Chapter Four
General Plan

With the establishment of goals and policies, the next step in the planning process is to outline in some detail the plans and programs which should be followed in order to accomplish the desired goals. These detailed plans address the areas of public facilities, transportation including trails, economic development and land use with its physical constraints.

Public Facilities and Services

Water Resources

In Chapter 2 of the General Plan, existing water resources of the County that could be converted from irrigation to culinary use were identified. With the exclusion of water rights in the Central Planning Area, the total amount of water available for conversion to culinary use from irrigation rights is as much as 55,777 acre feet in the Heber Valley, 22,463 acre feet in Round Valley and 4,600 acre feet in supplemental water, and 900 acre feet in Municipal and Industrial water from the Jordanelle Reservoir.

In order to determine the number of residential units that could be supplied from available water resources for both outside and inside use, several mathematical models were developed for lots of ranging from 1 to 5 acres. Table 12 identifies the impervious and irrigated areas for each lot size. Table 13 shows the number of acre feet of water required per acre based on lot size and the continued use of a lagoon wastewater treatment facility. Table 14 shows the number of acre feet of water required per acre based on lot size and the change to a mechanical wastewater treatment facility which would result in a reduction in return flow requirements to the down-stream water users and the potential reuse of treatment plant effluent. Tables 15 and 16 show the number of lots that could be developed from available water resources if all lots developed in the county were of that size and wastewater treatment was either by the use of lagoons or a mechanical wastewater treatment facility.

In Tables 17 and 18 the use of Planned Unit Developments were evaluated using varying percentages of required open space and either lagoon or a mechanical wastewater treatment facility. Trying to tie the potential number of new residential units to the projected population of the County is not practical because currently about 42 percent of the residential units in Wasatch County are second homes with the percentage expected to climb between 45 and 55 percent during the next 20 years. These new second houses will bring Wasatch County close in percentage of second houses in Summit County which was 60 percent in 2000.

From the following tables it is evident that during the next 20 years that water is not a limiting factor in the growth that will potentially take place in Wasatch County.

Table 10

Available Water Summary in Heber Valley

Irrigation Area	Available Culinary (acre-feet)	Available Irrigation Water (acre-feet)
Center Creek	0.0	1,724.4
Charleston	0.0	2,864.2
Daniel	0.0	5,356.7
Lake Creek	538.0	7,189.5
Midway & Island Ditch	14.7	9,757.8
North Field	0.0	7,125.8
Sagebrush & Spring Creek	0.0	2,891.8
Timpanogos	625.1	7,377.6
Wasatch & Extension	205.2	11,489.4
Available M&I Water	900.0	0.0
Available Supplemental Water	0.0	4,600.0
TOTALS	**2,283.00**	**60,377.10**

GRAND TOTAL (acre-feet): 62,660.10

Water Analysis Assumptions

1. Only first class water rights were used to determine available irrigation water
2. Capacity of dam at spillway was used when water right amount was not available.
3. Water Right quantities from State Engineer used in the analysis.

Table 11

Available Water for Future Growth in Heber Valley from Water Rights Analysis

Description	Quantity	Unit
Gross Available Irrigation Water Outside of Incorporated	60,377.10	acre-feet
Less Central Planning Area (4,031 acres)	(12,093.0)	acre-feet
Net Available Irrigation Water Outside of Incorporated Area	48,284.10	acre-feet
Available Culinary Water Outside of Incorporated Area	3,783.00	acre-feet
Total Available Water for Growth	**52,067.10**	**acre-feet**

Notes:

1. Sewer treatment facility, Provo River Corridor and grazing lands were excluded from the Central Planning Area acreage of 4,031.

Table 12

Impervious and Irrigated Area for Various Lot Sizes

Density Description	**Typical Street Frontage** (feet)	**Typical Street Area** (sq. feet)	**Typical Building Pad Dimensions** (ft x ft)	**Typical Building Pad Area** (sq. feet)	**Typical Patio Area** (sq. feet)	**Typical Driveway Area** (sq. feet)	**Typical Sidewalk Area** (sq. feet)	**Impervious Area per Lot** (sq. feet / lot)	**Irrigated Area per Lot** (acre / lot)
5 acre lot	300	4050	100 x 40	4000	400	800	1500	10750	4.96
1 acre lot	200	2700	100 x 40	4000	400	800	1000	8900	0.93
20,000 sf lot	150	2025	90 x 40	3600	300	600	750	7275	0.40
15,000 sf lot	150	2025	90 x 40	3600	200	600	750	7175	0.28
12,000 sf lot	120	1620	90 x 30	2700	200	600	600	5720	0.23
10,000 sf lot	100	1350	80 x 30	2400	150	600	500	5000	0.18
8,000 sf lot	80	1080	60 x 30	1800	150	600	400	4030	0.15

Notes:

1. Street area based on typical frontage and half of 27 feet of asphalt within 60 foot right-of-way.
2. Minimum side yard set back is 10 feet for 8,000 and 10,000 sf lots.
3. Minimum side yard set back is 15 feet for 12,000 sf and greater lots.
4. Sidewalk area is based on 5 feet sidewalk along street frontage.

Table 13

Water Required per Lot Size with Lagoon Wastewater Treatment Facility

Density Description	**Density** (lot / acre)	**Water for Inside Use** (ac-ft / lot)	**Water for Depletion** (ac-ft / lot)	**Irrigated Area per Lot** (acre / lot)	**Water for Irrigation** (ac-ft / lot)	**Water Requirement per Lot** (ac-ft / lot)	**Water Requirement per Acre** (acre-feet / acre)
5 acre lot	0.2	0.45	0.45	4.96	14.88	15.78	3.16
1 acre lot	1.0	0.45	0.45	0.93	2.80	3.70	3.70
20,000 sf lot	2.2	0.45	0.45	0.40	1.19	2.09	4.59
15,000 sf lot	2.9	0.45	0.45	0.28	0.85	1.75	5.07
12,000 sf lot	3.6	0.45	0.45	0.23	0.68	1.58	5.69
10,000 sf lot	4.4	0.45	0.45	0.18	0.55	1.45	6.38
8,000 sf lot	5.4	0.45	0.45	0.15	0.44	1.34	7.23

Notes:

1. 0.45 acre-feet of water is required by State Engineer for inside use.
2. 3 acre-feet of water is required per acre of irrigated land by State Engineer.
3. State Engineer requires an addition 0.45 acre-feet of water to account for downstream depletion when lagoon treatment is used.

Table 14

Water Required per Lot with Mechanical Wastewater Treatment Facility

Density Description	**Density** (lot / acre)	**Water for Inside Use** (ac-ft / lot)	**Water for Reuse** (ac-ft / lot)	**Irrigated Area per Lot** (acre / lot)	**Water for Irrigation** (ac-ft / lot)	**Water Requirement per Lot** (ac-ft / lot)	**Water Requirement per Acre** (acre-feet / acre)
5 acre lot	0.2	0.45	0.30	4.96	14.88	15.03	3.01
1 acre lot	1.0	0.45	0.30	0.93	2.80	2.95	2.95
20,000 sf lot	2.2	0.45	0.30	0.40	1.19	1.34	2.94
15,000 sf lot	2.9	0.45	0.30	0.28	0.85	1.00	2.90
12,000 sf lot	3.6	0.45	0.30	0.23	0.68	0.83	2.99
10,000 sf lot	4.4	0.45	0.30	0.18	0.55	0.70	3.08
8,000 sf lot	5.4	0.45	0.30	0.15	0.44	0.59	3.18

Notes:

1. 0.45 acre-feet of water is required by State Engineer for inside use.
2. 3 acre-feet of water is required per acre of irrigated land by State Engineer.
3. State Engineer allows 0.30 acre-feet of inside water use to be reused downstream if mechanical wastewater treatment facility is used.

Table 15

Heber Valley Lot by Lot Growth per Available Water Rights with Lagoon Wastewater Treatment Facility

Density Description	**Density** (lots / acre)	**Water Requirement for Unit Density** (ac-ft / acre)	**Units Supported by Available Irrigation** (lots)	**Units Supported by Available Culinary** (lots)	**Total Units** (lots)
5 acre lots	0.2	3.16	3,189	239	3,428
1 acre lots	1.0	3.70	13,617	1,022	14,640
20,000 sf lots	2.2	4.59	24,149	1,813	25,962
15,000 sf lots	2.9	5.07	28,819	2,164	30,983
12,000 sf lots	3.6	5.69	31,877	2,393	34,271
10,000 sf lots	4.4	6.38	34,748	2,609	37,357
8,000 sf lots	5.4	7.23	37,631	2,825	40,457

Table 16

Heber Valley Lot by Lot Growth per Available Water Rights with Mechanical Wastewater Treatment Facility

Density Description	**Density** (lots / acre)	**Water Requirement for Unit Density** (ac-ft / acre)	**Units Supported by Available Irrigation** (lots)	**Units Supported by Available Culinary** (lots)	**Total Units** (lots)
5 acre lots	0.2	3.01	3,348	251	3,599
1 acre lots	1.0	2.95	17,079	1,282	18,362
20,000 sf lots	2.2	2.94	37,702	2,831	40,533
15,000 sf lots	2.9	2.90	50,384	3,783	54,167
12,000 sf lots	3.6	2.99	60,663	4,555	65,218
10,000 sf lots	4.4	3.08	71,977	5,404	77,382
8,000 sf lots	5.4	3.18	85,558	6,424	91,982

Table 17

Heber Valley Density if Developed as P.U.D. with Lagoon Treatment Wastewater Facility

Developable Land (acres)	**Irrigated Open Space**	**Total Available Water** (acre-feet)	**Water Required for Irrigation** (acre-feet)	**Remaining Water for Units** (acre-feet)	**Total Number of Units** (units)	**Allowable Density** (units / acre)
16,800	60%	54,167	30,240	23,927	26,586	1.58
16,800	55%	54,167	27,720	26,447	29,386	1.75
16,800	50%	54,167	25,200	28,967	32,186	1.92
16,800	45%	54,167	22,680	31,487	34,986	2.08
16,800	40%	54,167	20,160	34,007	37,786	2.25

Notes:

1. Developable land determined from available irrigated lands.
2. Three acre-feet per acre required for open space irrigation per State Engineer.
3. Unit requires 0.45 acre-feet of water for inside use per State Division of Drinking Water.
4. State Engineer requires 0.45 acre-feet per unit for downstream depletion when using lagoon treatment facility.

Table 18

Heber Valley Density if Developed as P.U.D. with Mechanical Treatment Wastewater Facility

Developable Land (acres)	**Irrigated Open Space**	**Total Available Water** (acre-feet)	**Water Required for Irrigation** (acre-feet)	**Remaining Water for Units** (acre-feet)	**Total Number of Units** (units)	**Allowable Density** (units / acre)
16,800	60%	54,167	30,240	23,927	53,171	3.16
16,800	55%	54,167	27,720	26,447	58,771	3.50
16,800	50%	54,167	25,200	28,967	64,371	3.83
16,800	45%	54,167	22,680	31,487	69,971	4.16
16,800	40%	54,167	20,160	34,007	75,571	4.50

Notes:

1. Developable land determined from available irrigated lands.
2. Three acre-feet per acre required for open space irrigation per State Engineer.
3. Unit requires 0.45 acre-feet of water for inside use per State Division of Drinking Water.

Culinary Water

All culinary water systems that have more the 20 connections are classified as public water systems even though they may be privately owned. In the unincorporated area there are three types of culinary water systems: publicly owned, private for profit, and mutual company. Each type of culinary water system is required to meet the same standards with regards to quality and quantity of water they deliver to their customers. Where they do differ is in whom they have to accept as customers. Publicly owned and for profit culinary systems will provide service to all potential connections within their service area, while mutual companies need only supply stockholders in the company. The Daniel Domestic and Center Creek Culinary Water Companies are examples of mutual water companies. Since mutual water companies are not required to provide service to all properties adjacent to their lines, numerous drill wells have been drilled in the Daniel and Center Creek areas. Table 19 below lists the providers of culinary water to housing developments in the unincorporated area. Maps 12 through 14 show the location of culinary water lines in the major distribution systems.

Table 19

Water Systems

System	Type
Billy Bethers Water Supply Company	Mutual
Canyon Meadows	Mutual
Center Creek Water Company	Mutual
Charleston Water Conservancy District	Public
Country Estates Mobile Home Park	Private for profit
Current Creek	Private for profit
Daniel Domestic Water Company	Mutual
Daniels Summit Company	Mutual
Heber City	Public
Interlaken Estates Mutual Water Company	Mutual
Jordanelle Special Service District	Public
Midway City	Public
Oak Haven Mutual Water Company	Mutual
Snake Creek Mutual Water Company	Mutual
Storm Haven	Private for profit
Swiss Alpine Water Company	Mutual
Timber Lake Special Service District	Public
Twin Creek Special Service District	Public
Wallsburg Town	Public
Windy Ridge	Mutual
Woodland Hills	Public

As growth continues, the pressure to expand culinary water systems will increase. At the present time the Twin Creeks Special Service District has provided the required piping and space within its treatment plant to triple its capacity. The water resources inventory contained in the appendix of this plan and Maps 9 and 10 identifies the location of major springs in the Heber Valley and Round Valley that potentially could be used for culinary use with an approved change of use from irrigation to domestic by the State Engineer and the approval of the irrigation company in the area.

Identified culinary water source protection zones are show on Map 14. These protection zones are established to insure that no concentrated source of pollution is allowed within a zone that will adversely impact the quality of culinary water.

Map 12 – Twin Creeks Special Service District and Center Creek Water Company Culinary Water Systems Pull-Out

Map 13 – Daniel Domestic and Charleston Water Conservancy District Culinary Water Systems Pull-Out

Pressurized Irrigation

The Wasatch County Special Service Area Number One was created in 1997 to operate and manage the Wasatch County Water Efficiency Project. The project replaces water from the upper Strawberry River basin used by the Daniel Irrigation Company (DIC). Replacement water for DIC is diverted through the Timpanogos Canal, pump stations and pipelines to existing DIC storage ponds. The project improved water use efficiency in nine of the 12 Heber Valley irrigation companies, where pressurized irrigation allowed farmers to convert 3,675 acres from flood irrigation to sprinklers. The project rehabilitated 16 miles of canals, replacing some distribution canals and ditches with pipelines, which directly conserved water by improving efficiency of the conveyance system.

As land is developed, the presences of the pressurized irrigation system eliminate the need for culinary water systems to provide water for outside use, thus reducing the size and cost of culinary water lines and storage facilities. Map 15 shows the location of the main pressurized irrigations lines.

When development does occur, adequate irrigation water rights shall be provided to each lot in amounts approved by the County.

When development occurs on non-irrigated lands and animals are to be grazed, the USU Extension shall be consulted to establish the number of days that grazing may occur. The Conditions Convents and Restrictions for the development shall contain restrictions on grazing based on the USU Extension's recommendations.

Map 14 – Culinary Water Source Protection Zone Pull-Out

Map 15 – Heber Valley Pressurized Irrigation Systems Pull-Out

Storm Water Control

In 1986 Wasatch County and Heber City constructed a flood control network to convey storm water runoff from the Lake Creek and Center Creek areas to the Provo River. This system uses stream channels, canals and a constructed flood channel to move flood waters to the river. This system is operated and maintained by a joint agreement between Wasatch County and Heber City. This system is increasingly being used as a place where storm water is being discharged after detention. Map 16 shows the location of the flood control net work and storm drainage facilities that discharge into it.

