Governors Office of Planning and Budget

Envision Utah

Utah Quality Growth Commission

2008 Utah Baseline

Current Conditions, Trends, and Projections

NOTES:

2008 Utah Baseline Report:

Current Conditions, Trends, and Projections

Edited By
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State and Local Planning Section
Demographic and Economic Analysis Section

Envision Utah
Utah Quality Growth Commission
Utah Division of Air Quality
Utah Division of Water Resources
Utah Department of Transportation

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In 1963, Utah's population hadn't yet reached the 900,000 mark. I-15 was only complete in a few areas of the state. Geneva Steel was one of the largest employers in Utah County. Farming was still a way of life throughout much of the Wasatch Front. Yet visionary leaders realized the state was changing, the needs of residents were increasing and greater coordination and planning was critical if state government was going to effectively meet the needs of an expanding population. Governors Cutler and Rampton responded to this need by establishing the position of State Planning Coordinator as well as increasing the focus on planning efforts in what would become the Governor's Office of Planning & Budget.

On the forty fifth anniversary of the creation of the planning function of state government we find it fitting in the Baseline 2008 Report to recognize those who have helped guide planning efforts in state government. In addition, we salute Envision Utah, our partner in the Baseline Report process. This group of dedicated citizens pioneered the most inclusive, grassroots planning process in the nation, which defined the path to a future based on citizen values. They highlighted issues such as land use, air quality, transportation needs, water quality and maintaining the quality of life in our state. The Baseline Report is a direct result of the cooperation of state government planners and citizen volunteers.

A special thanks is due those who compiled this information. This includes: Juliette Tennert, State Economist; John Bennett, Executive Director of the Quality Growth Commission, and the senior planner in the Governors Office of Planning and Budget who edited this report; Peter Donner, Economics and Demographics; Evan Curtis, Land Use; Walter Steinvorth, Transportation; Patrick Barickman, Air Quality; Todd Stonely, Water Resources; and Glade Sowards, Climate Change. Neil Ashdown, the Chief of Staff to Utah Governor Jon Hunstman, Jr. led the Baseline 2003 Report and provided invaluable support to the Baseline 2008 Report. Thanks also to Governor Jon Huntsman, Jr. who served as a founding member of the Utah Quality Growth Commission and the second Chairman of Envision Utah, and continues to serve the State of Utah as its 16th Governor.

Alan Matheson

Envision Utah

Mike Mower

Utah State Planning Coordinator

State of Utah – Planning Coordinator
1964 – 2008
Robert Huefner (Governors Clyde & Rampton 1963 - 1967)
Ken Olsen (Governor Rampton 1967 - 1971)
Burt Carlson (Governor Rampton 1971 – 1976)
Jed Kee (Governors Rampton & Matheson 1976 - 1978)
Kent Briggs (Governor Matheson 1978 - 1981)
Martha Dyner (Governor Matheson 1981 – 1983)
Ralph Becker (Governor Matheson 1983 - 1985)
Mike Christensen (Governor Bangerter 1985 - 1990)
Brad Barber (Governors Bangerter & Leavitt 1990 - 2000)
Natalie Gochnour** (Governor Leavitt 2000 - 2002)
Wes Curtis (Governors Leavitt & Walker 2002 - 2005)
Richard Ellis* (Governor Huntsman 2005 – 2006)
John Nixon* (Governor Huntsman 2006 – 2007)
Kim Hood** (Governor Huntsman 2007)
Mike Mower (Governor Huntsman 2007 - present)

*Served as State Planning Coordinator while Director of Governor's Office of Planning & Budget
**Served as State Planning Director while Deputy Director of Governor's Office of Planning & Budget

Chairs of the Coalition for Utah's Future

Pamela Atkinson	2004 to present	
James Clark	2000 to 2004	
Aileen Clyde	1998 to 2000	
Robert Grow	1996 to 1998	
Irene Fisher	1994 to 1996	
Jack Schiefer	1992 to 1994	
Clay Parr	1990 to 1991	
Scott Matheson	1989 to 1990	(The Coalition & Project 2000 combined in 1990)
Lucille Stoddard	1989	Project 2000 Chair
Lee Kapaloski	1988	Project 2000 Chair
Diana Allison, Co-Chair & Karl Snow, Co-Chair	1987	Project 2000
Michael Zimmerman	1986	Project 2000

Envision Utah Chairs

Jerry Stevenson	2005 to present
Bruce Christensen	2003 to 2005
Greg Bell	2001 to 2003
Jon Huntsman, Jr.	1999 to 2001
Robert Grow	1997 to 1999

Members of the Utah Quality Growth Commission---1999 to 2007

Jon Huntsman
Gary Herbert
Lewis Billings, Chairman 1999 to 2003
Dan Lofgren, Chairman 2003 to 2007
Carol Page
Shauna Kerr
Cary Peterson
Kathleen Clarke
Carlton Christensen
Lee Allen
Max D. Thompson
Leland J. Hogan
David Allen
Dee Allsop
Jerry Stevenson
Dennis Larkin
Kenneth Ashby
Bob Morgan
Brad Barber
Camille Cain

Current Members

Jaren Davis, Chairman 2007 to Present
Flint Richards, Vice Chairman, 2007 to Present
Darrell Smith
Leonard Blackham
Mike Styler
Laraine Swenson
Sally Elliott
Mike Kohler
Ken Mitchell
Reed Erickson
Justin Allen
Larry Ellertson
Brent Tanner

UTAH
QUALITY GROWTH
COMMISSION

Planning Staff,
Governors Office of Planning and Budget

Air Quality Baseline

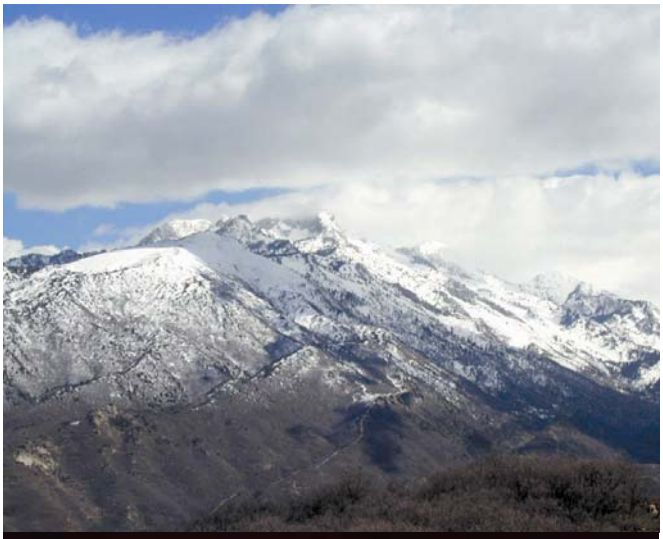
Major Issues and Findings

Pollutant levels have been declining: There has clearly been a reduction in pollutant levels along the Wasatch Front since the early 1990s. These reductions have come from all major sectors of the economy by reducing process emissions from large industrial sources, cleaner and more efficient automotive technology, and more efficient commercial and residential products which simply require less energy for their use.

Growth is complicating the problem—Pollution per capita is decreasing, but population increases make maintaining air quality a challenge: Growth in population, the economy and vehicle miles traveled has been robust during this same period and future projections foresee growth continuing. So, while pollution per capita may be on a downward trend, the fact of more people making demands on natural resources, including the capacity of the local airshed, is a challenge that will take creativity and perseverance to solve.

Changing EPA Air Quality Standards make Compliance more difficult in the Future: In addition to the opposing forces of less per capita pollution offset by growing population and economic activity, a second and more immediate challenge faces northern Utah in the attainment of air quality health standards. The EPA-mandated air quality standards for ozone and PM2.5 have been tightened since the last baseline scenario was published in 2003. The more stringent standards have put counties that had either returned to compliance with those standards or had never been out of compliance, into the non-compliance category.

Utah faces Air Quality Compliance Challenges in the Future: As Utah and other states assess their impact on and options for mitigating climate change, federal legislation is likely to add to the air quality regulatory environment. Consequently, there are very real challenges that the state of Utah, especially the Wasatch Front and rapidly growing parts of the State, will be dealing with in the years to come.



Demographics and Economics Baseline

Major Issues and Findings

The anticipated changes in the population and economy of Utah introduce several major issues and findings that are relevant to the understanding of the baseline and the development of alternative scenarios. These include:

Demographics

Utah Population will continue to increase: The population in Utah is projected to increase from 2.70 million, to 6.84 million people in 2060, or 1 person every 6 minutes.

Population will grow at 1.9% per year through 2060: The current and projected rates of population growth, which are approximately twice the national average, are not unprecedented in terms of Utah's recent history, nor unique among the Intermountain states. Utah's historical rate of population growth from 1950 to 2000 averaged 2.4 percent per year. The projected rate from 2000 to 2060 is 1.9 percent.

Large families = high growth rate: The primary reason for Utah's rapid and stable population growth is the many large families in the state. Utah has a relatively young population and therefore a disproportionately large share of women in childbearing years. In addition, Utah's fertility rate of 2.5 children per woman is the highest in the nation; the national rate is 2.1 children per woman. These two factors result in a relatively large number of births.

65% of projected growth is indigenous: Utah's preferences for large families and healthy lifestyles, result in a high rate of indigenous population growth. During the 60 year period, approximately 65% of the state's population growth is projected to originate from residents' own children and grandchildren. Residents in Utah have higher life expectancies then their national counterparts. Higher survival rates and a younger population results in a relatively smaller number of deaths per capita.

80,000 new Utahns every year till 2060: Utah will average almost 80,000 new residents a year between now and 2060. This is an annual population growth of roughly the current size of Ogden. These new residents will require government services and infrastructure. They will also increase the levels of congestion and place tremendous pressures on open space, farmlands, and air quality.

32,000 housing units needed annually: According to the 2008 Baseline, homes and apartments for about 32,000 new households will need to be built every year.

In migration will continue—Efforts to limit in migration would negatively impact the economy: In a society where people have the constitutional right to move freely among states, in and out migration is a given. It has never been the goal of the state to have net in-migration, but leaders have tried to foster an economy that provides economic opportunity to current and future residents. Attempts to limit in-migration by restricting economic development opportunities are likely to negatively impact economic prospects for residents as well.

Economics

Utah's economy will remain strong despite current national downturn: The economy in Utah is projected to remain strong during the projections period. This is based on analysis of the historic and national trends in 23 industries, as well as local expertise. Job growth is projected to be sufficient to provide for Utah's rapidly growing labor force and will even attract in-migrants through out the projections period. Net in-migration is projected to average almost 28,000 new residents per year.

Transportation Baseline

Major Issues and Findings

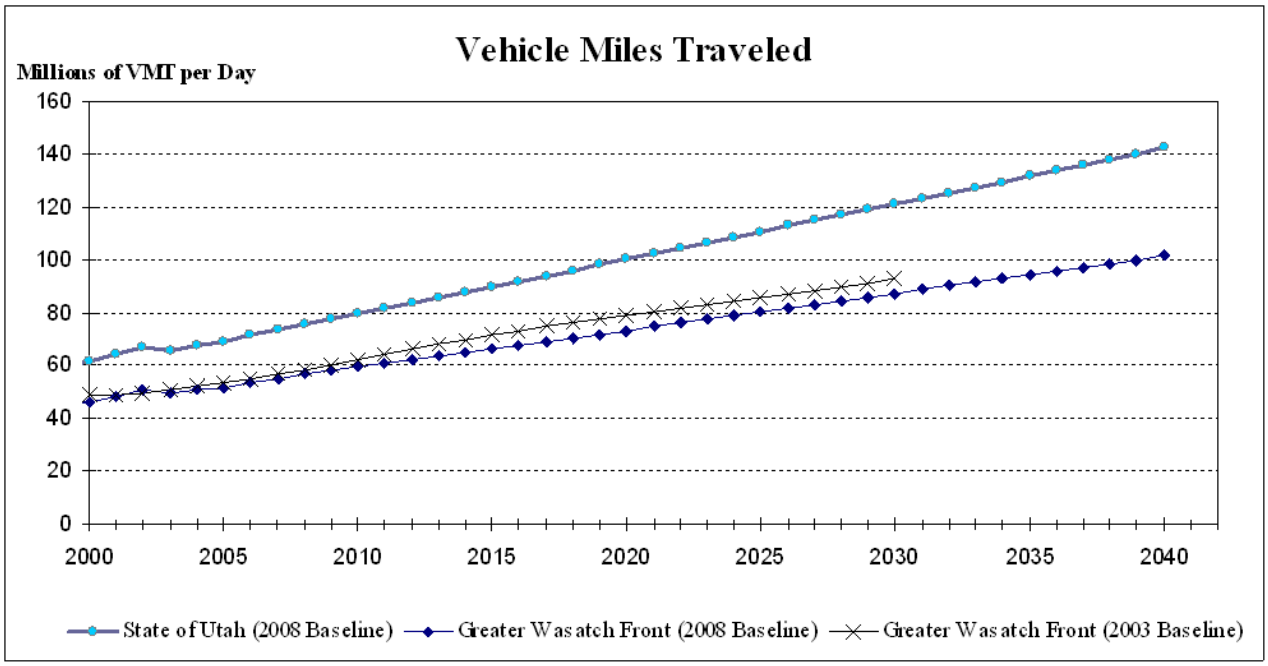
Statewide Vehicle Miles of Travel will double by 2040: Statewide daily vehicle miles of travel are forecast to approximately double by the year 2040 from 71 million miles in 2006 to 142 million miles in 2040.

Wasatch Front VMT will nearly double by 2040: Daily vehicle miles of travel within the Greater Wasatch Front are projected to increase from 53 million miles in 2006 to 101 million miles in 2040.

Wasatch Front will have fastest VMT Growth—Utah County and St. George area VMT's are also growing fast: The largest increase in VMT is projected to occur within the WFRC region. The Mountainland AOG region and Five County AOG region are also projected to experience significant VMT growth.
(for AOG Regions, refer to Page 32 of this report)

Annual rate of VMT growth is forecast to be the highest in the Five County AOG: This is primarily due to growth within Washington County.

Utah County VMT will grow faster than statewide average: The Mountainland AOG is also projected to have an annual VMT growth rate that is higher than the statewide average. Statewide VMT is forecast to grow faster than population of new residents per year.



Water Baseline

Major Issues and Findings

Water is not a constraint to growth in most of the state through 2030—without Lake Powell Pipeline, water will constrain Dixie growth: Water is not a constraint to growth in the Greater Wasatch Area, Cache County, and most other counties through 2030. However, without the construction of the Lake Powell Pipeline, water will be a limiting factor on growth in Utah's Dixie.

In some areas, water must be shared across jurisdictional lines and additional distribution systems will need to be built in order to meet demands.

Per capita water use has declined 12 % since 2000: Per capita water use of public water supplies during 2005 was estimated to be 260 GPCD. This is 12% lower than the 290 GPCD estimated by the division for the baseline year of 2000. The state's goal is to reduce per capita water use by at least 25% (220 GPCD) by 2050.

Most of the anticipated water savings through 2025 have already been achieved: The division anticipated a 12.5% reduction in water use between 2000 and 2025, from 290 GPCD to 255 GPCD. Since use in 2005 was 260 GPCD, most of the anticipated reduction appears to have already been achieved.

Causes of the usage decline are unknown—drought and state conservation efforts have had an effect: Utah water officials are unsure whether the dramatic decline in water use over the past few years is a short term response to the drought which occurred from 1999-2004 or the beginning of a long term trend. Clearly the drought and the "slow the flow" wise water use campaign have caused people to use water more carefully.

Major new water sources have been identified: Major new sources of supply include development of additional groundwater supplies and expansion of water treatment plants to use more mountain stream water in Salt Lake County, irrigation conversions, Lake Powell Pipeline, and Bear River development.

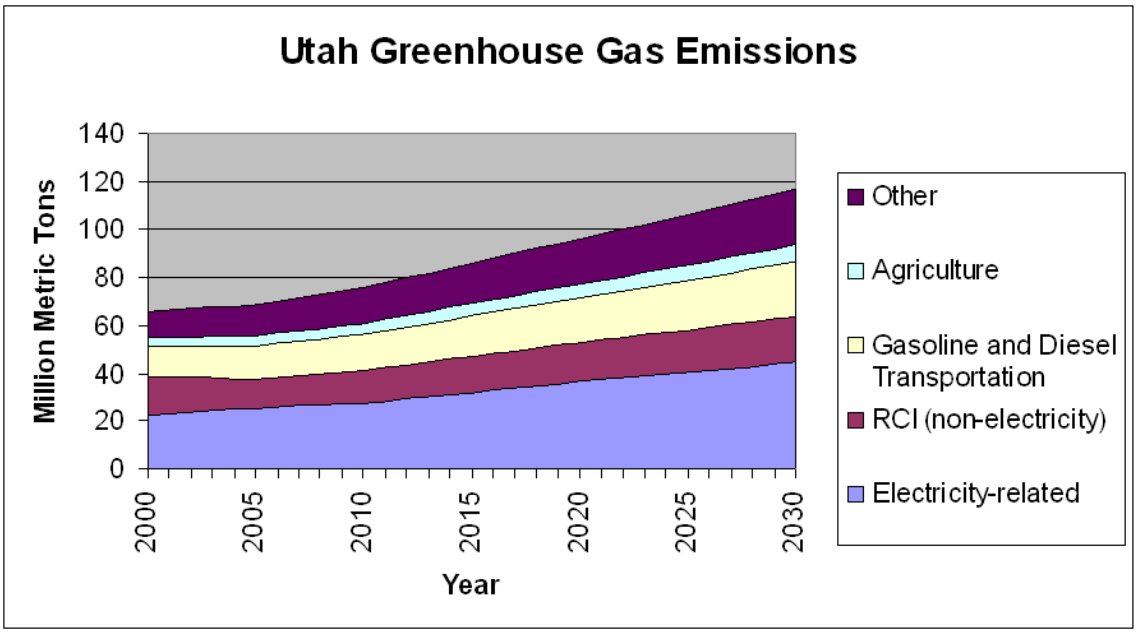
Climate Change Baseline

Major Issues and Findings

Utah produced 1% of total US Greenhouse Gases in 2005: Overall GHG emissions in Utah were 68.8 MMtCO2e in 2005 or approximately one percent of U.S. emissions.

Utah Emissions will grow by 70% by 2030: Under a "business as usual" scenario, GHG emissions in Utah are anticipated to grow by over 70 percent from 68.8 MMtCO2e in 2005 to 117.1 MMtCO2e by 2030.

Numerous factors could influence these emissions: This trend could be markedly influenced over the forecast period by a variety of factors including, but not limited to changes in market conditions, advanced technology development and deployment, diversification of Utah's energy resource mix to include a greater proportion of renewable and other low-carbon energy sources, efficiency standards and programs, tax credits and other incentives, and regulation and policy at the state, regional, or national level



Land Use Baseline

Major Issues and Findings

While making precise projections on land use and development patterns over twenty years into the future may not be possible, it is possible to show illustrations of what the future may look like based on trends and population projections. Using the projections from the Statewide Travel Model, the entire state was analyzed to see which areas may show the most growth by 2030.

900 Square miles of new development needed to keep up with growth at current density: With a current figure of over 796,650 acres of developed land in the state (including commercial), it is estimated that there are an average of 3.2 people per developed acre in this state. At that rate 575,000 acres, or nearly 900 square miles of new land would need to be developed to keep up with population projections for 2030.

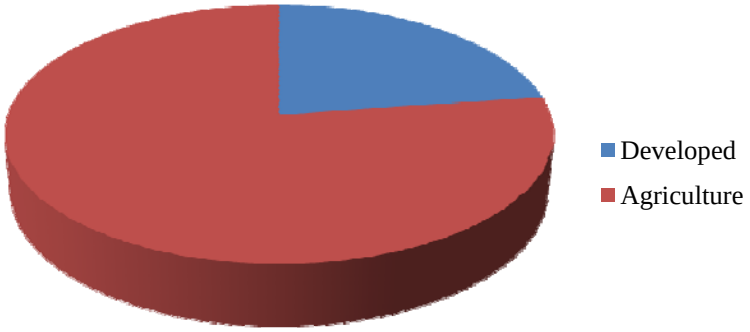
Current trend will increase developed land in Utah by 75% by 2030: That rate of development would increase the amount of land developed in the state by nearly 75%. This estimate, however, probably represents the high-end in many areas of the State.

Other development types will likely reduce actual land development: Many of the developed areas will use in-fill practices, newer developments are likely to be denser in design, and many of the current large-scale industrial land uses such as Kennecott Copper Mines are unlikely to be replicated at the same scale elsewhere in the state during the next twenty years. Furthermore, many newly developed areas will utilize existing infrastructure, public buildings, and commercial areas. Population per developed acre should increase and the rate of land consumption will decrease.

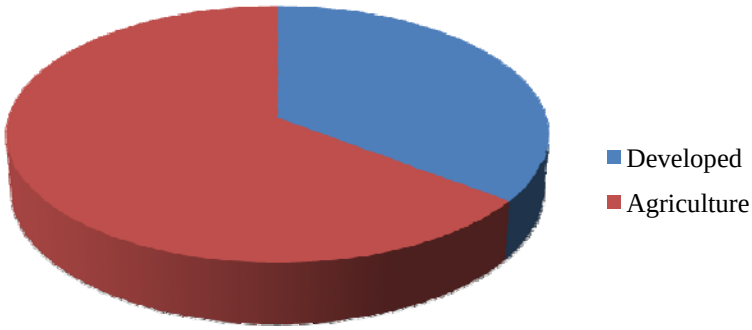
Utah will lose agricultural land to development: Statewide, agriculture land is projected to decrease by 310 square miles by 2030.

Utah will increase amount of developed land statewide: The amount developed land state wide is projected to increase by 898 square miles if population per developed acre (PPDA) densities remain constant. If PPDA increases, on average, from the current 3.2 PPDA to 3.9 PPDA , the amount of developed land statewide would increase by 516 square miles.

Statewide Agricultural vs. Developed Lands 2005



Estimated Statewide Agricultural vs. Developed Land 2030



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Sources and Assumptions

The Utah Division of Air Quality (DAQ) monitors air pollution and implements regulatory measures to protect public health. If health standards are violated, the state must develop a formal plan to meet the standards. This is known as the State Implementation Plan (SIP). Air quality is projected for five major pollutants. They are:

- Carbon Monoxide (CO)
- Nitrogen Oxides (NOx)
- Sulfur Oxides (SOx)
- Ozone
- Particulate Matter (PM10, PM2.5)

Some pollutants are emitted directly from stacks and tailpipes (CO, NOx, SOx, and some PM10); others (ozone, some PM10, and PM2.5) are formed by chemical reactions in the air. For example, NOx and volatile organic compounds (VOC) are precursor chemicals in the formation of ozone. The chemical reaction of NOx and VOC in the presence of sunlight and high outdoor temperatures creates ground-level ozone in the atmosphere. Exceedances of the ozone standard usually occur during the late spring and summer months. Air quality models use emissions of NOx and VOC as a means to predict the future levels of ozone. Similarly, the fine particles less than 2.5 microns in size are formed by atmospheric reactions of NOx and SOx with ammonia. VOC are also known to play a part in the chemical reactions that form these secondary particulates. This problem primarily occurs along the Wasatch Front during winter inversion conditions (see Figure A).

To estimate the concentration of the five pollutants DAQ produces a triennial emissions inventory that is reported to the EPA and becomes a part of the national emissions database. For modeling purposes DAQ also projects the current-year inventory to future years and uses this estimation along with the model to test strategies for reducing pollution.

The triennial emissions inventory consists of point sources (approximately 300 individual stationary, commercial, or industrial sources); mobile sources (highway vehicles); and area sources (non-road mobile

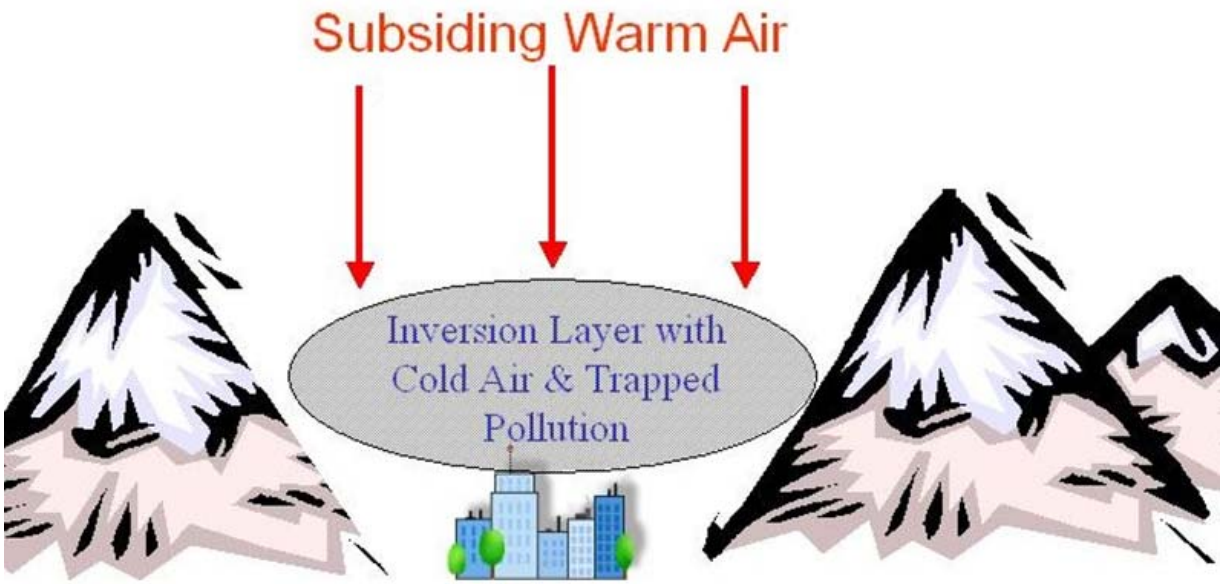

Figure A. The Impact of Temperature Inversions on Urban Air Pollution.

and stationary sources that are too small or numerous to be inventoried individually). The emission inventories quantify the amount of pollution emitted in each county. This type of inventory provides a coarse representation of the spatial and temporal distribution of the pollutants. Using population and economic projections a future-year forecast of emissions in the area can also be estimated.

The future-year inventory combined with air quality modeling is used to predict the amount of pollution in the future. The models, developed by the Environmental Protection Agency (EPA), consider population and industrial growth, vehicle emissions, and the effects of weather and terrain on air quality. They also incorporate known technological advances that will be required in the marketplace and will reduce emissions. These advances include new industrial standards, cleaner vehicle engines and fuels, and other technologies. When concentrations of certain pollutants are projected to violate the state and federal air quality health standards, the Utah Air Quality Board takes actions to achieve and maintain the standards.

Characteristics and Trends

Air monitoring began in the late 1970s. Since that time, parts of the Greater Wasatch have violated the health standards for SO2, fine particulates, CO, and ozone. The highest measurements of these pollutants occurred during the 1980s. During the 1990s and early 2000s, however, pollution levels have steadily declined. Recently, however, new more stringent health standards were promulgated by the EPA for PM2.5 and ozone and as a consequence, new non-attainment areas are being identified based on current monitoring in the State.

The concentrations of the five major air pollutants, as monitored at the DAQ monitoring network sites, are projected to decline from the year 2000 to 2030, continuing the trend from the 1990s. Figures B and C show trends in PM2.5 and ozone at several monitoring locations along with the revised and tightened Ambient Air Quality Standards (NAAQS) during the last ten years. Figures D and E show that ambient concentrations of CO and SO2 have been largely under control for many years and this is expected to be the case into the future. Figure D includes the corresponding number of inversion days to show that the downward trend in CO concentration is not the result of improved meteorology.

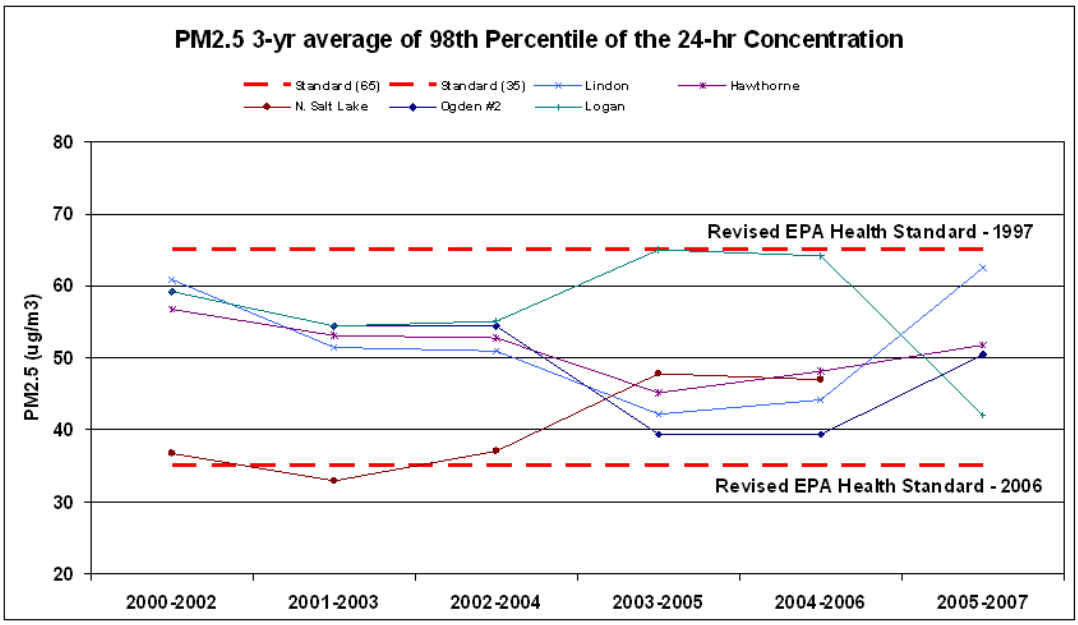

Figure B. Monitored PM2.5 With Revised Health Standard. Non-attainment Recommendation Submitted 12/18/2007.

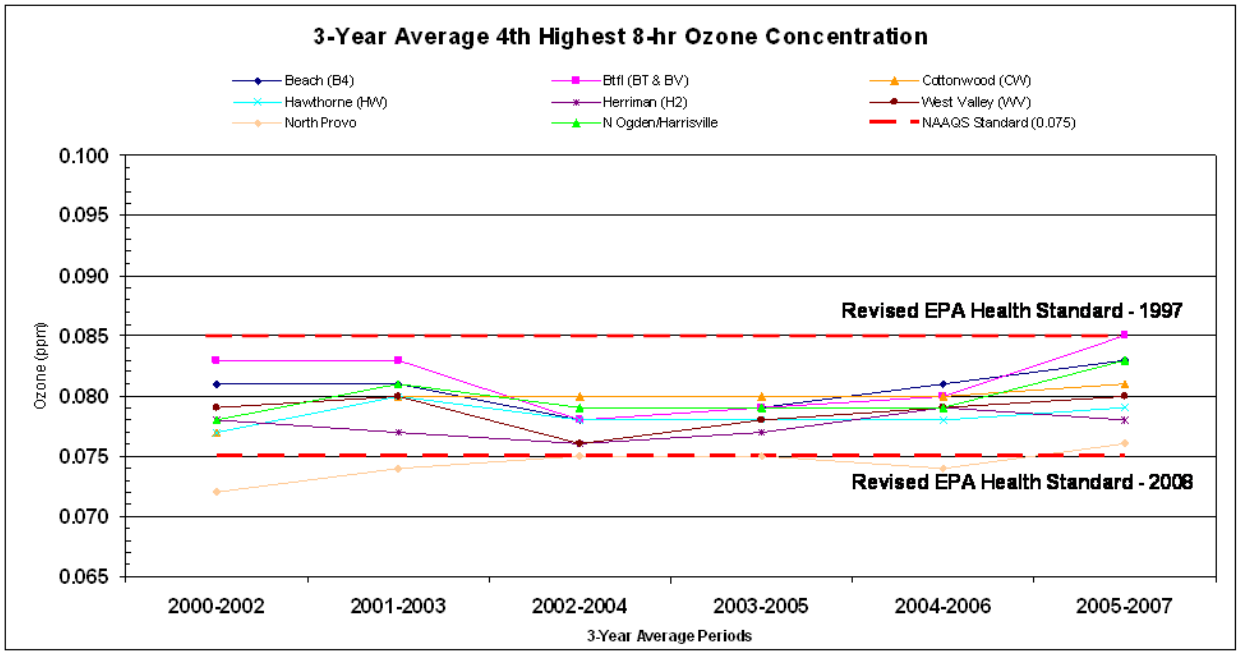

Figure C. Monitored Ozone With Revised Health Standard. Formal Non-attainment Recommendation Pending 3/12/2009.

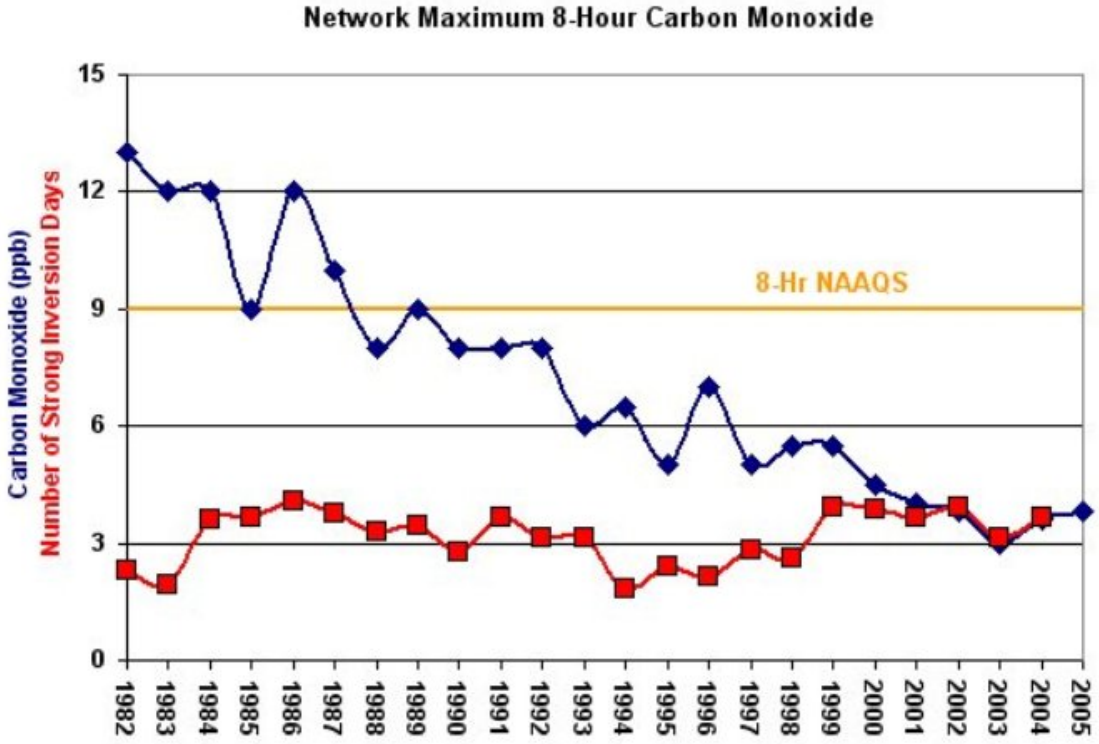

Figure D. Long-term Carbon Monoxide Trend Along the Wasatch Front.

