



SALT LAKE  
COUNTY

# WEST BENCH GENERAL PLAN

DRAFT 3, 2007



Note: This plan/document was not adopted by the County and as such is a reference only document.



# WEST BENCH GENERAL PLAN

Salt Lake County  
Planning and Development Services Division  
Salt Lake County Government Center  
2001 South State Street  
Salt Lake City, UT 84190  
[www.pwpds.slco.org/zoning/html/GeneralPlans/wbplan.htm](http://www.pwpds.slco.org/zoning/html/GeneralPlans/wbplan.htm)

DRAFT  
AUGUST 3, 2007

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# TABLE OF CONTENTS

## FRONT END

Figures	vi
Tables	vii
Abbreviations and Acronyms	viii
Glossary	x

## CHAPTER 1

### INTRODUCTION AND PLANNING CONTEXT

1.1	Plan Overview	1-1
1.2	Planning Process	1-4
	Plan Inception	1-4
	West Bench Planning Efforts	1-6
1.3	Relationship to the Salt Lake County General Plan	1-7
1.4	Salt Lake County's Role in the West Bench General Plan	1-11
1.5	West Bench General Plan Relationship to Other Plans	1-12
	Copperton Township General Plan	1-13
	Magna Community Plan	1-14
	Southwest Community General Plan	1-14
1.6	Updates to the West Bench General Plan	1-16

## CHAPTER 2

### REGIONAL NEEDS

2.1	Introduction	2-1
2.2	Issues of the Greater Wasatch Region	2-2
	The Wasatch Front - Challenges and Opportunities	2-7
	Community Values – Challenges and Opportunities	2-8
	Land Use and Multi-Modal Transportation – Challenges and Opportunities	2-9
	Utilities and Services – Challenges and Opportunities	2-11
	Environmentally Sustainable Design – Challenges and Opportunities	2-12
	Natural Resources – Challenges and Opportunities	2-13
	Parks, Recreation, and Trails – Challenges and Opportunities	2-15
	Economic Sustainability – Challenges and Opportunities	2-16
	Housing Affordability and Variety of Blended Housing Types – Challenges and Opportunities	2-17
	Educational Resources – Challenges and Opportunities	2-19
	Heritage Resources – Challenges and Opportunities	2-20
2.3	The West Bench	2-21
	Natural Resources	2-21
	The Past	2-22
	The Present	2-24
	Kennecott's West Bench Master Plan	2-26

## TABLE OF CONTENTS (CONTINUED)

### CHAPTER 3

#### VALUES, VISION, AND GOALS

3.1	Values	3-1
3.2	Vision	3-2
3.3	Core Concepts	3-3
	Natural Resource Conservation	3-3
	Hierarchy of Centers	3-3
	Economic Growth	3-4
	Quality Neighborhoods	3-4
	Transit Corridors	3-5
	Parks and Open Space Network	3-5
3.4	Goals By Plan Element	3-7
	Regional Framework (RF)	3-8
	Community Values (CV)	3-12
	Land Use and Multi-Modal Transportation (LT)	3-14
	Utilities and Services (US)	3-19
	Environmentally Sustainable Design (ESD)	3-21
	Natural Resources (NR)	3-23
	Parks, Recreation, and Trails (PR)	3-26
	Economic Sustainability (ES)	3-28
	Housing Affordability and Variety of Blended Housing Types (HA)	3-30
	Educational Resources (ER)	3-31
	Heritage Resources (HR)	3-32

### CHAPTER 4

#### GOALS, OBJECTIVES, AND POLICIES

4.1	Objectives and Policies	4-1
	Regional Framework (RF)	4-3
	GOAL RF-1. <i>Land Use Plan.</i>	
	GOAL RF-2. <i>Regional Collaboration.</i>	
	GOAL RF-3. <i>Distinct Communities.</i>	
	GOAL RF-4. <i>Timing, Pace, and Location of Development.</i>	
	Community Values (CV)	4-15
	GOAL CV-1. <i>Social and Family Supportive Design.</i>	
	GOAL CV-2. <i>Life-Sustaining Environments.</i>	
	GOAL CV-3. <i>Safe Environment.</i>	
	Land Use and Multi-Modal Transportation (LT)	4-19
	GOAL LT-1. <i>Hierarchy of Mixed-Use Centers.</i>	
	GOAL LT-2. <i>Complete Residential Communities.</i>	
	GOAL LT-3. <i>Economic Opportunities</i>	
	GOAL LT-4. <i>Transportation Network.</i>	
	GOAL LT-5. <i>Urban Form and Transportation.</i>	
	GOAL LT-6. <i>Transportation Demand Management.</i>	
	Utilities and Services (US)	4-59
	GOAL US-1. <i>Utilities, Public Facilities, and Services.</i>	
	GOAL US-2. <i>Decision-Making Framework.</i>	
	Environmentally Sensitive Design (ESD)	4-64
	GOAL ESD-1. <i>Resource Protection.</i>	
	GOAL ESD-2. <i>Environmentally Responsible Design.</i>	



## TABLE OF CONTENTS (CONTINUED)

### CHAPTER 4

#### GOALS, OBJECTIVES, AND POLICIES (CONTINUED)

Natural Resources (NR)	4-71
GOAL NR-1. <i>Open Space Conservation and Management.</i>	
GOAL NR-2. <i>Scenic Features Protection.</i>	
GOAL NR-3. <i>Plant and Animal Conservation and Management.</i>	
GOAL NR-4. <i>Hazards.</i>	
Parks, Recreation, and Trails (PR)	4-80
GOAL PR-1. <i>Parks and Recreation System.</i>	
GOAL PR-2. <i>Trail System.</i>	
Economic Sustainability (ES)	4-88
GOAL ES-1. <i>New Employment Opportunities.</i>	
GOAL ES-2. <i>Job Variety.</i>	
GOAL ES-3. <i>Economic and Fiscally Sound Development.</i>	
Housing Affordability and Variety of Blended Housing Types (HA)	4-94
GOAL HA-1. <i>Range of Housing Types.</i>	
GOAL HA-2. <i>Job Variety Support.</i>	
Educational Resources (ER)	4-99
GOAL ER-1. <i>Educational Resource Integration.</i>	
Heritage Resources (HR)	4-104
GOAL HR-1. <i>Historic and Cultural Resource Conservation.</i>	
GOAL HR-2. <i>Interpretation and Education.</i>	
GOAL HR-3. <i>Native American Heritage.</i>	

### CHAPTER 5

#### IMPLEMENTATION

5.1	Introduction	5-1
5.2	How to Implement	5-1
5.3	Market Demand	5-3
	Residential Growth Forecasts	5-3
	Commercial Growth Forecasts as of 2007	5-4
	Market Support for Retail Development	5-4
5.4	Fiscal Sustainability	5-7
	Salt Lake County Fund Structure	5-7
	Major Revenue Sources	5-9
5.5	Infrastructure, Services, and Amenities	5-13
	Transportation	5-13
	Water	5-16
	Sewer and Water Reclamation	5-19
	Storm Drainage	5-21
	Power, Gas, and Communications	5-22
	Solid Waste and Recycling	5-23
	Oquirrh Mountain Range	5-25
	Educational Resources	5-26
	Housing Affordability and Variety of Blended Housing Types	5-26
5.6	Summary	5-28

#### WORKS CONSULTED,

#### BIBLIOGRAPHY, AND LITERATURE CITED

## FIGURES

Figure 1-1	Municipal Jurisdiction Boundaries	1-9
Figure 1-2	Coordination of County, Municipal, and Regional Plans	1-12
Figure 2-1	Envision Utah's Growth Scenarios	2-4, 2-5
Figure 2-2	West Bench Planning Area Comparison	2-6, 2-7
Figure 2-3	The West Bench Planning Area's Estimated Build-Out Population Comparison	2-8, 2-9
Figure 2-4	Public Lands	2-14
Figure 2-5	Eight Universities and Colleges Serve the Region	2-18
Figure 2-6	1879 Map	2-21
Figure 2-7	1876 Map	2-22
Figure 2-8	Development Constraints	2-28
Figure 2-9	Relationship of Placetypes, Density and Slope	2-29
Figure 2-10	Ground-up Plan Building Methodology	2-30
Figure 3-1	Artist's Concept of a Town Center	3-4
Figure 3-2	Core Concepts Map	3-6
Figure 3-3	Artist's Concept of a Neighborhood Center	3-13
Figure 3-4	Artist's Concept of a Village Center	3-15
Figure 3-5	Artist's Concept of a Transit Corridor	3-16
Figure 3-6	Artist's Concept of an Urban Center	3-28
Figure 3-7	Artist's Concept of a Campus Center	3-31
Figure RF-3.1	Distinct Communities	4-10
Figure LT-1.1	Future Land Use Map	4-21
Figure LT-1.1.1A	Urban Center	4-23
Figure LT-1.1.1B	Town Center	4-24
Figure LT-1.1.1C	Village Center	4-25
Figure LT-1.1.1D	Neighborhood Center	4-26
Figure LT-1.1.1E	Mountain Resort	4-27
Figure LT-2.1	Residential Districts Overview	4-31
Figure LT-2.1.1A	Village Residential	4-32
Figure LT-2.1.1B	Neighborhood Residential	4-33
Figure LT-2.1.1C	Foothill Residential	4-34
Figure LT-2.1.1D	Hillside Residential	4-35
Figure LT-2.1.1E	Cluster Residential	4-36
Figure LT-4.1	Transportation Systems Map	4-43
Figure LT-4.1.1	Street Network	4-44
Figure LT-4.1.4A	Boulevard	4-46, 47
Figure LT-4.1.4B	Avenue	4-48
Figure LT-4.1.4C	Connector Street	4-49
Figure LT-4.1.5	Couplet	4-50
Figure LT-4.1.6A & B	Local Street and Rural Road	4-51
Figure NR-1.1.1	Open Space System	4-73
Figure NR-3.1.7	Clustering	4-76
Figure PR-1	Parks, Recreation, and Trails	4-81
Figure PR-1.1.2	Regional Parks	4-83
Figure PR-1.1.3	Community Parks	4-83
Figure PR-2.1.2	Regional Trail Linkages	4-85

## FIGURES (CONTINUED)

Figure PR-2.1.3	Local Trail Linkages	4-85
Figure PR-2.1.5	Safe Crossings	4-87
Figure PR-2.1.6	Open Space Trails	4-87
Figure ES-1.3.3	Walking Distances	4-91
Figure HA-1.1.2	Life-stage Housing	4-96
Figure ER-1	Schools	4-100
Figure ER-1.1.6	Higher Education	4-103
Figure 5-1	Short & Long Term Implementation Timeframe	5-5
Figure 5-2	Water Distribution Map	5-18
Figure 5-3	Sewer Improvement Districts	5-20

## TABLES

Table 2-1	The Top Five Fastest Growing Counties in Utah	2-3
Table 2-2	Constraints Used in Analyzing Future Land Uses for the Kennecott West Bench Master Plan	2-27
Table RF-1	Population of Cities & Townships Adjacent to the West Bench Planning Area	4-3
Table LT-4.1.1	WBGp Multi-Modal Street Standards	4-44
Table 5-1	West Bench Planning & Development Process	5-2
Table 5-2	WBGp Land Use Summary (2007)	5-4
Table 5-3	Fiscal Decision-making Questions	5-7
Table 5-4	Infrastructure Decision-making Questions	5-14

## ABBREVIATIONS AND ACRONYMS

AARC	Average Annual Rate of Change	R&D	Research and Development
Ac.	Acre	RF	Regional Framework
ADA	Americans with Disabilities Act	RMP	Rocky Mountain Power
AMI	Annual Mean Income	SF	Square Foot (Feet)
ATV	All-Terrain Vehicle	SID	Special Improvement District
BLM	Bureau of Land Management	SR-	State Route
BMPs	Best Management Practices	SSD	Special Service District
CFC	Chloro-fluorocarbons	STIP	State Transportation Improvement Plan
CLG	Certified Local Government	TDM	Transportation Demand Management
COG	Council of Governments	TIF	Tax Increment Financing
CV	Community Values	TIP	Transportation Improvement Plan
ER	Educational Resources	TPI	Total Personal Income
ES	Economic Sustainability	TRAX	Utah Transit Authority's Light Rail System
ESD	Environmentally Sustainable Design	U.C.A.	Utah Code Annotated
FEMA	Federal Emergency Management Agency	UDOT	Utah Department of Transportation
GIS	Geographic Information System	ULI	Urban Land Institute
GOPB	Governor's Office of Planning and Budget	US	Utilities and Services
HA	Housing Affordability and Variety of Blended Housing Types	USDOJ	U.S. Department of Justice
HR	Heritage Resources	USDOT	U.S. Department of Transportation
HUD	Housing and Urban Development	USFS	U.S. Forest Service
I-	Interstate	UTA	Utah Transit Authority
IAQ	Indoor Air Quality	WBGp	West Bench General Plan
JVWCD	Jordan Valley Water Conservancy District	WFRC	Wasatch Front Regional Council
KL	Kennecott Land Company	ZAP	Zoo, Arts, and Parks
KUCC	Kennecott Utah Copper Corporation		
LDS	Latter-day Saints		
LEED	Leadership in Energy and Environmental Design		
LRT	Light Rail Transit		
L RTP	Long Range Transportation Plan		
LT	Land Use and Multi-Modal Transportation		
NR	Natural Resources		
OHV	Off-Highway Vehicle		
PR	Parks, Recreation, and Trails		

## GLOSSARY

The purpose of this Glossary is to clarify certain terms used throughout the West Bench General Plan that are not currently defined in the Salt Lake County Code of Ordinances.

**ACCESSIBLE / ACCESSIBILITY** – A description of a site, building, facility, or portion thereof that complies with applicable Americans with Disabilities Act (ADA) design standards and/or the Fair Housing Act.

**AFFORDABLE HOUSING** – Housing that requires a household to spend less than 30 percent of gross household income on housing, according to the Department of Housing and Urban Development.

**BEDROOM COMMUNITY** – Also known as a “commuter town,” a bedroom community is primarily residential without supporting retail and industries, with most workers commuting to nearby cities for employment.

**BIG BOX** – See: “LARGE FORMAT RETAIL.”

**CENTER (URBAN, TOWN, VILLAGE, NEIGHBORHOOD)** – Commercial and civic focal points for the West Bench, each containing a mix and intensity of uses. Centers are categorized hierarchically based on the scale of the district that supports it, ranging from the Urban Center to the Neighborhood Center.

**COMMUNITY STRUCTURE PLAN** – Delineation of a smaller geographic area within a designated Planned Community District – that establishes a range for housing units and commercial square footage to be developed in this community, the major infrastructure systems, the unifying systems within this community, such as open space, major transportation corridors and connections to regional facilities and trails, and approximate locations of land use designations.

**COMPACT LAND USE PATTERN** – A focused layout of land uses, emphasizing redevelopment and infill and compatible new development, thus significantly reducing the demand for growth in outlying areas of the city; facilitating efficient pedestrian, bicycle, and transit mobility; and conserving open space and rural areas.

**DENSITY** – The number of dwelling units (du) per acre of residential land development.

**DISTRICT** – An area that is large in size and has a distinct purpose, such as a school district, special service district, or special improvement district. The use of the term ‘district’ in the WBGPP is not intended to correspond to existing or future zoning districts.

**ENERGY STAR** – A voluntary labeling program of the US Environmental Protection Agency (EPA) and the US Department of Energy that qualifies energy efficient products and homes.

**GENERAL PLAN** – A document that is adopted by the governing county or municipality that sets forth policies and guidelines as desirable ends for proposed future development. By virtue of its name, it is comprehensive and general, containing elements required by Utah State Code.

## GLOSSARY (CONTINUED)

**HAZARD** – An adverse condition capable of causing damage or loss of property and life, such as an avalanche, earthquake, subsidence, landslide, etc.

**HOUSING TENURE** – Refers to the financial arrangements under which someone has the right to live in a house or apartment. The most frequent forms are owner occupancy and tenancy, in which rent is paid to a landlord.

**HOUSING TYPES** – Refers to the variety of buildings or structures that serve as living quarters for people.

**INTEGRATE** – To combine or coordinate separate elements (such as housing, recreation, jobs, and shopping), to provide a harmonious, interrelated whole, organized or structured so that constituent parts function cooperatively.

**LARGE FORMAT RETAIL** – Large retail establishment will mean a retail establishment, or any combination of retail establishments in a single building, occupying more than 25,000 square feet of floor area, with the exception of supermarket-grocery stores. Commonly referred to as “big box” stores.

**LEED™** – Leadership in Energy and Environmental Design (LEED)™ is a Green Building Rating System that is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

**MASTER SUBDIVISION PLAT** – Delineation of a smaller or equal geographic area within a Community Structure Plan (CSP) area. The recorded Master Subdivision Plat (MSP) documents detailed information regarding the development of all or a portion of the CSP and subdivides all or a portion of the CSP into logical development units. In addition, the MSP will include the approval of specific Development Standards.

**MIXED-USE** – The combination of different land uses, such as retail, service, industrial, residential, or office uses, either horizontally or vertically, on the same site. Vertical mixed use refers to varying uses in the same multi-story building on different floors. The purpose of mixed-use development is to encourage high quality, human scale, and pedestrian friendly spaces, while creating a variety of complementary and integrated uses, such as, but not limited to, residential, office, manufacturing, retail, public, or entertainment, in a compact, walkable urban form.

**MULTI-MODAL TRANSPORTATION** – Refers to corridors and programs designed to encourage convenient, comfortable travel by pedestrians, cyclists, and transit users in addition to automobiles.

**NATURAL AREAS** – An area of land in its natural or natural-appearing condition that supports the continued existence of geological, paleontological, ecological, or other natural features.

**OPEN SPACE** – Open Space is land that may be permanently protected through agreements, easements and trusts. Unlike a park, open space is to remain in a natural or natural-appearing condition for perpetuity.

## GLOSSARY (CONTINUED)

**PEDESTRIAN** – Relating to or designed for walking, including persons with disabilities.

**PEDESTRIAN SCALE** – The pedestrian scale is an informal and relative standard. It suggests that the relationship between the person and his or her environment, whether natural or man-made, is comfortable, intimate, and contributes to the individual's sense of accessibility. Also referred to as "human scale."

**PLAT** – Consists of a scale map showing divisions of a piece of land. For a plat to be legally valid, it must be reviewed and approved by a governing body.

**PRIMARY EMPLOYMENT** – Also known as "base industry," primary employment refers to businesses that produce goods or services which are produced for export to areas outside of the city, and thereby import income into the city. Such goods and services do not include retail sales activities, but may include manufactured goods, consulting services, research activities, and the support services associated with a regional or national headquarters of a service-producing organization.

**PRINCIPLE** – A fundamental rule, doctrine, or assumption.

**QUALITY OF LIFE** – The personal perception of the physical, economic, and emotional well-being that exists in a community.

**RECLAIM / RECLAMATION** – The process of restoring disturbed landscapes to useful properties that meet a variety of goals, such as creating productive ecosystems or usable industrial or municipal land.

**RIGHT-OF-WAY** – An easement that permits one to travel across the real property of another, or the strip of land subject to such an easement. A right-of-way may confer rights to an individual (such as a neighbor), entity (such as an agency), or to the public as a whole.

**SEEP** – An area where a liquid, usually groundwater, has intermittently emerged from the ground to the surface.

**SPECIAL STATUS PLANTS** – Plant species whose survival is of concern due to limited distribution, low number of individuals and/or populations, or potential threats to habitat. The Utah State BLM Office maintains a list of all known and suspected special status plants, which includes federally endangered, threatened, proposed, and candidate species and Utah State endangered, threatened, and rare species.

**STREETSCAPE** – The distinguishing character of a particular street, within the public right-of-way, including paving materials as well as the adjacent space extending along both sides of a street including landscaping, sidewalks, medians, lighting, street furniture, and signage.

**SUSTAINABLE / SUSTAINABILITY** – Refers to the balanced social, economic, and environmental health of a community. A sustainable community maintains and enhances ecological functions, and thrives without compromising the ability of future generations or other communities to meet their needs.

## GLOSSARY (CONTINUED)

TRANSIT – Public transportation, referring to bus, trolley, heavy rail, and light rail.

TRANSIT BOULEVARD – The primary corridor for high capacity multi-modal travel and mass transit in the West Bench that incorporates auto lanes, dedicated mass transit right-of-ways, bicycle lanes, and safe, convenient routes for pedestrian travel.

TRANSIT CORRIDOR – See ‘MULTI-MODAL TRANSPORTATION’

URBAN OPEN SPACE - Open space within the urban development areas that includes trails, parks, natural areas, public plazas, schools, and dedicated civic sites.

URBAN WILDLANDS INTERFACE CODE – An international standard to mitigate the threat to life and property from wildfires. The code addresses fire spread, accessibility, defensible space, water supply and more for buildings constructed near wildland areas.

VISITABILITY – An international movement to change home construction practices so that virtually all new homes--whether or not designated for residents who currently have mobility impairments--offer a few specific accessibility features, such as zero step entry from the outside to the main floor, 32" clear width passage doors, and a usable restroom for persons with disabilities on the main floor.

WALKABLE/ WALKABILITY – Refers to comfortable pedestrian features of create neighborhoods and centers that allow residents to reach destinations without the use of a car.

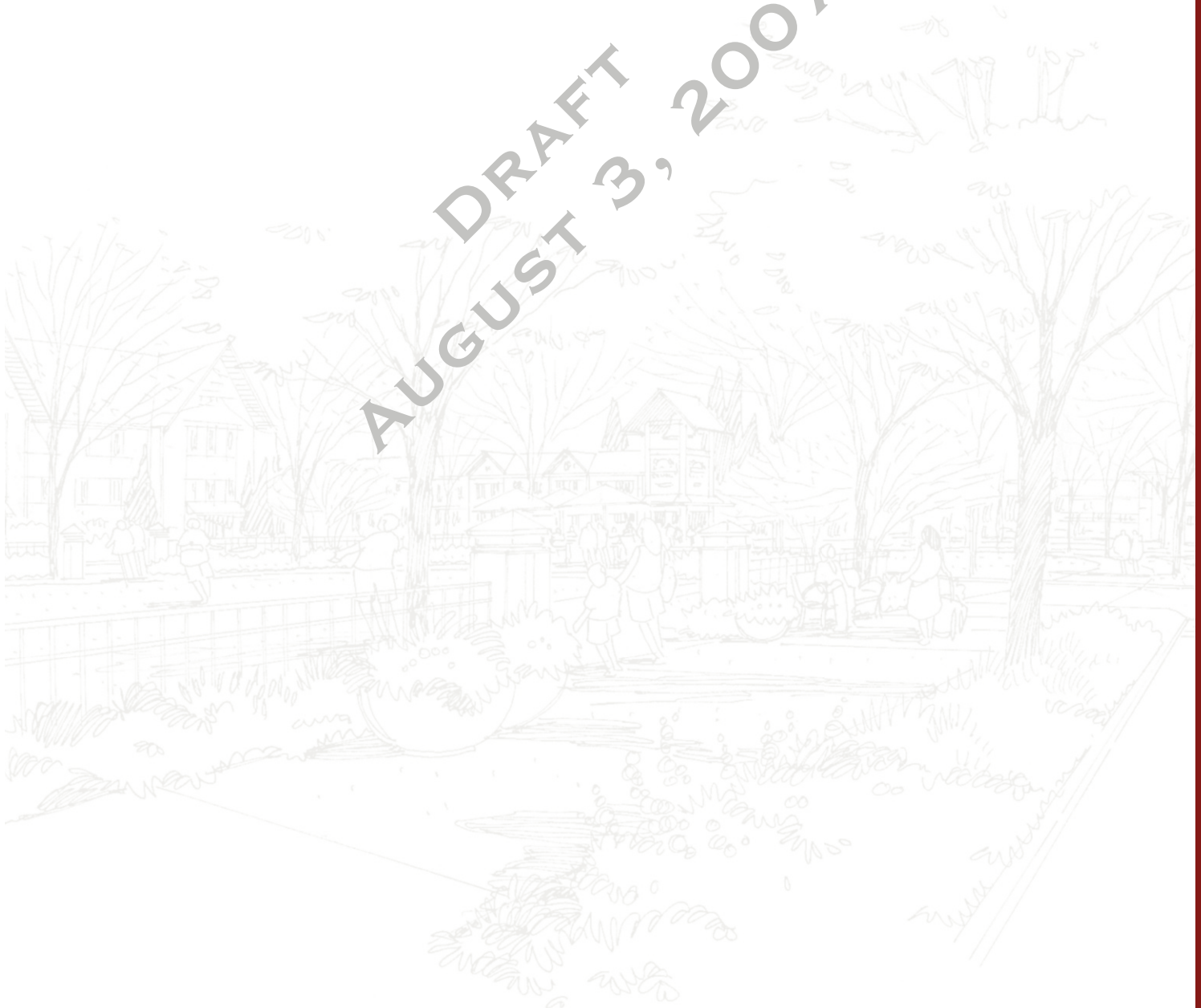
WATERSHED – A drainage basin or the region of land whose water drains into a specified body of water. For the purposes of this plan, the term watershed refers to the Jordan River watershed and the Great Salt Lake.



# CHAPTER 1

## INTRODUCTION AND PLANNING CONTEXT

DRAFT  
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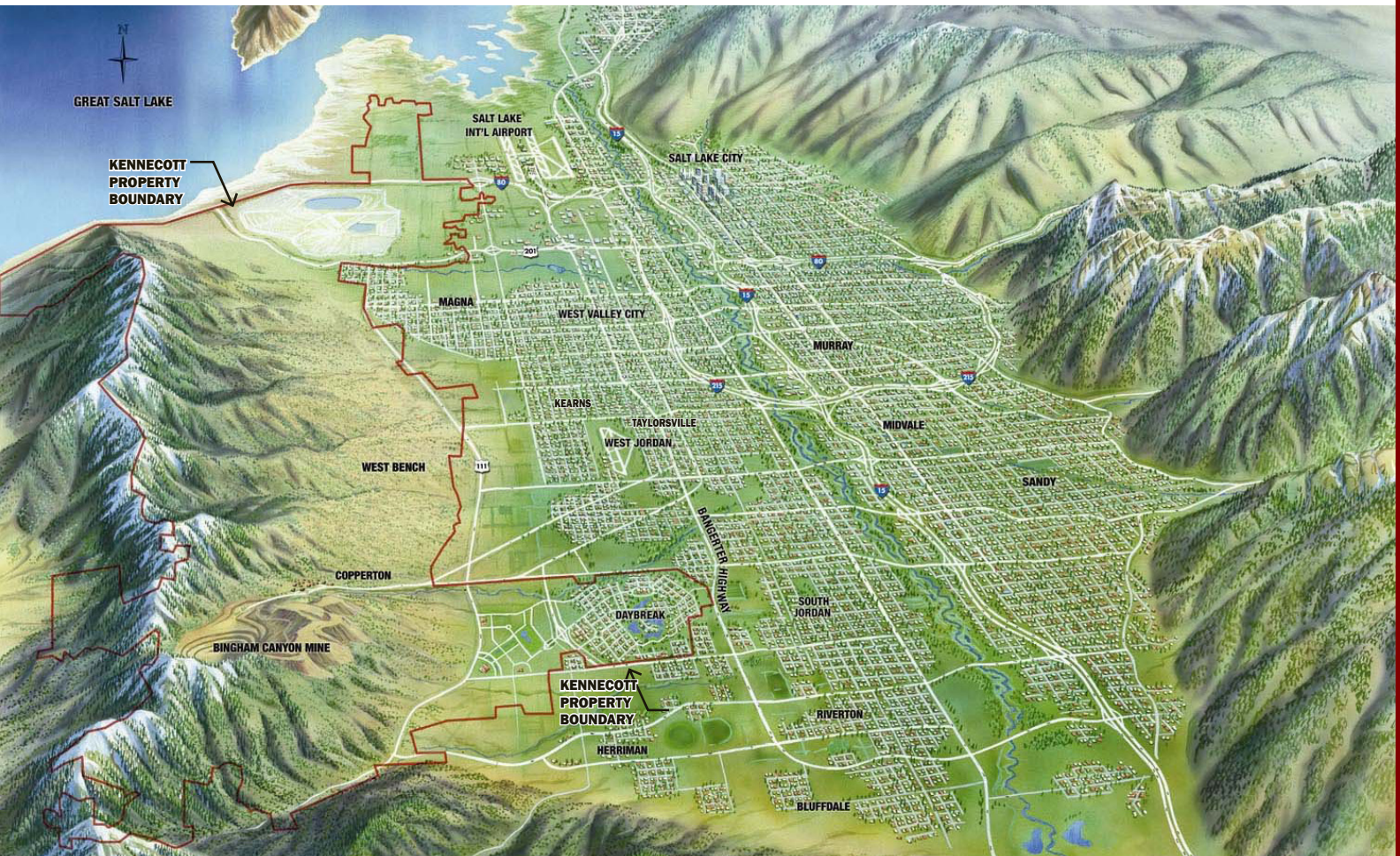


# CHAPTER 1- INTRODUCTION AND PLANNING CONTEXT

## 1.1 PLAN OVERVIEW

Those of us who live in the Salt Lake Valley share a concern for our families and their future, appreciate our vibrant economy, and value the breathtaking beauty of our mountainous setting. As we look to the future, we know that the Valley's population will continue to grow due to natural increase and in-migration. In fact, nearly 70 percent of our future growth will be our own children and grandchildren. So do we just let growth happen or do we try and shape how growth occurs so that our shared concerns are preserved and sustained for future generations? We believe it takes a vision, a commitment by all to see that vision through by building healthy vibrant communities that provide places for all families, a strong economy and continued appreciation and stewardship of our surrounding natural environment. The West Bench General Plan represents the combined planning efforts of Salt Lake County and Kennecott on the future development of the West Bench area

**KENNECOTT OWNS APPROXIMATELY 93,000 ACRES IN SALT LAKE, TOOELE, AND UTAH COUNTIES. THE 75,000 ACRES LOCATED WITHIN THE BOUNDARIES OF SALT LAKE COUNTY ARE ADDRESSED IN THE WEST BENCH GENERAL PLAN.**



**WHAT IS THE PURPOSE OF THE WEST BENCH GENERAL PLAN?**

- IT ESTABLISHES A **PLANNING AND IMPLEMENTATION PROCESS** FOR THE WEST BENCH.
- IT GIVES **GENERAL, ADVISORY GUIDANCE.**
- IT SERVES AS AN **ADOPTED SALT LAKE COUNTY POLICY DOCUMENT.**
- IT IS **LONG-RANGE** (50 TO 75 YEARS)
- IT GUIDES THE TRANSITION OF A LARGE LAND HOLDING UNDER ONE OWNERSHIP TO MANY **DISTINCT COMMUNITIES.**

of the Oquirrh Mountain Range. As the largest land holding by a single land owner (Kennecott) adjacent to the a major metropolitan area in the United States, the West Bench offers a unique opportunity for master planned communities that are envisioned to be built over the next 50 to 75 years. These new communities will utilize the best technology and land development tools available to be sustainable and ultimately help meet the region’s future growth needs.

Adoption of the West Bench General Plan (WBGp) is intended to ensure that the development of the West Bench will create:

- A place to build sustainable and enduring communities;
- A place to raise and educate families in a safe, healthy environment;
- A place that improves transportation access and mobility for working, shopping, and playing;
- A place that creates jobs and economic opportunities; and
- A place that provides parks and recreation, while protecting sensitive lands, open space, and aesthetic beauty.

On the West Bench, balanced communities served by regional transit can be built, not just piecemeal projects and automobile-focused subdivisions. On the West Bench, the Quality Growth Strategy and common values outlined by Envision Utah can be realized. On the West Bench, land can be respected to create beautiful and enduring places for our families and future generations to live and work. In essence, the West Bench General Plan can set the standard for a new era in development, conservation, and mobility for the Salt Lake Valley. Due to its size and location close to the core of activity in the Salt Lake Valley, development of lands within the West Bench General Plan can serve to enhance the quality of life in the entire Wasatch Front. A balanced plan that closely coordinates land use, transportation, open space, and the continuation and expansion of mining operations and mineral and metal processing within the footprint of active mining areas, can efficiently and safely accommodate a large proportion of expected regional population and employment growth over the next decades. It can truly be a better way to grow.

The purpose of the West Bench General Plan is to apply our community's values and goals, and to establish planning policies as a guide to Salt Lake County decision-making. The County's West Bench General Plan addresses how to successfully plan and implement a long-term Vision for the West Bench in a manner that benefits the Salt Lake Valley and demonstrates environmental stewardship.

The Plan is organized by color in five chapters:

- **CHAPTER 1: INTRODUCTION AND PLANNING CONTEXT** describes the County's role in the West Bench, the West Bench General Plan's relationship to other planning efforts, how the Plan will be used, and how the public was involved in its preparation.
- **CHAPTER 2: REGIONAL NEEDS** outlines the regional characteristics, opportunities, and challenges of the West Bench Planning Area and describes how the Plan was developed.
- **CHAPTER 3: VALUES, VISION AND GOALS** provides a clear picture of what the community wants the West Bench to become. The chapter establishes the relationship to core community values, and presents an ambitious Vision and broad planning goals.
- **CHAPTER 4: GOALS, OBJECTIVES AND POLICIES** elaborates on the goals and establishes the enduring policy framework for County land use decisions by defining detailed objectives and policies for each goal to ensure this Vision is realized.
- **CHAPTER 5: IMPLEMENTATION** translates the Vision into a reality by discussing the process, responsibilities, and strategies necessary for successful implementation of the West Bench General Plan.

## HOW DO I USE THIS PLAN?

THE WBGP IS DESIGNED TO BE USED BY ANYONE INTERESTED IN THE FUTURE OF THE WEST BENCH AND IT'S RELATIONSHIP TO THE REST OF SALT LAKE COUNTY. THE PLAN ESTABLISHES A FRAMEWORK OF COMMUNITY-BASED GOALS, OBJECTIVES, POLICIES, AND AN IMPLEMENTATION PROCESS. AS AN ADOPTED SALT LAKE COUNTY DOCUMENT, DECISION-MAKERS WILL REFER TO THE WEST BENCH GENERAL PLAN AS AN ADVISORY GUIDE WHEN EVALUATING FUTURE DEVELOPMENT PROPOSALS (SEE PAGES 1-10 THROUGH 1-13).

IN ESSENCE, THE WEST BENCH GENERAL PLAN SETS THE STANDARD FOR A NEW ERA IN DEVELOPMENT, CONSERVATION, AND MOBILITY FOR THE SALT LAKE VALLEY.



## 1.2 PLANNING PROCESS

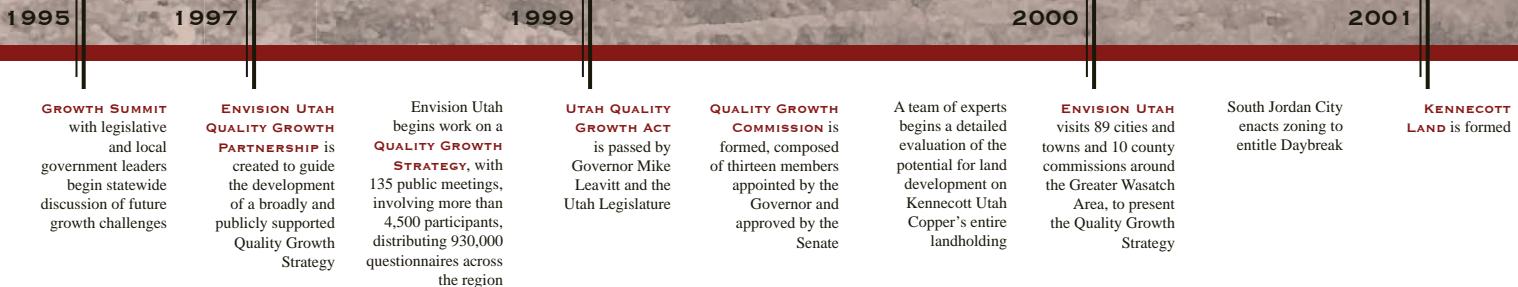
### ENVISION UTAH QUALITY GROWTH STRATEGY

- ENHANCE AIR QUALITY
- INCREASE MOBILITY AND TRANSPORTATION CHOICES
- PRESERVE CRITICAL LANDS, INCLUDING AGRICULTURAL, SENSITIVE RESOURCE LANDS, AND STRATEGIC OPEN SPACE AND ADDRESS THE INTERACTION BETWEEN THESE LANDS AND DEVELOPED AREAS
- CONSERVE AND MAINTAIN AVAILABILITY OF WATER RESOURCES
- PROVIDE HOUSING OPPORTUNITIES FOR A RANGE OF FAMILY AND INCOME TYPES
- MAXIMIZE EFFICIENCY IN PUBLIC AND INFRASTRUCTURE INVESTMENTS

The planning process refers to the method by which the West Bench General Plan was created, from inception to a framework for implementation. The creation of this Plan was 10 years in the making—from initial inception of growth strategies, to a Plan encapsulating the guiding planning principles of the region.

### PLAN INCEPTION

Plan inception can be traced to a series of early efforts, each of which resulted in planning principles that form the foundation of both the West Bench Master Plan and the West Bench General Plan. These efforts include the 1995 Growth Summit, a conference sponsored by the Governor and the State’s legislative leadership. The conference focused attention on the issues and generated numerous proposals and other suggestions for addressing the challenges associated with growth. These initiatives gave rise to the Envision Utah Quality Growth Partnership, created in 1997 under the sponsorship of a non-profit group called the Coalition for Utah’s Future. The group’s goal was to develop a consensus-based, publicly supported quality growth strategy for the Greater Wasatch Area. After 3 years of intensive study and public involvement, Envision Utah published a report in 2000 entitled “Producing a Vision for the Future of the Greater Wasatch Area.” This important publication, and the public forums and outreach efforts that preceded it, marked a new way of looking at growth in Utah, an approach that illuminated the types of choices available to communities and the consequences of these choices. To explore these choices, the Envision Utah process developed



a series of growth scenarios that illustrated alternative futures for the Wasatch Front region. The alternatives ranged from an automobile-oriented, historic growth scenario to one with significant increases in densities and extensive transit systems. Through this type of analysis and public input, the Envision Utah Quality Growth Strategy is now used to guide future growth in the region and Salt Lake County.

These strategies were tested in Daybreak, Kennecott Land’s first master planned community in the City of South Jordan. Daybreak is being developed on a 4,126-acre site at the foot of the rolling Oquirrh Mountain Range foothills. It will include more than 13,600 residential homes and 9.1 million square feet of commercial space. Although this community is just outside of the General Plan area, it represents an example of the community form and many of the planning principles embodied in the West Bench General Plan.

Building on these efforts, in 2005 a collaboration among the Wasatch Front Regional Council (WFRC), Mountainland Association of Governments, and Envision Utah was formed to examine the implications of transportation and land use alternatives on the region’s future and to formulate consensus on an updated vision of regional growth. The result was Wasatch Choices 2040, which was designed to focus on growth principles that address the interaction of transportation and land use planning. The study area for Wasatch Choices 2040 extends over a four-county region (encompassing Weber, Davis, Salt Lake, and Utah counties). Envision Utah facilitated more than 30 public forums, evaluated four scenarios, and selected a preferred growth scenario.



**VALUES OF DAYBREAK IN SOUTH JORDAN**

**COMMUNITY**

- WALKABLE, TRANSIT-ORIENTED
- DISTINCT CHARACTER
- VILLAGE & NEIGHBORHOOD MIXED-USE CENTERS

**EDUCATION**

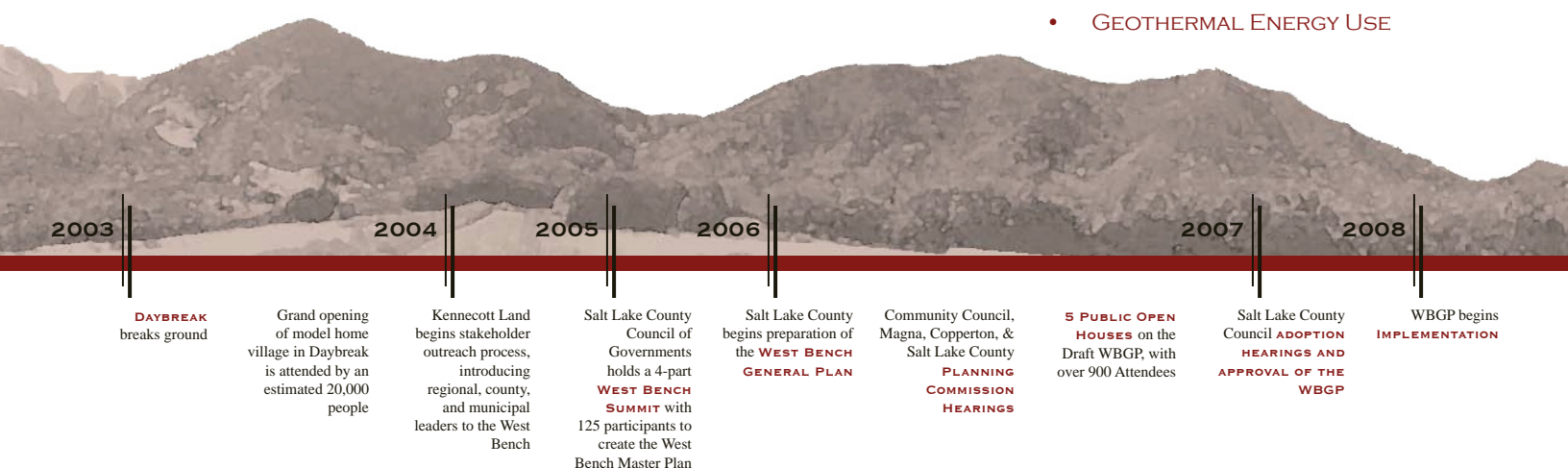
- INNOVATIVE SCHOOLS
- LIFELONG LEARNING

**PARKS & OPEN SPACE**

- SYSTEM OF PARKS, TRAILS, MEADOWS, SPORTS FIELDS, COMMUNITY GARDENS, AND OPEN SPACE

**SUSTAINABILITY**

- ENERGY STAR-RATED DESIGN
- DESIGNED TO CAPTURE 100 PERCENT OF STORMWATER RUNOFF
- RECYCLING PROGRAMS
- GEOTHERMAL ENERGY USE





COG SUMMIT #1: REGIONAL  
CONTEXT & SITE INTRODUCTION



COG SUMMIT #2: IN-DEPTH  
REVIEW OF THE DRAFT MASTER  
PLAN

**WHAT IS THE DIFFERENCE  
BETWEEN THE WEST  
BENCH MASTER PLAN  
AND THE WEST BENCH  
GENERAL PLAN?**

THE **MASTER PLAN** IS  
MAINTAINED BY KENNECOTT LAND  
AND WAS REFINED THROUGH THE  
COG WEST BENCH PLANNING  
SUMMITS.

THE **GENERAL PLAN** IS THE  
OFFICIAL POLICY DOCUMENT  
ADOPTED BY SALT LAKE COUNTY.

WEST BENCH PLANNING EFFORTS

In the fall and winter of 2005, Salt Lake County’s Mayor, the Salt Lake County Council of Governments (COG), and Kennecott Land (KL), completed a series of participatory summits to engage regional stakeholders in the development of a long-range plan for Kennecott’s properties. Planning for the West Bench builds on the lessons learned through the Envision Utah process and other regional planning efforts. This interactive outreach process solicited input from more than 125 summit participants, including Council of Governments members, mayors, council people, environmental leaders, and other regional decision-makers, about Kennecott’s properties and long-term development of the West Bench. The summit participants represented a diversity of stakeholder organizations including civic and municipal leaders as well as transportation, open space, utility, and business groups. Summit participants gave input on a draft Kennecott West Bench Master Plan, general policies, implementation, and detailed design concerns.

Summit participants provided valuable input to the draft Kennecott West Bench Master Plan, helping to ensure the Master Plan was consistent with both local and regional community values. Participant comments focused on a variety of topics, including land use and transportation coordination, environment and open space, jobs and the economy, and the provision of services. Kennecott Land responded to this feedback by making refinements to the Draft Kennecott West Bench Master Plan.

In 2006, using information learned at the planning summit and the resulting Kennecott West Bench Master Plan, the County and KL began preparation of the West Bench General Plan (WBGP). The draft WBGP that emerged is intended to create a flexible framework that will guide development in the future. Steps outlined in the Utah State Law for adoption of general plans provided the blueprint for the adoption process, including Planning Commission work sessions, Planning Commission review, public meetings and hearings, and adoption by ordinance by the County legislative body.

The real measure of success for the West Bench General Plan will be how well it is put into action. Implementing the WBGP will include



new land use regulations, community structure plan preparation, and plat submittals. Implementing the entire WBGP is viewed as a 50- to 75-year process, and many aspects of the Plan and the surrounding areas will change over that time. The WBGP will be continuously re-evaluated to determine its effectiveness and modified as necessary. Other implementation mechanisms will also be updated to ensure that the future envisioned by the Plan is truly achieved.

### 1.3 RELATIONSHIP TO THE SALT LAKE COUNTY GENERAL PLAN

The Salt Lake County General Plan is a combination of documents that sets forth general guidelines for future development in the unincorporated land within the county. The Salt Lake County General Plan is established by an overriding vision, and goals and policy statements to guide development and general plan decisions by the County Mayor and Salt Lake County Council, Salt Lake County Planning Commissions, Wasatch Front Regional Council, and all other service providers.

Eight broad goal statements were defined for the County General Plan, as shown below.

1. Ensure the health and well-being of residents and the physical safety of property through compliance with air and water pollution control standards and by identifying and avoiding areas of physical or geologic hazard.
2. Provide for a wide range of housing types, density, location, and affordability that is well maintained and blends with adjoining cities.
3. Promote development design that is in harmony with the surrounding built environments, preserves neighborhood character, and encourages community interaction.
4. Protect the natural beauty and resources of the Wasatch and Oquirrh Mountains by regulating development in hazardous or environmentally sensitive areas and encouraging public and private transfer of those areas to public ownership.
5. Promote a full range of transportation system alternatives that implements the land use plan.



WBGP PUBLIC OPEN HOUSES,  
2006



WBGP PUBLIC OPEN HOUSES,  
2006

6. Provide a coordinated and comprehensive system of parks, open space, recreational facilities, and programs that will meet the recreational needs of all citizens.
7. Foster communication and coordination between the County and the municipalities on projects and issues of mutual concern and promote inter-jurisdictional cooperation in planning and land use decisions.
8. Involve area citizen organizations and the community in implementing the General Plan.

The West Bench General Plan is a part of the Salt Lake County General Plan, representing a long-range Vision for the West Bench. The West Bench General Plan addresses approximately 75,000 acres within the boundaries of Salt Lake County, 97 percent of which are in unincorporated areas and the unincorporated Townships of Magna and Copperton. The remaining 3 percent have previously been incorporated into Salt Lake City, West Valley City, South Jordan City, City of West Jordan, and Herriman City as shown in Figure 1-1. Elements of the West Bench General Plan that address incorporated areas are advisory only unless adopted by the governing body of the municipality (U.C.A. 17 27a 403).

**SALT LAKE COUNTY  
GENERAL PLAN VISION STATEMENT**

“We aspire to create safe, beautiful communities for children, our future generations, and ourselves. We envision neighborhoods that are dynamic and sustainable, which offer diverse housing opportunities for all citizens, and where the natural environment is cared for. We strive to provide excellent planning and development-related services. We envision an economic climate that promotes strong, diversified opportunities for local businesses and quality employment choices. We extend to the public an open, accessible, responsive, and fiscally responsible government whose structure creates the functional framework to accomplish each goal.”

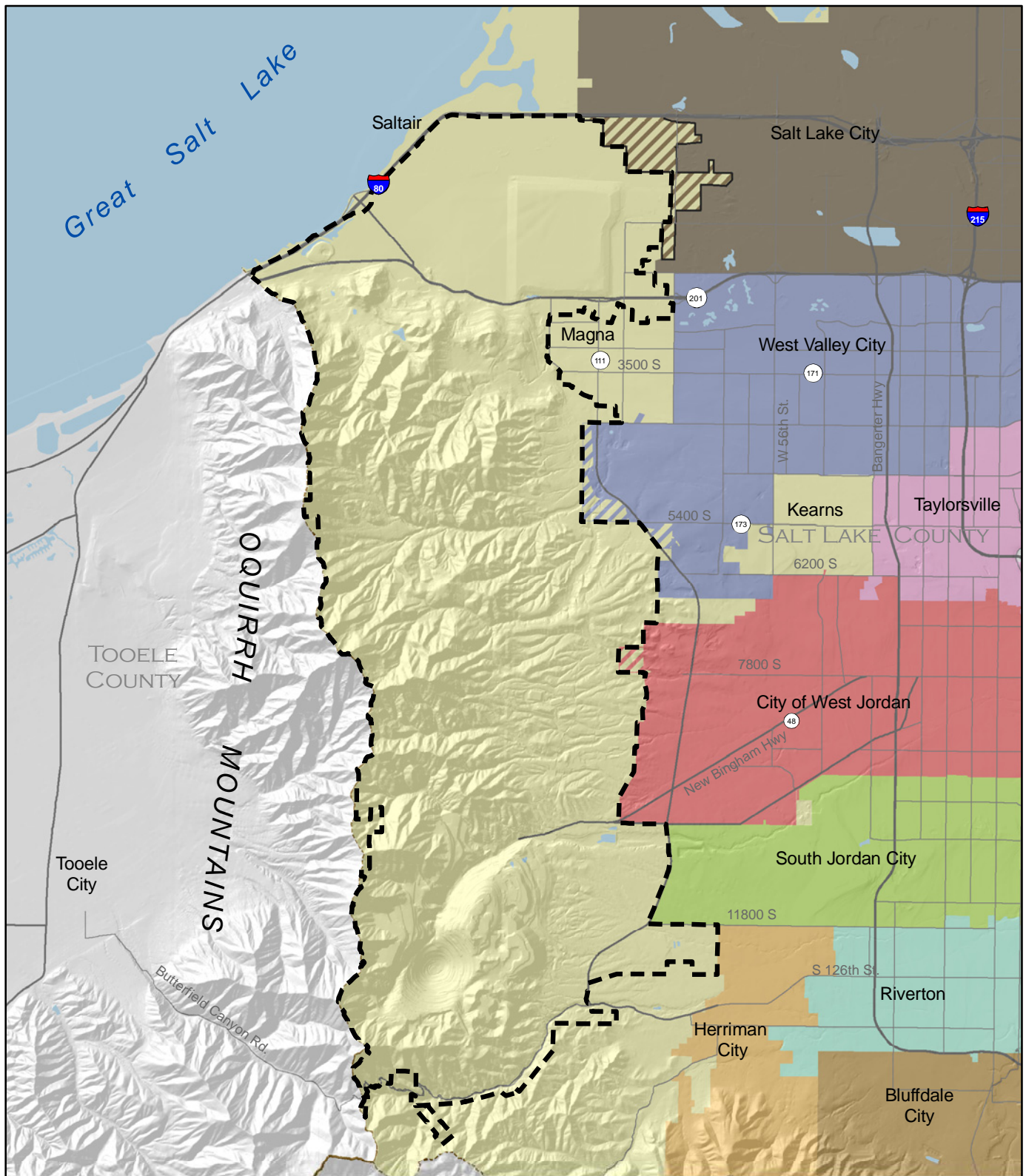
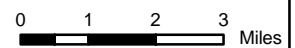


FIGURE 1-1. MUNICIPAL JURISDICTION BOUNDARIES.

- West Bench Planning Area
- Highways
- Key Local Roads
- County Boundaries
- Kennecott Properties within City Boundaries
- Unincorporated Salt Lake County
- Open Water

Incorporated Areas & Acreages	
Salt Lake City	Approx. 1530 Ac.
West Jordan City	Approx. 170 Ac.
West Valley City	Approx. 570 Ac.

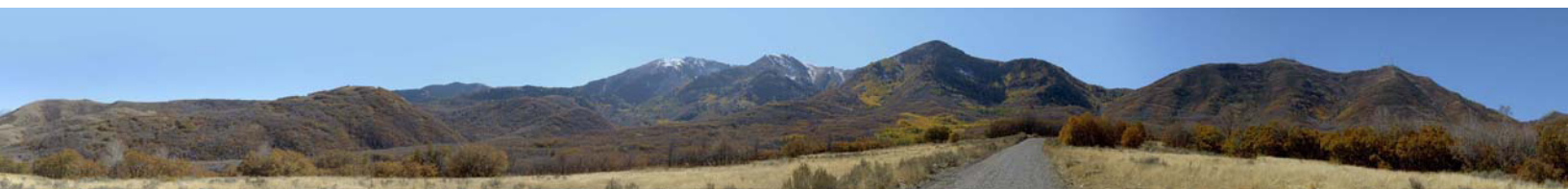


The West Bench General Plan addresses elements required by Utah law (U.C.A. 17 27a 403), such as Land Use, Transportation, and Housing, as well as optional elements, such as Regional Framework; Community Values; Utilities and Services; Environmentally Sustainable Design; Natural Resources; Parks, Recreation, and Trails; Economic Sustainability; Educational Resources; and Heritage Resources.

The West Bench General Plan should be viewed as an advisory guide for land use decisions, promoting community development in ways that foster prosperity of existing and future residents. Clarity for the future of this area emanates from the West Bench General Plan's distinctive Vision. Taking the next step, this Plan outlines goals, objectives, and policies that capture the components essential to ensuring that the Vision for the area is realized.

The West Bench General Plan works in conjunction with several other documents. Implementation of the West Bench General Plan works in conjunction with several other documents such as West Bench Zoning Ordinances, and the Community Structure Plan, Master Subdivision Plat, Preliminary Subdivision Plat and Final Subdivision Plat. The latter four documents are part of the development review process, and will be submitted in the future when actual development is proposed.

OF THE 75,000 ACRES  
ADDRESSED IN THE WEST BENCH  
GENERAL PLAN, AT BUILD OUT,  
ALMOST HALF (34,000) ARE  
NOT PLANNED FOR URBAN  
DEVELOPMENT. KENNECOTT LAND  
INTENDS TO ACT AS THE MASTER  
DEVELOPER OF THE REMAINING  
41,000 ACRES.



## 1.4 SALT LAKE COUNTY'S ROLE IN THE WEST BENCH GENERAL PLAN

Traditionally, most county governments utilize a strictly regulatory approach to growth. Regulatory documents inform property owners and developers what they can and cannot do, and County staff and policy-makers ensure compliance with adopted design standards, building codes, and construction practices.

Compliance alone will not ensure the realization of the Vision set forth in the West Bench General Plan. As the legislative policy-makers, Salt Lake County, in conjunction with surrounding jurisdictions and other agencies, will be a driving force in the creation of new West Bench communities. The County will have the central role in the inception, review, and implementation of new development. Decisions for the physical development of the area will be made by County Council and Planning Commissions. Guidance regarding general land use mix, transportation options, natural and cultural resources, utilities, visual quality, design, and recreation opportunities will be based on the goals, objectives, and policies articulated in the West Bench General Plan. Zoning entitlements and requirements, followed by site-scale design reviews, will be necessary to provide the detail for successful implementation.