Storm water runoff from each new development should be controlled and limited to the discharge rate that would have occurred during pre-developed condition from the site. Wasatch County and the Cities and Towns in Heber Valley should develop a joint storm drainage system to augment the flood control network and replace the irrigation ditch system that has been eliminated by the installation of pressure irrigation systems. The county should also insure that all developments with disturbed areas larger than five acres in size obtain a permit from the Utah State Division of Water Quality for their erosion control plan.

Storm water runoff is a major factor in the high concentrations of the nutrient phosphorus. The streams in Heber Valley are exceeding the indicator standards that have been set to maintain healthy water quality in Deer Creek Reservoir. The majority of the phosphorus level occurs during storm runoff from the valley floor. Drainage patterns in the Heber Valley are complex because of the irrigation canals that crisscross natural drainage channels.

The March 2000 Heber Valley Storm Water Management Plan by PSOMAS identifies the Best Management Practice for removing these pollutants as sediment basins and/or the use of wetlands. The plan contains two alternatives for the construction of sediment basins that would detain storm water runoff. The storm water management plan should be used by the County in its efforts to control the nutrient load to Deer Creek Reservoir. The Heber Valley Storm Water Management Plan is hereby incorporated as part of the General Plan.

Map 16 – Heber Valley Existing Flood and Storm Water Control System Pull-Out

Sewer Collection

Sewer collection facilities in the unincorporated area of the county are provided by Twin Creeks Special Service District, Jordanelle Special Service District, Midway Sanitation District, Strawberry Special Service District, North Village Special Service District and Heber City. Map17 shows the location of existing sewer lines in the unincorporated area of the County.

The single greatest constraint to development in the unincorporated area of the County is the limits placed on the use of septic drainfields due to the high potential of contamination of the ground water aquifer if density exceeds one unit per five acres. Therefore, the timing and location of the extension of sewer collection lines in the unincorporated area are one of the best tools available for managing growth and eliminating urban sprawl.

The expansion of the sewer collection system for new developments shall be paid for by the development. Increasing the capacity of existing collection lines shall also be paid for by new developments through the use of impact fees. When there is a sewer collection line within 300 feet of a new residence, it shall connect to the sewer system. Existing users of septic tank drainfields within 300 feet of a sewer line shall be encouraged to connect to the sewer within a reasonable length of time to be established by ordinance

Map 17 – Heber Valley Sewer Collection Systems
Pull-Out

Sewer Treatment

The Wasatch County Commission on the 25th day of May 1977, created the Heber Valley Special Service District (HVSSD) to provide wastewater treatment for Heber City, Midway City, Charleston Town, and Midway Sanitation District pursuant to resolutions adopted by each entity to be included in said Special Service District. The service area of the HVSSD has been expanded to include Twin Creeks Special Service District, Jordanelle Special Service District, and the North Special Service District. All of the above entities are currently receiving service from the District except Charleston Town.

In 2001 the District's lagoon system was enlarged increasing the District's treatment capacity to 10,000 Equivalent Residential Units (ERUs). During 2013 a new mechanical wastewater treatment facility was constructed, below the Jordanelle Reservoir, to accommodate JSSD, the North Village Special Service Districts and portions of the Twin Creek Special Service District. During 2013 HVSSD expanded their wastewater lagoon system with a mechanical wastewater treatment facility. This expansion is planned to accommodate the wastewater flow into HVSSD through the year 2030.

It is estimated that this expansion may meet the needs of the HVSSD service area for the next 5 to10 years. Jordanelle and North Village Special Service Districts should consider the construction of a sewer treatment facility to service their areas. If an additional sewer treatment facility was constructed to provide services to these two districts, the capacity of the HVSSD could be extended by 5 years. Because the HVSSD system was approved as having no discharge of effluent in order to protect the water quality of Deer Creek Reservoir, the Division of Water rights has classified the sewer treatment system as being near 100 % consumptive. Therefore, when water rights are approved for culinary use and waste water treatment is to be provided by HVSSD, additional water rights may be required for return flow.

Parks and Recreation

Wasatch County Recreation Department provides organized recreation activities for all the County's citizens not just the unincorporated areas of the County. Therefore, facilities must be sized to meet the needs of the overall County population. The Recreation Department in cooperation with Wasatch County School District is working together to provide the greatest variety of recreation activities while making maximum use of public school buildings and grounds and recreation department facilities. The Department uses school buildings and grounds for basketball, handball, swimming, soccer, and tennis, while the schools use the Department's facilities for High School Rodeo, High School Baseball and softball. The schools now use the New Wasatch County Recreation Center for basketball, soccer, tennis, baseball, softball, golf, graduation parties and various school activities throughout the school year and summer months.

The goal of the County Recreation Department is to meet the needs of organized recreation activities. With the distances between population centers in the County, major recreational facilities should be concentrated to reduce management and operational cost. The County currently operates three facilities: the recreation complex on Midway Lane consisting of softball, baseball, and soccer fields, walking paths, skate park, children's playground and picnic facilities. The County Fairgrounds at the same location contains facilities for rodeos, livestock shows, and the demolition derby.

Trade shows and events needing a facility of 60,000 sq ft. can use the Wasatch County Recreation Center. Wasatch County Purchased the Bear Creek building in 2009 and in 2010 renovated it into the new Wasatch County Recreation center with the following uses now being provided: Basketball/Volleyball courts, tennis courts, racquetball courts, batting cages, Turf fields for soccer, football and golf, golf simulators, indoor track, class rooms, art room, Gymnastics area, Locker/shower rooms and the offices of the Wasatch County Parks and Recreation Department.

The Parks and Recreation Department should consider the construction of a new outdoor recreation facility that features Baseball/Softball fields, Soccer /football fields, Playground, Pavilion and walking paths to meet the needs of the growing population as soon as possible

The Wasatch County Commission in 1999 adopted an ordinance that established an impact fee for parks and recreation. This fee is charged at the time that a building permit is issued. The fee is assessed for the purpose of providing capital facilities needed to meet the demands for new development.

Public Schools

The construction of new schools, in general, lags behind the growth in population, and schools have not been constructed until existing facilities have exceeded their capacity. This established approach to the construction of new schools ensures that schools are not constructed before they are needed and their location has been determined by area growth patterns of school age children. Projecting the growth of school age children from housing starts in Wasatch County where nearly 42.5 % of the taxable value of residential is in second homes that have no children attending school, is not practical.

Fire Protection

The Wasatch County Fire Protection Special Service District is responsible for the protection of structures within all of Wasatch County. The District, in conjunction with the Wasatch County Public Work Department, is responsible for the control of wildland fires in the County.

The Fire Protection District has equipped fire stations in the following locations in the County: Heber City, Midway, Wallsburg, Timber Lakes and Jordanelle. In addition to the above facilities, fire equipment is available by the district in the Strawberry Valley during the summer months. Through inter-local agreements fire protection services are provided to outlying areas in the county by Fruitland Fire Department for the Current Creek and Strawberry areas, Utah County North Fire District for Canyon Meadows area, South Summit Fire District with stations in Kamas and Woodland provide service to Bench Creek and areas south of the Provo River adjacent to Francis and the Park City Fire District providing service to Brighton Estates area, and Spanish Fork to Solider Summit.

The Fire Protection District Master Plan calls for additional fire stations in Timber Lakes, Brighton Estates, Jordanelle South, Jordanelle East and Strawberry Valley. The location of these facilities is intended to place the majority of all residential structures in Wasatch County within a five mile driving distance of a fire station. Map 18 shows the location of existing and proposed stations and their five mile area of service.

The location of fire stations, equipment in each station, and the water supply available for fire protection are the main elements in the establishment of "Fire Rating." The fire rating is an indicator of an area's fire defenses and is used as a basis for determining the fire insurance rates. The rates assigned range from one to ten, with a lower number denoting a more favorable rating. Generally a rating of six is considered acceptable for a community with a volunteer fire department. Currently, fire ratings in Wasatch County range for 6 to 10 depending on the distance from a fire station and available water supply.

In the approval of new developments public safety must be a major concern. The level of service that can be provided to each development must be considered. All developments shall be served by an approved culinary water system that is capable of providing fire flows for the protection of anticipated structures based in their size and distance from one another in accordance with the Utah Insurance Rating Service guidelines or other suitable fire suppression methods approved by the County Fire Marshal

Map 18 – Existing and Proposed Fire Station Locations with 5 Mile Service Area
Pull-Out

Emergency Medical Care

Emergency medical care equipment is housed at fire stations in Heber City, Midway, and Wallsburg. Additional equipment is to be provided at the Jordanelle fire station when EMTs are available and at proposed fire stations in Timber Lakes, Brighton Estates, Jordanelle South and East and Strawberry Valley. Volunteer EMTs presently operate equipment out of Heber City, Midway and Wallsburg with crews on call 24 hours a day seven day a week.

Police Protection

In 1980 with a county population of 8,523 the Sheriff Department consisted of the Sheriff, three deputies and two elderly men who slept at the jail if there were prisoners. In 2001 with a county population of 14,111 the Department consists of the Sheriff and 15 Deputies. The growth in the Sheriff Department is due in part to the growth in population but also to the increasing demands placed on the Department as a result of growth in recreationists from the Wasatch Front using the Jordanelle, Deer Creek, Currant Creek, and Strawberry reservoirs, Wasatch Mountain State Park and the Uinta National Forest.

The impact of recreational users on the Department is quite evident when one examines 15,638 man hours spent over a three-year period in search and rescues of the nonresident recreational population. In a four-year period there were 290 search and rescue operations of which four involved residents of Wasatch County.

The national standard for the number of residents per police officer varies from one officer per 500 residents to one per 1000 residents. Heber City in 2000 had a population of 6,232, which is nearly half of the County's population, and their own police force was 11 officers. The impact of the recreational user and the staffing of the county jail are the main reasons the Sheriff staff is as large as it is.

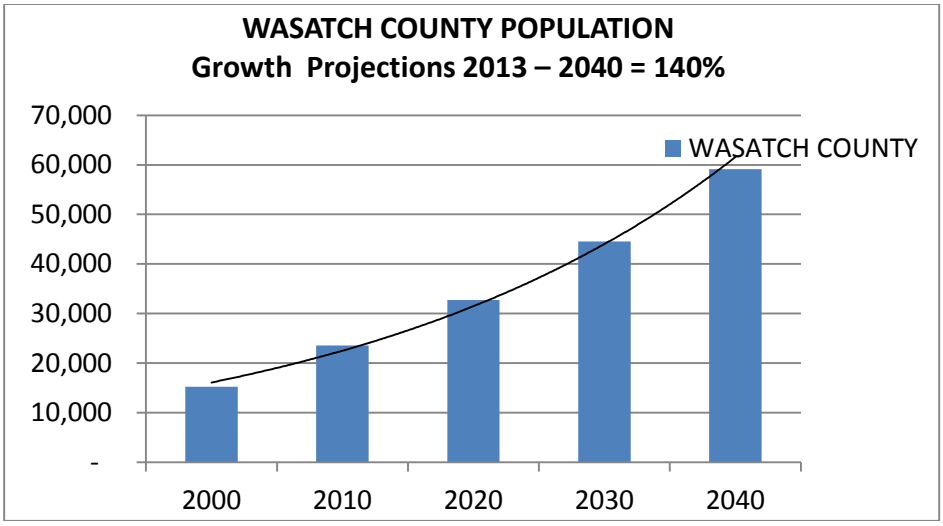
To predict the required growth in the Sheriff's Department over the next 20 years based solely on population growth would give a false impression of staffing needs. The rate at which second homes and recreational use increase in the county will have nearly as large an impact on the size of the Department over the next 20 years as the growth in the County's population. As the population grows and recreational use in the county increases, the Sheriff Department should consider the establishment of substations in the outlying fire stations such as the Jordanelle and the station proposed for Strawberry area.

The county should seek ways through the legislature for the state to provide funding to reduce the large financial impact that search and rescue operations and law enforcement for non-residents recreational users have on the tax payers of Wasatch County.

Transportation

Roadways

On April 5, 2011 the Wasatch County Regional Transportation Plan was adopted by the Wasatch Inter-local Group. This map and chart (map 21 and chart 21A) identifies a transportation system that will accommodate the anticipated growth and maintain mobility throughout Wasatch County through the year 2040 based on the Utah Governor's office of planning official projections for Wasatch County. The plan provides for the needs of the County's citizens and the demands placed upon it by the pass through traffic from adjacent counties and recreational users. This plan is devised to serve the existing and anticipated land use as well as the official socio-economic projections of the entire County.



Source: 2013 Governor's Office of Planning and Management

The travel demand modeling done by Mountainland Association of Governments dynamically accounts for the existing traffic conditions and future projected conditions. The Wasatch County Roadway functional classification maps (Maps 19 and 20) were evaluated and updated based on this information. These maps show the roadway functional classifications such as; State Routes, arterials, collectors, and minor collectors.

The Wasatch County regional transportation plan shown on map 21 and chart 21A was developed using the same travel demand model in concert with UDOT, the municipalities and the County through the rural planning organization (RPO) in concert with the inter-local advisory council. The improvement projects shown as part of map 21 with the corresponding timelines shown on chart 21A satisfy the projected travel demand through the year 2040. Chart 21A shows that these projects are phased through time based on the traffic needs and economic development strategy of the local governments.