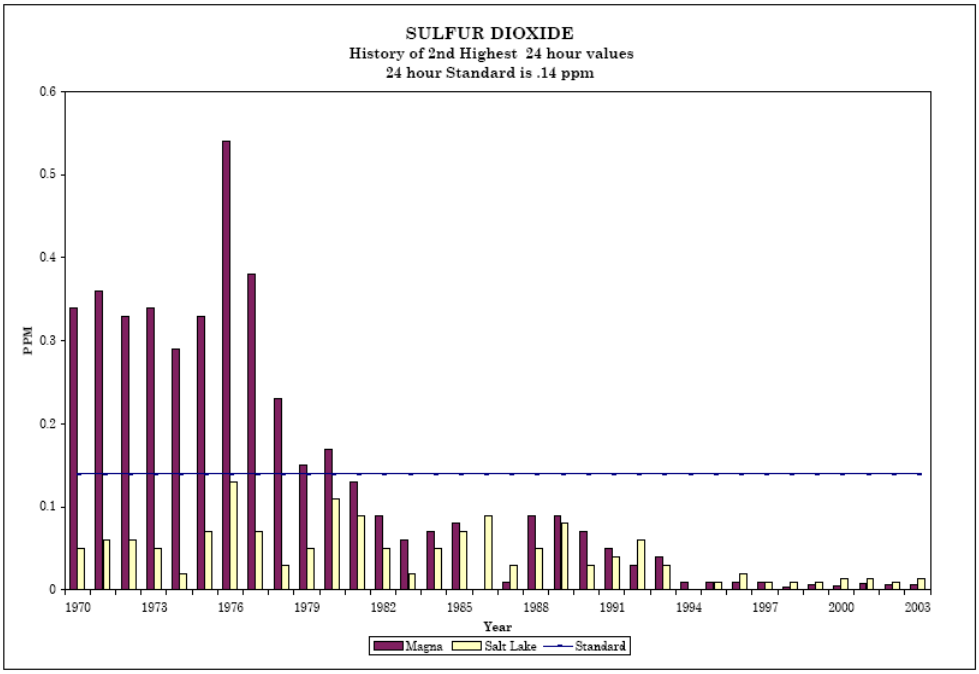

Figure E. Thirty Year Trend in Monitored SO2.

Annual Emissions Inventory

One method used by DAQ to assess the amount of pollution going into the air is the statewide inventory. The inventory is created to estimate pollution coming from four major categories. These include large industries, automobiles, a combination of small commercial sources and household activities, and natural sources. Table A shows inventory projections for the ten-county area of northern Utah projected to the year 2030. The table also compares these same projections created for the 1997 Baseline Scenario and the 2003 Baseline Scenario.

One of the difficulties in comparing emission projections over time is that emission estimation methods and emission factors are continually changing and improving. This may cause emissions to appear higher or lower from one year to the next without any actual emission change. One further difference in the reporting of the 2008 baseline estimate compared to the previous two is the reporting of anthropogenic, or human-caused, emissions only. This leaves out the emissions from wild fires and from a category known as biogenics which are emissions from vegetation such as trees, plants, and crops.

Table A shows four of the five emission categories projected to decline or stay relatively constant over the next twenty five years. The one category that shows a very modest growth in emissions is coarse particulate matter or PM10. This category does include the fine fraction as well, which is PM2.5. However, it is important to distinguish between the *primary* fine particulate, which is what this category in the inventory represents, and *secondary* fine particulates. Primary particulates consist mainly of dust in the air from dirt roads, construction sites and even desert dust storms. Dense smoke from forest fires is also made up of a lot of primary particulates.

It is the secondary particulates which account for the majority of what we measure in the air at our monitoring stations during the winter time. The amount of secondary fine particulates are influenced more by the emissions of NOx and VOC than by the primary emissions. Table A shows that emissions from sources that produce NOx and VOC are either declining or remaining flat into the future. It is also important to keep in mind that NOx and VOC are the main pollutants in the formation of ozone. Consequently the reduction in these emissions is helpful in our ability to maintain the public health for both ozone and PM2.5.

Air Pollution Emissions for the Greater Wasatch Area, 2005 to 2030

Davis, Salt Lake, Utah, Weber, Box Elder, Juab, Morgan, Summit, Tooele and Wasatch Counties

	2008 Baseline Emissions by Pollutant **					Total Emissions by Pollutant		
Year	Particulate Matter PM10	Sulfur Dioxide SO2	Nitrogen Oxides NOX	Volatile Organic Compounds VOC	Carbon Monoxide CO	1997 Baseline	2003 Baseline	2008 Baseline
2005	129	34	243	230	1,653	3,295	2,439	2,289
2006	130	35	240	224	1,601	3,366	2,466	2,230
2007	135	34	236	221	1,551	3,444	2,347	2,178
2008	137	34	228	218	1,517	3,525	2,277	2,134
2009	138	34	220	213	1,481	3,607	2,262	2,087
2010	139	32	207	210	1,446	3,695	2,244	2,034
2011	140	32	199	206	1,412	3,770	2,236	1,989
2012	141	31	190	203	1,378	3,849	2,227	1,943
2013	142	31	181	199	1,343	3,933	2,222	1,896
2014	143	31	178	200	1,352	4,018	2,223	1,903
2015	145	31	176	201	1,360	4,104	2,228	1,913
2016	147	32	174	202	1,370	4,183	2,232	1,925
2017	148	32	172	203	1,379	4,263	2,239	1,934
2018	150	33	170	204	1,387	4,344	2,245	1,943
2019	152	33	167	205	1,395	4,427	2,254	1,952
2020	153	33	165	206	1,403	4,511	2,265	1,961
2021	155	34	163	206	1,412		2,283	1,969
2022	157	34	160	207	1,420		2,303	1,978
2023	158	34	158	208	1,428		2,324	1,987
2024	160	35	155	209	1,436		2,347	1,995
2025	162	35	153	210	1,444		2,371	2,004
2026	163	35	151	211	1,453		2,396	2,013
2027	165	36	148	212	1,461		2,422	2,022
2028	167	36	146	213	1,469		2,446	2,031
2029	169	36	144	214	1,478		2,473	2,040
2030	170	36	141	215	1,486		2,499	2,049
AARC	1.13%	0.29%	-2.15%	-0.28%	-0.42%	1.99%	0.10%	-0.44%

AARC - Average Annual Rate of Change, 2005 to 2030
Note: Data reflects an annual average tons per day
Source: Utah Division of Air Quality

**** Anthropongenic (human-caused) emissions only**
This inventory does not include natrural emissions such as those caused by wild fires and vegetation and trees

Table A. 2008 Baseline Air Emissions Inventory.

Major Issues and Findings

There has clearly been a reduction in pollutant levels along the Wasatch Front since the early 1990s. These reductions have come from all major sectors of the economy by reducing process emissions from large industrial sources, cleaner and more efficient automotive technology, and more efficient commercial and residential products which simply require less energy for their use. However, growth in population, the economy and vehicle miles traveled has been robust during this same period and future projections foresee growth continuing. So, while pollution per capita may be on a downward trend, the fact of more people making demands on natural resources, including the capacity of the local airshed, is a challenge that will take creativity and perseverance to solve.

In addition to the opposing forces of less per capita pollution offset by growing population and economic activity, a second and more immediate challenge faces northern Utah in the attainment of air quality health standards. The EPA-mandated air quality standards for ozone and PM2.5 have become more stringent since the last baseline scenario was published in 2003. The more stringent standards have put counties that had either returned to compliance with those standards or had never been out of compliance, into the non-compliance category.

As Utah and other states assess their impact on and options for mitigating climate change, federal legislation is likely to add to the air quality regulatory environment. Consequently, there are very real challenges that the state of Utah, especially the Wasatch Front and rapidly growing parts of the State, will be dealing with in the years to come.

NOTES:

Demographics and Economics

2008 Baseline

2008 Baseline: Demographics and Economics

The central assumptions, data, projects, and constraints contained in 2008 Baseline originate from key planning documents that are broad in scope, but encompass the most important features of more detailed plans prepared by city, county, and state entities. For presentation purposes, the baseline is presented by subject area with a brief description of the most important points in three areas: (1) sources and assumptions, (2) characteristics and trends, and (3) major issues and findings.

Source and Assumptions
Long-term population, employment, and household projections for Utah's counties are produced by the Governor's Office of Planning and Budget. These projections inform the planning processes of state government, local government, and private entities. The fundamental logic of the modeling process follows the general points listed below. These points are followed by the main assumptions.

Logic

--Changes in the size and composition of a region's population depend upon: (1) the size and demographic characteristics of the initial population, (2) the annual number of births, (3) the annual number of deaths, and (4) the number and characteristics of persons moving into and out of the region.

--Migration into or out of a region occurs because of employment opportunities and other factors such as the desire to attend school, serve a religious mission, retire, or accompany other members of a household who are migrating for any of these or other reasons. Employment-related migration is a function of the number and types of jobs created in the region and the availability of local labor supply to fill these jobs. In-migration occurs when there are not enough people in the labor force to fill jobs. Out-migration occurs when there are not enough jobs to support the population.

Assumptions
--Fertility rates (a calculation of age-specific birth rates) are projected to remain constant at 2.5 children per woman of childbearing age. Fertility rates for both Utah and the nation have fallen since the 1960s, but have been relatively stable for many years. Utah is expected to continue to have one of the highest fertility rates in the nation.

--Survival rates are assumed to increase along with projected U.S. survival rates to 2060. Life expectancy in Utah and the nation has increased over the past three decades. These trends are expected to continue in the future, though at a lower pace. Utahns are expected to continue to live longer than their national counterparts.

--Labor force participation rates are assumed to trend with projected U.S. rates through 2060.

--Utah's economy is projected to continue to grow more rapidly than that of the nation and its industrial structure is assumed to mimic the nation. These assumptions are based on analysis of historic trends, national projections, and local technical input on 23 detailed industries. For the long-term, 2000 to 2060, basic employment growth was assumed to be strong enough to generate continued in-migration.

Characteristics and Trends
Utah’s population is currently 2.70 million people, with over 75 percent concentrated along the Wasatch Front in Salt Lake, Utah, Davis and Weber Counties. By the year 2060, the population is projected to more than double to 6.84 million, but the share concentrated along the Wasatch Front will fall to 64%. Washington and Iron Counties in the south, and Cache and Box Elder in the north will experience dramatic increases in population, and will be home to an increasing share of the state’s population. Overall, the state’s annual rate of population growth will be about twice the national rate. Based on these projections, Utah’s population will increase by an average of 80,000 people per year, or one person every 6 minutes. Natural increase, births less deaths, is projected to account for 65 percent of the new growth and net in-migration will average almost 28,000 people per year.

The number of households in Utah is projected to increase from almost 707,000 in 2000 to 2,554,000 in 2060. About 32,000 new households are projected to be created each year, which is a rate of 2.2 percent per year.

Total jobs in Utah are projected to increase from 1.39 million in 2000 to 3.82 million in 2060. This is an increase of 1.7 percent per year compared to a rate of 0.6 percent for the nation. The Education and Health Services Industry is projected to increase at a faster average rate than any other major industry. Employment in natural resources and mining is projected to decrease over the next five decades.

Major Issues and Findings

The anticipated changes in the population and economy of Utah introduce several major issues and findings that are relevant to the understanding of the baseline and the development of alternative scenarios. These include:

Demographics

The population in Utah is projected to increase from 2.70 million to 6.84 million people in 2060, or 1 person every 6 minutes.

The current and projected rates of population growth, which are approximately twice the national average, are not unprecedented in terms of Utah's recent history, nor unique among the Intermountain states. Utah's historical rate of population growth from 1950 to 2000 averaged 2.4 percent per year. The projected rate from 2000 to 2060 is 1.9 percent.

The primary reason for Utah's rapid and stable population growth is the many large families in the state. Utah has a relatively young population and therefore a disproportionately large share of women in childbearing years. In addition, Utah's fertility rate of 2.5 children per woman is the highest in the nation; the national rate is 2.1 children per woman. These two factors result in a relatively large number of births.

Utah's preferences for large families and healthy lifestyles result in a high rate of indigenous population growth. During the 60 year period, approximately 65% of the state's population growth is projected to originate from residents' own children and grandchildren. Residents in Utah have higher life expectancies then their national counterparts. Higher survival rates and a younger population result in a relatively smaller number of deaths per capita.

Utah will average almost 80,000 new residents a year between now and 2060. This is an annual population growth of roughly the current size of Ogden. These new residents will require government services and infrastructure. They will also increase the levels of congestion and place tremendous pressures on open space, farmlands, and air quality.

According to the 2008 Baseline, homes and apartments for about 32,000 new households will need to be built every year.

In a society where people have the constitutional right to move freely among states, in and out migration is a given. It has never been the goal of the state to have net in-migration, but leaders have tried to foster an economy that provides economic opportunity to current and future residents. Attempts to limit in-migration by restricting economic development opportunities are likely to negatively impact economic prospects for residents as well.

Economics

The economy in Utah is projected to remain strong during the projections period. This is based on analysis of the historic and national trends in 23 industries, as well as local expertise. Job growth is projected to be sufficient to provide for Utah's rapidly growing labor force and will even attract in-migrants through out the projections period. Net in-migration is projected to average almost 28,000 new residents per year.

Table A: Economic and Demographic Summary

	July 1 Population Total Population		Total Employment		Households		
Year	Total	Growth Rate	Total	Growth Rate	Total	Growth Rate	Average Size
2000	2,246,553		1,387,847		706,978		3.12
2010	2,927,643	2.7%	1,796,544	2.6%	958,165	3.1%	3.00
2020	3,652,547	2.2%	2,197,122	2.0%	1,242,459	2.6%	2.89
2030	4,387,831	1.9%	2,563,153	1.6%	1,556,949	2.3%	2.77
2040	5,171,391	1.7%	2,972,731	1.5%	1,876,862	1.9%	2.70
2050	5,989,089	1.5%	3,391,591	1.3%	2,200,285	1.6%	2.67
2060	6,840,187	1.3%	3,817,552	1.2%	2,554,061	1.5%	2.62

Notes:

1. Includes self-employed and others not included in nonagricultural employment.
2. All numbers are dated July 1.
3. Average Household Size is based on the household population which does not include Group Quarters Population.

Source: Governor's Office of Planning and Budget, 2008 Baseline Projections

Table B: Pop. Projections by County and District

County	2000	2010	2020	2030	2040	2050	2060	AARC 200-2060
Beaver	6,023	6,674	9,178	13,293	17,418	21,971	27,298	2.6%
Box Elder	42,860	49,953	59,215	70,393	84,034	102,910	126,925	1.8%
Cache	91,897	117,758	149,322	181,921	223,442	274,527	331,594	2.2%
Carbon	20,396	20,317	24,843	27,106	27,447	28,275	29,338	0.6%
Daggett	933	992	1,076	1,155	1,231	1,351	1,520	0.8%
Davis	240,204	323,087	369,467	390,159	407,238	424,318	441,398	1.0%
Duchesne	14,397	17,336	20,130	21,533	22,561	24,586	27,499	1.1%
Emery	10,782	10,698	12,673	13,119	12,854	13,313	13,791	0.4%
Garfield	4,763	5,092	5,843	6,823	7,656	8,738	10,356	1.3%
Grand	8,537	9,693	11,007	11,827	12,559	13,781	15,542	1.0%
Iron	34,079	50,601	68,315	87,644	110,257	137,240	168,383	2.7%
Juab	8,310	10,519	14,158	18,004	22,950	29,728	38,446	2.6%
Kane	6,037	6,893	8,746	10,394	12,034	14,267	17,276	1.8%
Millard	12,461	13,863	16,868	19,682	22,754	28,538	37,549	1.9%
Morgan	7,181	10,589	16,756	24,478	34,407	48,662	68,246	3.8%
Piute	1,436	1,396	1,526	1,690	1,817	2,035	2,404	0.9%
Rich	1,955	2,235	2,606	2,842	3,040	3,473	4,147	1.3%
Salt Lake	902,777	1,079,679	1,273,929	1,468,615	1,671,627	1,853,891	2,004,773	1.3%
San Juan	14,360	15,053	15,319	16,653	18,051	20,083	23,174	0.8%
Sanpete	22,846	27,557	31,519	36,120	40,196	45,624	53,066	1.4%
Sevier	18,938	21,249	23,583	25,177	26,775	29,828	33,740	1.0%
Summit	30,048	42,320	61,738	83,252	104,620	131,594	165,029	2.9%
Tooele	41,549	63,777	91,849	119,871	152,734	192,007	235,839	2.9%
Uintah	25,297	31,379	37,950	40,638	42,536	46,445	51,300	1.2%
Utah	371,894	560,511	727,718	907,210	1,092,450	1,261,653	1,438,300	2.3%
Wasatch	15,433	24,950	36,181	48,693	64,631	86,393	113,910	3.4%
Washington	91,104	168,078	279,864	415,510	559,670	709,674	860,378	3.8%
Wayne	2,515	2,698	2,912	3,395	3,879	4,556	5,608	1.3%
Weber	197,541	232,696	278,256	320,634	370,523	429,628	493,358	1.5%
MCD								
Bear River	136,712	169,946	211,143	255,156	310,516	380,910	462,666	2.1%
Central	66,506	77,282	90,566	104,068	118,371	140,309	170,813	1.6%
Mountainland	417,375	627,781	825,637	1,039,155	1,261,701	1,479,640	1,717,239	2.4%
Southeast	54,075	55,761	63,842	68,705	70,911	75,452	81,845	0.7%
Southwest	142,006	237,338	371,946	533,664	707,035	891,890	1,083,691	3.4%
Uintah Basin	40,627	49,707	59,156	63,326	66,328	72,382	80,319	1.1%
Wasatch Front	1,389,252	1,709,828	2,030,257	2,323,757	2,636,529	2,948,506	3,243,614	1.4%
State of Utah	2,246,553	2,927,643	3,652,547	4,387,831	5,171,391	5,989,089	6,840,187	1.9%

Notes: 1. AARC is average annual rate of change; 2. Populations are dated July 1. Source: GOPB, 2008 Baseline Projections

Table C: Employment by County and District

County	2001	2010	2020	2030	2040	2050	2060	AARC 2001-2060
Beaver	3,063	3,580	5,304	7,161	9,350	11,812	14,267	2.6%
Box Elder	24,066	30,651	36,285	41,573	47,914	54,601	61,382	1.6%
Cache	54,276	73,624	94,277	113,986	137,065	161,587	187,139	2.1%
Carbon	11,277	13,631	14,464	15,164	16,000	16,754	17,488	0.7%
Daggett	598	734	771	801	841	881	918	0.7%
Davis	125,330	169,750	200,044	209,651	215,040	220,632	226,237	1.0%
Duchesne	8,041	11,015	11,689	12,228	12,899	13,602	14,089	1.0%
Emery	5,332	7,236	7,734	8,180	8,704	9,198	9,619	1.0%
Garfield	3,049	3,776	4,286	4,769	5,377	6,025	6,636	1.3%
Grand	5,761	6,996	7,498	7,930	8,500	9,078	9,635	0.9%
Iron	19,387	27,470	37,391	46,920	58,035	70,096	82,610	2.5%
Juab	3,946	5,977	8,097	10,053	12,281	14,677	17,266	2.5%
Kane	3,800	5,011	6,028	6,986	8,133	9,343	10,580	1.8%
Millard	6,003	7,480	8,690	10,003	11,439	13,145	14,909	1.6%
Morgan	3,135	4,212	7,676	11,497	15,918	20,834	25,870	3.6%
Piute	620	749	772	788	812	852	896	0.6%
Rich	1,106	1,443	1,513	1,571	1,652	1,744	1,800	0.8%
Salt Lake	663,866	790,393	897,257	994,647	1,112,712	1,233,261	1,359,109	1.2%
San Juan	5,309	6,189	7,075	7,922	8,958	10,058	11,126	1.3%
Sanpete	10,434	11,078	13,157	15,282	17,619	20,160	22,810	1.3%
Sevier	10,004	11,996	13,233	14,370	15,803	17,324	18,941	1.1%
Summit	24,408	37,816	46,218	54,126	63,462	73,293	83,499	2.1%
Tooele	16,172	24,998	37,469	50,980	67,842	89,246	114,966	3.4%
Uintah	14,129	20,799	21,932	22,822	23,876	24,950	25,654	1.0%
Utah	202,957	283,915	373,848	459,981	560,058	666,085	777,851	2.3%
Wasatch	7,816	13,156	21,597	29,858	39,339	49,576	60,331	3.5%
Washington	49,445	91,146	154,566	220,700	280,387	329,210	365,981	3.5%
Wayne	1,758	1,752	1,874	1,999	2,163	2,377	2,581	0.7%
Weber	108,233	129,971	156,377	181,205	210,552	241,190	273,362	1.6%
MCD								
Bear River	79,448	105,718	132,075	157,130	186,631	217,932	250,321	2.0%
Central	32,765	39,032	45,823	52,495	60,117	68,535	77,403	1.5%
Mountainland	235,181	334,887	441,663	543,965	662,859	788,954	921,681	2.3%
Southeast	27,679	34,052	36,771	39,196	42,162	45,088	47,868	0.9%
Southwest	78,744	130,983	207,575	286,536	361,282	426,486	480,074	3.1%
Uintah Basin	22,768	32,548	34,392	35,851	37,616	39,433	40,661	1.0%
Wasatch Front	916,736	1,119,324	1,298,823	1,447,980	1,622,064	1,805,163	1,999,544	1.3%
State of Utah	1,393,321	1,796,544	2,197,122	2,563,153	2,972,731	3,391,591	3,817,552	1.7%

Notes: AARC is average annual rate of change

Source: GOPB, 2008 Baseline Projections

Table D: Employment Projections by Major Industry for Utah

Industry	2001	2010	2020	2030	2040	2050	2060
Natural Resources & Mining	32,285	33,784	31,895	30,205	27,913	24,866	21,959
Construction	95,865	125,073	152,832	175,057	208,784	253,530	286,671
Manufacturing	127,589	125,457	149,300	171,244	192,007	206,627	233,596
Trade, Trans., Utilities	259,986	329,660	371,764	389,524	401,476	410,155	460,302
Information	36,549	39,745	45,740	48,738	51,308	52,648	59,442
Financial Activity	130,511	169,937	199,893	228,090	260,031	292,063	328,104
Professional & Business Services	181,050	248,414	314,536	366,742	419,713	466,846	526,982
Education & Health Services	134,239	206,051	291,839	403,992	531,208	650,730	736,062
Leisure & Hospitality	115,486	167,078	209,541	254,343	311,629	383,331	432,901
Other Services	72,475	98,996	120,850	144,154	171,272	202,782	228,999
Government	207,286	252,349	308,932	351,064	397,390	448,013	502,534
Total	1,393,321	1,796,544	2,197,122	2,563,153	2,972,731	3,391,591	3,817,552

Notes:

1. Numbers in this table may differ from other tables due to different data sources.

2. The 2000 number is not available in a NAICS consistent format.

Source: Governor's Office of Planning and Budget, 2008 Baseline Projections

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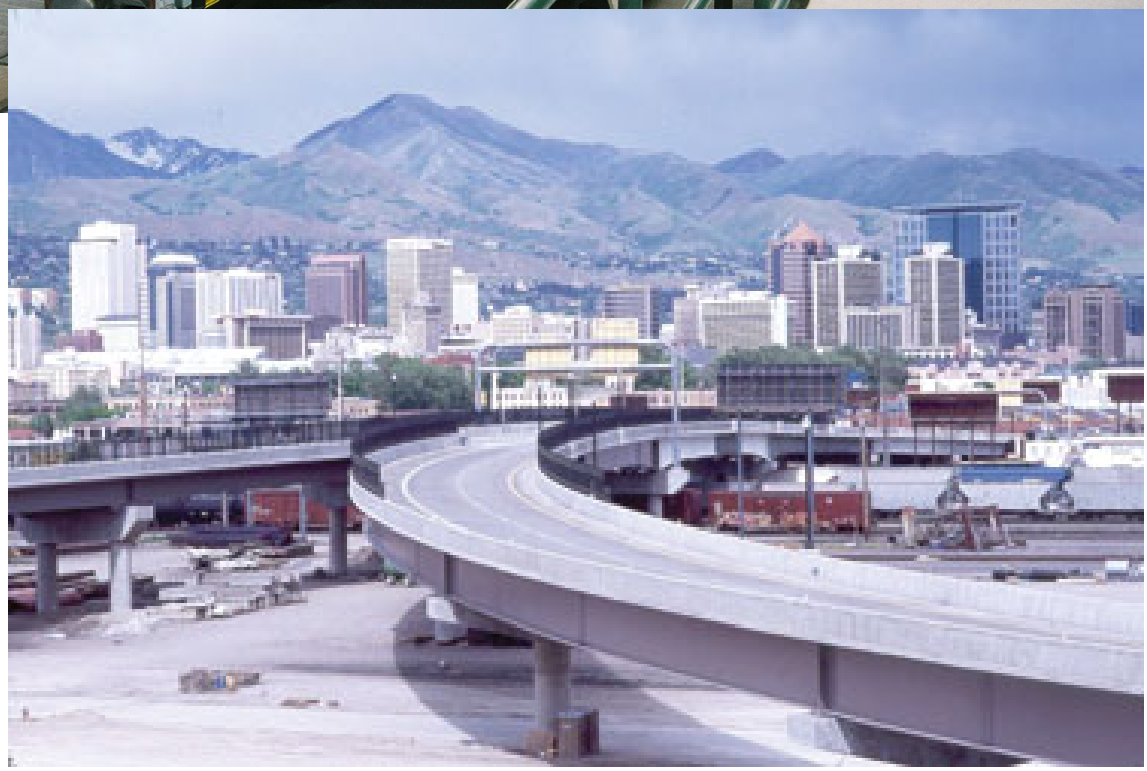


Assumptions
Projections of vehicle miles of travel (VMT) are based upon traffic forecasts at the county level.

--Where countywide travel demand models are available, year 2030 VMT forecasts were provided by the respective MPOs (Metropolitan Planning Organizations) and are based upon analysis of trip generation, trip distribution, mode choice, route assignment.

--Forecasts of VMT in counties without travel demand models are based upon either linear regression of population to VMT or a straight line forecast based upon historic VMT from 1996 through 2006.

--Regression forecasts of VMT to projected population were used in counties that do not have interstate highways.

--Straight line projections were used in counties that have interstate highways and relatively low populations.

Association of Governments (AOG).
There are seven regional Associations of Government in Utah. The numbers in this report are reflected by AOG region.

AOG Regions in Utah:

Wasatch Front Regional Council (WFRC)—Salt Lake, Tooele, Davis, Morgan and Weber Counties

Bear River AOG (BRAG)—Box Elder, Cache and Rich Counties

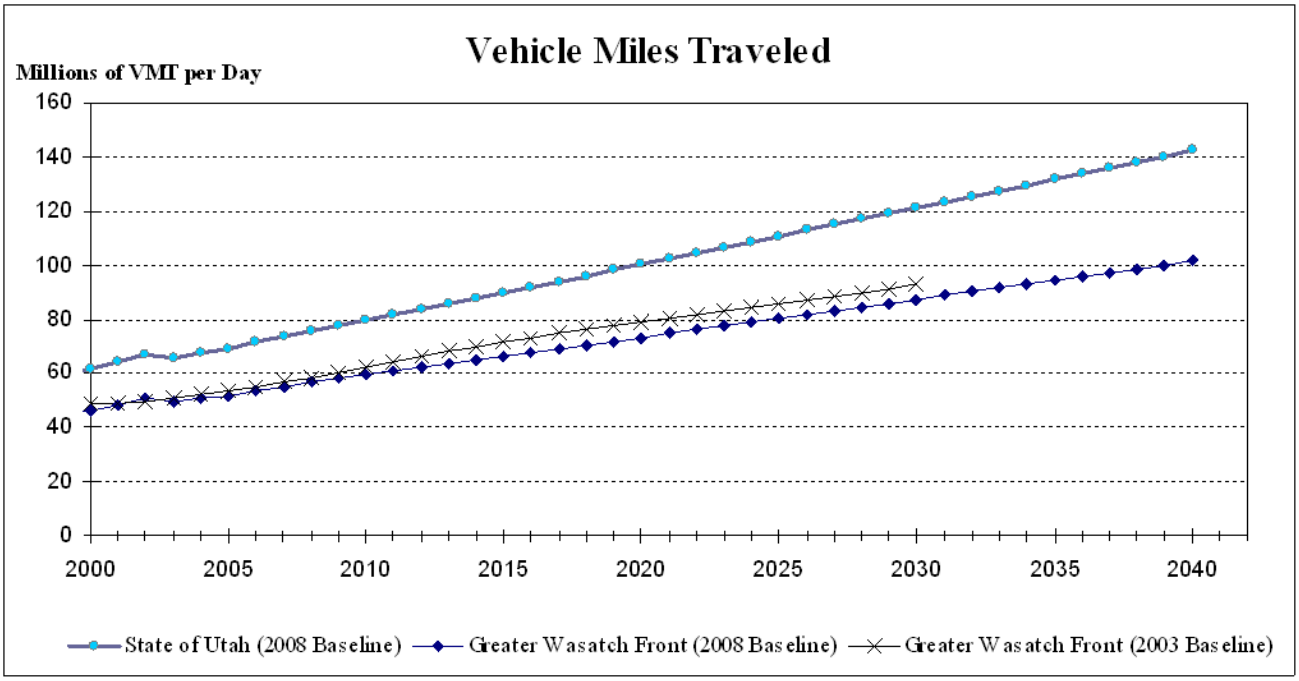
Mountainland AOG—Utah, Summit and Wasatch Counties

Uintah Basin AOG—Uintah, Duchesne, and Daggett Counties

Southeastern Utah AOG—Carbon, Emery, Grand and San Juan Counties.

Six County AOG—Juab, Millard, Sanpete, Sevier, Wayne, and Piute Counties

Five County AOG—Beaver, Iron, Washington, Garfield, and Kane Counties



Trends – Findings

Statewide daily vehicle miles of travel are forecast to approximately double by the year 2040 from 71 million miles in 2006 to 142 million miles in 2040. Daily vehicle miles of travel within the Greater Wasatch Front are projected to increase from 53 million miles in 2006 to 101 million miles in 2040.

The largest increase in VMT is projected to occur within the WFRC region. The Mountainland AOG and Five County AOG are also projected to experience significant VMT growth.