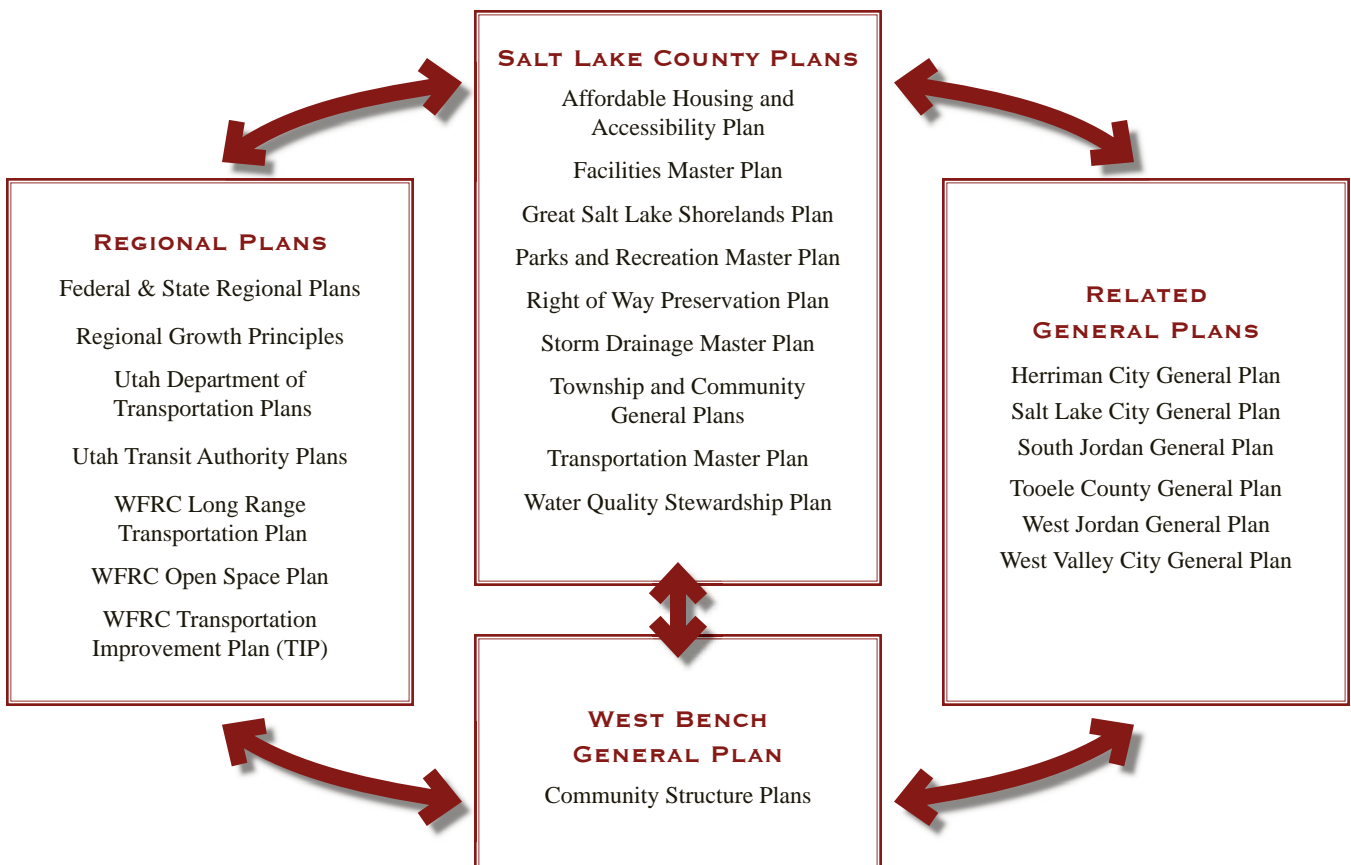
The WBGP is designed to be used by residents, business owners, government officials, and all those interested in the future of the West Bench. Decision-makers will refer to guidance in the West Bench General Plan when evaluating future development proposals to determine how the proposal achieves the Core Concepts contained in the WBGP and the desires of the community. The West Bench General Plan is an advisory guide for decision-making, establishing a flexible framework of community-based goals, objectives, policies, and implementation strategies (U.C.A. 17-27a-405). Although advisory, the Plan is founded in the desires of our citizens and elected decision-makers. Thoughtful coordination between future development, regional planning efforts, and the Plan's goals, objectives, and policies is necessary for realizing the Vision of the West Bench. Chapter 5 of this document explains the implementation process for the WBGP.

## 1.5 WEST BENCH GENERAL PLAN RELATIONSHIP TO OTHER PLANS

As shown in Figure 1-2, the West Bench General Plan is connected to regional and local planning efforts. Coordination with other regional planning efforts is imperative and will continue as they relate to the West Bench. This will include the development and refinement of regional transportation, infrastructure, schools, housing, economic, open space, and natural resource planning initiatives.

The plans of adjacent municipalities such as South Jordan City, West Valley City, City of West Jordan, Salt Lake City, and Herriman City as well as regional plans and adjacent township plans, will be integral to any planning decisions on the West Bench. Only through collaboration will the desired future for this area and the region be achieved.

FIGURE 1-2. COORDINATION OF COUNTY, MUNICIPAL, AND REGIONAL PLANS.



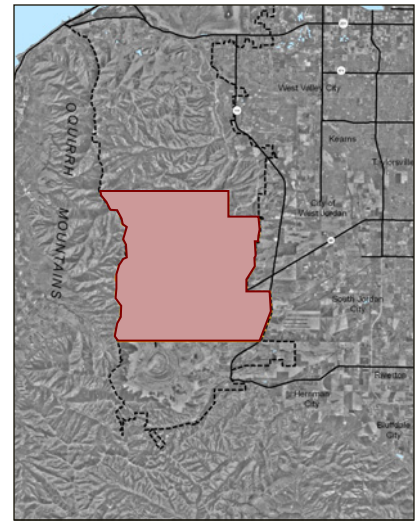
The West Bench General Plan considers previous and future regional and local planning efforts as a way to shape the future of the area. Of key importance will be the plans for townships and communities located entirely or partially in the Planning Area, such as the General Plans of Magna, Copperton, and Southwest Community. Where discrepancies occur between the West Bench General Plan and adjacent cities and townships, collaborative effort will be made to resolve differences and find the best solutions.

### COPPERTON TOWNSHIP GENERAL PLAN

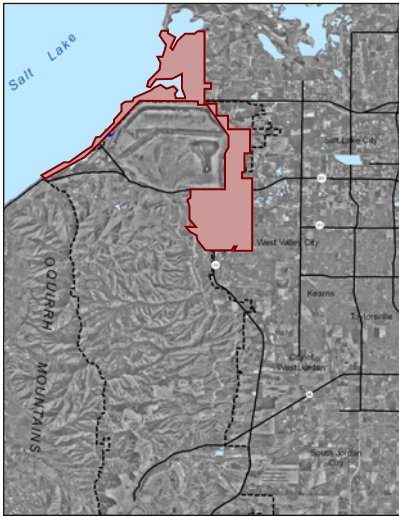
Copperton is an unincorporated township located in the southwestern part of the county, bounded on the north at 7000 South, on the east at roughly 7800 West, on the south at 11800 South, and on the west by the ridge of the Oquirrh Mountain Range. The combination of Copperton's rural nature, availability of affordable housing, and proximity to major employment and retail centers makes it a valued and convenient place to live. The quaint 1920s style bungalows, front porches, small lots, quiet streets, mature trees, and large neighborhood park all come together to create a desirable place, and encourage community unity and pride.

In 2004, Salt Lake County adopted the Copperton Township General Plan to assist in guiding land use decisions. The plan recognizes the characteristics that set the existing Copperton neighborhood apart, and is driven by issues that citizens have identified as critical and by long-range goals based on a collective vision for the future. The plan's main objectives are centered on preservation of the character of Copperton, while creating patterns for new development that will enhance rather than detract from the close-knit, walkable community that Copperton is today. The WBGP recognizes the historic Copperton community and preserves this neighborhood center as being unique and separate from future development within the Township.

The Copperton Township General Plan assists in guiding land use decisions in the West Bench Planning Area, and also serves as a comprehensive reference and blueprint for community programs and public- and private-sector initiatives.



COPPERTON

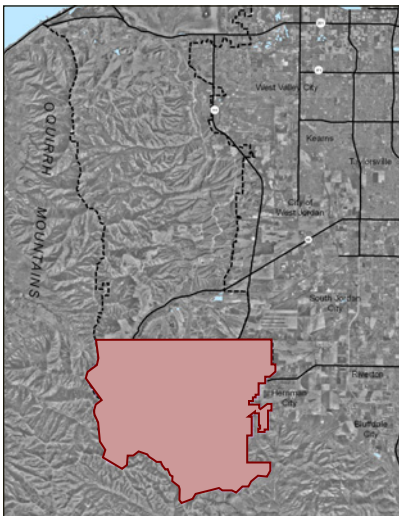


MAGNA

### MAGNA COMMUNITY PLAN

Magna is an unincorporated township located in the northwest part of the county, bounded on the north by the Great Salt Lake and Salt Lake City boundary, on the south at roughly 4100 South, on the east by 7200 West, and on the west by the base of the Oquirrh Mountain Range. Magna was first developed as a community for copper processing employees in the early 1900s and was geographically isolated from the rest of Salt Lake County. Beginning in the 1960s, Magna began to experience change as people started commuting from other areas of the Salt Lake Valley to work at the copper processing plant, and more citizens of Magna began commuting to Salt Lake City to work. As a result, much of Magna’s original “downtown” has become ripe for redevelopment. Today, Magna blends into the broad sweep of suburban development in the western Salt Lake Valley due to suburban growth in neighboring communities. Still, residents of Magna still view themselves as living in a distinct and unique community.

In 1989, Salt Lake County adopted the Magna Community Plan in an effort to improve the quality of life of Magna residents as the population increases and the physical environment changes during the next decade. It involves anticipating and guiding development to ensure that harmonious land use relationships are created, and continuing a consistent redevelopment and rehabilitation program to gradually eliminate pockets of blight and deterioration. It also contains goals aimed at maintaining and improving the social, economic, and physical resources of Magna as the community continues to grow and develop.



SOUTHWEST COMMUNITY

### SOUTHWEST COMMUNITY GENERAL PLAN

The Southwest Community encompasses a large area located in the southwest corner of the county, bounded on the north by 11800 South, on the south by the Salt Lake County line, on the east by approximately 6400 West and Herriman City limits, and on the west by the Salt Lake County line.

Development of land within the Southwest Community is limited, in part, by existing constraints on the land, such as steep slopes, access



problems, and lack of infrastructure, such as water and sewer lines. Much of the approximate 30,000 acres of the Southwest Community remains undeveloped. The majority of the residential units are single-family dwellings on rural, often unpaved, roads. Outside the Herriman City boundaries, non-residential activities are limited to farms, small ranches, and recreational properties.

In 1996, Salt Lake County adopted the Southwest Community General Plan to deal with the increasing pressure for new subdivisions, homes, and public services the community was experiencing. With the incorporation of Herriman City and the development of the West Bench General Plan, the Southwest Community will be involved in providing input to this Plan as a neighboring community.



OQUIRRH RIDGELINE NEAR FARNSWORTH PEAK

## 1.6 UPDATES TO THE WEST BENCH GENERAL PLAN

As described in Chapter 3, the West Bench General Plan is built on stable and enduring community values and goals. It represents the ultimate value that future growth and conservation can bring to the broader community. As a result, values and goals in the WBGPP are general and timeless in nature and are expected to endure.

Still, planning is an ongoing process, and objectives and policies must periodically be reassessed, revised, and updated. Specific estimates and projections presented in this document are based on the best information available at printing. The West Bench General Plan will be kept current by managing new opportunities, lessons learned, and community needs through compliance with the County's established or future policies and procedures.

The West Bench General Plan may be comprehensively reviewed and updated per state law requirements. The purpose of a comprehensive update is to thoroughly re-evaluate and modify the Vision, goals, objectives, and policies to make sure that the West Bench General Plan is heading in the right direction and is being effectively implemented. Comprehensive updates, as well as periodic minor modifications, will be directed by County staff, and will include opportunities for involvement by the public, boards and commissions, and other affected interests in accord with State law.

## CHAPTER 2 REGIONAL NEEDS

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DRAFT  
AUGUST 3, 2007





## CHAPTER 2 - REGIONAL NEEDS

### 2.1 INTRODUCTION

Kennecott is the largest property owner in the West Bench Planning Area, with landholdings comprising 93,000 acres, or 144 square miles, in the Salt Lake and Tooele Valleys. Such a large property – straddling three counties, five municipalities, and two townships – requires a regional approach to land use and transportation planning. Likewise, the most pressing challenges facing the Wasatch Front are regional in nature and do not begin or end at jurisdictional boundaries. These challenges include the pace of population growth, land consumptive patterns of development, re-use of brownfields, supply and distribution of affordable housing, protection of critical lands, encouragement of infill development and urban reinvestment, safeguarding of air and water quality, and financing of transportation choices.

The majority of the area addressed by the West Bench General Plan is within the unincorporated area of Salt Lake County (73,334 acres). Currently, there are only two primary developed areas within the WBGp area: the townships of Copperton and Magna, each with less than 25,000 residents. Remaining unincorporated areas outside of these townships are characterized by very low-density development, open space, and ongoing mining-related activities. Approximately 3 percent of the West Bench Planning Area overlaps the incorporated cities of Salt Lake City, West Valley City, South Jordan City, City of West Jordan, and Herriman City. WBGp policies are advisory only, unless adopted by the governing body of the municipality (U.C.A. 17 27a 403).

The next section of this chapter, Issues of the Greater Wasatch Region, examines the 10-county Greater Wasatch region and the 4-county Wasatch Front region and discusses broad trends in terms of population growth, social and economic issues, and patterns of land use and transportation development. This section includes an exploration of the challenges and opportunities facing the region and the choices that must be made for the West Bench to advance regional goals.

The final section of this chapter, The West Bench, examines the West Bench's wealth of natural resources, rich history and heritage, and

#### HOW DO I USE CHAPTER 2?

THIS CHAPTER OUTLINES THE UNIQUE REGIONAL NEEDS, OPPORTUNITIES, AND CHALLENGES PRESENTED BY THE WEST BENCH PLANNING AREA, SETTING THE STAGE FOR GOAL STATEMENTS PRESENTED IN CHAPTER 3. IT CONCLUDES WITH A DESCRIPTION OF THE SITE'S PAST, PRESENT, AND FUTURE, INCLUDING HOW THE FUTURE LAND USE MAP IN CHAPTER 4 WAS DEVELOPED.



THE WEST BENCH AREA IS LOCATED ADJACENT TO SALT LAKE CITY, THE LARGEST CITY IN UTAH AND A STRATEGIC LOCATION FOR ECONOMIC DEVELOPMENT WITHIN THE UNITED STATES.

relationship to regional concerns. It focuses on the 75,000 acres of Kennecott’s properties within Salt Lake County boundaries, including small portions of Herriman City, Salt Lake City, West Valley City, City of West Jordan, South Jordan City, and the townships of Magna and Copperton. The chapter concludes by describing how the West Bench Future Land Use Map in Chapter 4 was prepared in consideration of these natural, social, and economic needs.

## 2.2 ISSUES OF THE GREATER WASATCH REGION

BY 2030, THE 10-COUNTY GREATER WASATCH REGION WILL INCREASE BY 1.2 MILLION PEOPLE. 79 PERCENT WILL BE OUR OWN CHILDREN AND GRANDCHILDREN.

The many complex challenges facing the nearly 100 cities and 160 special service districts in the 10-county Greater Wasatch region will continue to intensify as the extraordinary pace of change continues. To give a sense of the magnitude of change, the population of the region is projected to increase from 1.9 million people in 2000 to 3.1 million by 2030. This increase of 1.2 million people is roughly equivalent to the number of people living in the City of San Diego, California in 2005 (2005 Census Population Estimates). According to the Governor’s Office of Planning and Budget, Salt Lake County alone is expected to increase by nearly 0.5 million - from a population of 898,387 in 2000 to 1,381,519 by 2030 (GOPB 2005). This population boom is not solely from newcomers moving into the state. In fact, most is due to natural increases (the amount by which births exceed deaths), which will account for 79 percent of Utah’s population growth over the next 45 years (GOPB 2005). For the most current information, contact the Governor’s Office of Planning and Budget or visit <http://governor.utah.gov/dea/People.html>.

### 10 COUNTIES OF THE GREATER WASATCH REGION

BOX ELDER, DAVIS, JUAB, MORGAN, SALT LAKE, SUMMIT, TOOELE, UTAH, WASATCH & WEBER

This population growth will have profound effects on land use within the 10-county Greater Wasatch region and the 4-county Wasatch Front region. In 2005, the total urbanized area of 63 cities and townships in the 4-county Wasatch Front region is less than 400 square miles of land. The amount of urbanized area is projected to increase to 615 square miles by the year 2020 and to 697 square miles by 2030; as a result, agricultural lands, critical lands, and other land uses will continue to be converted at an increasing pace as the demand for new housing and services grows. If current trends continue, population density in the urbanized area is

### 4 COUNTIES OF THE WASATCH FRONT REGION

DAVIS, SALT LAKE, UTAH & WEBER

actually expected to decline as people move to the suburban fringes, dropping the overall density from 4,771 people per square mile in 2000 to 4,484 in 2030 (GOPB 2005).

At a local scale, this transformation is changing the face of Salt Lake County as small-town life gives way to suburbs and highways. Townships and cities in the county have grown dramatically in the last 15 years; for example, both South Jordan City and the City of West Jordan have more than doubled their populations during this period (1990 Census, 2005 Census Population Estimates), and are expected to double their population again. Without an increase in viable transportation options and a reduction in automobile dependency, it is likely that future growth and densities will continue to parallel I-15, I-215, I-80, State Highways, and the potential Mountain View Corridor.

However, the land-consumptive patterns of development seen in the last several decades are not inevitable (see Figure 2-1). Envision Utah’s Quality Growth Strategy has shown that by meeting demand for multi-family housing, redeveloping underutilized areas, and reducing the average single-family lot size by less than 10 percent, the total land area needed to accommodate newcomers by 2020 could be cut in half (from 324 square miles to 154 square miles). Of the total land converted to urban use, current trends would consume 143 square miles of agricultural land compared to 27 square miles under the Quality Growth Strategy (Envision Utah 2000). Recent positive policy changes related to regional growth include expansion of the transit system, encouragement of transit-oriented development, and more aggressive conservation of critical lands. These policy changes will encourage development at higher densities and the preservation of natural areas - in essence, more close-knit communities.

If West Bench lands remain off-limits to development, substantial growth is expected to continue spilling over into other portions of the region outside of Salt Lake County. In fact, three out of the five fastest-growing counties in the state are adjacent to Salt Lake County (see Table 2-1), with unprecedented population growth in towns such as Tooele, Stansbury Park, Lehi, Spanish Fork, Payson, and Western Utah County and the Wasatch Back.

TABLE 2-1. THE TOP FIVE FASTEST-GROWING COUNTIES IN UTAH (2000 - 2050) (GOPB 2006).

COUNTY	PROJECTED GROWTH (AARC)
Washington County	6.8%
Wasatch County	5.3%
Tooele County	4.6%
Utah County	4.2%
Iron County	4.1%

AARC = Average Annual Rate of Change

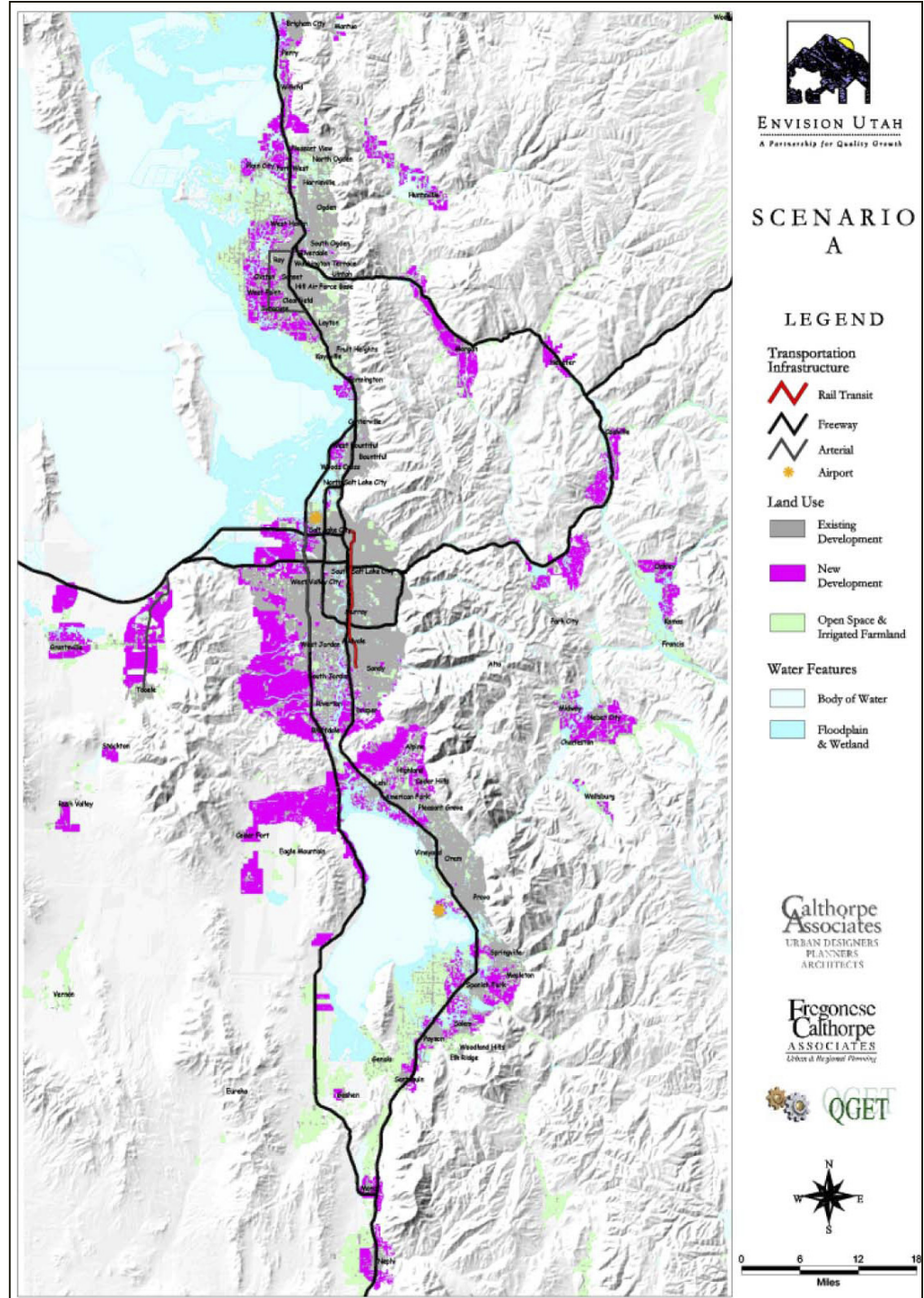
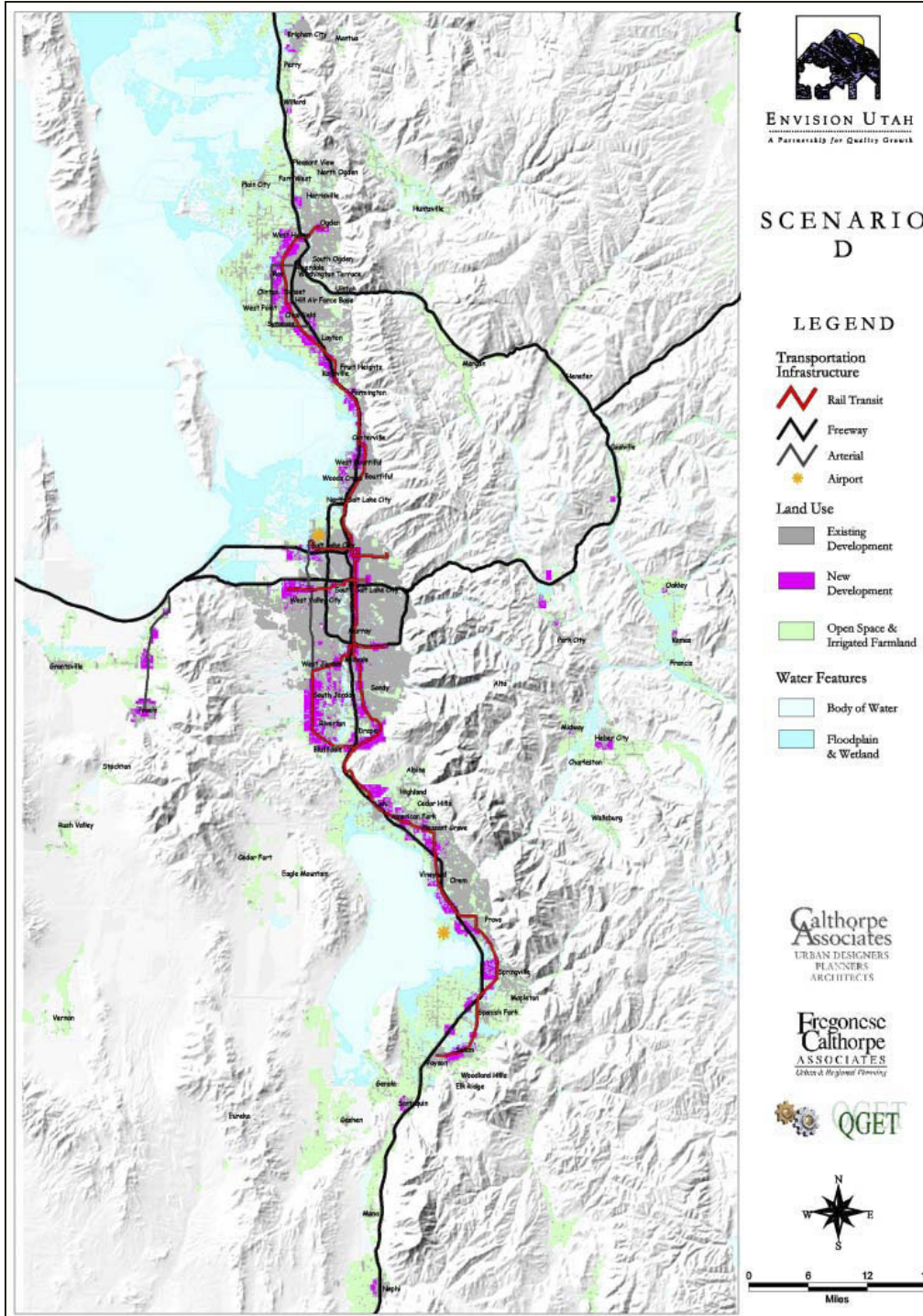


FIGURE 2-1. ENVISION UTAH'S GROWTH SCENARIOS DEMONSTRATED THAT LESS LAND-CONSUMPTIVE PATTERNS ARE POSSIBLE AND CAN HAVE PRONOUNCED EFFECTS: THE CONTINUATION OF CURRENT TRENDS (LEFT) WOULD CONSUME 325 SQUARE MILES MORE THAN WHAT WOULD BE REQUIRED UNDER A MORE COMPACT AND TRANSIT-ORIENTED SCENARIO (RIGHT) TO ACCOMMODATE THE SAME POPULATION (ENVISION UTAH 2000).







The West Bench offers 75,000 acres of land – more than the land area of Salt Lake City (see Figure 2-2). The 41,000 acres of the West Bench most suited to urban development represents over 50 percent of the remaining developable land in the county, and the only large-scale, contiguous land supply left in the county. As such, it represents the Salt Lake Valley’s best – and possibly last – opportunity to comprehensively plan and grow in a better way. Decisions regarding development of the West Bench should be shaped by regional needs, considered in a global context, and tempered by local appropriateness.

More specifically, what are the challenges and opportunities facing the region? How should we plan for development of the West Bench to respond to these challenges and opportunities? The following discussion examines the factors that will play the greatest role in influencing the types of communities that should be built on the West Bench, the social infrastructure that families will rely on, and the communication and transportation networks that will be needed to move the region forward.

## THE WASATCH FRONT - CHALLENGES AND OPPORTUNITIES

As noted earlier, the Wasatch Front includes multiple jurisdictions. What type of agreements, both fiscal and political, can be employed on the West Bench to promote inter-jurisdictional coordination – not competition – throughout the region in land use and transportation planning, economic development, parks, and open space? How can West Bench planning projects bridge the gap between municipal and county future land use plans?

Rapid growth in the Salt Lake Valley over the past 40 years, as in most of the nation, has been auto-dependent and low density – rapidly using the remaining vacant lands and adding more cars to over-loaded regional roads. How can we ensure that each West Bench community uses land wisely and remains distinctive to prevent simply more of the same? What regional facilities (i.e., colleges, transportation hubs, new freeways or arterials, regional parks) are needed to accommodate the build-out population of the county? How can we balance the need for development with open space, natural resource conservation, and protection of the visual character of our mountainous backdrop?

---

*The West Bench can advance economic, ecological, and social prosperity in the region.*

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IN ESSENCE, THE WEST BENCH CAN ASSIST THE REGION IN CREATING A FUTURE THAT IS QUITE DIFFERENT FROM WHAT WOULD EMERGE FROM PRESENT TRENDS.

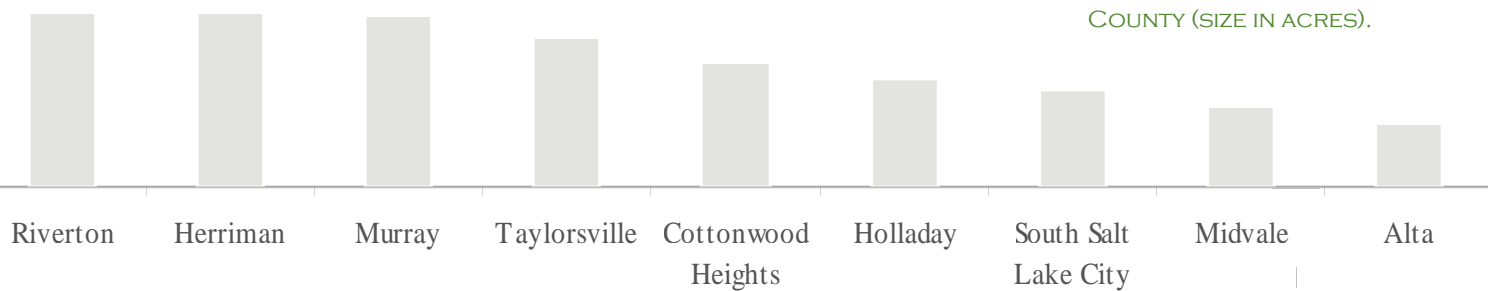


FIGURE 2-2. THE WEST BENCH PLANNING AREA ENCOMPASSES A LARGER AREA THAN ANY INCORPORATED CITY IN SALT LAKE COUNTY (SIZE IN ACRES).

"I WOULD ENCOURAGE YOU TO ACKNOWLEDGE THE NEED FOR SENIOR CENTERS IN THE PLANNING FOR THE FUTURE OF THE WEST BENCH. THESE CENTERS COULD BE LOCATED IN PARKS OR CO-LOCATED WITH OTHER GOVERNMENT SERVICES SUCH AS LIBRARIES."  
 - WEST BENCH PUBLIC COMMENT

## COMMUNITY VALUES – CHALLENGES AND OPPORTUNITIES

The Salt Lake County area is undergoing a transformation similar to most of the major urban centers of the inter-mountain western United States. The local economy has been dominated by resource-based industries such as agriculture and mining. Today, that economy is shifting as part of the "New West" (Robb and Riebsame 1997).

The New West's most telling reality is the new social layers: a thriving recreation and tourism industry, an amenity region attracting immigration, and a post-industrial, high-technology economy creating new jobs in record numbers.

Not surprisingly, neighborhood design affects neighborliness, and civic design influences the civility of a community. Careful implementation can ensure that new development creates whole communities – not just "bedroom communities" that are isolated from employment and cultural centers. Careful planning can overcome the great divide of distance, allowing families to spend more time playing, vacationing, and simply being together. Urban form can encourage social interaction and community relationships by locating shared community activity areas for education, religion, recreation, and local governance as centers of each community. Residential communities can be designed to support intergenerational and extended family relationships. The rich legacy of civic, cultural, and performing arts found in traditional downtowns can be expanded throughout the Salt Lake Valley and West Bench. How can we design neighborhoods to encourage social interaction and

FIGURE 2-3. TO GIVE AN IDEA OF THE MAGNITUDE OF THE WEST BENCH GENERAL PLAN, THIS CHART SHOWS THAT THE WEST BENCH PLANNING AREA'S ESTIMATED BUILD-OUT POPULATION OF MORE THAN 0.5 MILLION IN 50-75 YEARS IS LARGER THAN THE CURRENT POPULATION OF SALT LAKE CITY, WEST VALLEY CITY, AND SANDY COMBINED (2000 CENSUS).



strengthen family relationships? What type of recreational, civic, and cultural facilities should be incorporated to emphasize the values of our community?

---

*West Bench development can support Utahns' strong sense of shared values that emphasize the importance of family and community.*

---

LAND USE AND MULTI-MODAL TRANSPORTATION — CHALLENGES AND OPPORTUNITIES

As the region accommodates new growth, it is faced with a decision between continuing the automobile-oriented development pattern that has dominated since World War II, and searching for innovative ways to accommodate new households. The cooperation and vision embodied in the Envision Utah process set the stage for long-term development of the region as a whole. Recognizing that a declining supply of land, coupled with mounting traffic congestion and growing demand for housing and retail choices, demonstrates the need for more walkable, transit-oriented communities. With its proximity to the existing urban fabric and regional transportation infrastructure, the West Bench provides the region's greatest opportunity for quality, sustainable development. By developing West Bench lands with higher density mixed-use centers focused on transit, more than 500,000 new residents can be accommodated over the next 50 to 75 years (see Figure 2-3). By focusing the vast majority of West Bench development near the eastern edge of West Bench Planning Area, this new development can be integrated into existing development.

Population



“WE WILL HAVE TO GET SERIOUS ABOUT PROVIDING TRANSIT OPTIONS THAT TRULY COMPETE WITH THE CONVENIENCE OF THE CAR. NO ONE IS DOING THAT.”

-ROBERT DUNPHY, URBAN LAND INSTITUTE SENIOR FELLOW

“I WOULD LIKE TO SEE A LIGHT RAIL SPUR CONNECTING MAGNA WITH SALT LAKE CITY AND THE CURRENT LIGHT RAIL LINE.”

- WEST BENCH PUBLIC COMMENT

Still, there are complicated issues to make this integration successful. With a constrained land supply yet a persistent frontier mentality, how can urban design balance the competing needs of density and privacy? How can we adapt current zoning regulations to support and regulate new patterns of development?

---

*West Bench land use patterns can achieve  
Envision Utah’s vision of walkable, transit-oriented communities that consume less land.*

---

The American experience is often characterized by a mismatch between travel demand and transportation supply. Clogged freeways, road rage, and the need for traffic calming are all evidence of peak hour travel demands that exceed available transportation capacity.

Utah is not immune from the peak hour congestion experienced by other metropolitan areas. While the state does not experience the massive delays of the Los Angeles basin, Utah motorists have become acquainted with recurring congestion on major freeways and arterials. Travel demand has grown substantially over the past decade, resulting in peak hour/peak direction congestion on significant segments of Interstate 15 and Interstate 215. In addition, east/west travel between I-15 and surrounding communities continues to grow, and expansion or new construction of east/west corridors such as SR-201, I-80, 3500 South, 5400 South, 7800 South, 9000 South, and 106000 South may be needed. While TRAX light rail has been successful and commuter rail construction is now underway, additional transit investment will not keep pace with transit demand. An additional high-capacity, north-south transit line appears necessary. Centralized employment in downtown Salt Lake City exaggerates rush-hour congestion – current peak hour problems will only increase unless appropriate types of employment are provided locally.

Avoiding the fate of other congested metropolitan areas while enhancing the quality of life for residents of the Salt Lake Valley presents a major challenge. Although major milestones have been accomplished, the region’s overall dispersed land use pattern limits the choice to walk, bike, or use transit. Which transportation improvements will more efficiently

move more people? How can new, walkable communities be built to include transit and a variety of non-motorized transportation options?

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*The West Bench can explicitly relate the urban form to travel behavior and provide a new multi-modal model – one that is founded on walkability, functional transit systems, and convenient transportation choices for all.*

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## UTILITIES AND SERVICES — CHALLENGES AND OPPORTUNITIES

Utility services, including water, sewer, telecommunications, power, and natural gas, provide essential resources needed to sustain human life. The quality of life, and life itself, depends on having a healthy and sustainable water supply for natural systems and new development. Wastewater is also an essential resource that can be reused to help maintain upstream environmental quality by reducing the demand for new water sources, and to improve surface water quality by reducing the effluent discharging into it. Telecommunications, electricity, and natural gas provide infrastructure to maintain emergency response, health, and safety.

Because ownership patterns in the Wasatch Front region have been fragmented, aside from Daybreak, the region has not yet experimented with truly large-scale master planned communities. These larger developments offer the opportunity to deliver state-of-the-art technologies, innovative water-saving and reuse systems, and an overall safer and healthier quality of life. How can we incorporate needed utility infrastructure in a sustainable way? How can we create a framework now for a community that will be developed over the next 75 years?

---

*The West Bench can explore new technologies and innovative solutions for water protection and wastewater use to protect the environment and provide low-cost, efficient infrastructure to the region.*

---

## ENVIRONMENTALLY SUSTAINABLE DESIGN — CHALLENGES AND OPPORTUNITIES

Sustainable communities embody the principles of sustainable development. They balance and integrate the social, economic, and environmental components of their community; meet the needs of existing and future generations; respect the needs of communities in the wider region; and preserve and enhance natural ecological functions. Sustainable design may also reduce pollutants that could ultimately lead to climate change. Salt Lake County has taken an active role in environmentally responsible policy-making through programs such as the Jordan River restoration, including the Jordan River Ecological Restoration site, the upgrading of County facilities to maximize efficiency in heating and air conditioning systems, the use of hybrid vehicles in the County fleet, the development of a water conservation-oriented landscape ordinance, the upgrading of County park maintenance to eliminate over-watering, expanding the county-wide recycling program to involve not only County facilities, but also household recycling, and the construction of LEED-certified libraries and other public facilities.

Environmental responsibility in the design, construction, and operation of communities in the West Bench will be paramount in building enduring communities. For private development, careful and innovative design, construction methods, and use of materials will help protect the natural setting and ecosystems. Daybreak in South Jordan is Utah's first Energy Star community (i.e., Energy Star homes use at least 30 percent less energy than homes built to the National Model Energy Code). The scale of the West Bench provides the opportunity to try innovative and broad-scale approaches not feasible for smaller developments. Implementation of alternative energy systems, protection of critical lands, and large-scale recycling programs are all opportunities for the West Bench development. What types of sustainable practices can be used in the West Bench communities? How can we plan systems and strategies now to protect our air, water, and energy resources?

---

*The West Bench can accelerate local interest and market transformation in sustainable design and green building practices.*

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## NATURAL RESOURCES — CHALLENGES AND OPPORTUNITIES

Since the creation of the Utah Copper Company in 1903, and its acquisition and expansion by Kennecott Copper Corporation in the 1930s, Kennecott Utah Copper Corporation (KUCC) has purchased large tracts of land for mining, mineral, and metal processing uses. Those areas of the West Bench that have not been used for these purposes have seen relatively little human activity for over 100 years.

The quality of life enjoyed by county residents can be attributed in part to the amazing natural setting of the West Bench. With approximately 75 percent of Utah's population living along the Wasatch Front, environmental concerns such as water and air quality and the preservation of open space and habitats are priorities for any new development in the region. Thousands of acres of the West Bench are steep slopes within the Oquirrh Mountain Range (Figure 2-4), providing an opportunity to sustain large blocks of contiguous habitat.

Reclamation is the process of restoring mined land or other altered landscapes to useful properties that meet a variety of goals, such as creating productive ecosystems or usable industrial or municipal land. Portions of the West Bench that are in active use for mining and mining-related activities will require specific reclamation actions to restore the land for other uses.

What can be done for conserved lands to provide for wildlife migration, watershed health, and scenic protection? Which habitats need to be protected to maintain the ecological integrity of Great Basin ecosystems? How can these lands be accessible in an urban environment and still maintain the wildlife values they were created to protect?

---

*The West Bench can accommodate regional growth while conserving valuable natural resources, regional scenic assets, and the ecological health of the region.*

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“SALT LAKE COUNTY SHOULD TAKE A POSITION NOW ON THE FUTURE OF THE OQUIRRH MOUNTAIN RANGE. . .”

- WEST BENCH PUBLIC COMMENT

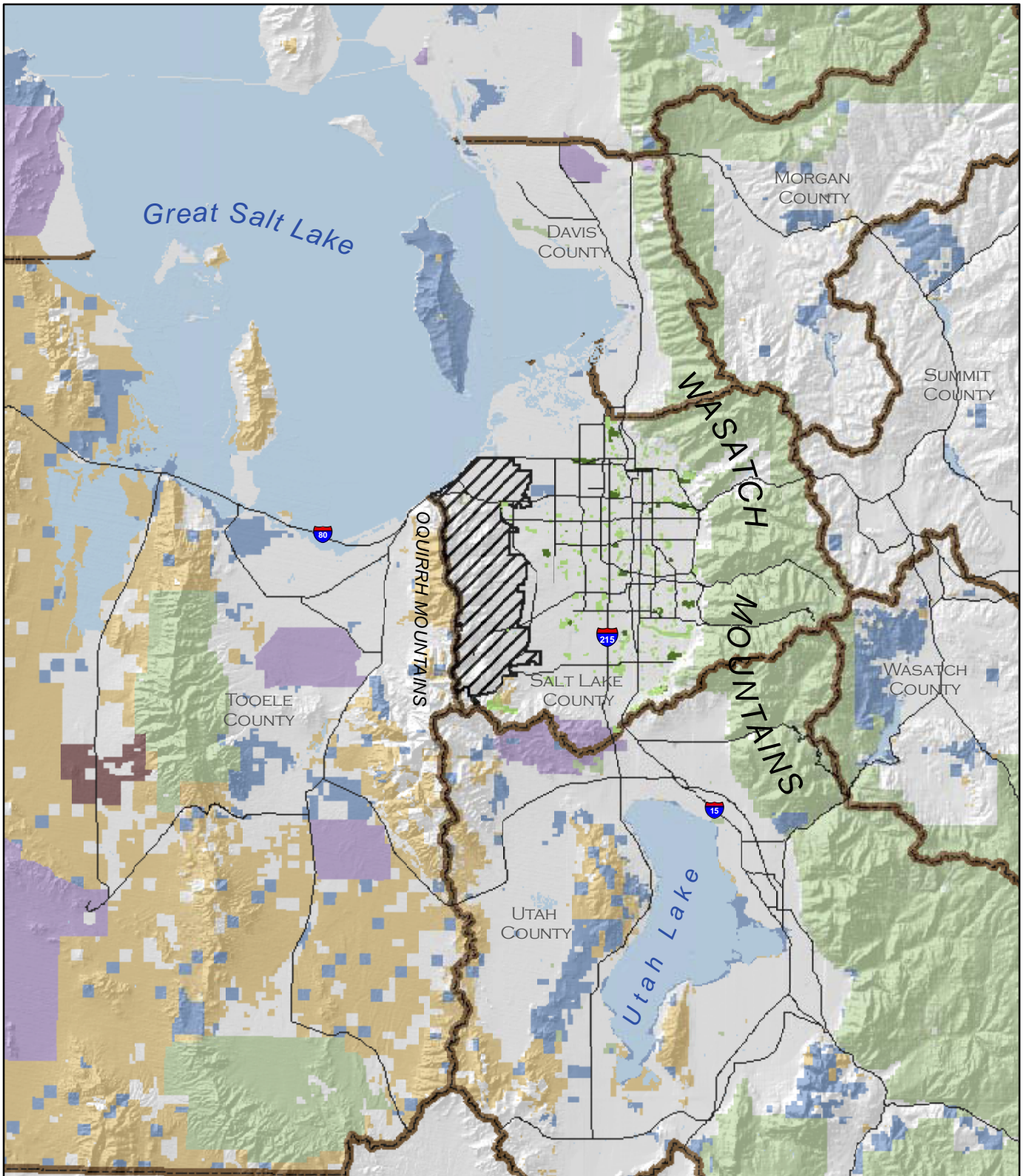
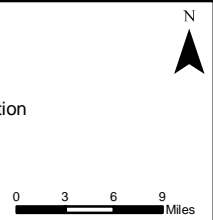


FIGURE 2-4. PUBLIC LANDS

- |                          |                       |                              |                             |
|--------------------------|-----------------------|------------------------------|-----------------------------|
| West Bench Planning Area | County and City Parks | <b>Public Land Ownership</b> | Military Reservations       |
| Counties                 | Golf Courses          | BLM                          | Native American Reservation |
| Highways                 | Open Water            | Forest Service               | State of Utah               |
| Major Streets            |                       |                              |                             |

EDAW | AECOM



## PARKS, RECREATION, AND TRAILS — CHALLENGES AND OPPORTUNITIES

Parks, recreational facilities, and trails are important aspects of a livable and healthy community. They provide opportunities for rest, relaxation, stress relief, socializing, exercise, and skills improvement. They are also an element of the region’s open space system, providing landscape variety and relief from urban development.

Currently, the 945,496 residents (2003 Census) of Salt Lake County enjoy approximately 8,391 acres of developed urban regional, community, and neighborhood parks. The 2005 Salt Lake County Parks and Recreation Master Plan establishes park acreage standards based on the population to be served. As development of the West Bench area occurs, consideration of park needs should be evaluated using the County’s Parks and Recreation Master Plan standards. What types of recreational activities and facilities will we need? How can we ensure that these facilities are incorporated into each new community?

The West Bench can play an important role in meeting these needs. Over time, as conditions and activities change, portions of the land could become available for additional recreational use. Additional regional and local parks, trails, natural resource areas, and protected open space within development areas will add to this acreage. What types of recreational activities and facilities will we need? How can we ensure that these facilities are incorporated into each community?

---

*The West Bench can provide extensive systems of parks, trails, and open space to enhance the quality of life for current and future Salt Lake Valley residents.*

---

“THE BONNEVILLE SHORELINE TRAIL NEEDS TO BE PRESERVED.”  
- WEST BENCH PUBLIC COMMENT

“PRESERVE WILDLIFE CORRIDORS, PARKS, DAY HIKING TRAILS AND HORSE RIDING TRAILS.”  
- WEST BENCH PUBLIC COMMENT



THE WEST BENCH IS MOST KNOWN FOR THE BINGHAM MINE, OPERATED BY KENNECOTT UTAH COPPER.

“WHERE PROSPERITY EXISTS, IT IS REGION-BASED.”

- KENICHI OHMAE, BUSINESS STRATEGIST & FORMER HEAD OF MCKINSEY & CO.

## ECONOMIC SUSTAINABILITY – CHALLENGES AND OPPORTUNITIES

The Wasatch Front has been growing rapidly, with an average of 28,600 new jobs per year since 1990 for an annual growth rate of 3.2 percent (GOPB 2005). This strong rate of growth is four times the national average of 0.8 percent. However, growth in some primary or basic employment sectors that import dollars into the region has been relatively flat. The largest employment sectors (Government, Retail Trade, and Professional Services), which account for 27 percent of total employment, are non-basic sectors serving the local market, but not generating new wealth for the region.

Although employment forecasts may change every year, in 2005 the Governor’s Office of Planning and Budget anticipated a 1.6 percent annual growth through 2050 for the Wasatch Front, with more than half of the regional activity occurring in Salt Lake County (GOPB 2005). The West Bench can provide needed resources to expand employment growth, attract new primary employment to the region, enable existing business and industry to expand, and foster economic development opportunities that encourage private investment throughout the Salt Lake Valley. Over the long term, the region will be able to provide attractive career opportunities to Utah’s high school and college graduates, enabling them to deepen their roots in the region.

Development of the West Bench expanse of land and the unique amenities it provides can function as an economic catalyst at a scale unfathomable to most economic planners. Within this context, the West Bench will enable the region to increase the rate of job growth from historical levels and achieve a better balance between basic and non-basic employment. The economy will become more diverse and enable residents to select from a range of employment opportunities.

Redevelopment is the process of updating existing communities to meet modern economic and social needs. As new communities develop, it is important that they be coordinated with existing communities into a continuous fabric. Magna and Copperton are older communities directly influenced by the development of the West Bench.

What new employment opportunities are needed in the region? How can the Wasatch Front region continue to develop primary jobs that provide economic sustainability to support the expansive growth that is expected? How will the West Bench develop environmental and economic capabilities to lead in a global workplace?

---

*The West Bench can expand the economic base of the region with substantial job creation in a fiscally sound and sustainable manner.*

---

#### HOUSING AFFORDABILITY AND VARIETY OF BLENDED HOUSING TYPES — CHALLENGES AND OPPORTUNITIES

The authenticity of a newly developed community is directly related to how well it reflects the social, cultural, and economic variety of the larger region. Housing affordability is a key element that contributes directly to a variety of housing types and enhances the sense of place. Achieving and maintaining housing affordability presents many challenges. The challenges relate to increasing density, diversifying the product mix, and providing the full range of price points and options for renters and owners.

A community can be considered successful if its housing inventory offers a spectrum of options and costs that is proportional to the makeup of its residents and employees and their ability to pay for housing. A successful housing spectrum will include ample options on the lower end as well as the upper end. The beneficiaries are not only community residents, but also employers that are able to draw from a broader spectrum of potential employees.

Housing is considered affordable when a household spends less than 30 percent of gross household income on shelter, according to the Department of Housing and Urban Development (HUD). As of 2005, the average price for existing homes in Salt Lake County was \$221,000, with newly constructed homes costing an average of 30 percent more.

“THANK YOU FOR MAKING HOMES THAT OUR FAMILY, FRIENDS, AND NEIGHBORS CAN ALL USE.”  
- WEST BENCH PUBLIC COMMENT

Housing price appreciation has been strong in the seven-year period from 1997 to 2003; annual average rates of appreciation ranged from 1.7 to 3.5 percent. The rate has surged recently, however, with appreciation ranging between 7.1 and 8.2 percent. Keeping housing costs low is a challenge that is becoming more acute with appreciation rates at these levels. Master planned communities afford the opportunity to provide a complete range of housing options and distribute affordable housing throughout the development, rather than in concentrated areas.

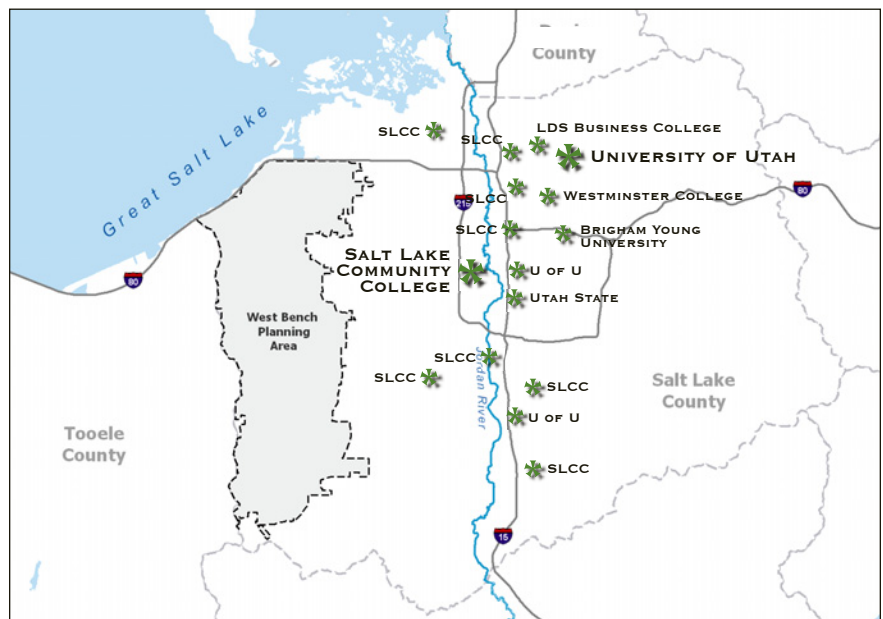
How will residential neighborhoods be designed as more accessible and inclusive human habitats? How can we foster connections across age, income, tenure, and class, and provide opportunities to keep families together? How will gentrification be avoided when such development becomes highly successful? The West Bench offers the opportunity to provide a range of blended housing types, including single-family homes, townhomes, condominiums, accessory dwelling units, and apartments, which will allow for a range of housing affordability and lot sizes.

---

*The West Bench can provide viable housing, employment, and community service options for a full range of incomes and household types.*

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FIGURE 2-5. EIGHT UNIVERSITIES AND COLLEGES SERVE THE WASATCH FRONT REGION. FIVE OF THESE ARE IN SALT LAKE COUNTY.



## EDUCATIONAL RESOURCES – CHALLENGES AND OPPORTUNITIES

Residents of Salt Lake County have enjoyed the region's focus on academic excellence for over a hundred years. Educated residents, both children and adults, create a solid foundation for community growth in safe and prosperous cities. Increasingly, job creation is shifting to the high technology and service industries that demand more highly skilled workers. Lifelong learning opportunities are important to maintaining productivity and competitiveness of individuals and communities in the global marketplace.

With the second highest percentage of school-age population in the nation, Utah trails the nation in per-pupil spending and tops the nation in student-teacher ratios (Wikstrom 2005). In Salt Lake County, public high school graduation rates typically average in the 90th percentile, demonstrating a high degree of preparation for higher education. With 90 percent of adults completing a high school education, Utah ranks second only to Wyoming with regard to the percentage of the adult (25 and over) population who are high school graduates (Wikstrom 2005). However, Utah ranks only 32nd among the 50 states in higher education participation (Wikstrom 2005). Despite a good variety of higher education facilities in Salt Lake County (see Figure 2-5), 10 to 22 percent of those prepared for advanced degrees do not pursue them.

Within the state of Utah, providing education is the responsibility of the State and local school districts, not Salt Lake County. Through coordinated planning, the County can assist State and local school districts in maximizing the benefit and compatibility of proposed school sites. As the region grows, what local school district facilities and expansions will be necessary to maintain – even surpass – current performance? What resources will be needed to expand the skills of Salt Lake Valley residents for them participate in the global economy? What new college campuses or other major educational facilities are needed on the West Bench to make higher education more attainable to Salt Lake Valley residents?

---

*The West Bench can foster the physical, institutional, organizational, social, and cultural life that leads to lifelong learning and educational excellence.*

---

## HERITAGE RESOURCES – CHALLENGES AND OPPORTUNITIES

“PLEASE PRESERVE AND ENHANCE OUR HERITAGE RESOURCES. . .”  
- WEST BENCH PUBLIC COMMENT

Historic resources are reminders of the area’s past. Native Americans and pioneers continue to influence the area to this day. Within the West Bench Planning Area, early ranching and timber harvest settlements, the history of mining and mineral and metal processing, and other heritage resources are all integral parts of the region’s and state’s history.

Each year, about 150,000 tourists visit the Bingham Mine, providing a steady economic benefit to neighboring communities. Cultural landscapes, structures, and sites define a sense of place, remind us of where we came from, and provide an attraction for both locals and visitors of the area. Heritage resources enrich and reinforce the culture of the region and contribute to the economic and social base of the region as interpretive sites. How can the heritage resources on the West Bench be conserved, while still offering access to open space and natural areas and allow development? What are the best interpretation opportunities to educate the public and support local tourism?

---

*The West Bench can help us understand our history and culture through preservation, interpretation, and public education.*

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## 2.3 THE WEST BENCH

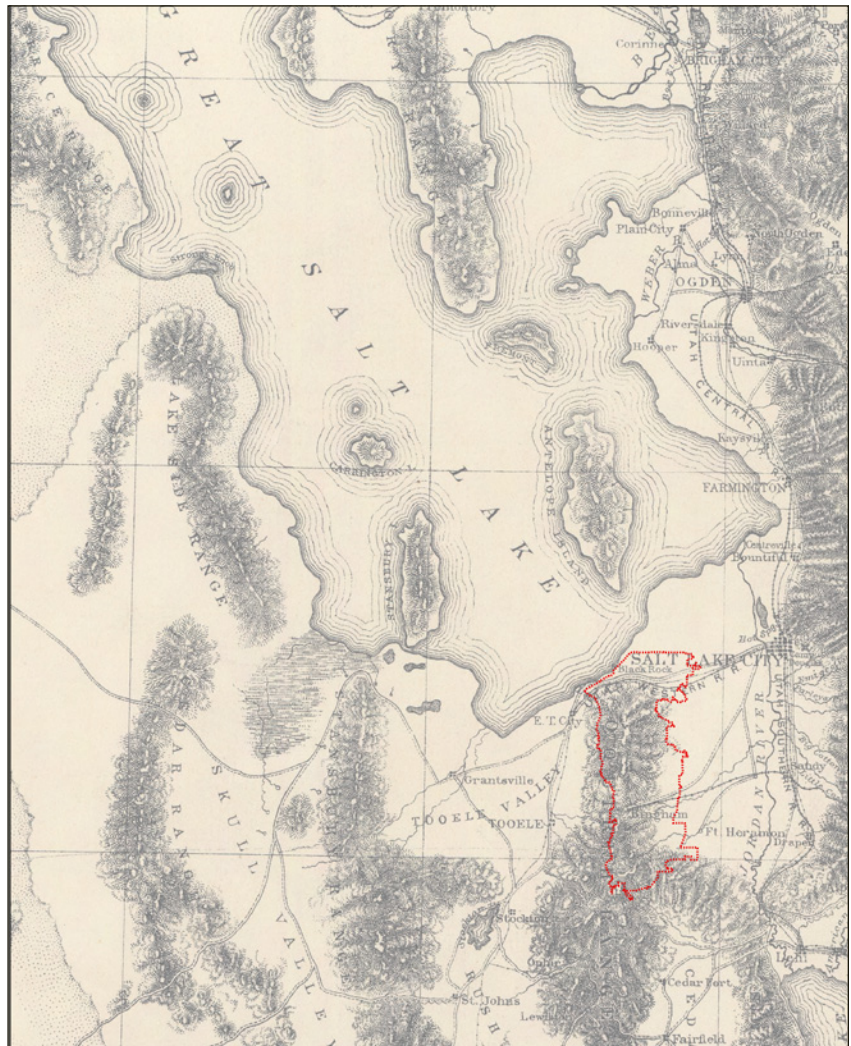
### NATURAL RESOURCES

The West Bench Planning Area is located along the eastern edge of the Great Basin, a vast, arid region between the Sierra Nevada and Rocky Mountains that covers nearly all of Nevada, a portion of southern Idaho, and western Utah. The Great Basin is characterized by broad, arid valleys or basins, interspersed with mountain ranges oriented to the north-south. The Oquirrh Mountain Range is one of many mountain ranges oriented in a north-south direction that act as biological islands within the Great Basin, supporting plant species and communities that are very different from those in the surrounding valleys (see Figures 2-6 and 2-7).