Map 21 Regional Transportation Plan 2011-2040

Chart 21A Regional Transportation Projects Plan 2011-2040

Project#	Phase One 2011-2020		*Projects Numbers are not a Prioritization*		
	County	Agency	Project Name and Location	Improvement Type	Functional Class
1	Wasatch	UDOT/Heber City	SR-113 (Midway Lane), 300 East Midway to US40	Widen to 3 Lanes	Collector
2	Wasatch	UDOT/Midway City	SR-222, Midway Main Street to Cari Lane	Widen to 3 Lanes	Collector
3	Wasatch	UDOT/Heber City	Intersection of US-40/US189 (HUB)	Capacity Improvements	Intersection
4	Wasatch	Heber City	Center Street, 1490 East to 3600 East	Widen to 3 Lanes	Collector
5	Wasatch	Wasatch County, Private	Jordanelle Parkway, Mayflower Exit #8 US40 to SR248	New 3 Lane Road	Collector
6	Wasatch	UDOT	US40, US189 (HUB) to Mill Road	Widen to 5 Lanes	Principal Arterial
7	Wasatch	Wasatch County	River Road, US40 to Midway Main Street	Widen to 3 Lanes	Collector
8	Wasatch	Heber City	North Village Connector (1490 East), Valley Hill Dr to Lake Creek	New 3 Lane Road	Collector
9	Wasatch	Midway City	Cari/Burgi Lane, SR222 (Homestead Drive) to River Road	Widen to 3 Lanes	Collector
10	Wasatch	Wasatch County	Wallsburg Second Access to US189	New 2 Lane Road	Minor Collector
11	Wasatch	Heber City	1200 South, 600 East to Mill Road	Widen to 5 Lanes	Arterial
12	Wasatch	Wasatch County	1200 South, Mill Road to Lake Creek	Widen to 3 Lanes	Collector
13	Wasatch	Wasatch County	Center Creek, US40 to Sleeping Indian Rd	Widen to 3 Lanes	Collector
14	Wasatch	Heber City	South Field Road, SR113 (Midway Lane) to US189	Widen to 3 Lanes	Collector
15	Wasatch	Heber City	Daniel Connector (South Bypass), US-189 to Daniel Rd	New 3 Lane Road	Principal Arterial
16	Wasatch	Heber City	Daniel Connector (South Bypass), Daniel Rd to US-40	New 5 Lane Road	Arterial
17	Wasatch	Heber City	650 South, Industrial Pkwy to South Field Rd	Widen to 3 Lanes	Collector
18	Wasatch	Heber City	Mill Road, 1200 South to Valley Hills Drive	Widen to 3 Lanes	Collector
19	Wasatch	Heber City	Valley Hills Drive, 1350 East to US40	Widen and Extend Road to 3 Lanes	Collector
20	Wasatch	Midway City	Mitchie Lane, SR113 (Midway lane) to SR113	Widen to 3 Lanes	Collector
21	Wasatch	Wasatch County	Sleeping Indian Road, 1200 South to 2400 East (Center CR.)	New 3 Lane Road	Collector
22	Wasatch	Independence	Duke Lane, 2400 So. (Center Cr.) to US-40	Widen to 3 Lane Road	Collector
23	Wasatch	Heber City	Daniel Road, Hub to 2400 South	Widen to 3 Lanes	Collector
24	Wasatch	Wasatch County	Pine Canyon Rd, end of pavement to SR-224	Pave existing 2 Lane Road	Mountain Road
25	Wasatch	Hideout	Long View Dr, SR-248 To SR-248	Pave existing 2 Lane Road	Minor Collector
26	Wasatch	UDOT	New Interchange US40/189 at SR32/River Road (Exit 13)	New Interchange	Interchange

Project#	Phase Two 2021-2030		*Projects Numbers are not a Prioritization*		
	County	Agency	Project Name and Location	Improvement Type	Functional Class
27	Wasatch	UDOT, Midway, Charleston, Wasatch County	SR-113, Midway Main Street to US189	Widen to 3 Lanes	Collector
28	Wasatch	Wasatch County / Midway City	Midway Lane, South Bypass to 400 East Midway	Widen to 5 Lanes	Arterial
29	Wasatch	Wasatch /Heber/UDOT	West Route Bypass, US189 to 700 N Main St	Widen/New 4 Lane Expressway	Other Freeway/Expressway
30	Wasatch	Wasatch County	North Village Connector, SR32 to Coyote Lane	Widen/New 3 Lane Road	Collector
31	Wasatch	Wasatch County	Lake Creek, 3600 East to Lake Pines	Widen to 3 Lanes	Collector
32	Wasatch	Heber City	1300 South (South Bypass), Industrial Pkwy to South Field Rd	New 5 Lane Road	Arterial
33	Wasatch	Heber City	600 South, Mill Road to Industrial Pkwy	Widen to 3 Lanes	Collector
34	Wasatch	Heber City	Mill Road, 1200 South to US-40	Widen to 3 Lanes	Collector
35	Wasatch	Independence	Sleeping Indian Road, Center Creek to US-40	New 3 Lane Road	Collector

Project#	Phase Three 2031-2040		*Projects Numbers are not a Prioritization*		
	County	Agency	Project Name and Location	Improvement Type	Functional Class
36	Wasatch	UDOT	US189, SR-113 to US-40	Widen to 4 Lanes	Principal Arterial
37	Wasatch	UDOT	US40, Mill Road to 3600 South	Widen to 3 Lanes	Principal Arterial
38	Wasatch	Heber City	400 East, Valley Hills Drive to Coyote Lane	New 3 lane Road	Collector
39	Wasatch	Heber City	Center Street, 3600 East Heber to 1490 East	Widen to 5 Lanes	Arterial
40	Wasatch	UDOT	US-40/US-189, SR-32 to Summit County Line	Add Passing Lanes	Other Freeway/Expressway
41	Wasatch	UDOT	3600 South to Daniels Summit	Add Passing Lanes	Principal Arterial
42	Wasatch	UDOT	US-40 to Summit County Line	Add Passing Lanes	Principal Arterial

Wasatch County

Regional Transportation Plan

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Chart 21A

One of the major objectives of the transportation element of the General Plan is to provide sufficient transportation corridors to allow and encourage connectivity between neighboring communities and counties while at the same time limiting the impacts of major corridors on the overall quality of life enjoyed by the residents of Wasatch County. To accomplish this conflicts on State highways, arterials, and collectors should be minimized and speeds should be maintained as much as possible by limiting access onto these roads so these roads can maintain their intended purpose of moving traffic.

Bypass

Both Heber City and Wasatch County have passed resolutions of support (2007-05 and 06-04 respectively) for the bypass (project numbers 29 and 32 on map 21 and map 20A) and the bypass alignment shown on Maps 32 and 20A. A plan set has been developed and right-of-way is being acquired by both local governments to preserve this major future transportation corridor. The right-of-way corridor should be acquired through annexation requests, developer approvals, exactions, purchases, density bonuses and other means to secure the necessary land for the future facility.

The Heber Bypass is also included in UDOT's long range plan.

The roadways that the Master Transportation Plan classifies as collector and arterials should have right-of-ways that include adequate space for the roadway, trails, bike paths, drainage and green space. Access to collector and arterial roads by driveways shall not be allowed and must be limited to street intersections except in cases of legal lots of record.

To the extent possible, streets should form a continuous network providing connectivity between neighborhoods, blocks, sections and quarter sections which keeps local trips off collectors and arterials so that speeds can be maintained and allows access between neighborhoods, schools, churches etc. without the requirement to utilize arterials and collectors. Through streets should be encouraged in compliance with the land use code and cul-de-sacs only used when a through road is not necessary.

The county, Municipalities, UDOT and potential transit service providers should develop a park and ride lot plan.

Map 19 – Wasatch County Functional Classification

Map 20 – Heber Valley Functional Classification

Map 20A Heber Parkway Map

Map 20B UDOT Access Management Agreements

Non-Motorized Transportation (Trails and Pathways)

The desire for trails development in Wasatch County is based on results of a 1994 tourism and recreation survey conducted with support from the Board of County Commissioners. Wasatch County residents stated overwhelmingly that tourism and recreation are an investment in the community and that the greatest return to the county is through improved recreation opportunities. Trails including hiking, walking, equestrian and cycling specifically were supported by 60% of those surveyed.

Existing trails in the county are primarily on State and Federal lands and are recreational type trails. Within the populated area of the county, trails and non-motorized facilities are needed to improve access to public facilities as well as provide additional transportation options. Public facilities may include schools, libraries, parks, health centers, and shopping and civic centers. The Wasatch County trail system should also connect to state and federal public lands as well as incorporated cities. It is critical that all transportation issues and projects give credence to the mobility of pedestrians and cyclists.

Healthy lifestyles and quality of life are top priorities for county citizens and must be protected issues as growth occurs throughout the county. Wasatch County is committed to the health and safety of its citizens and will promote trail construction that encourages residents to participate in daily physical activity. During the summer of 2001 the Legacy Trail was constructed between Heber and Midway. It is a state-designation Gold Medal Mile that gets continual use by variety of user groups. The county will continue to expand the trails network by requiring new development to provide public trails, in compliance with the trails master plan, that connect throughout the county and to adjoining subdivisions. To be a successful trails network the county must work diligently with and help the communities of Heber, Midway, Daniel Charleston and Wallsburg.

As the area experiences population growth, the planning and construction of trails will become more important and more difficult. Planning efforts are now underway to improve and promote pedestrian transportation and bicycle mobility. The Wasatch County trail plan is intended to effectively maintain quality of life standards by, reducing traffic congestion and pollution, protect access to state and federal lands, promote the health and well-being of county residents and provide opportunities for visitors and residents to explore and easily transport themselves around the area. To encourage residents to use cycling as a transportation method, road standards have been approved to include five foot shoulders on all collector and arterial roads as well as meandering pathways. With the increased growth and infrastructure every opportunity should be taken to improve the safety of our children as they travel to obvious destinations such as schools and parks. Trails that are open to the public should be displayed on the county web site and eventually through hard-copy publications. How to promote trails should be addressed as the trail network expands.

An important element of the trail plan should include locations for trailheads which includes parking, kiosks and restrooms if needed. Trailheads should allow for access onto public trails at various locations so the public trails are accessible to a larger percentage of the population and trail users are not required to ride or hike excessive distances to reach the next trailhead.

To ensure that Wasatch County maintains its character and rural charm, new developments will contribute to the existing Wasatch County Trail System through construction and dedication of trails, impact fees and/or other contributions to the Wasatch County Trail System, including public trail access. Options to pay for the maintenance of public trails in perpetuity should be explored.

The Wasatch County Trails Committee has created two documents supporting trail construction and planning. The Wasatch County Trail Design Guidelines sets forth requirements for trail alignment; trail width, grade, signing, surface materials, and maintenance standards.

The Wasatch County Trail Corridor Map (Map 22) identifies general routes for consideration of non-motorized pathways and bicycles lanes. The routes were selected based upon current travel patterns, traffic densities and obvious destinations as mentioned above. Trails on the corridor map will be developed using the Wasatch County Trail Design Guidelines.

Map 22 shows existing and proposed trail corridors that will connect, but is not limited to, Cities and Towns; schools; commercial area; recreation centers; subdivisions and parks in the Heber Valley with existing trails, National Forest lands, Wasatch Mountain State Park, Deer Creek State Park and the Jordanelle Basin area trail network.

The Wasatch County Trail Design Guidelines and the Wasatch County Trails Master Plan are hereby incorporated as part of the General Plan.

Map 22 – Heber Valley Non-Motorized Trail Plan

Transit

Wasatch County should embrace Utah's Coordinated Human-Service Public Transportation Plan Conducted by UDOT and MAG

This Plan focuses on Human Service Transportation programs that provide specialized transportation services for the less mobile members of our community to provide access to their destinations. As the population of elderly in the County increases these services will become more important.

Examples of Human Service Transportation programs include:
- Senior center vans
- Door to door service for those who cannot make it from the door to the curb independently
- Other similar types of transportation

In many communities, services such as these are critical for people who cannot supply their own transportation. Unfortunately, communities often face challenges meeting the transportation needs of the disadvantaged especially in rural counties.

The county should coordinate agencies working together to meet their client's various transportation needs.

Environmental

Air Quality

The mountains that surround Heber Valley and Round Valley result in the formation of a pronounced temperature inversion during most seasons of the year, because the cold air flows down the mountain slopes and collects on the valley below. These inversions cause the average temperatures on the slopes 1,000 to 1,500 feet above the Valley floor to be several degrees higher than temperatures in the Valley which results in periods of trapped air pollutant at the Valley floor.

Determining the number of residential units and other air quality impacting activities that should be permitted in the Heber Valley and Round Valley's air shed without violating the National Ambient Air Quality Standards is beyond the scope and resources of this General Plan. The quality of Heber Valley and Round Valley, beyond activities occurring locally, is also impacted to some degree by the air quality in Utah County that leaks into Heber Valley and Round Valley via Provo Canyon.

Because of the confining nature of Heber and Round Valley's air shed, air quality should be the limiting factor in the amount of growth that takes place in these valleys. Due to the rapid growth of Heber Valley, the County and Cities should combine in conducting an air quality study to determine the most desirable level of growth that should be allowed to occur without degrading the air quality to an unacceptable level.

In the interim the County should consider limiting the use of wood burning stoves, open burning, and the implementation of established best management practices to control air pollution.

Surface Water Quality

In 1981, because of an eutrophication problem in Deer Creek Reservoir, Governor Scott Matheson established the Jordanelle Reservoir Water Quality Technical Advisory Committee for the purpose of developing a reservoir management plan for Deer Creek Reservoir and the future Jordanelle Reservoir. Wasatch County took the lead in the preparation of the Water Quality Management Plan for Deer Creek and Jordanelle Reservoirs which was completed in 1984. This plan identified various sources of pollution and assigned required reductions from each source to achieve the desired level of water quality in the two reservoirs and their tributary streams. This is an ongoing planning effort with annual water sampling, evaluations and plan modifications to insure that measures taken are reducing adverse impacts on the surface water quality in the Provo River drainage. One of the identified sources of pollution was agriculture return flows from flood irrigation. The Wasatch County Efficiency Project has resulted in the installation of pressurized irrigation on much of the farm land in the County, limiting most agricultural return flows and soil erosion on cultivated land. This project has also resulted in the conservation of water resources.

The Water Quality Management Plan for Deer Creek and Jordanelle Reservoirs, its updates and annual implementation reports are hereby incorporated as part of the General Plan.

Ground Water Quality

Ground water quality also received a great deal of attention during the 1990s. Many homes in the unincorporated areas use wells in the unconsolidated valley fill as their source of water. The valley fill also discharges 11,000 acre feet of ground water annually to the Provo River and 42,000 acre feet directly to Deer Creek Reservoir. In order to determine the potential impacts of the use of septic tank drainfields on the water quality of the valley fill aquifer, Wasatch County had a Hydrogeologic/Water Quality Study conducted in 1994. This study recommended that in order to protect the pristine quality of water in the valley fill aquifer, septic tank drain field use should be limited to a density no greater than one per five acres. The Wasatch County, Utah Hydrogeologic/Water Quality Study is hereby incorporated as part of the General Plan.

Flood Control

The streams in Wasatch County have been mapped by the Federal Emergency Management Agency identifying anticipated areas that would be flooded during a 100-year event. In 1986 after flooding in 1982 and 1984 Wasatch County and Heber City jointly constructed a flood control network to convey storm water runoff from the Lake Creek and Center Creek areas to the Provo River. This system uses stream channels, canals and a constructed flood channel in moving flood water to the river. This system is increasingly being used as a place where storm waters are being discharged after detention.

Wasatch County and the Cities and Towns of Heber Valley should develop a joint storm drainage system to augment the flood control network and replace the irrigation ditch system that has been eliminated by the installation of the pressurized irrigation system.

Provo River Restoration Project

While the Provo River Restoration Project is not under direct control of Wasatch County, it will have a large impact on the overall environment of the County; therefore, a brief review of this project follows.

Prior to the 1940s much of the Provo River above Deer Creek Reservoir offered outstanding fish and wildlife habitat. This was due in part to the free meandering of the Provo River. These bends in the river provide deep holes for fish and a dense streamside forest for many species of birds. This productive habitat was altered in the 1940s and 1950s when the river was channelized and placed between dikes. The dikes were constructed by the U.S. Bureau of Reclamation to contain high flows that came from additional water added to the Provo River from transbasin diversions of the Upper Weber and Duchesne Rivers.

As a consequence of the construction of the Central Utah Project, fish and wildlife habitat have been negatively affected which has resulted in an obligation on the part of the federal government to mitigate these impacts to fish and wildlife. The Provo River Restoration Project is part of a larger effort to mitigate these impacts by returning the middle Provo River between Jordanelle Dam and Deer Creek Reservoir to a more naturally functioning condition in order to support additional aquatic species and the restoration of wildlife habitats lost due to the construction of the Jordanelle Reservoir.

The social impacts of the river restoration project have not been adequately addressed. A trail system along this section of the Provo River is not planned to be constructed. Such a trail was contemplated by the Utah State Legislature when it created the Provo/Jordan River Parkway Authority. Much of the Parkway's trail system in Salt Lake and Utah Counties has already been constructed. The Provo River Restoration Project has no plans to include a continuous trail as part of the project and has discouraged such a trail as having a negative impact on wildlife.

Wasatch County should make every effort possible to insure that a continuous trail along the Provo River corridor is made a part of the restoration project. The details of the proposed restoration project are contained in the Provo River Restoration Project Final Environmental Impact Statement, December 1997.