Annual rate of VMT growth is forecast to be the highest in the Five County AOG primarily due to growth within Washington County. The Mountainland AOG is also projected to have an annual VMT growth rate that is higher than the statewide average. Statewide VMT is forecast to grow faster than population

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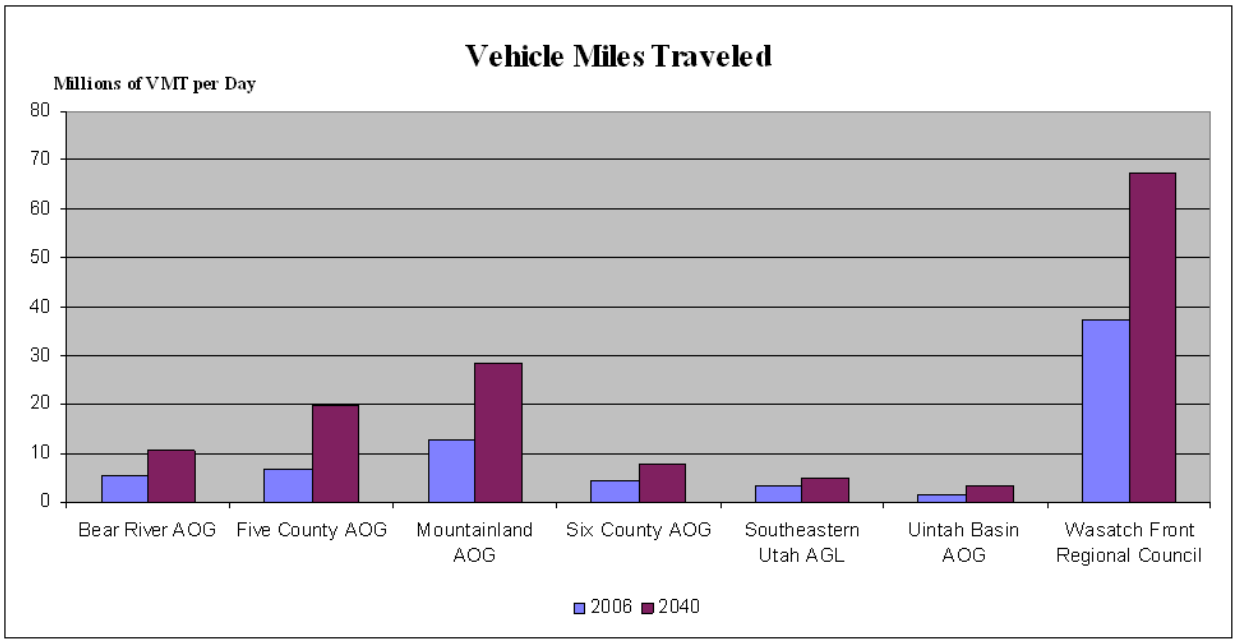

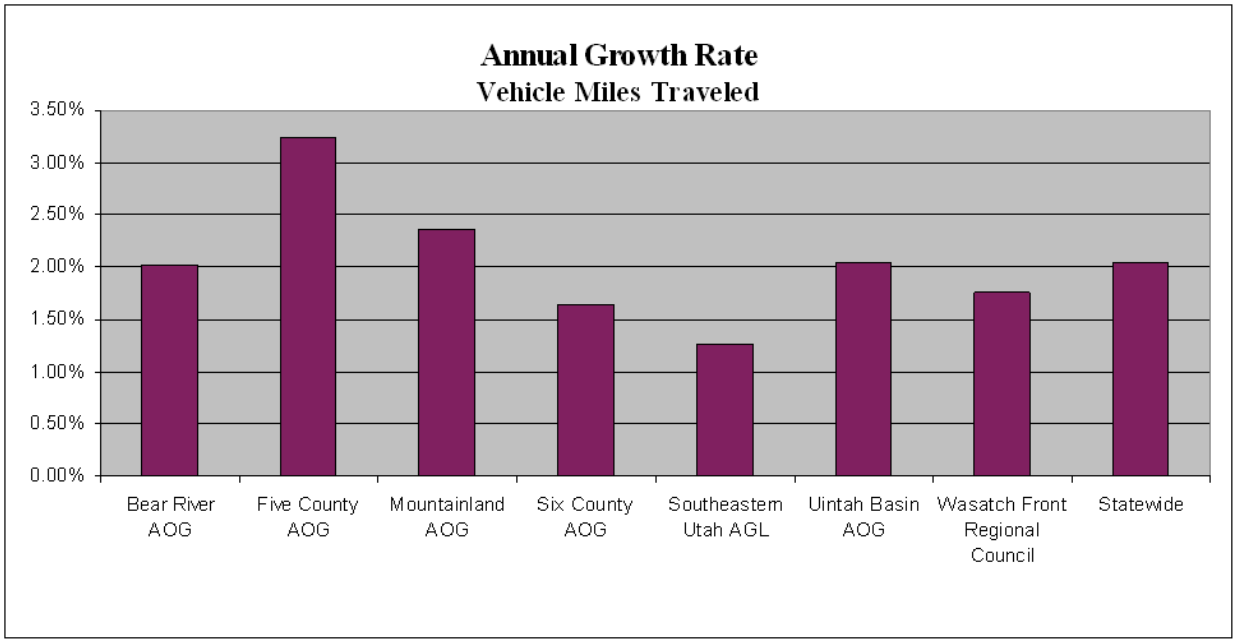

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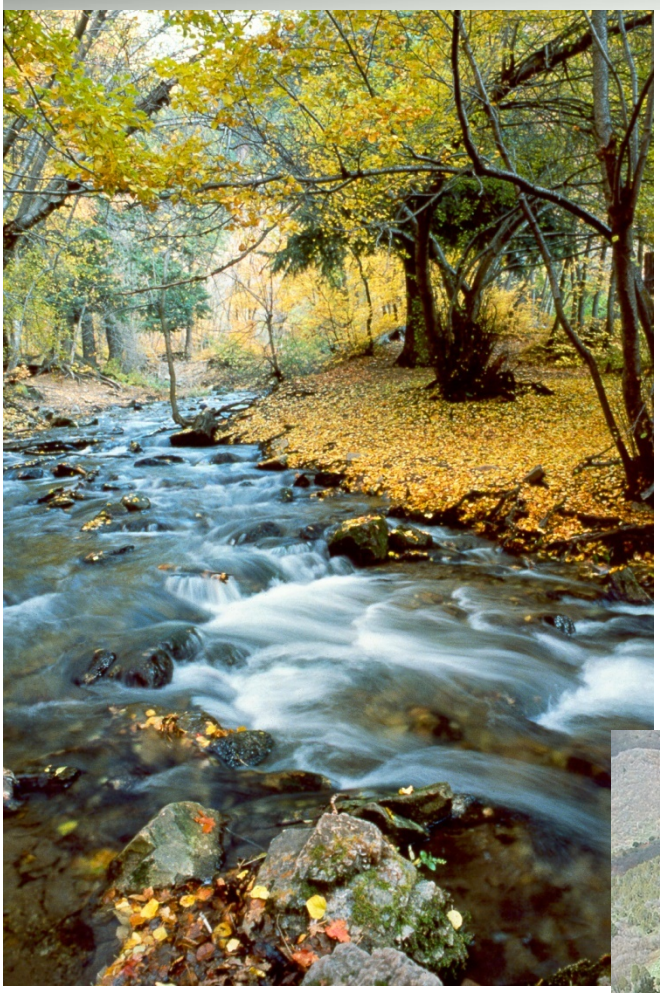


Source and Assumptions

The Utah Division of Water Resources (DWRe) works with water providers, municipalities, and other local entities to meet the water needs of the public. Water supply and demand projections are prepared by DWRe utilizing the Utah Water Demand/Supply Model. DWRe also prepares the State Water Plan which directs the orderly and timely planning, conservation, development and protection of Utah's water resources. The projections of municipal and industrial (M&I) water supply and use prepared by DWRe, in consultation with local water entities, help to inform decisions regarding water infrastructure and new water development. The fundamental logic of the modeling process used to make these projections corresponds to the following general points. These points are followed by the main assumptions.

Logic

• A modeling approach formulates individual demand estimates for water service entities.

• Residential demand for water is a function of population, persons per household, lot size, secondary system usage, turf evapotranspiration and season of the year.

• Total water supply for individual water service entities is tabulated from each of their sources, such as surface water, wells and/or springs.
• The population, number of persons per household, water conservation and irrigation efficiency are all inputs to the forecasting process.

Assumptions

• All existing developed M&I water supplies will continue to be available.
• The Central Utah Project will be completed as now envisioned.
• Additional groundwater will be developed.
• Considerable infrastructure development, including water treatment plants and distribution systems, will be developed.
• New secondary systems will convert agricultural water to secondary use as agricultural land becomes urbanized.
• Lake Powell Pipeline will be developed.
• Bear River water will be developed in some form.
• M&I Per capita water use will decline because of low flow plumbing, a gradual increase in xeriscaping by the new residential population, and price increases. None of these changes are considered to be major changes in human behavior, but rather a continuation of current trends.

Characteristics and Trends

Greater Wasatch Area

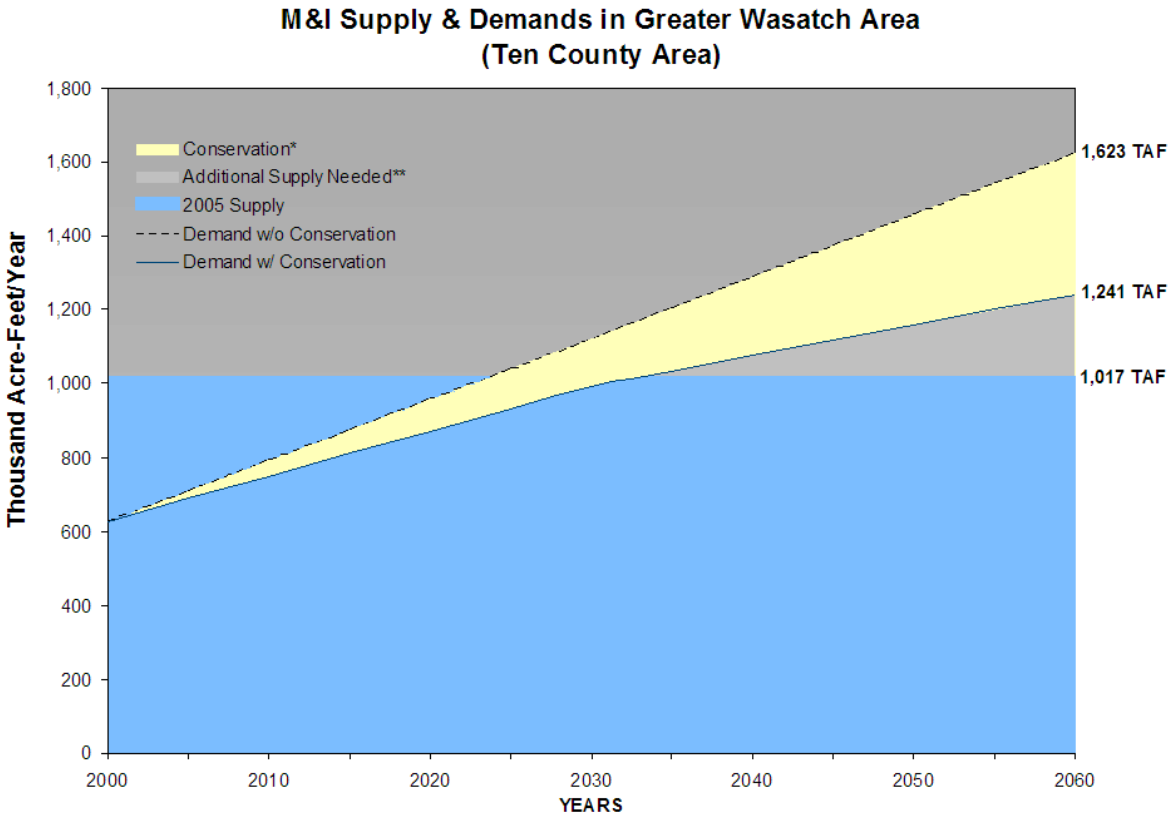
The Greater Wasatch Area consists of the ten counties in and around the Wasatch Front: Box Elder, Davis, Juab, Morgan, Salt Lake, Summit, Tooele, Utah, Wasatch, and Weber counties. M&I water demand in the Greater Wasatch Area is expected to increase steadily from 715,000 acre-feet in 2005 to approximately 992,000 acre-feet in 2030. M&I water supplies will also increase as new supplies are developed to meet this demand. Water supplies available in 2005 amount to approximately 1,017,000 acre-feet, which will meet demands until approximately 2035. Additional supplies will also become available by that time, helping ensure a reliable supply. However, in order for this to happen, per capita consumption must decline and water suppliers will need to negotiate agreements and build distribution systems to move water from one system to another as necessary.

Utah's Dixie

Utah's Dixie consists of Iron and Washington counties. M&I water demand in Utah's Dixie is expected to increase steadily from 61,000 acre-feet in 2005 to approximately 192,000 acre-feet in 2030. M&I water supplies available in 2005 amount to approximately 99,000 acre-feet, which is sufficient to meet demands until approximately 2012. In order to meet needs to 2030, other water developments will be necessary, including the Lake Powell Pipeline. Another key component to meeting future needs will be a reduction in per capita consumption and the negotiation of agreements and building of distribution systems to move water from one system to another as necessary.

Cache County

M&I water demand in Cache County is expected to increase steadily from 39,000 acre-feet in 2005 to approximately 55,000 acre-feet in 2030. M&I water supplies will also increase as new supplies are developed to meet this demand. M&I water supplies



*25% Conservation of public community system's supply only by the year 2050.
**Additional water development needed with conservation to ensure a reliable supply.

available in 2005 amount to approximately 54,000 acre-feet, which will meet demands until approximately 2030. Additional supplies will also become available by that time, helping ensure a reliable supply. However, in order for this to happen, per capita consumption must decline and water suppliers will need to negotiate agreements and build distribution systems to move water from one system to another as necessary.

Other Areas

In the remaining counties in Utah, M&I water demand will increase at a slower pace from 141,000 acre-feet in 2005 to approximately 165,000 acre-feet in 2030. Total M&I water supplies available in 2005 are more than sufficient in most counties to meet anticipated demands beyond 2030. With an associated reduction in per capita demand, these supplies will be adequate even longer.

Major Issues and Findings

• Water is not a constraint to growth in the Greater Wasatch Area, Cache County, and most other counties through 2030. However, without the construction of the Lake Powell Pipeline, water will be a limiting factor on growth in Utah's Dixie.

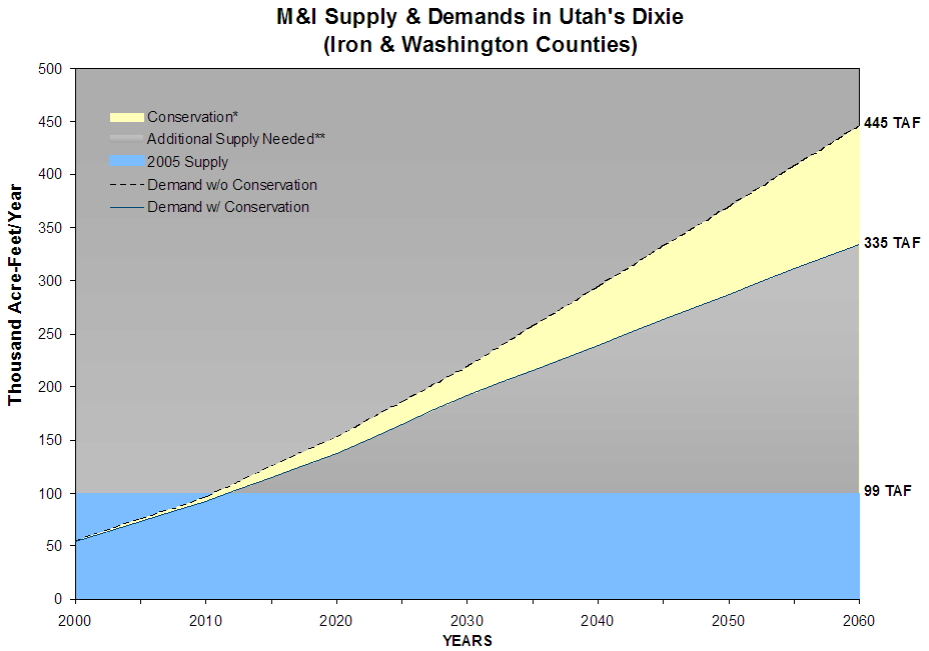
• In some areas, water must be shared across jurisdictional lines and additional distribution systems will need to be built in order to meet demands.

• Per capita water use of public water supplies during 2005 was estimated to be 260 GPCD. This is 12% lower than the 290 GPCD estimated by the division for the baseline year of 2000. The state's goal is to reduce per capita water use by at least 25% (220 GPCD) by 2050.

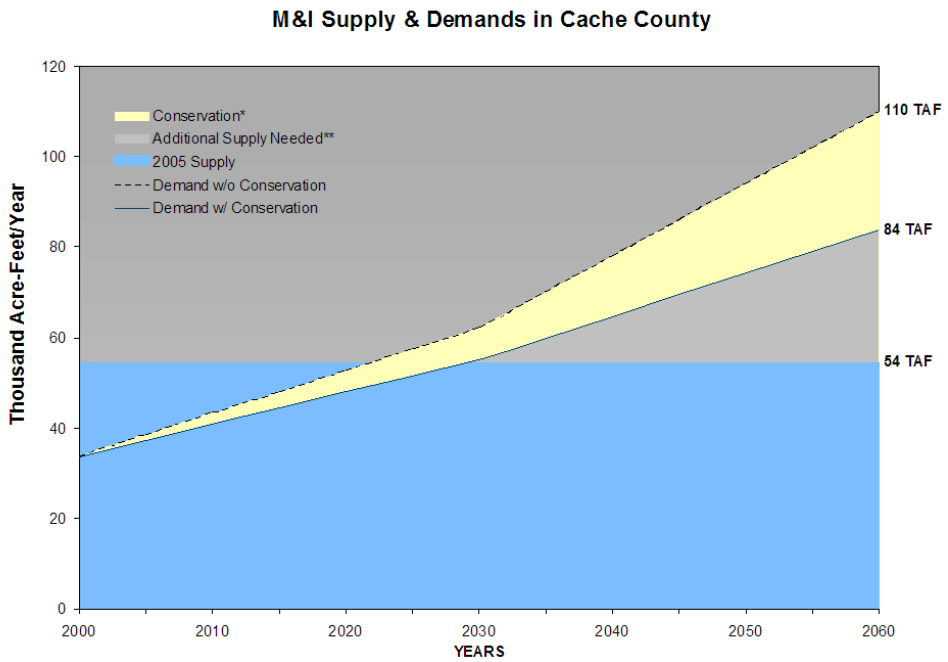
• The Utah Division of Water Resources anticipated a 12.5% reduction in water use between 2000 and 2025, from 290 GPCD to 255 GPCD. Since use in 2005 was 260 GPCD, most of the anticipated reduction appears to have already been achieved.

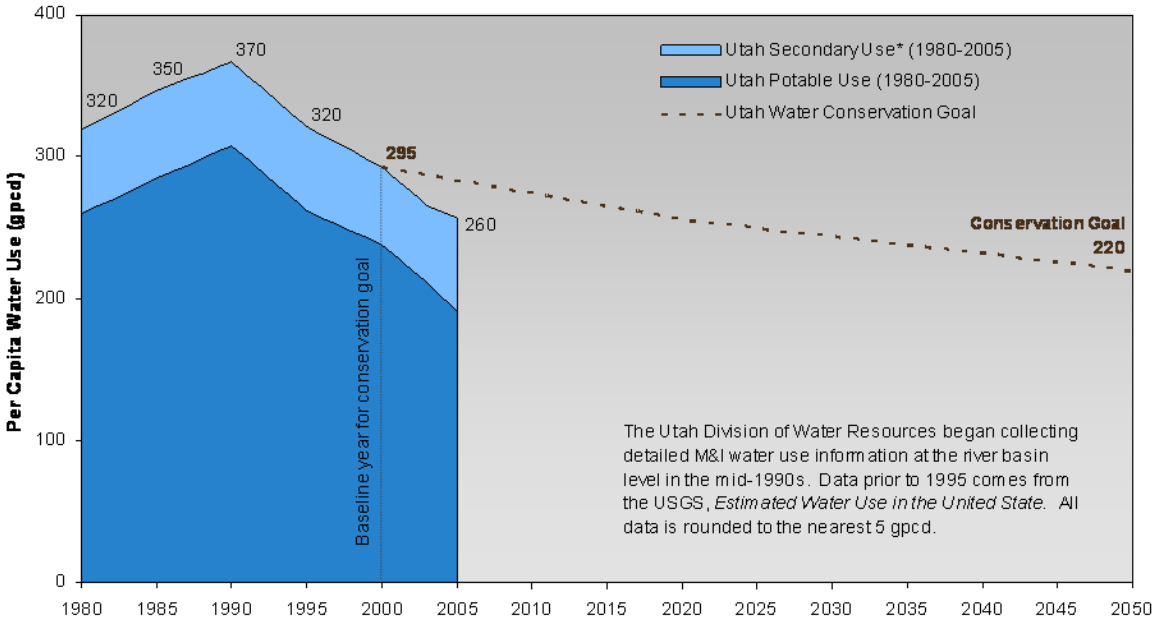
• Utah water officials are unsure whether the dramatic decline in water use over the past few years is a short term response to the drought which occurred from 1999-2004 or the beginning of a long term trend. Clearly the drought and the "slow the flow" wise water use campaign have caused people to use water more carefully.

• Major new sources of supply include development of additional groundwater supplies and expansion of water treatment plants to use more mountain stream water in Salt Lake County, irrigation conversions, Lake Powell Pipeline, and Bear River development.



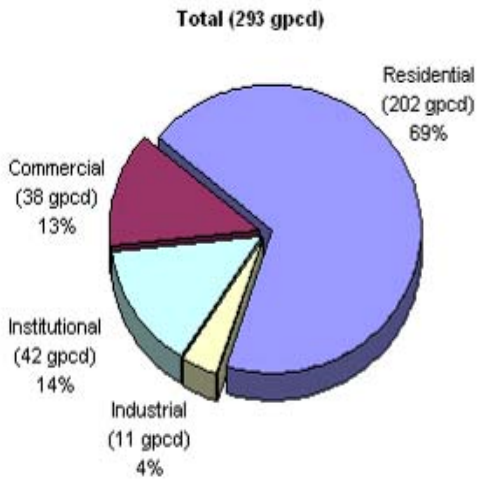
*25% Conservation of public community system's supply only by the year 2050.
**Additional water development needed with conservation to ensure a reliable supply.

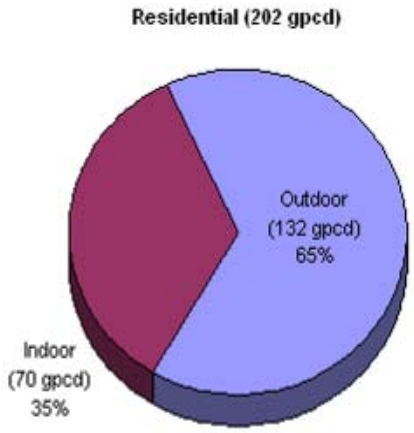

M&I Supply & Demands in Cache County
Conservation*
Additional Supply Needed**
2005 Supply
Demand w/o Conservation
Demand w/ Conservation
Thousand Acre-Feet/Year
YEARS
110 TAF
84 TAF
54 TAF
*25% Conservation of public community system's supply only by the year 2050.
**Additional water development needed with conservation to ensure a reliable supply.


Utah Secondary Use* (1980-2005)
Utah Potable Use (1980-2005)
Utah Water Conservation Goal
Per Capita Water Use (gpcd)
320
350
370
320
295
260
Conservation Goal
220
Baseline year for conservation goal
The Utah Division of Water Resources began collecting detailed M&I water use information at the river basin level in the mid-1990s. Data prior to 1995 comes from the USGS, Estimated Water Use in the United State. All data is rounded to the nearest 5 gpcd.

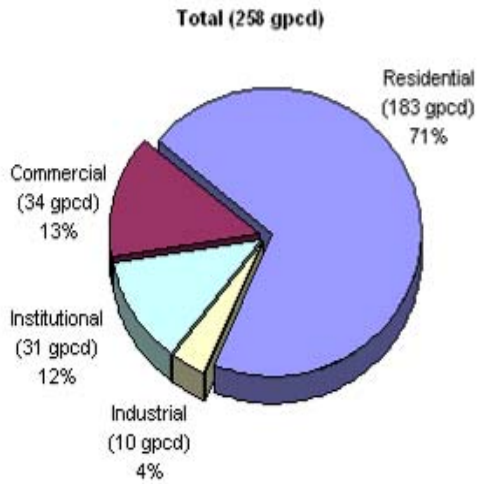
M&I Per Capita Water Use in Utah

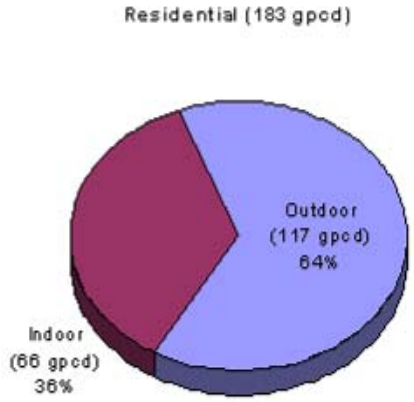
2000





2005





Climate Change 2008 Baseline

Greenhouse Gas Emissions

In June 2007, the Center for Climate Strategies (CCS) released its *Greenhouse Gas Inventory and Reference Case Projections, 1990-2020*, which was prepared for the Utah Department of Environmental Quality (DEQ) under an agreement with the Western Governor's Association (WGA). The report provided an inventory and forecast of greenhouse gas (GHG) emissions from 1990 to 2020. This report became a key component of the Climate Change Blue Ribbon Advisory Council (BRAC) October 2007 report to Governor Huntsman. The BRAC report outlined 72 recommended policy options aimed at reducing GHG emissions in Utah.

In early 2008, DEQ contracted with the Nicholas Institute for Environmental Policy Solutions to assess the GHG reduction potential of several key policy options recommended by the BRAC. Because much of the GHG reduction potential associated with these policies would not be fully realized during the CCS forecast period, a longer-term forecast was necessary against which to assess a full array of emissions reductions options. To this end, the Nicholas Institute developed an extended forecast of GHG emissions out to 2030 based largely upon the original work performed by CCS. This extended forecast became the "business as usual" baseline against which individual policy options could be assessed. The results of this extended forecast are summarized in Figures 1 and 2 below.

As shown in Figure 1, the electricity sector was the largest source of GHG emissions in 2005 at 25.6 million metric tons (MMt) of carbon dioxide equivalent (CO2e) or 37 percent of total emissions. It should be pointed out that this estimate does not include emissions associated with net exports of electricity from Utah to other states in the Western Electricity Coordinating Council (WECC). The high proportion of GHGs in the electricity sector stems from the fact that Utah relies predominately on coal – a relatively high-carbon energy source – for its electricity generation.

Absent a significant change in market conditions or some form of policy intervention, this trend is anticipated to continue throughout the forecast period as illustrated in Figure 2

The second largest contributor to 2005 GHG emissions is gasoline and diesel consumption in the transportation sector at 13.6 MMtCO2e or 20 percent of total emissions. It should be noted that for the purposes of the Nicholas Institute inventory, emissions from the consumption of other transportation fuels – primarily jet fuel, natural gas, and propane – are included in the "other" category. As a result, total transportation sector emissions represent an even higher percentage of total statewide emissions.[1] While GHG emissions from gasoline and diesel combustion are expected to grow to reach 22.8 MMtCO2e by 2030 under existing fuel consumption patterns, this trend may be tempered somewhat by the establishment of a mandatory Renewable Fuel Standard (RFS) and by more stringent corporate average fuel economy (CAFE) standards, both of which were brought about by the passage of the Energy Independence and Security Act (EISA) in December 2007.[2]

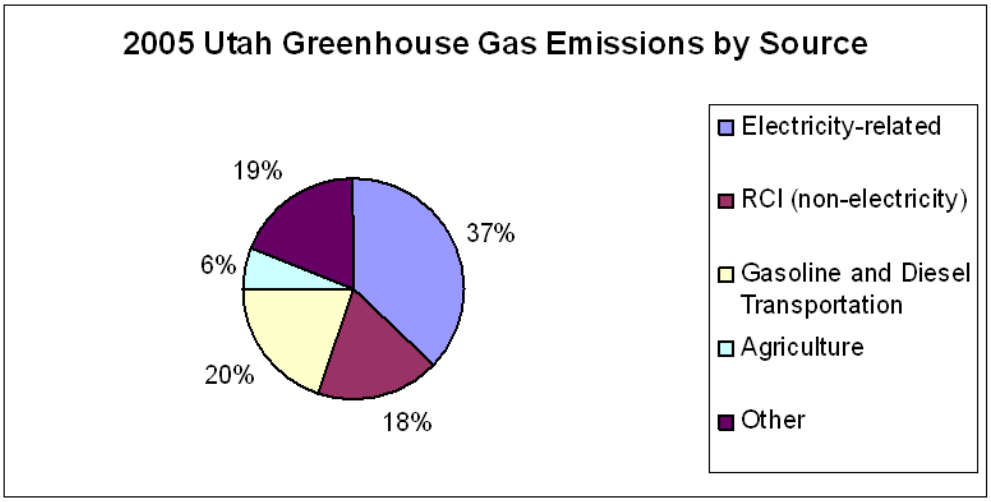
Non-electricity fossil fuel consumption from the residential, commercial, and industrial (RCI) sector is the third largest source of 2005 GHG emissions in Utah at 12.2 MMtCO2e or 18 percent of total emissions, while emissions from agriculture represent an additional 4.2 MMtCO2e or 6% of total emissions. The "other" category includes 13.1 MMtCO2e or 19 percent of total emissions from the fossil fuel industry, industrial processes (i.e. non-combustion industrial emissions), and emissions from landfills and wastewater management facilities.

[1] For comparison, the *Utah Greenhouse Gas Inventory and Reference Case Projections, 1990-2020* inventory completed by CCS attributed 17.2 MMtCO2e or 24.9 percent of total emissions to the overall transportation sector (i.e. all transportation fuels) in 2005.

[2] The 2007 EISA mandates that fuel produces use at least 36 billion gallons of biofuel by 2022 and raises CAFÉ standards by 40 percent to35 miles per gallon by 2020

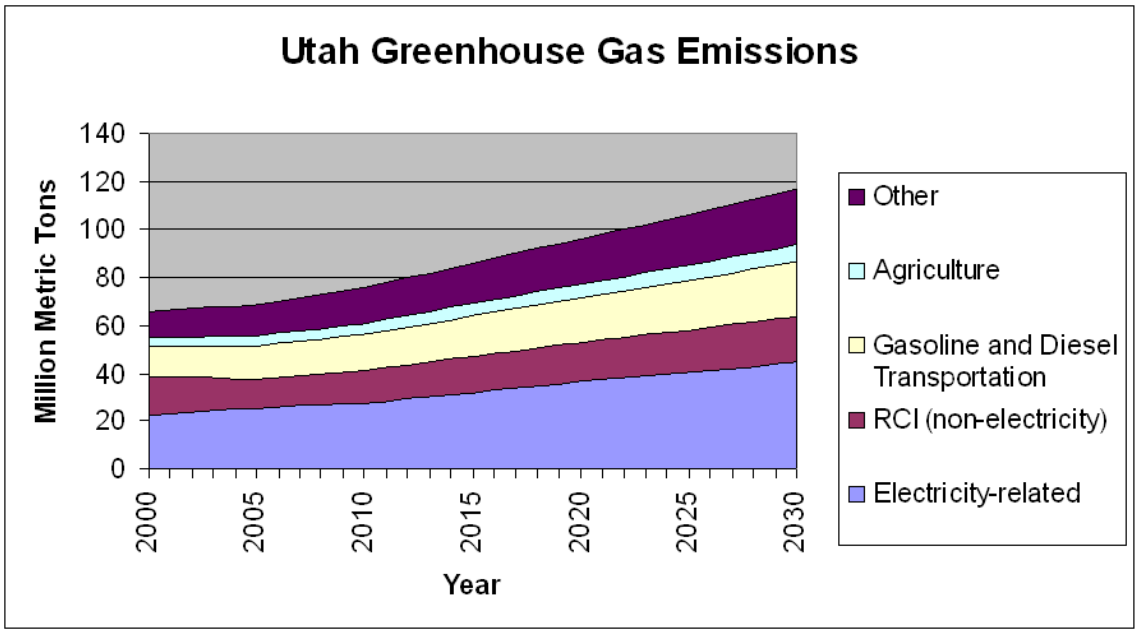
Overall GHG emissions in Utah were 68.8 MMtCO2e in 2005 or approximately one percent of U.S. emissions. As shown in Figure 2, under a "business as usual" scenario, GHG emissions in Utah are anticipated to grow by over 70 percent from 68.8 MMtCO2e in 2005 to 117.1 MMtCO2e by 2030. This trend could be markedly influenced over the forecast period by a variety of factors including, but not limited to changes in market conditions, advanced technology development and deployment, diversification of Utah's energy resource mix to include a greater proportion of renewable and other low-carbon energy sources, efficiency standards and programs, tax credits and other incentives, and regulatory intervention at the state, regional, or national level.

Figure 1.



Source: Nicholas Institute for Environmental Policy Solutions and Center for Climate Strategies.

Figure 2.



Source: Nicholas Institute for Environmental Policy Solutions and Center for Climate Strategies.

NOTES:

Land Use 2008 Baseline

Utah Land Use

As Utah's population continues to expand, the number of developed acres across the State also expands. This analysis looks at developed land throughout the state in an effort to determine broad patterns of land use. The main focus of this analysis follows previous baseline studies by looking at residential, commercial, and agricultural lands. The analysis also projects land use to 2030.

Houses in Daybreak.

Sources and Assumptions

The two primary data sources for the analysis came from the Utah Division of Water Resources "Water-Related Land Use" map layer, and the Utah Department of Transportation (UDOT) Statewide Travel Model.

The Water-Related Land Use layer uses GIS, field surveys, and remote sensing technology to determine land use across the state. Agricultural and developed lands were extracted from this data. Because the data were compiled over the course of several years, some regions have data from as recently as 2007, while data from other regions were from as far back as 2003. To rectify this, regions with data prior to 2005 were manually updated using aerial photography from 2006 to ensure that major developments were included. These updated developments were then subtracted from the agricultural lands data. In the updated map layer, the oldest data is from 2004 from the Sevier River Basin (a region that is growing relatively slowly), all other data is post-2005 and as recent as 2007. Developed areas include all areas that are not in a natural or agricultural use. Developed land includes such large landscape features as Kennecott Copper mines and tailings, sewer ponds, and golf courses; however, many small disturbances such as oil drilling pads may not be captured.

The Statewide Travel Model was created by UDOT in cooperation with Wilbur Smith Associates. The model divides the State into Traffic Analysis Zones (TAZ), small areas designed for traffic analysis. Each TAZ contains data, such as population and employment projections that are designed to assist transportation planners in anticipating infrastructure needs. Metropolitan Planning Organizations (MPOs) such as the Wasatch Front Regional Council (WFRC) have been using TAZ in their regional planning efforts for many years, however, this is the first time that such an analysis has taken place on a statewide basis. Because of this impressive effort, it is possible to analyze population and employment data across the state, and then make projections out to 2030. Because the most recent data for these zones are from 2005, that is the year that was analyzed as the baseline year. The 2003

Land Use Highlights

- Over 1244 square miles of developed land statewide.*
- Over 4,321 square miles of agricultural lands.
- Average of 3.2 people per developed acre statewide.*
- Estimated to add up to 898 sq. miles of developed land by 2030. †
- Estimated more than 310 sq. miles of agricultural lands consumed by 2030 to development.

* "Developed Land" includes commercial and industrial uses, this means that the average density for residential areas would be significantly higher than 3.2 people per acre.
† Assuming people per developed acre remains the same.

baseline used data from 2000, and so 2005 still follows the five-year pattern.

Classification

Using population and employment data from the Statewide Travel Model, clipped to only include developed areas, population was subtracted from total employment. Areas that had more employment than population were classified as Commercial, and those that had less employment than population were classified as Residential. If an area had equal employment and population it was assumed to be residential.

The residential zones were classified as Urban, Suburban, or Exurban.

Urban = more than 10 people per acre

Suburban = between 3 and 10 people per acre

Exurban/Rural = fewer than 3 people per acre

The Commercial zones were classified as Dispersed and Concentrated.

Concentrated = more than 10 jobs per acre

Dispersed = fewer than 10 jobs per acre.

Agricultural Zones were based on remotely sensed data from the Division of Water Resources and is typically irrigated crop or pasture land, and does not include rangelands.

These classifications are keeping with the same assumptions and methodology used in the 2003 baseline, however, the data are much less coarse, which may result in more jobs or people per acre in some of the larger traffic analysis zones on the periphery that were clipped to development. Because the geography of analysis was a Traffic Analysis Zone (TAZ) and not parcel level, some errors are inherent to the data. For instance, the TAZ was analyzed by numbers, not by land area. This means that even if industrial activities occupy the bulk of the land *area* in the TAZ, it may still be labeled residential if the *population* in the zone is greater than the number of jobs.