The West Bench Planning Area encompasses the east-facing half of the Oquirrh Mountain Range from the ridgeline (which serves as the Salt Lake–Tooele County boundary) down to the Salt Lake Valley floor, bounded by the Great Salt Lake to the north, and Butterfield Canyon (generally along Middle Canyon Road) to the south. While a significant portion of the West Bench area is relatively flat or gently sloping, the Oquirrh Mountain Range is a steep, rugged, and highly dissected range with numerous canyons. The foothills topography mainly consists of low, rolling hills with shallow relief and dry creek beds that taper toward the Jordan River. The Jordan River watershed drains into the Great Salt Lake, which is a closed basin.

Elevation ranges from 4,200 feet at the edge of the Great Salt Lake, to

FIGURE 2-6. THE OQUIRRH MOUNTAIN RANGE IS ONE OF MANY MOUNTAIN RANGES ORIENTED IN A NORTH-SOUTH DIRECTION THAT ACT AS BIOLOGICAL ISLANDS WITHIN THE GREAT BASIN, AS SEEN IN THIS 1879 HANDDRAWN MAP OF UTAH (DAVID RUMSEY 1879).



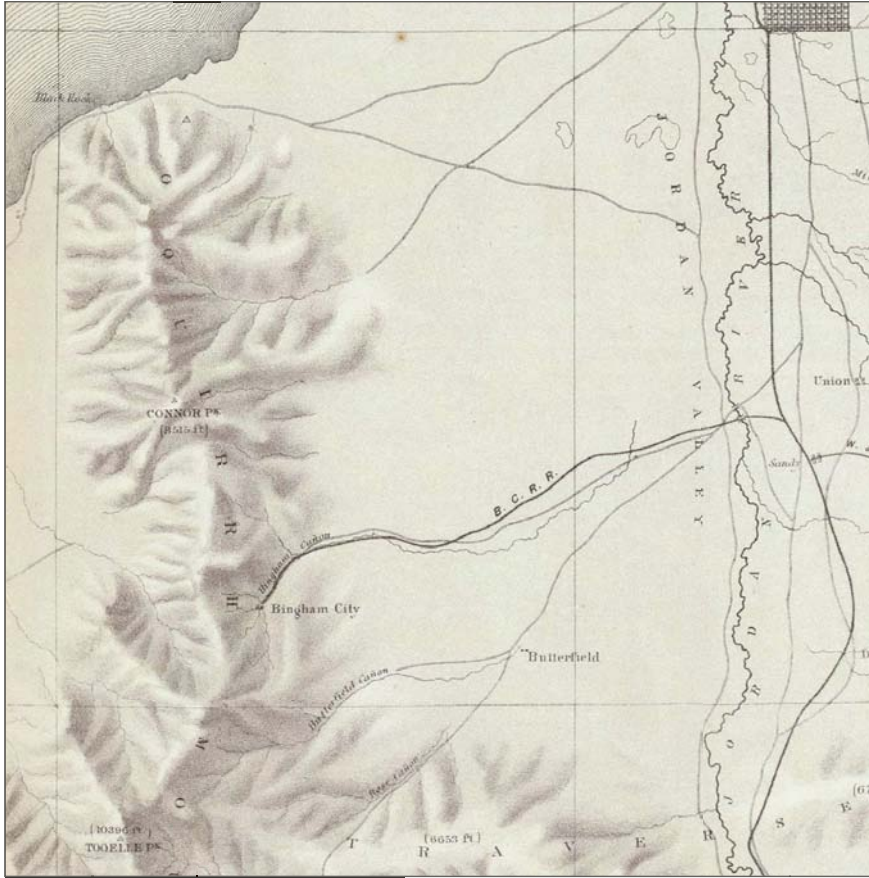


FIGURE 2-7. THIS 1876 HANDDRAWN MAP FROM "GEOLOGICAL AND TOPOGRAPHICAL ATLAS ACCOMPANYING THE REPORT OF THE GEOLOGICAL EXPLORATION OF THE FORTIETH PARALLEL" SHOWS THE EARLY LOCATIONS OF BINGHAM CITY, THE TOWN OF BUTTERFIELD, AND THE BINGHAM CANYON RAILROAD (DAVID RUMSEY 1876).

almost 10,000 feet at the crest of the mountain range; thus, the study area contains an astounding variety of low elevation valley (4,200-5,250 ft.), foothill (5,250-6,500 ft.), and mid-montane (6,500-9,800 ft.) plant and animal communities. Vegetation includes sagebrush and grasses on the lower elevation foothills, oak shrub on the warmer and drier southern and western slopes, Douglas-fir and aspen on the cooler and wetter northern slopes, and Gambel's oak and bigtooth maple in the canyon bottoms. The high mountain meadows, steep canyon slopes, and streams support a variety of wildlife, including cougar, elk, mule deer, and a variety of other species.

## THE PAST

The fertile Salt Lake Valley has been occupied by humans for nearly 12,000 years, beginning with Native American bands settling in the Great Basin after the retreat of Lake Bonneville that originally covered one third of present-day Utah. The original inhabitants of the Salt Lake Valley were Shoshone, Paiute, Goshute, and Ute Native American tribes that ranged through the area moving seasonally, surviving by hunting, fishing, and gathering seasonal foods in the productive canyons and forests of the Oquirrh and Wasatch Mountains. The first Europeans to enter the Salt Lake Valley were fur trappers in the 1820s, following the streams into the Oquirrh Mountain Range (Salt Lake County Website).

Euro-American settlement began in the Salt Lake Valley with the arrival of the first Mormon wagon train on July 24, 1847 (LDS Gospel Library Website). These members of The Church of Jesus Christ of Latter-day

Saints sought to escape religious persecution and were the first people of European descent to settle permanently in the area. Within hours of establishing camp, members of the first wave of pioneers had begun plowing the ground and damming a nearby mountain stream; agriculture in the Salt Lake Valley has remained an important industry to this day. By winter, approximately 1,700 pioneers had reached the Salt Lake Valley. Three years later, in 1850, the Salt Lake Valley and surrounding areas had grown to over 11,000, and the United States Congress created the Utah Territory from the "State of Deseret" established by the Mormon pioneers (Salt Lake City Website).

The Bingham Canyon, west of Salt Lake City, was settled in 1848 (Denver & Rio Grande Ghost Depot Website). The abundant timber in the canyon was logged for construction of the developing towns in the Salt Lake Valley, including the construction of the Salt Lake Tabernacle. Within five years, a number of small settlements were well established within the Canyon. Lead deposits were discovered in Bingham Canyon in 1863 (Denver & Rio Grande Ghost Depot Website). By 1874, the Canyon had a population of 1,400, as it quickly became lined with mines, stampmills, and small mining towns. New factories, foundries, and smelters were constructed in the Salt Lake Valley to support the mining enterprises.

The Utah Central Railroad was opened in the early 1870s, connecting the isolated Salt Lake Valley to the national rail system (Utah State Tourism Website). The railroad not only connected the area to the outside world, but also increased productivity at the mines by transporting ore. By the end of the twentieth century, the small mining claims in the canyons were consolidated by large corporations that changed the nature of mining in the Canyon.

In 1906, the Utah Copper Company started surface mining, making the first cuts into the mountain with large steam shovels (Kennecott Utah Copper Website). By 1912, the mines in Bingham Canyon employed over 5,000 workers and by 1914, 10,000 people lived in the Canyon. Miners came from all over the world to work at the Bingham Mine. In 1912, it was estimated that 65 percent of the population in Bingham Canyon was foreign born. Each nationality settled in a different community in

the Canyon, including Carr Fork, Highland Boy, Copperfield, Lark, and Bingham. The mines, along with the nearby mills, smelters, and refineries, were recognized as the largest industrial mining complex in the world.

During World War II, the Bingham Canyon Mine helped meet the nation's copper demand, producing one-third of the copper used by the Allies during the war. Through the expansion of the Bingham Mine over the last 100 years, it has become the largest open-pit copper mine in the world (Kennecott Utah Copper Website). Designated as a National Landmark in 1966, the Bingham Mine is one of only 12 landmarks in Utah to receive this level of recognition.

Although cities and suburbs now cover much of the land of the Salt Lake Valley that had historically been rural agricultural areas, there linger traces of the agricultural origins. Remnant irrigation canals, fencing, and corrals from ranching can still be found. As the Salt Lake Valley continues to grow and change, Kennecott Utah Copper and the mining industries of the past continue to remind us where we have come from and hint at the future. The strong character and self-sufficiency of the early Mormon pioneers and the ingenuity and entrepreneurial spirit of the miners and engineers have all left their imprints on the both the people and the landscape of Salt Lake Valley.

## THE PRESENT

Today, the West Bench lies in the path of growth for the Salt Lake Valley, and lands adjacent to the West Bench contain existing and planned land uses of every variety. Lands adjacent to the northern half of the West Bench, such as Magna, have experienced growth and development for over 100 years, and support major employers such as Kennecott Utah Copper, Alliant Techsystems and the International Center.

The southern half of the West Bench has not experienced intense urban pressures, and many agricultural lands remain. Some light industrial uses and gravel mining exist, although areas adjacent to major transportation

corridors are experiencing a rapid transition to rural residential, low-density residential uses with limited supporting retail and office uses.

Driven by housing and employment demands and opportunities presented by the expanding highway system, the municipalities of West Valley City, City of West Jordan, South Jordan City, Herriman City and Salt Lake City have annexed westward up to the West Bench Planning Area, leaving very little land unincorporated. Of the 16 incorporated cities in the county, five are adjacent to the West Bench. Salt Lake City lands near the West Bench are primarily used and zoned for light manufacturing activities. Lands within West Valley City, City of West Jordan, and Herriman City located along the WBGp boundary are currently planned for low-density residential uses, planned communities, and agricultural uses. In South Jordan, Kennecott's multi-use Daybreak development is located directly east of the WBGp boundary.

Since Kennecott properties historically have been off-limits for development, municipal comprehensive plans, zoning districts, and infrastructure plans bordering the West Bench Planning Area have not planned for development of the West Bench. Most of these plans envision the continuation of existing industries and few new employment opportunities, with a steady western transition to very low-density residential development, parks, or open space.

**HOW BIG IS 75,000 ACRES?**

IT IS THE SIZE OF BLUFFDALE, COTTONWOOD HEIGHTS, HERRIMAN CITY, HOLLADAY, MIDVALE, MURRAY, RIVERTON, SOUTH JORDAN CITY, SOUTH SALT LAKE CITY, AND TAYLORSVILLE COMBINED.

**KENNECOTT’S WEST BENCH MASTER PLAN**

How does one begin planning for an area 75,000 acres in size, 20 miles long from north to south, 7 miles from east to west, with nearly a 6,000-foot change in elevation? How can a framework be developed to last for 50 to 75 years and adapt to changing economies, lifestyles, and regional needs? To answer these critical questions, Kennecott and its parent company Rio Tinto, made the commitment to work with regional governments, major stakeholders and the public to develop a Master Plan for its properties in the West Bench through a series of steps as presented below

*First, it requires a decade-long process of understanding and actively participating in regional needs assessments and visioning*, through forums and interested groups. Ongoing involvement in regional growth discussions helped define the guiding principles, or decision-making framework, for all West Bench planning efforts.

**BUILDING ON REGIONAL STRATEGIES & PRINCIPLES**

**ENVISION UTAH  
QUALITY GROWTH STRATEGY**

1. Preserve Critical Lands
2. Promote Air Quality
3. Create Transportation Choices
4. Encourage Water Conservation
5. Promote Housing Options
6. Support Efficient Infrastructure

**KENNECOTT WEST BENCH MASTER PLAN  
GUIDING PRINCIPLES**

(FROM THE 2005 COG SUMMIT PROCESS)

1. Respect the Landscape
2. Preserve and Enhance Open Space
3. Provide Transportation Options
4. Demonstrate Environmental Responsibility
5. Implement Watershed Management and Water Conservation
6. Create Economic Opportunities
7. Design for Social Equity and Diversity
8. Focus on Sustainability
9. Utilize and Optimize Existing Infrastructure
10. Build a Sense of Community and Place
11. Design for Public Safety and Health
12. Provide for Schools and Educational Opportunities

*Second, it requires a respect for the land.* It is intended that the stewardship principles instilled on the West Bench will be a model for future land development in the region. Site constraints and opportunities were analyzed by Kennecott Land when creating the West Bench Master Plan using Geographic Information System (GIS) data. Physical and environmental constraint levels were identified and mapped to determine areas of developable land within the boundaries of Kennecott's properties, while restricting development in unsuitable areas (see Table 2-2 and Figure 2-8). As we look ahead, and as technology changes, most mining areas may become available for new uses.

TABLE 2-2. CONSTRAINTS USED IN ANALYZING FUTURE LAND USES FOR THE KENNECOTT WEST BENCH MASTER PLAN.

#### PHYSICAL CONSTRAINTS

- Slopes over 30%
- Faults
- Landslide Areas
- Avalanche Areas
- Streams (100' buffer)
- Water Bodies (100' buffer)
- Non KUCC Powerline Easements (300' buffer)
- Non KUCC Power Substations (300' buffer)
- Great Salt Lake Shoreline (less than 4217' in elevation)

#### ENVIRONMENTAL CONSTRAINTS

- Riparian Vegetation Zones (50' buffer)
- Bonneville Shoreline (200' buffer along 5090' elevation contour)

#### MINING CONSTRAINTS

- "Wet" areas in the Tailings Pond
- Facility Sites
- Hazard Areas

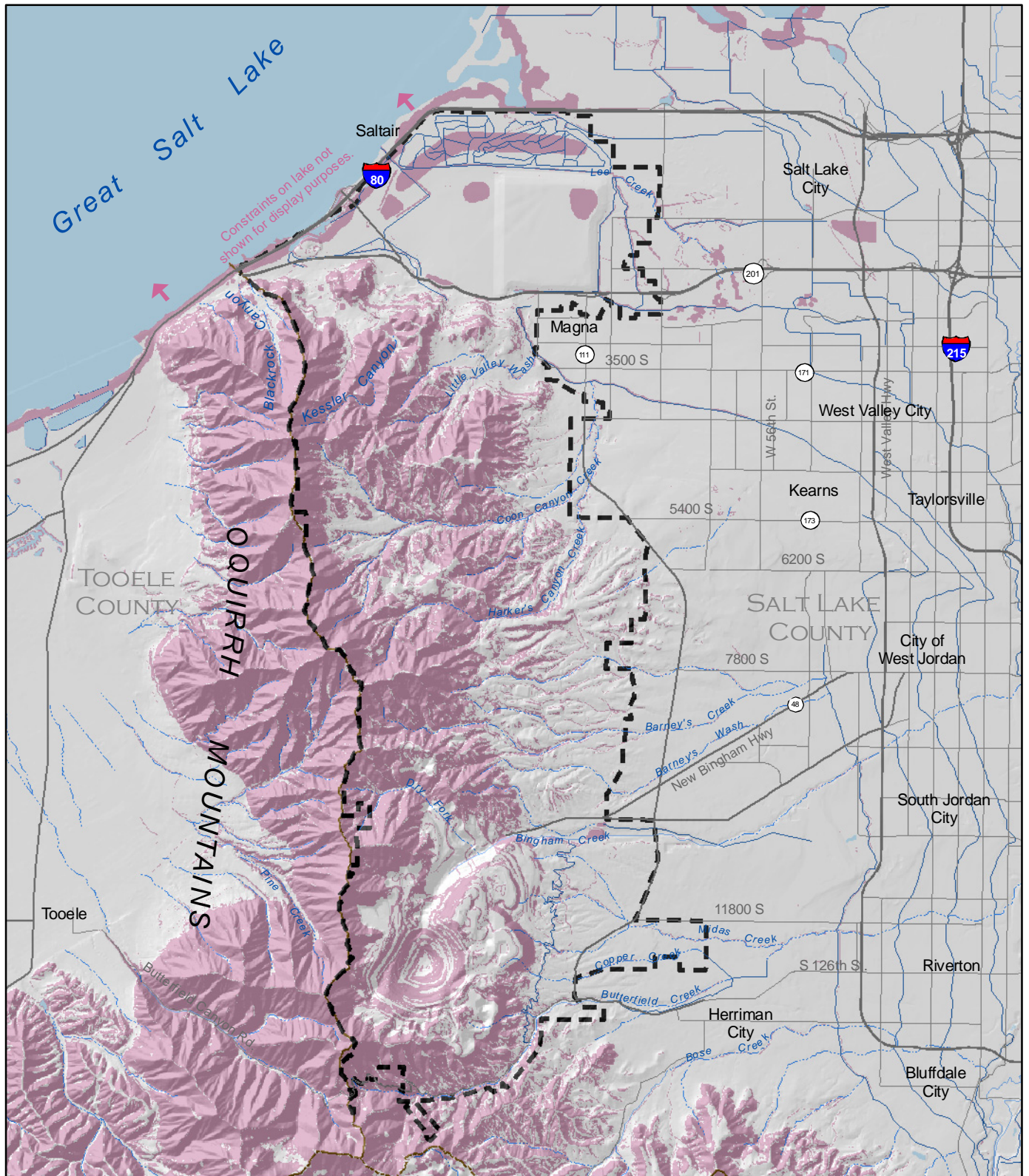
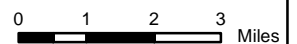


FIGURE 2-8. DEVELOPMENT CONSTRAINTS IDENTIFIED BY KENNECOTT LAND

- Highways
- Key Local Roads
- County Boundaries
- Open Water
- Stream/River- Perennial
- Stream/River - Intermittent
- Canal Ditch/Aqueduct
- West Bench Planning Area
- Development Constrained Areas \*\*

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\*\* Level 1 constraints define areas that are not developable. The Level 1 Constraints make up the initial constraints "filter" that was used to determine the overall carrying capacity of the Kennecott West Bench Master Plan by Calthorpe Associates.





*Third, it requires an appreciation for how sustainable, enduring communities really work.* Successful old and new communities were analyzed using a range of quality of life indicators to understand the design principles that gave them permanence. These prototype communities include Rockridge District in Oakland, California; Issaquah Highlands near Seattle, Washington; Sugarhouse in Salt Lake City, Utah; Stapleton in Denver, Colorado; and Daybreak in South Jordan. A set of “placetypes,” or land use types based on the designs of real places, represented a hierarchy of employment opportunities and residential product types and densities as shown in Figure 2-9. The appropriate location for each type was determined through a number of factors, such as specific topographic characteristics, access to existing and potential transportation infrastructure, proximity to other existing and future centers, and relationship to environmental features as shown in Figure 2-10.

FIGURE 2-9. RELATIONSHIP OF PLACETYPES, DENSITY, AND SLOPE IN THE WEST BENCH MASTER PLAN: SLOPE WAS A SIGNIFICANT FACTOR IN LOCATING DIFFERENT PLACETYPES. AS THE SLOPE INCREASES, THE DENSITY OF MIXED-USE CENTERS AND RESIDENTIAL NEIGHBORHOODS DECREASED. THIS ALLOWS FOR DEVELOPMENT TO PRODUCE MINIMUM IMPACTS ON NATURAL SYSTEMS, AND IS MORE FISCALLY EFFICIENT FOR NEW INFRASTRUCTURE. LAND AREAS WITH SLOPES ABOVE 30 PERCENT WERE DEEMED “OFF LIMITS” FOR DEVELOPMENT.

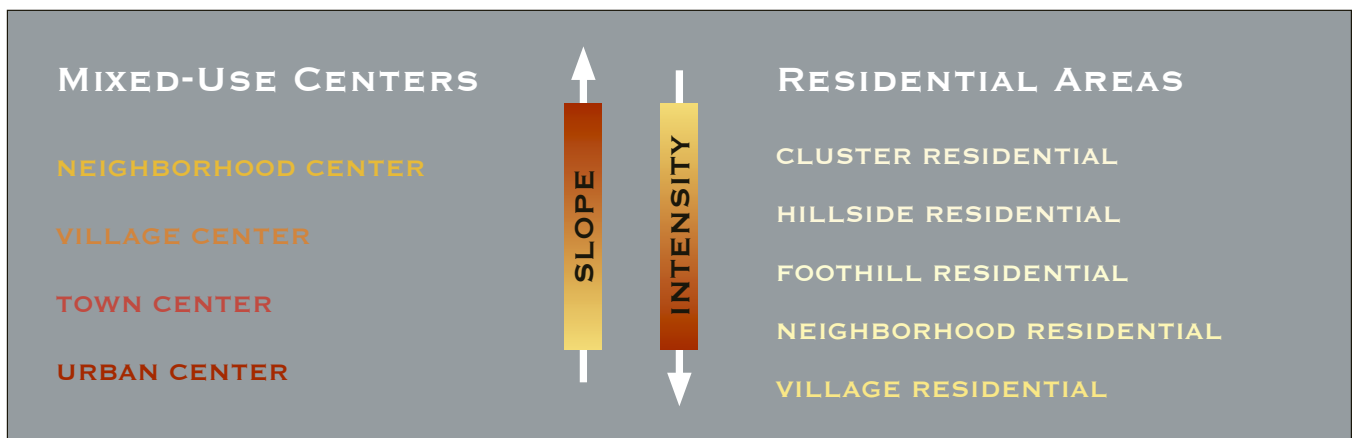
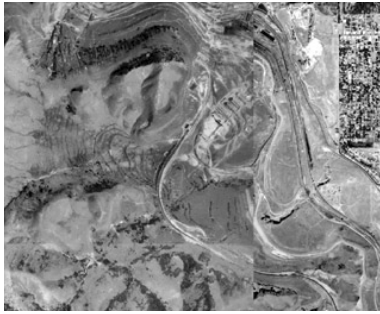
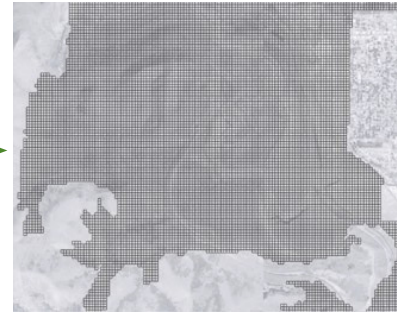


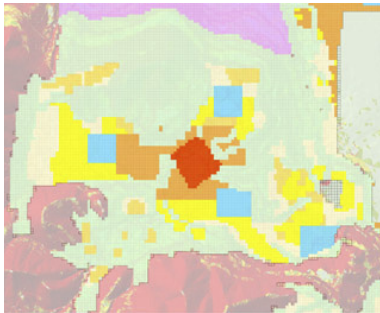
FIGURE 2-10. GROUND-UP PLAN BUILDING METHODOLOGY.



DEVELOPMENT SCENARIOS FOR THE PLANNING AREA WERE CONSTRUCTED, ANALYZED, AND REFINED IN A GIS SYSTEM.



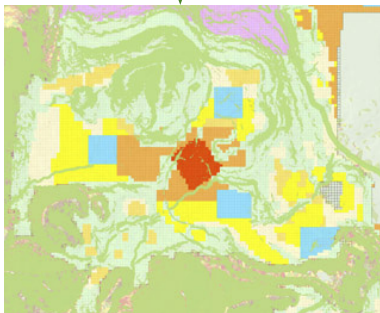
THE PLANNING AREA WAS BROKEN UP INTO A SERIES OF GRID CELLS IN WHICH DIFFERENT TYPES OF DEVELOPMENT — IN THE FORM OF PLACETYPES — WERE CONSIDERED.



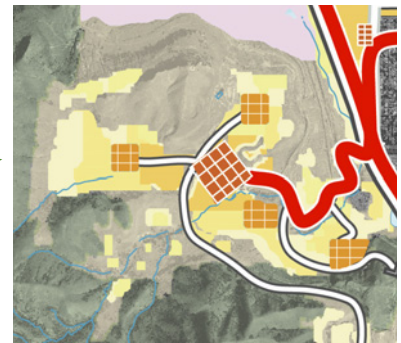
PLACETYPES WERE APPLIED, INFORMED BY THE CONSTRAINTS ANALYSIS TO LOCATE DEVELOPMENT WITHIN THE MOST APPROPRIATE AREAS.



CONSTRAINTS WERE MAPPED.



CONSTRAINTS WERE LAID OVER THE LAND USES, AND CALCULATIONS OF DEVELOPABLE LANDS WERE DERIVED BY SUBTRACTING CONSTRAINED LANDS.



CONSTRAINTS WERE REMOVED IN THE FUTURE LAND USE MAP FOR ILLUSTRATIVE PURPOSES.

***Fourth, it requires that transportation and infrastructure respond to land use, not the reverse.*** Alternatives to the car—transit, cycling, walking, carpooling, telecommuting—offering a range of transportation options are integral to land use scenarios for the West Bench. Given its significant size, build-out of the West Bench will impact the transportation network of the Salt Lake Valley. Transportation modeling and infrastructure analysis for the West Bench used the Wasatch Front Regional Council’s travel demand model to estimate conditions in 30 years and 50–80 years. It found that by emphasizing walking and transit trips as an integral part of the development structure (that is, managing transportation demand), the amount and costs of new roads and other facilities will be reduced. West Bench modeling further found that the number of vehicle hours and vehicle miles traveled decreased for the type of communities proposed at the West Bench compared to typical development patterns in the Salt Lake Valley. The infrastructure analysis also included assessing the energy, water, snowpack, and watershed needs of the West Bench.

Together, the constraints analysis, placetype studies, and infrastructure analysis revealed numerous opportunities to help the region meet economic, social, and environmental goals. The values analysis – what Salt Lake residents truly care about – was used to group opportunities into a set of common themes, or Core Concepts. A summary of our shared values, the West Bench Vision Statement, and Core Concepts of the West Bench General Plan are presented in the following chapter.



# CHAPTER 3

## VALUES, VISION, AND GOALS

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DRAFT  
AUGUST 3, 2007





## CHAPTER 3 VALUES, VISION, AND GOALS

### 3.1 VALUES

Building an enduring community requires that the driving Vision and goals be founded on shared values – especially when the task is to manage the steps in building a community for the next 50 to 75 years.

Values are stable and enduring, are widely shared, and provide a basis for consensus among diverse groups. The values of a community are manifested in a variety of ways, such as through:

- Religious and civic organizations;
- Chamber of Commerce and community organizations;
- Adopted plans and policy documents;
- Regional forums, such as the Council of Governments (COG) Summit Process;
- Local media;
- Public dialogue resulting from public processes, such as Wasatch Choices 2040;
- Appointed and elected commissions, councils, and officials; and
- Local bond and proposition measures.

Although these values may be held by each one of us individually, only when clearly stated and shared can they be realized by a community and Salt Lake County.

Values are both a basis for the Vision and a way to understand the Vision, goals, objectives, and policies of the West Bench General Plan. From a regional perspective, several consistent themes have emerged from recent planning efforts, all of which are inseparable from Utah's distinctive social and cultural characteristics and sought-after quality of life.

Together, these values provide a firm foundation upon which to build a better future for ourselves and the generations to follow. Not surprisingly, all of these values relate to growth. In fact, nearly all Utahns feel that growth is the number one cause of the state's challenges and problems, yet very few feel that limiting growth is a good idea.

#### SHARED VALUES

**FAMILIES**, SENIORS,  
AND FUTURE  
GENERATIONS

ACCESS TO  
**EDUCATION** FOR  
LIFELONG LEARNING

**CLEAN** AIR AND  
WATER QUALITY

**OPEN SPACE** AND  
CRITICAL LANDS

THE AESTHETIC  
**BEAUTY**  
OF THE MOUNTAINS

**SAFETY** AND CRIME  
PREVENTION

A VARIETY OF  
**TRANSPORTATION**  
**OPTIONS**

**ECONOMIC**  
**DEVELOPMENT**  
AND JOB CREATION

QUALITY **HEALTH**  
**CARE**

**QUALITY OF LIFE**  
THROUGH EXCELLENT  
DESIGN

## 3.2 VISION

### HOW DO I USE CHAPTER 3?

READ THIS CHAPTER TO UNDERSTAND THE WEST BENCH VISION, CORE CONCEPTS, AND GOALS, WHICH ARE BASED ENTIRELY UPON THE COMMUNITY'S VALUES. GOAL STATEMENTS IN CHAPTER 3 PROVIDE THE FRAMEWORK FOR SUBSEQUENT OBJECTIVES AND POLICIES IN CHAPTER 4.

Just as an architect produces a blueprint that represents the form of a future building, so this General Plan defines a preferred future for the West Bench. Vision requires imagination, creativity, stewardship, and hope. The Vision, Core Concepts, and a set of broad timeless goals articulated in this chapter will guide the area for the next 50 to 75 years. The Vision Statement confidently proclaims that the West Bench will consist of communities that are built on shared values—that is, sound planning principles that lead to lifelong learning, social and economic sustainability, environmental protection, and a high quality of life.

The Vision Statement presents an image of the desired future based on a set of shared values. The Vision Statement is intended to be a broad, far-reaching statement that defines an ideal future.

### WEST BENCH VISION

The West Bench will provide enduring communities, employment centers, and significant open spaces, integrated with a multi-modal transportation system, and driven by a commitment to respect the landscape, conserve natural systems, and develop human resources. These future communities will consist of a variety of unique and well-defined communities, centers, and neighborhoods, each creating safe and beautiful places for our children and future generations to live and work. We value:

- Education for ourselves and our children;
- Economic growth and a range of employment opportunities;
- Diverse housing opportunities for all family types and incomes;
- Social diversity and equity;
- Distinctive, well-designed neighborhoods and civic spaces;
- Compact urban development that supports transit and walking;
- Transportation choices, including transit, bicycles, and walking as well as an effective road network;
- Conservation of natural and cultural resources;
- Open space, parks, and trails to protect and provide appropriate access to natural areas; and
- Places that promote a sense of community and connectedness for our families and children, ourselves, and future generations.



### 3.3 CORE CONCEPTS

In preparing the West Bench General Plan, the Salt Lake Valley community has tackled challenging choices about how our region should change – where to grow and how to grow – so that growth can enhance, not detract from, the region’s quality of life. These choices have resulted in a basic form and physical structure – a pattern of places – that give meaning and shape to the Vision Statement. While every element of the Plan is important to the richness and complexity of the Vision, there are six Core Concepts related to the physical form that are absolutely critical to the Plan’s success.

#### NATURAL RESOURCE CONSERVATION

The Planning Area will provide a balance between land development and land conservation, with a portion of this area being set aside for parks, open space, and civic uses. The natural areas will be managed to maintain and enhance biodiversity and ecosystem functions, while offering public access to appropriate areas that have seen little human activity for over 100 years. Within the development areas, greenways will preserve precious riparian habitats and wildlife corridors, link systems of parks to open space, and serve as community separators to the newly developing communities of the West Bench. Historic resources will also be conserved to ensure that the history of the region is experienced by future generations. The importance of mining and mineral and metal processing is also recognized. Stormwater and utility infrastructure and new urban development will be designed to consider innovative means of natural resource conservation in conjunction with efficient and cost-effective buildings and utility systems.



#### HIERARCHY OF CENTERS

For the West Bench General Plan, the Future Land Use Map emphasizes a rich mix of land uses in a hierarchy of mixed-use centers. From Urban Centers that serve a regional area to Town, Village, and Neighborhood Centers that serve towns and smaller communities, each offers a variety of housing options, retail and commercial uses, and employment opportunities in a setting that provides a host of transit, bicycle, and walking in balance to automobile travel. Figure 3-1 illustrates one concept for a Town Center.





### ECONOMIC GROWTH

For growth to occur that is economically sustainable, the West Bench is planned to provide a balanced mix of jobs and housing. Much of the proposed office, retail, and business employment will be focused in and around mixed-use centers. A variety of specialized industrial, urban office, research & development, and educational campuses are designated to provide settings for employment essential for the region.



### QUALITY NEIGHBORHOODS

Many of Utah's shared values center on home, family, education, community, outdoor recreation and safety. Each of these is reflected in the structure and variety of neighborhoods found within the West Bench. Neighborhoods ranging from traditional hillside single family to urban mixed use districts that are centered on around cultural, entertainment and restaurant districts, local community centers, elementary schools, open space or neighborhood parks. This variety of neighborhoods provides residents the opportunity to live, work, grow and explore their world in a safe, secure and enriching environment. Neighborhoods will be designed with consideration for healthy living, convenience in travel, safety and beauty, and reflect the community values of the Salt Lake Valley.



FIGURE 3-1. ARTIST'S CONCEPT OF A TOWN CENTER.

## MULTI-MODAL TRANSPORTATION CORRIDORS

Salt Lake Valley residents are beginning to use and appreciate new transit systems that can ease increasing traffic congestion, minimize air pollutants, and save time and money for commuters. The West Bench General Plan is built around a central multi-modal transit corridor with high capacity bus transit, light rail, or other rapid, high-quality public transportation to serve long distance travel needs. The transit corridor will also feature parallel lanes for automobile traffic, and a supporting network of sidewalks, bicycle paths, and trails to encourage a variety of travel. Surrounding land uses are designed at a density to make transit convenient and accessible to all. In addition to this central corridor, is the importance of building east – west corridors that connect to roadways in adjacent cities and provide cross valley travel.



## PARKS AND OPEN SPACE NETWORK

The West Bench General Plan promotes a hierarchy of parks serving regional, community, and neighborhood needs linked by a network of trails, paths, and road access. Land within each mixed-use center and neighborhood will be set aside for active parks, community uses, and open space. Regional parks will serve the Salt Lake Valley, and trails will link regional parks. Development adjacent to open space should be designed as to not preclude potential recreational access in the future.



These Core Concepts are not intended to be thought of as single-use “zones” in the sense of traditional land use zoning patterns, but rather as distinct and diverse places that contain mixtures of uses, activities, and movement. Each is built on tested New Urbanist principles that integrate a mixture of land use, housing types, and transportation options into sustainable, enduring places. Together, the Core Concepts serve as the essential combination to create the desired future embodied in the shared values, Vision Statement, and goals. The Core Concepts Map (Figure 3-2) illustrates a future vision made up from these six basic kinds of places.

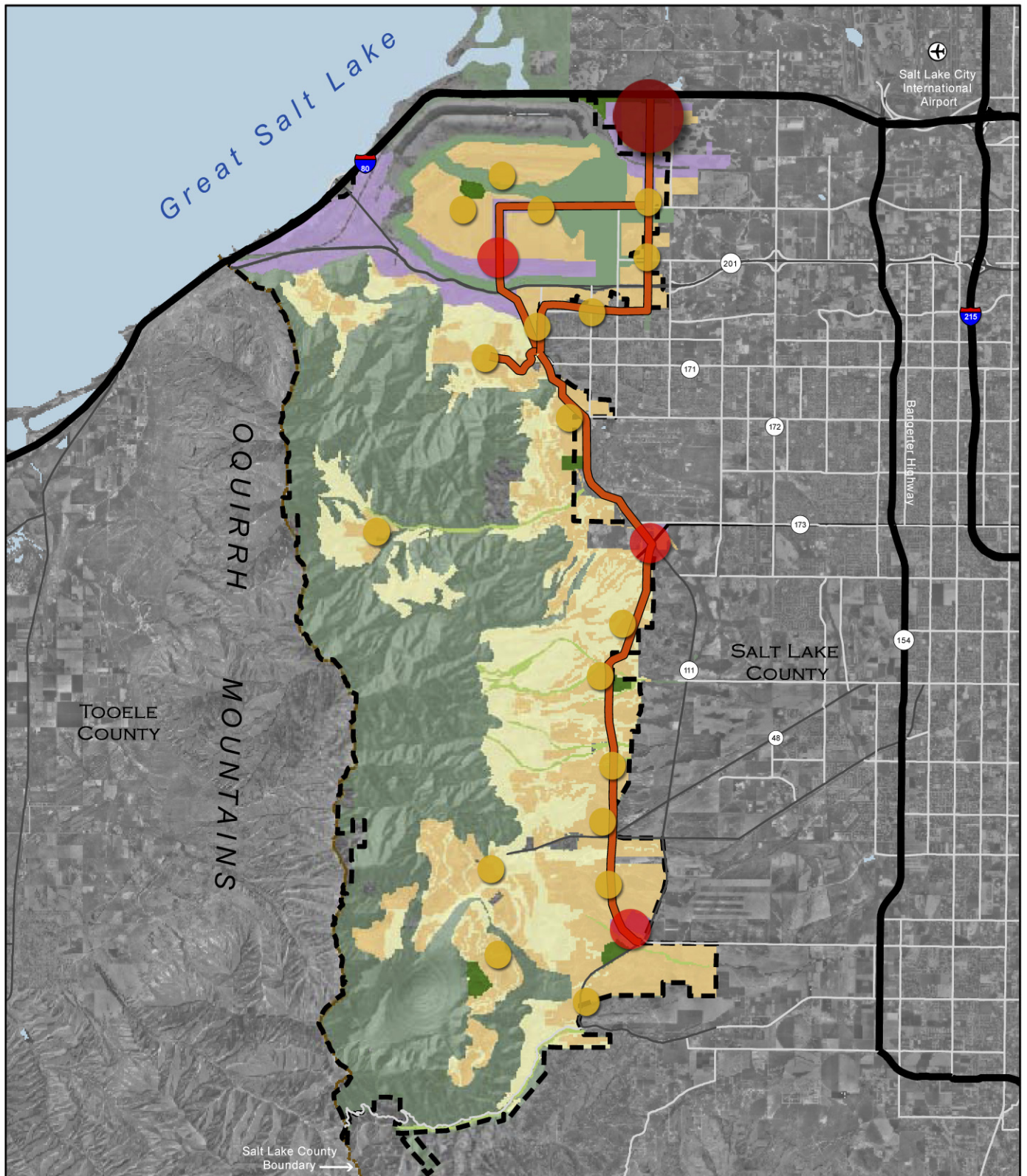


FIGURE 3-2. CORE CONCEPTS MAP

*This map portrays the general concept for the distribution and location of West Bench land uses and major transportation facilities; however, specific locations and sizes of centers are likely to vary as specific development is proposed.*

**Mixed-Use Centers**

- Urban Center
- Town Center
- Village Center

- Open Space
- Regional Parks
- Greenways

- Transit Corridor

- West Bench Planning Area

**Land Use**

- Areas of Development
- Employment Districts

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## 3.4 GOALS BY PLAN ELEMENT

The Vision and Core Concepts of the General Plan are brought into a clearer, more detailed focus through the goals. The goals are the beginning points for many efforts, and start the process of developing future Community Structure Plans. Goals provide a tangible direction, focused on a single purpose – that of building enduring communities on the West Bench.

A goal identifies components of the Vision and defines what is intended to be accomplished. A planning goal is broad and is not specifically measurable. The goals are organized into the Plan's eleven elements:

1. Regional Framework (RF)
2. Community Values (CV)
3. Land Use and Multi-Modal Transportation (LT)
4. Utilities and Services (US)
5. Environmentally Sustainable Design (ESD)
6. Natural Resources (NR)
7. Parks, Recreation, and Trails (PR)
8. Economic Sustainability (ES)
9. Housing Affordability and Variety of Blended Housing Types (HA)
10. Educational Resources (ER)
11. Heritage Resources (HR)

The goals provide the framework for subsequent objectives and policies. Although an individual goal focuses on a single purpose, it is recognized that goals are interrelated – each influences the others, affecting their success. Goals for each element are presented and described below.



## REGIONAL FRAMEWORK (RF)

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*GOAL RF-1. Establish a pattern for development and open space within the West Bench that responds to regional needs for growth and conserves natural resources, consistent with the Vision and Core Concepts of the General Plan.*

---

The six Core Concepts of the Plan address Natural Resource Conservation, Hierarchy of Centers, Economic Growth, Quality Neighborhoods, Transit Corridors, and Parks and Open Space Network. These define how development should occur (mixed-use centers, employment areas, and neighborhoods), how residents are served (transit, parks, and open space), and how natural resources are protected (natural resource conservation). Each Core Concept is critical to the long-term success of the Plan and the economic and environmental sustainability of the Wasatch Front.



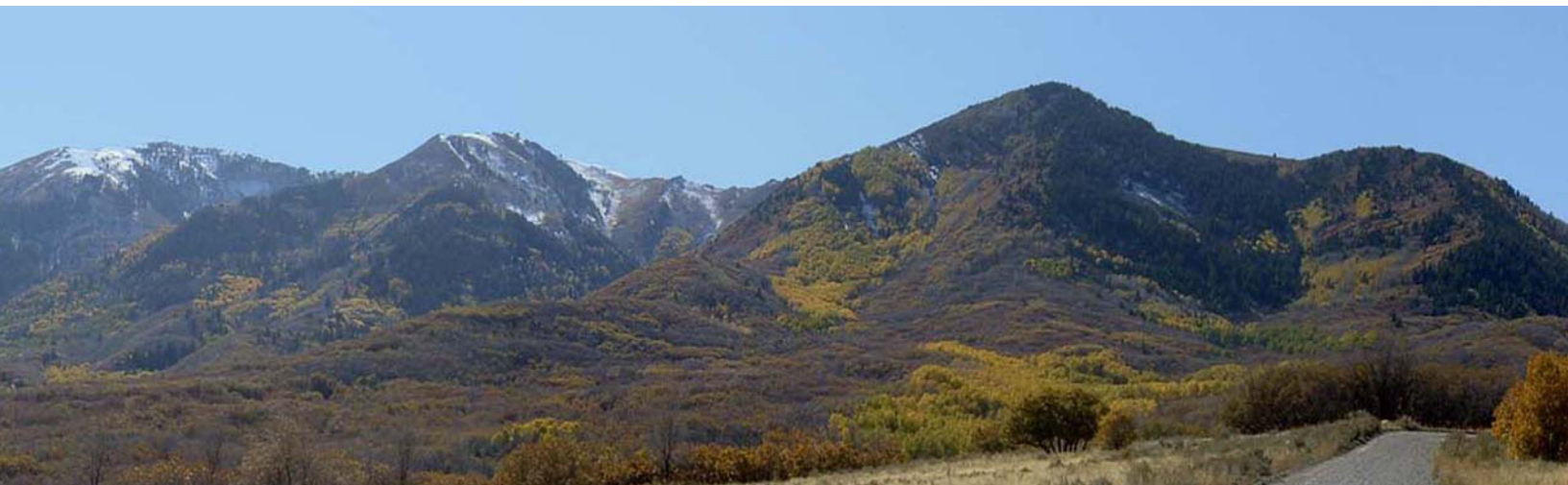
The West Bench General Plan is not only about new development, it is also about the conservation of important natural resources, providing future transportation and recreation choices for the public, and maintaining the extraordinary scenic quality of the Salt Lake Valley. The Plan is also about recognizing the importance of mining and its related uses, such as mineral and metal processing, today and continuing its valuable contributions as a regional employer and economic asset in the future. It is through balancing all of these concepts that the true value of the West Bench to the Wasatch Front is realized.

---

*GOAL RF-2. Collaborate with adjacent townships and cities; various County departments; and appropriate service providers to provide coordinated and sustainable development of the region.*

---

Integrating new development seamlessly into the larger regional framework, and providing the necessary facilities to support that development, represent key concerns for the WBGP. Strong communities with sustainable, long-term success are best created by producing unique places that interact well with surrounding communities while also maintaining a sense of individual identity. The Regional Framework goals, objectives, and policies aim to create such communities by supporting community identity, ongoing dialogue with neighboring jurisdictions, and coordinated networks of open spaces, delivery of services, transportation, and utilities. Adjacent jurisdictions will be able to coordinate their own development with that contained in the WBGP, and plans and proposals resulting from the WBGP will consider the plans and policies of adjacent jurisdictions.





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*GOAL RF-3. Establish a framework of distinct communities within the West Bench that relates to the existing urban development, promotes a differentiation of places, and fosters the distribution of a variety of live-work-play opportunities.*

---



Development on the West Bench is envisioned as walkable communities that are built with a focus on a place or destination. These communities may be centered on a school, community center, park, shopping, cultural or entertainment districts that provide opportunities for social interaction, and reinforce community values. Development that occurs at the regional scale and attracts employees and visitors from across the region must also be sensitively designed at a community level to ensure that resulting towns and villages are distinctive and embody a sense of place. This can be achieved through design techniques, recognizing and incorporating existing natural features, and the grouping of complimentary land uses. Another way to accomplish this is to divide the larger Planning Area into distinct communities, separated by natural features and identified by a distinct character. The WBGp takes the first step in this effort by preliminarily identifying distinct development communities on the West Bench, emphasizing the natural features that separate these communities. Future development plans will further define and differentiate each area as Community Structure Plans and Master Subdivision Plats are prepared. Consistent management of existing development will ensure successful places and opportunities. Depending on the delivery of services or the interests of local residents, these communities may remain as County unincorporated areas as towns, villages, or townships - or may annex to adjacent cities, or incorporate into their own cities.





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*GOAL RF-4. Coordinate the timing, pace, and location of development and services such that complete and viable communities are developed in harmony with their surroundings.*

---

Development on the West Bench is intended to offer an alternative to the auto-centric pattern of suburban development that has dominated new development since the 1950s. West Bench communities are intended to be walkable, transit-oriented, full-service communities – not just suburban residential enclaves dependent on commuting to services and jobs. To accomplish this Vision, it is important that mixed-use centers, Employment Districts, and public facilities be developed in proximity to residential uses, and that alternative forms of transportation are available. Growth must occur with a careful balancing of both jobs and housing in pace with the economy and market demand and fully served by infrastructure. The ability to provide this large-scale, integrated system of infrastructure with new communities is a significant advantage for development at the scale of the West Bench properties. Careful coordination with the County, municipal jurisdictions, and various service providers will further ensure that the infrastructure is coordinated with existing and planned regional systems, benefiting the entire Salt Lake Valley. For mixed-use development in the West Bench to be successful, it is important to protect the market for retail and office uses in the West Bench by, for example, carefully examining proposed changes in land use in proximity to the West Bench.





## COMMUNITY VALUES (CV)

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*GOAL CV-1. Design communities to encourage social interaction and support family and community relationships.*

---

Utah residents highly regard the values of trust, reciprocity, communication, family connections, and participation in their community. Lifelong learning will be encouraged through a hierarchy of schools, colleges, and educational institutions distributed throughout the West Bench. Communities will be designed to foster personal interaction through community centers, civic centers, parks, and public spaces. Utah residents express strong values for families, places of worship, seniors, future generations, and especially spending time with families and friends. Communities will be designed to provide homes for large and extended families and a mix of housing types serving a variety of income levels and life-cycle requirements—such as young family starter homes to retirement housing.



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*GOAL CV-2. Design communities to create life-sustaining environments, providing residents with recreational and healthy living opportunities.*

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Having a reliable sense of direction over one's life is paramount for good health and happiness. By creating empowered communities, citizens have control over their environment and a sense of ownership for their community. Neighborhoods will be designed first for the pedestrian to optimize walkability, with human-scaled amenities, public gathering spaces, and traffic-calmed streets (e.g., calming devices, narrow streets, alley-fed) to minimize conflicts and enhance neighborhood appearance. Communities will be designed to promote healthy lifestyles by providing recreational opportunities and the ability to view and experience the natural environment. Figure 3-3 presents one concept of how a Neighborhood Center might be developed.



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*GOAL CV-3. Provide a safe environment for citizens of all ages.*

---

Safety risks, such as traffic incidents, safety of children in neighborhoods, and vandalism, and preparing for natural disasters will be proactively addressed during the physical design stage (Master Subdivision Plat and Project Plan/Preliminary Subdivision Plat). Communities will be designed to allow for “eyes on the street” to foster safety for residents. Designing for safety within communities not only involves the physical aspect of neighborhood planning, but also relies on the continued involvement of safety-oriented neighborhood groups. Resident concerns will be addressed, and mechanisms for fostering the long-term and active involvement of residents to improve neighborhood safety will be provided.



FIGURE 3-3. ARTIST'S CONCEPT OF A NEIGHBORHOOD CENTER.



## LAND USE AND MULTI-MODAL TRANSPORTATION (LT)

---

### *GOAL LT-1. Create a hierarchy of mixed-use centers.*

---

A hierarchy of mixed-use centers will serve as the economic and civic focal points of the West Bench. As defined in Chapter 4, centers will be human-scale, defined by quality design features and a rich mixture of uses that incorporate living and working opportunities with entertainment, cultural activities, and shops serving the daily life of residents and employees. Figure 3-4 shows one concept of a Village Center development. Higher intensity centers will feature regional and region-serving retail and office activity, as well as medium and higher density housing. Lower intensity centers will accommodate local-service retail, civic, and educational uses. Collectively, centers will bring a wide range of economic, retail, residential, and leisure opportunities within proximity of West Bench residents.



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### *GOAL LT-2. Create a fabric of complete residential communities.*

---

A variety of housing types will be distributed across the West Bench to accommodate current and future housing needs. The location and density of residential communities will be guided in large part by the character of the land, responding to topography, hazards, and valuable natural features. The range of housing products integrated throughout the communities of the West Bench will offer flexibility in meeting the evolving needs of residents and families in the Salt Lake Valley. Communities will include a wide array of activities, enabling residents to meet many of their daily needs within a short distance of their home. Civic institutions and amenities will form the heart of neighborhoods, joining local-serving conveniences to form a community nucleus. Opportunities for both recreational and educational activities will be encouraged in all communities.



---

*GOAL LT-3. Create economic opportunities by linking the location of jobs with transportation and housing options.*

---

Employment Districts will be located in proximity to a range of housing and transportation options. Educational facilities will be woven into the urban fabric of the West Bench, acting as hubs of civic activity within centers and communities. The most intensive concentrations of employment will be either integrated into centers or closely linked to surrounding communities by multi-modal transportation corridors. Less intensively clustered forms of employment will be located in economically viable locations well served by the local, regional, and international (airport) transportation network.



FIGURE 3-4. ARTIST'S CONCEPT OF A VILLAGE CENTER.



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*GOAL LT-4. Create a balanced, complete transportation network of multi-modal corridors and local circulation.*

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The West Bench will be designed for a multi-modal transportation system from the outset, ensuring that future residents and employees enjoy a true choice of travel options, including public transit, taxis, carshare, walking, and bicycling, as well as the automobile. The transportation network will reinforce the land use, ecological, and social principles shaping the development of the West Bench. Multi-modal transit corridors incorporating frequent, high-capacity public transit and safe bicycle and pedestrian routes will serve as a strong framework for transport and land use, linking major mixed-use centers along the West Bench to each other and the surrounding region. An artist's view of a transit corridor is provided in Figure 3-5. The design of streets, sidewalks, bicycle paths, and public transit amenities will maximize mobility and safety for all travelers.



FIGURE 3-5. ARTIST'S CONCEPT OF A TRANSIT CORRIDOR.

The street classification system, defined in Chapter 4, will provide safe, convenient access by a variety of modes to multi-modal corridors and mixed-use centers. A dedicated network of bicycle and pedestrian trails and connections will enable circulation along recreation routes and safe non-auto travel between centers and residential communities throughout the West Bench. Streets will respond to topography, limiting the ecological impact on the land with effective transportation options.

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*GOAL LT-5. Purposefully integrate urban form and the transportation network.*

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For most existing urban areas, it is estimated that 55 to 65 percent of trips are less than 3 miles, and up to 80 percent are less than 5 miles. Many of these trips can be combined or completed utilizing different transportation modes. The West Bench will be characterized by multi-use centers that provide local and community-wide destinations, capturing most shopping, recreation, and service trips within a quarter to a half mile of the center. To maximize transit ridership and minimize automobile usage, the system will be planned in a fashion that considers the following:

- Variety of land uses;
- Design that enhances access to transit facilities;
- Density that results in maximum ridership; and
- Destinations that attract transit riders.

Multi-modal transportation corridors incorporating frequent, high-capacity public transit and safe bicycle and pedestrian routes will serve as a strong framework for both transport and land use, linking major mixed-use centers along the West Bench to each other and the surrounding region. The design and scale of streets, sidewalks, bicycle paths, and public transit amenities will maximize mobility and safety for all travelers. Major intersections and public transit transfer points will be located at mixed-use centers, creating convenient access by a variety of modes to a vibrant mix of residential and employment opportunities, entertainment venues, and civic services.





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*GOAL LT-6. Utilize a comprehensive transportation demand management approach.*

---

Transportation demand will be assessed and managed utilizing a comprehensive approach that considers land use mix, employment and residential density, system capacity, trip dynamics, and the travel market. The Wasatch Front Regional Council is responsible for assessing and managing transportation needs in the region. This approach will enable transit services and parking requirements to be customized to the unique mix of land uses, households, and densities within centers and communities. Flexible policies such as shared parking and transit incentive programs will be utilized to reduce unnecessary trips and development costs while making the most efficient use of land and streets. By carefully customizing the approach to managing transportation demand, unnecessary travel can be minimized, enhancing air quality and reducing the impact on roadways throughout the Salt Lake Valley.





## UTILITIES AND SERVICES (US)

*GOAL US-1. Create reliable, cost-effective, environmentally sustainable systems of utilities, public facilities, and services for West Bench communities.*

The permanence and stability of urban areas are greatly affected by the quality and extent of utilities, public services, improvements, and conveniences. The location, maintenance, and sizing of public facilities have a significant impact on land use patterns and future growth in an area. Inadequate provision of services and facilities discourages development and may have a long-range impact on the economic stability of the West Bench. Early planning and acquisition of sites needed for public facilities can direct development, as well as help determine the future character of the communities. Providing the level of services appropriate to the planned density of settlement and projected needs will be a priority in the development of new communities.

West Bench infrastructure will be designed to minimize the impact on natural resources while providing reliable services to residents and businesses. West Bench communities will develop efficient systems to effectively convey water and, to the extent feasible, reclaim wastewater, while protecting environmental integrity and scarce resources. Innovative watershed management techniques will be employed where possible, thereby supporting vegetation and replenishing groundwater.





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*GOAL US-2. Develop a decision-making framework that anticipates future needs and costs, but can efficiently adapt to changing environments and technologies.*

---

As a regional influence, service planning for the West Bench will be coordinated in municipal, County, regional, State, and Federal decision-making settings. As future communities develop, the utility plan will have the capability to accommodate changes such as fluctuations in demand, technological improvements, variations in political and regulatory climates, and shifting environmental sensitivities in order to evolve with changing needs while maintaining the priorities of efficiency, sustainability, and quality.

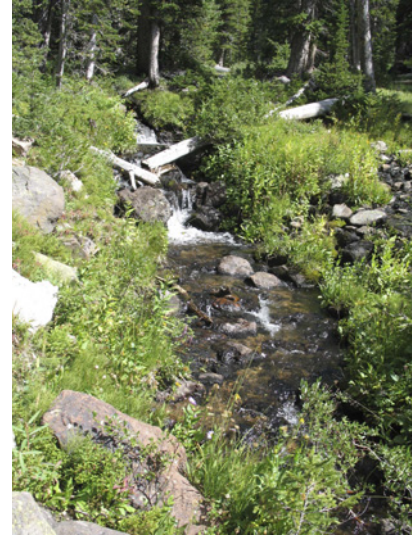
## ENVIRONMENTALLY SUSTAINABLE DESIGN (ESD)

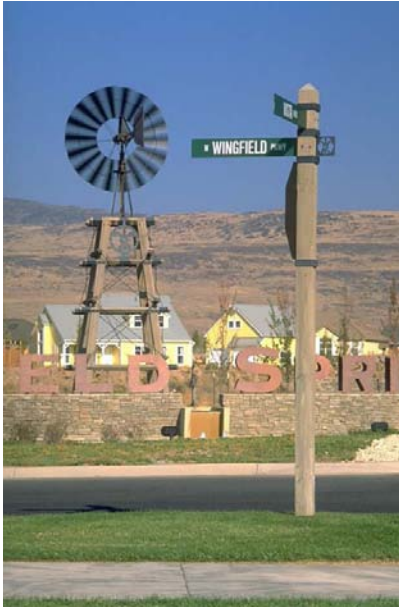
*GOAL ESD-1. Protect our region's air, water, and energy resources, providing a healthy environment for our citizens.*

Air quality can be improved by establishing policies and implementing strategies that reduce automobile use, energy needs, carbon dioxide emissions, air pollution associated with construction, and stationary pollutant emissions from commercial and industrial developments. The West Bench General Plan will include transit opportunities to minimize air pollutant emissions related to motor vehicle use, methods to reduce emissions during construction, and operation of commercial and industrial developments.

Energy, water conservation, and waste reduction programs facilitate the ability to protect and improve many other environmental resources. The programs also safeguard communities from the effects of pollution and hazardous materials, and reduce the need for additional infrastructure to store and deliver water; produce and transmit power; and transfer, process, and deposit waste materials. Consumer choices and renewable energy technologies, including local production and neighborhood scale systems, will be implemented to reduce dependence on non-renewable energy sources.

By effective handling of development-related water management issues, future water quality on-site and downstream throughout the Jordan River watershed can be protected. Effective handling includes but is not limited to a variety of measures designed to minimize changes in existing drainage patterns; control surface water volume, suspended solids, nitrate, phosphorous, and pH levels; and protect groundwater quality and quantity.