Noise

As growth takes place in an agricultural environmental, increases in the level and duration of noise generally occurs from four sources: traffic, airplanes, industry and residential noise such as lawn care equipment, music, air conditioners, etc. This noise over time becomes accepted as background noise, "The hum of the city." If the level of noise does not become too loud, then it is generally accepted.

Potential unacceptable levels of noise in the Heber Valley are likely to be associated with the expansion of the Heber Airport, and increased noise from truck traffic using US 40 and 189 to bypass the Salt Lake Area as the Provo Canyon road is completed. Because of the confining nature of the surrounding mountains, noise from all jets and many small aircraft that use the Heber Airport can be heard throughout the Valley as they take off and land. The hundreds of feet difference between the elevation of US 40 as it enters Heber Valley on the north and south, results in traffic noise being carried great distances especially noise from truck tires and the use of engine brakes.

Wasatch County should request that the Utah Department of Transportation use road surfaces that will generate the least amount of noise from truck tires and prohibit the use of engine brakes. The County should work with Heber City to define flight patterns and ground controls that do not require planes to completely circle the Heber Valley and airport before landing.

The expansion of shooting ranges and their increased use as the population grows can cause additional noise pressure. The Development Code should establish standards for shooting range including location and times of use.

Light Pollution

In order to prevent the night skies from being dulled by pollution from street lights, homes, commercial and industrial establishments, the Development Code established lighting standards that would reduce light pollution.

Economic Development

Heber Valley Tourism and Economic Development (HVTED) is an inter-local office governed by representatives of Wasatch County, Heber City, Midway City, and the Heber Valley Chamber of Commerce. Its role is to represent the county and its cities and towns on tourism and economic development activities. HVTED accomplishes its purpose by recruiting quality businesses to Wasatch County, helping existing businesses expand, promoting business opportunities in Wasatch County, and promoting destination tourism.

HVTED takes a proactive role in attracting businesses to the County by collaborating with the Economic Development Corporation of Utah (EDCUtah), The Utah Governor's Office of Economic Development (GOED), and other community partners. HVTED works to create positive relationships with and recruit businesses that seek expansion plans within Wasatch County due to its business friendly environment, rural quality of life, and close proximity to larger cities.

HVTED also seeks to attract new businesses to the County by creating tax incentives that support the creation of new jobs. These tax benefits include the Rural Enterprise Zone Tax Incentive, the Recycling Zone Tax Incentive, and other incentives for businesses that are administered by the Utah Department of Workforce Services. As needed, HVTED will recommend the creation of Economic Development Areas within Wasatch County that will act as a catalyst to attract businesses through tax increment financing.

HVTED takes a proactive role in attracting businesses to the County by contacting business that will appreciate the unique attributes of the County and will find the quality of life found in the valley a big fit in with the lifestyle of the

HVTED is responsible for creating strategic economic development plans to address relevant issues in Wasatch County and its cities and towns. Such strategic plans address the goals for population growth, education services, transportation needs, destination promotion, and other commercial activities. Furthermore, HVTED is tasked with identifying and recruiting key industries that have the greatest potential for job creation in Wasatch County. The industries include the following: (1) outdoor recreation services and products, (2) Software development and information technology, (3) aviation services and development, (4) light manufacturing, and (5) healthcare services and facilities.

One of the key pillars of a vibrant economy is the degree in which Wasatch County maintains a strong tourism base. In addition to recruiting businesses that enable Wasatch County residents to work within the county limits, promoting the greater Heber Valley area and its amenities is an important economic priority. The focus of tourism is to get people to stay, hopefully for multiple nights, in any accommodation that yields transient room tax (e.g., resorts, hotels, motels, etc.) and to spend money in local businesses. Tourism also plays an important role in recruiting businesses to the area. HVTED uses a variety of tools and resources to promote tourism in Wasatch County, including websites, social media,

newsletters, print and online advertising, direct mailers, and focused public relations outreach.

Promoting tourism should include attracting special events that either start or finish (or both) in the County and have an economic benefit through overnight stays with acceptable impacts to the residents of the county.

HVTED employs an event coordinator who is responsible for attracting and promoting new events to the area. This is done in cooperation with the Wasatch County Tax Advisory Board (TAB) which is given an annual allotment from Wasatch County to incentivize new events that attract overnight visitors to the area.

Land Use

This section provides a written description of each planning area's setting and major constraints followed by a land use plan. The County is divided into the following thirteen planning areas:

- Central Planning Area
- Western Valley Planning Area
- Southern Planning Area
- Daniel Planning Area
- Eastern Planning Area
- East Hills Planning Area
- South Hills Planning Area
- Wallsburg Planning Area
- Wasatch Mountains Planning Area
- Uinta Mountains Planning Area
- Strawberry Planning Area
- Jordanelle Planning Area
- North Village Planning Area

Map 23 shows the location of each of these planning areas in relation to the entire County.

Not contained in this planning document are the plans for the Jordanelle and North Village planning areas. Planning for these two areas has been developed to a greater level of detail and they were started prior to the beginning of the update of the county general plan. Jordanelle and North Village plans are hereby incorporated as part of the General Plan.

In the process of determining the most appropriate use of land the following five factors are taken into account:

1. Natural features/physical constraints
2. Cultural features
3. Development patterns
4. Likely future land use needs
5. Public vision.

In the integration all of the foregoing factors, patterns of growth should emerge that will produce the most economical and attractive development while taking advantage of infrastructure and other improvements that have already been constructed.

Since Wasatch County is located close to the population and economic center of the State, the Wasatch Front, pressures for growth will always be present. This being the case, all development that is approved should be required to meet standards of quality and durability that will sustain the quality of the environment and the County's fiscal health.

In the past the development of summer homes surrounding the Heber Valley and in the mountain environment were not constructed to adequate standards for year round use. As a result the roads and infrastructure are not adequate to meet the needs of those who are now living in these developments year round. The County must ensure that any development that is approved in the future can meet the standards for year round use.

Whenever development comes to Wasatch County, it should be constructed and maintained in such a way that it will contribute to the quality of life and the environment rather than degrade it. Each development should also be required to pay its own freight with regards to taxes and fees required to fund urban type services the development uses, so it does not become a burden to the people of the County.

The following is a summary of the land use plans for eleven of the thirteen planning areas in Wasatch County.

Map 23 – Land Use Planning Areas
Pull-Out

Map 23A – Land Use Categories
Pull-Out

Central Planning Area

Setting and Constraints

The Central Planning Area containing 6,103 acres is characterized by meadows, river and stream riparian environment, high ground water table, hydric soils, and unsuitable soils for building and infrastructure development. The Central Planning Area is located within the inundation area of sudden failure of the Jordanelle Dam and major flood area that extends beyond the Provo River Corridor. This planning area contains a total of 28 dwellings.

Map 24 compiled from the Soil Survey of the Heber Valley Area, Utah shows soils that have water tables that rise to within 60 inches of the surface during some period of the year except for Rasband, Crook Creek Little Pole and Henefer soils. This information is confirmed in Map 25 from the Department of Natural Resources Technical Publication No. 27 entitled Water Resources of The Heber-Kamas-Park City Area North-Central Utah which shows that most of the Central Planning Area has a water table within five feet of the surface during some period of the year. This high ground water condition can have a profound effect on the infrastructure that would be required to support development in this planning area.

A high ground water table results, in almost all cases, in the infiltration of ground water into the sewer system which adds an additional cost to sewage treatment. This condition should be avoided where possible. A high ground water table also causes difficulties in the maintenance of culinary systems. When a water line break occurs in a high ground water table, it is impossible to prevent ground water from entering the culinary water system on the non-pressurized side of a leak. In the Heber Valley environment, most water line pipings are located at depths of six feet with a required five feet of cover over the top of the pipe placing lines well within the water table of the Central Planning Area.

Some would suggest that the water table be lowered in the Central Planning Area by the installation of underground drains. If drains were installed, they would likely result in the destruction of wetlands that have been identified in the Central Planning Area (see Figure 25) which would result in the violation of Federal Law.

Map 24 - Central Planning Area Soil Map
Pull-Out

Map 25 – Central Planning Area Dept to Water Table and Wetlands Pull-Out

It has been argued by others that if flood irrigation was discontinued, the water table for much of the Central Planning Area would drop. This may be the case in some small areas, but since the majority of the soils within the Central Planning Area are hydric soils which have taken hundreds if not thousands of years to develop into a high ground water table environment, the abandonment of flood irrigation which has occurred for less than 140 years is unlikely to have much of an impact on the overall ground water table.

The Soil Survey of the Heber Valley Area further identifies that many of the soils shown on Map 24 have severe limitations for roads, foundations for dwellings and septic tank absorption field. These severe conditions are a result of the high ground water table and high potential for frost action. While these limitations may be overcome with proper engineering, the cost is considerably higher and should be considered when it comes to the maintenance and operation of a public infrastructure.

The above findings are further confirmed by the historical lack of development in the Central Planning Area due to the above identified physical constraints and the experiences of the Wasatch County Road Department in their efforts to maintain minimum standard gravel roads in the area and the Wasatch City County Health Department's experience in disapproving many requests for on-site waste water disposal systems in the planning area due to high ground water. Additional physical constraints that may limit the development of lands in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soil. Map 27 identifies Suitability for Wastewater Disposal in Septic-Tank Soils Absorption Systems. Map 28 shows landslide hazards.

The Central Planning Area is completely located within the inundation area of a sudden Jordanelle Dam failure as shown in Map 29. Map 29 also shows the area that would be affected by a major flood even with Jordanelle Dam.

The Provo River is currently undergoing a restoration program to remove diking that was installed in the 50s and to restore the river to its natural pattern with a meandering channel and restored river riparian and in stream habitats. The corridor for this project is 800 to 2,200 feet wide along the river and is shown in Map 30 Central Planning Area, existing land use. Map 31 shows existing ownership with parcel sizes for private land.

Also located in the Central Planning Area are the Heber Valley Special Service District's waste water treatment lagoons. As the area continues to grow, a mechanical treatment facility will in all likelihood replace the present lagoon treatment system. These lagoons could still be utilized to store winter flows for the mechanical treatment facility and made available for reuse through the valley irrigation system.

Map 26 – Flood Hazards, Earthquake Hazards and Problem Soils Pull-Out

Map 27 – Suitable Wastewater Disposal in Septic-Tank Absorption Systems Pull-Out

Map 28 – Landslide Hazards
Pull-Out

Map 29 – Inundation Area of Sudden Jordanelle Dam Failure and Area Affected by Major Flood Event Pull-Out

Map 30 – Central Planning Area Existing Land Use Pull-Out

Map 31 – Central Planning Area Existing Land Ownership Pull-Out

Central Planning Area

Land Use Plan

An evaluation of physical constraints in the Central Planning Area suggests that providing necessary infrastructure to accommodate significant development in this area would be very costly to units of local governments to provide. Therefore governmental support of the extension of the infrastructure such as water and sewer facilities and the acceptance of new streets for maintenance by the County should not be granted while other areas which are more suited for development are available.

The physical constraints of the Central Planning Area by themselves will likely insure that the historical land use pattern for this planning area will largely be maintained. Therefore as a matter of public policy, the Central Planning Area is to be maintained in its historical land use pattern of open meadows, and river and small stream riparian habitat. The use of this area for housing and other types of development is discouraged due to the physical constraints and the higher costs of providing governmental services.

The Central Planning Area is highly prized by many local residents of Heber Valley as open space. This area's scenic value contributes significantly to the real value of all land within the Heber Valley area. Therefore, the following strategies should assist the county in preserving some of this area as open space at the same time providing property owners with a reasonable value for the removal of development rights from their property.

The Development Code should provide for an increase in density credits when the development rights are removed from land in the Central Planning Area.

Land within the Central Planning Area has been identified as having a public benefit as open space. In this area while development may occur at the underlying zone of one unit per 20 acres if a suitable area can be identified, an increase in transferable density credit for he is area should be allowed.

The County should adopt a general sales tax and/or bonding as an additional ways to fund the purchase of development rights and/or fee title to land identified as having a public benefit as open space.

The preservation of open space in the Central Planning Area will also provide for a desired green belt separation between Heber City and Midway. The Development code should ensure that any development along SR 113 is set well back from the road and the rural character along this road is maintained.

A major impact to the green belt area between Heber City and Midway will be the construction of the Heber City truck route which would allow trucks to bypass Heber City's Main Street. Care must be taken to see that this road is constructed as close to Heber City as possible. Map 32 shows the proposed alignment of the truck route. New developments along the truck route corridor should be required to provide the required right-of-way as a condition of any project approval. The truck route intersection with Midway Lane should not become an area of commercial activity. Allowing commercial development at this intersection would in all likelihood only shift wealth from existing Heber City businesses and not create any new wealth. To avoid the potential of commercial development, an overpass without exits could be used to cross Midway Lane.

The Central Planning Area has also been identified as an area where paths and trails for walking and riding of bikes should be provided. Efforts should be made to have a trail constructed along the Provo River corridor between the Jordanelle and Deer Creek Reservoirs and one from Heber City to Midway.

Map 32 – Proposed Alignment of Heber Bypass or Parkway Pull-Out

Western Valley Planning Area

Setting and Constraints

The Western Valley Planning Area is characterized by farm land, the Snake Creek corridor, three summer home developments in the foothills, and scattered single family homes between Midway City and the Wasatch Mountain State Park on the west and north, Deer Creek State Park on the south and the Central Planning Area to the east.

Much of the land in the unincorporated area between the Wasatch Mountain State Park and Midway City's western boundary has already been developed by such projects as Lime Canyon Estates and Swiss Mountain Estates. There remains only a small amount of land west of Midway City in the unincorporated area with slopes less than 30 percent that is developable. This area is located west of the Zermatt Resort and will in all likelihood be annexed into Midway City when development does occur. Map 33 shows the existing land uses in the planning area while Map 34 shows existing land ownership by parcel size.

There are twelve parcels of undeveloped land north of Midway City limits and the State Park boundary. Existing land uses consist of wetlands, Snake Creek corridor, pastures, crop land and Burgi Hill. Interlaken Estates, a subdivision constructed in the sixties, is the dominant land use in this area.

The east side of this planning area extends from the eastern Midway City boundaries to the Berkenshaw Ditch. Located in this area are a few homes, pastures, crop lands and Wasatch County's Memorial Hill.

The area south of Midway City is characterized by single family homes generally on one acre or larger lots mainly along State Road 113, 900 South, 250 West and Stringtown Road. The majority of this area is devoted to pastures and crop lands.

All of the area within the Western Valley Planning Area is located within the Midway Sanitation District which provides sewer collection. District has main lines that are easily accessible by most lands located in the unincorporated area in the Western Valley Planning Area. Map 17 shows the location of existing sewer lines Sanitation District.

Midway City, in cooperation with the Midway Irrigation, is committed to provide culinary water service to this planning area without annexation to Midway City. The availability of these services increases the pressure for development in this planning area. The major physical constraint to development in much of this planning area is the presence of travertine rock, (see Map 35) locally known as pot rock. Above ground this rock is seen at hot water cones or pots located throughout the Midway area. The presence of pot rock increases the cost of installing all underground utilities.

Other physical constraints that may limit development in this planning area are shown in the following Maps. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

In 1961 as the Wasatch Mountain State Park was about to be created at the request of state officials. "....Wasatch County took steps to zone a half-mile buffer area around the park to prohibit commercial development and speculation." The County's Development Codes from that time to present day have only allowed dwellings and agricultural uses in this "buffer" area.