Baseline Land Use

From the most current data, it is estimated that there are over 1244 square miles of developed land in the state of Utah. Over three times that amount of land is in agricultural uses, over 4231 square miles. Overall, the more rural counties had a much higher amount of land in agricultural uses and a much lower amount of developed land; however, Cache and Utah Counties both had significantly more land in agriculture than in development. San Juan County had the highest agriculture to developed land ratio. Only three counties, Salt Lake, Davis, and Weber had more developed land than agricultural lands. Piute County had the least amount of developed land, and Salt Lake County had the most developed land.

Projections to 2030

While making precise projections on land use and development patterns over twenty years into the future may not be possible, it is possible to show illustrations of what the future may look like based on trends and population projections. Using the projections from the Statewide Travel Model, the entire state was analyzed to see which areas may show the most growth by 2030.

With a current figure of over 796,650 acres of developed land in the state (including commercial), it is estimated that there are an average of 3.2 people per developed acre in this state. At that rate 575,000 acres, or nearly 900 square miles of new land would need to be developed to keep up with population projections for 2030. That would increase the amount of land developed in the state by nearly 75%. This estimate, however, probably represents the high-end in many areas of the State. Many of the developed areas will use in-fill practices, newer developments are likely to be denser in design, and many of the current large-scale industrial land uses such as Kennecott Copper Mines are unlikely to be replicated at the same scale elsewhere in the state during the next twenty years. Furthermore, many newly developed areas will utilize existing infrastructure, public buildings, and commercial areas.

.

This will mean that overall the population per developed acre should increase, leading to less land consumption.

In order to illustrate what the state may look like in 2030 based on population projections from the Statewide Travel Model, growth was modeled for each individual TAZ based on projected population at the average density per developed acre by county. Using this methodology, 493,000 acres were added to the current developed land proportionally to the zones that are projected to see the most growth. This adds nearly 82,000 fewer acres than would be added if growth were to continue to consume the same amount of land as in the past, a 16% decrease overall. This decrease in projected land consumption is most pronounced in more urban counties that are likely to increase densities as available land becomes increasingly scarce and in areas that have been historically rural with extremely low densities that are likely to increase to more closely match the statewide average as growth continues.* The resulting developed land projection was then mapped and analyzed based on the projections for the year 2030 from the Statewide Travel Model. Each zone was then classified using the previously mentioned classification scheme to show projected residential and commercial zones.

While the mapped projections and corresponding analysis of development types and agricultural land consumption are likely representations of 2030, it is also useful to consider what 2030 would look like if population densities remain stable. Considering that trends over the past twenty years in Salt Lake, Cache, and Washington Counties show that the population per developed acre (PPDA) has remained relatively stable (see Appendix I), this is not outside the realm of possibility. Even though *housing densities* may have been increasing overall, *household sizes* have been decreasing. This means that while houses may be getting closer together, each unit will hold a smaller percentage of the population and more houses will need to be built. In order to show what projected land consumption would be if population per acre densities remain stable, numerical projections in Chart 1 show land consumption values for both the mapped values (assumes density increase from 3.2 to 3.9 PPDA, county values are estimates) and assuming continued population per acre values (Appendix II outlines the current population per developed acre for each county as well as the projected population per acre values in the mapped analysis).

Development in Cache County.

Agricultural Land Consumption to 2030

The areas that were mapped as developed in 2030 were subtracted from the current agricultural lands layer get an idea where agricultural lands may be converted to development. Bear in mind that when analyzing agricultural land consumption, the maps use the more conservative, higher density, numbers assuming that future growth will likely show an increase in density as land and home values increase. Actual consumption of agricultural lands may occur on a larger scale if the population-per-acre densities remain stable.

Technical Assistance

A special thanks to UDOT, AGRC, Division of Water Resources, and Wilbur Smith Associates for technical assistance and data preparation

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*Only Cache and Davis Counties are mapped at a slightly lower population per acre density than would be projected assuming the population per acre density from 2006 remained stable. Actual land consumption assuming a stable population per acre density would be *slightly* less than what is mapped. In Cache County the population per acre dropped from 3.4 in 1986 to 3.3 in 2006, and is mapped at 3.12 in 2030.(See Appendix I for more information).

Chart 1

County	Developed Land 2005	Agricultural Land 2005	Projected 2030 Developed (Assuming continued PPA*)	Projected 2030 Developed (Mapped values†)	Projected Agricultural Land 2030 (Mapped values†)
All values in square miles					
BEAVER	15.4	68.9	31.9	18.00	68.0
BOX ELDER	66.0	680.3	101.0	79.00	669.0
CACHE	50.0	278.5	86.1	91.00	241.0
CARBON	18.7	23.5	25.9	23.00	22.0
DAGGETT	8.7	22.4	10.6	9.00	22.0
DAVIS	90.8	38.4	123.7	125.00	12.0
DUCHESNE	20.0	227.9	27.6	24.00	225.0
EMERY	13.7	100.0	17.2	15.00	99.0
GARFIELD	9.8	83.7	14.0	11.00	83.0
GRAND	11.8	13.2	15.5	13.00	13.0
IRON	40.3	169.3	81.3	62.00	160.0
JUAB	9.4	175.4	18.2	12.00	174.0
KANE	12.7	31.7	21.1	15.00	31.0
MILLARD	30.5	414.7	45.4	34.00	412.0
MORGAN	7.8	27.1	21.3	18.00	21.0
PIUTE	2.9	45.6	3.6	3.00	45.0
RICH	11.5	158.7	15.4	12.00	159.0
SALT LAKE	283.1	53.3	417.3	344.00	25.0
SAN JUAN	11.9	280.0	13.5	13.00	280.0
SANPETE	31.1	261.3	43.5	35.00	258.0
SEVIER	17.6	116.0	22.2	20.00	114.0
SUMMIT	45.9	73.5	103.7	74.00	65.0
TOOELE	79.9	164.1	176.1	107.00	144.0
UINTAH	29.8	190.2	43.7	40.00	182.0
UTAH	139.0	309.8	265.2	251.00	235.0
WASATCH	18.9	36.0	43.8	23.00	33.0
WASHINGTON	66.4	77.2	204.7	148.00	52.0
WAYNE	5.4	33.5	7.2	6.00	33.0
WEBER	95.9	77.8	142.5	135.00	46.0
Statewide	**1244.00**	**4232.00**	**2142.5**	**1760.00**	**3922.00**

*Assuming a continued statewide development rate of people per developed acre

†See "Projections to 2030" section of the text for more information on the difference between mapped values and numerically projected.

Developed Land vs. Agricultural Land

Much of the development in Utah will happen by converting agricultural land uses into residential or commercial uses. This is especially true in the rapidly urbanizing areas on the metropolitan fringe. Available land in close proximity to employment and infrastructure make these areas especially attractive to future growth.

Statewide Agricultural vs. Developed Lands 2005

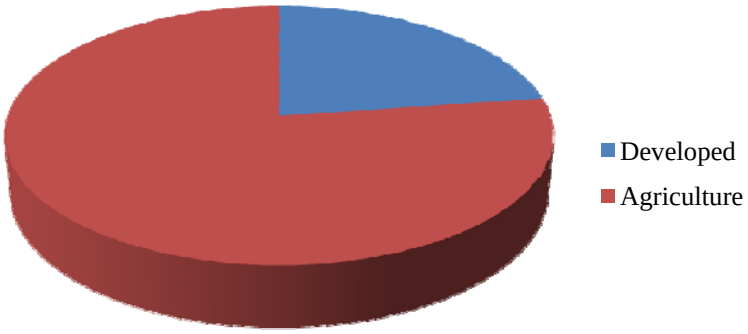
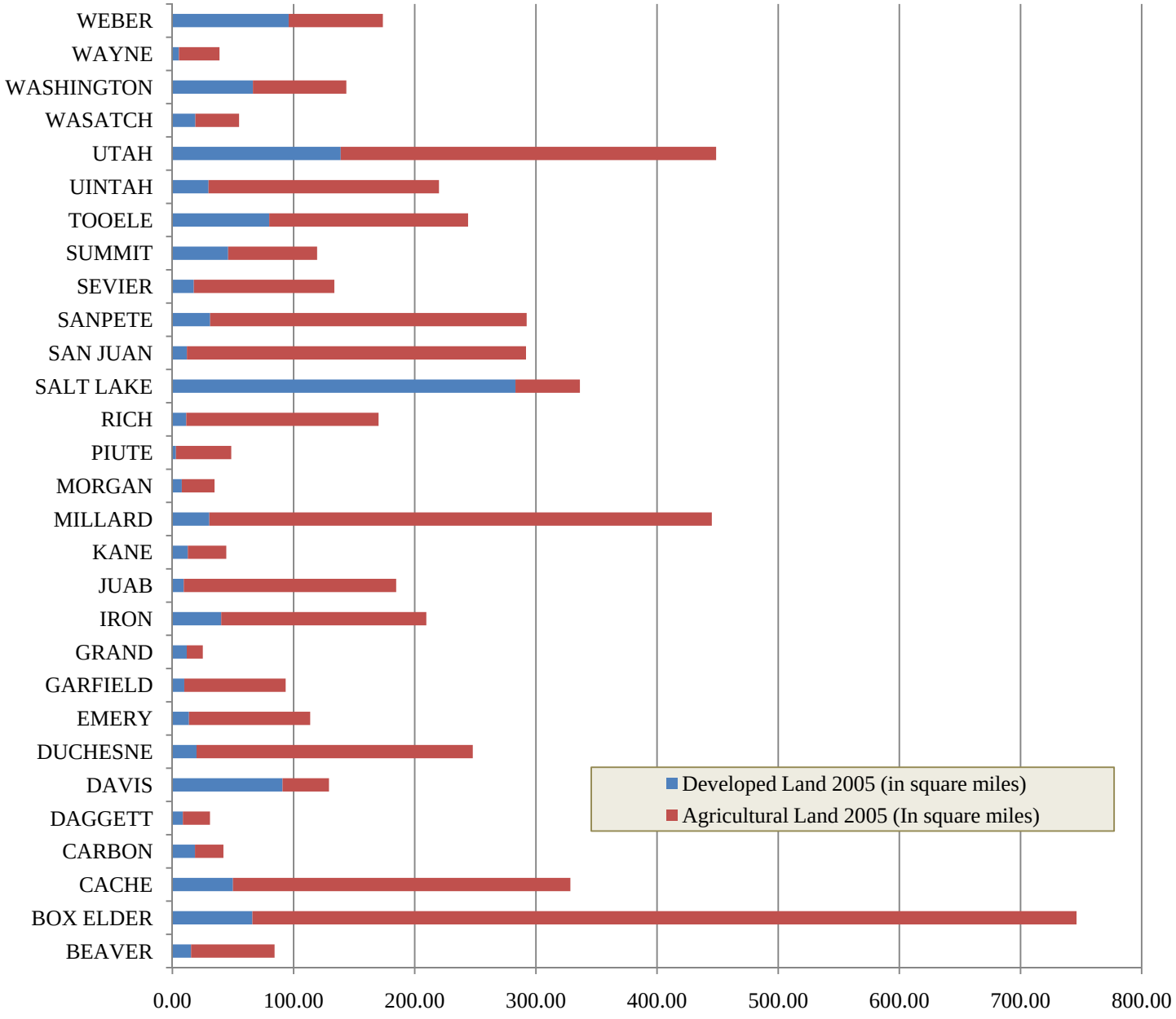


Chart 2



Agricultural Land Consumption to 2030

The areas that were mapped as developed in 2030 were subtracted from the current agricultural lands layer get an idea where agricultural lands may be converted to development. Bear in mind that when analyzing agricultural land consumption, the maps use the more conservative, higher density, numbers assuming that future growth will likely show an increase in density as land and home values increase. Actual consumption of agricultural lands may actually occur on a larger scale if the population-per-acre densities remain stable.

Estimated Statewide Agricultural vs. Developed Land 2030

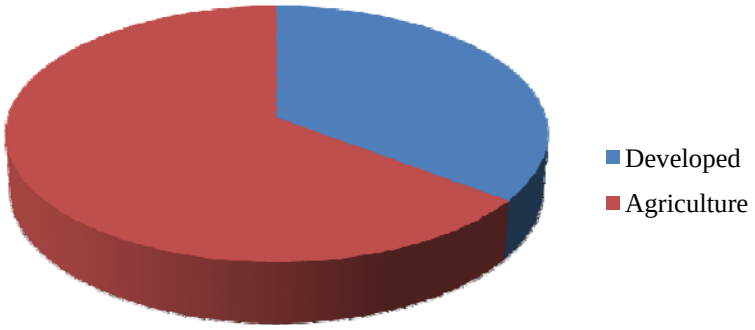
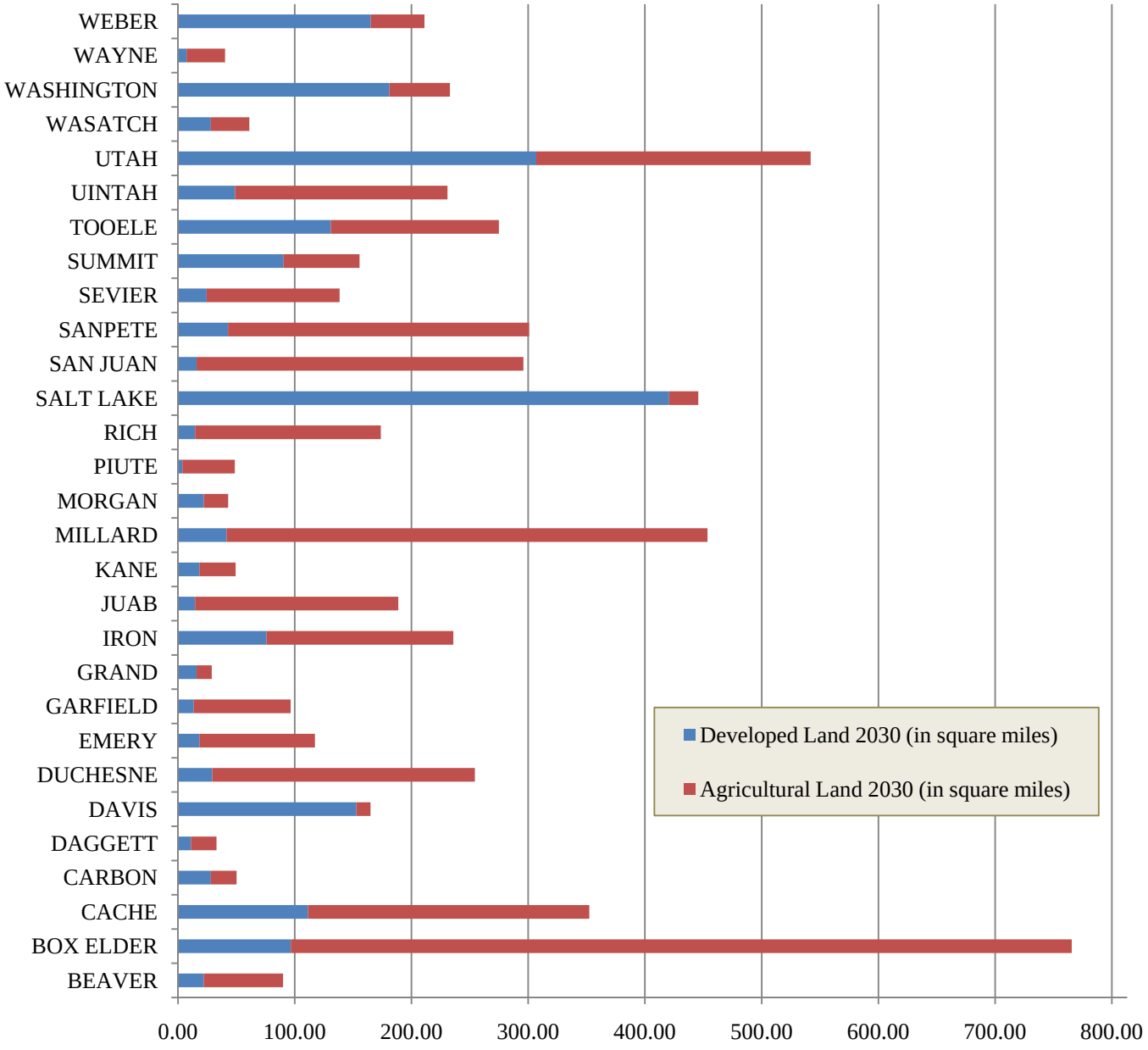
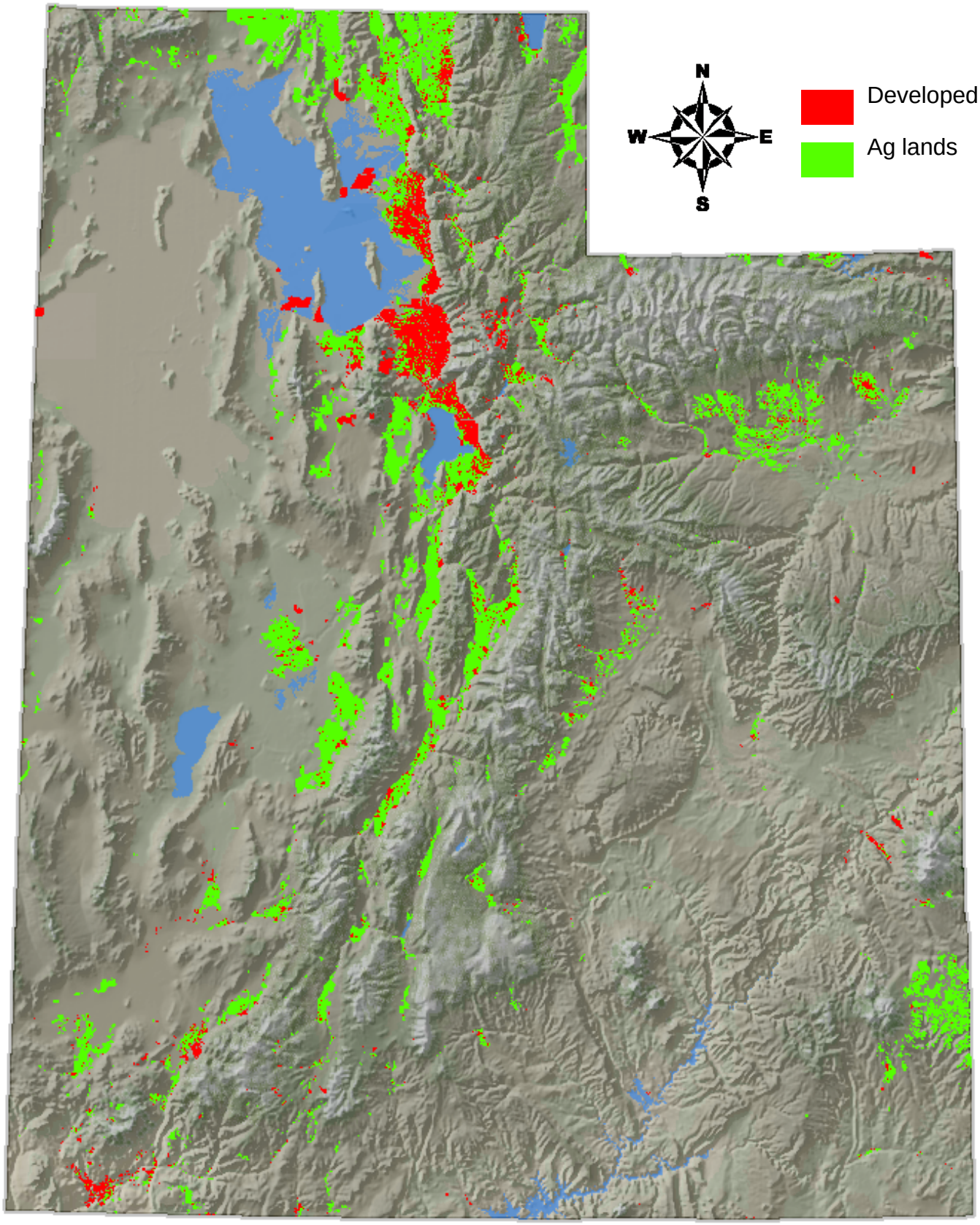


Chart 3

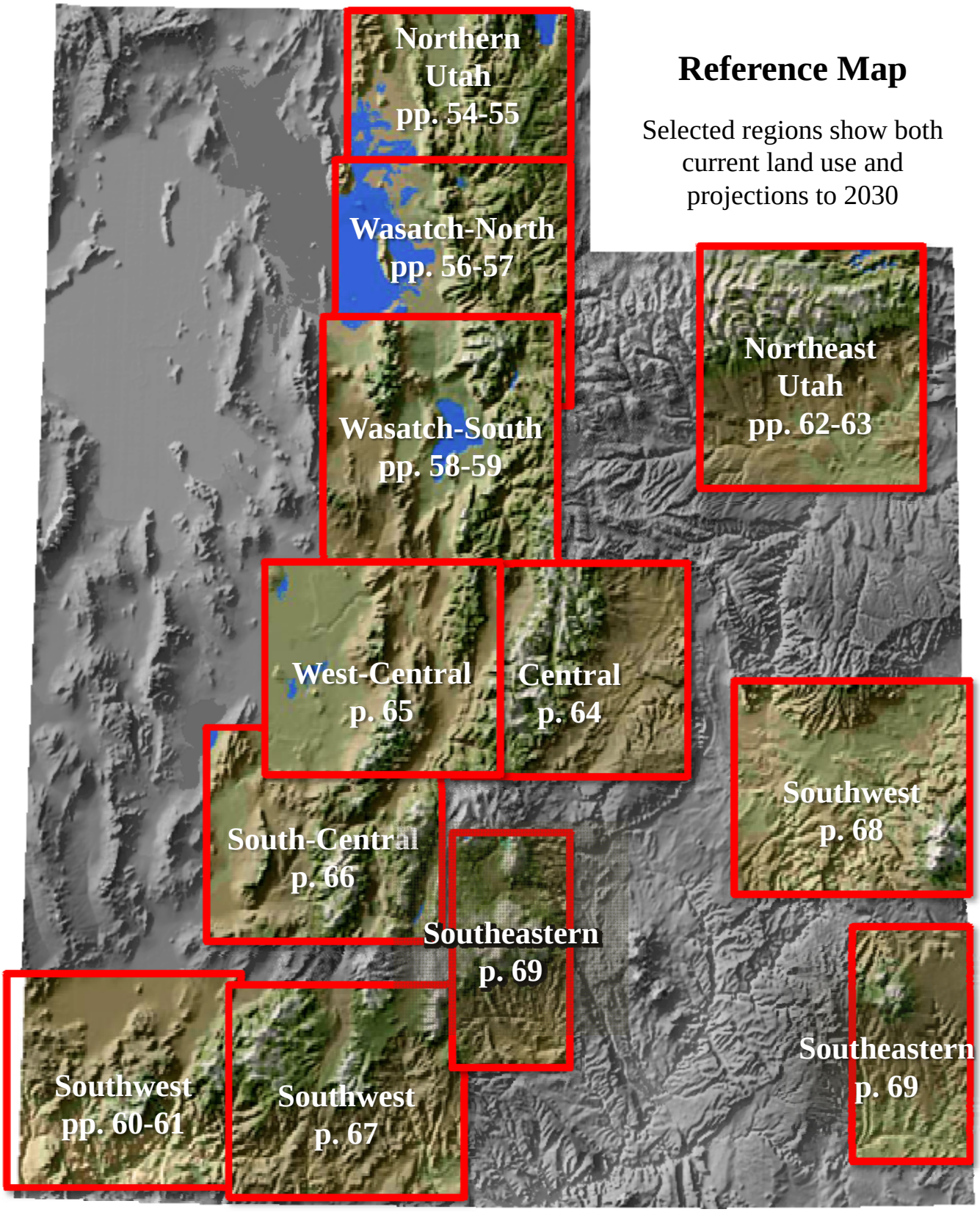


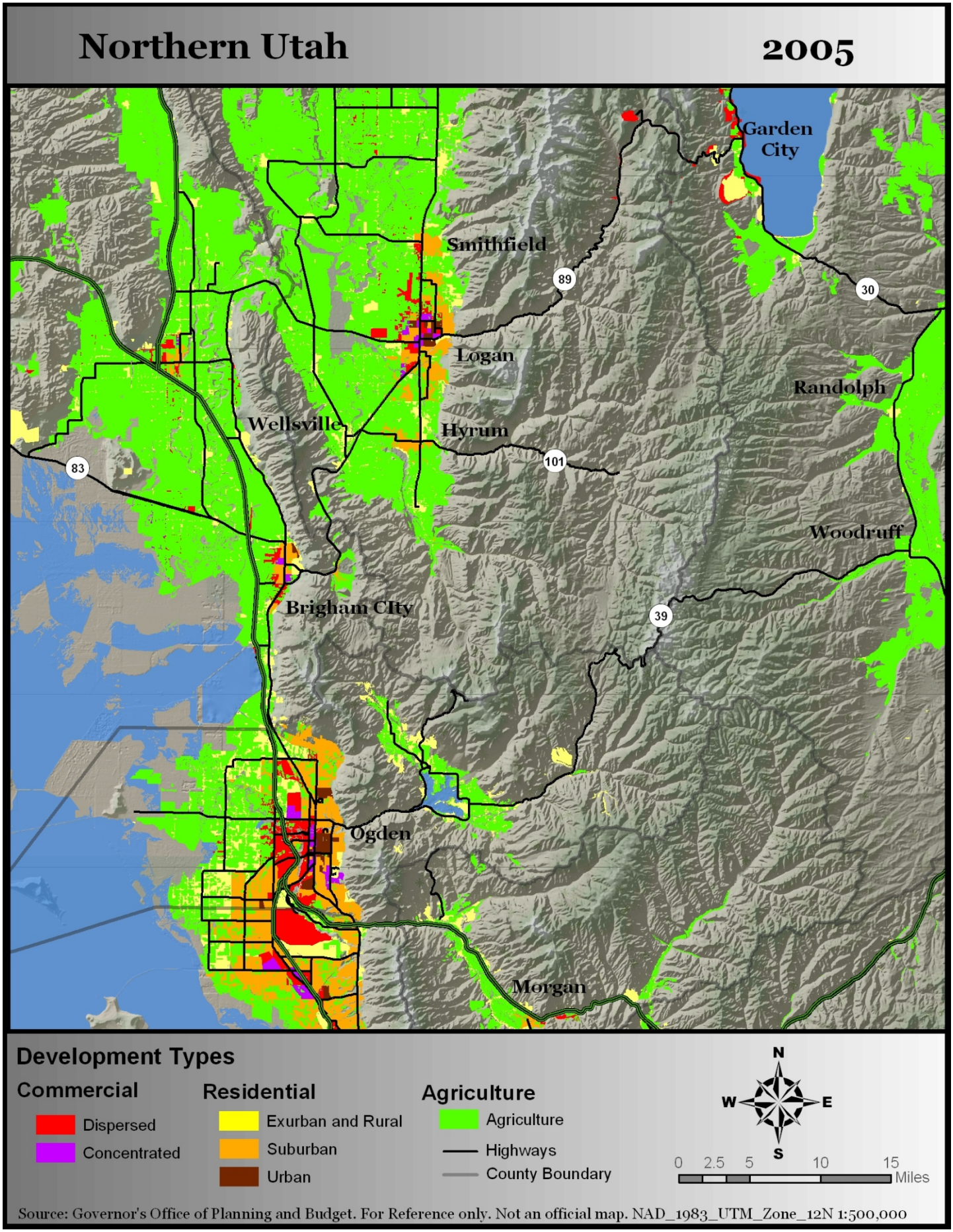
Agricultural and Developed Lands in Utah