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*GOAL ESD-2. Demonstrate environmental responsibility in the design, construction, and operation of communities in the West Bench.*

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Development of the West Bench is intended to create sustainable communities that minimize the environmental footprint of buildings through the use of building materials, waste elimination, landscaping, and construction methods that conserve natural resources, are energy efficient, and are free of hazardous conditions such as indoor air pollutants. "Green building" design is a tool that may be used to encourage a whole systems approach to the design, construction, and operation of a building that helps mitigate the environmental, economic, and social impacts of buildings.

The overall location and site design of projects are intended to minimize impacts and disturbance to limited land resources. Landscaping using xeriscape principles, native materials, and low-water, drought-tolerant plants will celebrate the unique environment of the Wasatch Front where appropriate.

## NATURAL RESOURCES (NR)

*GOAL NR-1. Conserve and manage designated open space for the continued health of the environment and enjoyment of the region's residents.*

The future of the West Bench area is not only about new development, it is also about protection of the natural habitat of the Oquirrh Mountain Range. Management of the Oquirrhrs should establish mechanisms to sustain thousands of acres of mountainous land, ensure proper stewardship of natural resources, provide appropriate public access, and maintain the extraordinary scenic quality that these mountains provide. Long-term conservation of these rich resources will require coordination with Federal, State, and local agencies to establish roles, responsibilities, and funding mechanisms so that the Oquirrh Mountain Range is managed as a permanent feature of the Salt Lake Valley.

A comprehensive approach to open space protection will be employed, planning a system of passive parks, trails, and natural areas. This open space system will be structured to provide appropriate recreational access while preserving ecologically important and culturally significant resources. Connected open space will protect critical habitats and provide networks, webs, and corridors vital for environmental health and wildlife movement and grazing habitats. Communities will be designed so that residents will have easy, walkable access to an open space network while respecting the natural resources.





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*GOAL NR-2. Protect important scenic features and the natural character of West Bench communities.*

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It is through balancing sensitively sited and well-designed development with open space and resource protection that the true value of the West Bench to the region is realized. The visual integrity of ridgelines, prominent slopes, and scenic features will be conserved in order to retain the unique visual character of the region.



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*GOAL NR-3. Conserve and manage native plant and animal communities to maintain biodiversity and ecosystem functions.*

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After nearly a century with minimal public access, the West Bench contains a rich variety of wildlife. It is the goal of the Plan to conserve and buffer blocks of sensitive habitat and wildlife corridors. The habitat values of open spaces within development communities will be preserved and improved through science-based management. Most high-density development will be concentrated in the eastern portions of the West Bench, contiguous to other developed areas. Habitat areas within the Oquirrh Mountain Range, that are outside of the planned urban development areas, should be protected through a comprehensive program of restoration, ongoing management, mining practices and monitoring.



Native vegetation in undeveloped areas will be managed to minimize impacts from invasive species. Areas dominated by weeds are often subject to erosion because these species do not hold soil as well as native plants. Similarly, some plant species are extremely flammable and can increase fire risk. The loss of native vegetation along streams and in wetlands can impede the ecological functions of these areas in filtering and absorbing water and providing wildlife habitat. Careful management of native species in undeveloped areas will conserve water quality, surface runoff, and wildlife habitat and reduce hazards from wildfire, flooding, and erosion.



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*GOAL NR-4. Minimize hazards related to geology, soils, industrial activities, and hazardous materials.*

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Geological hazards are often associated with steep slopes and soil conditions. When steep slopes are excavated or disturbed, the slopes may become susceptible to debris flows and landslides. Potential hazards within the West Bench area also include waste rock sites, avalanches, overpressure zones associated with the ATK Thiokol operations, and hazardous materials. Hazards will be minimized by carefully managing the development in steep slope areas, and reclaiming hazardous materials sites per applicable regulations.





## PARKS, RECREATION, AND TRAILS (PR)

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*GOAL PR-1. Provide and maintain a diverse, high-quality, safe, and affordable system of parks and recreational facilities that provide for the recreational needs of all age groups.*

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Parks shall be distributed throughout the West Bench communities to provide access to a variety of active and passive recreational opportunities. Furthermore, a well-planned system of local and regional parks and recreational facilities shall be developed that accommodates a range of active and passive recreational activities. Active recreation shall be accommodated in a functional system of developed sites, including organized, scheduled activities such as soccer and softball. Passive recreation is also important, and facilities for informal play, picnicking, walking, and jogging shall be provided. Community centers shall be incorporated into selected parks, offering residents a host of recreational activities, community-oriented programs, and events.





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*GOAL PR-2. Provide a system of interconnected trails within the West Bench area that tie into existing and planned regional trails, including the Bonneville Shoreline Trail.*

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The Salt Lake Valley and surrounding mountains offer unique opportunities for trail-oriented use and recreation. From the urban environment at the Salt Lake Valley floor to the semi-primitive experience in the canyons and on the mountain crests, the West Bench setting offers a variety of experiences. A coordinated and interconnected system of trails shall be developed, consistent with County and regional trail plans, that will afford opportunities for a variety of non-motorized users, including pedestrians, bicyclists, and equestrians. It shall also provide for an assortment of trail experiences, including those in urban, suburban, rural, and primitive settings. The trail network shall link the West Bench communities together and provide connections to parks, recreational facilities, and the open space system. Additionally, the trail system shall be designed to link people and neighborhoods to places of employment and commercial centers, thus encouraging non-vehicular modes of transportation as described in the Land Use and Multi-Modal Transportation section.



## ECONOMIC SUSTAINABILITY (ES)

*GOAL ES-1. Utilize the large tracts of land and unique resources of the West Bench as an economic catalyst for attracting new employment opportunities for the region.*

The West Bench will provide opportunities for new primary (basic) employment to the region, enable existing businesses and industry to expand, and foster economic opportunities that encourage private investment in the West Bench, as well as the Wasatch Front. Within this context, the West Bench will provide an opportunity for the region to increase the rate of job growth from historical levels and achieve a healthy balance between basic and non-basic employment. The economy will become more diverse and enable residents to select from a range of employment opportunities. The region will be able to provide attractive career opportunities to Utah's high school and college graduates, enabling them to deepen their roots in the region.



FIGURE 3-6. ARTIST'S CONCEPT OF AN URBAN CENTER.

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*GOAL ES-2. Promote economic growth on the West Bench to provide a variety of jobs and a balance of jobs and housing.*

---

Employment centers will be located in proximity to housing and transportation (see Figure 3-6). Employment growth will be balanced with housing growth to achieve a sustainable ratio of jobs and housing, allowing residents to work close to home and reducing demands and travel distance on the regional transportation system. Kennecott Utah Copper Corporation operations will continue to provide a secure employment base for the region, and new employers will be attracted to the West Bench. Housing will likely develop first, followed by retail and employment opportunities to fulfill the goal of jobs/housing mix. Appropriate sites and markets for retail and employment uses will be preserved while residential uses are developed.




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*GOAL ES-3. Develop the West Bench in an economic and fiscally sound and sustainable manner.*

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Services will be provided using efficient delivery methods, as described in Chapters 4 and 5. Development of the West Bench will be coordinated with adjacent communities to create an effective relationship and maximize resources.

Advanced digital infrastructure will facilitate innovative workplaces and educational campuses that serve the needs of all students and prospective employers. Where appropriate, education and employment centers will make common use of facilities and technology to capitalize on the full potential of these resources.





## HOUSING AFFORDABILITY AND VARIETY OF BLENDED HOUSING TYPES (HA)

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*GOAL HA-1. Supply a range of housing types covering a spectrum of interests, affordability, and lifestyles.*

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The West Bench will expand the range of choices available and encourage a variety of housing types, densities, and styles that will be dispersed throughout the development. Housing types will include single-family, townhomes, patio homes, condominiums, accessory dwelling units, and apartments. Higher densities will provide the critical mass necessary for the provision of commercial services in proximity to most homes.



Neighborhoods will generally include a variety of housing types to support a diverse population and allow people of different ages and cultures to live in the same neighborhood. The variety in unit type will allow for a range of housing affordability according to the County-wide Housing Plan and provide a balance of housing for a broad spectrum of ages and income levels. Housing types that are affordable, visitable, and accessible will be geographically dispersed throughout the community to avoid creating over-concentration in any neighborhood.

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*GOAL HA-2. Support jobs requiring a variety of skill sets and wage levels by providing housing variety.*

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Employers will be able to fill a diverse set of jobs, ranging from clerical to executive, and will include positions for manufacturing, industrial, retail, services, and others. The West Bench will provide a deep pool of potential employees. Given the variety in the cost of housing, the range in employee profiles and wage requirements will vary accordingly.

## EDUCATIONAL RESOURCES (ER)

*GOAL ER-1. Encourage the integrated establishment of educational resources within new communities.*

Educational resources play an important role in a community: they encourage the development of healthy and creative children, knowledgeable and involved adult residents, and community cohesiveness. Integrated educational amenities will foster academic excellence, provide reliable and accessible educational services to residents, and create a sense of community. Educational facilities in the West Bench should lead the nation in quality, opportunities, and accessibility, creating a strong level of demand and attractiveness for future West Bench residents. The WBGV envisions a college campus may be developed (see Figure 3-7). Lifelong learning opportunities will be accessible to residents. Strategies addressing educational resources within the community, including how schools respond to growth, will be designed to achieve excellence in every respect. Schools will be located to function as the physical and symbolic centers of neighborhoods and towns, as integral components of neighborhood social systems.



FIGURE 3-7. ARTIST'S CONCEPT OF A CAMPUS CENTER.



## HERITAGE RESOURCES (HR)

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*GOAL HR-1. Conserve historic and cultural resources that symbolize the community's identity and uniqueness.*

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Historic and archaeological resources are important assets to the community of the West Bench. The surrounding historic landscape is valuable because it gives people a sense of permanence and continuity – a sense of place. Many sites in and around the West Bench are of historic interest due to age, design, and association with historic events or people. The cultural integrity and attractiveness of the West Bench will be maintained by identifying and preserving both historical and cultural resources. Major new development will be accomplished in concert with preservation of archaeologically and historically significant sites.



*GOAL HR-2. Support cultural resource preservation through interpretation, education, and incentives.*

---

A community's image of itself is important in sustaining both its economic health and the well-being of its citizens, and can be improved through interpretation, education, and incentives. Historic resources represent vital, irreplaceable heritage of traditions, with a unique collection of structures and sites representing various stages of Salt Lake County's growth and mirroring Utah's distinctive cultural history. Active programs to educate the public about the region's history and to interpret specific buildings or sites are an important part of preservation.



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*GOAL HR-3. Consider local Native American tribal issues in heritage planning.*

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Three tribes historically occupied the project vicinity. Today, these tribes are represented by two recognized tribes of Goshute: the Skull Valley Band of Goshute and the Confederated Tribes of Goshute; and the Northwestern Band of the Shoshoni Nation in Brigham City, Utah. For most tribes, there is a high concern about Native American burial sites and, often, concerns about rock art, ceremonial and habitation sites, and traditional cultural properties. Local Native American tribes will be consulted to identify and establish procedures for protecting significant heritage resources.







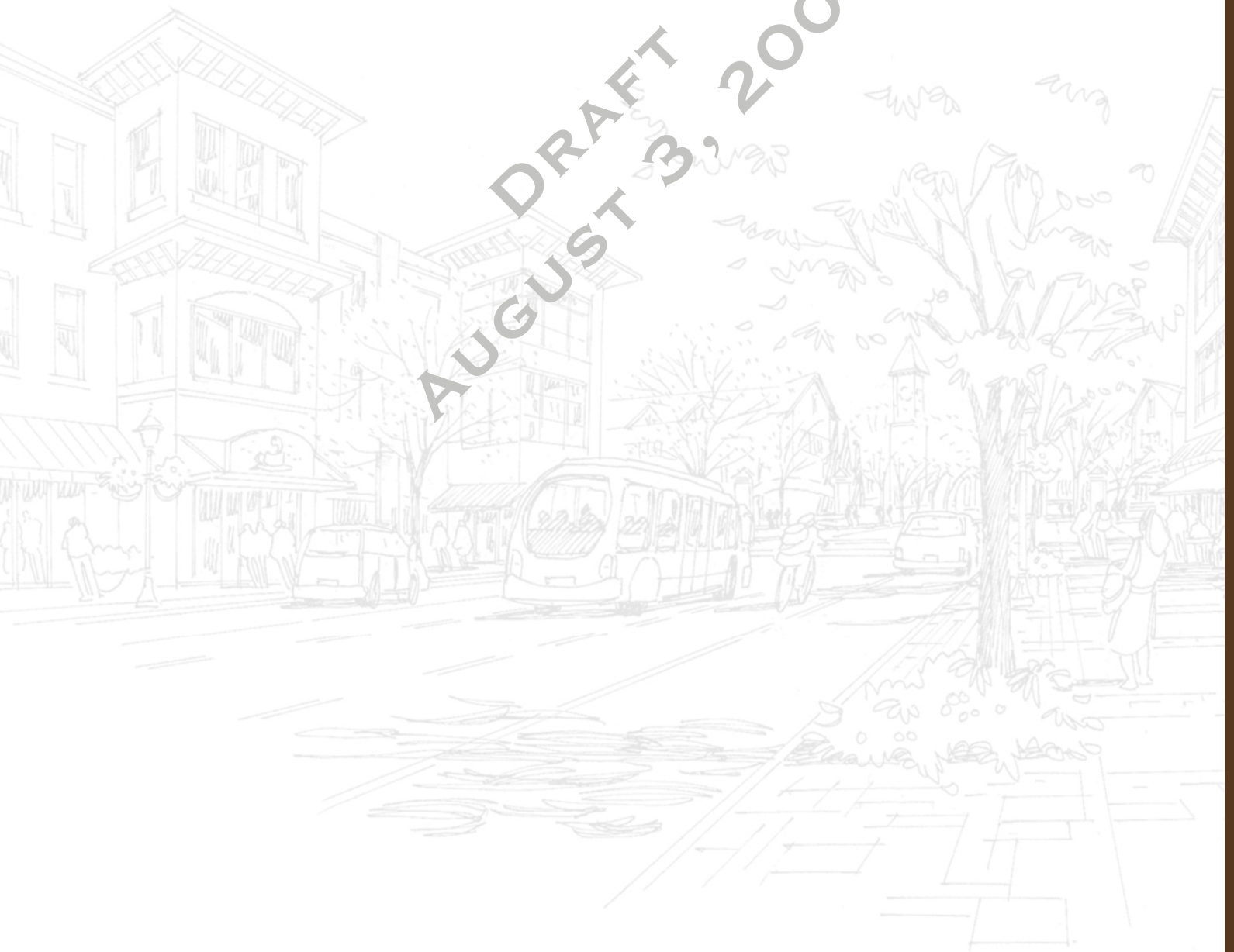
# CHAPTER 4

## GOALS, OBJECTIVES, AND POLICIES

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DRAFT  
AUGUST 3, 2007





## CHAPTER 4 - GOALS, OBJECTIVES, AND POLICIES

Concepts for development of the West Bench area must begin with an understanding of and consensus around our shared values, an ambitious vision, and broad planning goals presented in Chapter 3. Objectives and policies translate these values and overall Vision into a more substantive form. Illustrations - such as renderings, cross-sections, reference tables, maps, etc. - often accompany policies to elaborate their meaning, but should not be considered as policy statements. Together, these objectives, policies, and illustrations define the look, feel, and intent of the West Bench General Plan. They should be reviewed in tandem with applicable ordinances, which provide additional information for the Plan's elements.

This chapter serves as a guide for new urban development and resource conservation in the West Bench Planning Area. Mining and mining related uses currently exist within the West Bench and are expected to continue and possibly expand.

### 4.1 OBJECTIVES AND POLICIES

An "objective" identifies a measurable component of an associated goal and may be used to differentiate specific topic areas within the broader goal statement. Each element includes objectives and policies at a community-wide level and (where appropriate) additional objectives and policies that directly relate to specific communities or sub-areas of the Plan.

A "policy" is defined as a definite course or method of action intended to guide future decisions. Generally, the policies are the most referenced portion of the WBGp and are used to guide the day-to-day decision-making of elected officials. In this Plan, each policy is named and identified by letters that designate the element of the Plan where it is located and numbers that indicate the sequence of objectives and policies within each section. In the Land Use and Multi-Modal Transportation Element, for instance, a policy might be called "LT-2.3.1." This would be "LT," a Land Use and Multi-Modal Transportation policy under goal "2," and under objective "3" of that goal. The "1" shows it is the first policy under that objective.

### HOW DO I USE CHAPTER 4?

CHAPTER 4 ELABORATES ON THE PREVIOUS CHAPTER'S GOALS BY ESTABLISHING A POLICY FRAMEWORK FOR COUNTY LAND USE DECISIONS. OBJECTIVES AND POLICIES IN THIS CHAPTER SERVE AS A GUIDE FOR LAND USES AND ACTIVITIES IN THE WEST BENCH PLANNING AREA. ILLUSTRATIONS OFTEN ACCOMPANY POLICIES TO ELABORATE THEIR MEANING, BUT SHOULD NOT BE CONSIDERED AS POLICY STATEMENTS. CHAPTER 4 SHOULD BE REVIEWED IN TANDEM WITH PROPOSED COMMUNITY STRUCTURE PLANS AND OTHER APPLICABLE SALT LAKE COUNTY ORDINANCES AND PLANS.



An “illustration” can accompany a policy to clarify its intent. Illustrations can occur as artistic renderings, cross-sections, reference tables, maps, etc. Illustrations are included solely to aid in understanding the depth and complexity of the West Bench General Plan. These graphic embellishments are typically described with terms such as “illustrative,” “concept,” or “example” to emphasize that several approaches could be applied to achieve a specific policy. In this chapter, illustrations are called out as “Figure” or “Table” followed by the element acronym for ease in referencing (i.e., Figure LT-2.3.1 illustrates Policy 2.3.1 in the Land Use and Multi-Modal Transportation Element).

Objectives and policies are organized into the Plan’s eleven elements:

Regional Framework (RF)

Community Values (CV)

Land Use and Multi-Modal Transportation (LT)

Utilities and Services (US)

Environmentally Sustainable Design (ESD)

Natural Resources (NR)

Parks, Recreation, and Trails (PR)

Economic Sustainability (ES)

Housing Affordability and Variety of Blended Housing Types (HA)

Educational Resources (ER)

Heritage Resources (HR)

Each of these elements is described below along with the associated goals, objectives, and policies.

## REGIONAL FRAMEWORK (RF)

Development of the 75,000 acres of the West Bench that lie within the Salt Lake County limits represents change at a regional scale for the whole of Salt Lake Valley. When fully developed over 50 to 75 years or more, the West Bench is estimated to accommodate a new residential population of over 500,000 persons, or more, a number greater than the 2005 census estimates of all of the adjacent cities and townships combined (Table RF-1). Development of this magnitude and across this large an area will substantially change the character of the region. Given the significant role the West Bench development will have within the region, it is critical that planning address regional issues.

The State of Utah and Salt Lake County have experienced rapid growth over the past 25 years (73 percent and 57 percent, respectively), with many local jurisdictions witnessing even higher levels of growth. Such growth is projected to continue into the future. Currently, the locations of new development in the county are expected to extend farther south and west within the Salt Lake Valley. The West Bench area can accommodate more than half of the planned growth in new patterns of development that offer new solutions to Salt Lake Valley.

Even with many challenges, the opportunities for developing the West Bench are great. Coordination with the townships, adjacent cities, and the County departments will be important for the success of the development. Housing, transportation, economic, infrastructure, and other demands resulting from development proposed in the WBGP will need to be addressed – but offer the opportunities to create new solutions not available for the piecemeal planning of smaller developments.

Plans and proposals resulting from the WBGP should benefit from the consideration of the plans and policies of adjacent jurisdictions. The WBGP envisions a series of unique new communities, each creating and maintaining an individual identity and character to create identifiable edges between communities and surrounding jurisdictions. Establishing mechanisms to ensure the unique character of individual communities will be essential.

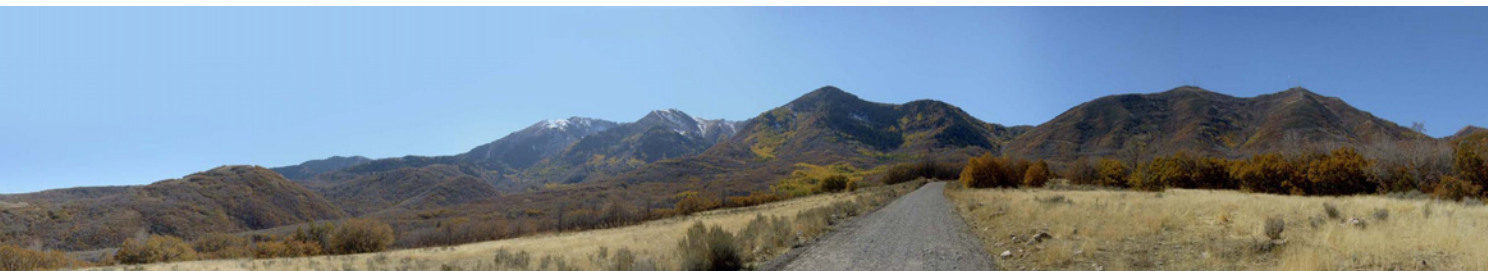


TABLE RF-1. POPULATION OF CITIES & TOWNSHIPS ADJACENT TO THE WEST BENCH PLANNING AREA (U.S. CENSUS BUREAU 2005)

JURISDICTION	POP.
Copperton	700
Herriman City	12,000
Magna	23,000
Salt Lake City	178,000
South Jordan City	40,000
City of West Jordan	91,000
West Valley City	113,000
Total	457,700

As a long-term plan (50- to 75-year timeframe), the WBGP also provides opportunities to foster coordinated planning by jurisdictions in the Salt Lake Valley. Adjacent jurisdictions will be able to coordinate their own development with the WBGP. As development of the West Bench area occurs, it may reduce development pressure and the impacts of new development at the southern end of the Salt Lake Valley by providing additional residential capacity, economic opportunity, and new transportation options for residents of the region. The WBGP recognizes the need to protect the beautiful Oquirrh Mountain environment and lands that distinguish the Salt Lake Valley. The lands not planned for urban development are intended to be protected at appropriate times and in appropriate areas as mining uses change. For the foreseeable future, mining related uses in the Oquirrh Mountain Range will likely continue and may even expand within the current active mining areas. The combination of mining, mineral and metal processing and urban development that is planned for within the West Bench, will provide jobs and economic development while accommodating regional growth in a desirable urban form.

The following goals, objectives, and policies are designed to create such communities by supporting community identity, establishing an ongoing dialogue with neighboring jurisdictions, and coordinating open spaces, transportation, and utilities networks.



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*GOAL RF-1. Establish a pattern for development and open space within the West Bench that responds to regional needs for growth and conserves natural resources, consistent with the Vision and Core Concepts of the General Plan.*

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### **Objective RF-1.1**

Use the Core Concepts Map (see Figure 3-2) and the Future Land Use Map (see Figure LT-1.1) as conceptual guides for broad planning purposes and to guide future development.

Policy RF-1.1.1: General land use. Consider the Core Concepts Map (Figure 3-2) and the Future Land Use Map (Figure LT-1.1) as conceptual guides in making land use decisions. These maps are not designed to determine detailed planning decisions.

Policy RF-1.1.2: Density flexibility. Allow residential units and non-residential land uses to be allocated to various areas throughout the West Bench, for example, to direct development away from sensitive habitats and constrained lands. Residential units and nonresidential uses should be managed through Community Structure Plans as part of the overall development total.

Policy RF-1.1.3: Open space. Seek to preserve key open space areas, protecting the natural setting of the Salt Lake Valley. Where possible, create linkages to the regional open space network that will help define future communities, both inside and outside the West Bench.



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*GOAL RF-2. Collaborate with adjacent townships and cities; various County departments; and appropriate service providers to provide coordinated and sustainable development of the region.*

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***Objective RF-2.1***

Promote inter-jurisdictional coordination in land use planning, economic development, and provision of parks and open space early and often.



Policy RF-2.1.1: Adjacent Cities. Consider land use, economic development, transportation, and open space plans for nearby incorporated cities in preparing specific Community Structure Plans for projects within the West Bench.

Policy RF-2.1.2: Communication. Consult with adjacent cities and townships in land use planning early and often to facilitate integration of existing and new communities in a cohesive manner, and address and alleviate concerns.

Policy RF-2.1.3: County departments. Coordinate with various County departments responsible for land use, economic development, and open space plans in preparing and refining site-specific plans for West Bench land.

***Objective RF-2.2***

Foster jurisdictional coordination in land use planning, economic development, and protection of parks and open space with adjacent unincorporated townships and communities.

Policy RF-2.2.1: Respect existing communities. Respect existing communities and neighborhoods by acknowledging important components of these areas in the planning and design of new communities (e.g., their history, inherent design, significant places/features, views, relationship to other communities). The County may continue to work with these communities by including these components in updated planning documents that address the character and compatibility of existing adjacent development.



Policy RF-2.2.2: Incentives for coordination. Consider incentives for coordination between new and existing communities to create integrated plans for development/redevelopment, such as tax breaks, transfer of development rights, conservation easements, land/mitigation banking, and other such measures.

Policy RF-2.2.3: Copperton. Coordinate land use, economic development, and open space plans for Copperton in site planning for adjacent West Bench developments. Incorporate Copperton's planning goals of "preservation of historic, small town character and existing quality of the natural environment, and orderly, sensitive growth," and remain sensitive to Copperton's historic connection to Kennecott and local mining activities.

Policy RF-2.2.4: Magna. Coordinate land use, economic development, and open space plans for Magna in site planning for adjacent West Bench developments. Incorporate Magna's planning goals "...to improve the quality of life of Magna residents as the population increases and the physical environment changes during the next decade...[by] maintain[ing] and improve[ing] the social, economic and physical resources of Magna...."

Look to Magna's West Main Street Development Plan as an excellent example of the incorporation of local historic and cultural influences into redevelopment and town planning as the gateway to Little Valley, and invest in local historic preservation and celebration of Magna's role in Kennecott's copper mining industry.

Policy RF-2.2.5: Southwest Community. Coordinate land use, economic development, and open space plans for the Southwest Community in site planning for adjacent West Bench developments. Coordinate with Southwest Community's planning goals "to direct the orderly, sensitive growth of the community while retaining and protecting its natural beauty, rural character and existing quality of the foothill and mountain environment."

Policy RF-2.2.6: Coordinated updates. Consider updates to West Bench planning and land use goals in coordination with Copperton's, Magna's, and Southwest Community's changes to their plans. Updates to township plans should also integrate goals, objectives, and policies as found in the WBG. In the case of a discrepancy between plans, collaborative effort should be made to resolve differences.





### ***Objective RF-2.3***

Coordinate infrastructure development with agencies and service providers.

Policy RF-2.3.1: Regional transportation. Coordinate with the Wasatch Front Regional Council, Utah Department of Transportation (UDOT), and other regional transportation agencies and local communities so that regional transportation systems are planned, prioritized, funded, designed, and constructed at appropriate locations and at an appropriate pace.

Policy RF-2.3.2: Long-range transportation planning. Work with WFRC to ensure that future West Bench transportation system and the County Transportation Corridor Preservation Plan are incorporated into regional transportation improvement plans.

Policy RF-2.3.3: Water and sewer. Coordinate with local water and sewer service providers so that necessary systems are funded, designed, and constructed at proposed locations and at a pace consistent with development of the West Bench.

Policy RF-2.3.4: Other services. Coordinate with regional service providers and special service districts – schools, fire, police, gas, electricity, telecommunications, transit, etc. – so that regional capital improvements are funded, designed, and constructed at proposed locations and at a pace consistent with development of the West Bench and neighboring jurisdictions or cities.

Policy RF-2.3.5: Joint planning. Collaborate on resources that commonly link one community with another (e.g., transportation, parks, trails, open space, utilities, etc.).

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*GOAL RF-3. Establish a framework of distinct communities within the West Bench that relates to the existing urban development, promotes a differentiation of places, and fosters the distribution of a variety of live-work-play opportunities.*

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### **Objective RF-3.1**

Define distinct communities within the West Bench, distinguished by differences in development patterns, character, and scale.

The General Plan allows for flexibility in defining individual communities and their evolution over time, but also suggests eleven distinct communities as a starting point for that evolution. The approximate size and distribution of proposed development for each community are shown in Figure RF-3.1. The character of each community is briefly described below. These communities and their descriptions are intended for use in coordinating with other regional and local plans and are not intended to be binding designations. Flexibility will be provided in designing, proposing, and developing individual communities.

- **Barneys** – This community is planned with two or more Village Centers. Barneys may provide for a population of approximately 60,000 people or more. Office and retail space may be distributed among Village Centers and numerous Neighborhood Centers. Small portions of the Barneys area are within the incorporated city limits of West Valley City and the City of West Jordan.
- **Bingham** – This community is planned for long-term development and may provide for a population of approximately 60,000 people or more. Retail and office space may be focused in two or more Village Centers and multiple Neighborhood Centers. Located near the Bingham Mine, the area will likely be suited for development in the long term.
- **Butterfield** – Butterfield may provide for a population of approximately 45,000 people. This area will likely share the Town Center in Midas Gulch and is the gateway to Butterfield Canyon.
- **Clay Hollow** – This community is planned with new neighborhoods and clustered residential development of approximately 60,000 people or more. Located near transit corridors, it provides convenient access



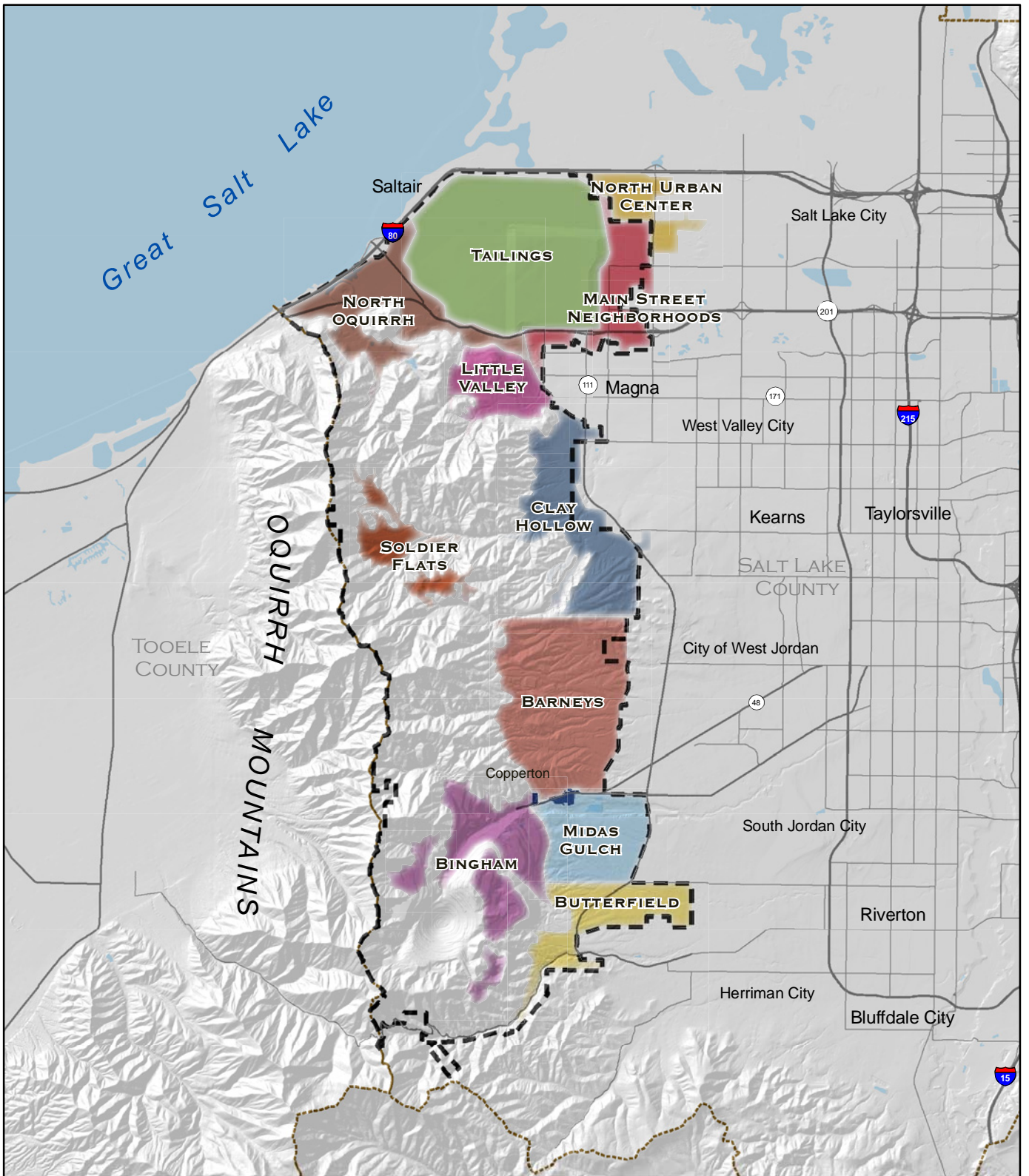





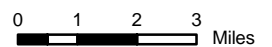


FIGURE RF-3.1. DISTINCT COMMUNITIES.

-  West Bench Planning Area
-  Open Water
-  Highways
-  County Boundaries
-  Key Local Roads



to employment centers. Clay Hollow may also include community services, amenities, and civic buildings located in Village Centers and several Neighborhood Centers.

- **Little Valley** – This community is located on the east-facing slopes of the Oquirrh Mountains south of Highway 201 adjoining Magna. The area may consist of clustered residential development and residential neighborhoods, providing for a population of approximately 20,000 people or more. Little Valley may have two or more Village Centers and multiple Neighborhood Centers comprising businesses, shops, and civic uses as well as areas for Flex/Research & Development.
- **Main Street Neighborhoods** – Main Street Neighborhoods may provide for a population of approximately 45,000 people in addition to the existing Magna population, integrating and complementing the community.
- **Midas Gulch** – This community is located west of Daybreak, near Copperton. The community of Copperton will continue to be unique in character and complemented by future development. Midas Gulch is expected to include many new neighborhoods and possibly could reach a population of 60,000 people or more. Substantial new office and retail spaces may be provided in Town Centers, three or more Village Centers, and multiple Neighborhood Centers. A future university/college campus is planned for Midas Gulch and could provide a catalyst for high technology jobs in the region.
- **North Urban Center** – Located at the intersection of I-80, Highway 201, and the new transit corridor, this community may include the new Urban Center within the West Bench. The planned new regional employment center is mostly located on lands within the incorporated limits of Salt Lake City. Associated neighborhoods may surround this new Urban Center, providing for a possible population of approximately 40,000 residents.
- **North Oquirrh** – This community is viewed as a future major industrial area near I-80. With approximately 18 million square feet of industrial space and a population of approximately 6,000, this area may become a major employment center for the region.
- **Soldier Flats** – This community is unique among the West Bench properties due to its isolated mountain setting. Soldier Flats is currently being considered as a resort to potentially include wintertime skiing and summer recreation. The area may also include new neighborhoods for approximately 15,000 people or more, served by Village Centers for retail space.
- **Tailings** – This community may include three or more Village Centers, Town Centers, a Transit Boulevard Area (see Objective LT-3.1) providing retail development and an extensive Flex/Research & Development Area (refer to Objective LT-3.2) for office and industrial space, and a population of approximately 90,000. Ongoing mining related operations make it likely that development will occur in the long term.

Policy RF-3.1.1: Community boundaries. Delineate community boundaries using natural features, where feasible, including rivers, creeks, streams, and associated buffer areas; drainage basin boundaries; floodplains; and major topographic features.

Policy RF-3.1.2: Transit-oriented development. Develop communities in relation to the region's transit system with locations for concentrated, high-density, mixed-use centers, as well as nodes of mixed-use, neighborhood-oriented communities.

Policy RF-3.1.3: Balanced development. Coordinate and balance development in the region as evidenced by: (1) a regional "fair-share" approach to meeting the housing needs of the urban population, and (2) regional development of employment opportunities as housing development creates appropriate markets.

Policy RF-3.1.4: Sense of place. Urban growth should occur in a manner that supports the preservation of historic, cultural, topographic, and biological features of the regional landscape that contribute significantly to the region's identity and "sense of place."

### ***Objective RF-3.2***

Create "breaks" and transitions in the urban fabric, providing definition for cities and towns.

Policy RF-3.2.1: Natural features. Respect natural features that can provide transitions, buffers, and separators between cities, towns, and villages.

Policy RF-3.2.2: Built features. Establish distinct built features, such as enhanced transportation corridors and iconic boulevards, to serve as edges and transition spaces between cities, towns, and villages. Large parks, educational facilities, and campus-type uses also provide opportunities for transition between land uses.

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*GOAL RF-4. Coordinate the timing, pace, and location of development and services such that complete and viable communities are developed in harmony with their surroundings.*

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***Objective RF-4.1***

Coordinate the planning process so that West Bench communities have an opportunity to evolve naturally and so that new developments are connected with their surroundings.

Policy RF-4.1.1: Community evolution. Manage the land development process to encourage the evolution of an efficient urban growth form; provide a clear distinction between urban and rural lands; support interconnected but distinct incorporated or unincorporated cities and towns (see Land Use and Multi-Modal Transportation Element) in the urban region; and recognize the inter-relationship between development and redevelopment objectives in all parts of the urban region.

Policy RF-4.1.2: Existing developments. Consider surrounding developments in the design and site planning of new developments. Provide through-roads to link existing and new developments, where feasible, and consider incorporating amenities that can be shared among developments. Provide distinctive edges or incorporate buffers or transitions to separate new development from adjacent existing or proposed incompatible uses, where needed.

***Objective RF-4.2***

Coordinate the planning process so that the development of communities and needed infrastructure is phased and timed in concert with market forces.

Policy RF-4.2.1: Market responsive. Coordinate development with the continued growth of regional economic opportunities to promote a distribution of jobs, income, investment, and tax capacity.

Policy RF-4.2.2: Infrastructure timing. Coordinate the market-driven pace of development with: (1) the provision of infrastructure and critical public services; (2) public investment for parks and open space; and (3) the creation of a balanced transportation system that is less dependent on the private automobile, supported by both the use of emerging technology and the location of jobs, housing, and commercial activity.

Policy RF-4.2.3: Coordination. Coordinate development in the West Bench area in relation to ongoing mining and mineral and metal processing activities on West Bench properties and needed activities for reclamation of these lands.

Policy RF-4.2.4: Surrounding uses. Evaluate proposed uses beyond the West Bench planning area that are within the service delivery area of any planned WBGP uses for their compatibility with the WBGP goals and land use plan.



## COMMUNITY VALUES (CV)

Through surveys and planning studies in recent years (Envision Utah, Wasatch Choices 2040, Utah Foundation), Salt Lake County citizens have had an opportunity to identify their shared values and define what is important to them in creating communities that meet their needs and endure for future generations. A strong sense of shared values is one of the defining characteristics of Salt Lake County residents. Given this strong sense of shared values, it is the intent of this section to incorporate these values into policies that will guide the development of the West Bench over the next 50 to 75 years or more.

Based on a review of recent surveys and planning studies, important community values shared by Salt Lake County residents were identified and are addressed in various elements of the WBG as listed below:

- Families, seniors, and future generations (see Goal CV-1)
- Access to education for lifelong learning (see Educational Resources Element)
- Clean air and water quality (see Environmentally Sustainable Design Element)
- Open space and critical lands (see Natural Resources Element)
- The aesthetic beauty of the mountains (see Natural Resources Element)
- Safety and crime prevention (see Goal CV-3)
- A variety of transportation options (see Land Use and Multi-Modal Transportation Element)
- Economic development and job creation (see Economic Sustainability Element)
- Quality health care (see Goal CV-2)
- Quality of life through excellent design (see Goal CV-1 and the Regional Framework Element)

The Salt Lake Valley is undergoing a major transformation that is changing the face of the region as small-town life gives way to suburbs and long commuting times. Rapid growth presents both challenges and opportunities in terms of community values. Carefully planning new development can create whole communities that are integrated with employment and cultural centers. Careful planning can create places that encourage people to interact and get involved, places that reinforce a sense of community and strengthen shared values.





Social fabric and community values are the foundation of communities, cities, and towns, and many of these issues are addressed in various elements throughout the Plan. A select few are additionally addressed in this element. The following goals, objectives, and policies are intended to protect and preserve these values as development occurs within the West Bench.

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*GOAL CV-1. Design communities to encourage social interaction and support family and community relationships.*

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**Objective CV-1.1**

Design the West Bench to provide shared community activity areas for education, houses of worship, recreation, and local governance.

Policy CV-1.1.1: Family friendly. Design the West Bench to focus on children, providing active areas for exercise and socializing and safe pathways and bikeways to allow independent travel in a secure environment.

Policy CV-1.1.2: Education-focused. Promote opportunities for life-long learning by integration of schools into community facilities, providing convenient regional access to higher education, and creating community centers for alternative education programs (see Educational Resources Element).

Policy CV-1.1.3: Community gathering places. Design community developments to provide elementary schools, community centers, places of worship, and recreation spaces as central gathering places, meeting spaces, and shared-use facilities for the community.

Policy CV-1.1.4: Cultural amenities. Plan central locations for community-based cultural amenities including museums, performing arts centers, art galleries, interpretive centers, and lecture halls.



**Objective CV-1.2**

Design the West Bench to support intergenerational and extended family relationships.

Policy CV-1.2.1: Life-cycle housing. Design the West Bench to provide life-cycle housing – a diverse array of housing types and densities suited to various age groups, lifestyles, and family structures. (See Housing Affordability and Variety Element.)

Policy CV-1.2.2: Social services. Provide a network of social services for residential communities to allow seniors, children, and special needs individuals to live in a variety of housing types and neighborhoods with safe and convenient access to services.

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*GOAL CV-2. Design communities to create life-sustaining environments, providing residents with recreational and healthy living opportunities.*

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***Objective CV-2.1***

Design neighborhoods to foster healthy living environments.

Policy CV-2.1.1: Recreation. Design the West Bench to provide opportunities for a variety of active and passive recreation, serving various age groups and abilities.

Policy CV-2.1.2: Walkability. Design neighborhoods to provide local access to adjacent neighborhoods and nearby activity areas or community centers by walking and bicycles.

Policy CV-2.1.3: Health care. Design a network of health care centers, hospitals, and regional medical facilities serving residential communities to allow convenient access to health care.

Policy CV-2.1.4: Accessibility. Design centers, neighborhoods, and streets to provide an accessible route of travel for people of all abilities, incorporating guidance from the United States Access Board Public Right-of-Way Guidelines and The Americans with Disabilities Act (ADA).

***Objective CV-2.2***

Provide clean air, quality water, and open space.

Policy CV-2.2.1: Air and water quality. Protect clean air and water for the health of our citizens and future generations (see policies under Goal ESD-1).

Policy CV-2.2.2: Water conservation. Promote building designs and landscape treatments that use water efficiently (see policies under Goal ESD-2).

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*GOAL CV-3. Provide a safe environment for citizens of all ages.*

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***Objective CV-3.1***

Design neighborhoods to foster local resident control and promote safety.

Policy CV-3.1.1: Safety. Consult with the principles of Crime Prevention Through Environmental Design in the design of new developments to minimize opportunities for crime and to provide “eyes on the street.”

Policy CV-3.1.2: Local control. Provide mechanisms for local control such as neighborhood or homeowner associations, local governing boards, or neighborhood watch programs to foster safety and security.

Policy CV-3.1.3: Traffic calming. Design street networks in neighborhood residential areas with traffic calming measures such as narrow streets, speed bumps, roundabouts, etc. to promote a safe environment for children, pedestrians, and bicyclists.

Policy CV-3.1.4: Hazards. Incorporate design measures to decrease naturally occurring major hazards (fault lines, seismic hazards, landslides, radon, etc.) to acceptable levels.

## LAND USE AND MULTI-MODAL TRANSPORTATION (LT)

In light of forecasted rapid future growth, it is a major challenge to create new communities that enhance the quality of Utahns' lives. A declining supply of land and energy, coupled with mounting traffic congestion and growing demand for housing and retail choices and job sites for economic development, provide the need and opportunity for new forms of development – forms that create livable communities that are economically and environmentally sustainable.

The West Bench has the potential to lead the way for sustainable and livable urban growth. By coordinating long range land use and transportation planning for such a large area, the West Bench offers an unusual opportunity to balance jobs and housing and provide a match between transportation demand and transportation supply. By conceiving of the West Bench as a network of complete communities and centers, the Plan can successfully coordinate land use and development decisions with attractive urban design and public investments in education, transportation, and infrastructure. The West Bench communities can be built in ways that allow a variety of transportation modes. Creative new forms of development on the West Bench are envisioned that can offer choices for both existing and future residents of the region and county, responding to a range of households, life-cycles, and lifestyles.

The physical, economic, and political contexts surrounding the West Bench General Plan present a host of challenges but also great opportunities. The West Bench General Plan provides an innovative approach to shaping large-scale development and regional form in the Salt Lake Valley. Assessing demand for housing and commercial space across the West Bench communities for the next 50 to 75 years of development is an inexact science. The policies included in the Land Use and Multi-Modal Transportation Element are intended to provide sufficient flexibility to respond to market realities and changing concepts of community development while creating opportunities for walkable, diverse communities linked by a variety of transportation options.



**DENSITY:**

DENSITY IN THE WEST BENCH WILL ENCOURAGE HIGHER NUMBERS OF RESIDENTS AND JOBS PER ACRE. THIS IS A DESIRABLE PLANNING OBJECTIVE, BECAUSE IT IS EFFECTIVE AT REDUCING TRAVEL AND OTHER IMPACTS, ESPECIALLY WHEN ACCOMPANIED BY HIGH LEVELS OF REGIONAL ACCESSIBILITY, MIX OF USES, AND QUALITY URBAN DESIGN. A HIGH CAPACITY TRANSIT SYSTEM IS DEPENDENT ON HIGH RESIDENTIAL AND EMPLOYMENT DENSITIES. THE LAND USE OBJECTIVES AND POLICIES IN THIS SECTION ADDRESS DENSITY FOR EACH OF THE TYPES OF LAND USES PROPOSED FOR THE WEST BENCH.

**DIVERSITY:**

DIVERSITY IN THE WEST BENCH WILL PROMOTE A GOOD MIX OF LAND USES. THE MIX OF LAND USES SUPPORTS A RELATIVE BALANCE OF JOBS AND HOUSING AS WELL AS THE MIX OF RETAIL AND NON-RETAIL JOBS WITHIN WALKING/ BIKING DISTANCE OR, SECONDARILY, SHORT DRIVING DISTANCE. DIVERSITY IS CORRELATED WITH REDUCTIONS IN VEHICLE TRIPS AND TRAVEL DISTANCE. THE FUTURE LAND USE MAP FOR THE WEST BENCH PROVIDES FOR A SERIES OF MIXED-USE CENTERS TO ENCOURAGE DIVERSITY OF LAND USE.

The objectives and policies included in the Land Use and Multi-Modal Transportation Element present a coherent set of standards to shape the West Bench in an economically viable and environmentally responsible manner.

The Land Use and Multi-Modal Transportation Element divides the land uses across the West Bench into a series of interdependent components: Centers, Residential Areas, Employment Areas, and Parks/Open Space. Each type of land use is treated in relation to other land uses, transportation networks, and environmental features. In addition to these land use types, the Plan creates policies for the location of civic amenities to take full advantage of their potential to invigorate centers and residential communities. The Future Land Use Map (Figure LT-1.1) establishes the general concept for the distribution and location of these land uses and for major transportation facilities. Specific locations will be further defined as given areas are proposed for development.

Finally, the element directly links the capacity of the transportation network to the location and type of development. This section also articulates an integrated solution to transportation that simultaneously addresses the demand and supply components of the transportation equation. The transportation approach outlined through the goals, objectives, and policies of this section is specifically intended to integrate transportation and land use, utilizing innovative yet practical tools. The key themes that characterize this section—walkability, right-of-way multi-modal options, and a focus on mobility—will manifest themselves in a transportation system that fully supports anticipated land uses and land reuse along the West Bench. This section is supportive of the approach proposed by the Wasatch Front Regional Council. With a linkage between urban form and travel behavior, the West Bench General Plan comprehensively addresses the four “D’s” of “smart” development: Density, Diversity, Design, and Destination.

Transportation rights-of-way and infrastructure will play a major role in the character and livability of the West Bench. The following goals, objectives, and policies are intended to build on regional goals and values, within the framework of the West Bench General Plan. The Transportation Systems Map (see Figure LT-4.1) depicts the “backbone”

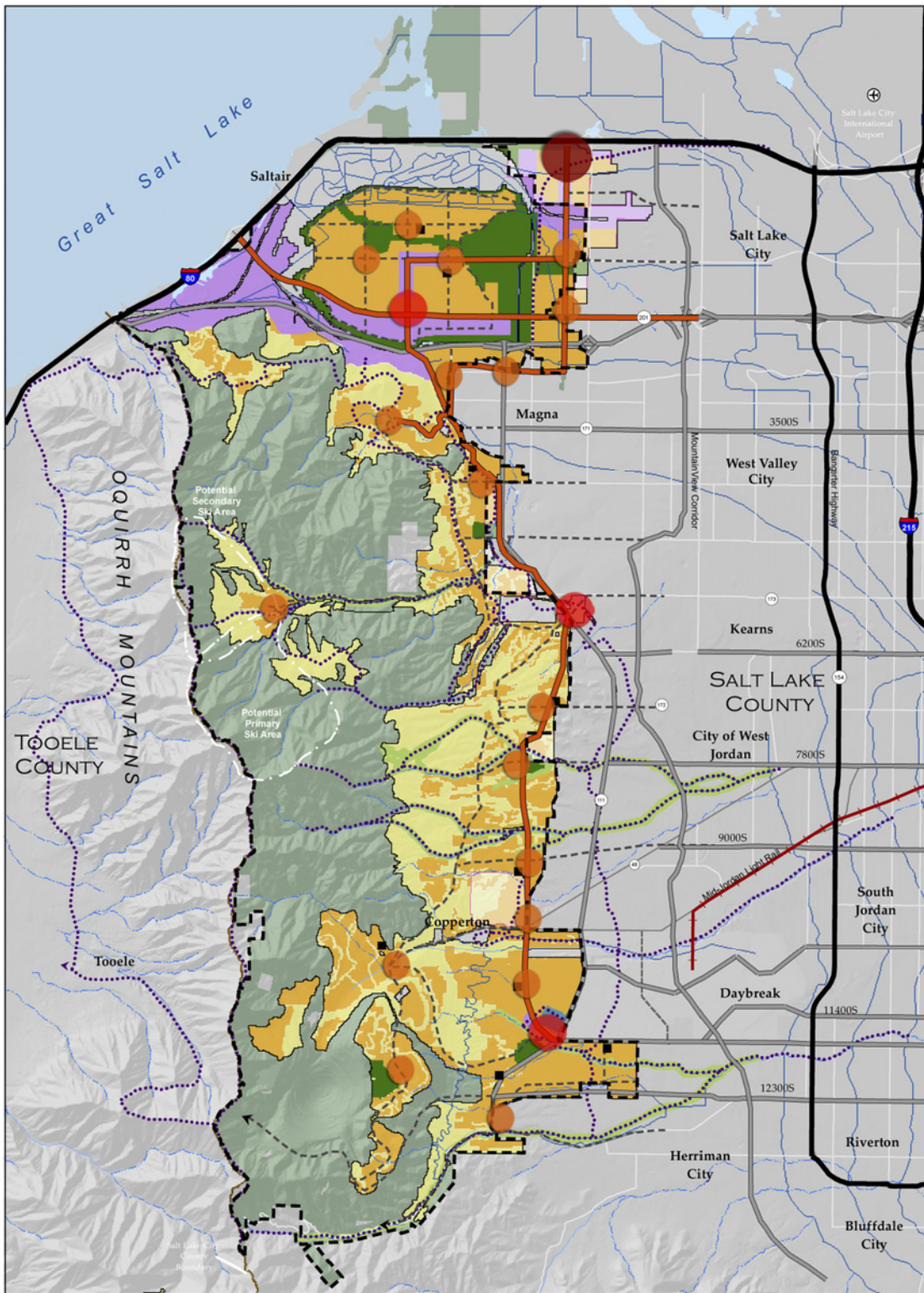
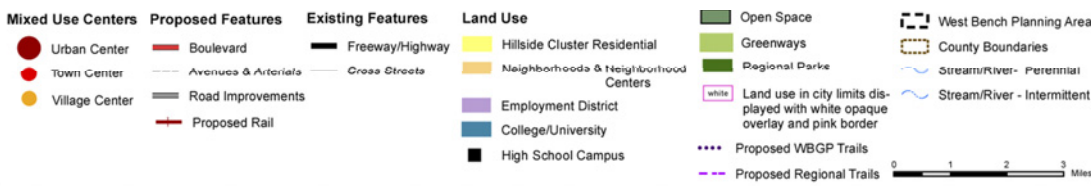


FIGURE LT-1.1. FUTURE LAND USE MAP.

*This map portrays the general concept for the distribution and location of West Bench land uses and major transportation facilities; however, specific locations and size of centers are likely to vary as specific development is proposed.*



**DESIGN:**

DESIGN REFERS TO THE APPEARANCE AND LAYOUT OF VARIOUS USES. THE WEST BENCH GENERAL PLAN PROMOTES DESIGNERS TO CREATE WALKABLE NEIGHBORHOODS. WHEN MEASURED IN TERMS OF CONNECTIVITY AND DENSITY OF THE STREET AND PEDESTRIAN NETWORKS AND SIDEWALK COMPLETENESS, WALKABLE URBAN DESIGNS ARE CORRELATED WITH REDUCED AUTO TRAVEL. WALKABLE MIXED-USE CENTERS AND RESIDENTIAL NEIGHBORHOODS SUPPORT ALL THE OTHER GOALS OF THE WEST BENCH GENERAL PLAN, ESPECIALLY THOSE DESCRIBED IN COMMUNITY VALUES.

**DESTINATION:**

GROWTH IN THE WEST BENCH WILL OCCUR AT DESTINATIONS WITH HIGH ACCESSIBILITY TO OTHER ACTIVITIES IN THE REGION AND COUNTY, AN IMPORTANT PLANNING STRATEGY. ONE CONSEQUENCE OF HIGH ACCESSIBILITY IS REDUCED VEHICLE TRAVEL PER CAPITA. HIGH ACCESSIBILITY ALSO SUPPORTS GROWTH IN EMPLOYMENT AND ENCOURAGES A JOBS/HOUSING BALANCE FOR THE WEST BENCH.

on-site and off-site transportation system that will provide mobility to and within the West Bench. At later stages of site planning, detailed transportation planning will determine specific on-site and off-site transportation system needs (e.g., the number of lanes for each facility, generalized alignment, transportation mode, etc.). Like the Future Land Use Map, this map portrays the general concept for development of transit and transportation systems within the West Bench; however, the specific locations of transit lines and transportation routes will be further defined as given areas are proposed for development.

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*GOAL LT-1. Create a hierarchy of mixed-use centers.*

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*Objective LT-1.1*

Centers are designed to include a mix and intensity of uses, ranging from the Urban Center to the Neighborhood Center, and serve as commercial and civic focal points for the West Bench. The Future Land Use Map, Figure LT-1.1, depicts the general concept for the location of centers, other types of uses, and their relationship to the transportation network. Specific locations for centers and other land uses will be determined as areas are proposed for development.

Policy LT-1.1.1: Network of centers. Centers form a network of complementary employment, retail, cultural, and civic opportunities linked by multi-modal transportation systems. The following types of centers, ranked from most to least intensive, can form mixed-use destinations across the West Bench: (1) Urban Centers; (2) Town Centers; (3) Village Centers; (4) Neighborhood Centers; and (5) Mountain Resort. Guidelines for each of these centers are described and illustrated in Figures LT-1.1.1a–e. The actual location, type and number of centers on the West Bench will be determined as specific developments are proposed. It is anticipated that as market demands change, that centers may evolve to the next hierarchy in type of center.

Centers should be arranged in a spatial hierarchy based upon proximity to: (a) regional rapid transit connections; (b) population density in surrounding communities and adjacent portions of the region; and (c) other centers. Density ranges characteristic to each type of center are included to assist in understanding the relationship and scale between centers; however, it is anticipated that these density ranges may vary as actual development is proposed.



FIGURE LT-1.1.1A. URBAN CENTER.



Urban Centers are intended to be focused around a multi-modal transit station linked to the regional rapid transit network as well as supported by a hierarchy of street types and pedestrian pathways. These transit-oriented centers will provide primary employment, serve as a retail destination, and host major cultural attractions. Region-serving civic amenities and medium to high density housing will help make the Urban Center a complete mixed-use environment. Typically, Urban Centers will include higher density housing (20 to 40 dwelling units per gross acre) along with a mix of retail, office, and civic or cultural buildings. The Urban Center will feature the highest-density concentration of housing, retail, office, and civic activity, as compared to other centers across the West Bench. While other centers may grow into Urban Centers over time, the general intent shown in the Future Land Use Map is to plan for an Urban Center at the northern end of Kennecott's properties.