Map 33 – Western Valley Planning Area – Existing Land Use Pull-Out

Map 34 – Western Valley Planning Area – Existing Land Ownership
Pull-Out

Western Valley Planning Area

Land Use Plan

With available water and sewer facilities, proximity to the State Park and the setting of this planning area, it is anticipated that considerable development will occur during the next 20 years.

It shall be the policy of the County to allow the extension of sewer lines into all area of the Western Valley Planning Area. The density for all lands not served by the sewer collection system within the Midway Sanitation district shall be one unit per five acres due to the required use of septic tank drainfields.

All development that occurs in the unincorporated area that is within the area identified by Midway in its Annexation Policy Plan (Utah code Annotated 10-2-401.5) shall be developed in accordance with Midway's standards. Map 36 shows the expansion area identified by Midway in its Annexation Policy Plan during the next 20 years.

In keeping with the spirit of commitments made at the time the Wasatch Mountain State Park was being created, the Development code should only allow those activities adjacent to the Wasatch Mountain State Park, Snake Creek, Pine Canyon and Solider Hollow's entrances that are4 compatible with the park, mainly single family detached dwellings and existing agricultural uses.

With the recreational history and climate that have been developed in the Midway area over the years, resort developments should be encourage that provide overnight accommodations when associated with designated recreation activities.

In support of the goal that growth should be encouraged to take place within municipalities, densities permitted in the Western Valley Planning Area should be less than that of the adjoining Midway City zoning districts.

One of the identified public priorities for this area is to see that the Snake Creek corridor, its riparian environment and wetlands are preserved as open space and for trails. Since this area has been identified as having a public benefit for open space and with the availability of water and sewer facilities for its development, a transferable density credit of one (1) unit for every (1/4) acre should be allowed when development rights are removed from property within the Snake Creek corridor, its riparian environment or adjacent wetlands.

One of the most prominent features in this planning area is Memorial Hill. Memorial Hill is under the ownership of Wasatch County and should be developed into a high quality park.

With 300 South in Midway being constructed as a major collector road, the area between 300 South and the Heber Valley Special Service District's waste water treatment facility should be designated as a light industrial area containing no outdoor storage. In support of land use policies, this light industrial area should be landscaped to give the area a park like appeal and buffer along 300 South. Only those industries or manufacturing operations that are consistent with the policies of this plan shall be permitted.

The County should also encourage the Utah Department of Transportation to improve this section of road to meet the needs of increased traffic volumes and improve safety.

As Cascade Spring Road is further developed, its intersection with Stringtown Road should be modified to encourage traffic to use Tate Lane to get to State Road 113 and not Stringtown Road.

In association with the Wasatch Mountain State Park and Midway City, the county's Development Code should require as a condition of approval all on-site trails within a development in accordance with trails section of this plan.

Due to the number of acres that remain in agricultural use in this planning area, the Development Code should implement "Agricultural Protection and Right to Farm" strategies requiring all non-agriculture activities to develop in a manner that is compatible with nearby agricultural operations which include provisions that protect the rights of farmers and ranchers from complaints regarding noise, odors, length of working hours and general operation from non-agricultural neighbors.

Map 35 – Western Valley Planning Area - Location of Pot Rock Pull-Out

Map 36 – Midway City Annexation Growth Boundary Pull-Out

Southern Planning Area

Setting and Constraints

The Southern Planning Area is characterized by the large open field of the Heber Valley Special Service District's farm, Heber Valley Railroad, and scattered single family homes in a farming environment. This area is located on the north side of US 189 between US 189 and the Town of Charleston and east of the Central Planning Area. This area has 57 resident dwellings which are fewer than any other planning area in the Heber Valley except the Central Planning Area. Map 37 shows the existing land use within the planning area while Map 38 shows existing land ownership by parcel size.

One fourth or 430 acres of the Southern Planning area is utilized by the Heber Valley Special Service District for the disposal of treated waste water from its lagoons in the fox den area of the Central Planning Area. With the potential of the Heber Valley waste water treatment changing from a lagoon system to a mechanical treatment system in the future, use of the District's farming area must be considered in future land use of the site. This farm provides a large area of open fields adjacent to US 189 opposite the Heber Valley Airport which contributes to the rural character of the County.

The Heber Airport Master Plan calls for upgrading of the airport to allow for instrument aided landings. Instrument aided landing will require the airport runway to be realigned slightly to the southwest and moved to the west into the Southern Planning area as shown in Map 39. This realignment would require US 189 and part of the Heber Valley Special Service District's farm to be moved.

Another major road proposed for this area is the Heber truck route (see Map 32) which would be located west of 1200 South in this planning area and connect to 1200 west at about the location of the Heber Valley Historical Railroad crossing. It would then proceed south along 1200 West to US 189. Heber's proposed extension of 1200 south from Main Street westward will also connect to the truck route.

The Heber Valley Historic Railroad crosses through the center of the Southern Planning Area on a right-of-way owned by the Wasatch Mountain State Park. The Heber Valley Historic Railroad is one of the most popular tourist attractions in Heber Valley. The 16 miles of track between Heber City and Vivian Park in Provo Canyon offer some of the most spectacular scenery in the state. The open fields and rural environment are the main feature of the railroad as it passes through the Southern Planning Area.

The greatest concentration of residential dwellings in the Southern Planning Area occurs along Casperville Road where the Charleston Water Conservancy District provides culinary water service. Culinary water and sewer collection services are provided by Heber City to a small area between US 189 and Heber City limits along Industrial Parkway. No other area within this planning unit has culinary water and sewer collection service available. In 1999 the citizen of Charleston Town voted not to have a sewer extended into their community for State Road 113 and Tate Lane as part of a grant in support of the 2002 Winter Olympics at Soldier Hollow. This vote precludes sewer service to most of the Southern Planning Area in the foreseeable future because sewer lines serving this area would be required to run through Charleston.

The single greatest constraint to development in this area without a sewer collection system is the use of septic tank drainfields as a means of waste water disposal due to the high potential of contamination of the ground water aquifer. Hansen Allen and Luce Inc., in their 1994 Hydrogeologic Water Quality Study, Wasatch County, Utah, determined that a concentration of septic tank drainfields greater than one per five acres could result in volition of Heber Valley's underground water designation as pristine.

The Sage Brush and Spring Creek Canal which runs through this planning area are being used by Heber City for the disposal of storm water runoff from several storm drains that have been constructed (see Map 16). With the completion of the valley wide pressure irrigation system, the Sage Brush/Spring Canal for most of its length is only used for stock.

Physical constraints that may limit development in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27 shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

Map 37 – Southern Planning Area - Existing Land Use Pull-Out

Map 38 – Southern Planning Area - Existing Land Ownership Pull-Out

Map 39 – Airport Clear Zone
Pull-Out

Southern Planning Area

Land Use Plan

With the potential that the Heber Valley Special Service District's waste water treatment will be changed to a mechanical treatment system, the future use of the District's farming area must be considered. In order to insure that the public has a full voice in the future land use of the District's farm, which represents such a large area of open space, this land should be placed in a special Public Facilities Zone. To change uses, to other than a public use, would require a change to this plan and the Development Code.

In order to protect the public's investment in the Heber Valley Railroad, the Development Code should require that all new development along the railroad be well setback from the right-of- way and buffered providing for safety and to reduce nuisance complaints.

The expansion of the Heber City Airport should be discouraged by the County. The airport's expansion will bring increase noise from all jets and many small aircraft due to the confining nature of the surrounding mountains. With the major airports in Provo and salt Lake less than 30 to 45 minutes away, the rural setting of Heber valley need not be disturbed by unwanted noise from aircraft.

The small unincorporated area between US 189 and Heber City limits along Industrial Parkway with available culinary water and sewer collection services from Heber City should be designated as light industrial. This area is located adjacent to the Heber City Industrial Park and would be compatible with uses within the City. If water and sewer services are provided by Heber City to the area along US 189 from the Heber Valley Special Service District's farm north to the city limits, then this area should be considered for commercial zoning. Commercial development that occurs in this area must access US 189 from a side street that is of an adequate distance from other side streets so as not to reduce the serviceability of the highway. No direct access to US 189 shall be permitted. All structures shall be well set back from the highway with a landscaped buffer strip as outlined in the transportation section of this plan.

Wasatch County should place the Heber truck route on its master street plan and insure that any development that occurs in the area of the proposed road alignment provides the required right-of-way.

With the lack of a sewer collection system or the potential for a sewer collection system in the next 15 to 20 years, the disposal of residential waste water will be by the use of septic tank drainfields. With the determination that the concentration of septic tank drainfields shall not be greater than one per five acres to ensure that a violation of Heber Valley's underground water designation as pristine does not occur, the Development Code shall establish the minimum lot size in this planning area as five (5) acres.

Due to the number of acres that remain in agricultural use in this planning area, the Development Code should implement "Agricultural Protection and Right to Farm" strategies requiring all non-agriculture activities to develop in a manner that protects the rights of farmers and ranchers from complaints regarding noise, odors, length of working hours and general operation from non-agricultural neighbors.

The use of the Sage Brush and Spring Creek Canal to convey storm water runoff requires that an adequate setback be established along its banks to allow for maintenance, operation and a public trail. Heber City and Wasatch County need to own the canal from north of Heber City to its crossing of the City/County flood Channel

Daniel Planning Area

Setting and Constraints

The Daniel Planning Area containing about 2,650 acres is located between US 189 and the Heber Airport on the west, US 40 on the east, Heber City limits on the north and the base of the hills to the south form its southern boundary. The existing land uses of this planning area are characterized by gravel pits, Heber Airport clear zone, industrial areas, limited commercial facilities along US 40 and dwellings rather densely constructed along county roads with large open spaces behind the homes. Map 40 shows the existing land use in the planning area while Map 41 shows existing land ownership by parcel size.

Daniels Creek runs near the southern boundary of the planning area. This steam has a limited riparian environment due to agriculture uses along the stream and the dewatering of the stream during most of the irrigation season. With water and sewer available from Heber City, many adjacent property owners have annexed their property into the City. It is expected that this trend will continue in the near future.

Physical constraints that may limit the development of lands in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27 shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

Wasatch County and Binggelli Rock Products have gravel operations in the planning area which have visual impact on Heber Valley, impact air quality and traffic. No rehabilitation of disturbed areas has occurred at either pit in the past 30 years even though such rehabilitation is required. The County should prepare a plan for the rehabilitation of its pit with schedule for completion. The County should insure that all other existing gravel pits comply with the rehabilitation requirements of the Development Code in a timely manner.

The industrial area between the Heber Airport and Daniel Road is made up of mainly storage units and construction company facilities. This industrial area is provided water and sewer services by Heber City. Development within this industrial area has been occurring at a modest rate. Since Heber City provides water and sewer services to this area, it would likely be annexed into the city but several property owners have prevented the annexation. It is likely that this industrial area will become a part of Heber City in the next few years.

Two factors have contributed to the present configuration and density of housing in the Daniel area are the existing County road net work and the Daniel Domestic Water system along this same road. A large part of the Daniel Planning Area is served by the Daniel Domestic Water Company. However, the lack of capacity or coverage of the system over the years has seen a large number of the newer homes in the area forced to drill wells. With

most of the development occurring along existing County Roads, many of these streets have a subdivision feel with most of the open fields hidden behind the homes.

At present there is no commercial development along US 189 in the Daniel Planning Area. There is however a small industrial area at the intersection of US 189 and 3000 South. This area originally was established as a saw mill operation. Over time the land uses have changed to the Wasatch County Solid Waste Special Service District's transfer station and a small log home manufacturer.

At the eastern side of the planning area there are several small commercial businesses within the planning area along US 40, a construction storage building, a four unit apartment building and natural gas supplier. Each of these commercial buildings is outside of the area recommended for designation as commercial.

Map 40 – Daniel Planning Area - Existing Land Use Pull-Out

Map 41 – Daniel Planning Area - Existing Land Ownership Pull-Out

Daniel Planning Area

Land Use Plan

Gravel operations within this planning area are incompatible with the surrounding residential uses. No zoning change which would increase the size of the existing gravel pits should be granted.

The Development Code should limit the amount of surface area in a mountainside gravel operation that can be disturbed at any one time. All areas other than the working face should be reclaimed. In addition to requiring bonding for surface restoration, the Development Code should also provide standards and timing requirements for restoration. Also standards with regards to time of operation, dust control, and noise should be established.

As the below surface grade gravel pit north of Daniels Creek is reclaimed, care should be taken to ensure that any materials used to fill in this gravel pit will not have an impact on underground water quality. At the present time the owner of the gravel pit is considering using part of the pit for the development of a lake surrounded by housing. It is unlikely that this proposed development will occur any time during the next 20 years due to the amount of fill needed to bring the site back to a usable state. Therefore development of the reclaimed gravel pit is not addressed in this plan, but should be considered in future updates.

The light industrial designation between Heber Airport and 300 feet east of Daniel Road should be encouraged as a place for manufacturing and light industrial activities. This industrial area will also act as a buffer between the airport and housing area to the east and south.

Uses allowed on the southeastern corner of the intersection of US 189 and 3000 South should be limited to industrial. The designation should also allow for the Wasatch County Solid Waste Special Service District's transfer station and County public facilities.

A commercial area from Heber City limits to the mouth of Daniels Canyon would encourage the scattering of development, the loss of economic energy that occurs when commercial establishments are not close to one another, increased travel time, and the number of vehicle trips into the area. No commercial area along US 40 south of Heber City limits and 2400 south should be created. Existing commercial areas south of 2400 South would be permitted as non conforming uses.

The Heber Airport impacts land use in the Daniel Planning Area by the required clear zone around the airport, the noise and navigation lights. The land uses permitted adjacent to the airport should discourage residential development near the airport unless it is part of a fly-in community designed for airplane storage on the residential lot.

With the lack of a sewer collection system or the potential for a sewer collection system in the next 15 to 20 years, the disposal of residential waste water will be by the use of septic tank drainfields. With the determination that the concentration of septic tank drainfields shall not be greater than one per five acres to ensure that a violation of Heber Valley's underground water designation as pristine does not occur, the Development Code shall establish the minimum lot size in this planning area as five (5) acres.

Map 42 shows the area that Heber City anticipates it will annex into the city. The land uses permitted in this area should be compatible with those land uses that will be allowed under Heber City standards.

With the anticipated industrial and residential growth in the area proposed to be annexed by Heber City in the Daniel Planning Area, 2400 South should be extended as a collector road from US 40 west to 1200 West. Also 1200 West to 3000 South will require designation as a collector road.

Due to the steep slopes of the foothills adjacent to the Daniel Planning area and the Wallsburg Wildlife Management Area, land uses in these foothills on private land should be limited to grazing and existing gravel operations.

Map 42 – Heber City Growth Plan Pull-Out

Eastern Planning Area

Setting and Constraints

The Eastern Planning Area is characterized by the unincorporated community of Center Creek, farm land, scattered single family homes, and urban sprawl. The area contains two streams, Center Creek and Lake Creek. This planning area is located east of Heber City and US 40 to the surrounding foothills. Much of the Eastern Planning Area lies within the Twin Creeks Special Service District which provides culinary water and sewer services to part of the planning area. The Center Creek Culinary Water Company provides service to the Center Creek area. Map 43 shows the area of services for these utilities. This planning area contains more residential dwellings per square mile than any other planning area. Map 44 shows existing land use within the planning area while Map 45 shows existing land ownership by parcel size.