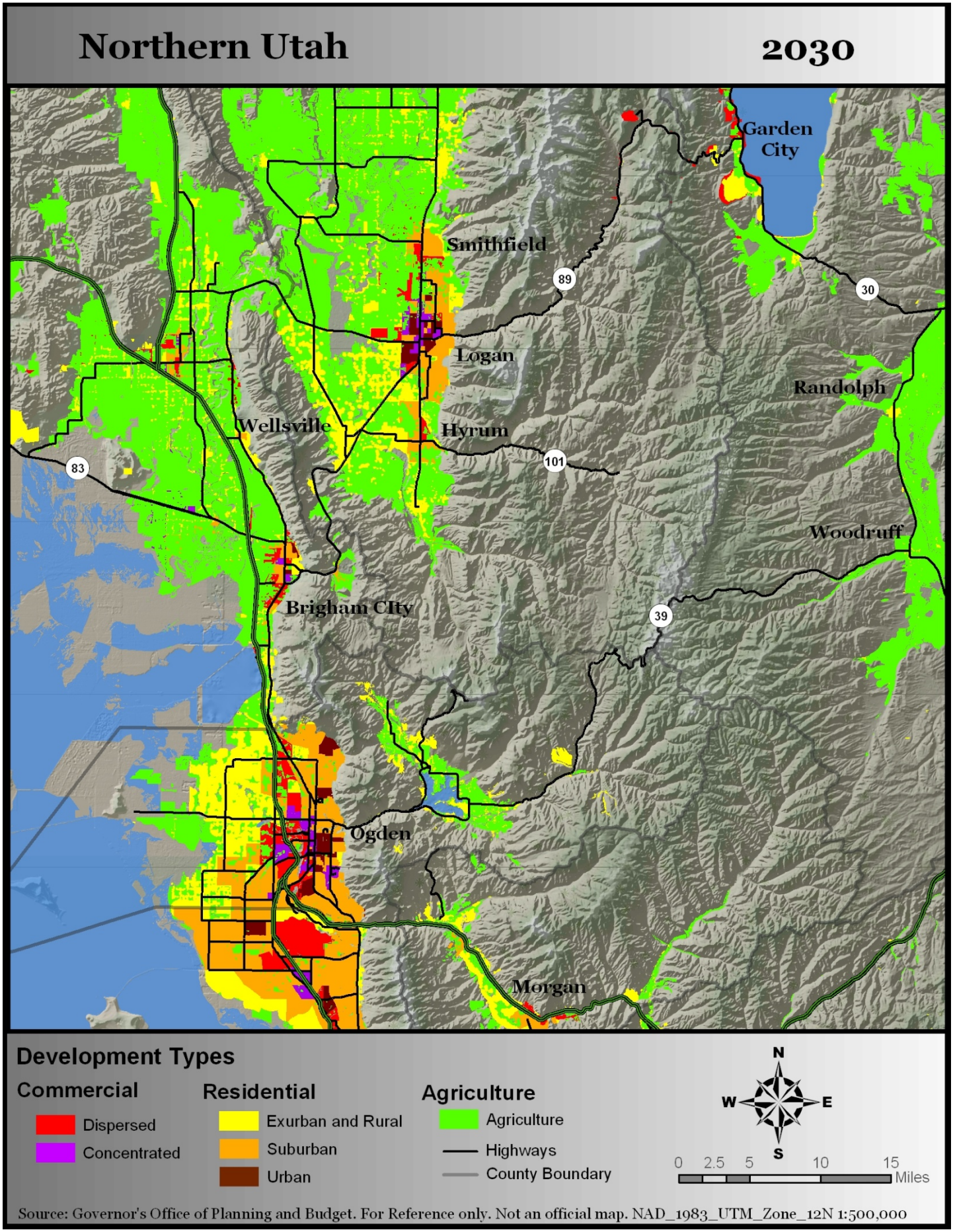


Reference Map

Selected regions show both current land use and projections to 2030




Northern Utah
2005
Garden City
Smithfield
89
30
Logan
Randolph
Wellsville
Hyrum
101
83
Woodruff
Brigham CIty
39
Ogden
Morgan
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Northern Utah
2030
Garden City
Smithfield
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Wellsville
Hyrum
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Ogden
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89
30
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101
39
Development Types
Commercial
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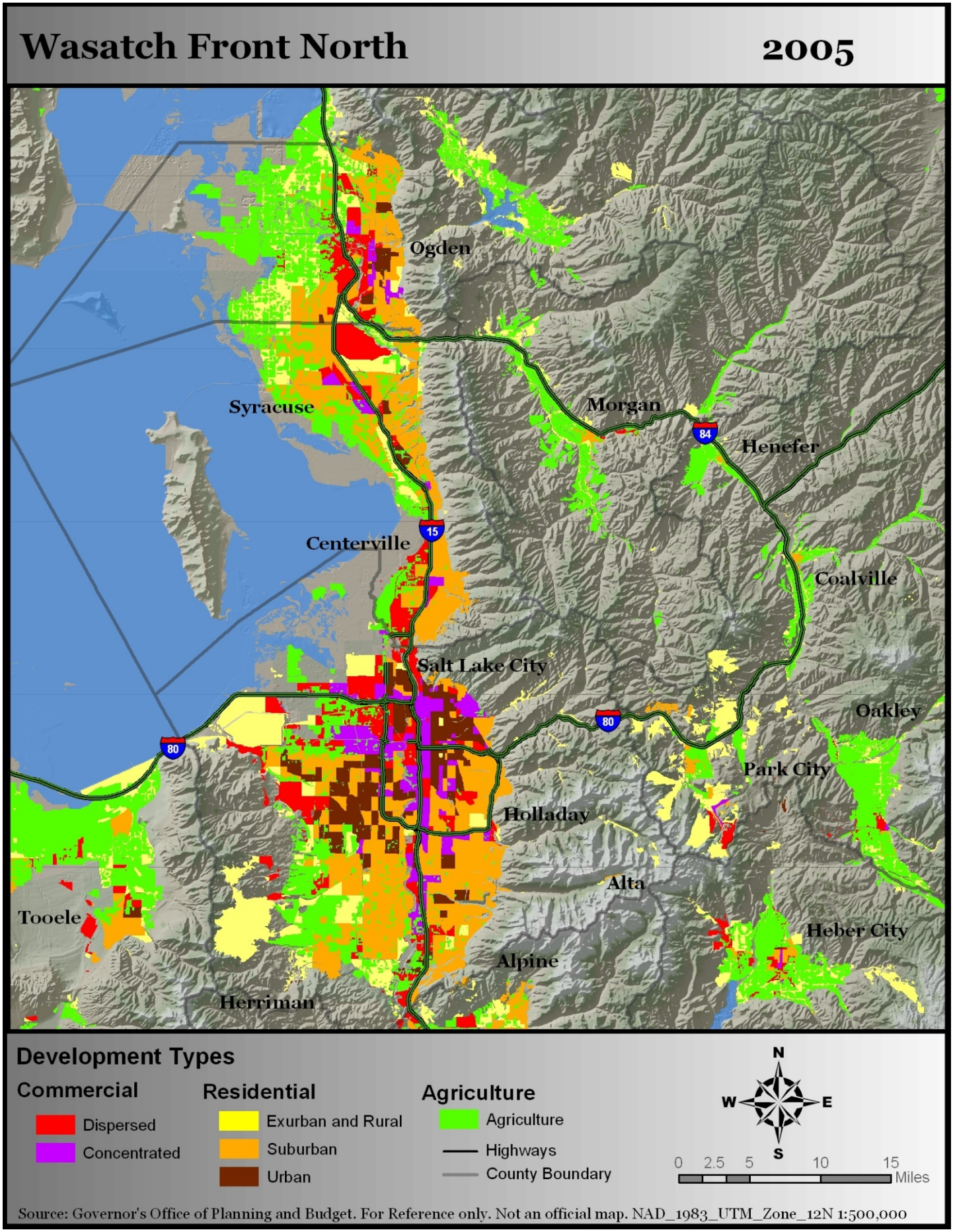
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Wasatch Front North
2005
Ogden
Syracuse
Morgan
84
Henefer
15
Centerville
Coalville
Salt Lake City
80
Oakley
80
Park City
Holladay
Alta
Tooele
Heber City
Alpine
Herriman
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
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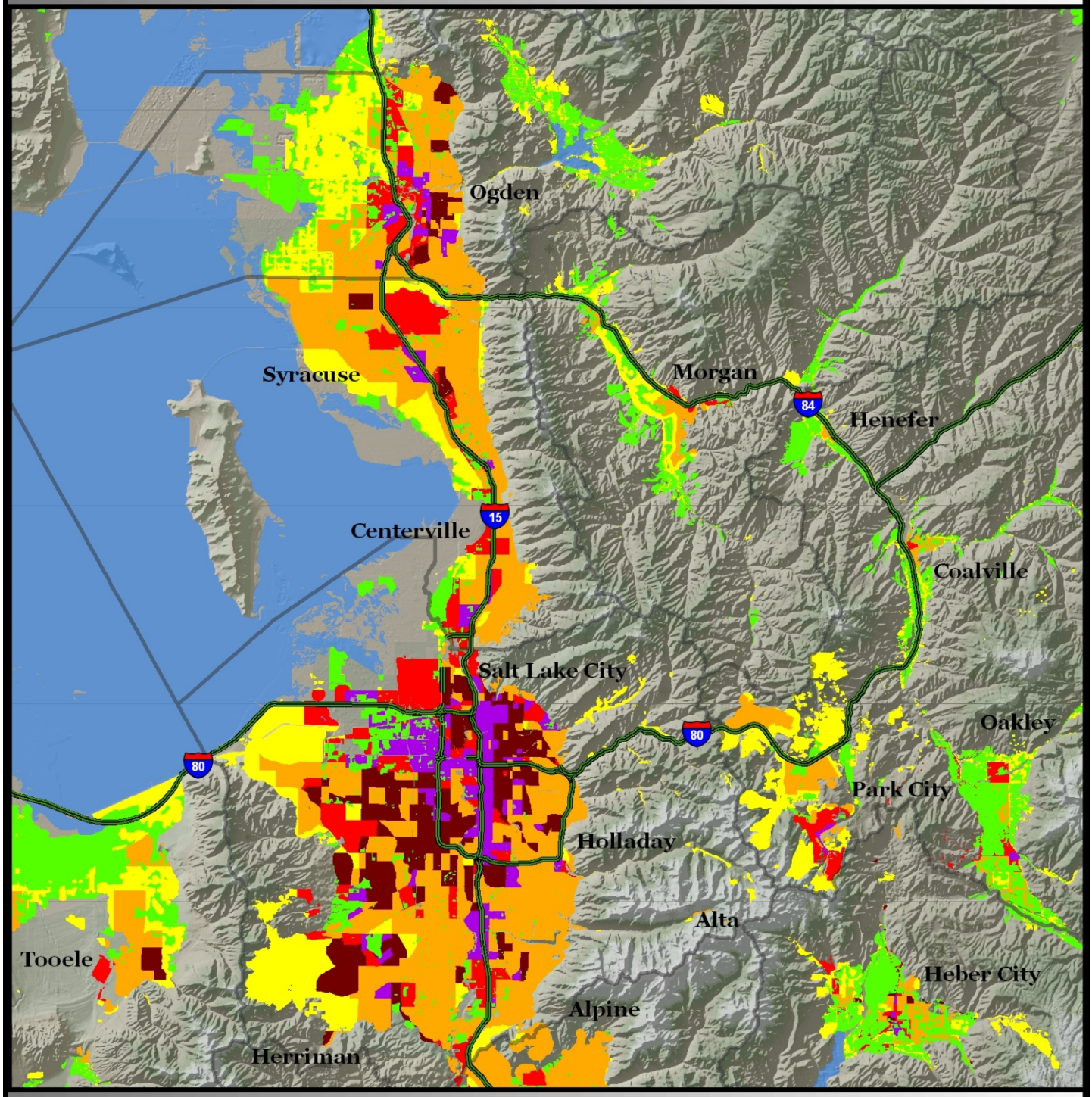
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Wasatch Front North 2030



Development Types

Commercial
- Dispersed
- Concentrated

Residential
- Exurban and Rural
- Suburban
- Urban

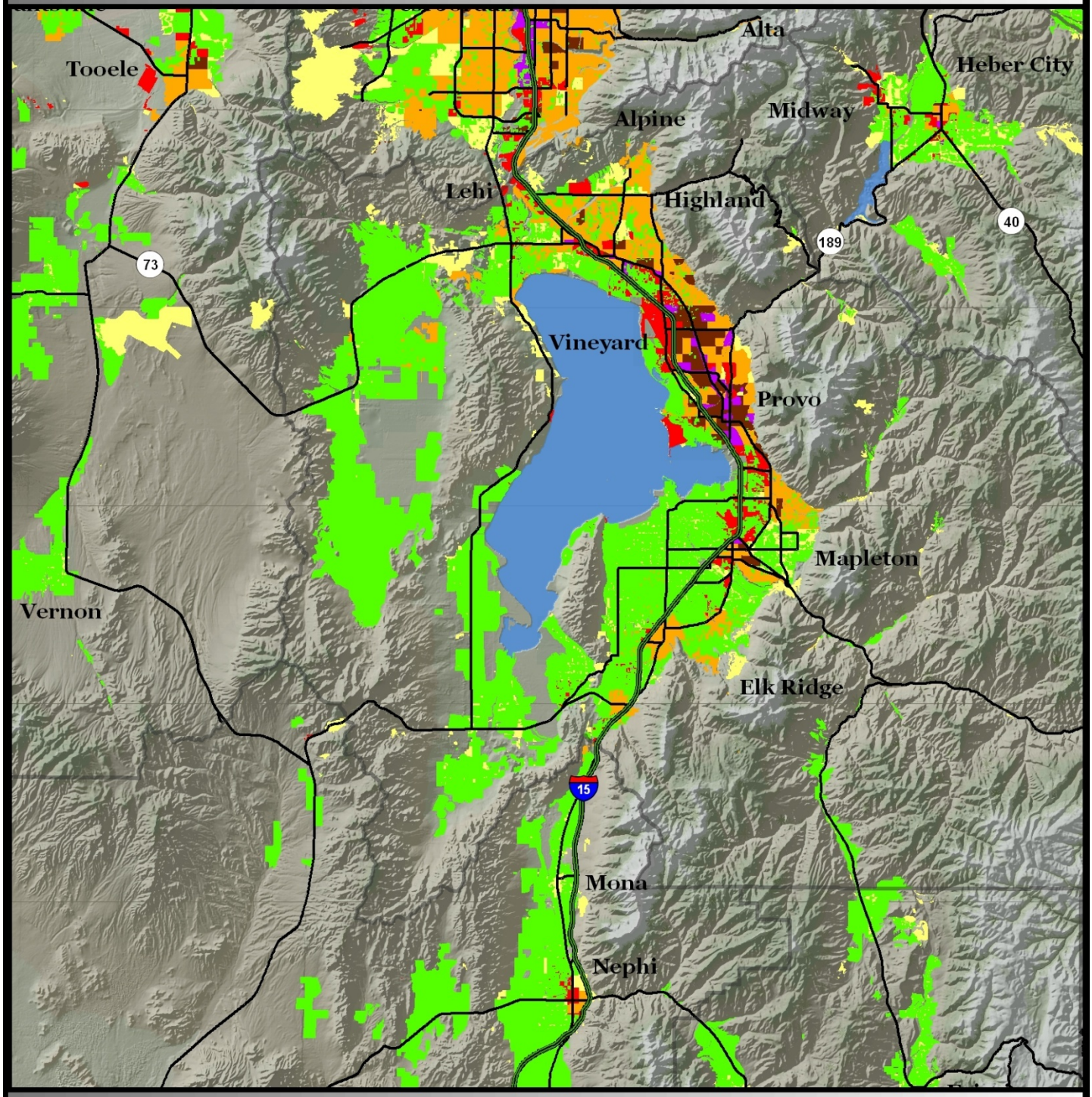
Agriculture
- Agriculture
- Highways
- County Boundary

N W E S

0 2.5 5 10 15 Miles

Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Wasatch Front South 2005



Development Types

Commercial
- Dispersed
- Concentrated

Residential
- Exurban and Rural
- Suburban
- Urban

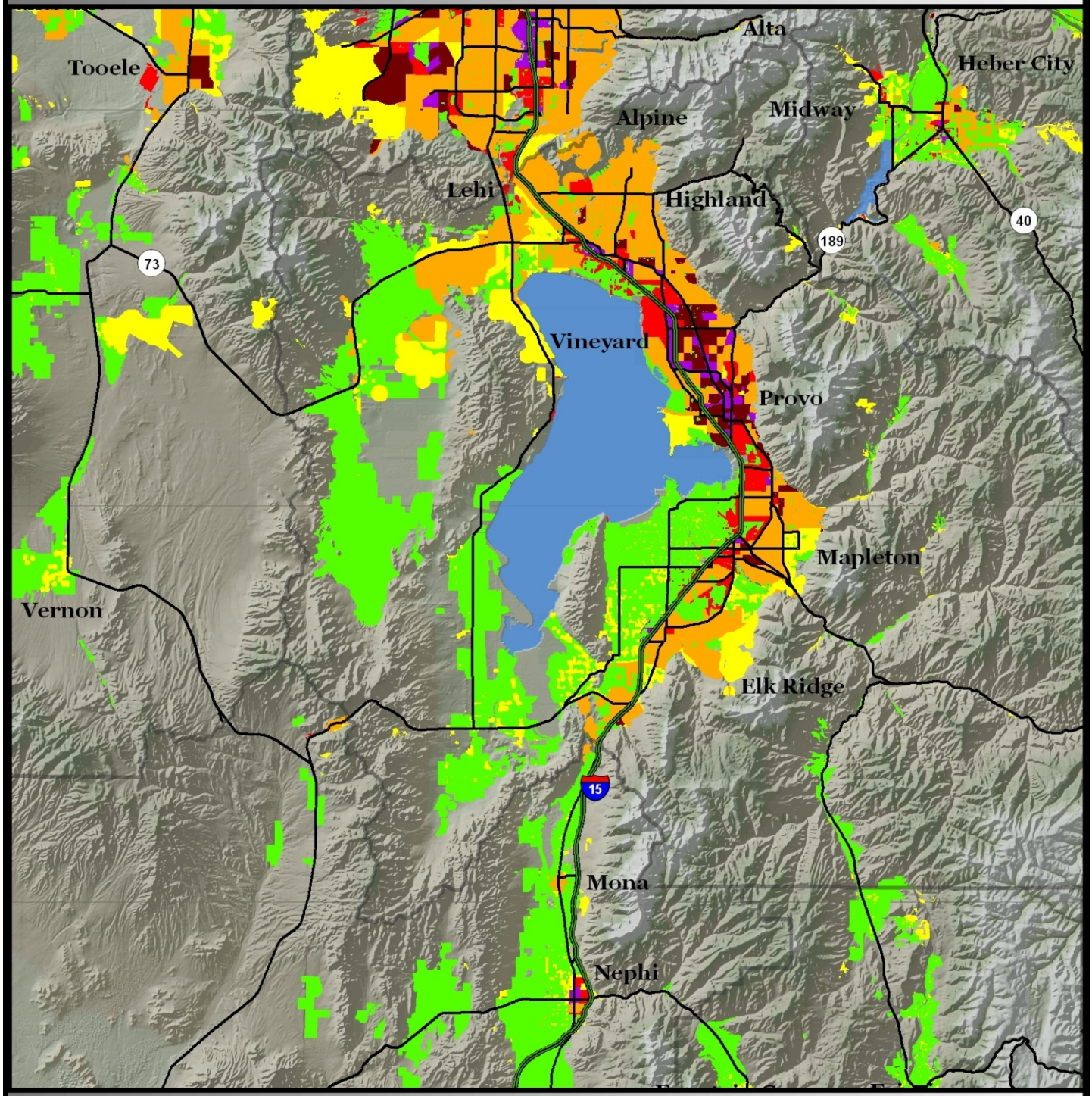
Agriculture
- Agriculture
- Highways
- County Boundary

N W E S

0 2.5 5 10 15 Miles

Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Wasatch Front South 2030



Development Types

Commercial
- Dispersed
- Concentrated

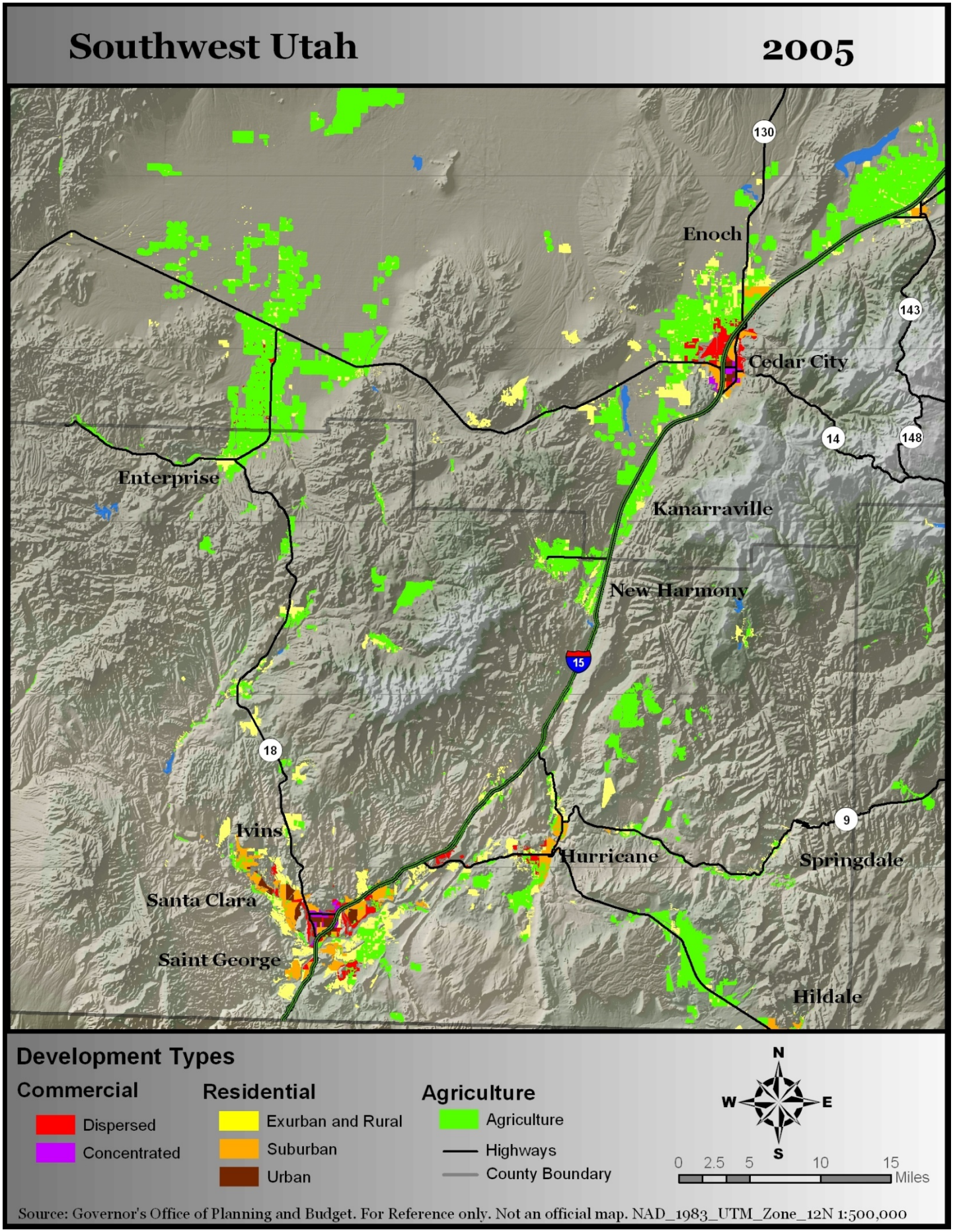
Residential
- Exurban and Rural
- Suburban
- Urban

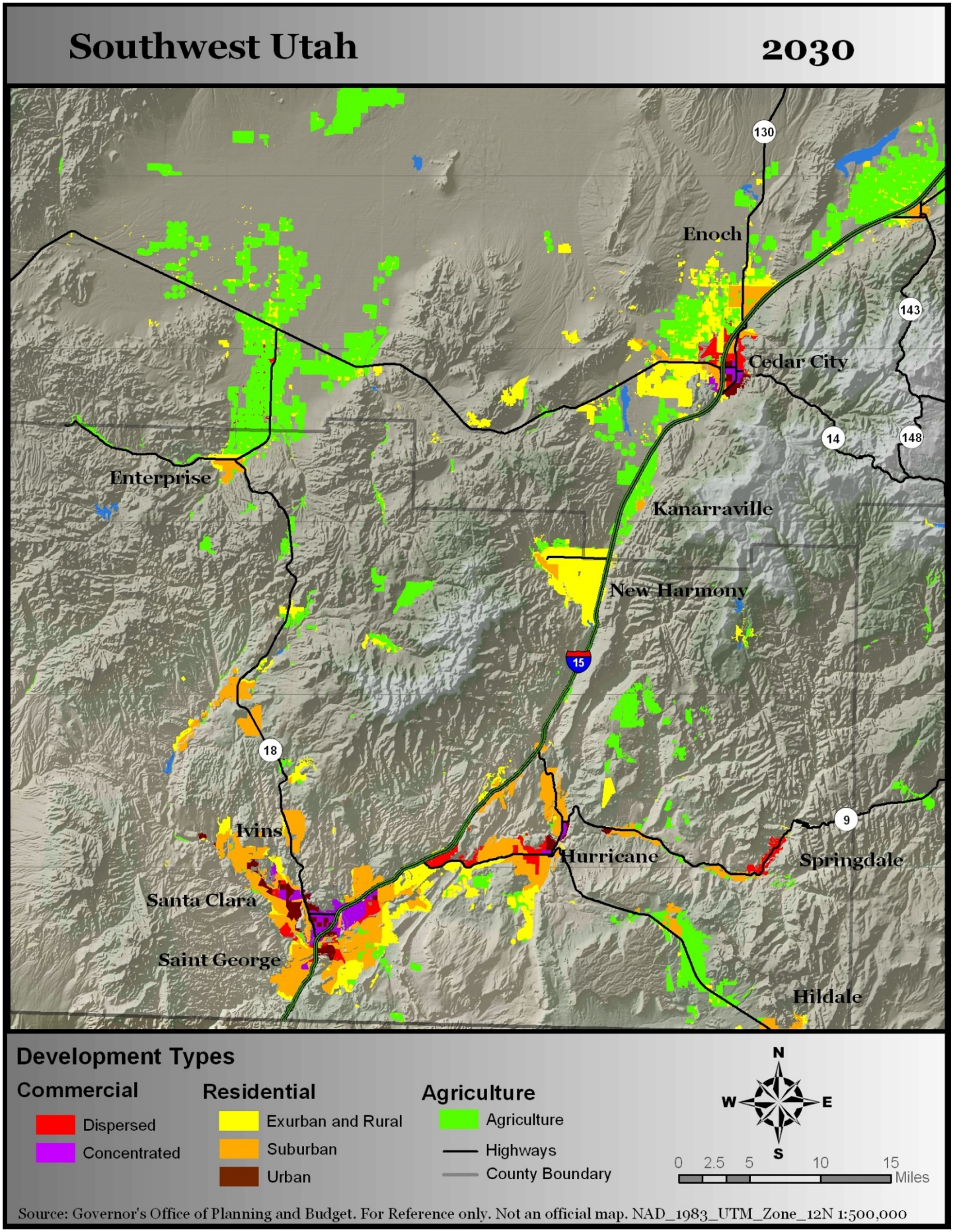
Agriculture
- Agriculture
- Highways
- County Boundary

N W E S

0 2.5 5 10 15 Miles

Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Southwest Utah
2005
130
Enoch
143
Cedar City
14
148
Enterprise
Kanarraville
New Harmony
15
18
Ivins
9
Hurricane
Springdale
Santa Clara
Saint George
Hildale
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Southwest Utah
2030
130
Enoch
143
Cedar City
14
148
Enterprise
Kanarraville
New Harmony
15
18
Ivins
Hurricane
9
Springdale
Santa Clara
Saint George
Hildale
Development Types
Commercial
Dispersed
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Residential
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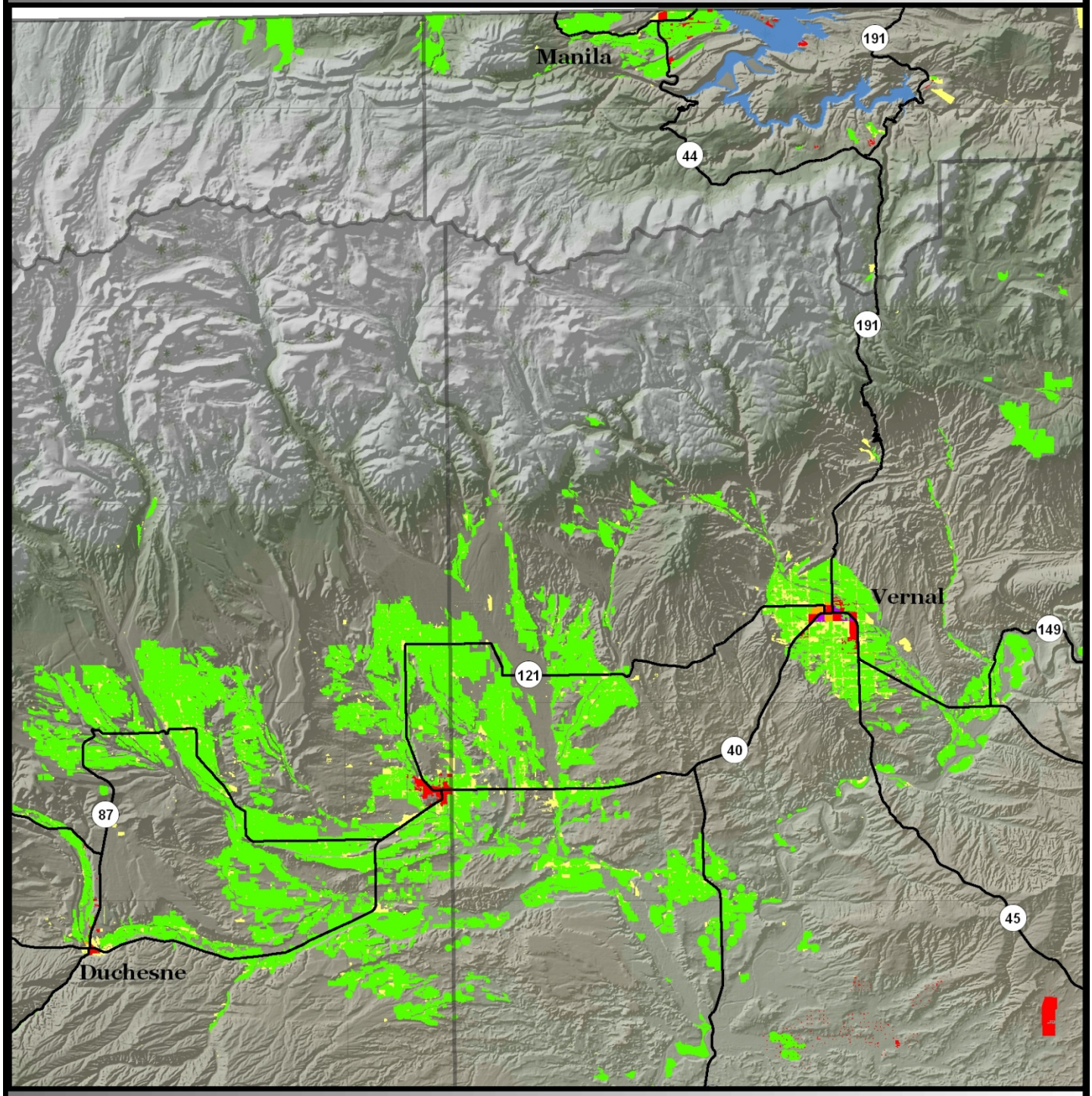
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Northeast Utah 2005



Development Types

Commercial
- Dispersed
- Concentrated

Residential
- Exurban and Rural
- Suburban
- Urban

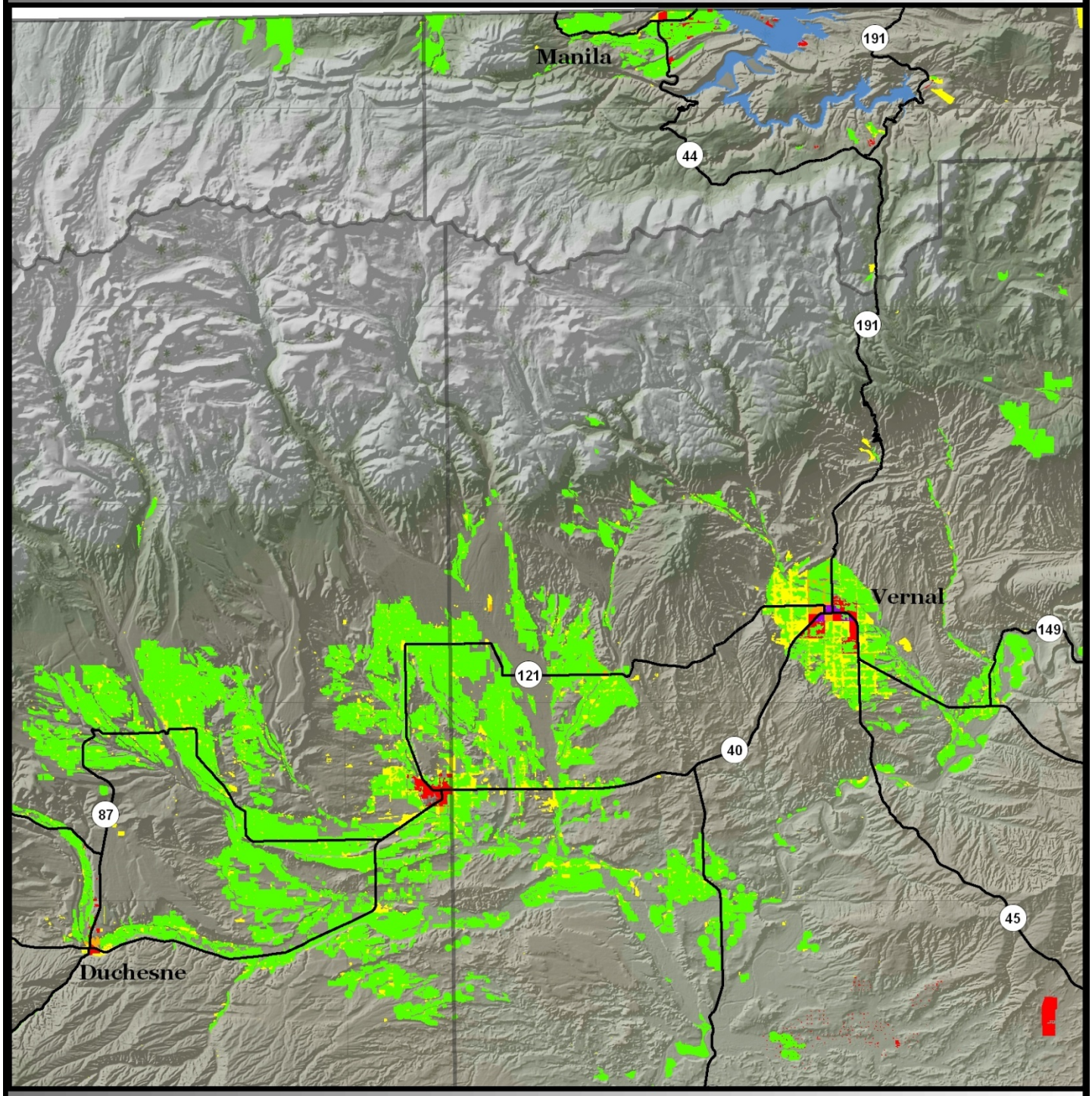
Agriculture
- Agriculture
- Highways
- County Boundary

N W E S

0 2.5 5 10 15 Miles

Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Northeast Utah 2030



Development Types

Commercial
- Dispersed
- Concentrated

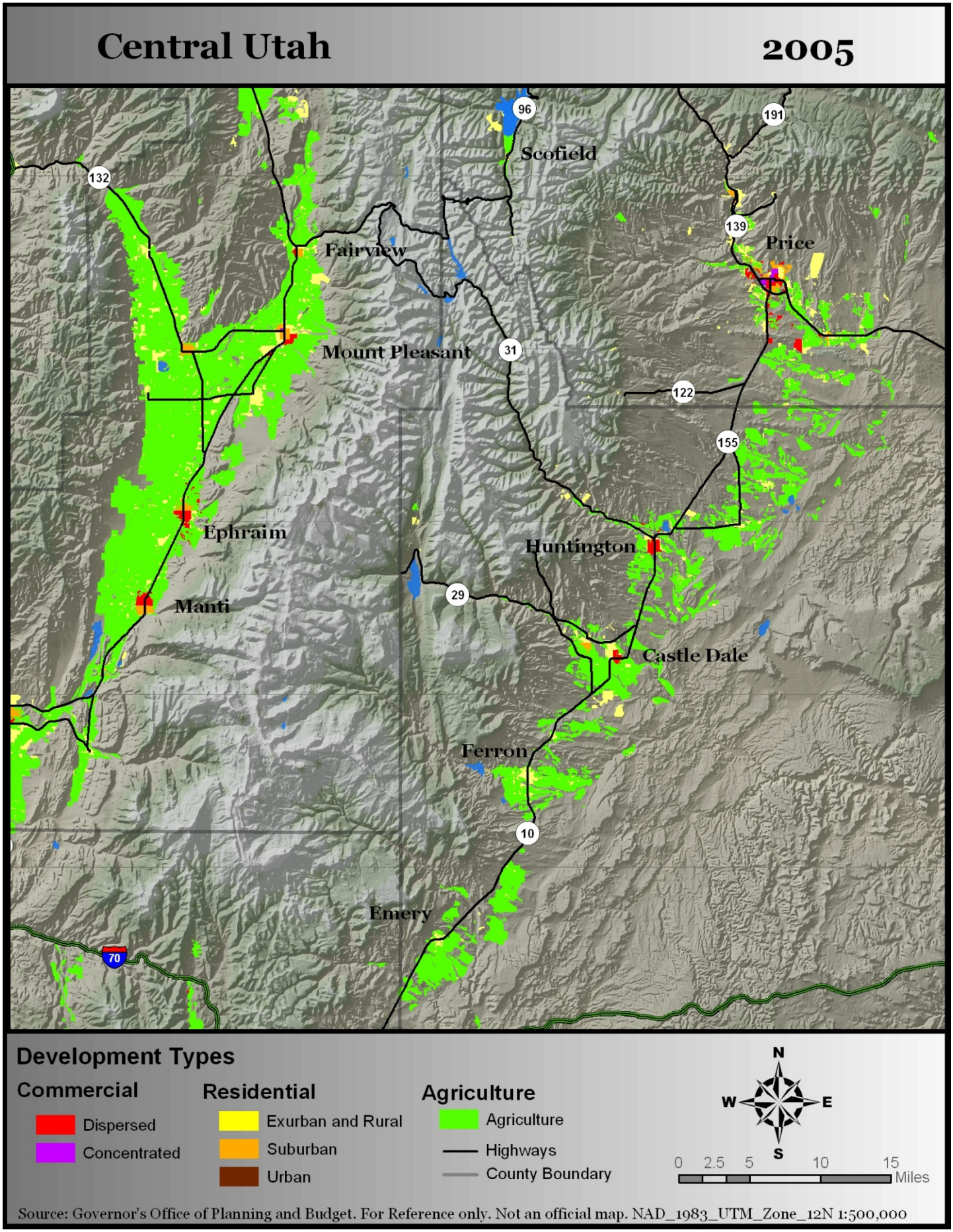
Residential
- Exurban and Rural
- Suburban
- Urban