MANCHESTER CITY CENTER, ENGLAND

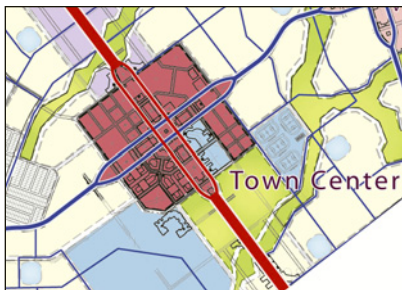


URBAN CENTER DIAGRAM

FIGURE LT-1.1.1B. TOWN CENTER.



STAPLETON TOWN CENTER,  
DENVER, COLORADO



TOWN CENTER DIAGRAM

Several Town Centers are planned to anchor portions of the West Bench around multi-modal transit stations well connected to the region. Town Centers will provide region and subregion-serving employment and retail opportunities, as well as medium and high-density housing options. The Future Land Use Map shows three to four Town Centers distributed throughout the West Bench, although this number and specific locations may vary as specific developments are proposed. Typically, Town Centers will be designed to include housing densities of 15 to 30 dwelling units per gross acre, along with a mix of retail, office, and community facilities. Some of the many smaller Village Centers may grow into Town Centers over time. The Town Center Core typically includes a community space surrounded by a mixture of shopping spaces, office, residential, and civic uses and is supported by a hierarchy of street types and pedestrian pathways.

FIGURE LT-1.1.1C. VILLAGE CENTER.



Several Village Centers are planned throughout the West Bench so that grocery stores and personal and business services are within a short trip of residents. The Future Land Use Map shows eighteen Village Centers distributed throughout the West Bench, although this number and specific locations may vary as specific developments are proposed. Village Centers are intended to provide sub-region and local-serving retail and office uses, as well as an assortment of medium-density housing options. Village Centers are designed to be focused around rapid transit stations, where practical, and will be located based upon surrounding population density and proximity to Urban and Town Centers – which may also provide adjacent Residential Areas with some of the amenities available in Village Centers. Typically, Village Centers will be designed to include housing densities of 10 to 25 dwelling units per gross acre, along with a mix of small, local-serving retail and offices. The Village Center Core typically includes a central park or plaza framed by the most intensive retail (e.g., anchor grocery store), commercial, and residential uses in the center that is supported by a hierarchy of street types and pedestrian pathways.

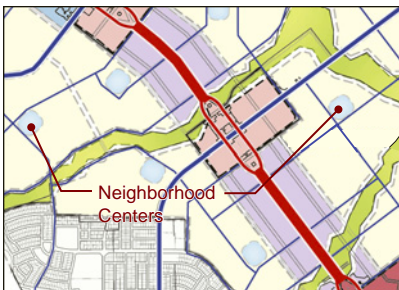
LOWRY TOWN CENTER,  
DENVER, COLORADO

VILLAGE CENTER DIAGRAM

FIGURE LT-1.1.1D. NEIGHBORHOOD CENTER.



DAYBREAK NEIGHBORHOOD PARK, SOUTH JORDAN, UTAH



NEIGHBORHOOD CENTER DIAGRAM

Neighborhood Centers are dispersed throughout the West Bench, bringing elementary schools, local parks, and other civic amenities within walking distance of the vast majority of residents. The spacing of Neighborhood Centers will be based upon population densities and resulting elementary school requirements. Neighborhood Centers have a large range of housing densities, from 5 to 25 dwelling units per gross acre. While some of the many Neighborhood Centers may grow into Village Centers over time, the general intent shown in the Future Land Use Map is to plan for many Neighborhood Centers distributed across the West Bench, to provide residents with easy access to schools, parks, and neighborhood services. The Neighborhood Center Core typically is focused on a community space, such as a school or community center or civic building, surrounded by civic buildings, higher density housing, and/or commercial buildings, although the mix in any given center may vary widely. The Neighborhood Centers are supported by a hierarchy of street types and pedestrian pathways to promote safe, walkable neighborhoods.

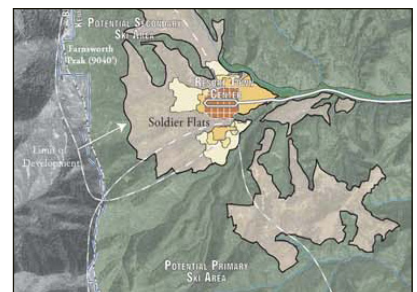
FIGURE LT-1.1.1E. MOUNTAIN RESORT.



A Mountain Resort and Town Center in the Soldier Flats vicinity are planned to provide year-round recreational opportunities for the Salt Lake Valley. The resort would be easily accessible by West Bench and Salt Lake Valley residents and would be focused around seasonal recreational activities such as skiing, hiking, biking, and wildlife viewing. This four-season resort community may consist of a compact, vibrant commercial core with conference and research facilities, and amenities serving the needs of residents and visitors. The Mountain Resort, Town Center and adjacent residential development would be sensitively sited and clustered to be compatible with the natural environment. Workforce housing would also be included within this development areas so that employees are able to live nearby. The Mountain Resort and Town Center would be served by a hierarchy of street types and pedestrian pathways.



HOTEL & CONFERENCE CENTER, VAIL, COLORADO



MOUNTAIN RESORT DIAGRAM



CELEBRATION VILLAGE, FLORIDA



LADERA RANCH,  
ORANGE COUNTY, CALIFORNIA



NORTHWOOD NEIGHBORHOOD PARK,  
IRVINE, CALIFORNIA

## SQUARES AND GREENS

SQUARES AND GREENS MAY INCORPORATE ACTIVE PEDESTRIAN AND TRANSIT USES, AS WELL AS VISUALLY DISTINCTIVE LANDSCAPING, INTERACTIVE FEATURES, AND ACTIVITIES SUCH AS KIOSKS AND VENDING BOOTHS. WHERE THEY ARE LOCATED AT THE CORE OF THE CENTER, THEY LIKELY WILL BE SURROUNDED BY THE HIGHEST LEVELS OF DENSITY.

Policy LT-1.1.2: Pattern of streets, blocks, and buildings. Centers should have a clear pattern of streets, blocks, buildings, and community spaces scaled to the pedestrian. Block sizes should be kept to walkable distances to promote pedestrian activity, particularly in Village and Neighborhood Centers. Retail, community spaces, and civic buildings can be arranged to create a network of active spaces of varying intimacy, size, and function. The massing and design of buildings can be designed to create a sense of intimacy and visually distinguish the center from surrounding communities.

Policy LT-1.1.3: Mixed-use within centers. Centers should provide for a mix of uses and block types to create local, walkable connections between jobs, housing, and retail. Block types may include:

- Mixed-use blocks that make up the core of each center and combine retail with housing or office uses;
- Commercial blocks that contain primarily office or retail uses;
- Residential blocks that contain a range of housing opportunities, including multi-family buildings, townhomes, live/work lofts, and/or a variety of single-family opportunities (these blocks may contain incidental retail); or
- Civic blocks that can contain a variety of public and civic buildings, from schools and churches to libraries, community centers, or parks.

Policy LT-1.1.4: Transit station location. Appropriate locations for transit stations and stops in centers include the following: (1) within the core areas of centers, (2) within or adjacent to blocks featuring major concentrations of commercial space, (3) major community places, and (4) convenient locations within or adjacent to residential blocks. To encourage transit use, stations should be designed to provide accessibility and feature convenient pedestrian connections to the surrounding street network and transit transfer points. Multi-modal transfer stations can be incorporated as focal points of centers through distinctive design and a location in a center's core.

Policy LT-1.1.5: Building character and orientation. The character, massing, and orientation of buildings will play a critical role in defining the public realm of centers. In general, fronting the edges of buildings at the sidewalk is encouraged to create a continuous "street wall" and a comfortable pedestrian environment. Providing interesting building details at a human scale also creates visual interest and pedestrian comfort. Visual diversity can be created through variations in setback, massing, and architectural details.

Policy LT-1.1.6: Center core. Centers should feature a core area that acts as the central gathering place for the center and surrounding communities. The core can accommodate the most intensive retail,

employment, civic, and pedestrian activity in each center. The design of streets and buildings in the core area should emphasize pedestrian comfort and visual interest. Core areas vary by each type of center, as illustrated in Figures LT-1.1.1a-d.

**Policy LT-1.1.7: Location and type of commercial activity.** Commercial activity is permitted throughout Urban, Town, and Village Centers, but the highest intensity commercial uses should be located in the core area of the center, and then along Boulevards, Avenues, and Connector Streets. Small convenience retail establishments, such as corner stores, can also occupy a portion of the ground floors of residential and office buildings outside of the core of Urban, Town, and Village Centers. Office uses generally should be clustered around public transit stations and squares and along boulevards and high-capacity transit routes. Less intensive office uses may also locate along the outer edges of centers, particularly where a center is adjacent to an Employment Area.

**Policy LT-1.1.8: Commercial activities within Neighborhood Centers.** A limited amount of local-serving commercial activity may be located in Neighborhood Centers around their core. Ideal Neighborhood Center retail uses include, but are not limited to, small grocery stores, cafes, restaurants, and personal services.

**Policy LT-1.1.9: Large format retail.** Large format retail uses (i.e., “big box” retail) are most suited to Urban Centers and may be located in Town Centers. Large format retail uses should be designed in scale with surrounding uses and parking areas in keeping with the standards of the area. In most cases, such uses would not be suited to Village or Neighborhood Centers.

**Policy LT-1.1.10: Mix of housing types and tenures.** In general, centers should include a mix of rental and for-sale units, and can include a vertical mix of uses, where residential units are located above ground floor retail and office uses.

**Policy LT-1.1.11: Gathering spaces.** Squares, greens, and plazas are gathering places that may provide visual relief and passive recreation. The overall design of the center should link these features in a sequence or network. A square or green is intended to act as the central feature of Neighborhood Centers, and should be surrounded by civic buildings and/or commercial or mixed-use buildings located in the center.

**Policy LT-1.1.12: Civic buildings.** Major civic buildings, such as libraries, schools, senior centers, and government offices, can help to anchor a center and should be designed and located to serve as a focal point for a center, where feasible.



DOWNTOWN BUENA PARK, CALIFORNIA



CENTENNIAL OLYMPIC PLAZA,  
ATLANTA, GEORGIA



LAKE LAS VEGAS, HENDERSON,  
NEVADA

## PLAZAS

PLAZAS SHOULD GENERALLY BE LOCATED WITHIN THE GROUND FLOOR SETBACKS OF COMMERCIAL BUILDINGS, AT THE ENTRIES TO CIVIC BUILDINGS, ALONG MID-BLOCK PASSAGES BETWEEN BUILDINGS, AND AT CORNERS OF MAJOR INTERSECTIONS. PLAZAS GENERALLY WILL INCLUDE SEATING AND STREET TREES.

Policy LT-1.1.13: Live-work units. Buildings and portions of buildings that combine commercial and residential uses within single units are encouraged throughout Urban, Town, and Village Centers. Good locations for individual live-work units are on the ground floor of residential buildings along Connector and Local Streets. In Neighborhood Centers, good locations for live-work units are in the core area.

Policy-LT-1.1.14: Accessory dwelling units. To meet the diverse and evolving housing needs of West Bench and Salt Lake Valley residents, accessory dwelling units should be allowed on parcels occupied by single-family homes in centers, unless specifically restricted by covenants, conditions, or restrictions.

Policy LT-1.1.15: On-street parking. On-street parking, which generally reduces traffic speeds and provides easy access for quick-stop shopping, is encouraged within most centers.

Policy LT-1.1.16: Off-street parking. Although surface parking lots are permitted in Urban, Town, and Village Centers, other parking options, such as structured parking and subterranean or semi-depressed garages, are encouraged. Where surface parking lots are used, they should be located behind buildings and to occupy only a very limited portion of the street frontage.

Policy LT-1.1.17: Shared parking. Land uses with different periods of peak activity are encouraged to use shared parking strategies to accommodate parking demand.

Policy LT-1.1.18: Interim parking blocks. Blocks adjacent to major retail uses in Urban and Town Centers can be utilized for surface parking on an interim basis until local real estate market conditions justify investment in a more intensive land use on the block.

Policy LT-1.1.19: Area edges. The outer edges of centers should be compatible with adjacent open spaces, neighborhoods, and core uses. Edge treatments may vary depending upon the surrounding context. For example, the perimeter of an Urban Center bounding a wide open space might feature taller residential buildings to emphasize the urban edge and create views. In contrast, the face of a Village Center block across the street from a Village Residential block could consist of townhomes to achieve consistency with the scale and density of this adjacent area.



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## GOAL LT-2. *Create a fabric of complete residential communities.*

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### **Objective LT-2.1**

Residential Areas should integrate a mix of housing types and local-serving commercial activity into a cohesive urban fabric responsive to the natural environment. An overview of these various residential areas is illustrated in Figure LT-2.1.

Policy LT-2.1.1: Mix of housing types and ownership. Residential Areas should incorporate a variety of housing types and ownership to meet the current and future needs of residents of the Salt Lake Valley. Five distinct Residential Area types are envisioned: Village Residential Areas, Neighborhood Residential Areas, Foothill Residential Areas, Hillside Residential Areas, and Cluster Residential Areas. Each of these is illustrated and described in Figures LT-2.1.1a-e. Density ranges characteristic to each type of Residential Area are included to assist in understanding the relationship and scale between neighborhoods. However, it is anticipated that actual density ranges may vary as specific development is proposed.



FIGURE LT-2.1.: RESIDENTIAL AREAS OVERVIEW.

FIGURE LT-2.1.1A. VILLAGE RESIDENTIAL.



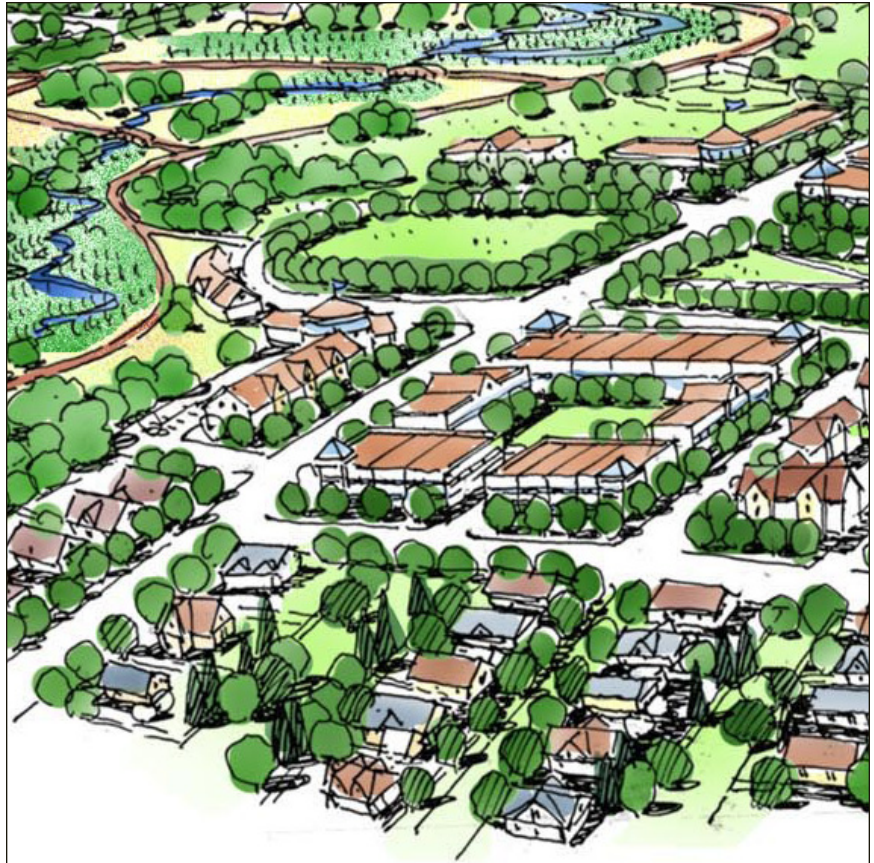
STAPLETON TOWN CENTER,  
DENVER, COLORADO



ISSAQUAH HIGHLANDS,  
ISSAQUAH, WASHINGTON

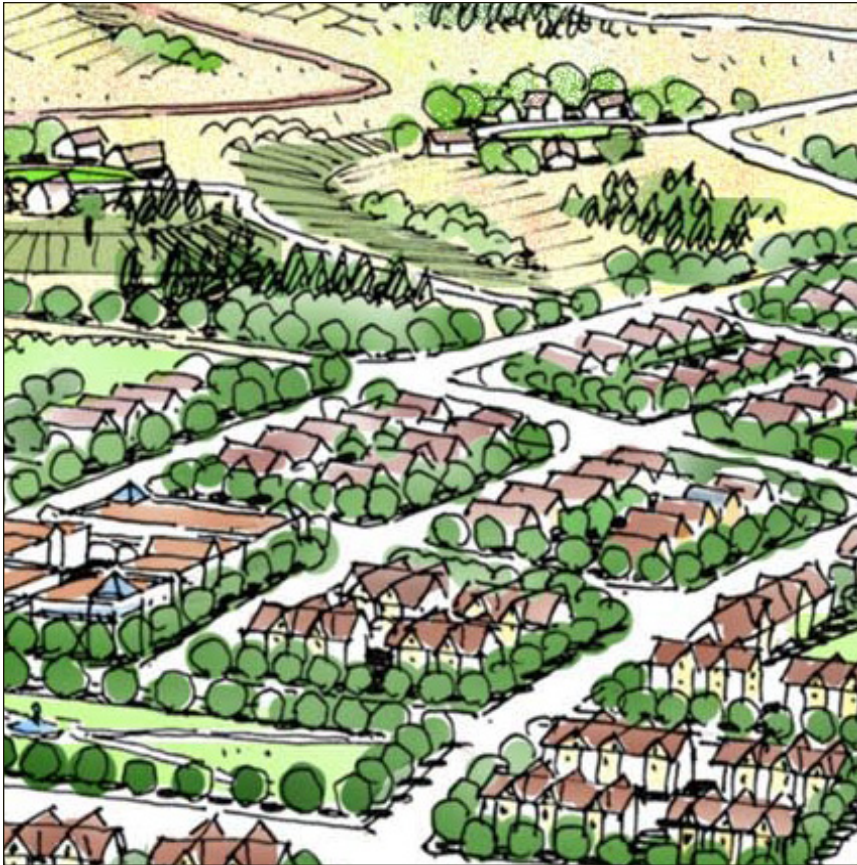


STAPLETON, DENVER, COLORADO



Village Residential Areas are intended to provide a mix of attached and detached single-family homes and multi-family buildings, located in and around various centers. Typical housing densities in Village Residential Areas range from 15 to 20 dwelling units per gross acre.

FIGURE LT-2.1.1 B. NEIGHBORHOOD RESIDENTIAL.



Neighborhood Residential Areas, like Village Residential Areas typically include a mix of attached and detached single-family homes and multi-family buildings, located in and around various centers. Typical housing densities in Neighborhood Residential Areas range from 7 to 10 dwelling units per gross acre.



ISSAQUAH HIGHLANDS,  
ISSAQUAH, WASHINGTON



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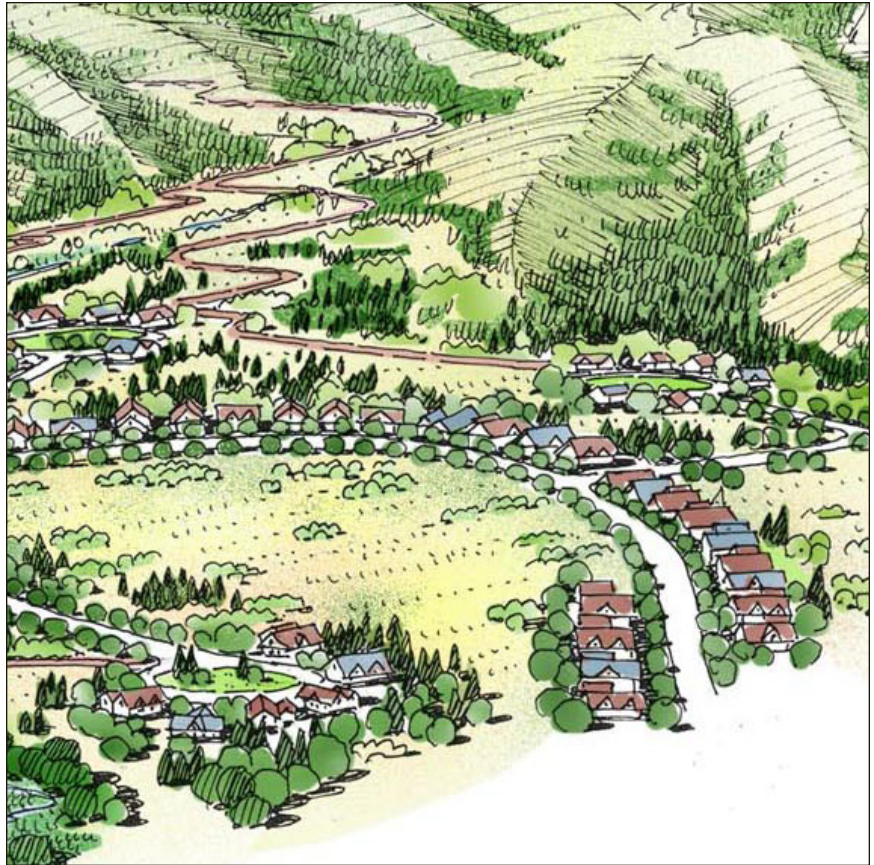


DAYBREAK, SOUTH JORDAN, UTAH

FIGURE LT-2.1.1C. Foothill Residential.



ISSAQUAH HIGHLANDS,  
ISSAQUAH, WASHINGTON



Foothill Residential Areas typically include single-family homes, primarily a mix of small and medium lot sizes, with densities ranging from 5 to 7 dwelling units per gross acre. The design of Foothill Residential Areas would respond to the unique topography, natural features, and habitat of the surrounding area.

FIGURE LT-2.1.1 D. HILLSIDE RESIDENTIAL.



SOUTH MOUNTAIN, DRAPER, UTAH



SOUTH MOUNTAIN, DRAPER, UTAH

Hillside Residential Areas typically include single-family homes, primarily of medium lot single-family sizes, with densities of 2 to 4 dwelling units per gross acre. The design of Hillside Residential Areas would respond to the unique topography, natural features, and habitat of the surrounding area.



STAPLETON, DENVER, COLORADO

FIGURE LT-2.1.1 E. CLUSTER RESIDENTIAL.



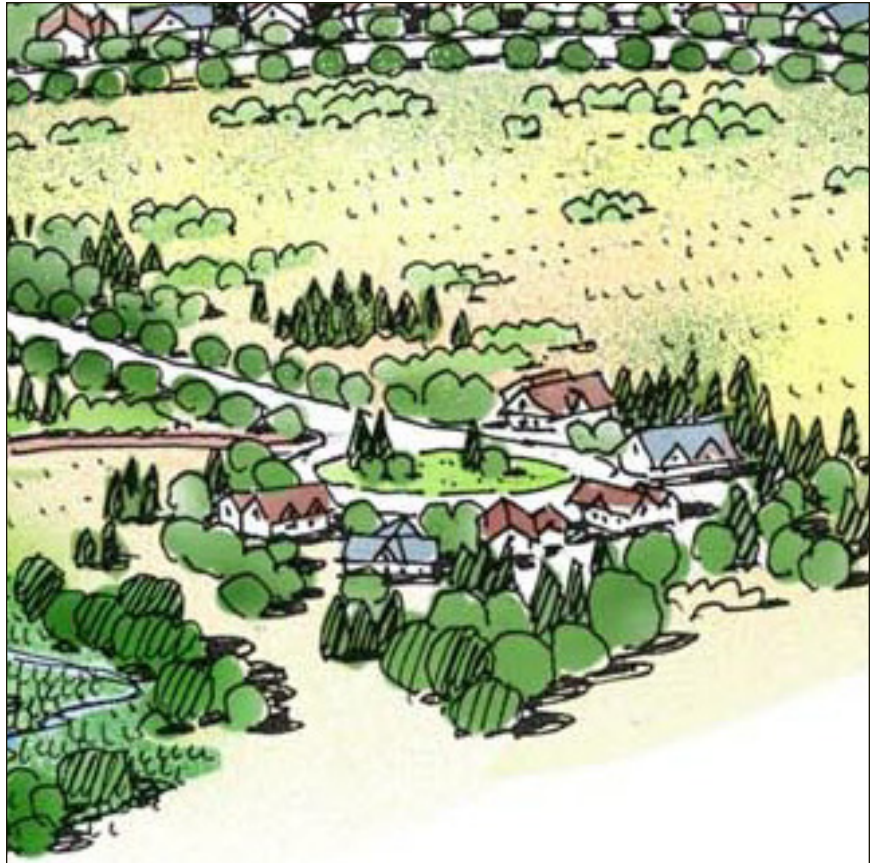
CLUSTER DEVELOPMENT AND ADJACENT OPEN SPACE



OPEN SPACE LEFT IN ITS NATURAL STATE



CLUSTER DEVELOPMENT AND ADJACENT OPEN SPACE



Cluster Residential Areas will be comprised of single-family homes, primarily in small clusters of medium and larger lot sizes, ranging from 0.25 to 2 dwelling units per gross acre. The design of Cluster Residential Areas would respond to the unique topography, natural features, and habitat of the surrounding area.

Policy LT-2.1.2: Slope sensitivity. The location, density, and street design of Residential Areas should respond to the topography of the West Bench. In general, development densities should decline as slope increases. The design of streets, lots, and buildings should diminish the impact of hillside development.

Policy LT-2.1.3: Pattern of streets and blocks. Residential Areas should maximize street connectivity, consisting of a coherent pattern of streets and blocks scaled to the pedestrian and discouraging street patterns that prohibit physical connectivity. The design of streets and blocks should respect topography and natural features, with more intense development focused in the flattest portions of the West Bench near mixed-use centers.

Policy LT-2.1.4: Pattern of buildings and community spaces. The orientation and character of buildings contribute to a cohesive built environment that reinforces community spaces, creates a sense of intimacy on streets, and links Residential Areas to surrounding centers and communities. Parks, plazas, and greens should form a continuous network linked physically and visually through streetscape, building, and open space design.

Policy LT-2.1.5: Transit stations and stops. Arrange transit stations and stops so that Residential Areas are conveniently linked to the rest of the West Bench and Salt Lake Valley. The frequency and nature of transit stations and stops within Residential Areas should be calibrated to population density, proximity to mixed-use centers, and topography. Stations and stops encourage transit use by featuring convenient, clear pedestrian connections to major destinations and the area's primary streets.

Policy LT-2.1.6: Parking. The location and design of off-street parking facilities in Residential Areas minimize visual intrusion into the public right-of-way and community spaces. Locating parking for multi-family, civic, and commercial buildings in structures, underground facilities, or in locations obscured from street view by buildings or landscaping is encouraged. Local streets may include on-street parking to accommodate visitors and serve as a buffer between street and sidewalk.

Policy LT-2.1.7: Location and type of commercial activity. Local-serving retail uses and offices (e.g., small grocery stores, laundries, cafes, and other personal and business services) may be located in Village Residential Areas along Boulevards, Avenues, and Connector Streets, as well as adjacent to community spaces. Ideal locations for retail uses include corners and the edges of parks and other community spaces.



Policy LT-2.1.8: Location of community spaces. Village Residential, Neighborhood Residential, Foothill Residential, and Hillside Residential Areas may include parks or greens. Parks, greens, and natural features should be distributed so that many residents of the West Bench live within walking distance of a park, green, natural feature, or open space area.

Policy LT-2.1.9: Natural features. Valuable natural features, including creeks and critical wetlands, should be conserved and accentuated through sensitive site planning, building placement, or other measures (see policies in Natural Resources Element).

Policy LT-2.1.10: Civic buildings. Civic buildings should anchor many centers and should typically be located in the core area. Where feasible, these will feature distinctive building details, entry features, and varying setbacks to provide a unique identity, with entrances facing onto public rights-of-way and parks.

Policy LT-2.1.11: Live-work units. Buildings and portions of buildings that combine commercial and residential uses within single units will be encouraged in the most densely developed portions of Village and Neighborhood Residential Areas and within walking distances of transit stations.

Policy LT-2.1.12: Accessory dwelling units. To meet the diverse and evolving housing needs of West Bench and Salt Lake Valley residents, accessory dwelling units may be allowed on parcels occupied by single-family homes in Residential Areas, unless specifically restricted by covenants, conditions, or restrictions.

Policy LT-2.1.13: Scale and density transitions. Transitions in scale and density within Residential Areas should be gradual. Sharp distinctions in scale and density on different sides of a street typically should be avoided.

Policy LT-2.1.14: Residential Area edges. Identifiable edges should be defined by natural features, transitions in development density, and/or changes in building style, scale, or massing. For example, a transition can be created through the placement of an open space or civic feature such as a park or small civic building in the area between the areas.

Policy LT-2.1.15: Density. Most residential areas should achieve appropriate densities to support walkable communities that can support transit and other key infrastructure investments.





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*GOAL LT-3. Create economic opportunities by linking the location of jobs with transportation and housing options.*

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**Objective LT-3.1**

Transit Boulevard Areas will be walkable Employment Areas comprised primarily of medium-intensity office uses, as well as a variety of residential and local-serving retail uses. Transit Boulevard Areas will complement Urban and Town Centers by accommodating slightly less intensive office uses that benefit from regional transit access, visibility, and a mixed-use environment.

Policy LT-3.1.1: Location and function of Transit Boulevard Areas. Transit Boulevard Areas should occur only in strategic locations along the transit corridor and near Urban and Town Centers. Transit Boulevard Areas will serve as medium intensity employment centers, incorporating some housing and retail uses.

Policy LT-3.1.2: Pattern of streets and blocks. Transit Boulevard Areas should maximize street connectivity, consisting of a clear pattern of streets and blocks scaled to the pedestrian and discouraging street patterns that prohibit physical connectivity. Although specific land uses will change from time to time, the street pattern, once established, will likely remain constant. It is important to establish a pattern of streets that provides connectivity and accommodates the different possible land use scenarios, while helping to define the area.

Policy LT-3.1.3: Pattern of building. The massing and design of buildings should be scaled to the pedestrian and contribute to a cohesive urban fabric that reinforces community spaces, creates a sense of intimacy, and visually distinguishes the Transit Boulevard Area from surrounding areas. The principal commercial buildings should orient to the Boulevard.

Policy LT-3.1.4: Mixed-uses. Transit Boulevard Areas may contain a mix of uses and block types. While the uses are envisioned as primarily office, other uses may include commercial (including hotels), retail, residential, and civic.

Policy LT-3.1.5: Transit station location and orientation. To encourage transit use, transit stations should feature convenient, clear pedestrian connections to the surrounding street network and transit transfer points, and be designed to be accessible to people with disabilities.



Policy LT-3.1.6. Transit station parking. Flexible parking standards should be considered around proposed transit stations and especially when the stations are located within centers. Parking requirements for stations should consider the following:

- Placement: Parking should be located away from the platform to preserve the land nearest the station for development. Placing parking within a five minute walk from the station opens prime real estate for development;
- Shared parking: Parking near the station should be shared among patrons of the Center at different times of day or week based on the types of developed uses around the station;
- Structured parking: Structure parking should be considered if it serves a multiple of users and developments in the Center; and
- Development opportunity: Place commercial development around the outside base of parking structures or surface lots to encourage mix use development and ease of access to and from the station and the surrounding community.

Policy LT-3.1.7. Building character and location. Buildings in Transit Boulevard Areas should reinforce the urban character of the transit corridor while creating a gradual scale transition with adjacent areas. Building details will be human scale and designed to create visual interest and pedestrian comfort. Visual diversity can be created through variation in building design and/or setback.

Policy LT-3.1.8: Location and orientation of community spaces. Squares, greens, and plazas are gathering places that should provide visual relief and passive recreation in Transit Boulevard Areas. The overall urban design of the corridor and surrounding centers should link these features in a sequence of community spaces.

Policy LT-3.1.9: Location of live-work units. Buildings and portions of buildings that combine commercial and residential uses within single units should be encouraged throughout Transit Boulevard Areas. One ideal location for individual live-work units is along connector and local streets.

Policy LT-3.1.10: Parking. Parking facilities in Transit Boulevard Areas are encouraged to be screened from view of the transit corridor, where practical. Surface parking is permitted and encouraged to be located at mid-block locations. Parking located in subterranean and semi-depressed garages is encouraged.

Policy LT-3.1.11: Scale and density transitions. Transitions in scale (building height and massing), land use intensity, and density within Transit Boulevard Areas should occur gradually to blend these uses with surrounding areas.

Policy LT-3.1.12: Location and orientation of retail and service commercial activity. Retail (such as coffee shops) and personal services (such as day-care and fitness clubs) are permitted in Transit Boulevard Areas and generally will be local-serving. Retail and personal services may be located on the ground floor of office and residential buildings.

Policy LT-3.1.13: Area edges. The outer edges of Transit Boulevard Areas should be designed to respond to adjacent open spaces, neighborhoods, and centers. Edge treatments may vary depending on the surrounding context.

Policy LT-3.1.14: Pedestrian/multi-modal design. The application of appropriate street types should be coordinated with land uses to encourage convenient, comfortable travel by non-auto modes and transit in Transit Boulevard Areas. Pedestrians, cyclists, and transit users will receive the highest priority among travelers in Transit Boulevard Areas.

### *Objective LT-3.2*

Industrial and Flex/Research & Development Areas will provide a variety of research and industrial employment opportunities configured into a coherent urban fabric accessible by primary regional road and/or rail corridors.

Policy LT-3.2.1: Location and function of Industrial and Flex/R&D Areas. Industrial and Flex/R&D Areas should be located in proximity to primary regional road and/or rail corridors to facilitate efficient goods movement. Industrial Areas will accommodate heavier industrial uses such as manufacturing, warehousing, and trans-shipment, while Flex/R&D Areas will accommodate less intensive light industrial, warehousing, health care centers, hospitals, regional medical facilities, and research & development uses.

Policy LT-3.2.2: Pattern of streets, blocks, and buildings. Industrial and Flex/R&D Areas should consist of a continuous pattern of streets, blocks, and buildings. While the size of blocks in these areas may be larger than that of other areas, the general principles shaping the urban fabric should remain the same.

Policy LT-3.2.3: Building character and location. The character and orientation of buildings in Industrial and Flex/R&D Areas should reinforce the street hierarchy and promote convenient access for non-automobile modes. In general, buildings should be built to a consistent setback along the most intensive adjacent street. The front facades of buildings should be oriented toward this street. The height, massing, and articulation of buildings may vary throughout the area.



Policy LT-3.2.4: Community spaces. Parks and greens are encouraged to provide visual relief in Industrial and Flex/R&D Areas.

Policy LT-3.2.5: Retail and service commercial activity. Retail and personal service uses may be located in Industrial and Flex/R&D Areas. Eating establishments and uses serving the daily needs of workers are ideal and are encouraged to locate near transit stations and stops, where feasible.

Policy LT-3.2.6: Location and character of parking. Parking facilities in this area are likely to be surface parking lots. Where feasible, these may be located on the faces of blocks adjacent to less intensive streets or screened from street and sidewalk view.

Policy LT-3.2.7: Area edges. The outer edges of Industrial and Flex/R&D Areas should be designed to carefully respond to adjacent areas and natural features. Buffers or transitions, such as parks and open space, can be used between Industrial and Flex/R&D Areas and Residential Areas.

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## *GOAL LT-4. Create a balanced, complete transportation network of multi-modal corridors and local circulation.*

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### *Objective LT-4.1*

An urban transportation network of multi-modal corridors and local circulation will provide a range of mobility options to residents and visitors. The Transportation Systems Map, Figure LT-4.1, depicts the general concept for Boulevards, Avenues, and Connectors within the West Bench and east-west connectors linking the West Bench to the region. Specific locations for these roads and transit lines should be determined in coordination with County and regional planning efforts and as given portions of the West Bench are proposed for development.

Policy LT-4.1.1: Urban network. Circulation in the West Bench should be arranged in an urban network of multi-modal streets that reinforces the hierarchy of mixed-use centers and corridors while ensuring walkable, human-scale areas and neighborhoods. From the Boulevard to the local street, the urban network serving the West Bench is designed to seamlessly link neighborhoods, centers, and other destinations with streets scaled to the pedestrian, cyclist, and transit user as well as the car. A conceptual drawing of this network is illustrated in Figure LT-4.1.1 and described in Table LT-4.1.1.

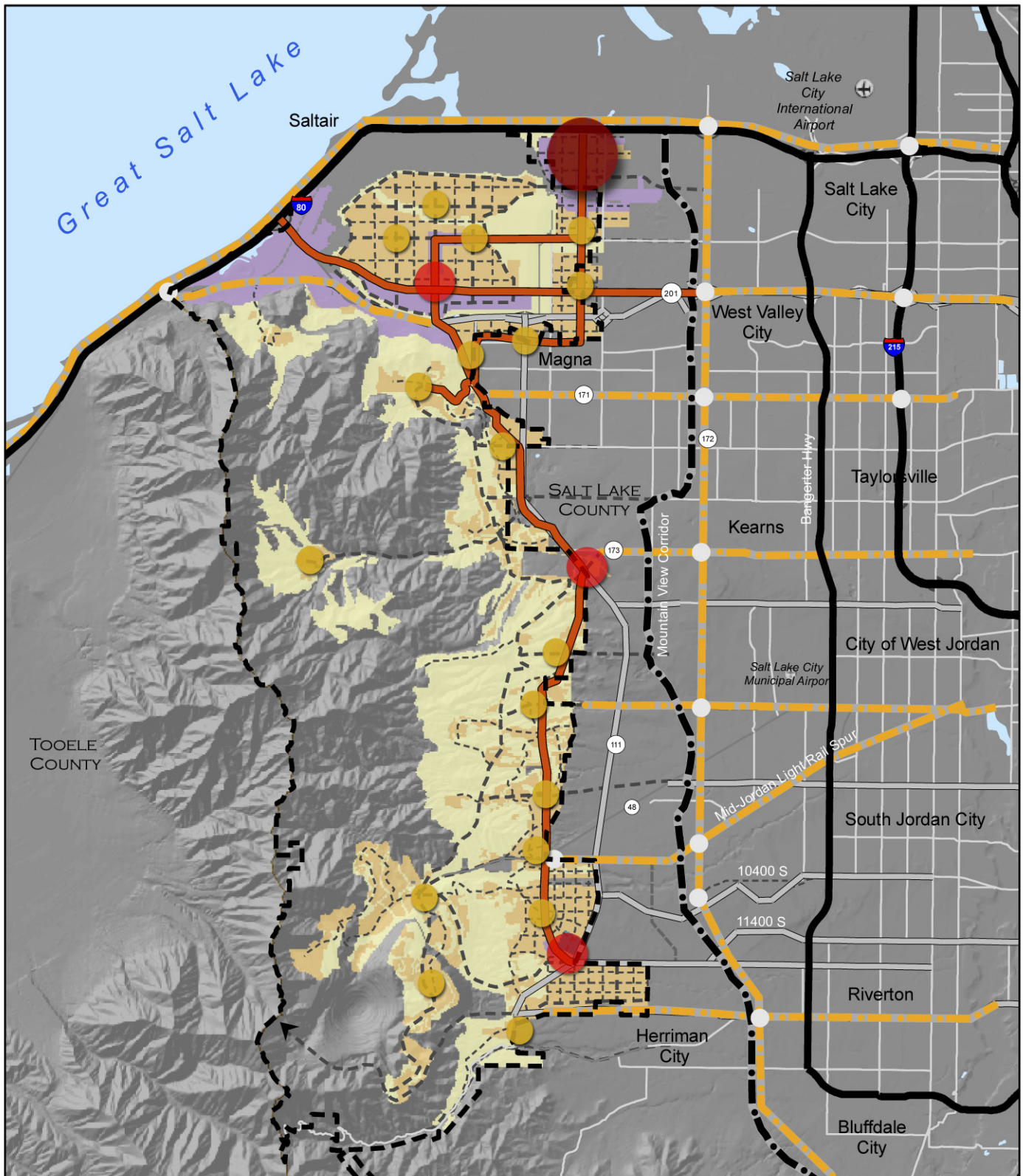


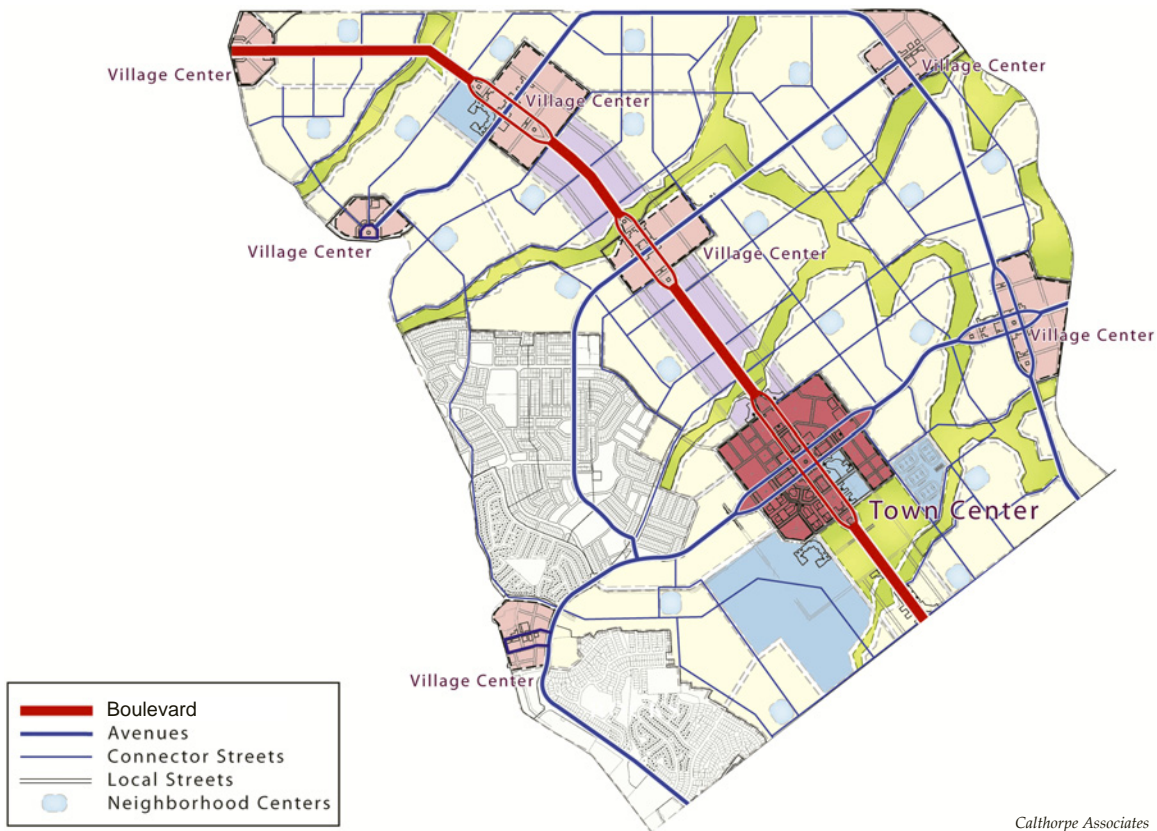
FIGURE LT-4.1. TRANSPORTATION SYSTEMS MAP.

*This map portrays the general concept for the distribution and location of West Bench land uses and major transportation facilities; however, specific locations and sizes of centers are likely to vary as specific development is proposed.*

Mixed-Use Centers	Existing Features	Proposed Features	Land Use
Urban Center	Freeway/Highway	Boulevard	Residential/Neighborhood Centers
Town Center	Cross Streets	Avenues/Arterials	Residential
Village Center	Airport	Interior Connector	Employment Districts
	Planned Freeway/Highway	Road Improvements	College/University
	Planned Transit Corridor	Intersections	County Boundaries
			West Bench Planning Area
			Open Water

EDAW | AECOM

FIGURE LT-4.1.1. STREET NETWORK.



*Calthorpe Associates*

TABLE LT-4.1.1. WBGp MULTI-MODAL STREET STANDARDS.

BOULEVARD	AVENUE	COUPLET (FOR BOULEVARDS & AVENUES)	CONNECTOR STREET	LOCAL STREET
<p>Boulevards will accommodate high capacity multi-modal travel, incorporating auto lanes, dedicated mass transit rights-of-way, bicycle lanes, and safe, convenient routes for pedestrian travel. Boulevards will typically be located along the North-South transit corridor in or near mixed-use centers or Transit Boulevard Areas.</p>	<p>Avenues will provide medium to high capacity circulation for public transit and private vehicles, as well as safe travel for bicyclists and pedestrians. Along highly traveled routes serving higher density destinations, dedicated transit lanes will facilitate rapid movement.</p>	<p>Couplets will provide a balance between pedestrian access and vehicular mobility in some centers. In these higher density locations, couplets shorten pedestrian crossing distances and bring transit vehicles to a curbside location for direct pedestrian access.</p>	<p>Connector streets will enable low to medium capacity multi-modal travel within and between neighborhoods and areas, and will disperse traffic from Boulevards and Avenues. Connector streets will provide connections from Boulevards and Avenues to lower-intensity destinations such as Neighborhood Centers, and will serve as transitional routes between these primary corridors and local streets.</p>	<p>Local Streets will provide lower-capacity circulation within neighborhoods and areas. Local streets will carry slower-moving vehicle traffic in a pedestrian-oriented environment that is also safe for bicycle travel. The use of cul-de-sacs and other discontinuous street patterns is discouraged.</p>

Policy LT-4.1.2 Multiple routes. Traditional suburban street networks tend to direct all trips to arterials and major through streets, even if the trip is to a local destination. Instead, the West Bench network should provide a grid pattern of multiple, local through-streets with sufficient frequency to allow short trips to local destinations, such as centers and transit nodes, on minor streets. This network of alternate local routes along with the appropriate spacing of major thoroughways should be designed in a manner that prevents excessive arterial and boulevard widths.

Policy LT-4.1.3. Right-of-Way Preservation. Creating and updating a comprehensive transportation plan that emphasizes right-of-way preservation and transportation improvements will implement a key component of the core concepts of this plan and provide a road map for sustainable development. The County's Right-of-Way Preservation Plan, the County Transportation Master Plan and the Wasatch Front Regional Transportation Plan are required tools to implement a coordinated and efficient transportation system serving the West Bench and all County communities

Policy LT-4.1.4. Multi-modal Transportation Corridor. From north to south, in appropriate locations, a Boulevard can act as the primary corridor for mass transit, shaping the location of mixed-use centers and major concentrations of commercial and civic activity.

Policy LT-4.1.5: Boulevards, Avenues, and Connector streets. The goal of the circulation plan is to create livable and useful places along all major corridors. Major thoroughways should be designed as Boulevards and Avenues rather than typical arterials. A network of Connector streets may reduce volumes on major roads while allowing local trips to local destinations (see Figures LT-4.1.5a through LT-4.1.5d).

Policy LT-4.1.6: Couplets in centers. As one option, Boulevards and Avenues entering a center may transition to pairs of one-way streets that are better scaled for pedestrian crossings (see Figure LT-4.1.6). The length and design of the Couplet may vary by center type and context but should not to extend through adjoining neighborhoods and areas.

Policy LT-4.1.7: Local street types. Provide a full range of local street types to serve the needs of various centers, areas, and educational facilities. These may include Local Streets, Rural Roads, and Alleys as shown in Figures LT-4.1.7a and LT-4.1.7b. In addition, other street types may be utilized, including County-provided street types or street types set forth in developer design guidelines or approved development standards.

FIGURE LT-4.1.5A. BOULEVARD.

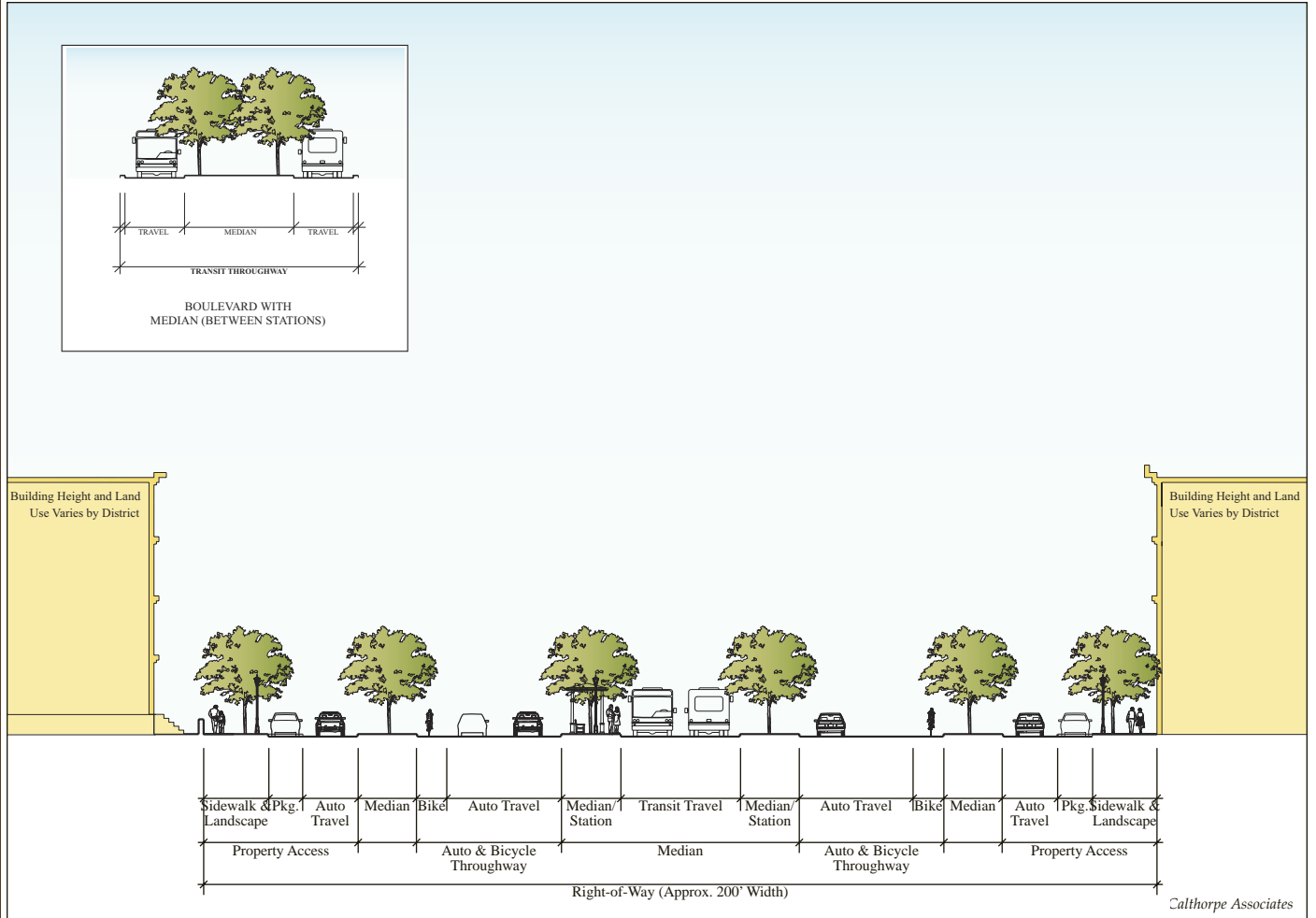




FIGURE LT-4.1.5B. BOULEVARD.

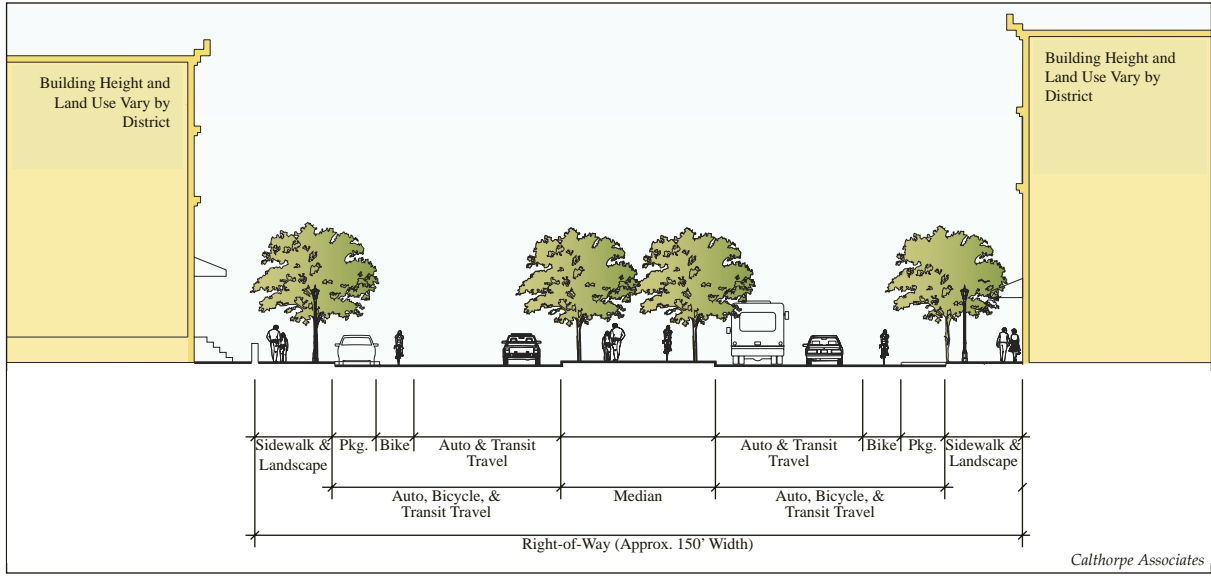


Boulevards can accommodate higher density residential, office, and retail uses by providing service roads at each edge and act as the primary corridor for high-capacity mass transit. The major fixed transit systems in the West Bench should be located in Boulevards in key locations, such as mixed-use centers. One key ingredient of the Boulevard is the use of parallel one-way service roads on each side to establish a pedestrian-friendly edge that allows guest parallel parking, local access, and a scale that can accommodate sidewalk cafes, major building entries, and small shops. This human-scale zone can be separated from through traffic by heavily landscaped medians. The Boulevard may contain multiple through lanes, bicycle lanes, and a dedicated right-of-way for transit.



TYPICAL BOULEVARD

FIGURE LT-4.1.5C. AVENUE.



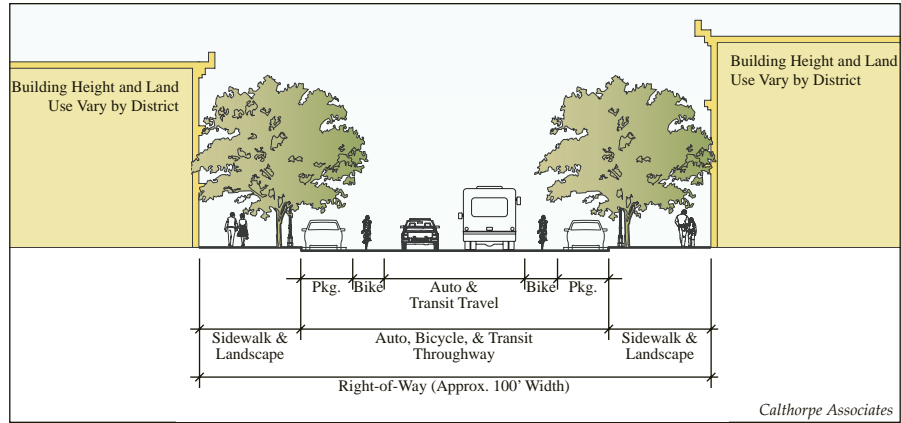
TYPICAL AVENUE



TYPICAL AVENUE

Avenues supplement the Boulevards as major thoroughways without the service roads, providing medium to high capacity circulation for public transit and private vehicles. Along highly traveled routes serving higher density destinations, dedicated transit lanes will facilitate rapid movement. Unlike typical arterials, Avenues feature parallel parking on both sides, generous tree lawns, bike lanes, and sidewalks to create a pedestrian-friendly environment and allow appropriate building uses to front the street. A wide center median is encouraged for Avenues.

FIGURE LT-4.1.5D. CONNECTOR STREET.