Physical constraints that may limit development in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

The unincorporated community of Center Creek, located in the southeastern part of the planning area, was the main area of residential development in this planning area until about 1994. Culinary water service is provided to many of the residents of this area by the Center Creek Culinary Water Company. The Center Creek Culinary Water Company during the past 10 to 15 years has not been able to provide culinary water service to any new homes because of the lack of water supply and storage which has resulted in the drilling of numerous private wells within the community.

In 2001 the Center Creek Culinary Water Company started a program to improve its water system which would increase the potential number of connections from the current 67 to 318. These new improvements include additional water sources and increased water storage facilities. Improvements to the Company distribution system are required before new connection can be made.

In 1993 a group of developers started the Lake Creek Culinary Water Company to provide service to Lake Creek Estates, Big Pole Estates, and Lake Creek Farms. In 1994 this company was purchased and the Twin Creeks Special Service District was formed. With larger housing developments being planned as a result of the culinary water system, pressure for a public sewer increased. A petition by land owners in the Lake Creek area for sewer service was submitted to the Wasatch County Commission. As a result of the petition, the County Commission added sewer collection to the services being provided by the Twin Creek Special Service District. The water and sewer services provided by Twin Creeks

Special Service District have resulted in what is classified as urban sprawl by definition because of the distances from existing centers of population, the distances between subdivisions served, and the extension of services past undeveloped lands. Maps 12 and 17 show the location of Twin Creek Special Service District's water and sewer lines.

Lake Creek and Center Creek streams traverse this planning area from east to west. These streams, for much of the year, are dry due to winter water storage or usage during the irrigation season.

Lake Creek Road and 1200 South are the two major east west routes through the planning area that provide access to the residents of Timber Lakes and the LDS Family/Youth Camp. Timber Lakes development has 1,585 approved lots and the LDS Family/Youth Camp is designed for 6,000 campers per week during the summer months. These two projects contribute to the majority of the traffic that occurs on these roads.

The single greatest constraint to development in the areas not served by Twin Creek Special Service District's sewer collection system is the use of septic tank drainfields as a means of waste water disposal due to the high potential of contamination of a ground water aquifer. Hansen Allen and Luce Inc. in their 1994 Hydrogeologic Water Quality Study, Wasatch County, Utah determined that a concentration of septic tank drainfields greater than one per five acres could result in a violation of Heber Valley's underground water designation as pristine.

There are also two soil conditions that occur in the planning area that further limit the use of septic tank drainfields for the disposal of waste water. One, the high water table that is associated with soil classified as Center Creek Series located in the area of the old Center Creek channel; and two, the slow permeability soils associated with the Watkins Ridge Series which is located mainly at the valley margins or foot hills.

Heber City has identified the area between the City's current eastern limits and 2400 East as an area into which it would consider annexing. The area between 1200 and 2400 East is within Twin Creek Special Service District. The City would like to enter into an agreement with the Twin Creeks Special Service District to transfer service in this area to the City for culinary water and sewer collection. This action could be in the best interest of those land owners near 1200 East that do not have adequate shares of stock in the Lake Creek Irrigation Company to be transferred to TCSSD for required culinary water service. These land owners could provide Heber City with shares of Timpanogos Canal Company stock or have the City purchase M&I water, both of which could be withdrawn from the Hospital well that lacks sufficient water rights for the amount of water that the well can produce.

Map 43 – Twin Creeks Special Service District Area of Service Pull-Out

Map 44 – Eastern Planning Area - Existing Land Use Pull-Out

Map 45 – Eastern Planning Area - Existing Land Ownership Pull-Out

Eastern Planning Area

Land Use Plan

Heber Valley has become popular as a bedroom community, largely because of its rural setting and its proximity to employment centers along the Wasatch Front. The increase in population in the Eastern Planning Area since 1995 has been accelerated by the creation of the Twin Creeks Special Service District that provides water and sewer services in the area.

The urbanization that is occurring in the Eastern Planning Area and agricultural activities are basically incompatible. The end result of co-mingling these two activities is urban sprawl which brings about the erosion of agriculture. Recognizing the fact that urbanization of the Eastern Planning Area is likely to continue, the Planning Commission should create an Agricultural Protection Program to protect agricultural lands and practices from complaints associated with non-agriculture growth and development on nearby property.

There are other impacts that must be managed as urbanization of the Eastern Planning Area occurs. When dwellings and developments are allowed to scatter out, many parcels of land become harbingers of weeds and rubbish. Management of irrigation and livestock becomes more difficult and expensive because of the interference by non farmers, and the attractiveness of open fields can give way to unsightly fences, old automobiles and clutter.

The landowners in this planning area need to understand that as urbanization increases so will the need for new and additional services. Ultimately, a full range of urban services will likely be required. Typical of these services are:

1. Additions to the Twin Creeks and Center Creek culinary water systems to accommodate the new growth.
2. Expansion of the Twin Creeks sewer collection system.
3. A higher level of road construction and maintenance, and an increase of snow removal service.
4. Disposal of storm water and increased level of flood control.
5. More restrictive animal control.
6. A higher level of fire, police and emergency medical care.
7. Increases in busing costs of school children.
8. Parks

Providing many of these higher levels of service will likely exceed the amount of taxes collected from the benefitted properties. Since the urbanization of this area could require additional taxes to support the increase in level of services, the County Commission should consider creating special service districts to fund these high level of services to avoid placing this burden on other tax payers in the County.

All development that occurs in the unincorporated area that is within the area identified by Heber City in its Annexation Policy Plan (Utah Code Annotated 10-2-401.5) shall be developed in accordance with Heber City standards. Map 36 identifies the growth area identified by Heber City in its Annexation Policy Plan during the next 20 years.

In order to provide revenue for the payment of debt and operation and maintenance of the existing sewer lines, development in the Eastern Planning Area, when connected to the sewer may occur at a greater density. Additional density may be allowed when a large percentage of the land is maintained in open spaces. A density bonus may be given when density is transferred from a density sending area.

The County should allow the extension of sewer lines into all areas of Eastern Planning Area. The density for all lands not served by the sewer collection system shall be one unit per five acres due to the required use of septic tank drainfields.

In the general commercial area along US 40 south of Heber City to 1200 East, all structures, roads or parking lots shall be set back to create a sense of openness from the right-of-way line of US 40 and provide for a greenway. Access to commercial developments along US 40 shall be by way of cross streets approved by the Utah Department of Transportation and not from driveways. Cross streets entering the Highway should be spaced so as not to impede the flow of traffic.

Area east of the commercial area along US 40, south of 1200 South, 500 feet west of 1200 East, should be designated as a business and research park. This area is likely to be annexed into Heber City in the future when development occurs because the City is in the best position to provide water and sewer service.

The section of road at 1200 South between the Heber City limits and 1200 East should be constructed as soon as possible. Construction of this section of road would provide a direct route to US 40, reduce the traffic on Lake Creek Road from the LDS Family/Youth Camp and Timber Lakes, reduce air pollution due to the shortened distance and time traveled to reach US 189 from much of the Eastern Planning Area, and reduce traffic congestion and safety concerns on 600 South near the Wasatch High School.

The 100 South in Heber should be extended past the county's services building eastward to the Wasatch Canal then northeast along the canal to Center Street (Lake Creek Road). This new connection to Lake Creek Road would provide a direct connection to Heber's Main Street at a traffic light, reducing the number of turning movements required to reach the same traffic light, improve safety, and reduce air pollution by eliminating time spent in waiting to make turning movements.

Lake Creek Road, 1200 South and 1200 East are designated as collector roads. Access from developments that occur along these roads shall be limited to cross streets and new access from driveways shall not be allowed. The collector road right-of-way shall include adequate space for roadway, trail and green space.

Lake Creek with its north and south channels is an important part of the Wasatch County flood control system. Development should not be permitted within 100 feet of the channel or within the designed FEMA 100 year flood plain. Areas wider than the designated flood plain along Lake Creek are encouraged in meeting open space requirements, to provide for trails and protection of the riparian environment along this stream.

There are several low lying hills in this planning area south of the Lake Creek Road. Structures should be controlled on the ridge line and no building should be allowed on slopes greater than 30 percent.

East Hills Planning Area

Setting and Constraints

The East Hills Planning Area contains 53,324 acres and is characterized by the 1,585 lot Timber Lakes Subdivision, four LDS Church Youth Camps containing more than 8,000 acres, the Wolf Creek Ranch containing eighty 160 acre lots and smaller mountain home developments along the upper Provo River. About two thirds of the private land in the East Hills Planning Area has approved development rights.

Existing land use in the East Hills consists of livestock grazing, small farming operations along the upper Provo River, mountain home developments, recreation camps, wildlife habitat, and sand stone and gravel extraction. Map 46 shows the existing land use in the planning area while Map 47 shows land ownership of undeveloped land by parcel size.

Besides the Provo River other streams in the planning area include upper Lake Creek, Center Creek and Daniel Creek. The vegetation in this area ranges from sage brush and scrub oak at the lower elevations to aspens and pines at the highest elevations.

Much of the East Hills Planning Area is located within the Twin Creeks Special Services District (TCSSD) which provides water and sewer service. Map 43 shows the boundary of the District. The Lake Creek watershed supplies surface water that is treated at the District's water treatment plant located on Lake Creek Road at 6400 East. The District also provides operation and maintenance services to the Wolf Creek Ranch development.

This planning area is bounded on the north by the Provo River and Jordanelle Planning Area, on the east by the Eastern and South Hills Planning Areas, and on the south and east by the Uinta Mountains Planning Area. Existing land uses are mountain home developments, private recreation camps, livestock grazing, wildlife habitat and sand stone extraction.

Physical constraints that may limit the development of lands in this planning area are shown in the following figures: Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27 shows the suitability for wastewater disposal in septic-tank soil-absorption systems, and Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

Map 46 – East Hills Planning Area - Existing Land Use Pull-Out

Map 47 – East Hills Planning Area - Existing Land Ownership

East Hills Planning Area

Land Use Plan

Land uses in the East Hills Planning Area should be limited to recreation, livestock grazing and wildlife habitat. All mountain home developments should be part of a cluster development with large areas of open space. The pressure for development in this planning area will come from the undeveloped land adjacent to already approved projects. In all likelihood, several rather large developments, as well as smaller projects, will eventually be proposed to the County for approval. A central culinary water system that meets the Utah Division of Drinking Water regulations should also be required along with a method of waste water disposal, that insures adequate disposal is available to each lot, unit or facility which meets the regulation of the Utah Division of Water Quality and the Wasatch City/County Health Department. Power service should also be required as a condition of development.

Within the East Hills Planning Area are the Lake Creek and Big Pole watersheds. These drainages are the source of surface water treated by the Twin Creek Special Service District for culinary use. These two watersheds must be protected from the establishment of any sources of pollution that would have an adverse impact on treatment of their surface water for culinary use. With the potential of more than 1,600 septic tank drainfields in the Lake Creek watershed, water samples should be taken monthly on Lake Creek at Clyde's Crossings and selected stream segments up steam to monitor the in stream water quality. The responsibility could be added to Mountainlands Association of Governments current water sampling in the county. This sampling could give adequate time to implement corrective measures if the water quality starts to be degraded. Corrective action would most likely be the construction of a sewer collection system and connection to the Heber Valley Special Service District for waste water treatment.

In addition to mountain home developments, campgrounds and lodges should be permitted. Lodges that provide overnight accommodations should be allowed only when they are associated with a destination recreation activity as opposed to meeting the needs of the traveling public.

Increased development in the East Hills Planning Area will result in demands for expanded fire protection services. The establishment of a fire station near the entrance to Timber Lakes Subdivision to provide a higher level of fire protection to existing and future developments will in all likelihood be required in the near future.

Additional development east of Lindsay Reservoir in the Lake Creek Area and south of the gravel pit near Center Creek would require major improvements be made to the Lake Creek and Center Creek roads to provide for year round access and safe roads that would handle the increased traffic volume. Winter time road maintenance would also be required beyond the above points. Additional points of emergency access to developments other than

existing roads such as the Lake Creek or Center Creek roads should be provided or considered before approvals are granted.

The Development Code should require that all developments in the East Hills Planning Area be approved as a conditional use to insure that plans are in harmony with concepts that will not degrade the environment and have carefully considered all existing physical constraints to development before approval of any developments is given.

The Development Code should limit the amount of surface area in the gravel operation that can be disturbed at any one time. In addition to requiring bonding for surface restoration, the Development Code should also provide standards and timing requirements for restoration. Also standards with regards to time of operation, dust control, and noise should be established.

Timber Lakes Subdivision which was started in the late 1960 as a summer home development has evolved into a year round residential community. With year round residents, problems with the culinary water system that was installed for summer use have developed along with the need for street snow removal. Because the Covenants, Conditions and Restrictions only allow a small increase in the Timber Lakes Home Owner Association dues, they were not able to meet the financial needs of the water and road system. To assist Timber Lakes Home Owners, the Wasatch County Commission created the Timber Lakes Special Service District to provide for culinary water services. The County Commission should insure that this Special Service District does not incur a debt that would prevent the transfer of water services provided by the District to Timber Lakes Town if incorporation occurs. Timber Lakes residents should be encouraged to incorporate by the County Commission.

Buildings in this planning area on slopes greater than 30% should be prohibited and structures on ridge lines should be controlled. The Development Code should also require that landslide hazards be adequately addressed.

South Hills Planning Area

Setting and Constraints

The South Hills Planning Area containing 51,224 acres is characterized by Provo Canyon Scenic Byway US 189, Canyon Meadows Subdivision, campground along the lower Provo River, gravel extraction and the Wallsburg Wildlife Management Area. The South Hills Planning Area consists of the mountainous territory between the western and southwest boundaries of the County and Deer Creek Reservoir and low lying hills between Heber and Round Valleys. The majority of the public land is within the Wallsburg Wildlife Management Area.

This planning area is bounded on the north by Wasatch Mountain and Daniel Planning Areas, on the east by the east and south and Uinta Mountains Planning Area. Existing land use in the South Hills Planning Area consists of livestock grazing, a residential subdivision, wildlife habitat, gravel extraction and private recreation facilities. Map 48 shows the existing land use in the planning area while Map 49 shows land ownership of undeveloped land by parcel size.

Besides the lower Provo River, the other streams major in the planning area include Little Deer Creek, Little Hobble Creek, and upper Main Creek with Daniels Creek forming part of Eastern boundary of the planning area. The vegetation in the area mainly consists of sage brush and scrub oak.

Physical constraints that may limit the development of lands in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27 shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

Map 48 – South Hills Planning Area - Existing Land Use Pull-Out

Map 49 – South Hills Planning Area - Existing Land Ownership Pull-Out

South Hills Planning Area

Land Use Plan

Land uses in the South Hills Planning Area should be limited to watershed protection, livestock grazing and wildlife habitat. When summer homes and recreational resorts are permitted, they should be in harmony with the natural setting, be developed in such a way as not to significantly degrade the quality of the environment, provide all essential utilities and be planned and developed using methods that will reduce the threat of wildfire to the area.

Because much of the private land in this area is a high productive watershed and contains outstanding natural features in an environmental sensitive area, a zoning ordinance containing a Critical Environment zone designed to preserve the quality of the natural environment and effectively discouraging summer home developments, recreational resorts or similar potentially incompatible developments should be adopted and enforced within the planning area. Any proposed development within the planning area should require the enactment of a change to the general plan and the zoning ordinance. Before granting such amendments, the Planning Commission and the County Council should thoroughly review a detailed proposal for which the amendment to the general plan and the zoning are being requested, and unless the developer can clearly show that the proposed project has considered all physical constraints and the development will be compatible with the natural environment in regards to its use, location, design, access, construction, maintenance and management, the request to change the general plan and zone ordinance should not be approved.