Agriculture
- Agriculture
- Highways
- County Boundary

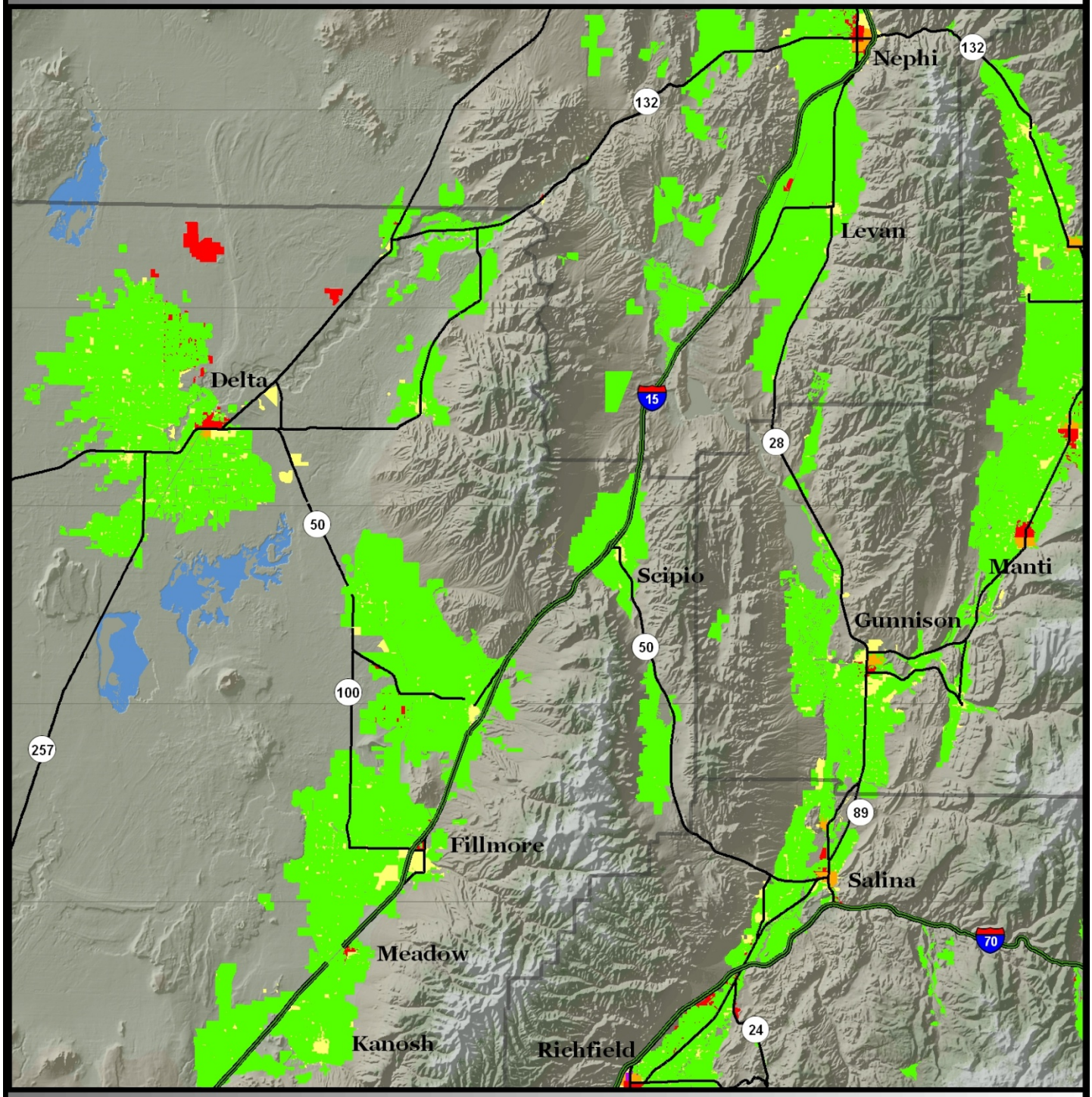
N W E S

0 2.5 5 10 15 Miles

Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Central Utah
2005
Scofield
Fairview
Mount Pleasant
Price
Ephraim
Manti
Huntington
Castle Dale
Ferron
Emery
96
191
132
139
31
122
155
29
10
70
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

West-Central Utah 2005



Development Types

Commercial
- Dispersed
- Concentrated

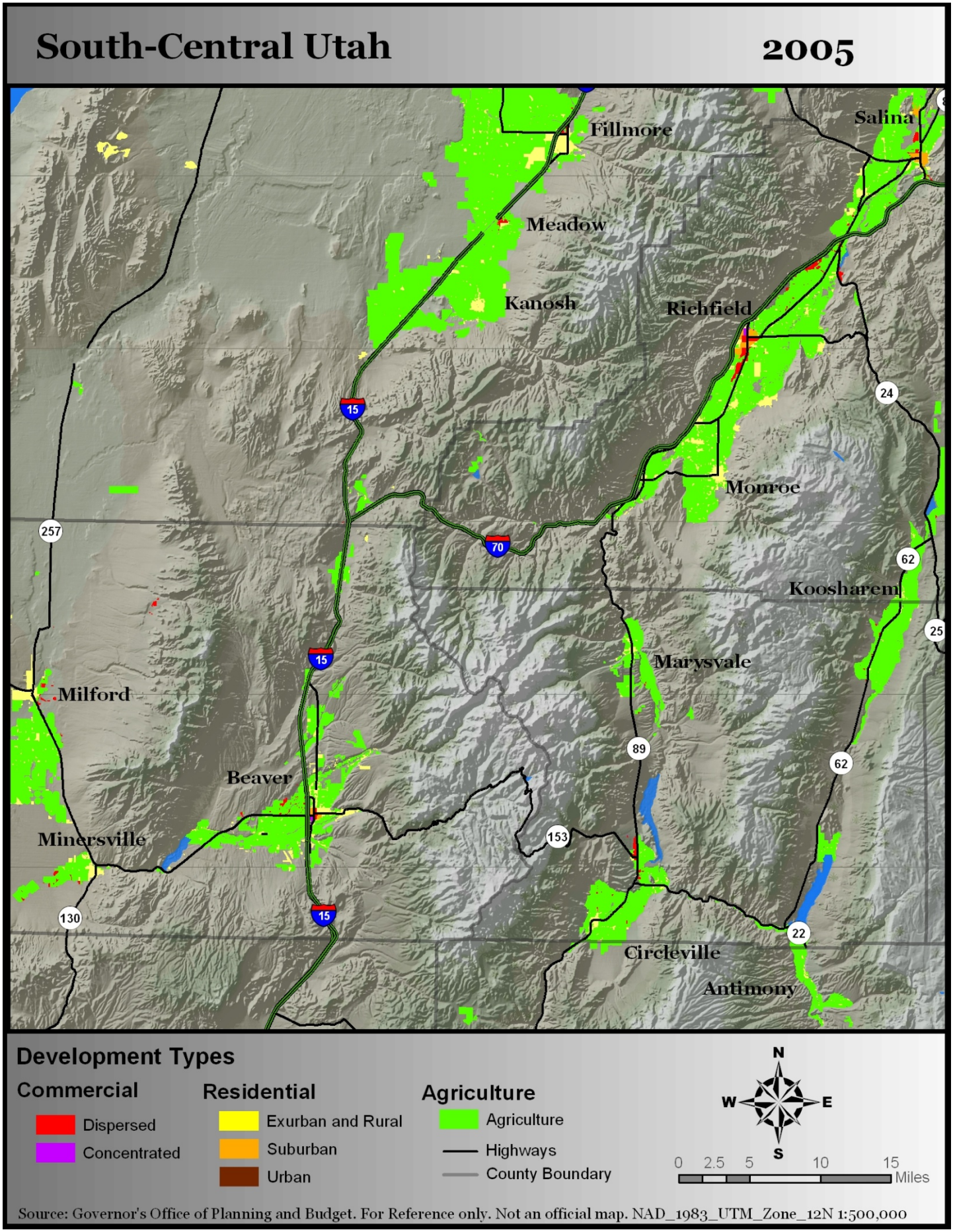
Residential
- Exurban and Rural
- Suburban
- Urban

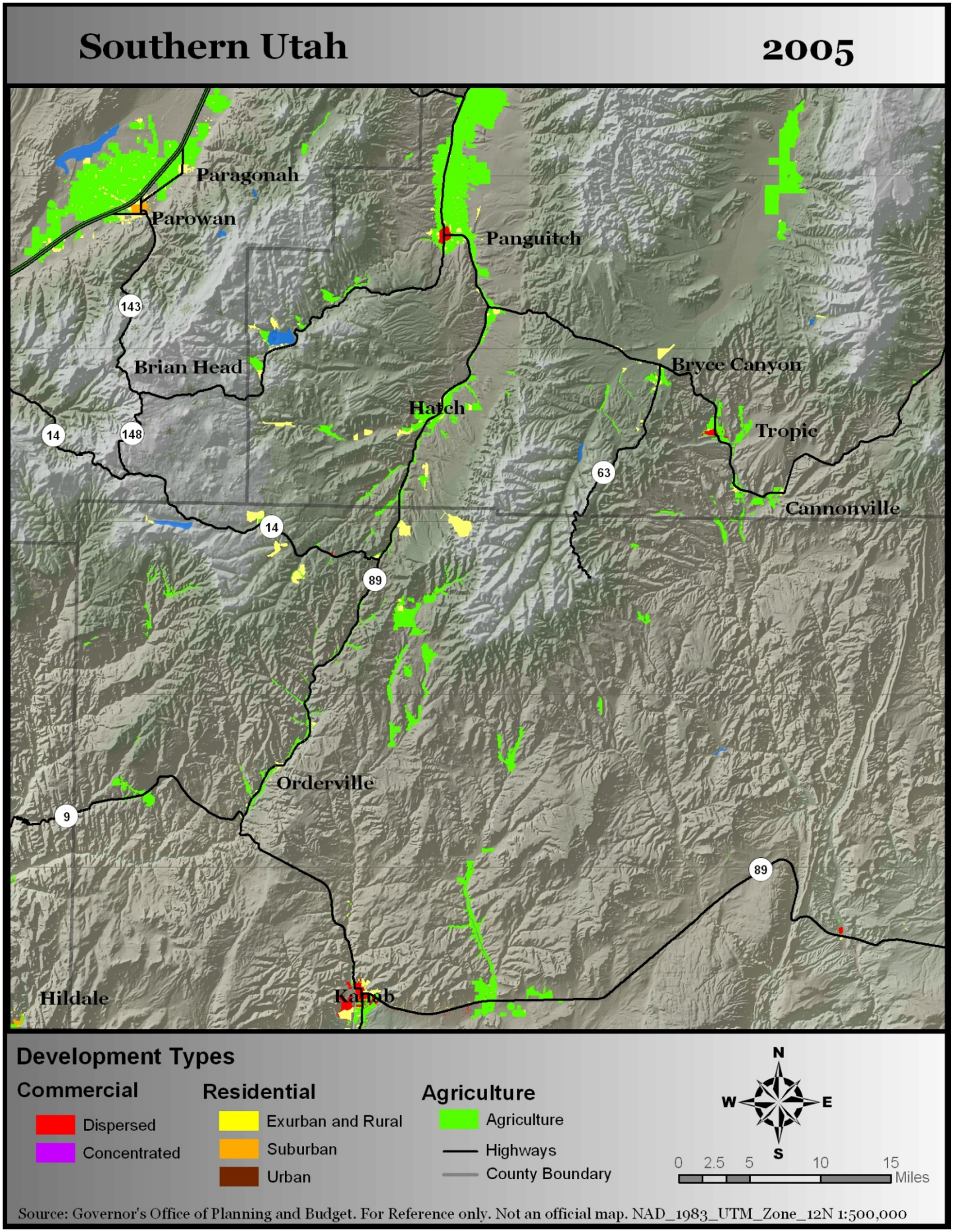
Agriculture
- Agriculture
- Highways
- County Boundary

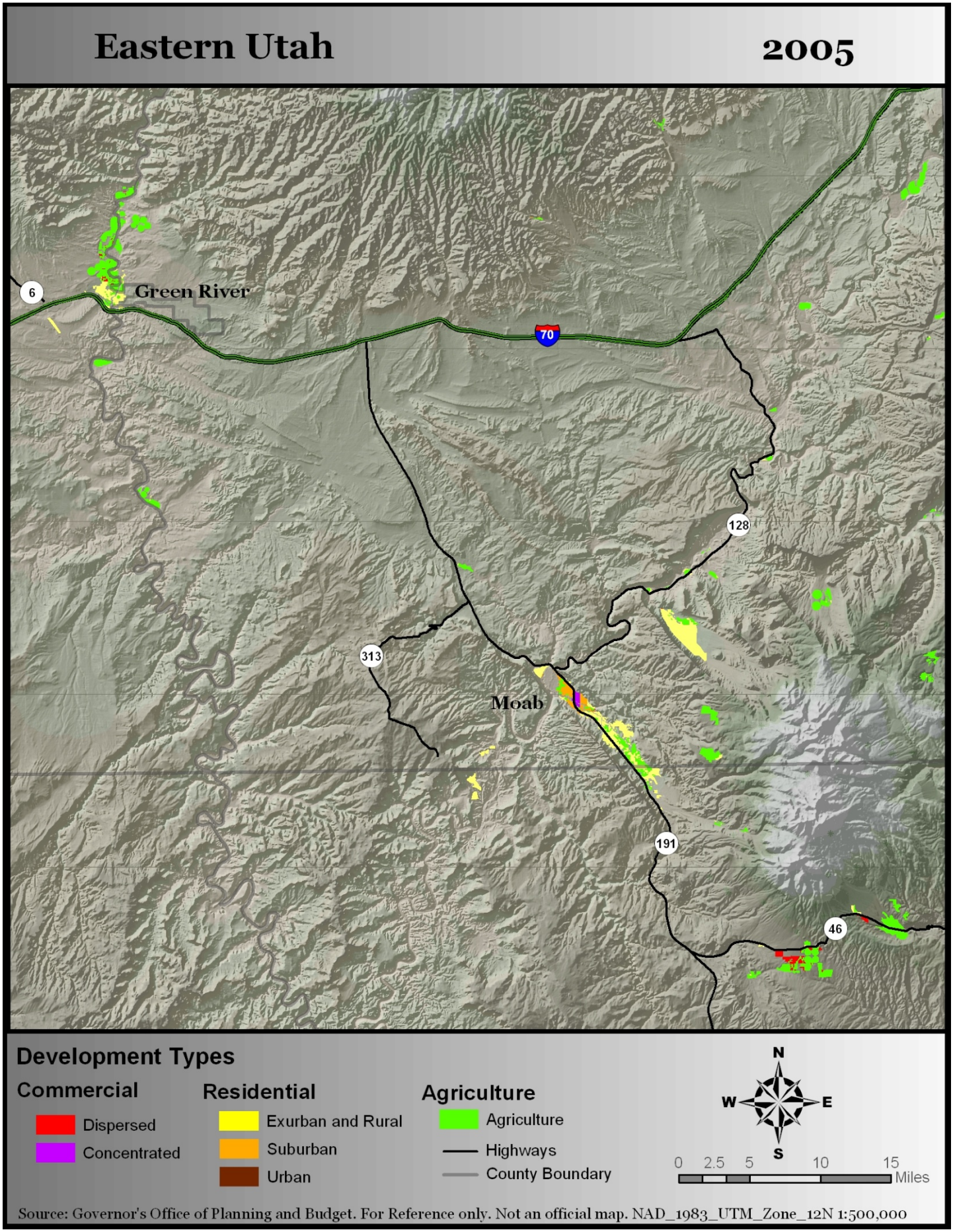
N W E S

0 2.5 5 10 15 Miles

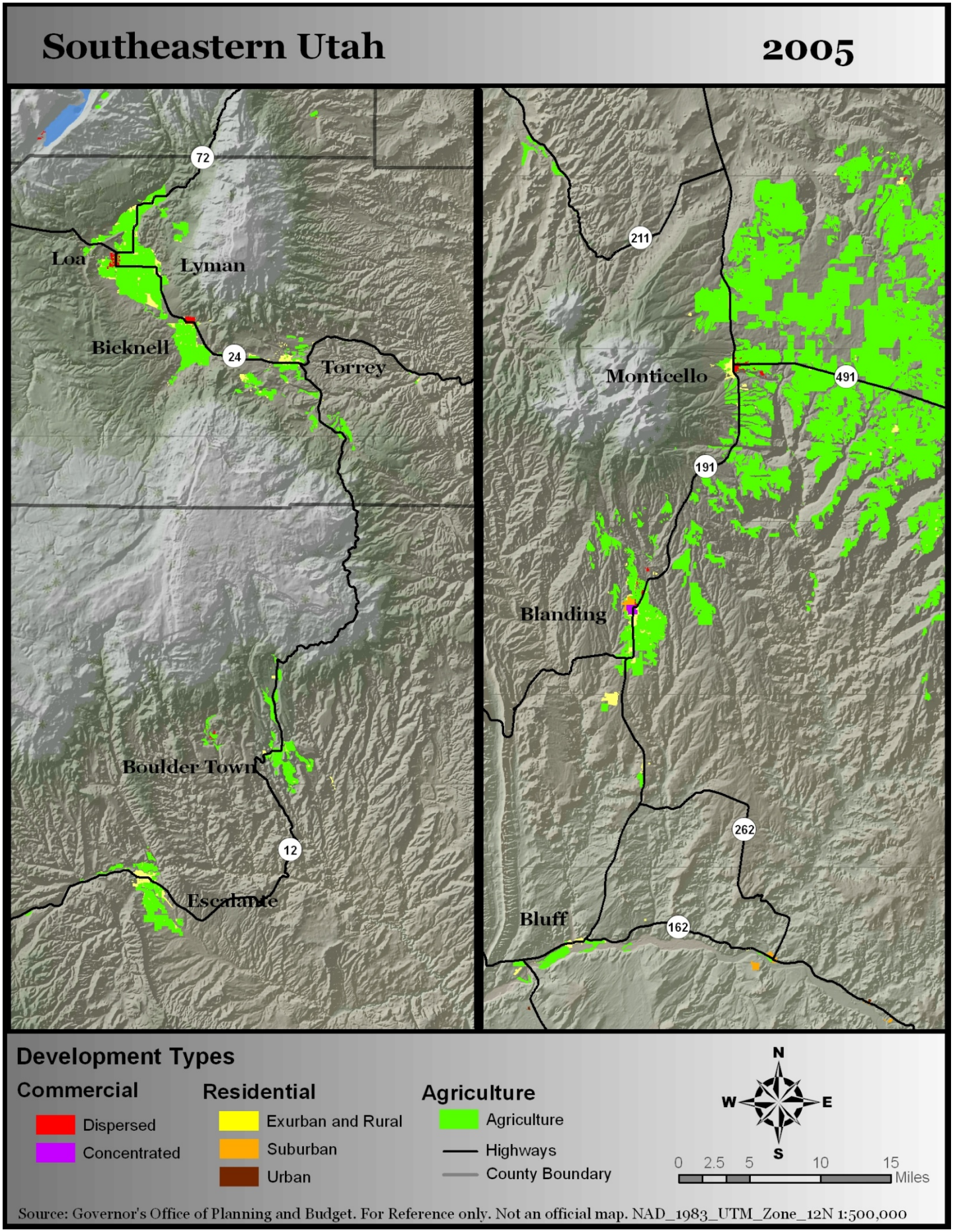
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


South-Central Utah
2005
Fillmore
Salina
Meadow
Kanosh
Richfield
Monroe
Koosharem
Marysvale
Milford
Beaver
Minersville
Circleville
Antimony
15
70
24
257
62
25
89
153
130
22
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Southern Utah
2005
Paragonah
Parowan
Panguitch
143
Brian Head
Bryce Canyon
Hatch
Tropic
14
148
63
Cannonville
14
89
Orderville
9
89
Hildale
Kanab
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000


Eastern Utah
2005
Green River
Moab
6
70
128
313
191
46
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Map 15

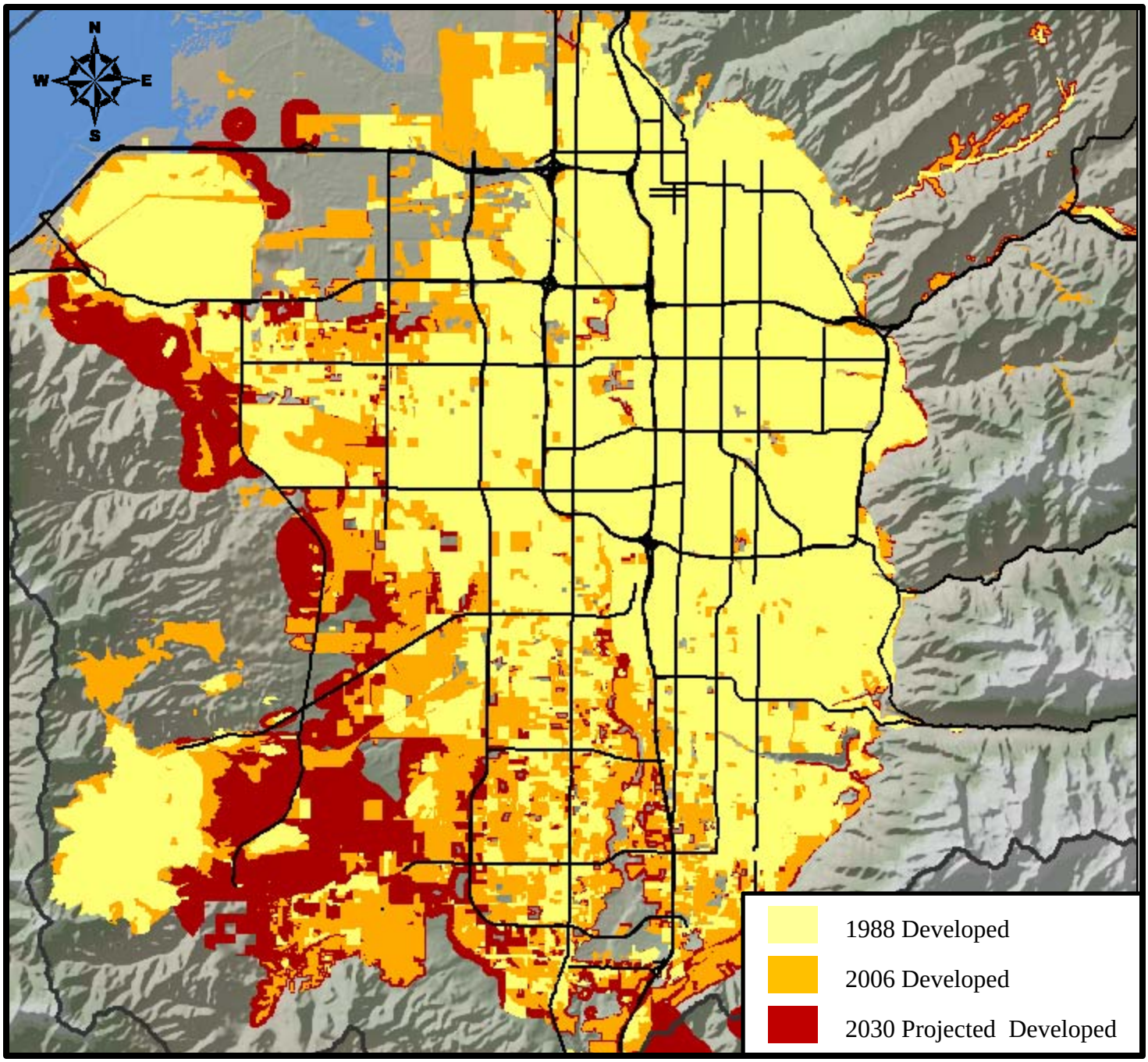

Southeastern Utah
2005
72
Loa
Lyman
Bicknell
24
Torrey
Boulder Town
12
Escalante
211
Monticello
491
191
Blanding
262
Bluff
162
Development Types
Commercial
Dispersed
Concentrated
Residential
Exurban and Rural
Suburban
Urban
Agriculture
Agriculture
Highways
County Boundary
N
W
E
S
0 2.5 5 10 15
Miles
Source: Governor's Office of Planning and Budget. For Reference only. Not an official map. NAD_1983_UTM_Zone_12N 1:500,000

Historic Patterns vs. Future Projections

Using remotely sensed data provided by the Division of Water Resources, land cover data from different years were compared to show how development patterns in the past compare to future projections from the Statewide Travel Model. This provided historical data for people per acre densities and how those densities have changed.

Salt Lake County

Salt Lake County was analyzed using data from 1988 and 2006, a span of 18 years. Density was 5.3 and 5.4 people per developed acre in both of those years (respectively). The map below represents 2030 at 6.6 people per developed acre assuming a projected population of 1,468,615 in 2030. A continued 5.4 people per acre would increase this illustration by over 73 square miles.

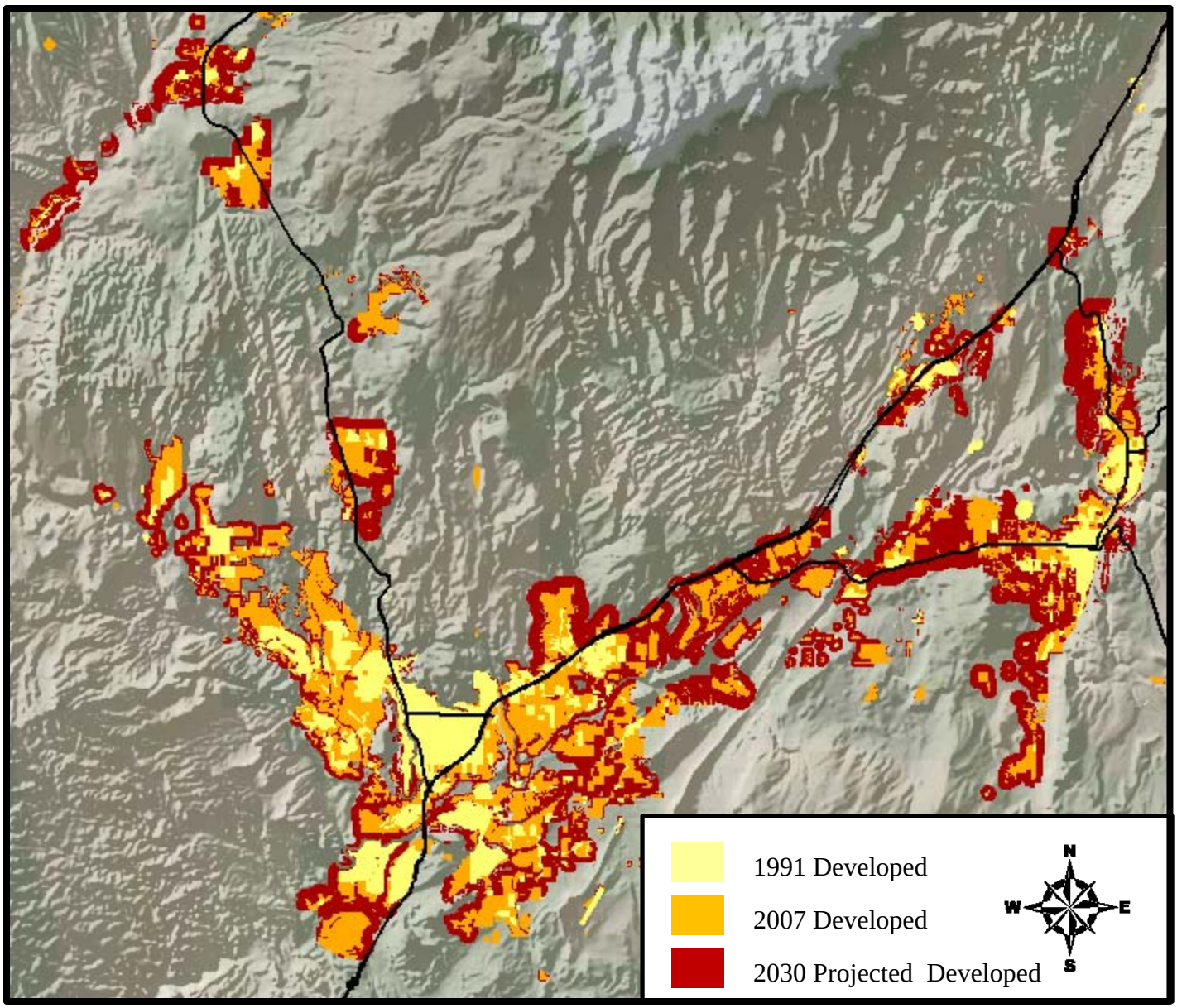


Historic Change:
Saint George and Surrounding Area
1991, 2007, 2030

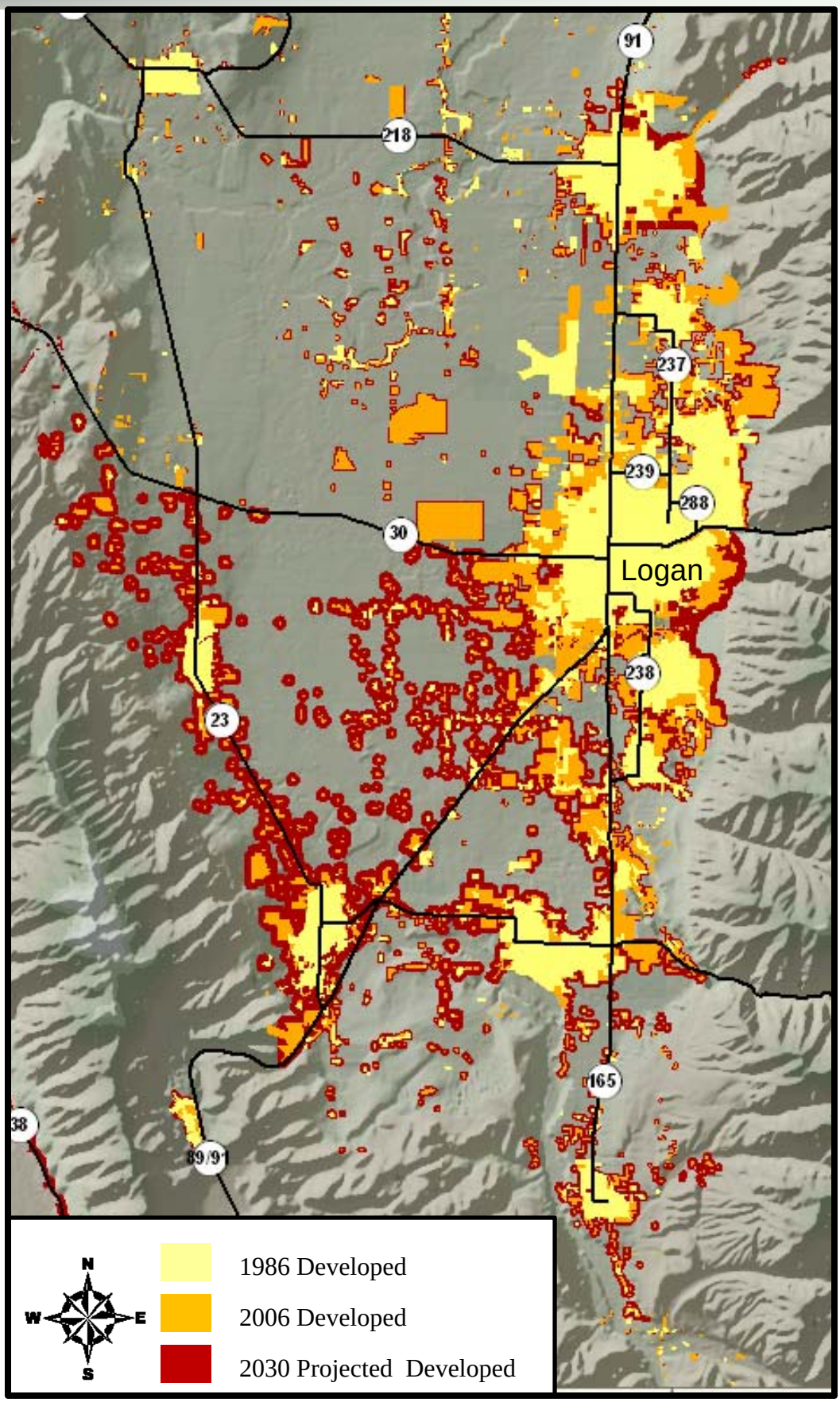
Saint George and the surrounding areas were analyzed using data from 1991 and 2007, a span of 16 years. Density was 3.3 and 3.4 people per developed acre in both of those years (respectively). The following map depicts 2030 at 4.4 people per developed acre assuming a projected population of 415,510. If population per acre remained stable, an additional 56 square miles would need to be added to this projection.

Logan and Surrounding Area
1986, 2006, 2030

Logan and the surrounding areas were analyzed using data from 1986 and 2006, a span of 20 years. Density was 3.5 and 3.3 people per developed acre in those years (respectively). The map on the following page depicts 2030 at 3.12 people per developed acre assuming a projected population of 181,921. If density remains at a stable 3.3 people per acre it would reduce the illustrated land development projection by nearly 5 square miles.



Land Use Appendix I 2008 Baseline



Land Use Appendix II 2008 Baseline

County All values in square miles	2030 Developed (Assuming same population per acre as in 2006)	Projected 2030 Developed (Mapped values*)	Population Per Acre 2006	Population Per Acre 2030 (Mapped values*)
BEAVER	31.9	18.00	0.65	1.15
BOX ELDER	101.0	79.00	1.09	1.39
CACHE	86.1	91.00	3.30	3.12
CARBON	25.9	23.00	1.63	1.84
DAGGETT	10.6	9.00	0.17	0.20
DAVIS	123.7	125.00	4.93	4.88
DUCHESNE	27.6	24.00	1.22	1.40
EMERY	17.2	15.00	1.19	1.37
GARFIELD	14.0	11.00	0.76	0.97
GRAND	15.5	13.00	1.19	1.42
IRON	81.3	62.00	1.68	2.21
JUAB	18.2	12.00	1.55	2.34
KANE	21.1	15.00	0.77	1.08
MILLARD	45.4	34.00	0.68	0.90
MORGAN	21.3	18.00	1.79	2.12
PIUTE	3.6	3.00	0.73	0.88
RICH	15.4	12.00	0.29	0.37
SALT LAKE	417.3	344.00	5.50	6.67
SAN JUAN	13.5	13.00	1.92	2.00
SANPETE	43.5	35.00	1.30	1.61
SEVIER	22.2	20.00	1.77	1.97
SUMMIT	103.7	74.00	1.25	1.76
TOOELE	176.1	107.00	1.06	1.75
UINTAH	43.7	40.00	1.45	1.59
UTAH	265.2	251.00	5.35	5.65
WASATCH	43.8	23.00	1.74	3.31
WASHINGTON	204.7	148.00	3.17	4.39
WAYNE	7.2	6.00	0.73	0.88
WEBER	142.5	135.00	3.52	3.71
Statewide	**2142.5**	**1760**	**3.28**	**3.90**

*See "Projections to 2030" section of the Land Use section text for more information on the difference between mapped values and numerically projected. County projections are estimates.

Time Lapse Photography

The projections in the land use section show the potential for some extreme growth based on the current average density of people per developed acre. While this number may increase as densities increase, it is fair to say that with a projected increase of over 2 million people across the state, there will be a fair amount of land consumption. The following images show what similar land consumption has looked like in Utah during the past 2 decades. While this is purely anecdotal evidence, it does demonstrate how quickly land consumption can occur in areas of rapid population growth.

