list of – Threatened (T), Endangered (E), and Candidate (C) Species.

**Daggett County**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
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<tbody>
<tr>
<td>Ute Ladies'-tresses</td>
<td><em>Spiranthes diluvialis</em></td>
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<tr>
<td>Humpback Chub</td>
<td><em>Cila cypha</em></td>
<td>E</td>
</tr>
<tr>
<td>Colorado Pikeminnow</td>
<td><em>Ptychocheilus lucius</em></td>
<td>E</td>
</tr>
<tr>
<td>Razorback Sucker</td>
<td><em>Xyrauchen texanus</em></td>
<td>E</td>
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<tr>
<td>Black-footed Ferret</td>
<td><em>Mustela nigripes</em></td>
<td>E Extirpated</td>
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<td><em>Ursus arctos</em></td>
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</tr>
<tr>
<td>Canada Lynx</td>
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<td><em>Glaucocarpum suffrutescens</em></td>
<td>E</td>
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<tr>
<td>Barneby Ridge-cress</td>
<td><em>Lepidium barnebyanum</em></td>
<td>E</td>
</tr>
<tr>
<td>Pariette Cactus</td>
<td><em>Sclerocactus brevispinus</em></td>
<td>T</td>
</tr>
<tr>
<td>Uinta Basin Hookless Cactus</td>
<td><em>Sclerocactus wetlandicus</em></td>
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</tr>
<tr>
<td>Yellow-billed Cuckoo</td>
<td><em>Coccyzus americanus</em></td>
<td>C</td>
</tr>
<tr>
<td>Black-footed Ferret</td>
<td><em>Mustela nigripes</em></td>
<td>E Experimental</td>
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<tr>
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<tr>
<td>Clay reed-mustard</td>
<td><em>Schoenocrambe argillacea</em></td>
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</tr>
<tr>
<td>Pariette Cactus</td>
<td><em>Sclerocactus brevispinus</em></td>
<td>T</td>
</tr>
<tr>
<td>Uinta Basin Hookless Cactus</td>
<td><em>Sclerocactus wetlandicus</em></td>
<td>T</td>
</tr>
<tr>
<td>White River Beardtongue</td>
<td><em>Penstemon scariosus var albilfluvis</em></td>
<td>C</td>
</tr>
<tr>
<td>Humpback Chub</td>
<td><em>Gila cypha</em></td>
<td>E</td>
</tr>
<tr>
<td>Bonytail</td>
<td><em>Bila elegans</em></td>
<td>E</td>
</tr>
<tr>
<td>Colorado Pikeminnow</td>
<td><em>Ptychocheilus lucius</em></td>
<td>E</td>
</tr>
<tr>
<td>Razorback Sucker</td>
<td><em>Xyrauchen texanus</em></td>
<td>E</td>
</tr>
<tr>
<td>Yellow-billed Cuckoo</td>
<td><em>Coccyzus americanus</em></td>
<td>C</td>
</tr>
<tr>
<td>Black-footed Ferret</td>
<td><em>Mustela nigripes</em></td>
<td>E Experimental</td>
</tr>
<tr>
<td>Brown (Grizzly) Bear</td>
<td><em>Ursus arctos</em></td>
<td>T Extirpated</td>
</tr>
<tr>
<td>Canada Lynx</td>
<td><em>Lynx canadensis</em></td>
<td>T</td>
</tr>
</tbody>
</table>
A few years ago the U.S. Fish and Wildlife Service’s estimated that the greater sage grouse was warranted for inclusion on the threatened and endangered species list, but tabled the decision until 2015. Due to concerns the State of Utah, various counties within Utah, including Daggett, Duchesne and Uintah Counties has been proactive in developing a conservation plan for the sage grouse. The plan consists of 11 established management areas of sage grouse in the state, all with the goal of preserving the bird and its habitat.

Merging state and local plans with those of the federal agencies has begun with the Forest Service and the Bureau of Land Management receiving their resource management plans to protect the bird on public lands.

The direction the plan provides will maintain or increase the number of sage grouse while allowing economic development to continue.

The Black-Footed Ferret that is listed on the Endangered Species Act of 1973 was reintroduced into Coyote Basin, Uintah County in October 1999. Forty plus animals are being monitored by UDWR biologists for survival, distribution, and mortality. The reintroduction occurred under “10j” status and will follow the guidelines as defined in the “Cooperative Plan for the Reintroduction and Management of Black-Footed Ferrets in Coyote Basin.” This cooperative plan was developed at the local level by agencies, industry, agriculture, and environmental groups prior to 1996. This project is still on-going with the population continuing to increase.

**Wild and Scenic Rivers**

Congress created the National Wild & Scenic Rivers System in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.
There are three categories of rivers in the WSR system: wild, scenic, and recreational. **Wild** rivers are free of dams, generally inaccessible except by trail, and represent vestiges of primitive America. **Scenic** rivers are free of dams with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. **Recreational** rivers are readily accessible by road or railroad, may have some development along their shorelines, and may have been dammed in the past. Congress further stated that the river, with its immediate environments, possesses outstanding scenic, recreational, geological, fish and wildlife, historic, cultural, and other similar values.