The Development Code should require that all small and large scale developments in the South Hills Planning Area be planned and developed in harmony with land use requirements and concepts that will not degrade the environment and have carefully considered all existing physical constraints to development before approval of any developments.

All permitted developments should be constructed with adequate utilities including a central culinary water system that meets the Utah Division of Drinking Water regulations and a method of waste water disposal that insures that adequate disposal is available to each lot, unit or facility which meets the regulations of the Utah Division of Water Quality and the Wasatch City/County Health Department.

Limited commercial development that provides services to recreational interests should be encouraged in the area south of Deer Creek Reservoir. Commercial development should only be approved as a conditional use when site physical constraints are acceptable and the project is well set back from US 189.

Existing approved land uses in the South Hills Planning Area should be permitted to continue as non conforming uses. Any change should follow the procedures outlined above.

The Wallsburg area residents have expressed interest in having both motorized and non-motorized trails. Non-motorized trails are an emphasis in the transportation element of the general plan and emphasize coordination with the Wallsburg area. A trail corridor should be provided with any new road access into the community from S.R. 189 and access into adjacent public lands must be preserved.

The Provo Canyon Scenic Byway Management Plan is an outline to restore, conserve and enhance the canyon corridor by preserving its intrinsic qualities while developing tourism and economic development activities. The plan is incorporated as a part of this general plan.

The Development Code should limit the amount of surface area in the gravel operation that can be disturbed at any one time. In addition to requiring bonding for surface restoration, the Development Code should also provide standards and timing requirements for restoration. Also standards with regards to time of operation, dust control, and noise should be established.

Development in this planning area on slopes greater than 30% and that extends above ridges lines should be prohibited.

Wallsburg Planning Area

Setting and Constraints

The Wallsburg Planning area is characterized by meadows, cultivated crop land, streams, high ground water table, hydric soils, and scattered single family homes in a farming environment and covers an area of 3,845 acres. This area is located in Round Valley and is surrounded by the South Hills Planning Area. Map 50 shows the existing land use in the planning area while Map 51 shows land ownership of undeveloped land by parcel size.

Physical constraints that may limit the development of lands in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. Map 52 shows wetlands. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

A high ground water table results in almost all cases in the infiltration of ground water into the sewer system which adds an additional cost to sewage treatment. This condition should be avoided where possible. A high ground water table also causes difficulties in the maintenance of culinary systems. When a water line break occurs in a high ground water table, it is impossible to prevent ground water from entering the culinary water system on the non-pressurized side of a leak. In the Round Valley environment most water line pipes are located at depths of six feet with a required five feet of cover over the top of the pipe placing lines well within the identified water table.

Some would suggest that the water table be lowered in this area by the installation of underground drains. If drains were installed, they would likely result in the destruction of wetlands that have been identified (see Map 52) which would result in the violation of Federal Law.

The above findings are further confirmed by: the historical lack of development in the western part of the planning area south of the Main Canyon
Road due to the above identified physical constraints; experiences of the Wasatch County Road Department in their efforts to maintain minimum standard gravel roads in the area; and the Wasatch City/County Health Department's experience in disapproving requests for on-site waste water disposal systems due to high ground water.

Wallsburg Town provides culinary water to a limited number of customers in the unincorporated area of Round Valley along it lines in Main Canyon Road. The lack of adequate water rights in Warm Spring (which is mostly owned by the irrigation company)

has forced new homes along the Town's culinary water line to drill wells. Imported water rights
and the potential impacts of drilling wells for new residents on existing water rights has been identified as one of the major concerns in the Wallsburg Planning area with regards to growth.

Map 50 – Wallsburg Planning Area - Existing Land Use Pull-Out

Map 51 – Wallsburg Planning Area - Existing Land Ownership Pull-Out

Map 52 – Wallsburg Planning Area – Wetlands Pull-Out

Wallsburg Planning Area

Land Use Plan

An evaluation of physical constraints in the western part of the planning area south of the Main Canyon Road suggests that providing necessary infrastructure to accommodate significant development in this area would be very costly for units of local governments to provide. Therefore, governmental support of the development of infrastructures such as water and sewer facilities and the acceptance of new streets for maintenance by the County should not be granted while other areas which are more suited for development are available.

The physical constraints in this part of the Wallsburg Planning Area by themselves will likely insure that the historical land use pattern will largely be maintained. Therefore, as a matter of public policy, the western part of the Wallsburg Planning Area south of the Main Canyon Road is to be maintained in its historical land use pattern of open meadows and small stream riparian habitats. The use of this area for housing and other types of development is discouraged due to the physical constraints and the higher costs of providing governmental services.

These meadows are highly prized by many local residents of Round Valley as open space. This area's scenic value contributes significantly to the real value of all land within the Round Valley area. Therefore, the following strategies should assist the county in preserving some of this area as open space at the same time providing property owners with a reasonable value for the removal of development rights from their property.

The Development Code should provide for an increase in density for areas determined to be receiving zones when the development rights are removed from land (density sending areas such as the western part of the Wallsburg Planning Area) that has been identified as having a public benefit as open space. Receiving zones in the area will be determined through the public process.

Those lands within the Wallsburg Planning Area that have been identified as having a public benefit as open space may be developed at the established under lying zone density of one unit per 20 acres, or a transferable density credit of one (1) unit for every five (5) acres should be allowed or what is determined by the legislative body as appropriate for the area. Any transfer of development rights within Round Valley must stay in Round Valley drainage area within established receiving zones.

With the lack of a sewer collection system the disposal of residential waste water will be by the use of septic tank drainfields. With the determination that the concentration of septic tank drainfields shall not be greater than one per five acres to ensure that a violation of the underground water designation as pristine does not occur, the Development Code shall establish the minimum lot size in the balance of the Wallsburg Planning Area as five (5) acres.

With the growth that is taking place in this planning area the Town of Wallsburg and the residents in the unincorporated area of the county east of Town should consider the creation of a special service district to provide culinary water services and waste water collection and treatment. The establishment of this infrastructure would allow the density in this area to be one unit per acre when connected to a sewer collection and treatment facility. Also culinary water systems that service developments shall be capable of providing fire protection for the anticipated structures, based on their size in accordance with the Utah Insurance Rating Service but not less than 1,000 gallons per minute of a two hour period.

The section of the general plan on water resources in the Round Valley area identifies: existing water rights by water right number, designated use, original water right quantity and any segregation. The total of all water rights that could be made available for development is 22,463 acre feet. Recognizing that some of these water rights will continue to be used on lands identified for limited development in the western part of the planning area and the need of outside irrigation in a residential setting, it is estimated that these existing water rights could support no more than about an additional 1,500 residential units in Round Valley.

Main Creek and Little Hobble Creek are major drainage ways in Round Valley. Development should not be permitted within 100 feet of these channels or within the designated FEMA 100 year flood plain. Areas wider than the designated flood plain along these streams are encouraged in meeting open space requirements to provide for trails and to protect the riparian environment along the streams.

As growth continues to occur in the Wallsburg Planning Area, there will be conflicts with agricultural activities because they are basically incompatible with development. The end result of co-mingling these two activities is urban sprawl which brings about the erosion of agriculture. Recognizing this fact, the Planning Commission should create an Agricultural Protection Program to protect agricultural lands and practices from complaints associated with non-agriculture growth and development on nearby property.

The County network of roads in Round Valley, except for the main road from US 189 to the Town of Wallsburg, is generally substandard. Any major development or the continuation of lot by lot development over time will require major improvements to many of the roads in the Valley. Also with the growth that is occurring and will likely to continue in the Wallsburg Planning Area, a corridor for a second access into Round Valley along the south foothills from US 189 to Round Valley Road should be established for future use. A trail accompanying this road should also be established.

The Wasatch County School District has indicated that substantial growth in the Wallsburg Planning Area may necessitate the construction of an elementary school. The county should insure that an additional 10 acres of land is made available adjacent to the school for County Recreation Department's activities and joint use by the school.

The Wallsburg area residents have expressed interest in having both motorized and non-motorized trails. Non-motorized trails are an emphasis in the transportation element of the general plan and emphasize coordination with the Wallsburg area. A trail corridor should be provided with any new road access into the community from S.R. 189 and access into adjacent public lands must be preserved

Wasatch Mountains Planning Area

Setting and Constraints

The Wasatch Mountains Planning Area consists of the mountainous territory lying along the western boundary of the County between Heber Valley and the County line. The scenic character of this area resulted in the creation of the 22,000 acre Wasatch Mountain State Park in the early 1960s. The planning area also contains National Forest lands and Deer Creek Reservoir. Because this area is located close to the state's population center, the Wasatch Front, its facilities are heavily used by non-county residents. While most of the land in the Wasatch Mountains Planning Area is publicly owned, there is sizable acreage situated in the northern part of the area that is privately owned.

Existing land use in the area is characterized by summer grazing of livestock, wildlife habitat, outdoor recreation, and summer homes along Snake Creek and north of the Wasatch Mountain State Park. Many of these lots are vacant due to inadequate culinary water supplies, unsuitable soils for septic tank drainfields and poor winter time access. Map 53 shows existing land uses and the location of the summer home developments while Map 54 shows land ownership in the planning area.

Physical constraints that may limit the development of lands in this planning area are shown in the following figures. Map 26 shows flood hazards, earthquake hazards, and problem soils. Map 27 shows the suitability for wastewater disposal in septic-tank soil-absorption systems. Map 28 shows landslide hazards. A review of these identified constraints along with a detailed on-site analysis should be required before any development is approved within this planning area.

Recreation facilities within the planning area such as the Forest Service's Cascade Springs, Wasatch Mountain State Park's golf courses, cross country skiing and biathlon facility, and campgrounds have a significant impact on Wasatch County with regards to traffic and law enforcement. Since many of the uses for these recreation facilities come from the Wasatch Front, which is less than one hour away, few people buy services and goods within Wasatch County.

Land use plans and policies for most of the planning area are under the control of the Forest Service and State Parks. Wasatch County's focus should be on planning and regulation of the privately owned land within the planning area.

Map 53 – Wasatch Mountain Planning Area - Existing Land Use Pull-Out

Map 54 – Wasatch Planning Area - Existing Land Ownership Pull-Out

Wasatch Mountains Planning Area

Land Use Plan

Land uses in the Wasatch Mountains Planning Area should be limited to watershed protection, recreation, livestock grazing and wildlife habitat. If summer homes and recreational resorts are permitted, they should be in harmony with the natural setting, be developed in such a way as to not significantly degrade the quality of the environment and provide all essential utilities.

Because much of the private land in this area is productive watershed and contains outstanding natural features or is in an environmental sensitive area, this planning area should be designated as preservation area designed to preserve the quality of the natural environment and effectively discourage summer home developments on lots of less than 160 acres, recreational resorts or other similar potentially incompatible developments or uses, grazing is encouraged to reduce the potential for wildland fires. Any proposed development within the planning area should require the preparation of physical constraints inventory and site master plan before the enactment of a change to the County's General Plan and the establishment of a development overlay zone. Before granting such amendments, the Planning Commission and the County Commissioners should thoroughly review a detailed proposal for which the amendments are being requested. Unless the developer can clearly show that the proposed project has considered all physical constraints and the development will be compatible with the natural environment in regards to its use, location, design, access, construction, maintenance and management, the request to change the general plan and zoning ordinance should not be approved.

All permitted developments should be constructed with adequate utilities including a central culinary water system that meets the Utah Division of Drinking Water regulations and a method of waste water disposal that insures that adequate disposal is available to each lot, unit or facility which meets the regulations of the Utah Division of Water Quality and the Wasatch City/County Health Department.

Brighton Estates Subdivision, a development approved in the 1960s is located within this planning area. Due to the lack of a central culinary water system, winter time access and generally unsuitable soil conditions for septic tank drainfields, many of the lots in this subdivision are undeveloped. Since the 1980s building permits for cabins on lots that lack adequate water and waste water facilities have been denied. A practice that has developed by lot owners is to seek a building permit for a storage building which does not require water and waste water facilities. Once the building has been constructed, it is used as a dwelling. The County should adopt regulations that prohibit the construction of any out buildings on lots within a subdivision unless a residential structure is located on the lot.

With the potential in the planning area for the construction of ski runs, it should be understood that their approval would require a change in the general plan and the zoning

ordinance. If permitted, ski runs should be located on land which will require little or no removal of vegetation.

Development in this planning area on slopes greater than 30% and that extends above ridges lines should be prohibited and building on ridge lines should be controlled.

Uinta Mountains Planning Area

Setting and Constraints

The Uinta Mountains Planning Area is the largest planning area covering the eastern two thirds of the county except for the Strawberry Planning Area. The planning area is characterized as being primarily mountainous with elevations ranging from 6,000 to 10,000 feet. Most of the land in the Uinta Mountains Planning area is owned by State and Federal agencies. Most of this public land is controlled by the U.S. Forest Service.

The remaining 40 percent of the land is privately owned mostly in large holdings. Map 55 shows the land ownership while Map 56 shows existing land uses in the planning area.

Current land use within the planning area is summer grazing of livestock, wildlife habitat, and outdoor recreation, primarily camping, hunting and fishing and summer homes along the upper Provo River. The existing road system provides vehicular access into most parts of the planning area except when snow closes all but the main highways.

While generally accessible, the major portion of the planning area may be considered as largely uninhabited except for small clusters of year-round service areas at Currant Creek near the eastern county line on US 40, and Soldier Summit in the southwestern corner of the County on US 6. Located along the upper Provo River there are a few irrigated farms with scatter dwellings and several summer home developments.

Uinta Mountains Planning Area

Land Use Plan

Land uses in the Uinta Mountains Planning Area should be limited to watershed protection, recreation, livestock grazing, highway service areas and wildlife habitat. If summer homes and recreational resorts are permitted, they should be in harmony with the natural setting, be developed in such a way as to not significantly degrade the quality of the environment and provide all essential utilities.

Because much of the private land in this area is productive watershed and contains outstanding natural features or is in environmental sensitive area, this planning area should be designated as a preservation area designed to preserve the quality of the natural environment and effectively discourage summer home developments on lots of less than 160 acres, recreational resorts or other similar potentially incompatible developments or uses.

Any proposed development within the planning area should require the preparation of physical constraints inventory and site master plan before the enactment of a change to the County's General Plan and the establishment of a development overlay zone. Before granting such amendments, the Planning Commission and the County Commissioners should thoroughly review a detailed proposal for which the amendments to the general plan and the zoning are being requested, and unless the developer can clearly show that the proposed project has considered all physical constraints and the development will be compatible with the natural environment in regards to its use, location, design, access, construction, maintenance and management, the request to change the general plan and zoning ordinance should not be approved.

Highway service areas should continue to be permitted uses in the Current Creek and Soldier Summit areas. Recreational lodges should be encouraged that provide overnight accommodations when they are associated with a destination recreation activity.

All permitted developments should be constructed with adequate utilities including a central culinary water system that meets the Utah Division of Drinking Water regulations and a method of waste water disposal that insures that adequate disposal is available to each lot, unit or facility which meets the regulations of the Utah Division of Water Quality and the Wasatch City/County Health Department.

The Development Code should require that all developments in the Uinta Mountain Planning Area be approved as a conditional use. Before approval of any developments is given, plans must be in harmony with concepts that will not degrade the environment and have carefully considered all existing physical constraints.

Within the irrigated agricultural area along the upper Provo River where septic tank drainfields are used, the minimum lot sizes should be one unit per five acres.