Herriman, 1993

Growth on the Urban Fringe

Herriman is an example of some of the tremendous growth that is beginning to occur on the periphery of the urbanized areas along the Wasatch Front. Mid-nineties aerial photography shows Herriman with little more than 8 city blocks worth of development. By the middle of the next decade, in 2006, Herriman's development footprint has increased many times over. **Eagle Mountain** is another example of explosive growth. The following pages show how Eagle Mountain grows from virtually no development in 1993 to a thriving community in 2006.

Herriman, 2006

Eagle Mountain, 1993

Eagle Mountain, 2006

Washington County

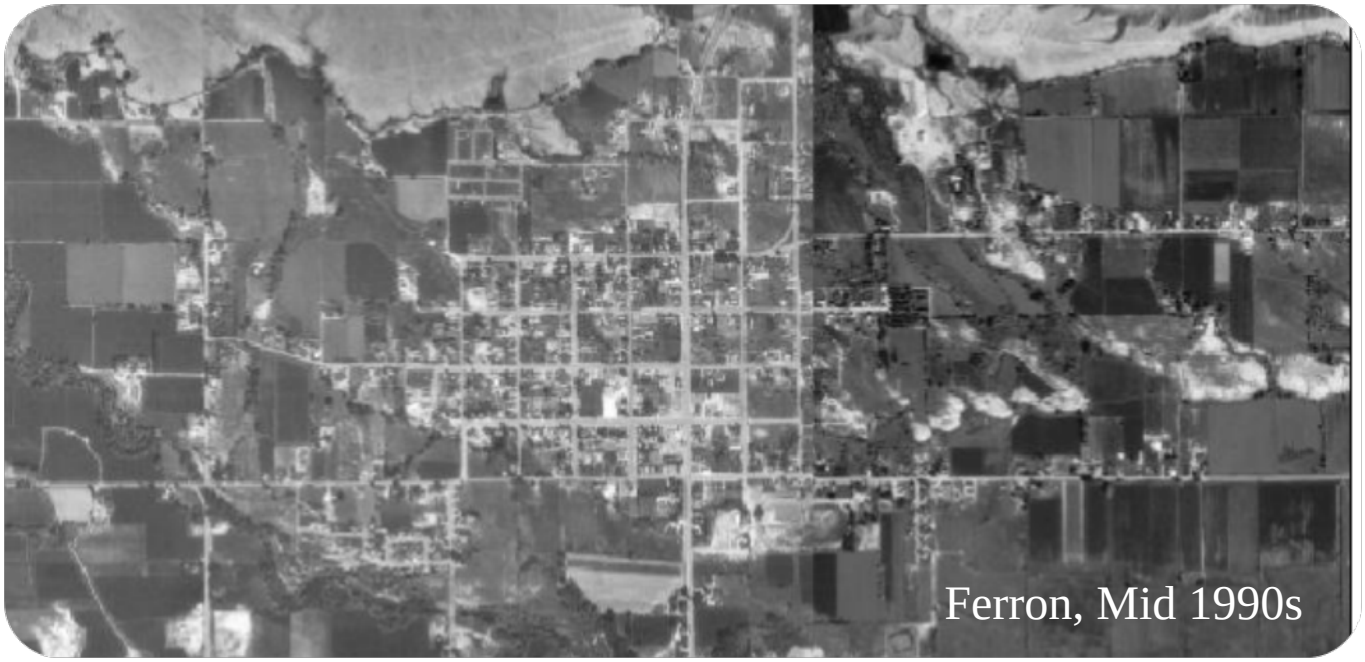
The part of Washington County contained within the Virgin River Watershed grew from approximately 25 square miles in 1991 to nearly 65 square miles in 2007, an increase of approximately 40 square miles from 1991 to 2007. The following imagery shows a little piece of what that growth looked like on the ground.

Northeast Saint George, 1997

Northeast Saint George, 2006

Rural Utah

Unlike many of the burgeoning metropolitan areas along the Wasatch Front and in Southwest Utah, many areas throughout the State have seen minimal changes. This example shows imagery from Ferron, a small town in Emery County that has shown only small changes from the mid nineties to 2006.



The Utah Quality Growth Commission will be celebrating its 10th Anniversary in 2009.

The Commission helped fund the dissemination of this report.

The Quality Growth Commission's 2008 Annual Report is attached for your review.

Quality Growth Commission

2008 Report

October 15, 2008

Main Street, Salt Lake City, approx. 1955

History of the Quality Growth Commission

The Utah Quality Growth Commission was created in 1999 by the Quality Growth Act. It has three responsibilities:

1. Advise the Governor and the Legislature on Growth issues.
2. Assist Local Governments with Quality Growth Planning
3. Conserve Critical Lands by administering the LeRay McAllister Critical Land Conservation Fund.

2009 marks the 10 year anniversary of the Quality Growth Commission and the LeRay McAllister Critical Land Conservation Fund.

Advise and Assist

As part of its mandate to advise the Legislature and the Governor, and assist local governments, the Commission is required to report annually to the Political Subdivisions Interim Committee on the state of Quality Growth in Utah.

Local Government Planning Issues:

This year, the Commission conducted an informal survey of local officials to identify local government planning issues. This survey was conducted at meetings where those officials were already present. While we were not able to meet with every local official, we met with numerous officials from throughout the state.
Meetings attended:

Salt Lake County Council of Governments
Wasatch Front Regional Council's Regional Growth Committee
Utah County Council of Governments
Davis County Council of Governments
Cache County Vision Steering Committee
Summit County Council of Governments
Utah Rural Summit in Cedar City, Utah
Utah League of Cities and Towns Convention

In each of these forums, the Commission members and staff presented information about the

Artist's Rendering, City Creek Center, Salt Lake City, Completion Date, 2012

Commission, the McAllister Fund, and the work we are doing, in conjunction with GOPB, to create tools to assist local governments with planning. We then asked officials to share with us their most critical planning issues. The following issues were mentioned during these meetings:

Recreation, trails and open space planning and conservation: Several officials indicated that citizens are very interested in trails and other recreation amenities and in preserving open space in their communities. These officials indicated that state technical assistance would be very helpful.

Citizen Planner Training: Many local officials indicated that their citizen planners needed training to do the job well. These officials were aware of training resources now available, but indicated a desire for additional resources including: Online training resources, shorter seminars focusing on specific issues, and assistance with costs for current citizen planning training courses.

Financial assistance to small local governments: Some local officials indicated that they could use financial assistance to hire consulting planners, gather information, write plans, conduct public meetings to receive input, and adopt the plans. Even modest costs for printing, postage, and data gathering are often beyond the means of small local governments, let alone the costs for hiring a consulting planner if needed.

Assistance with surveying costs for small local governments: Several local governments indicated that they need to re-survey their communities to correct survey mistakes. These surveys need to be completed before effective growth planning can occur.

Coordinate efforts to promote Quality Growth planning and principles: Several local officials indicated that they are currently working with their councils to promote quality growth principles as they update their plans. The Quality Growth Commission and Envision Utah have both undertaken efforts to promote quality growth principles to local governments in Utah. The

Wasatch Front Regional Council is also working to promote quality growth principles as part of its regional transportation plans. The WFRC Regional Growth Committee indicated a desire to coordinate those efforts to make them more effective. (See attached letter from Wasatch Front Regional Council).

Continue to provide technical assistance and tools to local governments. The Commission and GOPB Planning section have created several planning tools to assist local governments. These include:

- Rural Character Toolkit
- Land Use Ordinance Library
- Critical Lands Planning Toolkit, and others.

In addition, other state agencies have created tools that can be excellent planning resources. These include the Mapserve.Utah.Gov site which contains a local planning area where local governments can easily access all the geographic information maintained by the state. This information is available in a format that allows a local government to use the data even if they lack GIS capability.

SUPER TOOL

All of these tools are being linked together at a single portal called *SUPER Tool*—State of Utah Planning and Education Resource. It also includes some innovative tools created by universities in Utah as well as free software programs that allow manipulation of data and graphics. Several local officials spoke about these tools and urged GOPB and the Commission to continue providing these technical resources.

Promote Corridor Preservation: Some local officials mentioned that the legislature had provided direction and resources to preserve future transportation corridors. These officials indicated they needed assistance to improve planning and zoning around these corridors and promote their preservation.

Changes to the Quality Growth Commission

The Legislative Fiscal Analysts Office has indicated that new accounting standards will require changes to the LeRay McAllister Critical Land Conservation Fund in the near future.

Essentially, unless a designated source of funding for the Commission is identified, the fund will have to become a line item in the budget. When that happens, interest on the fund balance will revert to the General Fund. The Commission has used this interest income to fund tools, conferences and training opportunities for local governments in the past.

The Commission will adjust to the new way of doing business, but it may mean we have to limit the types of meeting and seminar sponsorships, training scholarships, and tools we support, because demand for conservation is so high that the Commissioners have hesitated to spend the appropriated funds for these purposes.

Attached is a letter from the Wasatch Front Regional Council outlining the Regional Growth Committee's Local Government Planning Issues

WASATCH FRONT REGIONAL COUNCIL
295 North Jimmy Doolittle Road · Salt Lake City, Utah 84116 · www.wfrc.org
Phone Salt Lake: 801.363.4250 · Fax: 801.363.4230 · Phone Ogden: 801.773.5559

John Petroff, Jr.
Chairman
Mayor, West Point

Michael H. Jensen
Vice-Chairman
Councilman, Salt Lake County

Byron Anderson
Mayor, Grantsville

Ken Bischoff
Commissioner, Weber County

J. Bruce Burrows
Mayor, Riverdale

Carlton Christensen
Councilman, Salt Lake City

Peter Corroon
Mayor, Salt Lake County

J. Lynn Crane
Mayor, Herriman

Craig L. Dearden
Commissioner, Weber County

Tom Dolan
Mayor, Sandy

Matthew R. Godfrey
Mayor, Ogden

Joe L. Johnson
Mayor, Bountiful

Bret Millburn
Commissioner, Davis County

Kent Money
Mayor, South Jordan

Dennis Nordfelt
Mayor, West Valley City

Ronald G. Russell
Mayor, Centerville

Bruce Sanders
Councilman, Morgan County

JoAnn B. Seghini
Mayor, Midvale

Senator Carlene M. Walker
Utah State Senate

Representative Todd Kiser
Utah House of Representatives

Louenda Downs
Utah Association of Counties

Russ Wall
Utah League of Cities & Towns

John Njord
Utah Department of Transportation

John Inglish
Utah Transit Authority

Robert Grow
Envision Utah

August 19, 2008

John Bennett, Executive Director
Utah Quality Growth Commission
Utah State Capitol Building
350 North State Street, Suite 150
Salt Lake City, Utah 84114

Dear John,

I appreciate the briefing you provided the Regional Growth Committee on May 15th and the opportunity it affords the RGC members to provide a list of specific regional planning needs that your office could assist with. You and the Governor's Office of Planning and Budget are to be commended for the excellent work you have done to date in providing training assistance to local planners, a library of model ordinances, planning grants, economic development support and the Quality Growth Principles themselves. Thank you for your good efforts.

With regard to what specific ideas or actions that your office could provide local governments located along the Wasatch Front, might I suggest several possibilities.

1. The need to coordinate our respective endeavors in promoting the ideals of smart growth found in both your Quality Growth Principles and our own Wasatch Choices 2040 Growth Principles is a high priority. Implementing the ideals of smart growth is our best opportunity to meet the challenges of anticipated regional growth and development. I would like to encourage the Utah State Legislature and administration to adopt a proactive role to meet this demand. Perhaps limited transportation funding could be awarded on a priority basis to those local communities that best utilize growth principles to decrease sprawl, create affordable housing, reduce commute time, promote transit use, and improve our region's air quality while reducing greenhouse emissions.

2. The need to preserve adequate corridors for future transportation projects within the region is ongoing. The State Legislature has helped develop the process to identify and set aside land for this purpose and allocate the necessary finances to implement this process. However, we will need to continue to invest in this effort to ensure our regional transportation network is not only cost effective, but the best that can be provided. Local communities need assistance to help identify strategies and techniques that they can use to preserve transportation corridors as part of their development approval process.

3. Some additional training of local planning officials, especially those in smaller towns, to help prepare or update their general plans and ordinances, and the means to implement such, would be beneficial. Much of this type of planning

assistance is already being provided by local consultants, county planning departments, and members of our staff. For example, Plain City and Hooper rely on the planning expertise of consultants whose staff not only helps local planning commissioners develop their general plans, but also secures grant money to pay for these services. As such, I don't see a strong need for a "circuit planner" in our region but, as grant money continues to become increasingly more and more difficult to secure, I would appreciate any additional funding that the State Legislature and administration could provide local governments for planning assistance.

4. The development, coordination, and distribution of various planner education tools, similar to that currently under development in your office, will be of benefit to both professional and non-professional planners throughout the region. I would encourage you and your staff to continue this effort. Our staff will gladly lend its assistance in whatever manner you require.

5. Ongoing Quality Growth Commission staff involvement and financial support for specific regional transportation projects is also an important need. We are looking into the possibility of a "Livable Corridors" concept that would encourage redevelopment in underutilized corridors. This effort would be designed to provide functional transportation options for all users. It would examine both future residential and commercial development to be constructed around the idea of a community with daily needs easily accessible by foot. Another example would be our efforts to promote the concepts of Green Infrastructure and the need to develop a region-wide plan. As you know, Green Infrastructure is the interconnected network of open space and natural areas such as greenways, wetlands, parks, forest preserves, farmland, and recreational or scenic areas. Your office could be directly involved in helping to oversee and finance these and similar types of studies and projects. Finally, the WFRC staff could use your help in identifying and inventorying both existing and potential transportation oriented developments in our region.

I hope the above ideas summarize much of what was discussed during our Regional Growth Committee meeting and fulfill your expectations. These suggestions to meet the planning needs and demands of a dynamic and growing region can be summarized and presented to our state lawmakers during their next legislature session.

If I can be of further assistance in this matter, please contact me at your convenience.

Sincerely,

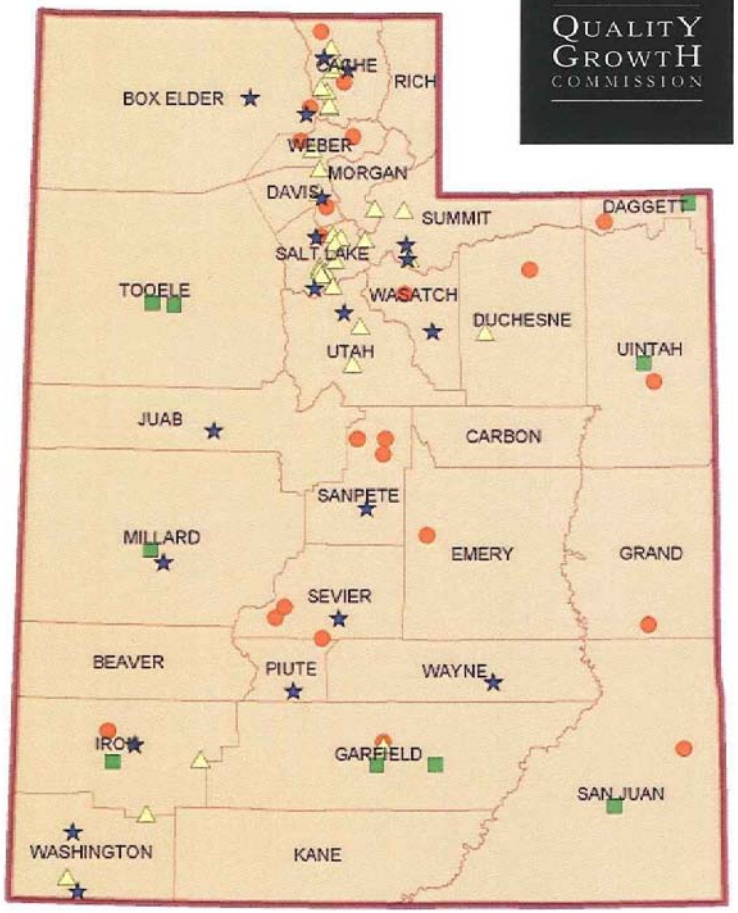
Val John Halford, AICP
Transportation Planner
Wasatch Front Regional Council

cc: Chuck Chappell
file

Map indicating planning grant assistance provided by the Utah Quality Growth Commission, 2005-2007

Planning Grants and LeRay McAllister Fund 2005-2007

UTAH QUALITY GROWTH COMMISSION



★ Critical Lands Planning

2005
- Bluffdale
- Farmington City
- Kamas/Oakley
- City of St. George
- Salt Lake City
- Cache County
- Juab County
- Millard County
- Piute County
- Sanpete County
- Sevier County
- Wayne County

2006
- Lindon City
- Box Elder County
- Iron County

2007
- Cache County
- Perry City
- Wasatch County
- Washington County

● General Planning Assistance

2006
- Plain City
- Ferron City
- Joseph
- Koosharem
- Monticello
- Mt. Pleasant
- Wasatch Front Regional Council
- Cache County
- Wasatch County
- Weber County

2007
- Boulder Town
- Brigham City/Perry City
- Centerville City
- Elsinore Town
- Fairview City
- Fountain Green
- Moab City/Grand County
- Trenton Town
- Unitah Basin AOG

■ County Resource Management Planning

2005
- Daggett County
- Iron County
- San Juan County
- Tooele County
- Uintah County

2006
- Daggett County
- Garfield County
- Millard County

2007
- Garfield County
- Tooele County

△ LeRay McAllister Fund

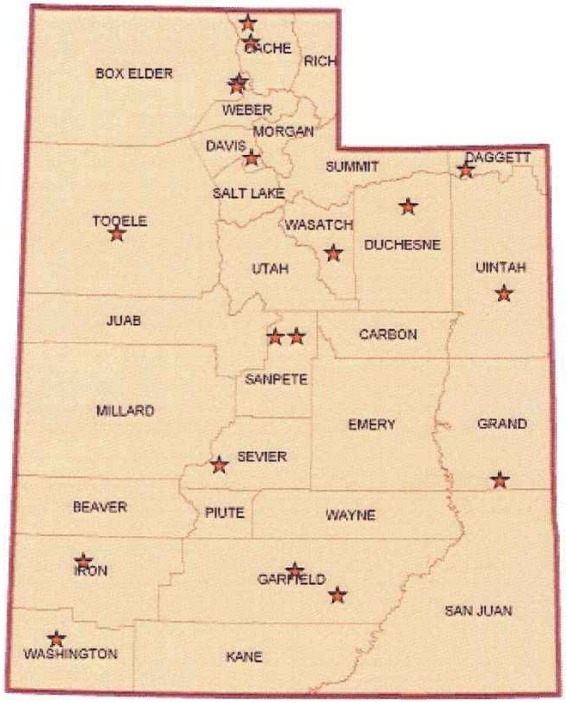
2005
- Bingham Fort Farm
- Dry Creek Restoration
- Fuhriman Farm
- Jordan River Open Space Preservation
- Red Butte Garden and Arboretum
- Rock Canyon
- Salem Outdoor Wetland Classroom
- Santa Clara Arboretum
- Tree Utah
- Woodlee Dairy/ Gittins Farm

2006
- Boulder Creek Canyon
- Co-op Valley
- Corner Canyon
- Kevin Conway Wildlife Management Area
- Knudsen Park
- Perkins Flat - Emigration Canyon

2007
- Chalk Creek Ranch
- Glenn Family Farm
- Richins Ranch
- Salt Lake City Foothill Preservation
- Selman Ranch Phase II
- Tree Utah Phase III
- Trout of Paradise
- Virgin River Headwaters
- Weber River Parkway

FY 2007 Planning Grant Funds - $200,000

Grant Recipient	Project Type	Grant Amount
Iron County	Spatial Growth Modeling Tool	$50,000
Washington County	Critical Lands Plan for the Vision Dixie Process	$40,000
Garfield County	County Resource Management Plan	$16,660
Tooele County	County Resource Management Plan	$12,000
Cache County	Critical Lands Plan	$10,000
Wasatch County	Critical Lands Plan	$18,000
Perry City	Critical Lands Plan	$8,000
Boulder Town	General Plan & Critical Lands Plan	$10,000
Fountain Green	General Plan Update	$6,000
Fairview City	General Plan Update	$4,000
Elsinore Town	General Plan Update	$2,000
Trenton Town	General Plan Update	$2,000
Unitah Basin AOG	Regional Transportation Plan	$5,000
Moab City/Grand County	Affordable Housing Plan	$10,000
Brigham City/Perry City	Design Guidelines	$15,000
Centerville City	Main Street Transit Oriented Development Plan	$8,000
		$216,660



UTAH QUALITY GROWTH COMMISSION

GOPB PLANNING

Map showing LeRay McAllister Fund Projects, CY 1999-2008

LeRay McAllister Critical Land Conservation Fund

73 Projects Funded by the Utah Quality Growth Commission as of October, 2008

LEGEND:

Counties which contain a project funded by the McAllister Fund

- Approved Projects
- Projects to be Approved 10.24.08

•Note: The symbol shown above does **not** pinpoint project locations on the map.

UTAH QUALITY GROWTH COMMISSION

Source: Governor's Office of Planning and Budget, October, 2008

Cache County
- American West Heritage Ctr., Phase I and II
- Logan City/ Blacksmith Fork River
- Brooke Ranch
- Sagamore Farms
- Fuhriman Ranch
- Woodlee Dairy, Phase I and II
- Zollinger Farm
- Selman Ranch, Phase I & II
- Glenn Farm
- Trout of Pardise
- Curtis Farm
- Elkhorn Ranch
- Baxter Ranh

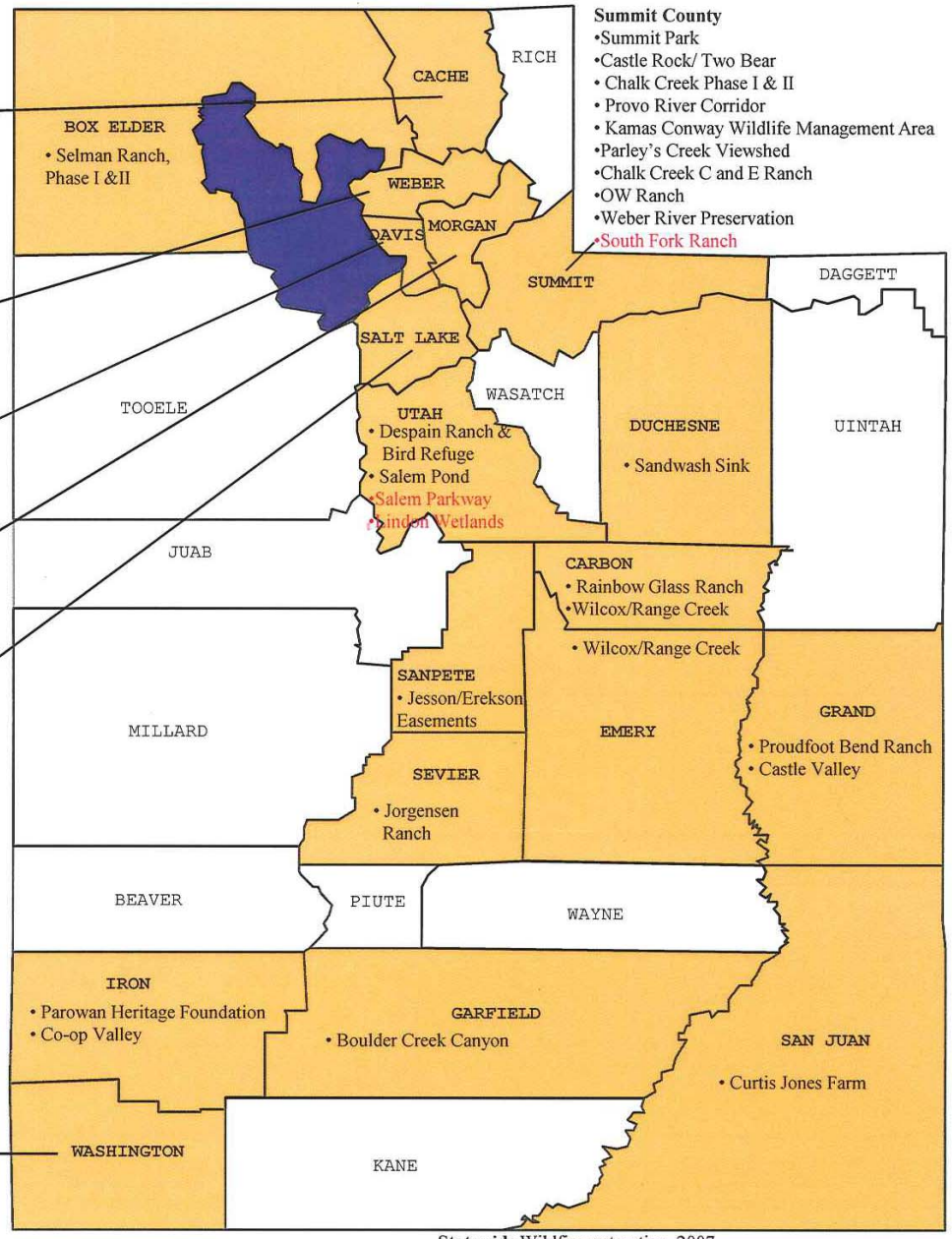
Weber County
- Gary Hess Weber River Property
- Ogden River Centennial Trail
- Bingham Fort Farm
- Weber Pathways Uintah Trail Segments
- Buffalo Springs Farm

Davis County
- Black Agriland
- PacifiCorp Conservation Easement
- Kay's Creek Corridor
- Mabey Pond
- West Layton Farmland
- Utah Botanical Center
- Jaques Farm

Morgan County
- Peaceful Valley Ranch
- Richins Ranch

Salt Lake County
- Dry Creek Riparian Restoration
- West Jordan, Jordan River Re-meandering
- Bluffdale UPRR/Jordan River Property, North & South
- Willow Heights, Big Cottonwood Canyon
- West Valley City Wetlands
- TreeUtah/Audubon Habitat Restoration Phase I, II, III, IV, V
- Red Butte Gardens
- Holladay Knudsen Park
- South Jordan Shields River Walk
- Draper Corner Canyon
- Emigration Canyon Perkins Flat
- Foothill H Rock
- Rose Canyon

Washington County
- Virgin River Confluence, Phase I & II
- Grafton Town, Phase I &II
- Santa Clara Arboretum, Phase I and II
- Virgin River Headwaters, Phase I and II
- Pine Valley Meadows



Summit County
- Summit Park
- Castle Rock/ Two Bear
- Chalk Creek Phase I & II
- Provo River Corridor
- Kamas Conway Wildlife Management Area
- Parley's Creek Viewshed
- Chalk Creek C and E Ranch
- OW Ranch
- Weber River Preservation
- South Fork Ranch

Statewide Wildfire restoration, 2007

Summary LeRay McAllister fund Projects, CY 1999 to 2007

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Five Grants Awarded 1999												
Washington County	Virgin River Confluence	$500,000	$0	$0	$520,000	$1,104,000	$0	$1,624,000	$2,124,000	125	Preserve critical habitat for various endangered and threatened fish species, plans for trails	Washington County
Bluff	Curtis Jones Farm	$309,174	$0	$72,000	$553,000	$0	$0	$625,000	$934,174	144.22	Preserve historic agricultural area and riparian habitat	Bluff City
Rockville	Grafton Preservation	$251,875	$250,000	$50,000	$850,000	$0	$0	$1,150,000	$1,401,875	212.56	Preserve historic agricultural area and riparian habitat	Town of Rockville
Davis County	Black Agriland	$172,000	$0	$50,000	$171,500	$0	$0	$221,500	$393,500	39.4	Preserve land currently under agricultural production that serves as natural buffer for the wetlands and habitat for migratory birds	The Nature Conservancy
Morgan County	Peaceful Valley Ranch	$750,000	$900,000	$1,000	$0	$0	$3,900,000	$4,801,000	$5,551,000	7300	Preserve the ranch's cultural, scenic, and natural resources	FFSL
Total for 1999		$1,983,049	$1,150,000	$173,000	$2,094,500	$1,104,000	$3,900,000	$8,421,500	$10,404,549	7821.18		
Agriculture	0	$1,983,049	1150000	173000	1574500	0	3900000	6797500	6280549	7696.18		
number ag easements		4										
Eleven Grants Awarded 2000												
Bluffdale	UPRR/ Jordan River Property	$124,235	$0	$0	$0	$124,235	$0	$124,235	$248,470	12.5	Preserve riparian corridor, plans to construct trails	Bluffdale City
Davis County	PacifiCorp Conservation Easement	$56,415	$0	$500	$0	$0	$56,515	$57,015	$113,430	70.8	Protection of the Great Salt Lake wetland ecosystem	DWR
Layton	Kays Creek Corridor	$150,000	$0	$0	$0	$150,000	$0	$150,000	$300,000	30	Preserve riparian corridor, plans to construct trails	Layton City
Marriott-Slaterville	Gary Hess Weber River Property	$38,048	$0	$0	$0	$35,750	$0	$35,750	$73,798	4.76	Preserve pasture & wetland, provide nature trail & access to the Weber River	Marriott-Slaterville
Sevier County	Jorgensen Bar J Ranch Conservation Project	$700,000	$1,965,000	$0	$535,000	$0	$1,050,000	$3,550,000	$4,250,000	5776	Preserve ranch and farm operations and natural values of the property.	FFSL
Parowan	Dr. Priddy Meek's Pioneer Farmstead Park & Urban Fishery	$12,500	$0	$30,000	$43,500	$47,500	$0	$121,000	$133,500	3.61	Restore historic natural areas, stream channel, and agricultural uses, add urban fishery & trails	Parowan Heritage Foundation
Provo	K. Dale and Sonja Despain Ranch and Bird Refuge	$200,000	$0	$0	$0	$200,000	$625,000	$825,000	$1,025,000	333.03	Preserve cattle ranch and open space in one of Provo's targeted open space areas.	Provo City

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Salt Lake County	Dry Creek Riparian Restoration	$250,000	$0	$0	$0	$250,000	$0	$250,000	$500,000	16	Restoration of Dry Creek channel and riparian system, plans for trail	Salt Lake County
Summit County	Summit Park	$400,000	$500,000	$0	$162,000	$0	$0	$662,000	$1,062,000	325	Preserve natural area on all but 25 acres which would allow for 7 homes, remainder of land to be open for hiking, skiing, mtn. biking, and to protect old growth forest.	TPL
Wellsville	American West Heritage Center Farmland Preserve	$100,000	$0	$0	$120,242	$0	$0	$120,242	$220,242	15.89	Preserve farmland which supports Jensen Historical Farm and the Center as a worldwide tourist destination	Utah Open Lands
West Jordan	Jordan River Critical Lands Preservation and Re- meandering	$439,778	$5,947,000	$0	$100,000	$0	$0	$6,047,000	$6,486,778	58.22	Preserve and restore critical riparian and upland area, re-meander Jordan River	
Total for 2000		$2,470,976	$8,412,000	$30,500	$960,742	$807,485	$1,731,515	$11,942,242	$14,413,218	6645.81		
Agriculture number ag easements	0	$1,050,548	1965000	30000	698742	283250	1675000	4651992	5702539.5	6133.29		
		5										
Nine Grants Awarded 2001												
Carbon and Emery Counties	Wilcox Property	$500,000	$2,008,300	$0	$0	$0	$0	$2,008,300	$2,508,300	4208.35	Preserve ranch for habitat, forest resources, cultural resources, and watershed protection	FFSL
Coalville, Summit Co.	Chalk Creek Restoration Phase I	$10,000	$0	$0	$0	$10,332	$0	$10,332	$20,332	0	Restore Chalk Creek shoreline, thin vegetation, remove debris, remove fencing (17.96 acres for restoration)	Summit County
Grand County	Proudfoot Bend Ranch	$537,500	$0	$0	$537,500	$0	$0	$537,500	$1,075,000	184.27	Preserve agricultural use and riparian habitat on the Colorado River in a key region of biodiversity	DWR
LaVerkin, Hurricane, Washington Co.	Virgin River Confluence Phase II	$500,000	$550,000	$0	$900,000	$0	$0	$1,450,000	$1,950,000	405	Protect riparian habitat and provide compatible recreation use	
Logan City, Cache Co.	Rinder- knecht Property	$12,950	$0	$0	$0	$12,950	$0	$12,950	$25,900	1.75	Improve land for habitat and passive recreational use, including a walking trail, fishing and birdwatching.	Logan City
Rockville, Washington County	Cox Property	$71,075	$0	$0	$110,000	$0	$0	$110,000	$181,075	7.97	Purchase conservation easement to protect agricultural land in historic ghost town of Grafton	Grafton Heritage Partnership Project
Salt Lake County	Willow Heights, Big Cottonwood Canyon	$700,000	$0	$0	$395,250	$395,250	$0	$790,500	$1,490,500	155.41	Protect pristine watershed and habitat. Provide for passive recreation.	
Summit County	Castle Rock	$900,000	$2,000,000	$0	$1,730,022	$0	$4,630,300	$8,360,322	$9,260,322	10013	Preserve wildlife habitat for deer and elk; cattle grazing; forested area designated for timber management; watershed.	FFSL