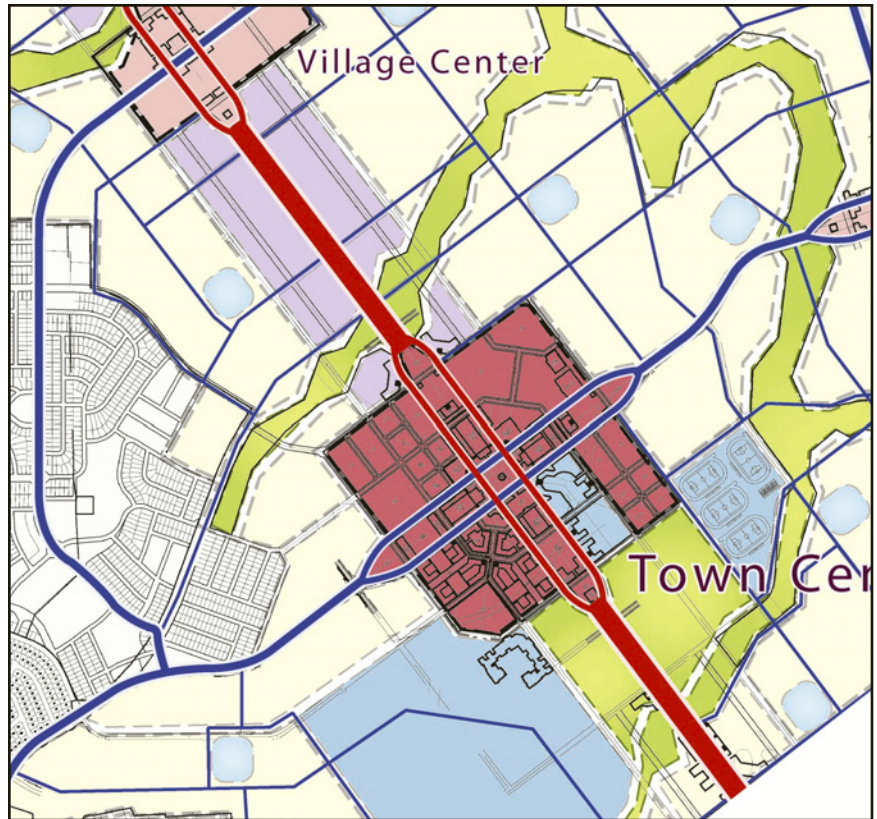


Connector streets are intended to replace the typical collector streets, enabling low to medium capacity multi-modal travel within and between neighborhoods and areas. They are intended to occur with a frequency and connectivity to allow traffic to disperse over parallel routes and serve as transitional routes between these primary corridors and local streets. Typically, they could be spaced on a grid at appropriate intervals and are intended to be continuous across major throughways. Connectors may have parallel parking on both sides, bike lanes, tree lawns, and sidewalks.



TYPICAL CONNECTOR

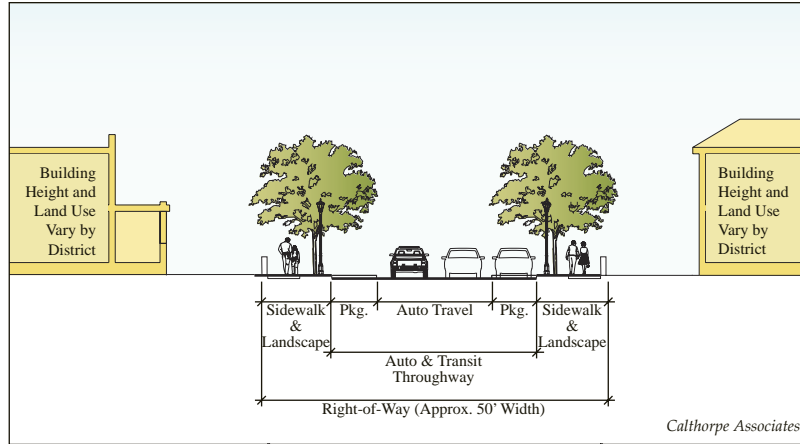
FIGURE LT-4.1.6. COUPLET.



TYPICAL COUPLET

The Couplet is a key circulation strategy designed to allow the centers to simultaneously handle through-traffic while remaining pedestrian friendly. As a Boulevard or Avenue enters a center, it may transition to pairs of one-way streets divided by a block of sufficient size for commercial or mixed-use development. Couplets can handle equal traffic volumes as major throughways and reduce traffic delay at intersections by eliminating left-turn phases in signaling. Each one-way street may have multiple through lanes with parallel parking on each side without excessive roadway width. Intersections could therefore be narrow and more pedestrian friendly as left turns would typically not require turn pockets. Wide sidewalks with street trees can be used to create a pedestrian-friendly urban setting. Transit and bike lanes may be added to the through lanes.

FIGURES LT-4.1.7A & LT-4.1.7B. LOCAL STREET & RURAL ROAD.

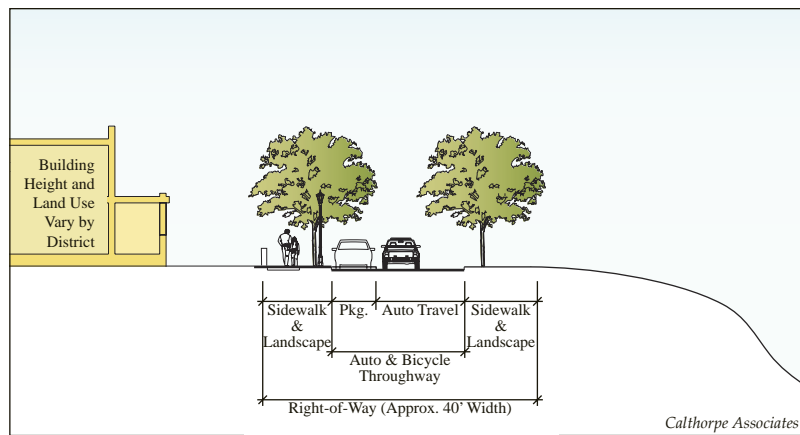


TYPICAL LOCAL STREET



TYPICAL LOCAL STREET

Local streets are the basic networks of the circulation system. As they are at the heart of the neighborhoods, local roads should be designed to encourage slower traffic and create a safe environment for children, bicyclists, and pedestrians. Typically, they should have parallel parking on both sides, narrow crossings at corners, generous tree lawns, and sidewalks.



TYPICAL RURAL ROAD

As many portions of the West Bench are hilly, these areas of steep grades and low density development may have a less formal road. In such areas, rural roads may be used with soft shoulders, no formal street parking, and sidewalks on one side only.



Policy LT-4.1.8: Context-sensitive street design. Any street regardless of classification can vary in section, features, and size in relation to its urban context. For example, a Connector street may have a different sidewalk dimension, tree lawn treatment, pedestrian crossing, and lane width as it moves from a neighborhood into a center. The elements that can vary include:

- Design speed
- Sidewalk size
- Tree lawn treatment and dimension
- On-street parking
- Bike lanes
- Traffic-calming treatments
- Transit facilities
- Pedestrian crossing treatments
- Types of street furniture and utilities (street light design, etc.)



Policy LT-4.1.9: East-West transit corridors. In appropriate locations and alignment with the existing roadway grid system, future extensions and improvements of east-west roads should be designed to connect the West Bench area to the communities to the east. The East-West transit corridors could create more than 18 key intersections with the North-South transit corridor, and should link future centers to existing centers throughout the county.

### ***Objective LT-4.2***

Major public transit transfer points and stations should be located at mixed-use centers.

Policy LT-4.2.1: Location of multi-modal transfer points. Primary transfer points between major transit lines and other transit modes and routes are likely to be located in central locations within Urban and Town Centers. Secondary transfer points should be located within Village Centers.

Policy LT-4.2.2: Location of major transit stations and stops. Specific locations for transit stations and stops will be developed through further study, consistent with the policies under goals LT-1, LT-2, and LT-3.



### *Objective LT-4.3*

A dedicated network of pedestrian and bicycle paths and connections is intended to provide safe, convenient access throughout the West Bench.

Policy LT-4.3.1: Function of trails. Trails should provide safe, convenient routes for pedestrians and bicyclists to both urban and open space destinations throughout the West Bench (see policies in the Parks, Recreation, and Trails Element).

Policy LT-4.3.2: Function and location of bicycle travel lanes. Dedicated bicycle travel lanes within streets typically should be designed to connect to a dedicated network of recreation trails connecting open space, parks, and recreation facilities.

Policy LT-4.3.3: Function of sidewalks. Sidewalks should provide an accessible route of travel for people of all abilities, especially those with disabilities who must rely on the pedestrian environment. These designs will incorporate guidance from the Federal Highway Administration, the United States Access Board, and applicable County ordinances and guidelines.




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## *GOAL LT-5. Purposefully integrate urban form and the transportation network.*

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### *Objective LT-5.1*

Integrate the location of land use types and transportation routes.

Policy LT-5.1.1: Land use linked to street typologies. The WBGPP will guide the County in preparing and implementing land use regulations that recognize specific street typologies. Street typologies are intended to emphasize the access and mobility function of each street classification, and to be matched to the land use classification for the adjacent land use.

Policy LT-5.1.2: Integrated transit facilities and amenities. Transit amenities, such as bus shelters and intermodal facilities, should be provided in conjunction with land use densities and mixes that are transit-supportive. Urban, Town, and Village Centers are logical locations for fully integrated intermodal transfer facilities served by medium and high-capacity routes. Neighborhood Centers may feature local-serving transit service and include appropriate transit amenities. Transit stations and stops will comply with ADA accessibility requirements as adopted by USDOT and USDOJ.

THE WASATCH FRONT REGIONAL COUNCIL HAS NOTED THAT “THE PROACTIVE PLANNING OF DEVELOPMENT AROUND TRANSIT STOPS AT THE TIME WHEN INVESTMENTS ARE BEING MADE WILL ENSURE THAT OUR FUTURE TRANSPORTATION SYSTEM IS SUPPORTED BY SMART LAND USE DECISION-MAKING THROUGHOUT THE GREATER WASATCH AREA.”



Policy LT-5.1.3: Street design. Developer design guidelines and/or development standards should include appropriate street typology that establishes primary and secondary priority design elements for each street type, which may include the following:

- Sidewalks
- Tree lawns
- On-street parking
- Bicycle lanes
- Recreation trails
- Alleys and rear-facing garages
- Landscaped medians
- Well-marked pedestrian crossings and signals
- Street furniture and lighting
- Transit amenities, such as transit shelters
- Traffic-calming features
- Street features to limit traffic conflicts
- Utility placement and maintenance

### *Objective LT-5.2*

Coordinate land use and transportation decisions based upon the four primary principles: Diversity, Design, Density, and Destination.

Policy LT-5.2.1: Parking standards. Where appropriate, centers should be characterized by shared parking facilities that service multiple users, minimizing the segregation of parking among individual entities. Consider national established parking standards, such as the Urban Land Institute (ULI) shared parking design standards and parking accessibility requirements of the Americans with Disabilities Act (ADA), in all centers.

Policy LT-5.2.2: Extensive transit choices. Continuous fixed-route transit service should provide frequent, reliable, and interconnected service linking major centers, Employment Areas, and civic/education areas.

Policy LT-5.2.3: Densities that support transit. The highest residential and employment densities, located in centers and Transit Boulevard Areas, should be located within walking distance of transit stations. Transit can facilitate convenient access to the services, activities, and experiences people want. When complementary uses are clustered together, automobile trips can be combined or even eliminated, freeing up limited transportation resources.



***Objective LT-5.3***

The location of transit and transportation facilities should be coordinated with the location and type of centers to encourage mobility between each type of use and other destinations in the West Bench and the region.

Policy LT-5.3.1: Pedestrian/multi-modal design. Facilities for transit and non-motorized travel should be coordinated with land uses within centers to encourage convenient, comfortable travel by non-auto modes and transit in centers, higher density Residential Areas, and Employment Areas. Pedestrians, cyclists, and transit users should receive the highest priority among travelers in centers.

***Objective LT-5.4***

The location of transit and transportation facilities should be coordinated with the location and type of higher density Residential Areas to encourage mobility between each type of use and other destinations in the West Bench and the region.

Policy LT-5.4.1: Pedestrian/multi-modal design. Facilities for transit and non-motorized travel should be coordinated with land uses within Residential Areas to encourage convenient, comfortable travel by non-auto modes and transit in centers, higher density Residential Areas, and Employment Areas. Pedestrians, cyclists, and transit users should receive the highest priority among travelers in Residential Areas.

***Objective LT-5.5***

Coordinate the location of mixed-use centers and Boulevards and Avenues.

Policy LT-5.5.1: Innovative roadway design elements. Consider innovative, practical roadway design elements that utilize couplets, roundabouts, "squareabouts," and other circulation improvements with explicit land use benefits. Typically located in mixed-use centers, these roadway designs facilitate block sizes and street frontages that can enhance economic viability for commercial land uses planned for the mixed-use centers. These roadway design features are usually characterized by:

- Smaller intersections
- Shorter crossings, less pedestrian exposure to traffic
- Narrower pavement
- Improved automobile speed management



Policy LT-5.5.2: On-street parking. Encourage on-street parking where feasible as a key ingredient to commercial vitality in mixed-use centers. Vast areas of free surface parking are not conducive to walkability or transit service. In addition, on-street parking enhances the pedestrian-friendliness of commercial area streetscapes (see Policy LT-1.1.14). On-street parking design should incorporate guidance from the United States Access Board and applicable County ordinances and guidelines.

Policy LT-5.5.3: Access to regional attractions. Regional attractions, typically located in Urban Centers or civic/education sites in other centers, generally should be located within a short walk or short, frequent shuttle/transit ride from a major transit station.

### ***Objective LT-5.6***

Coordinate the location of Employment Areas and Boulevards and Avenues.

Policy LT-5.6.1: Employment Area density. Encourage sufficient density (e.g., floor area ratio) within Employment Areas to ensure viability of transit service. Lower density office development is generally difficult to serve via transit. Maximum transit ridership should be enhanced by locating a critical mass of employees in proximity to one another and to transit stations.

Policy LT-5.6.2: Employment Area parking design to support transit. Carefully consider the quantity and location of parking when designing Employment Areas, including Transit Boulevard Areas and Industrial and Flex/R&D Areas. Vast areas of free surface parking are not conducive to walkability or transit service. Reliable, safe, and frequent transit service from Employment Areas to Residential Areas is critical in providing an alternative to solo vehicle trips, thereby decreasing the necessity for solo automobile travel.

### ***Objective LT-5.7***

Design Residential Area street networks to maximize transit and bicycle use, minimize high-speed traffic on residential streets, enhance walkability, and increase connectivity.

Policy LT-5.7.1: Transit service to Residential Areas. Encourage the reach of transit services into Residential Areas. Many Residential Areas will not have densities sufficient to support fixed-route service on a street-by-street basis. These likely include the Foothill and Hillside Residential Areas and Cluster Residential Areas. In these instances, encourage flexible transit alternatives (dial-a-bus, paratransit, etc.), as well as bicycles and automobile park-and-ride facilities that can capture trips from Residential Areas.

Policy LT-5.7.2: Trails and lanes within Residential Areas. Support a system of on- and off-street lanes and trails to facilitate bicycle and pedestrian circulation between Residential Areas and nearby centers, Employment Areas, and civic/education sites. These lanes and trails can also provide access from Residential Areas to park-and-ride facilities or inter-modal facilities.

Policy LT-5.7.3: Traffic calming. Design Residential Areas to minimize excessive vehicular speeds. Traffic calming techniques, including forms of both vertical and horizontal deflection, can be employed, where needed.

Policy LT-5.7.4: Encourage street connectivity. Intra-neighborhood connectivity is disrupted by cul-de-sacs and other discontinuous street design patterns. In addition, fire and ambulance service is enhanced by multiple access routes to any location. Therefore, residential streets should be interconnected to the extent feasible. If cul-de-sacs are necessary due to topographical constraints, trail connections at the cul-de-sac terminus are encouraged.

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## *GOAL LT-6. Utilize a comprehensive transportation demand management approach.*

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### *Objective LT-6.1*

Transportation demand should be assessed and managed utilizing a comprehensive approach taking into account land use mix, employment and residential density, system capacity, trip dynamics, and travel behavior.

Policy LT-6.1.1: Comprehensive transportation demand management. To reduce single-occupant vehicular trips, the County should develop comprehensive transportation demand management (TDM) programs including the following trip reduction strategies:

- Transit (bus, light-rail transit [LRT], commuter rail)
- Flexible work hours
- Telecommuting
- Bike/walk
- Parking “cash-out” programs
- Parking management
- Carpools
- Vanpools

As part of the TDM, trip reduction strategies may be identified and implemented to minimize unnecessary automobile travel and reduce impacts on the regional roadway system.

Policy LT-6.1.2: Integrate transportation demand management. Develop TDM goals to achieve level of service standards and reduce roadway capital investment. A combination of roadway construction, transit investment, and TDM can sustain high West Bench mobility. The ability to achieve TDM goals will have a direct relationship to mobility and level of service.

Policy LT-6.1.3: Parking management. Parking management strategies, focusing on parking supply and pricing, should be an integral component of the TDM program. The supply of parking is an important determinant underlying choice of travel mode. Generally, with greater parking supply, fewer drivers will consider using alternative modes. The relevant parking supply includes all available parking in the centers, both on- and off-site within walking distance. Consider preferential parking to carpools and vanpools at all centers and Employment Areas, and parking charges wherever appropriate. The effectiveness of parking pricing to reduce solo driving and increase use of alternative modes depends on several factors, including:

- The level of price and the share of cost actually borne by the driver; and
- The attractiveness of other travel and parking alternatives.

Policy LT-6.1.4: Transit signal priority. The County should investigate means to implement transit signal design to prioritize transit in all signal systems that serve both transit vehicles and motor vehicles.

Policy LT-6.1.5: Design to support TDM efforts. Support TDM efforts by creating walkable community design. This includes:

- Maximum street connectivity.
- Street-oriented buildings.
- Minimum roadway width in street section design.
- Locating transit stops and stations in the mixed-use centers and Transit Boulevard Areas.

## UTILITIES AND SERVICES (US)

Utility services, including water, sewer, telecommunications, power, and natural gas, provide essential resources needed to sustain human life. Given the importance of these services, it is the intent of this element to provide goals, objectives, and policies for developing a safe, predictable, reliable, and sustainable utility infrastructure with appropriate rights-of-way.

While much of the West Bench is currently unpopulated, the towns of Copperton and Magna, as well as the Bingham Mine, all have existing utility infrastructures. Future decisions will determine which communities of the West Bench will be able to reuse these existing utilities or adjust the systems to new uses.

Providing utility services to the West Bench communities has both challenges and opportunities. Geologic and topographic challenges will need to be overcome to bury utilities where appropriate, effectively convey water, minimize grading impacts to the environment, and enhance the aesthetics of the communities. Another challenge will be supplying ample services to the communities while promoting conservation and sustainability. Because the West Bench communities are starting with a clean slate, there are opportunities for careful planning and sustainable design that existing towns are often not afforded. Additionally, new, innovative technologies will be used to conserve resources and protect the natural environment.

One important goal in the Utilities and Services Element is to serve new developments with utilities and services via an underground infrastructure where feasible. In some cases, subsurface geology, topography, cost, and general site conditions may impact the ability to bury utilities. Further investigations and planning will reveal the feasibility of under-grounding utilities on the West Bench.

A second goal is sustainable management of limited water resources to support a growing population and maintain a high quality of life. Sensitive site planning, water-wise landscaping, and effective watershed





management will promote water conservation and sustainability. Capturing and cleaning increased runoff, and minimizing the pollution and disruption of surface waters, while also providing local aquifer recharge through filtration are potential components of a sustainable water management program.

Protecting the health and safety of the community is a main focus of this element. Providing sufficiently staffed and responsive police, fire, and emergency response departments will create a sense of security and a high level of protection. Safety will also be enhanced by promoting public education and emergency awareness as well as redundant yet efficient emergency infrastructure.



Utility services play a vital role in maintaining the quality of life of West Bench communities. The following goals, objectives, and policies promote ways to fully satisfy the needs of the community while promoting conservation and sustainability. See also the Natural Resources Element and Environmentally Sustainable Design Element for other related policies.

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*GOAL US-1. Create reliable, cost-effective, environmentally sustainable systems of utilities, public facilities, and services for West Bench communities.*

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***Objective US-1.1***

Provide adequate utilities systems for reliability, safety, and economic efficiency.

Policy US-1.1.1: Provision of services. Plan for adequate capacity, redundant services, public work facilities, and systems so that reliable power, sewer, and water supplies and appropriate rights-of-way are provided.

Policy US-1.1.2: Coordinate services. Where practical, coordinate with all telecommunication, entertainment, and internet needs to install “one line” to each residence.

Policy US-1.1.3: Telecommunications capacity. Coordinate telecommunication infrastructure, capacity, and redundancy conducive to business, civic, residential, and industry needs.

Policy US-1.1.4: New technology. Plan for future needs and embrace new technologies to meet them.

Policy US-1.1.5: Multi-use areas for recreation and utilities. Develop recreational facilities that can re-use land dedicated for utility use throughout the West Bench. Trails and pathways can share ground used by pipelines and power utilities; small detention areas can also be used as parks.

Policy US-1.1.6: Secondary irrigation sources. Evaluate the possibility of creating secondary water systems for recycled water irrigation both inside the West Bench areas as well as other west side communities.

### ***Objective US-1.2***

Plan for diverse and responsive police, fire, and emergency services that are staffed at appropriate officer-to-resident ratios to create a sense of security and a high level of protection.

Policy US-1.2.1: Local services. Encourage the development of local branches of police, fire, and emergency protection if County services are used. Locate stations and services within regions, and outreach branches within communities, if city services are established.

Policy US-1.2.2: Cooperative agreements. Consider cooperative agreements for police, fire, and emergency protection, and explore sources of funding.

Policy US-1.2.3: Emergency response. Emergency response times (i.e., 911 calls) should meet minimum standards. Fire response to foothills residential development should meet standards for wildfire situations.

Policy US-1.2.4: Wildfire management. Actively manage the fuel loads and condition of natural open space to minimize fire hazards, utilizing tools such as grazing and the Urban-Wildland Interface Code. Promote firewise design, such as fire breaks at interfaces with open space, use of fire-resistant building materials, and structure design appropriate for each development type.

Policy US-1.2.5: Fire protection. Provide clear access and fire protection to construction sites prior to construction using combustible materials. Access to sites should be provided and maintained within established safety parameters.

Policy US-1.2.6: Public awareness. Promote public education and awareness of wildfire prevention, wildfire protection, and neighborhood security.

Policy US-1.2.7: Emergency preparedness. Prepare for natural disaster and emergency response, and coordinate with public agencies to locate emergency shelters, create communication plans, and establish command centers.

Policy US-1.2.8: Search and rescue facilities. Plan for needed search and rescue facilities throughout the area, especially in the upper areas of the West Bench. Coordinate with public agencies, such as Salt Lake County Search and Rescue, the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS). Clearly mark trails and facilities with instructions for help.

Policy US-1.2.9: Crime prevention planning. Deter criminal activities through environmental design, such as by designing lighting to promote public safety while reducing the impact of light intrusion on neighbors.

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*GOAL US-2. Develop a decision-making framework that anticipates future needs and costs, but can efficiently adapt to changing environments and technologies.*

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***Objective US-2.1***

Coordinate County, regional, and statewide decision-making and policy setting for utilities, transportation, and telecommunications issues serving the West Bench that cross jurisdictional boundaries.

Policy US-2.1.1: Service and facility planning. Maintain open lines of communication with local and regional stakeholders and utility providers to ensure that adequate service and facilities are planned for and provided in an efficient manner to residents, retailers, employers, and service providers.

Policy US-2.1.2: Wastewater technologies. Evaluate and plan for the use of new wastewater reuse technologies and facilities. Provide buffering of land uses for the facilities where practical.



Policy US-2.1.3: Infrastructure sizing. Plan for infrastructure systems that can expand to accommodate the anticipated density at build-out to reduce long-term costs, maximize efficiencies, and prepare for the future growth. Reserve land and utility corridors that may be required over time (see Policy LT-4.1.2).

### ***Objective US-2.2***

Ensure efficiency in sustainable utility placement, use, and funding.

Policy US-2.2.1: Financing. Investigate the possibility of creating special districts or other means of providing innovative solutions for financing infrastructure costs.

Policy US-2.2.2: Rates. Work with water, energy, and solid waste and sewer service providers to develop a rate structure that rewards water and energy conservation and wastewater reclamation by residents and business owners.

Policy US-2.2.3: Monitor plans. Plan for anticipated development capacities and incorporate the ability to adjust for changes. Implement a plan review schedule for all utilities based on anticipated growth and demand rates.



## ENVIRONMENTALLY SUSTAINABLE DESIGN (ESD)

The quality of life enjoyed by county residents can be attributed in part to the beauty of the natural setting of the West Bench. As growth continues in the county, the type of development that occurs can have a direct impact on residents' quality of life. Sustainable building practices refer to design and construction practices that significantly reduce or eliminate environmental impacts in five broad areas: sustainable site planning, safeguarding water quality and water efficiency, energy efficiency and renewable energy use, conservation of materials and resources, and indoor environmental quality. Strategies such as sustainable building, air and water quality protection, renewable energy use, waste reduction, and recycling can have positive economic benefits. Environmentally sensitive design will be paramount to successful development in this unique setting.

The WBGPP guides development in a responsible and focused manner that maintains or improves the existing quality of life by sustaining natural systems. Careful and innovative design and construction methods will help protect these systems. The community of Daybreak in South Jordan City is an example of thoughtful planning with consideration toward both the sensitivities and needs of the region. The development incorporates Energy-Star rated homes, on-site stormwater management and containment, community-wide recycling programs, and geothermal energy use to support long-range sustainability goals.

The purpose of the goals, objectives, and policies of this section is to define ways to incorporate sustainable practices into the construction, maintenance, and ongoing operation of both buildings and communities. Many benefits stem from homes built with greater energy, water, and resource-efficiency. Some of these benefits include reduced energy consumption, protection of ecosystems, and improved occupant health. Promoting sustainable building helps achieve sustainable and efficient use of material, siting, and land resources.

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*GOAL ESD-1. Protect our region's air, water, and energy resources, providing a healthy environment for our citizens.*

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**Objective ESD-1.1**

Protect air quality to provide a healthy environment for Salt Lake County citizens.

Policy ESD-1.1.1: Air quality. Work with the Department of Environmental Quality to address and monitor vehicle, industrial, commercial, and construction-related emissions that may impact air quality.

Policy ESD-1.1.2: State Air Quality Implementation Plan. Innovations from the development proposed under the WBGPP should receive consideration within future updates to the State Air Quality Implementation Plan. This will require interaction at the State level in an effort to help the State develop comprehensive strategies to reduce emissions of air pollutants.

Policy ESD-1.1.3: Alternatives to driving. Promote programs such as carpooling, carshare, public transit, bicycling, and telecommuting that help reduce pollution.

Policy ESD-1.1.4: Agency plans. Coordinate with the Wasatch Front Regional Council, Utah Transit Authority (UTA), UDOT, and other transportation agencies so that land use and transportation decisions will protect regional air quality.

Policy ESD-1.1.5: Emission reduction. Incorporate emission reduction into programs such as "free transit," voluntary "no drive," and voluntary "no burn" days within the region.

**Objective ESD-1.2**

Encourage the implementation of new sources of energy production.

Policy ESD-1.2.1: Renewable energy. Encourage the implementation of renewable energy technologies such as geothermal, solar, and wind power.

Policy ESD-1.2.2: Local energy production. Encourage the local production of renewable energy and neighborhood-scale systems that reduce the need for large, regional energy infrastructure systems. Examples of neighborhood scale-systems include photovoltaic cells,



wind turbines, geothermal package plants, and similar systems. This type of local approach to energy production is not only healthy from an environmental perspective, but it can also lead to local job creation with respect to system installation and operations.

### ***Objective ESD-1.3***

Manage the natural water cycle through advanced watershed management techniques to protect and recycle the purity and volume of water within the watershed and promote aquifer recharge.

Policy ESD-1.3.1: Watershed protection. Protect and monitor the long-term quality of the Great Salt Lake watersheds. Encourage open space protection, riparian preservation, watershed basin models, monitoring, and/or strategic implementation of stormwater Best Management Practices (BMPs) as important tools in maintaining long-term watershed quality.

Policy ESD-1.3.2: Integrated stormwater system. Plan for reliable and innovative stormwater systems that maximize available water resources, minimize the impacts to surrounding infrastructure and the natural environment, lower contaminants from surface runoff, and capitalize on stormwater infiltration and surface run-off opportunities to increase groundwater recharge opportunities.

Policy ESD-1.3.3: Wastewater treatment. Explore the use of smaller wastewater treatment facilities that could treat wastewater for reuse (irrigation).

Policy ESD-1.3.4: Water quality. Protect overall water quality, encouraging stormwater infiltration, groundwater recharge, and removal of contaminants from stormwater runoff, and best practices for water quality stewardship.

Policy ESD-1.3.5: Watershed stability. Seek to preserve or improve the existing and historical natural conditions of the watershed.

Policy ESD-1.3.6: Habitat protection. Consider stormwater impacts to streams, seeps, wetlands, and riparian habitats when designing storm drainage systems. Seek to protect existing drainage channels from erosion both during the construction process and after improvements are complete.

Policy ESD-1.3.7: Retention and recharge. Where practical, integrate stormwater collection into a pond or lake within open space and park systems to create aesthetic and ecological amenities for residents. Evaluate the feasibility of regional or local retention and recharge

facilities where needed to mitigate impacts on historic hydrology. Where stormwater detention or retention is impractical, manage the downstream infrastructure to accommodate increases in stormwater runoff.

Policy ESD-1.3.8: Critical watersheds. Minimize development impacts to critical watersheds, through such strategies as the minimal use and extent of non-permeable surfaces.

Policy ESD-1.3.9: Drinking water. Protect West Bench drinking water sources in aquifer recharge and wetland zones, and establish appropriate restrictions on contaminants and uses in these areas.

Policy ESD-1.3.10: Snow storage. Coordinate snow storage locations with drainage facilities to reduce hazards and to capture runoff.

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## *GOAL ESD-2. Demonstrate environmental responsibility in the design, construction, and operation of communities in the West Bench.*

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### **Objective ESD-2.1**

Encourage the implementation of sustainable building design for new building construction in both the public and private sectors.

Policy ESD-2.1.1: LEED. Encourage the design and construction of LEED (Leadership in Energy and Environmental Design) certified buildings in both the public and private sectors.

Policy ESD-2.1.2: Climate. Respond to the regional climate in design, construction, and maintenance of buildings, such as in the use of insulation, placement and sizing of windows, and the location and siting of buildings and vegetation relative to temperatures and solar access.

Policy ESD-2.1.3: Energy efficiency. Encourage energy-efficient homes, such as Energy Star-rated homes. Promote energy-saving strategies such as:

- Energy-efficient windows to reduce heat loss in the winter and heat gain in the summer.
- Efficient water fixtures in residential homes to conserve water.
- Energy-efficient furnaces, air conditioners, water heaters, dryers, and appliances.
- Energy-efficient lighting and natural lighting.

### KEY CONCEPTS OF LEED

#### SUSTAINABLE SITES

- Erosion & Sedimentation Control
- Appropriate Site Selection & Redevelopment
- Alternative Transportation
- Reduced Site Disturbance
- Stormwater Management
- Heat Island Reduction
- Light Pollution Reduction

#### WATER EFFICIENCY

- Water Efficient Landscaping
- Innovative Wastewater Technologies
- Water Use Reduction

#### ENERGY & ATMOSPHERE

- Building Systems Commissioning
- Optimized Energy Performance
- CFC Reduction
- Renewable Energy & Green Power Use

#### MATERIALS & RESOURCES

- Storage & Collection of Recyclables
- Building & Resource Reuse
- Construction Waste Management
- Recycled Content Materials/ Local/Regional Materials/ Rapidly Renewable Materials/ Certified Wood Material Use

#### INDOOR ENVIRONMENTAL QUALITY

- Minimum IAQ Performance
- Environmental Tobacco Smoke Control
- Carbon Dioxide Monitoring
- Increase Ventilation Effectiveness
- Low-Emitting Material Use
- Chemical & Pollutant Source Control
- Controllability of Systems
- Thermal Comfort
- Natural Daylighting



Policy ESD-2.1.4: Innovation. Encourage continuing innovation in design to explore new environmentally sustainable materials, construction methods, and maintenance programs as development occurs in the West Bench.

Policy ESD-2.1.5: Hazardous waste. Discourage the use of potentially toxic and hazardous materials in building construction, and encourage the use of alternative materials and practices that are environmentally benign to improve indoor air quality and other health impacts.

### ***Objective ESD-2.2***

Encourage sustainable development that promotes the efficient use of land, conservation of natural resources, and resource-efficient design and construction.

Policy ESD-2.2.1: Water efficiency. Encourage conservation strategies for potable water in common or public landscaped areas through techniques such as water-wise or native plants, minimal turf areas, high-efficiency irrigation technology, or the use of rainwater harvesting or water recycling.

Policy ESD-2.2.2: Heat islands. Minimize the “heat island” effect common to urban areas through tools such as light-colored paving and roofing to reflect solar radiation, and trees and landscaping in parking lots to provide shade and improve air quality.

Policy ESD-2.2.3: Landscape maintenance. Evaluate ways to reduce the use of pesticides, fungicides, and herbicides and promote less-polluting, safer products.

Policy ESD-2.2.4: Energy-efficient street lighting. Provide energy-efficient street lighting at appropriate levels to reduce light impacts on dark skies.

Policy ESD-2.2.5: Energy-efficient infrastructure. Encourage compact development and infrastructure systems. In addition to providing low impact and on-site means of providing necessary infrastructure and creating jobs within the community, these systems reduce fossil fuel usage and minimize impacts to air quality.

Policy ESD-2.2.6: Site grading. Design developments to respect the existing topography and historic drainages, and conserve existing mature trees and significant vegetation, where feasible.

### ***Objective ESD-2.3***

Reduce the impacts of solid waste disposal on existing landfills to extend their life and limit the need for new landfills.

Policy ESD-2.3.1: Waste reduction. Promote pilot household and commercial business waste reduction and pre- and post-collection recycling programs.

Policy ESD-2.3.2: Organic waste recycling. Promote a yard waste recycling program to keep organic material out of the landfills. For example, collected yard wastes can be composted for use in community parks and for sale to the public.

Policy ESD-2.3.3: Construction waste recycling. Promote a construction waste recycling program to divert solid waste from the landfill.

Policy ESD-2.3.4: Landscape and household hazardous materials. Encourage substituting safer products, and reducing the use of and responsibly disposing of hazardous pesticides, fungicides, and herbicides. Discourage household storage of hazardous materials.



### ***Objective ESD-2.4***

Reduce the amount of embodied energy used in new construction. Embodied energy “is the energy required by all the processes associated with production of a building, from the acquisition of natural resources to product delivery.”

Policy ESD-2.4.1: Local resources. Encourage the use of locally based labor and building materials to reduce the total energy consumption of new construction.

Policy ESD-2.4.2: Recycled building materials. Encourage the salvage and reuse of building materials and recycled products in new construction.

Policy ESD-2.4.3: Embodied energy in materials. Encourage the use of building materials that have a low embodied energy rating, such as locally produced materials, materials with a higher recycled content, and materials that require less energy to produce or manufacture.



### *Objective ESD-2.5*

Work with the community to foster interest in sustainable design.

Policy ESD-2.5.1: Partnerships. Promote partnerships among public and private sector groups to promote environmentally sensitive design.

Policy ESD-2.5.2: Education programs. Encourage community programs (e.g., workshops, newsletters, or a website) to educate the public on subjects such as sustainable design, energy conservation, and sustainable construction.

Policy ESD-2.5.3: Training programs. Promote training seminars and continuing education programs for local government officials, planners, developers, contractors, and maintenance personnel in sustainable design and building technologies.

Policy ESD-2.5.4: Demonstration projects. Foster demonstration projects to illustrate environmentally sustainable strategies, such as:

- New energy sources
- Composting
- Recycling
- Sustainable building model homes, and public and commercial buildings
- Water-wise native and adapted non-invasive landscaping
- Permeable paving
- Sustainable streets with innovative stormwater BMPs
- Renewable energy
- Community gardens

Policy ESD-2.5.5: Environmental sustainability. Encourage the development of businesses that are environmentally sustainable and that have made a positive commitment to the environment and community as evidenced by their corporate policies and practices.



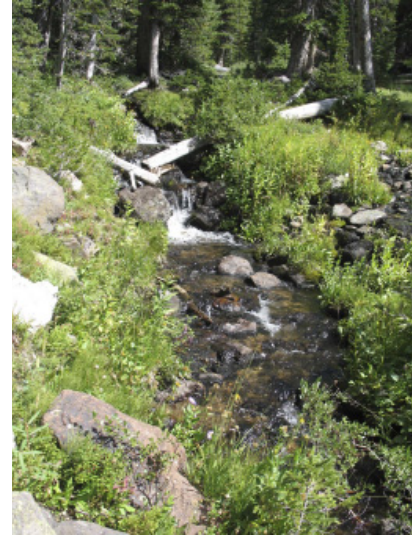
## NATURAL RESOURCES (NR)

Salt Lake County is blessed with the highly scenic backdrop and natural resource base of the Oquirrh Mountains. High mountain peaks are the most obvious of these visual resources, but they also include many other features such as open meadows, riparian corridors, wetland areas, and forested areas. The extensive amount of West Bench and other public lands (see Figure 2-4) offers the opportunity to employ a balanced approach to development and resource conservation, eventually incorporating a large, contiguous system of open space within the Oquirrh Mountains.

Thousands of acres of land exist in the West Bench Planning Area, much of which are constrained lands with slopes over 30 percent, and are not planned for urban development. Beyond a designation on the Future Land Use Map (Figure LT-1.1), a formal agreement must be in place for their permanent stewardship. As mining operations approach the end of their economic life and after additional studies are completed, a long-term management plan for these lands will be implemented. The management emphasis in these areas will be resource protection, including wildlife management and cultural resource protection. Appropriate recreational access and activities, such as skiing, hiking, mountain-biking, wildlife viewing, and picnicking, may also occur at key locations in the future.

A portion of the Oquirrh Mountains may be as open space, in a predominantly open and undeveloped condition suitable for any of the following:

- Natural areas;
- Wildlife and native plant habitat;
- Important wetlands or watershed lands;
- Stream corridors;
- Passive, low-impact activities;
- Little or no land disturbance; and/or
- Trails for non-motorized activities.



**OPEN SPACE**

OPEN SPACE IS LAND THAT MAY BE PERMANENTLY PROTECTED THROUGH AGREEMENTS, EASEMENTS AND TRUSTS. UNLIKE A PARK, OPEN SPACE IS TO REMAIN IN A NATURAL OR NATURAL-APPEARING CONDITION FOR PERPETUITY. IN GENERAL, MOST OPEN SPACE WILL CONSIST OF LAND THAT:

- IS CONSERVED IN OR RESTORED TO A NATURAL-APPEARING STATE, INCLUDING, BUT NOT LIMITED TO, RIPARIAN CORRIDORS, AGRICULTURAL OR WORKING LANDS, WETLANDS, WILDLIFE HABITAT;
- CONTRIBUTES TO THE UNIQUE CHARACTER OF THE REGION;
- FUNCTIONS AS A LINEAR, CONNECTIVE GREENWAY BETWEEN OTHER CONSERVED LANDS; AND/OR
- HAS THE POTENTIAL TO FUNCTION AS A DESTINATION LOCATION BY DRAWING PEOPLE TO VISIT, RECREATE, OR OTHERWISE EXPERIENCE IT.

Open space may be preserved, enhanced, and restored to maintain or improve the natural, scenic, ecological, cultural, hydrological, or geological resources of the West Bench. Portions of the open space system may also be used for publicly or privately owned or managed recreational, social, cultural, educational, public/quasi-public facilities, civic uses, developed parks, and other related uses. Other elements in this chapter, such as the Parks, Recreation, and Trails Element, provide separate goals and policies for active recreation and other civic uses that can occur on these portions of the open space system.

A healthy West Bench ecosystem also benefits our human communities in tangible ways. For example, the natural cycles and plant and wildlife habitats of the Oquirrh Mountains provide a clean water supply, climatic moderation, flood protection, purification of air, recycling of essential nutrients, and crop pollination. These lands also provide an opportunity for contiguous blocks of habitat, wildlife migration, and scenic protection. Ideally, protected lands should form an interconnected natural system to maintain and enhance these natural systems.

The goals for this section are based on community values, including respecting the landscape, continuing traditional land uses such as mining and mineral and metal processing, conserving natural resources, protecting wildlife, and creating an interconnected natural system of conserved lands.

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*GOAL NR-1. Conserve and manage designated open space for the continued health of the environment and enjoyment of the region’s residents.*

---

**Objective NR-1.1**

Manage the West Bench lands to protect natural resources and preserve cultural areas.

Policy NR-1.1.1: Land protection. Protect sensitive areas and other important resource values in the Oquirrh Mountain Range (Figure NR-1.1.1). These may include:

- Lands that are constrained due to environmental sensitivity or geologic hazards;
- 100-year floodplains designated by the Federal Emergency Management Agency (FEMA);
- Lands with important scenic values or that contribute to the visual quality of West Bench communities;
- Lands with important cultural values;
- Lands with important wildlife habitat or other natural value; and/or
- Lands that have important recreational values; and/or
- Lands with mining related activities and low-intensity uses.

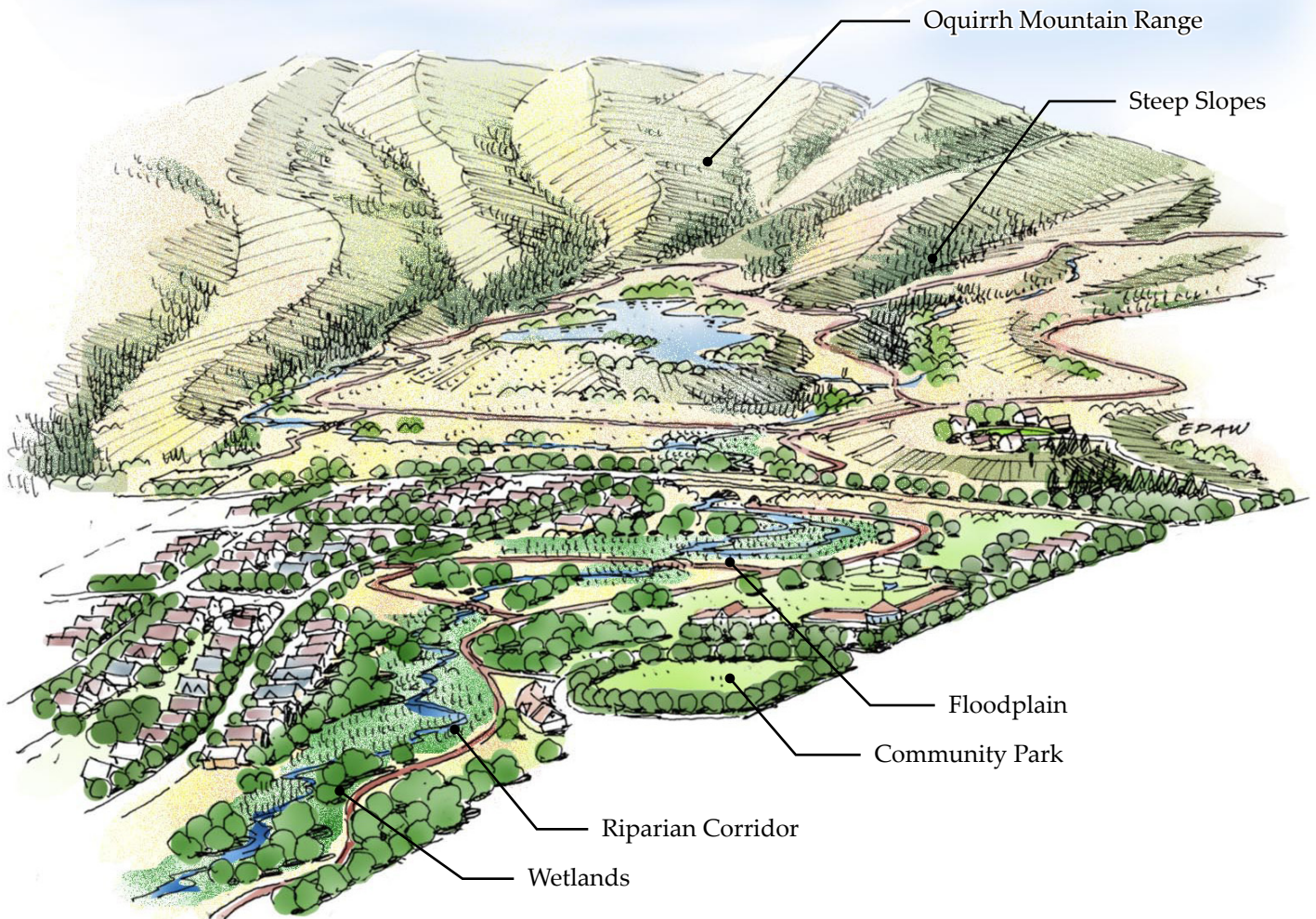
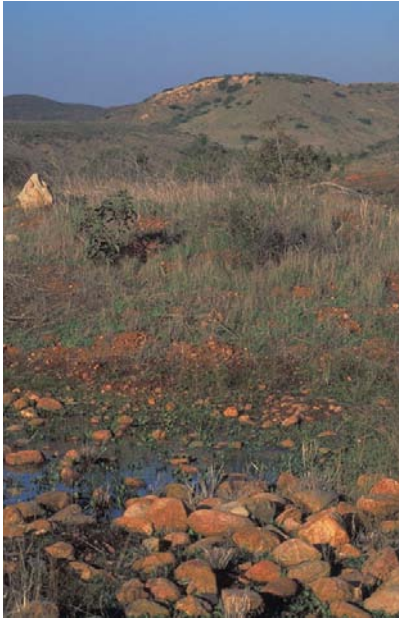


FIGURE NR-1.1.1. OPEN SPACE SYSTEM.



### ***Objective NR-1.2***

Create a system of permanently conserved open space. This system should be designed to sustain ecological functions, be interconnected, and provide opportunities for appropriate levels of public use.

Policy NR-1.2.1: Open space system. The open space system is encouraged to include lands identified as sensitive areas or lands having important resource values as described in Policy NR-1.1.1.

Policy NR-1.2.2: Open space access. Allow appropriate recreational use of the open space system, ranging from limited access in environmentally sensitive areas to increased access near recreational amenities.

Policy NR-1.2.3: Connections. Coordinate with regional entities to identify and preserve vital open space connections to the West Bench. These connections will form the basis of a regional open space system.

### ***Objective NR-1.3***

Protect the natural character and ecological values of open space through effective management.

Policy NR-1.3.1: Coordination. Coordinate and cooperate with other agencies and entities to identify, preserve, restore, and manage open space economically and efficiently to benefit county residents.

Policy NR-1.3.2: Management. Use a variety of strategies to manage and maintain open space, including: public/private partnerships, intergovernmental agreements, community associations, and other arrangements.

Policy NR-1.3.3: Partnerships. Promote and maintain partnerships with townships, cities, adjacent counties, State and Federal agencies, non-profit organizations, landowners, and others to plan for a regional system of open space.



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## ***GOAL NR-2. Protect important scenic features and the natural character of West Bench communities.***

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### ***Objective NR-2.1***

Maintain the visual integrity of hillsides, ridgelines, steeper slopes, and significant vegetation clusters and provide for the retention of

distinct topographical features that define the unique visual character for the region.

Policy NR-2.1.1: Scenic features. Identify the distinctive scenic features (ridgelines, prominent slopes, vegetation clusters, etc.) that define the unique visual character of the Oquirrh Mountains and coordinate these with plans for development (clustering, road alignments, etc.) to conserve key features.

Policy NR-2.1.2: Viewpoints. Incorporate key vistas, viewpoints, and overlooks into parks and open space where feasible.

Policy NR-2.1.3: Urban development. Design development on land with steep slopes to minimize visual impacts, vegetation removal, wildfires, erosion, mudslides, and ensure safety.

Policy NR-2.1.4: Ridgelines. Discourage urban development on prominent ridgelines to allow natural landforms to appear as prominent features in the landscape.

Policy NR-2.1.5: Unique landscapes. Incorporate unique landscape features when designing new urban development.

Policy NR-2.1.6: Utility aesthetics. With the exception of high capacity transmission and distribution lines, place utilities underground within easements and rights-of-way, lowering the impacts to existing natural features such as natural vegetative patterns and landforms.

Policy NR-2.1.7: Clustering. Encourage residential clustering to maximize contiguous open space and viable habitat, particularly in areas with steeper slopes (Figure NR-3.1.7).

Policy NR-2.1.8: Location and dominance. Encourage building and road locations and designs so that they are not obtrusive, do not loom out over the hillside, do not break prominent skylines, and are not located over significant drainageways.

Policy NR-2.1.9: Design. Reduce the visual impact of new development on visible hillsides through techniques such as minimizing grading, appropriate siting, and the use of appropriate colors, materials, and levels of reflectivity.

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*GOAL NR-3. Conserve and manage native plant and animal communities to maintain biodiversity and ecosystem functions.*

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**Objective NR-3.1**

Conserve streams, seeps, and wetlands from alterations that impact their ecological functions and habitat values.

Policy NR-3.1.1: Wetland and stream buffers. Conserve wetland and stream habitats by creating appropriate setback distances for urban development. Determination of buffer distances should consider habitat functions, water quality, slope, and minimum County, State, and Federal requirements.



FIGURE NR-3.1.7. CLUSTERING.

Policy NR-3.1.2: Instream flows. Limit impacts to functioning aquatic and riparian habitats. Limit new diversions of seeps and remove or modify existing diversions on a case-by-case basis to maintain adequate flows.

Policy NR-3.1.3: Mitigation. Mitigate the unavoidable loss of wetland and riparian habitat, as per applicable regulations, and restore natural areas temporarily disturbed during construction.

### ***Objective NR-3.2***

Identify and manage occurrences of special status plant species.

Policy NR-3.2.1: Utah Special Status plant species. Use knowledge of Utah Special Status plant species and locations to inform site development, open space planning, and park locations to avoid or minimize impacts to Special Status plants.

### ***Objective NR-3.3***

Conserve the integrity of native upland plant communities.

Policy NR-3.3.1: Landscaping. Encourage landscaping with non-invasive/native upland plants and other drought-tolerant species for residential lots and developed parks. Educate homeowners and park managers on the benefits of native species and drought-tolerant plants in West Bench landscapes.

Policy NR-3.3.2: Upland restoration. Use native plant stock and seed for restoration and erosion control projects. Allow the use of seed mixes that include sterile or short-lived non-native species, where needed, to prevent erosion while native plants are establishing.

Policy NR-3.3.3: Weed management. Where feasible, preserve the integrity of native plant communities and prevent the establishment and spread of weeds in and near developed areas and along road/utility corridors.

### ***Objective NR-3.4***

Conserve and manage significant wildlife habitats.

Policy NR-3.4.1: Elk and deer management. Determine the feasibility of maintaining a viable elk herd and deer population compatible with West Bench development and consider management strategies for these species. Investigate a variety of management tools and alternatives that could be used to maintain a viable elk herd and deer population on the West Bench.

## **SPECIAL STATUS PLANTS**

SPECIAL STATUS PLANTS ARE THOSE PLANTS FOUND ON PUBLIC LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT WHOSE SURVIVAL IS OF CONCERN DUE TO . . .

- THEIR LIMITED DISTRIBUTION.
- LOW NUMBER OF INDIVIDUALS AND/OR POPULATIONS.
- POTENTIAL THREATS TO HABITAT.

THE BLM USES THE TERM "SPECIAL STATUS PLANTS" TO INCLUDE . . .

- FEDERAL ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES.
- UTAH STATE ENDANGERED, THREATENED, AND RARE SPECIES.
- BLM SENSITIVE PLANTS.



Policy NR-3.4.2: Habitat conservation and management. In consultation with the resource agencies and conservation organizations, effectively manage wildlife habitat in the West Bench, with emphasis on mule deer, elk, raptors and migratory birds, bats, and Utah Sensitive Species.

Policy NR-3.4.3: Habitat fragmentation. Focus development in the eastern portion of the West Bench and cluster development to avoid or minimize disturbance in previously undisturbed areas. Generally locate and design development activities, including the general layout of lots, roads, driveways, utilities, drainage facilities, and other facilities, in a manner that minimizes the amount of land disturbance.

Policy NR-3.4.4: Buffers. Provide appropriate buffers between areas dominated by human activities and core areas of wildlife habitat, including corridors designed to facilitate wildlife movement, and provide connections between blocks of habitat.

Policy NR-3.4.5: Road routing. Without isolating neighborhoods, route and/or design roads within natural areas to avoid significant impacts to sensitive habitats and minimize the fragmentation of large blocks of habitat where feasible.

Policy NR-3.4.6: Road design. Design roads within natural areas in ways that minimize noise and include features to reduce wildlife mortality, such as speed limits, signage, underpasses, and large culverts.

Policy NR-3.4.7: OHV/ATV use. To minimize erosion and reduce disturbance impacts to wildlife, regulate use of off-highway vehicles (OHVs) and all-terrain vehicles (ATVs) to areas specifically designated and managed for such use, if any such areas are identified.

Policy NR-3.4.8: Domestic pets. Enforce leash-laws in open space and parks to minimize impacts to wildlife from domestic pets and impacts to pets from wildlife. Local animal control agencies should educate homeowners, particularly at the edges of developed areas, on the benefits of keeping cats indoors to reduce effects on bird populations and lower the risk of attracting cougars and coyotes.



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*GOAL NR-4. Minimize hazards related to geology, soils, industrial activities, and hazardous materials.*

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***Objective NR-4.1***

Proposed land uses and development should address known geologic and seismic hazards, including slope and soil stability, liquefaction, landslide, and erosion in natural areas.

Policy NR-4.1.1: Land use and hazards. Design land use activities to reduce the risk from geologic and seismic hazards, and to reduce erosion acceleration associated with grading and excavating disturbances. Additional study, such as a geologic review may be required prior to development.

Policy NR-4.1.2: Mine waste rock and tailings. Continue to assess the stability of mine sites, concerning waste rock, tailings impoundment, and liquefaction for urban uses.

Policy NR-4.1.3: Avalanche. Incorporate planning measures to minimize hazard potentials for severe damage to property due to avalanche and debris flows.

Policy NR-4.1.4: Wildfires. Incorporate natural fire breaks and preventative design measures into neighborhood planning and clear adjacent susceptible vegetation to minimize the potential for catastrophic loss due to wildfire.

Policy NR-4.1.5: Stormwater. Development near mouths of canyons should be designed and located to avoid conflicts with potential flooding.



## PARKS, RECREATION, & TRAILS (PR)

Parks and recreational facilities and amenities are important aspects of a livable and healthy community. Parks and trails connect to the community’s open space system, providing landscape diversity and relief from urban development. It is the goal of this Plan that parks be distributed throughout the West Bench to provide residents access to a variety of active and passive recreational opportunities.

A well planned system of local and regional parks and recreational facilities can provide a range of active and passive recreational activities for future residents of West Bench and the entire Salt Lake Valley (Figure PR-1). Active recreation encompasses a functional system of developed sites, including organized, scheduled activities such as soccer and softball. Passive recreation is also important and includes activities such as informal play, picnicking, walking, horseback riding, and jogging. Community centers may be incorporated into selected parks, offering residents a host of recreational activities, community-oriented programs, and events.

The following goals, objectives, and policies define a system of parks, recreation, and trails intended to provide for the recreation needs of residents of the West Bench.

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*GOAL PR-1. Provide and maintain a diverse, high-quality, safe, and affordable system of parks and recreational facilities that provide for the recreational needs of all age groups.*

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### **Objective PR-1.1**

Provide a variety of park types and sizes to meet a broad spectrum of recreation needs, distributed in a manner that minimizes overcrowding and overuse.