Structures in this planning area on slopes greater than 30% should be prohibited and building on ridge lines should be controlled.

Map 55 – Uinta Mountains Planning Area - Existing Land Use Pull-Out

Map 56 – Uinta Mountains Planning Area
Existing Land Ownership
Pull-Out

Strawberry Planning Area

Setting and Constraints

The Strawberry Planning Area is characterized by the Soldier Creek Arm of Strawberry Reservoir with the following public facilities: Soldier Creek campground and Boat Ramp, Aspen Grove Campground and the day use facilities at Soldier Bay and Rocky Point. Located within the planning area are five summer home developments with a total of 376 lots and Indian land. Map 57 shows existing land uses while Map 58 shows existing land ownership by parcel size.

Due to the harsh winters, land use in the Strawberry Planning Area has been limited to summer homes, summer grazing of domestic animals, wildlife habitat, water storage, fishing and other outdoor recreation activities. Strawberry Reservoir is considered one of the prime lake fisheries in the state. This fishing attraction is the main reason for summer home developments in the planning area. It is anticipated that the popularity of the Strawberry Planning Area as a place for summer homes will continue as recreational activities are expanded into a broader range of outdoor activities in addition to fishing.

Map 57 – Strawberry Planning Area - Existing Land Use Pull-Out

Map 58 – Strawberry Planning Area - Existing Land Ownership Pull-Out

Strawberry Planning Area

Land Use Plan

Land uses in the Strawberry Planning Area should be limited to watershed protection, livestock grazing and wildlife habitat. If summer homes and recreation resorts are permitted, they should be in harmony with the natural setting, be developed in such a way as to not significantly degrade the quality of the environment and provide all essential utilities.

Because much of the private land in this area is productive watershed and contains outstanding natural features, environmentally sensitive areas, and is remote from essential public services such as fire and police protection, this planning area should be designated a preservation area designed to preserve the quality of the natural environment and effectively discourage summer home developments on lot less than 160 acres, recreational resorts or other similar potentially incompatible developments or uses. Any proposed development within this planning area should require the preparation of a physical constraints inventory and site master plan before the enactment of a change to the County's General Plan and the establishment of a development overlay zone. Before granting such amendments, the Planning Commission and the County commissioners should thoroughly review a detailed proposal for the amendments to the general plan and the zoning being requested, and unless the developer can clearly show that the proposed project has considered all physical constraints and the development will be compatible with the natural environment in regards to its use, location, design, access, construction, maintenance and management, the request to change the general plan and zoning ordinance should not be approved.

Open Space and Sensitive Lands

Wasatch County is characterized by valuable open space and sensitive lands resources that contribute to the region's character and overall quality of life. Residents have long enjoyed views of and recreational access to the mountains, lived with abundant wildlife, and farmed the valley floors. They enjoy the ample open space that exists along main roads, which provide wide views along and into natural spaces and farmlands. While residents expect that real estate development will occur as population increases, they would like to see the rural heritage conserved for the enjoyment of future generations.

Wasatch County's open spaces have ecological, agricultural, cultural and recreational qualities, functions, and potential uses, and these lands are worthy of careful planning and conservation. The county envisions establishing segments of its green infrastructure through a range of conservation tools, including those that conserve land during the real estate development process, much like gray infrastructure is currently contemplated, planned, and developed. Areas identified as open space during the real estate development process should be permanently protected and connected to the county's overall open space network.

Wasatch County is partnering with its towns and cities to achieve a coordinated and effective open space conservation strategy. Together, the county and the cities and towns are working to conserve the open lands that lend the region its character.

Goals and Policies

1. GOAL: Clearly identify the open spaces and sensitive lands, and plan for their conservation, preservation, and multiple uses allowed by the zone.

1.1 POLICY: Permanently protect all tier one open spaces and sensitive lands. These lands include:

- Major ridgelines
- Slopes greater than 30%
- Streams, rivers, stream or river corridor and drainage setback areas, FEMA floodways and flood hazard areas and flood debris flow areas
- Landslide areas, fault lines and fault line set back areas, collapsible soil hazards, or other geologic hazard areas
- Trail corridors identified on the Wasatch County Trail Corridors Map
- Public recreational facilities and their buffers
- High value critical lands and natural features
- Public lands

2. GOAL: Preserve the rural character of Wasatch County.

2.1 POLICY: Preserve open space types identified as critical to maintaining rural character and a high quality of life. The preservation of tier one open space types listed within this plan should help to maintain rural character.

3. GOAL: Create a countywide, permanently protected network of open lands.

3.1 POLICY: Lands conserved for open space through acquisition, transfer of development rights, conservation subdivision design and other conservation tools shall be placed under permanent conservation easement wherever possible, with most conserved lands remaining under private ownership.

3.2 POLICY: Lands conserved for open space through acquisition, transfer of development rights, conservation subdivision design and other tools shall be linked, with the goal of creating a county-wide network of open lands where feasible. Connectivity of all open lands is the intent.

4. GOAL: Develop land use policies that preserve open space as real estate development occurs.

4.1 POLICY: Clustering, or conservation subdivision design, which encourages conservation while respecting current base density standards by accommodating flexible lot sizes, should become the standard design process employed when developing in the county's RA-1, RA-5, and Transition Overlay zones. These areas should have at least 30% open space requirement and be viewed as creating the "edge" of urban development. Clustering or conservation subdivision design is highly encouraged in the North Village Overlay Zone, P-160 and Mountain Zones, as a means of using land more efficiently and preserving/creating valued open spaces. Each of these zones should identify required percentages of open space. Conceptual planning across all zones discussed above should follow the four step design process common to the conservation subdivision:

Step One: Identify Tier One Open Spaces and Sensitive

Lands. In identifying tier one open spaces and sensitive lands, this design approach seeks to accommodate those special places, both existing and planned for the future, that make each community a distinctive and attractive place. Though this is the most critical step in the process, identifying these areas is a fairly easy task, and may include little more than a careful walk of the site. The county's Open Space Overlay Map and Open Space Network Map may also be of help.

Step Two: Locate Building Sites. In residential developments, for instance, house sites are located to maximize views of and often direct access to, identified open space, enhancing the house sites' desirability and value. Similarly, in nonresidential development, the second step involves locating office and other building pads to maximize their leasability with regard to views of the open space, access, visibility to customers, buffering, and continuity with development on neighboring sites.

Step Three: Align Streets and Trails. This step is almost a matter of "connecting the dots" for vehicular and pedestrian access. In nonresidential development, including mixed use commercial areas, there may be instances where civic nodes have been identified for future use. These nodes may spill into multiple developments. In such cases it is essential that the street-and-trail-planning step provide for joint planning among neighboring parcels and sometimes even involve cost sharing discussions for certain extraordinary facilities of common benefit to all developers at the node.

Step Four: Draw in the Lot Lines. This final step typically involves little more than marking boundaries midway between house locations or, in the case of nonresidential development, filling in commercial lot lines and site design details. In nonresidential projects as with residential, flexibility and diversity in acceptable project types is key to creating vibrant, successful communities.

4.2 POLICY: A **transfer of development rights (TDR)** program should be highly encouraged as a means of moving development units from areas where development is less desirable to areas where **residential development** is more desirable.

To support this and other conservation tools, request for additional residential density should be encouraged to use conservation tools to get the density.

4.3 POLICY: A **transfer of development rights (TDR)** program should be highly encouraged as a means of moving development units from areas where development is less desirable to areas where **increased commercial square footage** is desirable. A conversion rate to convert residential units to a commercial square footage should be established and used consistently. To support this and other conservation tools, additional request for commercial square footage, should be encouraged to use conservation tools to get the density.

4.4 POLICY: Encourage the **Purchase of Development Rights ("PDR")**, so that development rights can be purchased and retired, thereby restricting future development on sensitive open lands. While this is an inherently limited conservation tool because of its expense, PDRs could provide an excellent way for the county to conserve an entire high-priority parcel or vital connecting link in its overall open space network.

4.5 POLICY: **Conservancy lots** should be encouraged as a means of maintaining permanently protected open space under private ownership. A conservancy lot is a large, privately owned lot that encompasses part of an area identified as permanent open space. The purpose of the conservancy lot is to provide surrounding residents with visual access to open space while keeping the land under private ownership and maintenance. Only a small, delineated portion of such lots may be developed; the remainder must be protected through conservation easements.

4.6 POLICY: Allow **landowners' compacts.** This is a voluntary agreement among two or more adjoining landowners to plan their separate but contiguous landholdings in an integrated, comprehensive manner, providing opportunity to analyze the open space context of properties adjacent to proposed developments. The compact enables landowners to essentially dissolve their shared, internal property lines (for planning purposes) and to design their adjoining land holdings as if they were a single parcel. Areas for development and preservation could cross property lines so that they would produce the greatest benefit. Taking a very

simplified example, all the development that would ordinarily occur on three adjoining parcels could be grouped on the land containing the most suitable soils or slopes or having the least significant vegetation or wildlife habitat, potentially leaving one parcel entirely undeveloped. The three landowners then share net proceeds proportionally, based on the number of house lots each could have developed independently. Even more simply, the process could merely be used to plan eventual trail or greenway connections.

5. GOAL: Develop funding mechanisms that can be used to preserve open space, which may include the following:

5.1 POLICY: A **bond** for the purchase of easements or property identified as a critical open space area should be considered. Funds generated through bonding increase leveraging opportunities, giving better county access to state and federal conservation programs.

5.2 POLICY: A **conservation fee** should be implemented for the establishment of a fund that will allow for the purchase of easements in critical open space areas. The fee may be applied as a means to increase density beyond the base density on a parcel, where more intensive development is desirable.

5.3 POLICY: A **fee-in-lieu program** should be implemented for the establishment of a fund that will allow for the development of public facilities for community benefit. The fee may be applied as a means to increase the density beyond the base density on a parcel, where more intensive development is desirable.

5.4 POLICY: An **endowment and special service district** should be set up to offset and manage the continuing costs of maintaining preserved open space land under county ownership (e.g., costs such as maintaining public parks and trails, mowing meadows, removing invasive vegetation, paying insurance premiums and local taxes), including costs associated with active or passive recreation facilities. An endowment may also be used to build up an open space acquisition fund over time. Spending from endowment

funds should be restricted to the expenditure of interest so that the principal may be preserved.

5.5 POLICY: A Land donation program should be established to encourage a property owner or developer to preserve open space for current inhabitants or future generations. An outright donation is a simple means of conservation and can produce significant tax benefits for the donor. A permanent conservation easement and management plan should be placed on lands that are a part of a land donation program, ensuring permanent protection of valued open space conditions and/or functions.

Moderate Income Housing

In accordance with Utah Code ann. 17-27a-403 the legislative body of each County shall adopt a moderate income housing plan.

The population of Wasatch County is expected to increase over the next 10 years. The demand for moderate income home ownership and rental opportunities in Wasatch County will likely increase. Moderate income housing is defined as; "housing occupied or reserved for occupancy by households with a gross household income equal to or less than eighty percent (80%) of the median gross income of the metropolitan statistical area for households of the same size as determined by HUD/UHC. Such housing cannot cost more than thirty percent (30%) of a household's income.

Studies were done using the Utah Workforce Housing Estimating Model/Software, provided by the Utah State Division of Housing and run by Mountainland Association of Governments (MAG). The studies indicate that moderate income households, those at 80% of AMI, in Wasatch County have sufficient affordable rental and homeownership opportunities. The appropriate supply of affordable housing demonstrates that the current zoning, land use, free market and other regulations are not inhibitive to moderate income housing opportunities for this income bracket. As the County continues to grow the balance between the moderate income housing supply and the housing supply above the moderate income range will need to be maintained.

According to the studies there is a surplus of housing at or above the 80% Area Median Income (AMI) and opportunities to create additional moderate income housing in Wasatch County. The surplus should be sufficient to satisfy the immediate demands for moderate income housing however, as the population grows additional housing will be needed. In order to maintain a healthy housing stock capable of providing safe, decent, and affordable living conditions for residents the housing stock should not only include rental properties but ownership options as well.

Wasatch County believes that in most cases the market will provide for the moderate income housing needs. It is also the determination of the County that some developments will create the need for moderate income housing while others may not.

Wasatch County believes that the long term goal of moderate income housing requirements should be to provide home ownership opportunities for County residents so they can live and work in the County. Decisions on options for providing moderate income housing should be based partly on the intent to provide ownership opportunities to moderate income families.

The County should not permit excess moderate income housing that may be used to supply moderate income housing for communities outside of Wasatch County. To do this limits should be placed on specific areas of the County if it appears that a large percentage of

the area is developing as moderate income housing. The County will look into any means possible to limit moderate income housing for neighboring communities. Limits could include: additional zoning regulations, a cap on approvals of projects that have a moderate income housing product, a push toward ownership units rather than rental units etc.

In order to evaluate the potential for moderate income housing in the community, it is important to understand the regulatory environment for residential housing. Zoning regulations govern the use and density for new developments. These regulations have a direct impact upon the opportunity to provide affordable housing within the community. The chart below provides estimates of the acreages in the North Village based on the master plan and the product types allowed as well as the acreages in the Jordanelle basin that allows flexibility in product types and higher densities.

Survey of areas master planned to allow apartments and attached residential housing:					
Master Plan Area:	Master plan designation	Density	Approx. Total acres	Permitted Res. Uses	Conditional Res. Uses
North Village	TC (Town Core)	6-12 eru/ac.	160 acres	Attached res.	Stacked apts. Small lot detached
North Village	NC (Neighborhood Center)	4-8 eru/ac.	98 acres	Attached res.	Stacked apts. Small lot detached
North Village	NG (Neighborhood General)	3-6 eru/ac.	170 acres	Attached residential, small lot detached	Stacked apts. Small lot detached
Jordanelle Comprehensive Plan	Commercial Community	8 eru/ac.	65 acres	None	Attached residential
Jordanelle Comprehensive Plan	Residential High Density	3.25 to 5.0 eru/ac.	164 acres	None	Attached residential

*Acreages are best estimates and are subject to change

Below is the information provided by Mountainland Association of Governments using the Utah Workforce Housing Estimating Model to determine the Moderate income housing inventory. Columns on the right (in blue) show a slight surplus at the 80% median income level.

Affordable Housing Supply & Affordability Gap by HUD AMI - Wasatch County (Apr, 2013)		Affordable Shelter Cost			Number of Households (2013)	Number of DU (2013)	Affordable Housing Supply		
		Owned		Rent			Current (2013	5 Years (2018)	10 Years (2023)
		Single Family	Multi Family						
30% of Median	Up to $21,300	$106,000	$53,000	$533	471	35	-436	-551	-674
50% of Median	Between $21,300 and $35,500	$181,000	$129,000	$888	333	180	-153	-216	-288
60% of Median	Between $35,500 and $42,600	$219,000	$167,000	$1,065	132	110	-22	-32	-39
80% of Median	Between $42,600 and $56,800	$295,000	$243,000	$1,420	225	256	31	39	49
MEDIAN	Between $56,800 and $71,000 (median)	$371,000	$318,000	$1,775	189	682	493	670	816
120% of Median	Between $71,000 and $85,200	$447,000	$394,000	$2,130	158	671	513	700	851
More than 120%	More than $85,200				471	1,183	712	1,022	1,278
Total					1,980	3,117	1,137	1,629	1,993

***Housing inventory are estimates derived from the numbers provided from HUD. Affordability changes with interest rates, property values, rental rates and utility fees among other factors.**