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
West Valley City	West Valley City Wetlands/ Storm Water Park	$136,146	$0	$0	$0	$177,350	$0	$177,350	$313,496	20	Develop a multi-functional wetlands park: wetland enhancement, restoration, creation and banking; groundwater protection; wildlife habitat; recreational opportunities through hiking, biking, and equestrian trails; storm water retention/detention; educational opportunities.	
Total for 2001		$3,367,671	$4,558,300	$0	$3,672,772	$595,882	$4,630,300	$13,457,254	$16,824,925	14995.75		
Agriculture	0	$2,008,575	$2,000,000	$0	$2,377,522	$0	$4,630,300	$9,007,822	$11,016,397	$10,207		
number ag easements		4										
Four Grants Awarded 2002												
Castle Valley, Grand County	Castle Valley Preservation Initiative	$85,200	$0	$0	$271,000	$0	$0	$271,000	$356,200	90	Preserve area for hiking, camping, access to Castle Rock for climbing, habitat, landscape and view of valley.	
Clearfield, Davis Co.	Mabey Pond	$45,412	$0	$0	$0	$45,412	$0	$45,412	$90,824	2.31	Purchase pond for passive recreation, fishing, small non- motorized boating, Air and Water Quality, and Habitat.	
Paradise, Cache Co.	Brooke Ranch Easement	$250,000	$1,000,000	$0	$250,000	$0	$500,000	$1,750,000	$2,000,000	1563.32	Preserve cattle ranch, protect habitat, provide OS, and preserve historic ag. Character of community	TPL
Summit Co.	Provo River Corridor	$35,000	$60,000	$0	$187,000	$0	$183,000	$430,000	$465,000	16.82	Protect undeveloped characteristics of river corridor for Western Spotted Frog habitat and commercial flyfishing	Utah Open Lands
Total for 2002		$415,612	$1,060,000	$0	$708,000	$45,412	$683,000	$2,225,412	$2,555,824	1672.45		
Agriculture	0	$250,000	1000000	0	250000	0	500000	1750000	2000000	1563.32		
number ag easements		0										
Five Grants Awarded 2003												
Bluffdale, Salt Lake Co.	UPRR Property - North	$150,000	$0	$0	$0	$150,000	$0	$150,000	$300,000	11.65	This site will include a portion of the Jordan River Parkway and Bonneville Shoreline Trails connection. It will also include the Jordan River bottoms.	
Coalville, Summit Co.	Chalk Creek Restoration Phase II	$20,000	$0	$0	$0	$20,000	$0	$20,000	$40,000	0	Remove a diversion dam, fill in the ditch, grade and level out the shoulder areas and continue to pedestrian trail up to the existing sidewalk. The project would restore the natural flow of the creek and stabilize the shoulder area which has eroded as a result of the diversion dam.	
West Jordan, Salt Lake Co.	TreeUtah/Audubon Migratory Bird Habitat Restoration	$10,000	$0	$0	$10,000	$0	$0	$10,000	$20,000	120	The project objective is to restore high quality migratory bird habitat along the Jordan River. This includes reactivating and enhancing old menders, enhancing the Willow Creek Channel and the removal of exotic species and planting native species	
Ogden, Weber Co.	Parkway/Centennial Trail	$60,000	$0	$0	$0	$90,000	$0	$90,000	$150,000	15.62	The project will entail purchasing three parcels of land from the railroad to allow completion of the ogden River Parkway Trail and Centennial Trail. The trail will connect with existing trails already established in the city's of West Haven and Riverdale. The final trail will be a 28.2 mile loop that joins into the mouth of Ogden Canyon along both rivers to the mouth of Weber Canyon.	
Paradise, Cache Co.	Sagamore Farms	$250,000	$1,000,000	$30,000	$220,000	$0	$500,000	$1,750,000	$2,000,000	430	Help promote and implement the goals of the Cache Valley Agricultural Heritage Program, including protection of critical farmland and open spaces.	TPL
Total for 2003		$490,000	$1,000,000	$30,000	$230,000	$260,000	$500,000	$2,020,000	$2,510,000	577.27		
Agriculture	0	$250,000	1000000	30000	220000	0	500000	1750000	2000000	430		

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
number ag easements		1										
Six Grants Awarded 2004												
Nibley, Cache County	Fuhriman Agricultural Easement	$100,000	$270,329	$25,000	$25,000		$135,165	$455,494	$555,494	68		TPL
Smithfield, Cache County	Woodlee/Gittins Dairy	$155,000	$215,000	$60,000				$275,000	$430,000	21		UDAF
Salt Lake City, Salt Lake County	Red Butte Garden/Heritage preserve planning and restoration	$73,000			$147,000			$147,000	$220,000	436		
Santa Clara City, Washington County	Arboretum Restoration Project	$30,000				$35,000		$35,000	$65,000	15		
Salem City, Utah County	wetlands classroon	$20,000				$140,000		$140,000	$160,000	1		
Ogden, Weber Co	Bingham Fort Farm	$265,000	$530,000	$25,000		$0	$245,000	$800,000	$1,066,000	30		
Total for 2004		$643,000	$1,015,329	$110,000	$172,000	$175,000	$380,165	$1,852,494	$2,496,494	$571		
Agriculture	0	$520,000	$1,015,329	$110,000	$25,000	$0	$380,165	$1,530,494	$2,051,494	$119		
number ag easements		3										
Eleven Grants Awarded 2005												
South Jordan City	Sheilds River Walk	$97,500				$292,500		292500	$390,000	2.75	acquire the final piece of the Jordan River Parkway from 110 South to 90th South.	
Sportsmen for Habitat	Kamas-Kevin Conway Wildlife Management Area	$300,000			$1,300,000			$1,300,000	$1,700,000	569.00	This project seeks to conserve two parcels. One is 440 acres. An adjoining property of 129 acres would be acquired at the same time. The 569 Acre parcel is critical deer, moose, and elk winter range.	
Division of Forestry, Fire and State Lands	Co op Valley and Spanish Hollow	$400,000	$2,600,000					$2,600,000	$3,000,000	3265.00	Co-op Valley (3,265 acres) watershed provides municipal supply for Paragonah. Wildlifeincludes T&E species (bald eagle, N. goshawk, Utah prairie dog) plus elk, deer, bear, cougar, bobcat, coyote, wild turkey, blue grouse among others.	
Tree Utah	Audubon/Tree Utah Migratory Bird Habitat Restoration Phase 2	$20,000	$400,000		$51,630			$451,630	$471,630	20.00	The project objective is to restore high quality migratory bird habitat along the Jordan River. This includes reactivating and enhancing old meanders, enhancing the Willow Creek Channel, removal of exotic species and planting native species.	
Summit County Basin Open Space Advisory Committee	Parley's Creek Viewshed Preservation	$100,000				$250,000		$250,000	$350,000	46.70	The Roberts Parcel is 46.7 acres in size. The properties are identified as an important viewshed in the Summit County General Plan as it is highly visible from the I-80 corridor.	
Trust for Public Land	Zollinger Farm	$300,000	$700,000		$400,000			$1,100,000	$1,400,000	49.00	The farm is approximately 90 acres in size, 49 acres owned by the Zollinger Family and 50 leased from other landowners. The farm was originally a fruit orchard but has since branched into a growing nursery stock for retail and wholesale sales. Roughly 10 acres is still in apples.	
Draper City	Draper Corner Canyon Easement Project	$500,000				$10,596,000		$10,596,000	$11,096,000	1035.00	Draper City will acquire a conservation easement on ~1,035-acres in Corner Canyon. This will allow conserve the property and its many resources for the residents of Draper and Salt Lake and Utah Counties to enjoy as recreational open space. .	

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
The Nature Conservancy	Selman Ranch Conservation Project	$420,000	$700,000		$2,902,750			$2,902,750	$3,722,250	6700.00	protect key targets such as Columbian sharp-tailed grouse, Bonneville cutthroat trout and potential habitat for the boreal toad and goshawk, by removing the threat of habitat loss and connectivity due to development.	
The Nature Conservancy	Boulder Creek Canyon	$400,000	$400,000		$894,750			$1,294,750	$1,694,750	310.00	The project area consists of 310+/- acres of cropland and pastureland along with a portion of Boulder Creek. Located in the heart of Boulder, there is a critical desert riparian area and a rich history in agriculture. continue grazing cattle in a planned and responsible manner and grow crops while still improving water quality and quantity in the creek, thereby protecting and enhancing habitat for numerous species of wildlife.	
Utah Botanical Center, Utah State University	Improvements to Utah Botanical Center	$50,000			$350,000			$350,000	$400,000	64.00	South Pond is contiguous to I-15 and a city-owned park, we are concerned with public access and pedestrian safety near the restored ponds and wetlands.	
Utah Open Lands	Perkins Flat - Emigration Canyon	$350,000			$850,000	$450,000		$1,300,000	$1,650,000	20.00	this property was the last camp the Mormon Pioneers used before entering the Salt Lake Valley. Abuts Emigration Canyon Road, a Scenic Byway and part of the route of the California Overland trail, the Pony Express and Mormon Pioneer Trails.	
Division of Wildlife Resources	Sandwash/Sink Draw Conservation Easement	$225,000	$1,673,000	$213,000	$119,000			$2,005,000	$2,230,000	9504.00	The property is classified as critical winter habitat for sage-grouse. It is also critical winter range for deer and elk. Sage-grouse from the Strawberry Valley winter on the property, and one lek exists on the parcel.	
Total for 2005		$3,162,500	$6,473,000	$213,000	$6,868,130	$11,588,500	$0	$24,442,630	$28,104,630	21585.45		
Agriculture	0	$2,045,000	$6,073,000	$213,000	$5,616,500	$0	$0	$11,202,500	$13,747,000	20,397		
number ag easements		6										
Eight Grants Awarded 2006												
Division of Forestry, Fire and State Lands	Chalk Creek C and E Ranch	400,000	3,500,000	250,000	300,000	300,000	875,000	5,240,000	5,640,000	4700	The land is used grazing, raising alfalfa, hunting, fishing, right-of-way, and recreation.This ranch includes the headwaters of the North Fork of Chalk Creek and protects the watershed and wildlife habitat/corridor. This property was part of a larger family ownership. Parcels were divided between family members over the years. We can now restore this contiguous ownership through conservation easements. We are negotiating easements on three adjacent properties. Development in Summit County makes this land prime for future home sites.	

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Department of Agriculture and Food	Trout of Paradise	200,000			700000			700000	900,000	179	The Brooke Ranch easement and this property provide impressive wildlife habitat. Wildlife groups in Cache County have put $thousands into this habitat. Today, the ranch produces cattle, crops, trout, pheasants and partridge. As late as 1989 the Whites produced more than seven million pounds of trout annually from the property. In 1990, Whites began a costly disease disinfection, forcing the fishery in a different direction. Utilizing the original natural stream beds, the spring waters now flow as they did in the late 1800's. The two miles of streams and spring-fed lakes provide for year-round trophy fly-fishing. 178.91 Acres will be held in a perpetual easement .	
Utah Open Lands	Richins Ranch	400,000		239,000	1,950,000	350,000		2139000	2539000	1208	The Richins Ranch is key Sage Grouse habitat and has significant Ranching heritage. The property provides an active lek (the traditional strutting ground), and is identified by the DWR as critical brooding and winter habitat. Also, the conservation of this property continues preservation efforts along Utah's famed historic trails. The Richins Ranch is 2808 acres. Utah Open Lands requests funding for the 2nd phase of 1200 acres. About1600 acres are critical brooding and winter range for the Sage Grouse. The entire ranch serves as habitat for deer and elk. The ranch is adjacent to other protected lands.	

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Nature Conservancy	Virgin River Headwaters Project	300,000	1,800,000		3,097,000			4897300	$5,197,300	3562	The VRH Project consists of lands that have historically been grazed by sheep and cattle. Small family cabins exist on the properties and they are used as a summer retreat for the ranching families. The VRHP is located in the scenic high plateau country just north of Zion National Park. Eighteen landowners have come together to form the Kanarra Mountain Landowners Association to work on protection up to 11,000 acres of critical wildlife habitat and watershed. These properties provide high quality forest resources, unique wildlife habitat and critical watershed to LaVerkin Creek and the Virgin River.	
Nature Conservancy	Selman Ranch Conservation Project 2*	90,000	700000	420000	2,619,916		420000	4,249,916	$4,339,916	*	Placing a conservation easement on the Selman Ranch will protect key targets such as Columbian sharp-tailed grouse, Bonneville cutthroat trout and potential habitat for the boreal toad, Brewer's sparrow and goshawk, by removing the threat of habitat loss and connectivity due to development. Developing a resource management plan will address habitat improvements, invasive species and sustainable logging. Grazing will be allowed once the breeding period is over for sharp-tailed grouse.	
Salt Lake City	Foothill Preservation Project	195,000			455,000	600,000	700,000	1,770,000	1,965,000	16	The property is open space with no improvements. It is used by pedestrians as an access point for the Bonnevile Shoreline Trail (BST). The property offer unique panoramas of the Salt Lake Valley. Funds would be used to purchase parcels totaling 6.51 acres. The property owner will sell 3.24 acres and has agreed to donate the remaining 3.26 acres. If purchased the parcels would be part of the Foothill Nature Preserve (FNP), a 101 acre undeveloped area stretching from 1700 South to 2100 South. The FNP would be maintained as a Salt Lake City park and would allow access to National Forest Service Land to the east. The FNP would remain undeveloped with trails for all ability levels.	
Trust for Public Land	Glenn Family Farm	240,000	751,000		90,000			841,000	1,076,000	165	Acquisition of a conservation easement over the Glenn Family Farm was deemed a high priority by TPL because the farm contains more than 90% prime farmland and soils of statewide and local significance. Representatives of the Bear River Association of Governments confirmed that evaluation of this farm's soils resulted in the highest Land Evaluation and Site Assessment (LESA) scores ever calculated by BRAG. The proposed conservation easement would restrict future development to ensure that the land remains available for continued agricultural production in perpetuity.	
Weber Pathways	Weber River Parkway	25,000			57,900			57,900	82,900	17	Weber Pathways is working with South Weber, Uintah, Davis and Weber Counties, and UDWR to secure the trail corridor. 14 separate landowners have been identifed along this corridor. Three representative parcels have been appraised. Based on these appraisals, Weber Pathways estimates a total of $450,000 is needed to acquire all of the parcels. The parcels will be acquired over three years. In this first phase of acquisition of the trail corridor, WP has identified three parcels of land totaling 17.155 acres for which they are requesting $44,225 for assistance in purchasing. These parcels are in South Weber City, located between the river and I-84.	

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Tree Utah	Jordan River restoration	10,000			461,000		1,995,000	461,000	471,000 *		The project objective is to restore high quality migratory bird habitat along the Jordan River. This includes reactivating and enhancing old meanders, enhancing the Willow Creek Channel, the removal of exotic species and planting native species.	
Total for 2006		1,860,000	6,751,000	420,000	9,730,816	1,250,000	3,990,000	20,356,116	22,211,116	9847		
Agriculture		1,630,000	6,751,000	420,000	9,301,916	650,000	1,295,000	18,908,216	19692216	9814		
Number of Ag easements	6											
Ten Grants Awarded 2007												
statewide	Emergency Wildfire Reseeding	200,000	48,512,000	4,541,052	1,233,267			54,286,316	54,486,316		The Commission Contributed to the statewide wild fire restoration funding in the amount of $200,000 from the LeRay McAllister Fund. These funds will be used to restore fire damaged lands throughout Utah.	Department of Natural Resourses
Cache County	American West Heritage Center Farmland Preserve	100,000				200,000		200,000	300000	55	American West Heritage Center acquired 100 acres adjacent to their facility to prevent propoosed development that would mare the view they have of the wellsville mountains. The county is proposing to acquire a conservation easement on 55 of these acres to preserve them in perpetuity, and assist the center with this acquisition. These acres will be used for agricultural purposes, and will enhance public access and enjoyment of this site.	Cache County
Cache County, near Smithfield	Gittins/Woodlee Dairy	500,000	695,000				195,000	890,000	1390000	68	Preserves prime farmland for the Gittins Family Dairy Farm. Some land bordering this property has recently been sold for estate homes, and family would like to prevent that from happening on their property. Also, the property is in the approach zone for the Logan Airport. The this is phase two of the project and will complete the easement on the property. This project has received almost $700,000 in federal Farm and Ranch Land Protect funds for this easement	Utah Department of Agriculture and Food
Carbon County	Rainbow Glass Ranch, Phase 3	350,000					680,000	680,000	1030000	2393	Located in the Range Creek focus area of the Utah Forest Legacy Program, the property is a large tract of generally pristine mountain land of overall scenic beauty. It contains numerous springs, timber resources and a variety of wildlife. The proposed easement would protect the Grassy Trail watershed and reservoir, which supplies water to the Sunnyside and East Carbon communities. Forest Legacy closed Phase 1 of the project in 2004 with a landowner donation of 800 acres. Phase 2 (2,280 acres) closed in 2006. The remaining 2,393 acres, for which this funding request is made, will be placed under easement in 2007. An easement on the remaining 2,393 acres of the ranch would prevent potential division into 100 building lots. There is significant development pressure in the area for recreational properties and cabin sites. An adjacent 4,500 acre property has been subdivided into 40-acre "ranchettes", and is zoned to permit "mountain developments and planned home developments". A recent development in Argyle Canyon, just five miles from the Rainbow Glass Ranch, includes 100 cabin sites. The F	Division of Forestry, Fire and State Lands

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Sanpete County, near Mt. Pleasant	Jesson-Erekson Easements	150,000	120,000				801,000	120,000	1071000	354	Two landowners in Sanpete County are interested in selling conservation easements on their riparian habitat along the Sanpitch River and donating conservation easements on their upland property as a match. The property that would be protected with this grant contains vital habitat for the Columbia spotted frog, designated as a Tier I species on the Utah Sensitive Species List and is the subject of a multi-agency conservation plan and the leatherside chub, which is a Tier II species on the list. The conservation easements will be south of the Lauritzen property on which the DWR currently holds a conservation easement. The amount of funds requested are based on the $3000 per acre that was paid for the Lauretzen easement in 2005, so there is a decent chance that an appraisal will reflect a higher per acre value in the full application. We will be purchasing conservation easements on 90 acres and the landowners are donating conservation easements on the remaining 264 acres of their land.	Division of Wildlife Resources
Santa Clara City, Washington County	Santa Clara Arboretum Restoration Project	30,000				46,875			76875	15	The Santa Clara Arboretum Restoration project is a continuation of the project initially funded in 2004. Phase II encompasses the lower section of the Arboretum where the Tuachan Wash opens up into a broad, flat low land. Phase I funding (2004) paid for new vegetation in the cactus garden, some tamarisk eradication, a detailed plan for the Arboretum, wildflower seeds, tools, and valuable soil for planting. Phase II funding will continue the restoration and principally support the following efforts: (1) eradicating invasive weeds and restoring the natural contours to the land after past tamarisk removal (2) restoring stream banks along the natural flows in the wash (3) planting native vegetation in the wash bottom and along stream banks (4) establishing a water system for supportive irrigation at the onset of planting and during times of severe drought (5) establishing a small pond for wildlife (6) eradicating additional tamarisk	Santa Clara City
Washingtion and Iron Counties Near Kannarraville	Virgin River Headwaters Project, Phase 2	650,000			2,397,300				3047300	1602	The VRHP is located in the scenic high plateau country just north of Zion National Park. Eighteen landowners have come together to form the Kanarra Mountain Landowners Association to work on protection up to 11,000 acres of critical wildlife habitat and watershed. These properties provide high quality forest resources, unique wildlife habitat and critical watershed to LaVerkin Creek and the Virgin River. Phase 2 will preserve 3 parcels.	The Nature Conservancy
Salt Lake County, South Jordan City	Audubon/Tree Utah Migratory Bird Habitat Restoration Phase 4	20,000	40,000		92,750			132,750	152750	20	The project objective is to restore high quality migratory bird habitat along the Jordan River. This includes reactivating and enhancing old meanders, enhancing the Willow Creek Channel, the removal of exotic species and planting native species. This project is supported by thousands of volunteers, and has worked successfully in this area for more than five years. This is the third time the commission has considered funding for this project.	TreeUtah

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND

Location	Project Title	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Total Match	Total Cost	Acreage	Project Description	Applicant
Summit County	OW Ranch Easement Phase 2	350,000	1,010,000		460,250	505,000		2,731,500	3081500	200	The project seeks funding to complete the second of a two-phase conservation easement purchase over OW Ranch. Phase 1, totaling 140 acres was completed in January of 2007. This project would place an additional 60 acres under easement. The easements are held by Utah Department of Agriculture and Food for long-term management. Preservation of OW Ranch critical because of the land's high quality soils and its special location along the Weber River. The ranch's rich riparian areas (approximately 32 acres) include woodland consisting of cottonwoods, river birch and black willow, with an understory of native grasses and shrubs. These areas serve as a well-populated winter roosting area for the American bald eagle and provide habitat for deer, ducks, cranes, and other resident and migratory birds and mammals. The Utah Division of Wildlife Resouces has designated the Weber River along this stretch as a "Blue Ribbon Fishery." The proposed conservation easement would restrict future development, preserving the riparian habitat and maintaining the ranch.	Trust for Public Land
Summit County	Weber River Preservation Project and Angler Access	250,000	390,000	250,000	750,000				1640000	55	This property has historically been grazed or used to grow alfalfa. These uses continue on the property today. The Weber River runs through many properties from Echo Reservoir to the Town of Henefer. Utah Open Lands has met with several landowners along this section all contiguous to each other and they are interested in preserving the agricultural values of the land as well as allowing for needed stream restoration. Beyond the incredible wildlife and aquatic habitat, all landowners have agreed to public access to the stream provided it is monitored in conjunction with the conservation easement.	Utah Open Lands
Total for 2007		2,600,000	50,767,000	4,791,052	4,933,567	751,875	1,676,000	65,519,494	69,119,494	4762		
Total Agriculture		2,550,000	50,607,000	4,791,052	4,840,817	705,000	1,676,000	62,619,869	65169869	4727		
Number of Ag easements	8											

	McAllister Grant	Federal Match	Other State Match	Private Match	Local Gov't Match	Landowner Donation	Match	Total Cost	Acreage
Funded in 1999:	$1,983,049	$1,150,000	$173,000	$2,094,500	$1,104,000	$3,900,000	$8,421,500	$10,404,549	7,821.18
Funded in 2000:	$2,470,976	$8,412,000	$30,500	$960,742	$807,485	$1,731,515	$11,942,242	$14,413,218	6,645.81
Funded in 2001:	$3,367,671	$4,558,300	$0	$3,672,772	$595,882	$4,630,300	$13,457,254	$16,824,925	14,995.75
Funded in 2002:	$415,612	$1,060,000	$0	$708,000	$45,412	$683,000	$2,496,412	$2,912,024	1,672.45
Funded in 2003:	$490,000	$1,000,000	$30,000	$230,000	$260,000	$500,000	$2,020,000	$2,510,000	577.27
Funded in 2004:	$643,000	$1,015,329	$110,000	$172,000	$175,000	$380,165	$1,852,494	$2,496,494	571.00
Funded in 2005:	$3,162,500	$6,473,000	$213,000	$6,868,130	$11,588,500	$0	$24,442,630	$28,104,630	21585.45
Funded in 2006	$1,860,000	$8,341,000	$809,000	$9,780,816	$1,250,000	$1,120,000	$20,356,116	$22,211,116	16567
Funded in 2007	$2,600,000	$50,767,000	$4,791,052	$4,933,567	$751,875	$1,676,000	$65,519,494	$69,119,494	4762
Total Funded:	**$16,992,808**	**$82,776,629**	**$6,156,552**	**$29,420,527**	**$16,578,154**	**$14,620,980**	**$150,508,142**	**$168,996,450**	**75,197.91**
Total Agriculture 0	$12,287,172.00	$71,561,329.00	$5,767,052.00	$24,904,997.00	$1,638,250.00	$14,556,465.00	$118,428,093.00	$130,715,265.00	61,071.79
number ag easements	37								

Summary LeRay McAllister fund Projects, Recommended Projects CY 2008

The Quality Growth Commission will meet on October 24, 2008 to vote on the final allocation of funding for CY 2008. This is a summary of the recommended projects.

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND: 10th FUNDING CYCLE

Applicant Name	Project Name	Avg. Score	Avg Rank	requested	REC	2325870
Div. of Forestry, Fire and State Lands	South Fork Ranch - FFSL	91	1.38	$500,000.00	500,000.00	1,825,870.00
Cache County	Baxter	82	4.31	$289,000.00	$200,000.00	1,625,870.00
Cache County	Elkhorn Ranch	74	6.06	$500,000.00	$300,000.00	1,325,870.00
Salt Lake County	Rose Canyon - SLCo	74	6.13	$500,000.00	$200,000.00	1,125,870.00
Marriott-Slaterville City	Buffalo Springs	75	6.38	$299,000.00	$230,000.00	895,870.00
The Nature Conservancy	TNC Jaques Farm	74	6.44	$1,050,000.00	$345,870.00	550,000.00
Trust for Public Land	Curtis Farm TPL	70	6.88	$200,000.00	$100,000.00	450,000.00
Tree Utah	Tree Utah	74	7.38	$25,000.00	$25,000.00	425,000.00
Virgin River Land Preservation Assn.	Pine Valley Meadows	71	7.56	$400,000.00	$200,000.00	225,000.00
Lindon City	Lindon Wetlands	64	8.13	$350,000.00	$150,000.00	75,000.00
Salem City	Salem Parkway	58	10.50	$250,000.00	$75,000.00	0.00
Applications received July, 2008		0		$5,189,770.00	2,325,870.00	

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND: 10th FUNDING CYCLE

	Applications Received July 14, 2008											
Applicant Name	Project Title	Amount Requested	Match	Total Cost	Location	Project Type	Project Description	Method	Acreage	Proposed Easement/ Title Holder	Local Support	Use of Funds
Cache County	Baxter Ridge	$289,000	$536,000	$852,000	Cache County, Near Wellsville	Ag Land	Conservation Easement will preserve current agricultural use and important wildllife habitat. UDWR has identified critical sharptail grouse population and critical buffer for deer, elk and non-game species. The proposed route of the Bonneville Shoreline Trail crosses this property.	Conservqiton Easement Purchase	462	Cache County	Cache County, Wellsville	purchase easement
Trust For Public Land	Curtis Farm Easement	$200,000	$692,000	$892,000	Cache County, Near Paradise	Ag Land	This is 357 acres adjacent to the 1,563 acre Brooks Ranch, [Jon White] conservation easement in the south bench of Cache County, Town of Paradise. The current preserved ranch borders this project on the south boundary for 1 ½ miles. Developers have subdivided lands to the East. This is valuable agricultural land contiguous to other agricultural lands previously protected with McAllister Funds. Further this is critical winter habitat and for deer and elk and also valuable grouse habitat.	Conservation Easement	357	UDAF or DWR	Cache County Agricultural Advisiory Committee, Rocky Mountain Elk Foundation	purchase conservation easement
Cache County Critical Lands Taskforce	Elkhorn Ranch Conservation Project	$500,000	$840,000	$1,340,000	Cache County near Millville and Nibley	Ag Land	Preserve 3 adjoining farms located near the Blacksmith Fork River. Protects open space and agricultural land next to three adjoining towns, and preserves the historic Elkhorn Ranch, one of the first ranches in Cache Valley	Conservation Easement	167.5	Cache County	Cache County, Millville City, Nibley City, UDAF	Puchase Conservation Easement
Lindon and Orem Cities	Lindon Hollow Wetlands Project	$600,000	$16,894,500	$2,599,523	Utah County Near Lindon, Vineyard and Orem	Open Land	The subject property is undeveloped open space that is functioning primarily as a drainage area for the Lindon Hollow Ditch, which flows year-round and also carries storm water from Lindon, Orem, Pleasant Grove, and Cedar Hills. In addition to the open space preservation, Orem and Lindon City hope to utilize the drainage area for storm-water retention and natural 'clean-up' before the water enters Utah Lake which is ¼ mile to the west. Lindon City recently purchased right-of-way for the Lindon Heritage Trail which runs along the north border of the open space area (see map) and is planned to connect the Bonneville Shoreline trail to the Utah Lake Trail. The open space will be a benefit to the trail users for its natural and aesthetic qualities. Industrial uses surround the site and it is threatened by future development. Areas of the drainage have been filled in the past and the open space and storm water retention / clean-up potential is slowly disappearing. Anderson Geneva Development Inc currently owns the property and has indicated that if a buyer for the property is not found, they hope to pipe the	Conservation Easement, and restoration	13.8	Lindon City and Orem City	Lindon City, Orem City, Town of Vineyard, DWR, Utah Lake Commission, Rep. Grover, Senator Dayton.	purchase easement, and perform restoration work on the parcel to improve the wetlands as a stromwater treatment area.

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND: 10th FUNDING CYCLE

Applications Received July 14, 2008

Applicant Name	Project Title	Amount Requested	Match	Total Cost	Location	Project Type	Project Description	Method	Acreage	Proposed Easement/ Title Holder	Local Support	Use of Funds
Virgin River Land Preservation Association	Pine Valley Meadows Project	$500,000	$700,000	$1,200,000	Washington County, in Pine Valley	Ag Land	The property has been used for ranching/farming/grazing since the mid-1800's when pioneers and their livestock retreated from the heat of the desert communities around St. George to the lush mountain meadows of Pine Valley. This phase of the Pine Valley Meadows Preservation Project protects nearly 24 highly sensitive acres in the meadows and is adjacent to 10 acres which were protected in 2005. When completed, the project could protect over 200 acres of the most sensitive critical lands in the meadows. Preservation of the meadows preserves the scenic and historical qualities of the valley, protects agricultural lands, protects the watershed of the Santa Clara River, provides for protection of the floodplain and reduces potential property losses associated with flooding, protects wildlife and riparian habitat, and enhances the recreational experience of all those who travel through the valley to enjoy the Dixie National Forest.	Conservation Easement	24	Washington County and Virgin River Land Preservation Association in Joint Tenancy	Washington County Commission Pine Valley Irrigation Company Pine Valley Special Services District Rep. Clark, Sen. Hickman	$486000 for easement purchase, requesting $9000 for costs and $5000 for a monitoring endowment to make the total of $500000
Salt Lake County	Rose Canyon Ranch	$1,000,000	$7,700,000	$8,700,000	Salt Lake County near Herriman.	Open Lands	Rose Canyon is 1,681 acres of healthy, mixed habitat ranging in elevation from 5,900 to 7,300 feet. Views extend from Utah Lake and Mt. Timpanogas in the south, east to the Wasatch Mt. range, north to Salt Lake City, and west to the ridgeline of the Oquirrh Mts. The vegetation is categorized as mountain shrub, northern oak forest, Pinyon-Juniper forest, Aspen forest, and mixed confier forest (Utah Partners in Flight, 2002). Rose Canyon is adjacent to Salt Lake County's 800-acre Yellow Fork Park--an undeveloped natural area--and an additional 1,600 acres of Bureau of Land Management land south of Butterfield Canyon. The total 4,000 acre area comprises a large and significant open space preserve in the rapidly growing western half of the County, and is the only large land area that is guaranteed to be preserved in perpetuity on the eastern side of the Oquirrh Mts. In May, 2008 the County and BLM signed a Memorandum of Understanding to enter into a cooperative management agreement for the entire 4,000-acre area. The two agencies will lead and cooperatively	Conservation Easement	1681	FFSL	Utah Open Lands Bureau of Land Management Trust for Public Lands Rocky Mt. Elk Foundation Hi Country Estates I and II Herriman City	purchase conservation easement
Utah Department of Natural Resources	South Fork Ranch Preservation Project	$500,000	$2,553,850	$3,053,850	Summit County Near Coalville	Open Land	This 2,350 acre property is located adjacent to the Keith Blonquist Forest Legacy easement and 4 miles from the Don Blonquist Forest Legacy easement. Acting as the 'Gateway' to our Chalk Creek Project area, this is a key property to protect. Landowners have often been approached by Park City developers to sell the ranch. The slopes on the ranch allows for good access as well as adequate areas for development of home/cabin sites. A conservation easement would prevent subdivision into 16 parcels. Long-term management will incorporate livestock production, forestry and wildlife management objectives.	Conservation Easement	2350	FFSL	Summit County Commission Forest Stewardship Coordinating Committee Division of Wildlife Resources Eastern Summit Co. Open Space	purchase conservation easement
Marriott Slaterville City	Taylor's Buffalo Springs	$399,000	$399,000	$798,000	Weber County, Marriott Slaterville City	Ag Land	Agriculture, woodlands, flood-plain, and wetlands including an ox-bow pond consisting of the old channel of the Weber River. Purpose of the easement is preservation of prime agriculture farmland. Preservation of wildlife habitat and wetlands. Provides needed storm water retention and recharge area.	Conservation Easement	29.34	Marriott Slaterville City or Weber County	Rep. Kerry Gibson Marriott-Slaterville City Weber County – Commissioner Dearden	purchase conservation easement

LERAY MCALLISTER CRITICAL LAND CONSERVATION FUND: 10th FUNDING CYCLE

	Applications Received July 14, 2008											
Applicant Name	Project Title	Amount Requested	Match	Total Cost	Location	Project Type	Project Description	Method	Acreage	Proposed Easement/ Title Holder	Local Support	Use of Funds
The Nature Conservancy	Jaques Farm	$1,050,000	$1,106,000	$2,156,000	Davis County, near Layton	Ag Land	The property has historically, and is presently, used as pasture land for cattle and alfalfa production. In addition, this property is directly adjacent to the Conservancy's Great Salt Lake Shorelands Preserve. The Jaques property provides critical wetland and upland habitat for migratory birds. The Nature Conservancy is working with the Jaques family to acquire fee title to the property (116 acres more or less). At closing, the Conservancy would simultaneously transfer a conservation easement to the State Dept. of Agriculture and Food that protects and perpetuates both the agricultural use of the property as well as the wetland and upland values of the property.	Conservation Easement	116	DAF	Rep. Paul Ray, Davis County Commissioin	$1000000 For Conservation Easement Purchase, $50,000 to be added to TNC preserve funds for maintenance
City of Salem	Salem Parkway Project	$500,000	$4,000,000	$4,500,000	Salem, Utah County	Restoration	The open space being preserved will set a standard for other property owners located along the proposed Salem Parkway. This area was recently described by a representative of the Army Corps of Engineers as being one of the most perfect wetland areas in Utah County. With the impending development activities that is assuredly coming forth, this area should become a high land preservation concern to the State. The subject property is located on the northern tip of the Salem valley area which is part of a contiguous parcel that consists of hundreds of acres of similar property. By preserving , protecting and enhancing bird habitat and its associated wetlands that is allocated within the proposed Salem Parkways the chances are continually greater that other adjacent land owners will follow the vision. The Parkway will allow the public to use the system and its recreational aspects, but protect the wetlands from human interaction.	restoration	33	City of Salem	Saltem City Council, Salem Mayor	Restoration of Riparian areas and Habitat along dedicated trail corridor
Tree Utah	Audubon/Tree Utah Migratory Bird Habitat Restoration Phase 4	$25,000	$124,550	$149,550	South Jordan City, Salt Lake County	Open Land	The land we are working with is undeveloped open space. We are currently in the process of restoring it. Historically the property has been use for agriculture, primarily for grazing livestock. The project objective is to restore high quality migratory bird habitat along the Jordan River. This includes reactivating and enhancing old meanders, enhancing the Willow Creek Channel, the removal of exotic species and planting native species.	restoration	20		URMC Commission Senator Buttars Representative Newbold Mayor W. Kent Money	Purchase of plant materials as part of Restoration project
	Total:	$6,389,770	$37,072,670	$28,594,463					6,256.04			