Policy PR-1.1.1: Park Standards. As each community in the West Bench area is designed and developed, future citizens should have access to a variety of regional parks, community parks, neighborhood parks, open

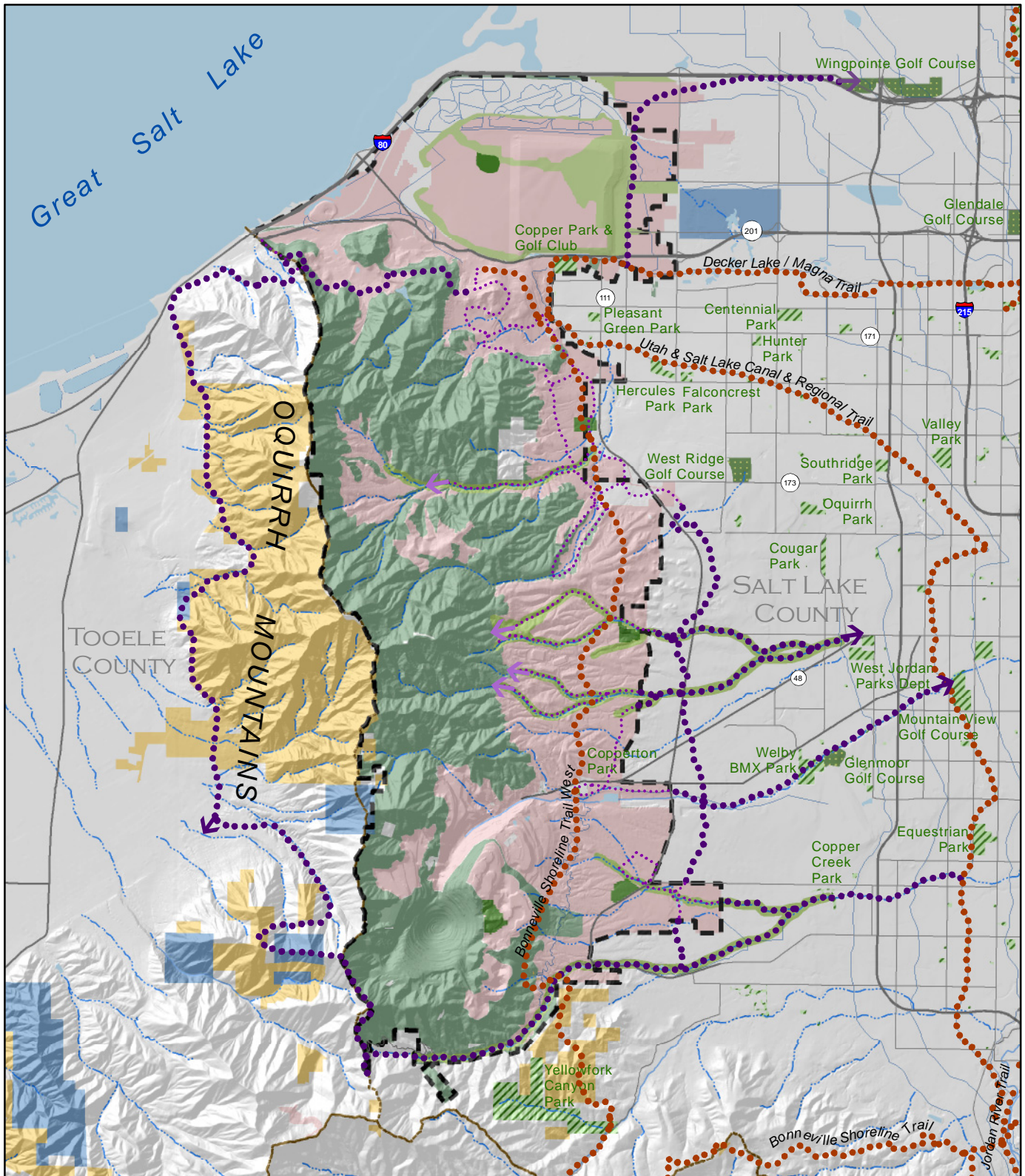


FIGURE PR-1. PARKS, RECREATION, AND TRAILS

This map portrays regional parks for the West Bench, but locations are likely to vary as specific development is proposed.

●●● Proposed Regional Trails*	▭ West Bench Planning Area	■ Proposed WBG Regional Parks	■ WB Developable Area
●●● Proposed WBG Regional Trails**	▭ County Boundaries	■ Proposed WBG Greenway	■ Bureau of Land Management
●●● Proposed WBG Trails	☪ Open Water	▨ Public Parks	■ State of Utah
— Highways	~ Stream/River	■ Public Golf Courses	
— Key Local Roads		■ Open Space	

\*Source: Salt Lake County Parks & Recreation 2005 Master Plan  
 \*\*Source: Calthorpe Master Plan for the West Bench

0 1 2 3 Miles



space and trails. Parks that are dedicated to Salt Lake County should be consistent with the County Park standards contained in the Salt Lake County Parks and Recreation Master Plan. Regional Parks that are dedicated to the State, or Federal government should be consistent with the operating park standards for these respective receiving entities.



PR-1.1.2 – Regional Parks. Regional parks vary in size and in function but are generally greater than the standard size and scale of community parks. Ideally, Urban Regional Parks should be located near transit stops and may incorporate natural amenities such as creeks and wetlands. Built facilities may include athletic fields, group picnic facilities, recreation centers, swimming pools, expanded children’s playgrounds, and restrooms, amphitheatres, campgrounds, shooting sport facilities, concessionaire facilities, trails, nature interpretive centers, equestrian trails and ancillary facilities, dog parks, skate parks, golf courses, multi-purpose hard-courts, and tennis courts. Regional Nature Parks are predominantly large tracts of aesthetically pleasing land in a natural condition, unaltered by human activity and development. Natural or historic points of interest may be included as well as wetlands, natural drainages, riparian corridors, meadows, forest lands etc. Figure PR 1.1.2 illustrates one concept for regional park development.



PR- 1.1.3 – Community Parks. Community parks provide the greatest variety of recreational opportunities and generally include a wide array of amenities, such as athletic fields, group picnic facilities, recreation centers, swimming pools and expanded children’s playgrounds. Because of their size and design, community parks draw a greater number of park users and should be located near transit stops. Figure PR 1.1.3 illustrates one concept for community parks.



PR – 1.1.4 – Neighborhood Parks. Neighborhood parks are smaller than community parks in size and should be primarily focused on serving walk-to or bike-to recreation needs and where possible, located adjacent to schools. They are generally developed areas of lawns and trees, often providing minimal small park amenities such as individual picnic tables, small group picnic pavilions, basketball courts, sand volleyball courts, and children’s playground equipment.

PR-1.1.5 – Other Parks. Other parks may also be included in the West Bench area. For example, pocket parks may be located near or within residential neighborhoods and may provide limited recreational facilities within close proximity of homes to increase park accessibility by foot.

FIGURE PR-1.1.2. URBAN REGIONAL PARKS.

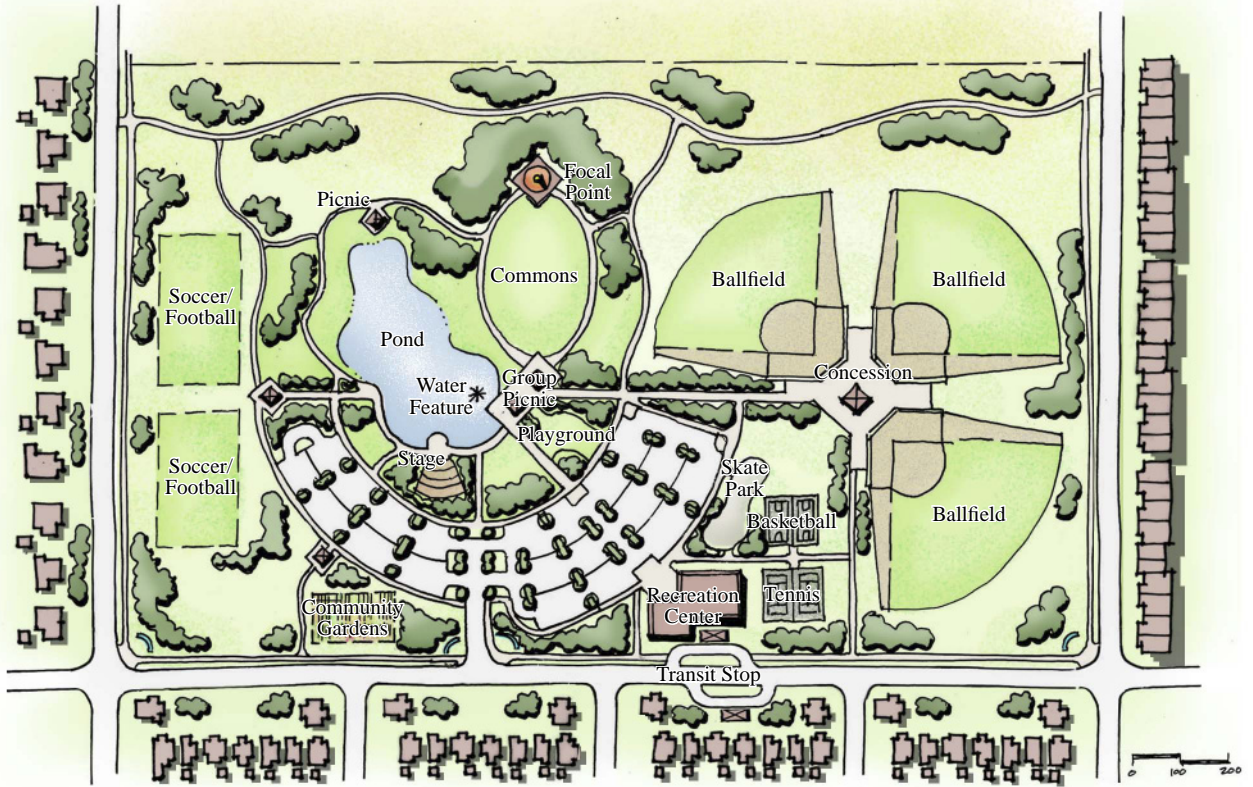
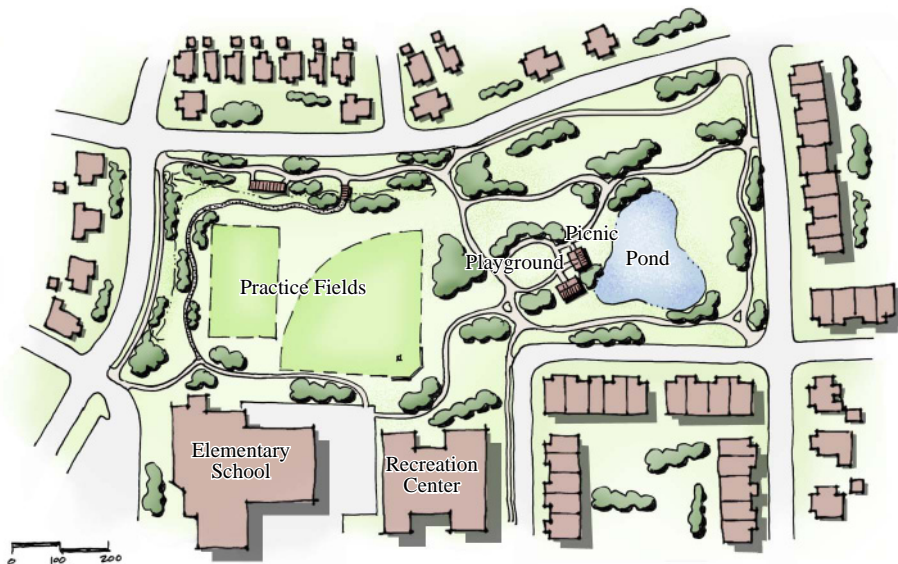


FIGURE PR-1.1.3. COMMUNITY PARKS.





Policy PR-1.1.6: Site selection. Plan for community and neighborhood parks on land that is suitable for active recreation uses, and functional as park space.

Policy PR-1.1.7: Year-round programming. Consider opportunities to develop year-round recreational programs and events such as skiing, hiking, and biking.

Policy PR-1.1.8: Accessibility. Facilitate the use of the park and trail systems by people with disabilities by following applicable ADA design standards.

### ***Objective PR-1.2***

Encourage partnerships among governmental agencies and private entities to provide the necessary parks, recreation, and trail investments as development proceeds throughout the West Bench.

Policy PR-1.2.1: Implementation. Cooperate with other interested parties for the creation and construction of new parks, trailheads, and recreation facilities.

Policy PR-1.2.2: Maintenance and operation. Provide mechanisms for the ongoing development, operation, and maintenance needs of park facilities.

Policy PR-1.2.3: Joint-use agreements. Consider joint use agreements with public agencies, such as schools, to help meet County park and recreation needs.

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*GOAL PR-2. Provide a system of interconnected trails within the West Bench area that tie into existing and planned regional trails, including the Bonneville Shoreline Trail.*

---

### ***Objective PR-2.1***

Provide convenient, non-motorized, multi-purpose trails, paths, and bicycle routes that create linkages to existing and proposed areas and facilities, including local, State, and Federal trail systems, parks, and open space.

Policy PR-2.1.1: Variety of trails. Design urban development plans to provide citizens with a variety of multiple-use trails.

Policy PR-2.1.2: Regional trail linkages. A regional trail system should be planned for the West Bench area that connects to the regional trails as identified through Salt Lake County’s Park and Recreation Master Plan and neighboring municipal regional trails. Figure PR 2.1.2 illustrates a cross section of a regional trail.

Policy PR-2.1.3: Local trail linkages. Promote trail connections between schools, parks, regional open space, and residential, commercial, and industrial uses should consider coordinating this non-motorized system with the vehicular circulation system. Figure PR-2.1.3 illustrates a local trail along a sloped hillside.

FIGURE PR-2.1.2. REGIONAL TRAIL LINKAGES.

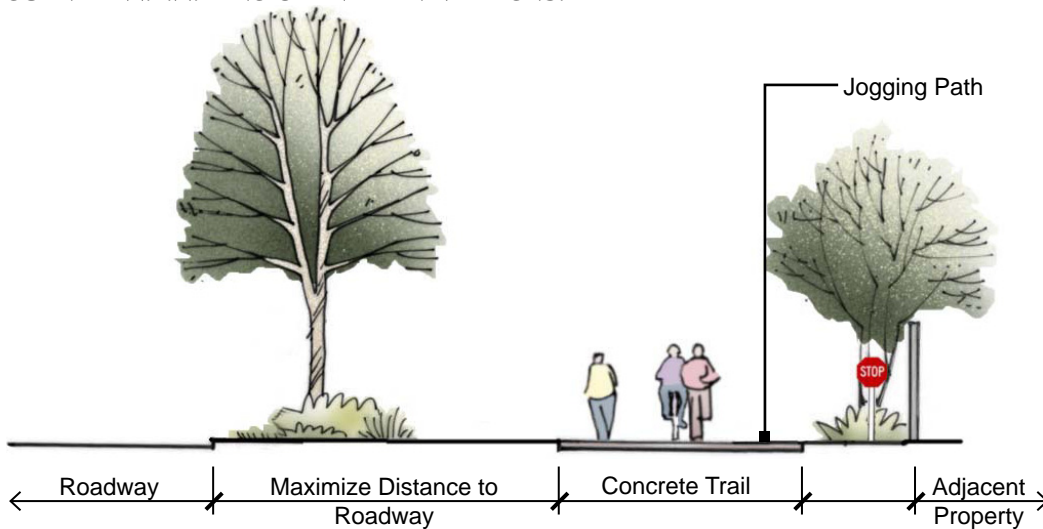
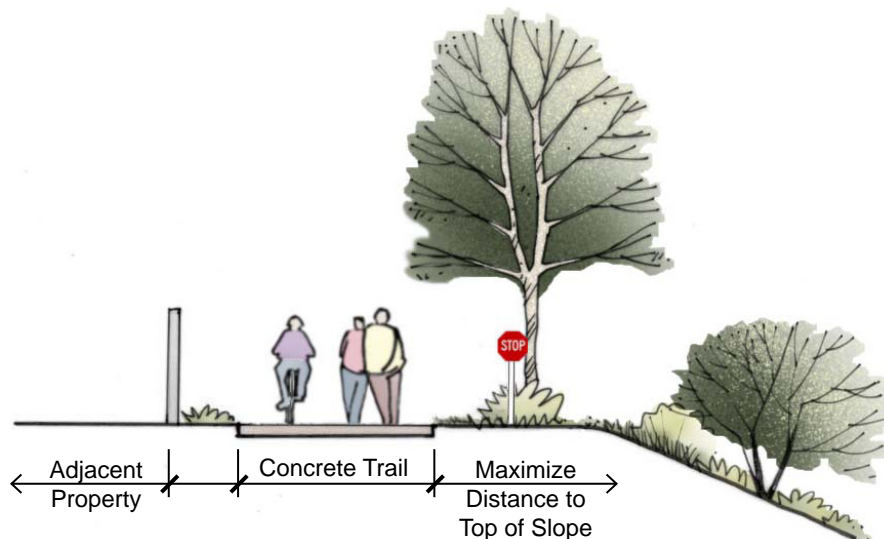


FIGURE PR-2.1.3. LOCAL TRAIL LINKAGES.





Policy PR-2.1.4: Connectivity and access. Design multi-purpose paths, neighborhood trails, bicycle routes, and bicycle connections to Transit Boulevards, arterial streets, commercial areas, schools, civic centers, and other user-specific destinations. Development should be designed as to not preclude potential recreational access in the future.

Policy PR-2.1.5: Safe crossings. Encourage multi-functional “grade-separated crossings” such as bridges, roadway underpasses, and other means at selected locations for the safety of bicyclists and pedestrians. Figure PR-2.1.5 illustrates one way that a trail can be placed in an underpass to create a safe crossing for pedestrians and bicyclists.



Policy PR-2.1.6: Trails. Plan trail connections to and through open space to meet various trail user needs, including equestrians, hiking, mountain bicycling, and backpacking by providing trails in applicable locations. Trails planned for persons with disabilities, should be designed according to ADA Design Guidelines. Monitor and manage recreational impacts to sensitive areas. Figure PR-2.1.6 illustrates a trail connection in a hillside open space area.

Policy PR-2.1.7: Develop national historic trails. Recognize the national historic trails that are located within the county and promote and pursue cooperative efforts with private, regional, State, and Federal agencies to develop and fund these trails on public and private land.

Policy PR-2.1.8: Access to recreation. Coordinate with Federal, State, and other agencies and private landholders to provide public access to regional recreational resources, including rivers, lakes, and public lands.



Policy PR-2.1.9: Rails to trails. Pursue the development of a “Rails to Trails” program to provide multiple-use trails along abandoned or vacated rail corridors.



FIGURE PR-2.1.5. SAFE CROSSINGS.

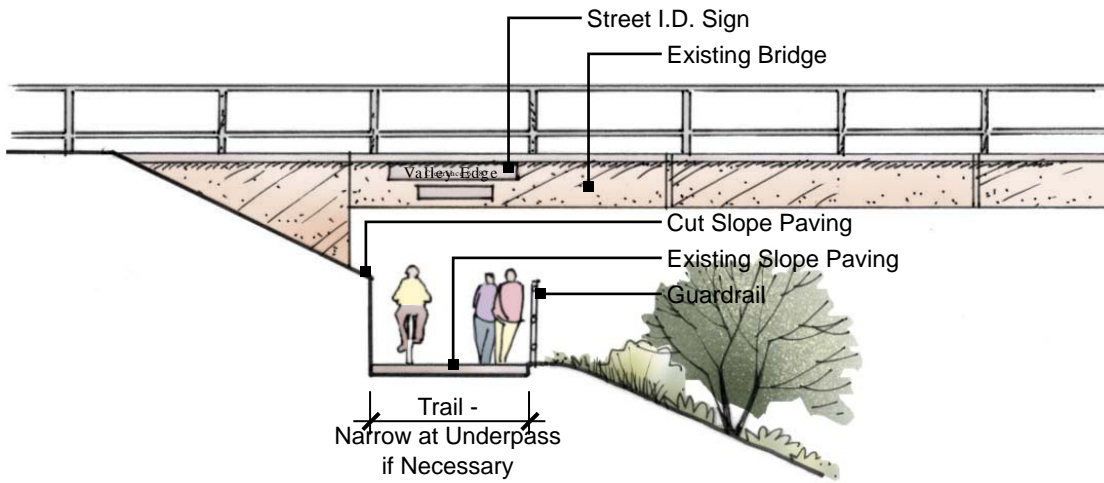
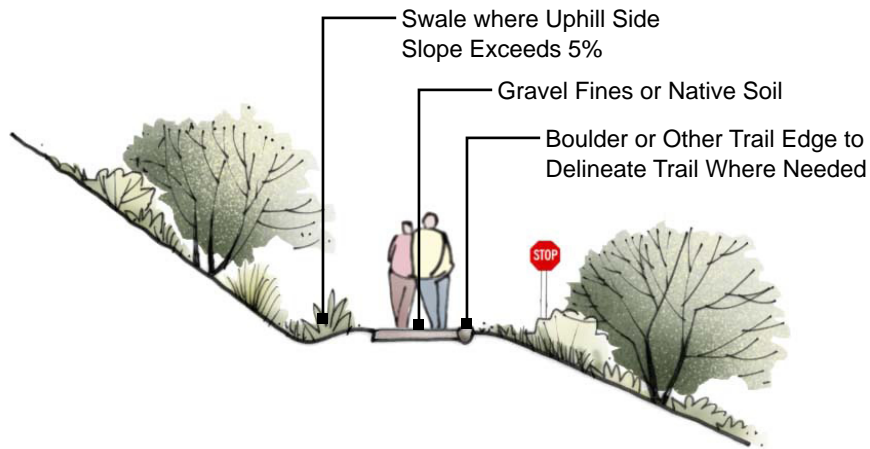
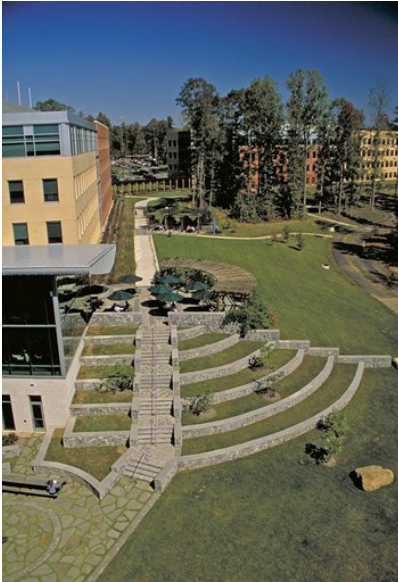


FIGURE PR-2.1.6. OPEN SPACE TRAILS.





## ECONOMIC SUSTAINABILITY (ES)

Growth is good only as a means for advancing human wellbeing. Economic sustainability focuses on policy choices that lead to broad-based economic growth within the context of political and social appropriateness and sound environmental management. Land conservation and development shown on the Future Land Use Map offer the opportunity to provide future generations with more resources, not less, by addressing needs related to the environment, the economy, and society. The West Bench can provide needed resources to expand job creation, attract to the region new basic employment (i.e., jobs that produce goods or services that import revenue from outside the region), enable existing business and industry to expand, expand the tax base, and foster economic development opportunities that encourage investment in the West Bench as well as the Salt Lake Valley.

The Governor's Office for Planning and Budget forecasts a 1.0 percent annual average growth in employment through 2040 for the Wasatch Front, with more than half of the regional activity occurring in Salt Lake County. The West Bench will likely enable the region to increase the rate of job growth from historical levels and achieve a better balance between basic and non-basic employment. The economy will likely become more diverse and enable residents to select from a range of employment opportunities. The region will be able to provide attractive career opportunities to Utah's high school and college graduates, enabling them to deepen their roots in the region.

Services can be provided concurrent with growth using efficient delivery methods. Revenues generated by the development can be sufficient to cover costs of services to create a positive net fiscal balance of the West Bench. Development of the West Bench will be coordinated with adjacent communities to reduce inefficiency, maximize resources, and to mitigate potential fiscal impacts.

The West Bench is planned as a mixed-use project, with a large portion of office-based employment uses concentrated in Village, Town, and Urban Centers and Employment Areas along with retail development

and higher density housing. The challenge will be to attract and develop these non-residential uses to balance the more traditional single-family residential development that, based on historic development trends, is likely to develop more quickly. Development in mixed-use centers and throughout the West Bench will likely be housing-led, followed by retail, and then employment, as market demand for non-residential uses grows. Careful planning efforts will be required to preserve the market for non-residential uses within mixed-use centers. Developing new employment uses (both in centers and employment campuses) will require a deliberate planning effort to attract these uses. The balance of land uses is also a fiscal challenge as the region's tax structure is partially based on sales tax revenues, principally from retail development, as the primary means to provide revenues for local government services.

The following goals, objectives, and policies are written so that the West Bench project will be a long-term development with a major imprint on the urban geography of the county and the larger Wasatch Front region (see also Chapter 5, Implementation). The project has the potential to expand and diversify the economic base of the region.

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*GOAL ES-1. Utilize the large tracts of land and unique resources of the West Bench as an economic catalyst for attracting new employment opportunities for the region.*

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### **Objective ES-1.1**

Expand the economic base of the region with substantial job creation by supporting business recruitment and development.

Policy ES-1.1.1: Higher wage jobs. Attract the establishment of new businesses that provide higher wage jobs for base employment opportunities.

Policy ES-1.1.2: Recruit base jobs. Coordinate with economic development agencies to actively recruit corporate expansions and relocations, providing new base (primary) jobs in the Salt Lake County region.



Policy ES-1.1.3: Recruit large employers. Utilize the large Industrial and Flex/ R&D Areas of the West Bench to recruit large employers and expand the region's resources for economic development recruitment.

Policy ES-1.1.4: Small business development. Support ongoing efforts to encourage non-retail, small business development with programs that include management training, employee training, mentorships, and similar programs.

Policy ES-1.1.5: Land use. Provide a range of employment-oriented land uses to allow for the development of manufacturing, distribution, business service, professional service, research & development, as well as retail and commercial jobs.

Policy ES-1.1.6: Research/tech park development. Investigate opportunities to develop a large-scale research and technology park. Work collaboratively with the in-state colleges and universities and other educational institutions to foster the creation of a world class research park that creates a place for new technology ventures and corresponding high-wage, basic employment.

### ***Objective ES-1.2***

Work with Salt Lake County, Envision Utah, local Economic Development Corporations and Chambers of Commerce, and the larger business community to support regional economic development efforts.

Policy ES-1.2.1: Opportunities. Partner with area economic development agencies to attract businesses to the West Bench that diversify the Salt Lake regional economic base.

Policy ES-1.2.2: Active recruitment. Coordinate with the active economic development recruitment program within Salt Lake County to attract new companies, expansions, and relocations, generating new primary jobs for the area.

### ***Objective ES-1.3***

Concentrate retail, service, and office-based employment in centers.

Policy ES-1.3.1: Concentrate activity. Concentrate employment uses in Urban and Town Centers and along the proposed transit corridor to allow for multiple purpose shopping trips, support transit, reduce impact on the road network, and reduce commuting times for area residents.

Policy ES-1.3.2: Co-locate services and employment. Encourage the co-location of commercial services (e.g., day-care, cleaners, mail and delivery centers, etc.) with employment centers to foster a walkable environment, support multiple purpose trips, and reduce vehicle miles, air pollution, and time spent completing day-to-day tasks.

Policy ES-1.3.3: Housing locations. Encourage housing development near major employment centers to reduce travel time to work (see Figure ES-1.3.3).

Policy ES-1.3.4: Transit. Support the UTA and other jurisdictions to create a regional integrated, efficient transit network that reduces the impact on the regional road network and enables direct access to employment centers for residents living within or outside the West Bench.

### ***Objective ES-1.4***

Manage the West Bench to allow for the continuation and expansion of mining, mineral and metal processing, and other appropriate uses.

Policy ES-1.4.1: Mining and related activities. Encourage productive mining and related industrial activities to continue and expand in appropriate locations throughout the West Bench.

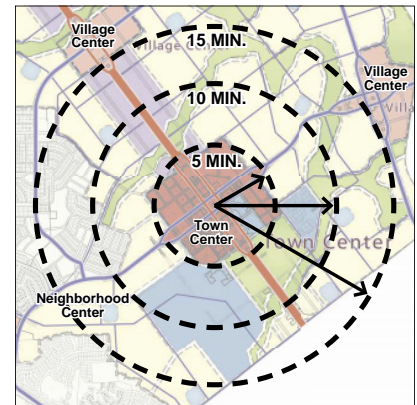
Policy ES-1.4.2: Phasing. Phase the timing of new development to allow for continued and expanded mining and related activities.

Policy ES-1.4.3: Mining interface. Maintain public health and safety by including appropriate measures in development projects aimed at enabling development to occur while mining and associated reclamation activities continue. Applicable measures may include:

- Protective features such as fencing, barriers, and screening of mining facilities; and
- Providing buffers between new development and existing industries that act as an amenity (open space and community separators).

Policy ES-1.4.4: Ongoing mining activities. Continue and manage clean-up, reclamation, and monitoring of mining activities and hazardous materials on West Bench lands in accordance with existing agreements.

FIGURE ES-1.3.3. WALKING DISTANCES.





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*GOAL ES-2. Promote economic growth on the West Bench to provide a diversity of jobs and a balance of jobs and housing.*

---

**Objective ES-2.1**

Maintain a balance between employment and housing land uses.

Policy ES-2.1.1: Jobs/housing balance. As consistent with market forces, a balance of land uses is encouraged that allows a sustainable ratio of jobs to housing, allowing residents to work close to home and reducing demands on the regional transportation system. Housing will likely develop first, followed by retail, then employment, as the market for non-residential uses builds. Appropriate sites and markets for retail and employment uses may be preserved while residential uses are developed.

Policy ES-2.1.2: Variety and blend of housing. Locating a variety and blend of housing types near major employment centers and accessible transit is highly encouraged and can benefit residents and the community by:

- Reducing travel time to and from work;
- Increasing personal time for wellness and family;
- Reducing vehicle usage and associated costs for upkeep;
- Utilizing a smaller portion of household income for travel expenses;
- Reducing pollutants and emissions into the environment;
- Enabling greater purchasing ability for needed household goods and services;
- Attracting new employers to the regions with attractive house prices;
- Generating business for merchants and the local tax base; and
- Enabling local government's ability to provide services to the community.

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*GOAL ES-3. Develop the West Bench in an economic and fiscally sound and sustainable manner.*

---

***Objective ES-3.1***

Create a fiscal structure that enables the County to provide facilities, services, and desired community amenities.

Policy ES-3.1.1: Revenue for infrastructure. Work collaboratively with West Bench developers to establish public financing mechanisms that involve a range of sources and result in a variety of revenue streams to help fund infrastructure development.

Policy ES-3.1.2: Innovative funding mechanisms. Work with West Bench developers to evaluate existing, proposed, or otherwise advantageous funding mechanisms to achieve funding sources for the development of the West Bench.

Policy ES-3.1.3: Land use balance. Development in the West Bench area should include a balance of residential and commercial land uses in order to provide fiscal stability for needed public facilities and services.

Policy ES-3.1.4: Phasing. Provide infrastructure according to a fiscally balanced program as development occurs.

Policy ES-3.1.5: County tax revenue. Protect the market for West Bench commercial development, with the corresponding sales, property, and use taxes, to help the County deliver services to the West Bench, by preserving adequate land for employment and commercial uses, encouraging sufficient densities to ensure viability of those uses, and coordinating with adjacent jurisdictions.

***Objective ES-3.2***

Develop an economic base that is sustainable and enhances the economic, social, and environmental elements of the community.

Policy ES-3.2.1: Business base for communities. Plan for a business base that allows residents to work and have access to community facilities and services, as well as parks and open space, in proximity to home. Work with Chambers of Commerce, community organizations, and other business-related organizations, such as Economic Development Corporations.



## HOUSING AFFORDABILITY AND VARIETY OF BLENDED HOUSING TYPES (HA)

The authenticity of a newly developed community is directly related to the range of opportunities presented to residents and merchants that reflect the diversity of the larger cultural and economic context. Housing affordability is a key element that contributes directly to the diversity and, over time, enhances the sense of place. Given the challenges related to housing affordability, it is the intent of this element to provide goals, policies, and objectives that will enable the West Bench to incorporate a range of residential product types and price points.

A traditional method used to increase affordability is to increase density, thus decreasing per unit land costs. Regional trends for new construction show that this approach is not reflected in local building practices, as 74 percent of units constructed between 1990 and 2000 were single-family homes. Building permit records from 1998 to 2004 show that single-family construction has accelerated over the last six years and in some areas of the region represents 90 percent of total new construction.

Affordability depends on the relationship between household resources and housing costs. A household earning 100 percent of Annual Mean Income (AMI) would be a “typical” household, reflecting the median income for the region. In the case of new construction, the average home price currently requires a household income of 132 percent of AMI to maintain expenses below 30 percent of gross income. Existing homes are less expensive, and households earning 106 percent of AMI are currently able to afford a home without spending more than an average of 30 percent of gross income. The average priced existing attached home requires an income of 96 percent of AMI to spend no more than 30 percent of gross income. Given the escalating costs of housing, careful planning is needed to provide housing opportunities for many households.

The West Bench General Plan calls for higher densities across all residential uses, which will provide the critical mass necessary for the



provision of commercial services within proximity to most homes. The planned higher density development will exceed conventional suburban development densities and, thus, will provide for a greater spectrum of product types and affordability levels. A small percentage of total development calls for low density, dispersed estate lots for single-family homes on steeper hillsides. These will provide large lots abutting open space.

Finally, key beneficiaries of affordable housing are primary employers that locate in proximity to a range of qualified employees. The West Bench will provide a deep pool of potential employees. Given the diversity in the cost of housing, the range in employee profiles and wage requirements will vary accordingly. Employers will be able to fill a diverse set of jobs, ranging from clerical to executive and will include positions for manufacturing, industrial, retail, services, and other positions.

The following goals, objectives, and policies reflect the priorities and vision for housing affordability on the West Bench. They provide measures to address the need for housing affordability and will work to ensure that a diversity of residents can live in the community as it matures over time. They recognize the needs of households that may be priced out of the local and regional market, and the need for an inventory of housing that reflects the range of wages paid by West Bench employers.

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*GOAL HA-1. Supply a range of housing types covering a spectrum of interests, affordability, and lifestyles.*

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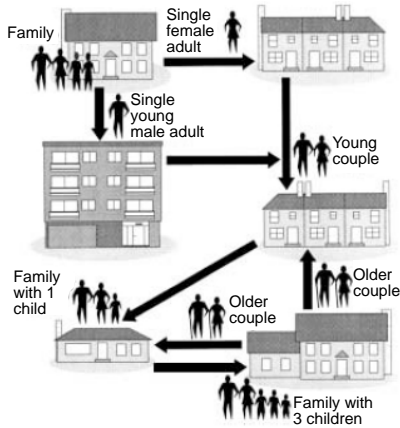
**Objective HA-1.1**

Plan for a mix of housing types for a diverse population of renters and owners throughout each development area.

Policy HA-1.1.1: Blended communities. Housing development in the West Bench area should seek to provide a variety of housing types that includes distinct architecture, density, scale and type, as well as different income levels of households within neighborhoods.



FIGURE HA-1.1.3. LIFE-STAGE HOUSING.



Policy HA-1.1.2: Inclusionary approach. Address housing affordability using an inclusionary approach that allows for a mixture of housing types and prices in a variety of communities of the West Bench, recognizing that housing affordability is integral to the long-term success of the West Bench and the region.

Policy HA-1.1.3: Life-stage housing. Plan for housing suitable for different stages of life, including smaller, more affordable units for first-time buyers, singles, young couples, families with many children, and older homeowners, as well as opportunities for senior citizen housing and long-term care/assisted living facilities (Figure HA-1.1.3).

Policy HA-1.1.4: Distribution. Promote more affordable housing opportunities distributed across the West Bench to avoid concentration in any one area. Encourage multi-family housing throughout the West Bench, using a variety of styles that are attractive and blend in with the local character.

Policy HA-1.1.5: Accessory dwelling units. Allow the development of carriage houses and accessory dwellings to increase density and affordability while maintaining character.

Policy HA-1.1.6: Accessible housing. Construct housing with practical features that provide basic access and functionality for people of all ages and various mobility and ambulatory capabilities. Housing design should include options for current and future accessibility needs of family members and friends by utilizing the minimum requirements of the Fair Housing Act Design Manual. Encourage opportunities to include visitable housing.

**Objective HA-1.2**

Housing in the West Bench will address the needs of renters and owners by supplying a range of housing types covering a spectrum of income and affordability. Efforts will be made to serve the segment of the population earning less than what is required to afford a home as dictated by County-wide policy.

Policy HA-1.2.1: Range of housing choices. Salt Lake County should work with the cities and the private sector to encourage a wide a range of housing choices within the planning area to meet the needs of our diverse population, support economic growth, ensure equitable and rational distribution of low-income and affordable housing throughout the county and provide housing choices for people of all income levels.

Policy HA-1.2.2: Affordable housing plan. Follow the County-wide Affordable Housing Plan in conformance with the State of Utah

mandate for all new development, and coordinate with regional organizations in addressing housing affordability throughout the Wasatch Front.

Policy HA-1.2.3: Partnerships. Promote affordable housing units in various types of housing stock through incentive programs and/or partnerships with a range of entities, including home builders, developers, non-profit organizations, and public agencies.

Policy HA-1.2.4: Incentives. Support and encourage the private development of affordable housing by offering incentives, and reduce County government barriers to the construction of additional units. Strategies may include sales/use tax rebates, financial subsidies, trust funds, prioritizing review and approval, and/or deferral of impact fees.

Policy HA-1.2.5: Density. Promote higher density housing development that exceeds conventional options to create a range of product types and affordable price points.

Policy HA-1.2.6: Affordable housing indicators. The County should collect, maintain, and provide county-wide information annually regarding the state of housing affordability.

Policy HA-1.2.7: County-wide programs. Participate in the development of County-wide programs to assist low and moderate-income households in obtaining affordable and appropriate housing.

Policy HA-1.2.8: Social agencies. Work cooperatively with private and not-for-profit developers and social and health service agencies to address local housing needs.

Policy HA-1.2.9: Incentive programs. Explore coordination of incentive programs with cities and townships throughout Salt Lake County to develop common affordable housing program guidelines to reduce administrative costs.

Policy HA-1.2.10: Educational programs. Promote education and guidance of low and moderate-income households on financing assistance, home purchasing techniques, and assistance in locating affordable rentals.



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*GOAL HA-2. Support jobs requiring a diversity of skill sets and wage levels by providing housing diversity.*

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***Objective HA-2.1***

Plan for a diversity of housing in the West Bench to supply employers with a pool of qualified employees for jobs requiring a diversity of skill sets and wage levels.

Policy HA-2.1.1: Housing targets. Recognize the relationship between workforce skills and wages and housing choices and availability.

Policy HA-2.1.2: Employer needs. To facilitate the attraction and retention of quality employers, the West Bench developments are planned to include a diverse inventory of housing for a range of homeowners and renters that reflects a spectrum of workforce, including those of executives, service workers, and the range of positions in between.

Policy HA-2.1.3: Employee needs. Encourage existing and future major employers locating within the West Bench to develop employer-assisted housing programs for lower income employees. Well-planned workforce housing also reduces commute time and cost.

## EDUCATIONAL RESOURCES (ER)

Residents of Salt Lake County have enjoyed the region's focus on academic excellence for more than 100 years. Future development goals for the West Bench have the opportunity to continue this tradition. As the area develops, the attraction for future residents will be due in part to the educational provisions available within the new communities. Educated residents, both children and adults, create a solid foundation for community growth and prosperous cities.

Within the county, public schools in four school districts are joined by several public charter schools to provide service to 113,831 public school students and 6,088 public charter school students (as of 2005). Private schools (8,491 students in 2004), home schooling programs (1,768 students in 2004), and special schools also educate a large percentage of the children who live within Salt Lake County. Public high school graduation rates typically average in the 90th percentile, and the percent of graduating students who pursue advanced education ranges between 68 and 80 percent. Several State and private colleges and universities within the area provide access to continuing education opportunities for students of all ages.

As shown in Figure ER-1, there are currently three school districts whose boundaries encompass the West Bench properties: the Salt Lake City, Granite, and Jordan districts. The boundaries of the Salt Lake City District are the same as Salt Lake City's boundaries and include a portion of the properties identified as the North Urban Center. The Granite District is bounded on the north by 2100 South, extending to the Great Salt Lake west of the Salt Lake City boundaries, on the south by 6600 South, and on the west by the Salt Lake County / Tooele County (top of the Oquirrh Mountains) boundary. The Jordan District is south of the Granite boundary (6600 South), and extends south to the Utah County line. The Jordan District also extends to the Tooele County line on the west.

High quality educational services is a priority for the West Bench General Plan. School sites placed within mixed-use centers are anticipated



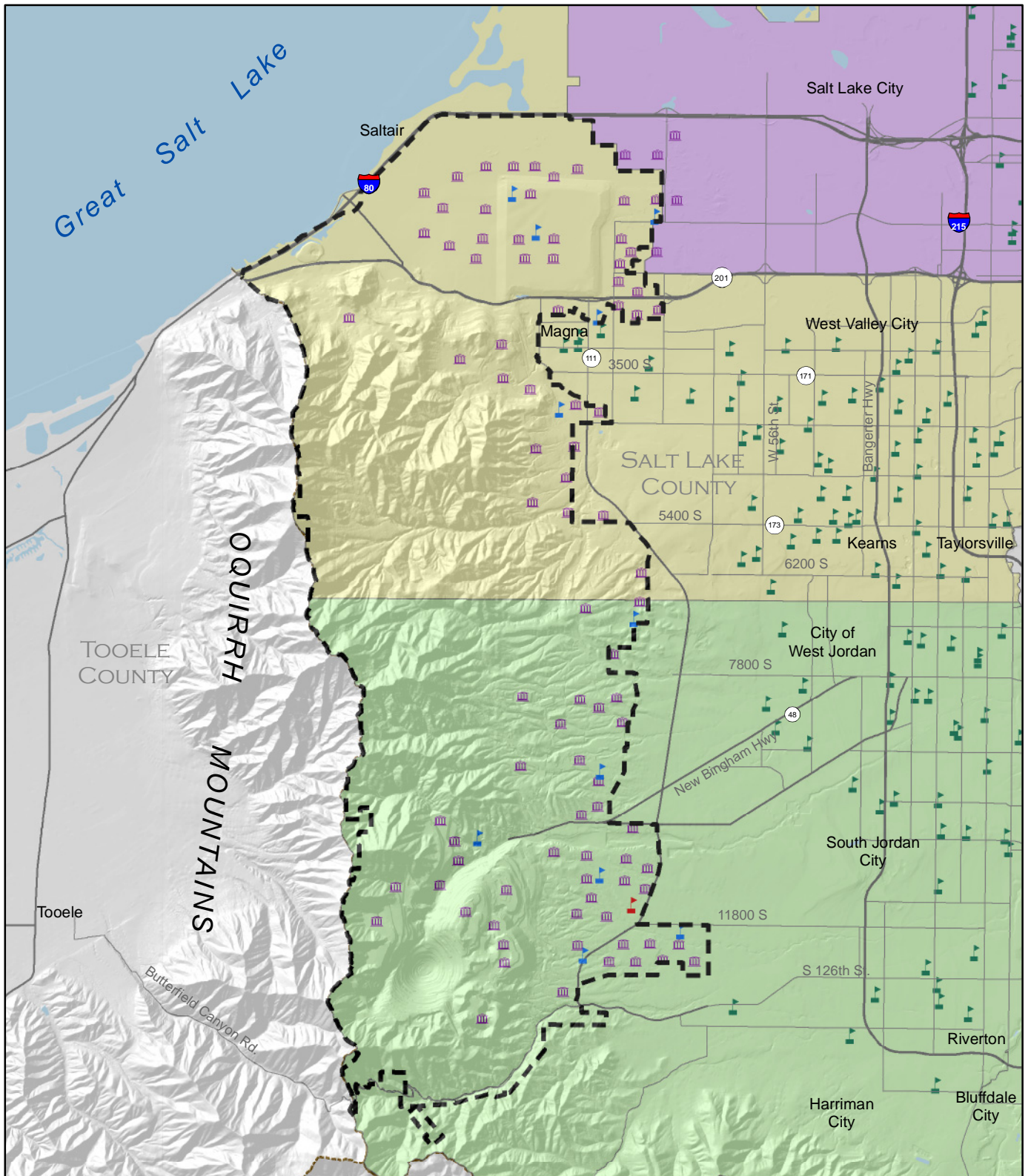
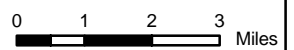


FIGURE ER-1. EXISTING & PLANNED SCHOOLS.

*Neighborhood Centers may contain a variety of civic resources, including elementary schools, libraries, police and fire stations, or other community support services or facilities.*



- |                          |                          |                             |                         |
|--------------------------|--------------------------|-----------------------------|-------------------------|
| West Bench Planning Area | Salt Lake County Schools | <b>WBGW Civic Locations</b> | <b>School Districts</b> |
| Highways                 | County Boundaries        | Neighborhood Center *       | Salt Lake City          |
| Key Local Roads          | Open Water               | High School                 | Granite                 |
|                          |                          | Campus                      | Jordan                  |



throughout the area, addressing a variety of educational ranges. Schools will be located in proximity to higher density housing, adjacent to parks, and/or with easy access to transit and trails. Elementary schools are planned within most Neighborhood Centers, and middle and high schools will generally be located near Town or Village Centers to support the community integration of the educational system.

Higher educational facilities can provide the next step for the children of the West Bench. The logical location for these institutions is near transit hubs to facilitate low cost/low impact transportation. These schools could become catalysts for mixed-use developments, providing a variety of housing, job opportunities, and demand for service-oriented businesses. University campuses and community colleges or applied technology schools can also provide evening adult education opportunities.

The success of the educational system for the West Bench will be contingent on the inclusive involvement of officials from districts and educational institutions. Refinements on numbers, types, and locations of facilities are needed in advance of development. Opportunities for private schools, charter schools, and the need to provide other programs such as head-start curricula will be considered as part of a comprehensive educational system.

The following goals, objectives, and policies for educational resources promote ways to create a solid educational framework for the West Bench. The policies provide measures to designate locations for school placement, encourage educational opportunities for the community, and integrate growth flexibility into planning procedures and management.

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*GOAL ER-1: Encourage the integrated establishment of educational resources within new communities.*

---

**Objective ER-1.1**

Plan for accessible and high quality educational resources for education at all life stages that meet the needs of local residents.





Policy ER-1.1.1: Educational system. Early childhood educational facilities, elementary schools, middle schools, high schools, and ideally centers for higher education should form the foundation of the educational system. The West Bench General Plan provides opportunities for adequate facilities that should ideally be constructed and programmed to support high teacher to student ratios and outstanding educational opportunities.

Policy ER-1.1.2: Location of educational facilities. In coordination with school districts, determine the appropriate size and location of educational facilities in proximity to homes, rapid transit routes, and/or civic amenities.



- Elementary schools should be distributed relative to population concentrations across the West Bench. Elementary schools should generally be located in Neighborhood Centers. It is the goal to have many elementary schools within a short walk or bicycle ride of homes.
- Middle schools and high schools are encouraged to be located within walking distance of frequent public transit service, and adjacent to a center or major park facility.
- Community college, college, and university campuses should ideally be located adjacent to or as the heart of Urban Centers, Town Centers, or Village Centers, and should be served by rapid transit.
- Libraries and learning centers providing educational services to residents of all ages in the West Bench are encouraged in centers, well distributed throughout the West Bench.

Policy ER-1.1.3: To the extent possible, work with the appropriate school districts so that the siting, scale, character, and orientation of educational buildings are compatible with the guidelines associated with the center or district in which they are located. It is the intent that:

- Larger middle schools, high schools, and universities should be located in proximity to rapid transit stations.
- School parking should ideally be placed within blocks containing schools and adjacent civic buildings and in a manner consistent with the parking location guidelines for the district or center in which the school is located.
- Parking facilities may be shared between school employees and employees and users of civic facilities.

Policy ER-1.1.4: Safety features. Additional safety features (e.g., school crossing lights) should reinforce a commitment to safe travel by foot, bicycle, or transit to school.



Policy ER-1.1.5: Variety of educational opportunities. Promote the establishment of libraries, museums, galleries, learning centers, private facilities, after-school programs, head-start curricula, senior programs, and other facilities and services to provide a variety of educational opportunities for community residents.

Policy ER-1.1.6: Higher and continuing education. Promote the development of higher educational opportunities in the West Bench, including the establishment of community colleges or university branches (see Figure ER-1.1.6). Encourage interactive learning opportunities and partnerships.

FIGURE ER-1.1.6. HIGHER EDUCATION.





## HERITAGE RESOURCES (HR)

The rich history of Salt Lake County can serve as a benchmark for the development of the West Bench. Historic resources are reminders of the area's past; Native Americans, pioneer settlements, military encampments, ranching, and mining are an integral part of the region's history and continue to influence the area to this day. Cultural landscapes, structures, and sites create a sense of place, remind us of where we came from, and provide an attraction for both locals and visitors of the area. Given the significance of the historic and cultural resources, the WBGPP will promote the protection, preservation, and interpretation of these resources and encourage efforts to educate visitors and residents about the area's history.

Known heritage resources on the West Bench provide both challenges and opportunities for future development. Protection and preservation of significant sites and structures (those that are listed on the National Register of Historic Places or State Register, such as the Bingham Mine) will be integrated with future development. Careful planning can ensure that new development is sensitive to the historic character and importance of such resources, and can lead to the long-term preservation of key resources.



Sensitive planning can avoid adverse effects on the cultural setting of the Bingham Canyon Copper Mine and the communities of Copperton and Magna. Other existing sites should be carefully managed to promote their preservation.

Heritage resources (historic structures, archaeological resources, and historic landscapes) play an important role in a community as a physical representation of a community's past and local cultural traditions. The following goals, objectives, and policies concerning heritage resources promote ways to protect and preserve those resources within the framework of the West Bench General Plan. The policies provide measures to mitigate impacts to resources, incentives for protection and preservation, and educational opportunities for the community and visitors.

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*GOAL HR-1. Conserve historic and cultural resources that symbolize the community's identity and uniqueness.*

---

**Objective HR-1.1**

Identify prehistoric and historic archaeological resources and cultural landscapes that meet national, State, or local criteria for designation and protection from destruction or harmful alteration. Preserve the unique historic character of heritage buildings, structures, sites, and artifacts.

Policy HR-1.1.1: Preservation management for archaeology. Conserve known archaeological resources that meet historic designation criteria, and determine their eligibility for listing on the National or State Register of Historic Places.

Policy HR-1.1.2: Archeological resources. Conduct inventories of sites located in high probability zones proposed for development prior to preparing the Preliminary Plat application to determine if prehistoric or historic archaeological resources are present, and to determine the significance of existing buildings, structures, scenic landscapes or vistas, sites, or artifacts.

Policy HR-1.1.3: Cultural or historical landscape resources. Identify cultural or historic landscapes and integrate these landscapes into open space or parks, where appropriate.

Policy HR-1.1.4: Preserve resources. Where feasible, encourage the rehabilitation, preservation, or restoration of historic buildings to sustain the character of the community. Take into account the historic significance of adjacent towns and Town Centers in planning and designing new developments, particularly those near Copperton and Magna.

Policy HR-1.1.5: Certified Local Government. Apply for status as a Certified Local Government (CLG) to provide opportunities for grant funding from the Utah State Historical Society for preservation projects.



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*GOAL HR-2. Support cultural resource preservation through interpretation, education, and incentives.*

---

***Objective HR-2.1***

Celebrate the National Historic Landmark status of the Bingham Mine.

Policy HR-2.1.1: National Historic Landmark. Update and maintain the National Historic Landmark designation of the Bingham Mine.

Policy HR-2.1.2: Gateway to the Bingham Mine. Design new development within the Bingham Mine gateway corridor in a manner that is compatible with the historic character.

Policy HR-2.1.3: Events. Support events and activities that celebrate the importance of the mining operation to the growth and development of Salt Lake County.

***Objective HR-2.2***

Provide interpretation and education on heritage resources within the West Bench Area.

Policy HR-2.2.1: Local visitor's center. Plan for a local visitor's center and include information and displays on the heritage of the Kennecott Utah Copper mining operation and its influence on the region.

Policy HR-2.2.2: Local events. Support events and activities that celebrate important historical activities, events, or people from the region.

Policy HR-2.2.3: Historic preservation education. Educate residents on historic preservation by conducting workshops on building rehabilitation, financial incentives, and other information.

Policy HR-2.2.4: Partnerships. Encourage partnerships between organizations in the private sector and engage the community.

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*GOAL HR-3. Consider local Native American tribal issues in heritage planning.*

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***Objective HR-3.1***

Consult with local Native American tribes to identify heritage resources significant to the tribes and to establish procedures for the protection of known cultural resources.

Policy HR-3.1.1: Traditional cultural properties. Consult with Native American groups to identify if any traditional cultural properties are present and establish protection measures, if needed.

Policy HR-3.1.2: Impacts on resources. Establish procedures for contacting tribes when individual developments are proposed that may impact cultural resources, and allow Native Americans access to traditional cultural sites if so requested.

Policy HR-3.1.3: Burial sites and remains. Notify the State Historic Preservation Office and the Native American Legislative Liaison Committee when Native American burial remains or sites are discovered.



# CHAPTER 5 IMPLEMENTATION

AUGUST DRAFT 3, 2007







## CHAPTER 5 - IMPLEMENTATION

### 5.1 INTRODUCTION

The West Bench General Plan presents a Vision for the future of the West Bench. Adoption of the West Bench General Plan is the first step to fulfill the Vision of the West Bench, and will guide land use decisions over the long term by providing guidelines for implementing regulations that will be used to evaluate future development proposals. The first section of this chapter focuses on the decision-making framework that will be used by Salt Lake County. The remaining pages describe the many planning and technical considerations that community leaders must consider to fund capital infrastructure and operating services. The Plan concludes by revisiting the Core Concepts, or the big picture, that every decision should strive to achieve.

### 5.2 HOW TO IMPLEMENT

Salt Lake County will adopt tools to provide a series of regulatory steps to implement the General Plan. The regulations allow development to move forward with greater specificity for portions of the site that are ready for development, as illustrated in Table 5-1.

The remainder of this chapter outlines options, opportunities, and constraints regarding how market demand, phasing, financing, infrastructure, and housing will affect how the West Bench will be developed. This section addresses the most critical discussions that are needed. Other implementing documents outside the Plan provide more detail on tasks necessary for implementation (e.g., Salt Lake County Parks and Recreation Master Plan). The key factors, although interrelated, are discussed separately in the following sections:

- **Market Demand** – West Bench development activity will occur within the context of the Salt Lake regional real estate market. Given the location and scale of the project, it will have a significant impact on the location of residential, civic, and commercial uses in the region. Market demand provides the context for estimating absorption rates for the range of uses proposed for the West Bench.

**HOW DO I USE CHAPTER 5?**  
CHAPTER 5 BEGINS BY OUTLINING THE P-C ZONE AND COMMUNITY STRUCTURE PLAN PROCESS THAT WILL BE USED TO IMPLEMENT THE GOALS, OBJECTIVES, AND POLICIES OF THE WBGPP TO ENSURE THAT THE RIGHT QUESTIONS ARE ASKED AT THE RIGHT TIME. THE FOLLOWING SECTIONS HIGHLIGHT WHAT QUESTIONS SHOULD BE ADDRESSED AS CAPITAL IMPROVEMENTS AND OPERATIONS ARE PHASED IN OVER THE NEXT 50 TO 75 YEARS.



TABLE 5-1. WEST BENCH PLANNING AND DEVELOPMENT PROCESS.

DOCUMENT	WHAT IS DESCRIBED AND APPROVED	EVALUATION AND APPROVAL LEVEL
<b>SALT LAKE COUNTY WEST BENCH GENERAL PLAN</b>	Vision and policy plan to guide County decision-making for the West Bench.	County Council and Planning Commission
<b>WEST BENCH ZONING</b>	Implementation of the West Bench General Plan requires adoption of several ordinances that will guide the development of the urban planned community area, will allow continuation of mining operations, mineral and metal processing to occur safely as development takes place and lastly will preserve portions of the Oquirrh Mountain range that are not planned for urban development.	County Council and Planning Commission
<b>COMMUNITY STRUCTURE PLAN</b>	Major systems for the community such as major roadways, open space networks, general location of mixed-use centers, residential areas, and employment areas.	County Council and Planning Commission
<b>MASTER SUBDIVISION PLAT</b>	Similar to requirements of preliminary plat, but with less detail. Shows major development parcel locations, open space system, and major infrastructure associated with roadways.	Planning Commission and County Mayor
<b>PROJECT PLAN/ PRELIMINARY SUBDIVISION PLAT</b>	All requirements of preliminary plat and many requirements of Site Plan review and condominium plat review processes, if applicable.	Planning Commission and County Mayor
<b>FINAL SUBDIVISION PLAT</b>	Final plat, Site Plan, and condominium plat requirements, once all requirements have been met.	Staff and County Mayor

- **Fiscal Sustainability** – Infrastructure and services will only be provided based on sufficient revenue sources, through a process that will not result in a financial deficit for Salt Lake County. A deficit could also occur through annexation and incorporations due to loss of revenue sources. From a fiscal and financial perspective, intensity and mix of uses both affect the sufficiency of revenues. For the long term, sustainable revenue sources are needed so future residents and businesses receive excellent urban services and enjoy premier amenities, as envisioned by the General Plan.
- **Infrastructure, Services, and Amenities** – Urban development has essential infrastructure requirements (e.g., roads, water, sewer) and necessary urban services (e.g., power and gas) to serve the development. Implementation will require major planning, engineering, and decision-making to achieve optimal service levels and to integrate each into the larger regional network.

## 5.3 MARKET DEMAND

### RESIDENTIAL GROWTH FORECASTS

As of 2007, Utah is the fourth fastest-growing state in the nation, with most of the growth occurring along the Wasatch Front. Population growth will increase over the next several decades based on state-wide and regional projections. By 2040, the 4-county Wasatch Front region is projected to see an additional 590,000 housing units, of which 320,000 housing units (54 percent) are expected to be constructed in Salt Lake County. The associated population increases are expected to be approximately 910,000 residents in the Wasatch Front region, with 500,000 in the county (GOPB 2005).