**Suitable Wild and Scenic River Segments**

Section 5(d) of the Wild and Scenic Rivers Act of 1968 states that, “the Secretary of the Interior...shall make specific studies and investigations to determine which additional wild, scenic, and recreational river areas within the United States shall be evaluated in planning reports.” The evaluation of the rivers on BLM lands has taken place through the resource management process. In accordance with the provisions of the Wild and Scenic Rivers Act, the evaluation takes place in a sequential process: eligibility (inventory); tentative classification; and suitability for inclusion in the National Wild and Scenic Rivers System. The suitable segments of rivers located in the Uintah Basin are shown below.

<table>
<thead>
<tr>
<th>Field Office</th>
<th>River Segment</th>
<th>Stream Miles</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vernal</td>
<td>Upper Green River Little Hole to the Utah State line</td>
<td>12</td>
<td>Scenic</td>
</tr>
<tr>
<td>Vernal</td>
<td>Lower Green River BLM boundary south of Ouray to the Carbon County line</td>
<td>27</td>
<td>Scenic</td>
</tr>
</tbody>
</table>

**Historic and Archeological**

There are fifty-five historic sites, one-hundred and ninety-nine archeological sites, and four unique natural areas in the Uintah Basin. The historic sites include buildings, cemeteries, and forts. One site, Fort Robidoux, established in 1837 or 1838, is said to be the oldest white habitation site in Utah. Five historic trails pass through the area. They are Ashley, Powell, Fremont, Escalante, and the Old Spanish Trail.

Archeological sites vary from surface scatters of chipping debris to entire villages. One site, the Caldwell Village, contains twenty-two large pit houses and an alleged irrigation ditch.
Unique natural areas include Dinosaur National Park, Asphalt Ridge, numerous interconnected sink holes and springs, and the Uinta Mountains.

**Coastal Zones**

None exist in the Uintah Basin.

**Superfund, Comprehensive Environmental Response**

Compensation and Liability Act (ECRLA) Four sites established in the State of Utah, none exist within the Uintah Basin.

**Sole Source Aquifers**

None exist in the Uintah Basin.

**Hazardous Chemicals**

A list is maintained by each local Emergency Manager in the area. If an emergency were to happen each manager is trained and certified in what actions need to take place.

**Environmental Justice**

The UBEDD utilizes the Community Development Block Grant (CDBG) funds for its housing projects that target low to moderate income. All criteria are followed and a mix of high, medium and low income housing projects is met.

**Air Quality**

The Clean Air Act which was last amended in 1990, requires the United States Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS). The NAAQS are standards are set in order to protect the public health and the environment. The state of Utah through the Department of Environmental Quality (UDEQ) have set up stations to measure and monitor air quality throughout the state. Within the region, both Roosevelt and Vernal have these monitoring stations. In addition, the EPA, Ute Tribe, the Bureau of Land Management (BLM), and the National Park Service (NPS) also maintain monitoring stations within the Uintah Basin (County Resource Management Plan Reference Document, Uintah Basin Association of Governments, 2016).
During the winter months in Duchesne and Uintah Counties, air quality monitoring sometimes reveals periods of elevated daytime ozone concentrations, exceeding the current NAAQS established by the U.S. Environmental Protection Agency (EPA). There is currently no evidence that emissions from Duchesne and Uintah Counties carry into Daggett County. (Lyman 2016). “Because the Uintah Basin is surrounded on all four sides by mountains, it is shaped physically like a basin and tends to trap polluted air and facilitate inversion formation” (County Resource Management Plan Reference Document, Uintah Basin Association of Governments, 2016). Key findings from “Uintah Basin Ozone Study” led by the Utah Division of Air Quality (DAQ) have revealed the following:

- Elevated winter O\textsubscript{3} is episodic and only occurs with snow cover and persistent temperature inversion.
- Oil and gas operations were responsible for 98% to 99% of VOC emissions and 57% to 61% of NO\textsubscript{x} emissions.
- The primary chemical drivers of winter O\textsubscript{3} formation in the Uintah Basin Differ greatly from those of summer O\textsubscript{3} formation in urban areas.
- Formaldehyde and other aldehydes are the dominant contributors to the creation of radicals that drive O\textsubscript{3} formation in the Uintah Basin.
- Research indicates that VOC controls focused on these reactive species will be particularly effective.

Although studies have shown that geography plays a large role in the air quality issues within the region, air quality is still a concern of local elected officials as federal guidelines tighten, which could result in the Uintah Basin becoming a “non-attainment” zone. If this designation takes place, the potential impact on development and utilization of the Basin’s energy resources would halt the economic progress that has been made.

Many partners have joined forces to address the air quality issues, due to the financial impact.

In September 2016, the State of Utah submitted Governor Gary Herbert’s recommendation for ozone nonattainment designations (Wasatch Front, and the Uintah Basin, minus tribal lands, which will make their own recommendation) to the EPA. The state will be required to develop a federally – enforceable State Implantation Plans (SIPs) to identify how the primary and secondary NAAQS would be attained in nonattainment areas. Through these plans, the state and the Ute Tribe would design control measures and strategies to reduce pollutant levels in the area, and if appropriate, any emissions of precursor pollutants. The time period for ozone nonattainment areas to achieve attainment depends on the area’s classification as marginal, moderate, serious, severe, or extreme. A higher classification would mean more stringent requirements, but allow for a longer time to reach attainment. Although the classification of the Utah-recommended nonattainment areas in unknown at this time, they are expected to be either