Recent growth pressures in the region have shifted new development to the south, southwest, and northwest of Salt Lake County and beyond. The West Bench General Plan will likely result in Salt Lake County capturing a greater share of regional growth than has occurred in the recent past. It is expected that future residents and employers will be drawn to the West Bench for its proximity to existing employment centers as well as the high quality of life resulting from vibrant neighborhoods, diverse employment opportunities, alternative transportation choices, and a system of parks and trails.

TABLE 5-2. WBGp LAND USE SUMMARY (2007).

USE	SF/UNITS
<b>COMMERCIAL</b>	
RETAIL	8,143,000
OFFICE	25,829,000
INDUSTRIAL	24,792,000
<b>TOTAL COMMERCIAL</b>	<b>58,764,000</b>
<b>RESIDENTIAL</b>	
VILLAGE RESIDENTIAL	61,004
VILLAGE CENTER	7,296
HILLSIDE CLUSTER	9,344
NEIGHBORHOOD	66,878
NEIGHBORHOOD CENTER	19,490
FOOTHILL RESIDENTIAL	7,394
HILLSIDE RESIDENTIAL	5,977
URBAN/TOWN CENTERS	22,617
<b>TOTAL RESIDENTIAL</b>	<b>200,000</b>

As of 2007, the West Bench General Plan could include upwards of an estimated 200,000 dwelling units, as shown in Table 5-2, and 59 million square feet of commercial area. The WBGp Planning Area is anticipated to be built in a series of communities, each consisting of a mosaic of residential neighborhoods and commercial centers. Figure 5-1 provides a conceptual delineation of development potential by phase, as described below.

- The near-term development includes Barneys, Butterfield, Soldier Flats, Little Valley, Main Street Neighborhoods, and North Urban Center with development activity potentially occurring over the next 30 years; the pace of development will be greatly influenced by market forces.
- The long-term development (30 to 70 years from now) calls for development of Bingham, Clay Hollow, North Oquirrh, and the Tailings. Portions of this phase are more directly linked to the mining operations and, therefore, will likely be unavailable for development until significant changes in mining operations occur.

### COMMERCIAL GROWTH FORECASTS AS OF 2007

The West Bench General Plan contains a series of mixed-use centers consisting of retail, office, and residential uses, as well as districts for light industry. The West Bench is expected to complement and enhance the Salt Lake region’s economic infrastructure and strengthen its economic base. As of 2007, the Plan proposes approximately 8.1 million square feet of retail floor area, 25.8 million square feet of office space, and 24.7 million square feet of industrial space. To understand the magnitude of the West Bench development, the proposed area can be expressed as a ratio to existing development and compared to other centers in Salt Lake County.

### MARKET SUPPORT FOR RETAIL DEVELOPMENT

Retail growth is of particular interest, given the significant role that tax plays in local government revenues, as well as the role that retail shopping plays in the function of mixed-use centers. The approximate amount of floor area that may be supported by the West Bench development is based on land use regulations. The purpose is to show a market-based approach that can be used in future revenue analysis, not to provide binding policy numbers. Exact amounts of commercial and other land uses will depend on market conditions at the time of development



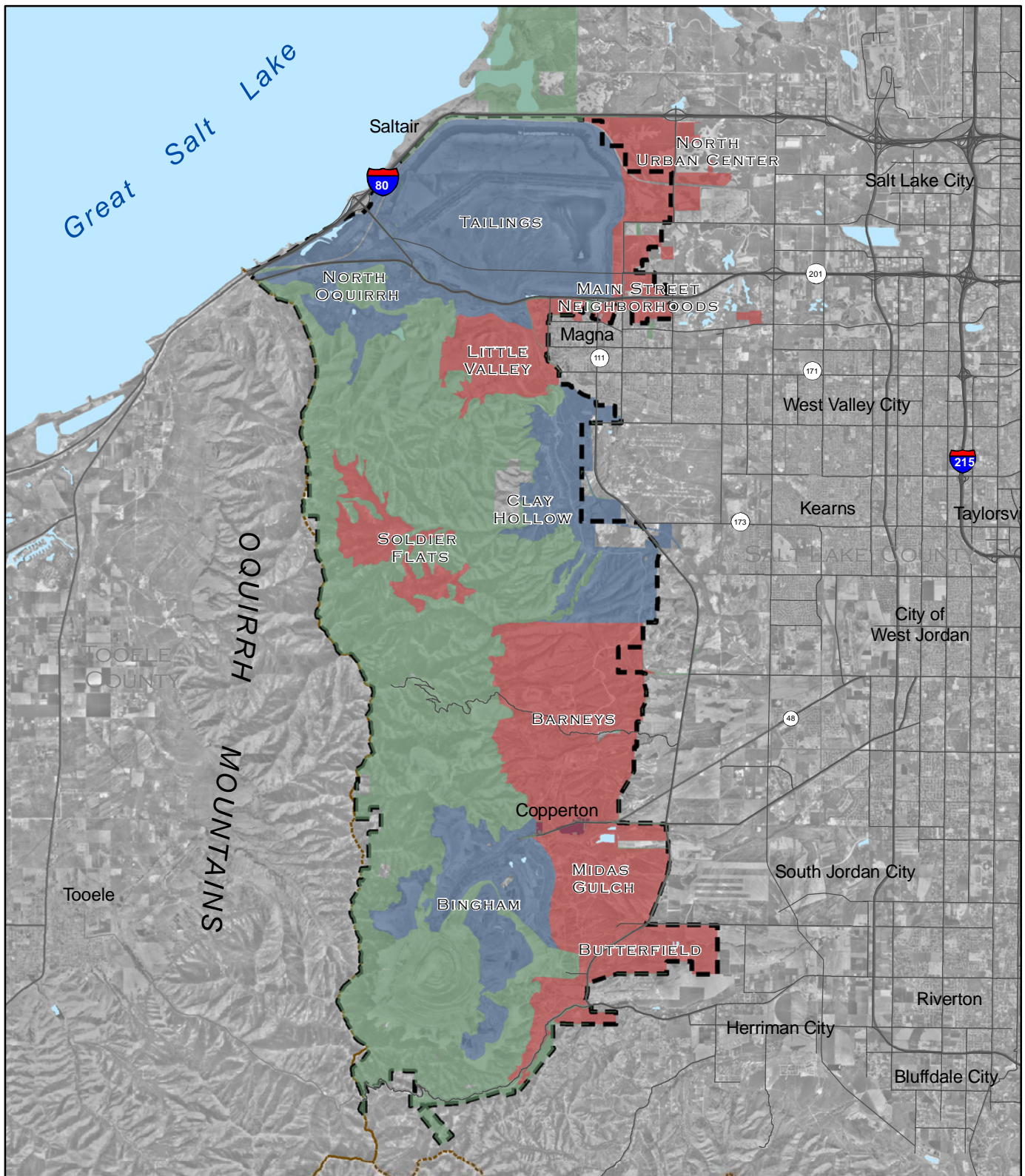
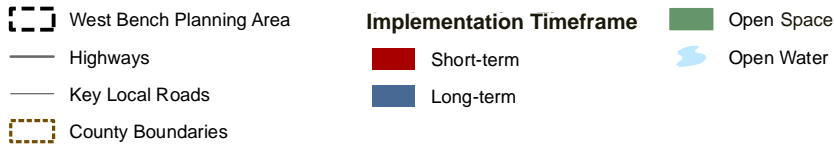
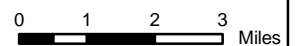


FIGURE 5-1. SHORT & LONG-TERM IMPLEMENTATION TIMEFRAME



EDAW | AECOM



and other related factors. Based on a 2005 average household income of \$54,500 for the region, total personal income (TPI) for the West Bench is estimated at \$8.99 billion at build-out (in 2005 constant dollars). Based on the existing statewide average, the portion of TPI that is spent on retail goods is 34.1 percent, and the retail expenditure by West Bench residents is estimated to be \$3.07 billion annually. To gauge the demand for land use, the retail expenditures were allocated to two levels of commercial centers: regional/community and neighborhood/village.

The Neighborhood/Village Center retail expenditures are projected to be \$1.42 billion annually, which translates to 4.1 million square feet of retail floor area. The Plan calls for retail to be integrated into Village Centers, with a substantial amount of mixed-use development of office and/or residential uses over first-level retail. In the Village Centers, retail space is estimated to account for a floor area ratio (FAR) of 0.09 out of a total FAR of 0.35. Assuming that retail is a determinant of first-level space, there would be an estimated demand for approximately 1,040 acres of land. The regional/community retail center share of expenditures adds up to \$1.65 billion, indicating that the market could support an estimated 4.7 million square feet of regional/community retail space. In most cases, regional retail is built at a 0.25 FAR, translating to a demand for 435 acres of land. The total land area needed for retail uses is projected to be 1,475 acres for 8.8 million square feet of floor area.

The success of the mixed-use centers, as designed, is dependent on the integration of uses within the immediate vicinity and the development of moderate to high density residential within walkable proximity. By concentrating the retail in mixed-use centers, each is expected to achieve the critical mass needed to succeed. The market areas and mixed-use centers is an important goal; a dilution of the trade area potential by strip, large format, or "big box" retail outside the planning area will reduce the ability to implement the six core concepts.

The Salt Lake regional market is expected to continue its strong growth, and the West Bench is well positioned to capture a competitive share of the regional market. Land area for office use likely exceeds demand. To reach full absorption of commercial uses, it may be beneficial to engage proactively in economic development efforts and search for opportunities to attract new business and expand existing businesses.

## 5.4 FISCAL SUSTAINABILITY

This section provides an overview of the fiscal structure in Salt Lake County and the State. It also identifies potential revenue sources that may be incorporated in the West Bench development. While each of the revenue sources identified is established in the Salt Lake region, amendments to the structure of some may be necessary to effectively address the fiscal needs of the West Bench development. This list is not intended to be exhaustive, but is meant to provide a sampling of the possible options as of 2007. Table 5-3 provides important potential decision-making considerations for a healthy fiscal strategy.



### SALT LAKE COUNTY FUND STRUCTURE

- **General Fund** - The General Fund (GF) of Salt Lake County (includes the General Fund, Flood Control Fund, Health Fund, Bond Debt Service Fund, Capital Improvements Fund, Planetarium Fund, and State Tax Administration Fund) is responsible for providing for services which are county wide in nature. The GF of Salt Lake County is primarily funded by Property Taxes, Sales Taxes, Grants and charges for service. Legal uses described in Chapter 36 of Title 17 of the Utah Code.

TABLE 5-3: FISCAL DECISION-MAKING QUESTIONS.

#	CATEGORY	QUESTION
1	Revenue	What is the magnitude of revenue potential?
2	Legality	Does the proposal conform with existing State and County standards?
3	Fairness	Is the funding responsibility equitable between residents, new and existing developers, and affected agencies?
4	Jurisdictional Issues	How is the proposal aligned with jurisdictional goals and interests?
5	Precedent	What effort will be required to create new funding sources?
6	Sustainable Sources	What is the long-term reliability of funding sources and their exposure to market trends?
7	Urban Design	How does the proposal achieve progressive urban design goals?
8	Nexus	What is the linkage between source and beneficiary?
9	Logistics	What is the ease of establishing revenue sources?

Source: Economic & Planning Systems, 2006

- **Municipal Services Fund** - The Municipal Services Fund (MSF) of Salt Lake County provides the “municipal type” services to the unincorporated county residents. The MSF will provide most of the “municipal type” services to the West Bench development. The MSF is at risk to annexations and incorporations to existing and new cities. The MSF of Salt Lake County is primarily funded by Property Taxes, Sales Taxes, and charges for service. Legal uses described in Chapters 34 and 36 of Title 17 of the Utah Code.
- **Salt Lake Valley Fire Service District** - The Salt Lake Valley Fire Service District (Fire District) that currently includes all areas of the Unincorporated County as well as Herriman and Riverton. The United Fire Authority (UFA) provides the actual fire service for the Fire District. All other cities in the county either contract with the UFA (Draper, Alta, Holladay, Taylorsville, and Cottonwood Heights have contracts) or have their own fire department funded by that city’s municipal funds. The Fire District area that serves the unincorporated county is at risk to annexations and incorporations to existing and new cities that may choose to provide their own fire services through their own fire department. This change in governance would require a withdrawal from the Fire District. The Fire District is primarily funded by Property Taxes.
- **Salt Lake County Library District** - There is the Salt Lake County Library District (Library District) that covers all of Salt Lake County except for Salt Lake City and Murray City who provide their own library services. The Library District is primarily funded by Property Taxes.

Incorporated Cities would have a similar funding structure with a few exceptions.

- Salt Lake City and Murray City provide their own Library services through their tax base and are not taxed in the Library District.
- In place of the Municipal Services Fund each incorporated city would have its own City General Fund (CGF). This is where each city provides for the services described in the MSF above. Herriman and Riverton are part of the Fire District. All cities beside Herriman and Riverton would provide for their Fire Service out of their CGF.



Other taxing and utility entities would include:

- **Taxing:**
  - School Districts predominantly funded through Property Taxes and funds appropriated by the State.
  - There are several special service districts throughout the county providing various services to specific areas. Special service districts are funded through various means including Property Taxes and Fees.
- **Utility:**
  - Water Districts funded primarily through hookup fees and ongoing monthly charges for service. Service areas vary.
  - Sewer Districts funded primarily through hookup fees and ongoing monthly charges for service. Service areas vary.
  - Sanitation Districts funded primarily through ongoing monthly charges for service. Service areas vary.
  - Power provided by Rocky Mountain Power funded primarily through ongoing monthly charges for service.
  - Gas provided by Questar Gas funded primarily through ongoing monthly charges for service.
  - Phone, Internet, Cable and other communications service provided by various companies funded primarily through ongoing monthly charges for service.

## MAJOR REVENUE SOURCES

- **Sales Tax** – Sales tax funds a significant portion of urban services. The rates are set by the State legislature and are rarely modified. Municipalities do not have the authority to set their own sales tax rates. The current rate for all jurisdictions in Salt Lake County is 6.6 percent, of which 4.75 percent is dedicated to the State, mass transit is allocated 0.5 percent, the County receives 0.25 percent, and a cultural tax of 0.1 percent funds the zoo, arts, and parks (ZAP tax). The remaining 1.0 percent is designated for local jurisdictions; half of that is point-of-sale based and is allocated to the city or county in which the sale occurs, and the other 0.5 percent is dispersed to local government on a per capita basis. For sales occurring in unincorporated Salt Lake County, the point-of-sale portion of the tax is received by the County.

- **Property Tax** – Local property tax revenues fund a sizeable portion of local government. All property is assessed at 100 percent of appraised value, with the exception of primary homes, which receive an exclusion of 45 percent. Thus, all commercial property owners as well as second homeowners pay the full appraised value. Tax rates vary by jurisdiction, as municipalities set their own property tax rates following the process mandated by the State. For 16 jurisdictions in the county, the total tax rate as of 2007 is 0.014607 with the cities falling within a relatively tight cluster between 0.012032 and 0.015926. The rate for the unincorporated area, at 0.014959, is slightly higher than the 16-jurisdiction average. The proceeds are distributed among a number of agencies. As an illustration, the City of West Jordan, which is representative of suburban communities in Salt Lake County, 56 percent of property tax is dedicated to schools, 22 percent is for the County, 5 percent is for special districts, and 17 percent is for the City. The average portion of property tax dedicated to cities approximates 20 percent of the total.
- **Impact Fees** – Most municipal jurisdictions in Salt Lake County have established impact fees for new development. The impact fee programs have been established to alleviate a municipality's cost of growth for services such as roads, water, sewer, storm sewer, fire, police, parks, and other minor categories. In addition to local municipalities, regional service districts also have fees for the communities where they provide services. All fee programs calibrate impacts by use and stipulate different fees for single-family units, multi-family units, and a range of different commercial uses. As of 2007, Salt Lake County has only adopted one fee, which applies to storm drainage.
- **Dedication of Land in Lieu of Fees** - While not a direct revenue source, the dedication of buildable land for parks, roads, schools, and other public benefit has value in that the receiving public entity has land to build the needed facilities to serve future residents and no fee is charged.
- **Special Improvement Districts** – The purpose of most Special Improvement Districts (SIDs) is to finance infrastructure (roads, parks, etc.) for a specific area. Typically, SIDs are funded by annual payments from property owners that are based on a baseline per unit or per square foot assessment plus an assessment linked to property value. The formation of an SID must be authorized by a local governing authority. For any funds derived from property valuation, a majority of landowners within the proposed district must approve it. Following a successful district formation, bonds are issued and the proceeds used to fund infrastructure improvements. Debt service is provided by annual payments from subsequent property

owners. The motivation to establish an SID is to fund capital improvements for large-scale development with efficiency not possible on a smaller scale. Due to the possibility of annexations and incorporations, any debt incurred by the County may be in the form of an SID.

- **Special Service Districts** – Special Service Districts (SSDs) are primarily used to fund ongoing operating and maintenance services beyond the standard levels. The formation requirements are similar to those of an SID. One primary difference is the length of time each is used. The debt structure for an SID traditionally runs less than 20 years, which coincides with the retirement of the bonds. For SSDs, annual proceeds from property owners are used for operations and can run in perpetuity.
- **Community Fees** – Community fees are structured to fund quasi-public entities, such as home owners associations or foundations. A fee structure is established by the initial master developer, which is then mandated for all future users. A common example of a community fee is one based on a percentage of property transactions. Research shows that these fees can fall in the range of a quarter percent up to two percent. For all property transactions, the buyer or seller must pay the fee as expressed as a percentage of the sales price.
- **Retail Sales and Property Tax Agreements** – In many communities, public revenue streams are established to fund infrastructure improvements using tools such as Tax Increment Financing (TIF). These funding mechanisms are established through negotiations between a developer and a public jurisdiction, such as a city or county. In the case of TIF financing, a portion of the net new revenues is pledged back to the developer to service infrastructure debt.
- **Water and Sewer Tap Fees** – Water and sewer tap fees are expenses paid at time of development that are distinct from impact fees. These fees will be an important source of revenue for any entity that provides service to the West Bench.
- **Grants** – Grants fund a significant portion of the Human Services programs (Mental Health, Substance Abuse, Youth Services, Aging Services, and Economic Development) available to county residents. Grants also fund a lesser portion of other services provided to the county, such as overtime funding for services and special programs provided by the Sheriff's office. The majority of grant funding is Federal and State money that is intended to help those less fortunate or as seed money to begin programs the grantor would like the local agencies to provide



in an ongoing basis following the grant period. Some grants are fixed in funding no matter the population or service area growth. Most grants are tied to grantor administration priorities and may change as administrations change. In almost all cases, the grant funds do not fully fund programs, but augment local efforts in a given area of emphasis.

- **Charges for Service** – Charges for services provided are a significant funding source for many county agencies. Charges for service may range from charging residents for using a recreation center to charges by a Sanitation District for garbage pickup fees. Charges for services provided may range from offsetting a portion of the cost of the service, to fully funding the service.

### *Options for Consideration*

The long-term fiscal strength of the West Bench depends on the resources available for the initial capital construction as well as the ongoing operating costs. An optimal strategy that effectively addresses both the capital and operating needs should be developed using the sources listed above and/or other attractive sources of potential funding. For some sources, there may be a need to depart from the historical application of a specific revenue source. A joint effort between the County and the developer and other entities may be needed to amend standards to create optimal sources. Any selected revenue sources for the West Bench should treat West Bench developers and residents equitably. It should be noted that most communities rely extensively on sales tax revenue, which in turn makes them dependent on trends in the retail development industry and exposes the community to vacillations in retail market conditions. If a combination of sources can be structured that is not overly dependent on sales tax, the future development will have a stronger position when it comes to incorporating (or limiting) large-format retail and other conventional retail development.

## 5.5 INFRASTRUCTURE, SERVICES, AND AMENITIES

This section outlines various options for how capital infrastructure costs, ongoing service costs, and major amenities could be provided within the West Bench Planning Area. Successful large-scale master planned community developments are based on a cooperative relationship between the developer and the local government. Methods and strategies discussed are not intended to be a complete or exhaustive representation of how infrastructure may be built or how services will be provided. Technical, fiscal, as well as additional opportunities or constraints may require changes or modifications to such options in the future. Prior to development, additional studies may be required to determine hazardous areas and to identify potential issues such as liquefaction, landslide, rockslide, debris flow, and avalanche areas.

Three types of infrastructure are most critical for development: transportation, water, and sewer. These types, as well as other infrastructure and services (storm drainage, power, gas, telecommunications, solid waste and recycling, parks, and affordable housing) are addressed below, with a range of possible solutions that are either straightforward, such as the provision of power and gas, or have a range of solutions that represent similar levels of cost and can be implemented through a number of arrangements, provided that adequate funding can be secured. Decision-making questions are suggested in Table 5-4 to assist leaders in determining the most appropriate solution for a given problem and context.

### TRANSPORTATION

#### *Existing Conditions*

Transportation is a concern for all those in Salt Lake Valley. Although preliminary alignments have been defined within the WBGPP Planning Area, additional studies need to be conducted on- and off-site for a regionally connected system. The WFRC is responsible for regional travel demand forecasting and long-range regional transportation planning and funding. Salt Lake County will participate with WFRC transportation planning, funding, and corridor preservation.



- The West Bench General Plan addresses approximately 41,000 acres of developable land in Salt Lake County that are currently undeveloped and therefore has limited transportation infrastructure.
- Access to and from the area includes a combination of east-west and north-south roadway facilities. The West Bench General Plan envisions almost 20 major connections between existing east-west transportation corridors and the West Bench Planning Area, with north-south connections at I-80 and in the Daybreak vicinity. No significant transit service currently exists to and from the West Bench Planning Area.

***Options for Consideration***

A significant on-site transportation project within the project area is the north/south Transit Corridor. This facility may include dedicated transit lanes, six travel lanes, parking, bicycle lanes, and a landscaped median. Although not currently included on either the State Transportation Improvement Plan (STIP) or Long Range Transportation Plan (LRTP), this facility would address both West Bench and regional travel needs and should be eligible for a mix of private and public funding sources. Phased construction of the transportation options along the north/south transit corridor is a key economic feature of the future West Bench development.

TABLE 5-4: INFRASTRUCTURE DECISION-MAKING QUESTIONS.

#	CATEGORY	DESCRIPTION
1	Cost	What capital outlay is required?
2	Environment	How does the proposal achieve the lowest possible impact to the environment?
3	Readiness	What is the availability of the proposed infrastructure solution to serve development as needed?
4	Cohesiveness	What is the proposal’s potential to keep the West Bench intact?
5	Logistics	What is the feasibility and degree of effort required for negotiations with service providers and/or municipalities?
6	Opportunity Cost	What is the opportunity cost in terms of land consumption that could be used for development alternatives?
7	Operations	What are the life-cycle maintenance requirements and costs?
8	Efficiency	How does the proposal maximize the use of existing infrastructures?

Source: Economic & Planning Systems, 2006

Future planning should utilize Traffic Analysis Zones (TAZs) that are sized appropriately to support future Community Structure Plans. Until travel demand forecasting is completed (20-year and build-out) by WFRC to test the on- and off-site West Bench General Plan transportation infrastructure requirements, it is premature to conclude which off-site roadway facilities will be impacted by future West Bench development. Transportation demand for western Salt Lake County is regional in nature, and not limited to demand resulting from development of the West Bench. The 2030 Long Range Transportation Plan and 2006 State Transportation Improvement Plan identify the following projects that are planned to alleviate regional demand:

- Mountain View Corridor
- Light Rail Transit Extension to Daybreak, Salt Lake International Airport, and West Valley
- SR-201 Widening
- 3500 South Improvements
- 6200 South Widening
- 7800 South Widening
- 9000 South Widening
- SR-104/10600 South
- 11400/11800 South Interchange and New Construction
- 12300/12600 South Widening and New Construction
- SR-111 Widening

In addition to the projects listed above, a number of additional projects would potentially provide capacity for future development in western Salt Lake County and the West Bench. The following projects are not currently shown on either the LRTP or the STIP and include the Light Rail Transit (LRT) extension beyond Daybreak; westerly extensions of 3500 South, 5400 South, 6200 South, 7800 South, 9000 South, and 10400 South; the widening of SR-111 from 3500 South to 5400 South; and potential future access to Tooele County through either Bingham Canyon or Butterfield Canyon.

## WATER

### *Existing Conditions*

The vast majority of the West Bench General Plan area is undeveloped and lacks municipal water service. However, the Copperton community area, a small community of housing originally built for mining workers, has an existing water system. Limited water service is also available at the Bingham Canyon Mine. Kennecott Utah Copper also operates a water treatment facility as part of the mining operation. These systems will continue to support the Copperton community and mining operations through the foreseeable future. New infrastructure and facilities will need to be constructed to support the additional urban development.

Salt Lake County does not supply water; several providers of water are available in the Salt Lake Valley. The current model in use in the valley is water service provided to users through a city or a special district. Magna Water Company also provides service to a portion of the north end of the property. These cities and districts provide water from their own sources such as wells, or through water obtained from a wholesale provider such as the Jordan Valley Water Conservancy District (JVWCD). The two major water purveyors in Salt Lake County include the JVWCD and the Metropolitan Water District of Salt Lake.

As stated earlier, water service is often provided by cities or special districts that have their own sources and/or augment their sources with water purchased from wholesale entities. A list of existing providers that could potentially serve all or part of the West Bench is provided below.

#### Cities:

- Salt Lake City
- City of West Jordan
- South Jordan City
- Herriman City

#### Districts:

- Copperton Improvement District
- Granger – Hunter Improvement District
- Kearns Improvement District
- Magna Water Company
- Taylorsville-Bennion Improvement District



Some of the entities are positioned with sufficient geographic proximity to be able to provide service to some of the West Bench development in the near term. Figure 5-2 illustrates the boundaries of the relevant water districts.

### *Options for Consideration*

Three options for consideration are presented in this section. These options do not represent a preferred or ideal course of action but illustrate how water service may feasibly be provided to portions of the West Bench. Technical, fiscal, or other considerations over time may make these options more or less attractive or may provide additional, more favorable opportunities. Regardless of which option is chosen, culinary water shall be addressed before development occurs.

- Culinary water service could be provided to specific development areas through agreements or other arrangements with various cities and districts along the West Bench. These entities would then oversee the expansion of improvements and would own and operate the systems.
- A new Special Improvement District, Special Service District, or other form of special district could be formed for the areas of the West Bench General Plan. The new district could build infrastructure to serve the developing communities of the West Bench and would own and operate the systems. The district could either contract with a wholesale provider of water such as JWCD, or develop its own sources of water from West Bench water rights, or use a combination of both water sources.
- Depending on the timing of development, it may be possible that combinations of options are used for the eventual build-out of the area. Some areas of the development can be included into existing districts and be served without large investments in new infrastructure. Other areas that are farther away from existing infrastructure and would require large capital outlays to bring water capacity to the development. These areas would benefit from long-range planning of systems, with incremental improvements over time, to eventually develop the needed infrastructure.

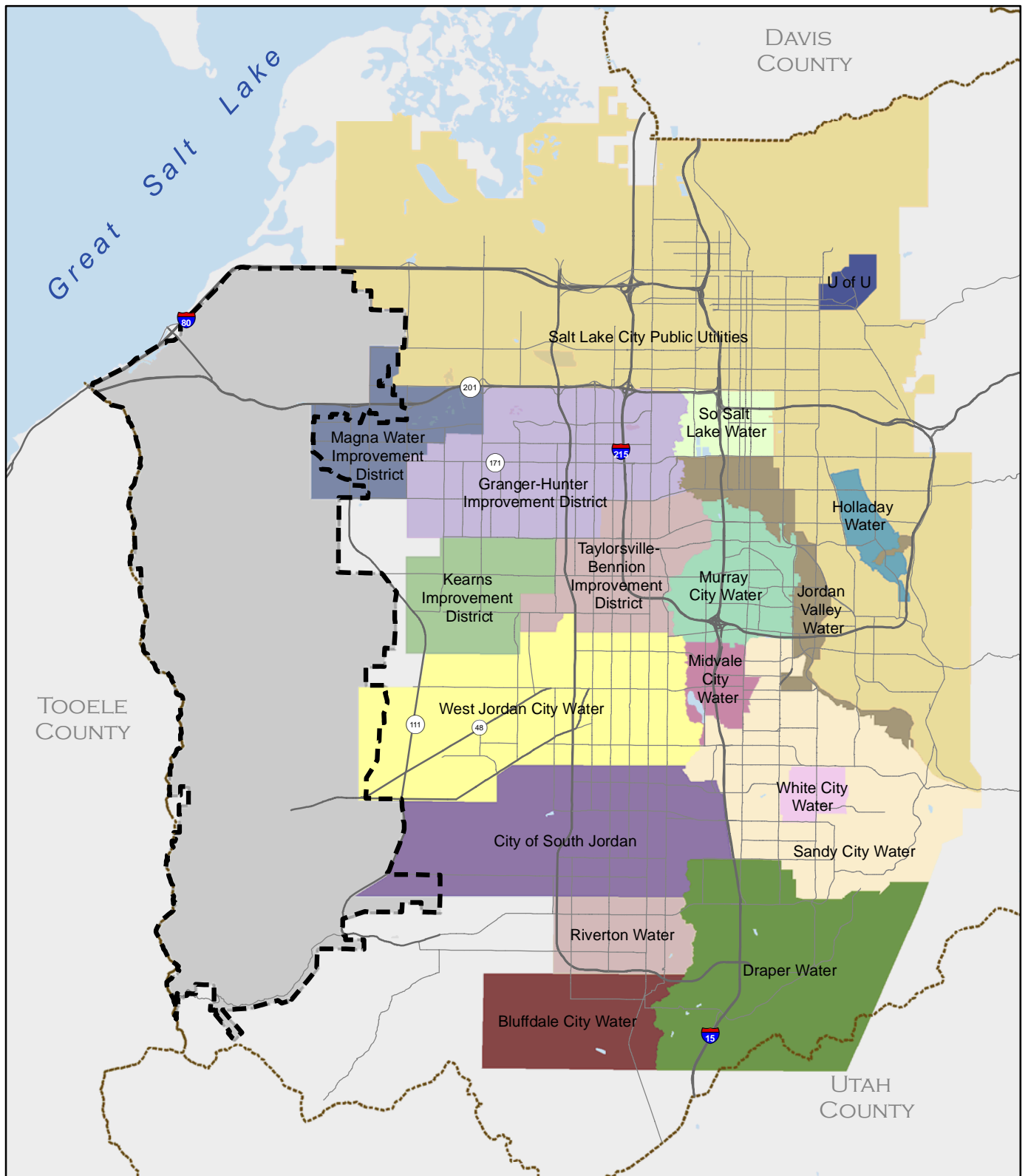


FIGURE 5-2. WATER DISTRIBUTION MAP

-  West Bench Planning Area
-  County Boundaries
-  Highways
-  Key Local Roads
-  Open Water

EDAW | AECOM Source: Salt Lake County

0 1 2 3 Miles

## SEWER AND WATER RECLAMATION

### *Existing Conditions*

Wastewater from the Salt Lake Valley is currently collected into various systems and routed to four wastewater treatment facilities located throughout the valley. These collection systems drain to a series of trunk lines that run primarily east-west to the treatment facilities, shown in Figure 5-3, which are operated by the following entities:

- Central Valley Water Reclamation Facility
- Magna Water Company
- Salt Lake City Corporation
- South Valley Water Reclamation Facility

Each of these facilities treats the wastewater and releases the effluent either to the Jordan River or the Great Salt Lake. None of the facilities have a significant reuse component for the treated water. Both the Central Valley and the South Valley facilities treat wastewater from several different collection entities, while the Magna and Salt Lake facilities treat the majority of wastewater from their own jurisdictions.

Collection trunk lines exist in most major east-west connection streets, which eventually run to the treatment facilities. These lines were constructed based upon wastewater master plans that did not account for the new West Bench communities and are not sized to accommodate the new flows. New collector trunk lines or upsizing of existing lines will be required to convey these flows to the plants. Also, significant enlargement of the treatment facilities will be needed to eventually handle the flows from the build-out of the development. Regardless of which option is chosen, sewer and water reclamation management should be addressed before development occurs.

### *Options for Consideration*

Numerous options exist for the eventual treatment, reuse, and disposal of the wastewater generated by the new West Bench development. Three options for consideration are presented in this section. These options do not represent a preferred or ideal course of action, but illustrate how



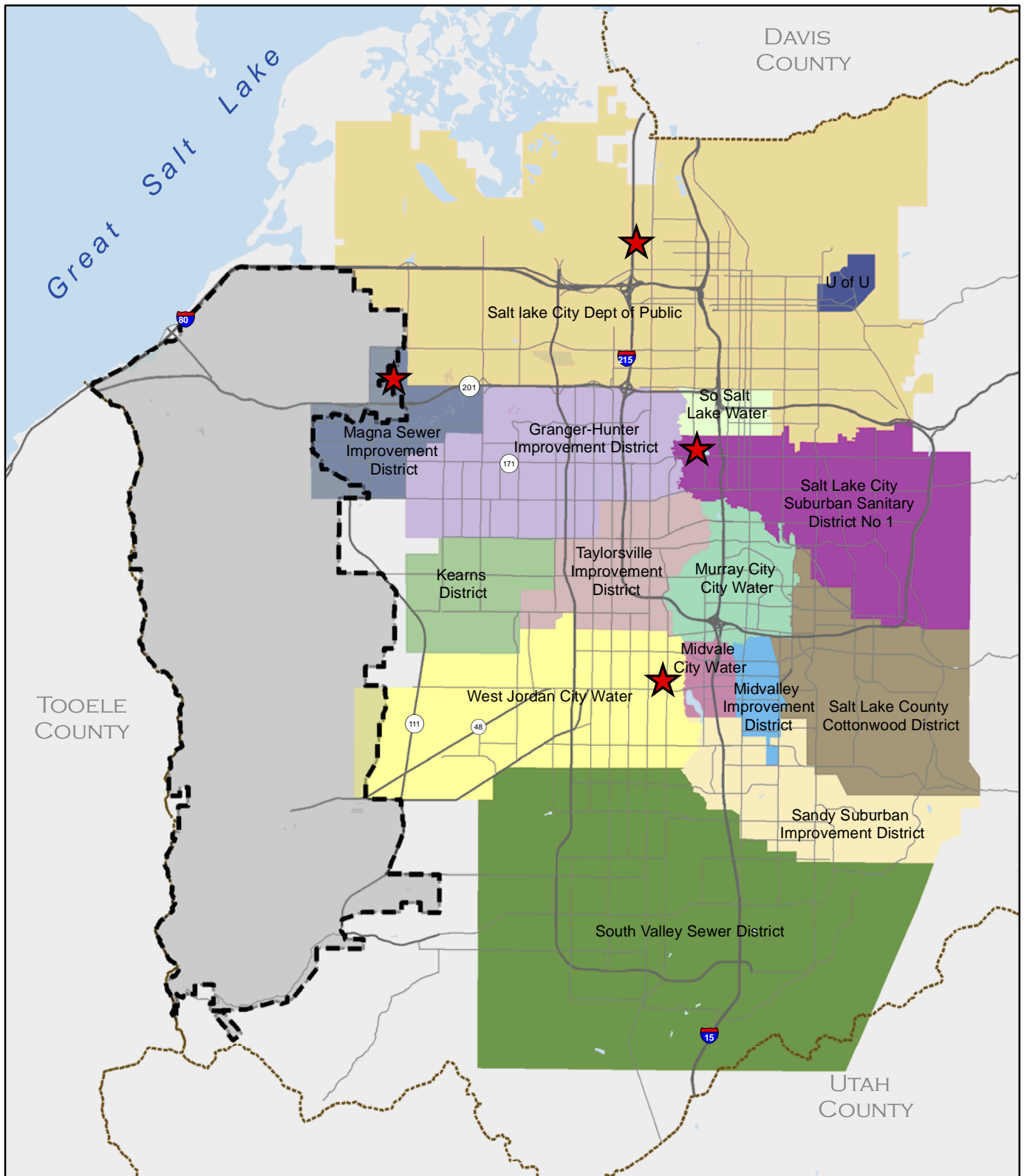


FIGURE 5-3. SEWER IMPROVEMENT DISTRICTS

- ★ Sewer Treatment Plants
- West Bench Planning Area
- Highways
- Key Local Roads
- ☁ Open Water
- ⋯ County Boundaries

EDAW | AECOM Source: Salt Lake County

0 1 2 3 Miles



sewer/wastewater service may feasibly be provided to portions of the West Bench. Technical, fiscal, or other considerations over time may make these options more or less attractive or may provide additional, more favorable opportunities. These options will also need to address the potential impacts of treated sewage on wetlands adjacent to the Great Salt Lake and the lake itself.

- Existing collection and trunk systems could be expanded and the flow routed to existing, expanded treatment facilities. Treated effluent could possibly be reused for irrigation purposes but would be located a significant distance from any reuse opportunities within the new development.
- New treatment facilities could be created near the new West Bench communities. These facilities would be sized for the new development and located close to the new communities where the treated effluent could possibly be reused within the new development as a source of irrigation water.
- Treatment facilities on or near the new development could be utilized to effectively skim the wastewater and extract a large percentage of water and solids and release the remaining wastewater for processing downstream. This would allow the treated effluent to be captured on site and be reused in the new development areas as compost or fuel sources. Moreover, the reduced volume would allow use of the existing trunk lines and treatment facilities with a significant reduction in the amount of new trunk lines that would need to be installed.

## STORM DRAINAGE

### *Existing Conditions*

The West Bench represents a large watershed that drains to several streams and creeks that eventually run to the Jordan River. Runoff has historically drained into this system that are now systems consisting of open channels, box culverts, and pipes. Many of these drainage corridors include riparian areas, which should be consistent with the goals of the Water Quality Stewardship Plan. Unless drainage capacities are increased, discharge quantities should be managed to the levels of historic flows coming off the West Bench Planning Area.

### *Options for Consideration*

Numerous options exist for the management of stormwater from the project. Three options for consideration are presented in this section. These options do not represent a preferred or ideal course of action, but illustrate how stormwater may be managed on portions of the West Bench. Regardless of which option is chosen, storm drainage should be addressed before development can occur. Technical, fiscal, or other considerations over time may make these options more or less attractive or may provide additional, more favorable opportunities.

- Detention basins could be constructed on site that would capture significant flows and release them over time into the current discharge locations. Several improvements would need to be made to the receiving systems downstream to increase capacity. This would require large capital outlays to build the needed infrastructure.
- Management systems may be constructed to route appropriate flows from large stormwater events to the Great Salt Lake. A system of collection pipes may be built in the new communities and routed to regional facilities. This system would run mostly south to north and eventually drain to the lake.
- All flows could potentially be captured on site and contained in a series of ponds and basins. This would be done with both local and regional facilities designed to maximize groundwater recharge of the aquifer. By reusing the water rather than discharging to the lake, the action would likely be better able to protect and preserve the natural watershed. On the other hand, needed facilities could be expensive or otherwise unfeasible.

### POWER, GAS, AND COMMUNICATIONS

Throughout the entire West Bench Planning Area, power is supplied by Rocky Mountain Power (RMP), and natural gas is provided by Questar. Current mining operations are primarily serviced by a power plant operated by Kennecott Copper and located in the area of the smelter. Kennecott power lines serve the smelter, the pit, and all areas of mining in between. Gas is also acquired for mine use through separate agreements with local gas providers. These resources will likely be in use throughout the life of the mining operation, including the smelter. It may be possible to reuse the facility after the mining operations have ceased, but until that point, power will need to be acquired from a different source.

RMP can access power from the main grid that runs east and west through the project at approximately 8000 South. Questar also has natural gas mains in the area with access to a large pipeline (owned by Kern River Pipeline) running north and south along the Highway 111 corridor.

Service for both of these utilities will be readily available from both entities. The property owner/developer is responsible for negotiations for funding of substations, gas metering stations, and other infrastructure items. Each has funding and cost-sharing mechanisms in place for providing service.

Phone, internet, cable, and other communication service provisions should be coordinated in advance in order to consolidate utility corridors.

## SOLID WASTE AND RECYCLING

Appropriate management of solid waste is important for the long-term sustainability of any community. Responsibility for management of solid wastes generated by future residents and businesses of the West Bench Planning Area is shared among the waste haulers, the Salt Lake Valley Solid Waste Management Council, and Salt Lake County.

### *Existing Conditions*

Salt Lake County Sanitation, Special District No. 1 provides collection of solid waste, recycling, and other programs to the residents of unincorporated Salt Lake County and to the cities of Herriman, Holladay, and Taylorsville. Salt Lake County Public Works Solid Waste Management Division is responsible for establishing and maintaining the necessary infrastructure to provide efficient, convenient, and reliable integrated solid waste management services for Salt Lake County citizens, businesses, and institutions. In 2005, the Division updated the Salt Lake Valley Landfill Master Plan. The Landfill Master Plan incorporates the newest state-of-the art methods, proven materials for protecting environmental resources and incorporates requirements to comply with Federal, State, and local landfill environmental regulations. The updated design coupled with the current reduction of waste disposed in

the landfill has prolonged the life of the landfill to reach capacity in 2052 (2005 Salt Lake Valley Landfill Master Plan). Items in the update of the Master Plan include:

- Increased design capacity.
- Incorporation of the landfill gas collection and control system.
- Leachate collection, treatment, and processing system.
- Current and projected costs for landfill development, closure, and post closure maintenance.
- Final cover design and projected end-use of the landfill. The finished landfill will support a variety of recreation uses including soccer fields, baseball fields, picnic area, and bike riding and walking trails.

### *Options for Consideration*

The West Bench General Plan highlights several ways for future residents and businesses in West Bench to reduce solid waste. These include pre- and post collection recycling programs, yard waste and construction recycling. Technical, fiscal, or other considerations over time may make these options more or less attractive or may provide additional opportunities. Key considerations include:

- Future updates of the Salt Lake County Landfill Master Plan to address the impacts and long-term management of solid waste generated by the new communities of the West Bench Planning Area.
- A new transfer station and maintenance facility to serve the west side of Salt Lake County including the new communities in the West Bench.
- A public education program to help current and new customers understand the importance of recycling and to select household goods and products that will reduce the solid waste stream.
- New technology for managing the disposal of solid waste should be considered by the County in the future. Reduction of the solid waste stream will provide numerous benefits including: extending the capacity of the current landfill, reducing overall operational costs, conserving resources, and protecting the environment, all benefiting current and new customers.



## OPEN SPACE

A Core Concept of the West Bench General Plan is the preservation of vast natural and scenic resources found within West Bench. Almost one-half of the land of the West Bench Planning Area has development constraints that create the opportunity to preserve contiguous areas of habitat, protect scenic resources, and, where appropriate, allow future citizens to recreate.

Parks for public, private, semi-private, or civic uses, and are discussed in the Salt Lake County Parks and Recreation Master Plan and in Chapter 4 of this document.

Open space in the West Bench is highly diverse in its ecology, topography, cultural history, and regional purpose. For these reasons, open space protection and implementation approaches should be multi-faceted. Chapter 4 states the various goals, policies, and objectives for open space. The following discussion outlines key considerations to facilitate these goals.

### *Options for Consideration*

- **Inventory and Prioritization.** The first step to protecting open space is to discover where such resources are located and define their context. Inventories should occur on the ground through surveys and compiling existing geographic data collected through Federal and state sources, along with local and other non-profit organizations.
- **Protection Mechanisms.** There are a multitude of protection mechanisms available for open space, depending on the nature of the land and ownership. Direct acquisition, land dedication, or application of conservation easements will be key tools for the County in the future. Federal, state, local, and non-profit organizations can own property or manage a conservation easement. Future zoning and sensitive land overlays are additional tools that could be used to conserve identified areas.
- **Management.** A long-term, science-based strategy for ongoing management of future properties is essential to achieve conservation objectives. Adequate personnel and budget are needed for restoration, weed control, wildlife management, and development of recreational amenities, interpretive features, and administration. A number of funding tools, including grants,



donations, general fund allocations, tax initiatives, and endowments, can be used for this purpose.

- **Comprehensive Approach.** Overall, a comprehensive approach to converting lands to open space status should be developed. The approach should begin with an inventory, followed by a open space classification system that considers ecological function, context, sensitivity, purpose, and desired levels of access. The approach should further prioritize lands for protection, determine appropriate preservation tools, and identify management organization and funding requirements.

## EDUCATIONAL RESOURCES

While providing education is the responsibility of State and local school districts, the success of the educational system for the West Bench will be contingent on the inclusive involvement of officials from school districts and educational institutions. At every age level, from head-start programs to universities, and for every type, from private schools to applied technology schools, educational facilities should be physically integrated within a comprehensively planned system of centers, neighborhoods, and transportation corridors. Through proactive consultation and coordinated planning, the County and the West Bench developer can assist State and local school districts in maximizing the benefit and compatibility of proposed school sites.

## HOUSING AFFORDABILITY AND VARIETY OF BLENDED HOUSING TYPES

### *Existing Conditions*

Housing price appreciation in Salt Lake County has been strong, especially in the recent past. From 1997 to 2003, the annual average rates of appreciation ranged from 1.7 to 3.5 percent, but more recent appreciation rates are running 7.1 to 8.2 percent annually. With appreciation rates at these levels, housing affordability becomes more of a challenge for the average homebuyer. In 2005, the price for existing homes in Salt Lake County averaged \$221,000, while new home prices averaged \$290,000. At these prices, a household income must exceed the median income by 32 percent to afford the average priced new home.

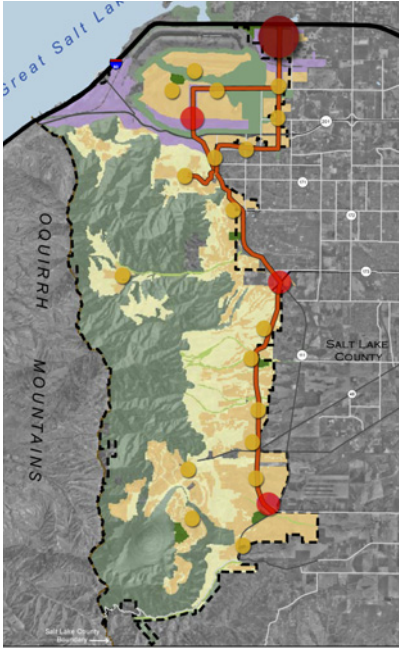


### *Options for Consideration*

There are numerous methods for developing affordable housing. Tools that could be used include credit enhancement, land banking, market rate buy-downs, land donations, gap financing and technical assistance for tax credit development, donations from foundations, establishment of a trust fund, and development partnerships among the West Bench developer, on-site builders, the County, the Utah Finance Authority, and non-profit organizations. In the future, it is recognized that the West Bench developer may utilize any of these, as well as other tools in its efforts to contribute affordable housing. It is the goal of the County and the West Bench development to:

- Take an inclusionary approach to affordable housing;
- Provide housing solutions that are proportional to the West Bench capture rate of regional development;
- Meet the intent and purpose of the current Salt Lake County Moderate Income Housing Plan and current State law; and
- Integrate and disperse a variety of housing types and price points within the larger development.
- Support modifications of State law to give local government more options in working with developers.
- Support development of a Countywide Housing Policy and Implementation Plan.

Additional studies or other considerations over time may make these options more or less attractive or may provide additional, more favorable opportunities that are not noted here.



## 5.6 SUMMARY

Inevitably, as the West Bench develops over the next 50-75 years, it will encounter a variety of challenges that will stem from issues with policy, funding, logistics, market demand, the environment, and others. In the future, the plan may need to be adjusted; however, the Core Concepts of the Plan (Section 3.3) must stay in place to achieve the desired Vision:

- Resource Conservation,
- A Hierarchy of Centers,
- Economic Growth,
- Quality Neighborhoods
- A North/South Transit Corridor, and
- Parks and Open Space Network

These Core Concepts provide the essential heart of the WBGP and the key to the future of the West Bench. Continued implementation of goals, policies, and objectives in Chapter 4 adds greater meaning and clarification to the Core Concepts. The success of the General Plan will likely depend on the continuous evaluation and response of appropriate strategies and services to address the unique issues that emerge over time.

## WORKS CONSULTED, BIBLIOGRAPHY, AND LITERATURE CITED

### PLANS AND OTHER DOCUMENTS

Calthorpe Associates. 2004. **Kennecott West Bench Master Plan.**

Prepared for Kennecott Land. February 2004. Revised July 2005. Also referenced as West Bench Master Plan.

City of West Jordan. 2003. **West Jordan Comprehensive General Plan.**

Commerce CRG, Commercial Real Estate Services. 2004. **Year End 2004, Market Review for Salt Lake County.**

David Rumsey Collection. 1876. Engineer Department U.S.A. Geological and Topographical Atlas Accompanying the Report of the Geological Exploration of the Fortieth Parallel Made by the Authority of the Honorable Secretary of War under the direction of Brig. and Brvt. Major General A.A. Humphreys, Chief of Engineers U.S.A. by Clarence King, U.S. Geologist in Charge. New York: Julius Bien Lith.

David Rumsey Collection. 1879. Topographical and Geological Atlas of the District of the High Plateaus of Utah to Accompany the Report of Capt. C.E. Dutton, U.S. Ordnance Corps, Assistant Geologist. New York: Julius Bien, Lith.

Envision Utah. 2000. **Envision Utah: Producing a Vision for the Greater Wasatch Area.** April 2000.

Envision Utah. 2003-2004. **Mountain View Corridor Study; A Four County Land-Use and Transportation Vision.**

Envision Utah . In process. **Wasatch Choices 2040.** Available at URL = <http://www.envisionutah.org/projects.phtml?current=1>.

Governors Office of Planning and Budget. 2005. **2005-2050 State of Utah Long-term Growth Projections: 2005 Baseline Highlights.** April 2005.

Governors Office of Planning and Budget. 2006. **2006 Population Estimates.** Accessed February 27, 2007. Available at URL = <http://governor.utah.gov/dea/Rankings.html>.

Herriman City Corporation. 2004. **Herriman City General Plan.**  
Herriman City, Utah.

Kunstler, James H. 1996. **Home From Nowhere: Remaking Our  
Everyday World for the 21st Century.** Simon & Schuster, New York.

Ohmae, Kenichi. 1995. **The End of the Nation State: The Rise of the  
Regional Economies.** Free Press, New York.

Robb, J. and Riebsame, W. 1997. **Atlas of the New West: Portrait of a  
Changing Region.** Boulder Center of the American West, University  
of Colorado Press.

Salt Lake City Community Development Division, 1995. **West Salt Lake  
City Master Plan.** Salt Lake City, Utah.

Salt Lake County Water Resources Planning and Restoration. Not yet  
adopted. **Salt Lake County Water Quality Stewardship Plan.**  
Unpublished.

Salt Lake County Community Resources and Development. 2007 Draft.  
**Salt Lake County Affordable Housing and Accessibility Plan.**  
Unpublished.

Salt Lake County. 2003. County Planning Goals and Policies.

Salt Lake County. No date. **Storm Drainage Master Plan.**

Salt Lake County Parks and Recreation Department. 2005. **Salt Lake  
County Parks and Recreation Master Plan.**

Salt Lake County Public Works Department, Planning and Development  
Services Division. 2004. **Copperton Township General Plan.**

Salt Lake County Public Works Department, Planning Division. 1989.  
**Magna Community Plan.**

Salt Lake County Public Works Department, Planning Division. 1996.  
**Southwest Community General Plan.**

Salt Lake County Public Works Department, Planning Division. No date. **Salt Lake County Transportation Corridor Preservation Plan.** Unpublished. Also referenced as **Salt Lake County Transportation Corridor Plan (Ch.4), Right of Way Preservation Plan.**

Salt Lake County Public Works Department, Planning Division. 2004. **Magna Historic Downtown Renovation Project.**

Salt Lake County, Salt Lake City and Shaw Environmental, Inc. **Master Plan Salt Lake Valley Landfill.** 2006.

South Jordan City. 2003. **South Jordan General Plan.** South Jordan, Utah.

Tooele County. 2006. **Tooele County General Plan.** Available at URL = <http://www.co.tooele.ut.us/engtcgpl.htm>.

UDOT (Utah Department of Transportation). 2006. **State Transportation Improvement Program (STIP).** Yearly update of transportation projects on State, City and County highway systems. Available at URL=<http://www.udot.utah.gov>

Utah Reclamation and Conservation Commission and Envision Utah, and Consultants Swaner Design, SWCA Environmental Consultants and Clarion Associates. 2003. **Salt Lake County Shorelands Plan. Part I: Regional Vision Report, Planning for the Great Salt Lake Shorelands and its Surroundings.** May 2003.

West Valley City Community and Economic Development Department. 2003. **West Valley City General Plan: Vision 2020.** West Valley City, Utah. Revised 2005. Available at URL = <http://www.wvc-ut.gov/comdev/zoning/documents/GPRevised8-30-05.pdf>

Wasatch Front Regional Council (WFRC). 2003. **WFRC Regional Transportation Plan Update, 2004-2030.** Salt Lake City, Utah. Available at [http://www.wfrc.org/cms/index.php?option=com\\_content&task=view&id=86&Itemid=38](http://www.wfrc.org/cms/index.php?option=com_content&task=view&id=86&Itemid=38). Also referenced as: 2030 Long Range Transportation Plan, Long Range Transportation Plan, WFRC LRT, WFRC Long Range Transportation Plan.

WFRC. 2005. **Transportation Improvement Plan (TIP)**. Salt Lake City, UT. Five year program of highway and transit projects for the Salt Lake and Ogden Metropolitan area. Available at URL=<http://www.wfrc.org>

US Geological Survey, Biological Resources, Utah Cooperative Fish and Wildlife Research Unit, Utah State University, College of Natural Resources, Wasatch Front Regional Council, Swaner Design, Utah Division of Wildlife Resources, Marriner S. Eccles Foundation. 2007. **Alternative Futures for Utah's Wasatch Front: Conservation of Open Space**. Salt Lake City, UT.

Wikstrom Economic and Planning Consultants. 2005. **Kennecott Land Community Assessment**. June 2005.

## WEBSITES AND OTHER INTERNET CITATIONS

The Church of Jesus Christ of Latter Day Saints. Website. **Great Salt Lake Valley – Emigration Square**. Accessed June 5, 2006. Available at URL = [http://www.lds.org/gospellibrary/pioneer/40\\_Salt\\_Lake\\_Valley.html](http://www.lds.org/gospellibrary/pioneer/40_Salt_Lake_Valley.html).

Denver and Rio Grande Ghost Depot. Website. Accessed June 5, 2006. Bingham, Utah History. Available at URL =<http://ghostdepot.com/rg/mainline/utah/bingham.htm>.

Kennecott Utah Copper. Website. **Our History**. Accessed June 5, 2006. Available at URL =[http://www.kennecott.com/history\\_changing\\_face.html](http://www.kennecott.com/history_changing_face.html).

Salt Lake City. Website. **Salt Lake City History**. Accessed June 5, 2006. Available at URL = [http://www.slcgov.com/info/area\\_info/salt\\_lake\\_city.htm](http://www.slcgov.com/info/area_info/salt_lake_city.htm).

Salt Lake County. Website. **Salt Lake County History**. Accessed June 5, 2006. Available at URL = <http://www.slco.org/about/history.html>.

Urban Land Institute. Website. **Commentaries from the Senior Resident**



**Fellows.** Accessed February 14, 2006. Available at URL = <http://www.uli.org/AM/Template.cfm?Section=Commentaries&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=126&ContentID=24583>.

U.S. Census Bureau. 1990. **General Population. South**

**Jordan City, UT.** Available at URL = [http://factfinder.census.gov/servlet/SAFFPopulation?\\_event=Search&\\_name=south+jordan&\\_state=04000US49&\\_county=south+jordan&\\_cityTown=south+jordan&\\_zip=&\\_sse=on&\\_lang=en&pctxt=fph](http://factfinder.census.gov/servlet/SAFFPopulation?_event=Search&_name=south+jordan&_state=04000US49&_county=south+jordan&_cityTown=south+jordan&_zip=&_sse=on&_lang=en&pctxt=fph).

U.S. Census Bureau. 2005. **Population Estimates. South**

**Jordan City, UT.** Available at URL = [http://factfinder.census.gov/servlet/SAFFPopulation?\\_event=Search&\\_name=south+jordan&\\_state=04000US49&\\_county=south+jordan&\\_cityTown=south+jordan&\\_zip=&\\_sse=on&\\_lang=en&pctxt=fph](http://factfinder.census.gov/servlet/SAFFPopulation?_event=Search&_name=south+jordan&_state=04000US49&_county=south+jordan&_cityTown=south+jordan&_zip=&_sse=on&_lang=en&pctxt=fph).

U.S. Census Bureau. 2000. Places in California . Accessed January 8, 2006. Available at URL = <http://www.census.gov/>.

Utah Division of Air Quality. Website. **State Air Quality**

**Implementation Plan.** Accessed May 7, 2007. Available at URL=<http://www.airquality.utah.gov/planning/sip>.

Utah Foundation. Website. **Utah Priorities: A Project of the Utah**

**Foundation.** Accessed June 5, 2006. Available at URL = <http://www.utahpriorities.net/utahpriorities.html>.

Utah State Tourism. Website. **Salt Lake City History.** Accessed June 5, 2006. Available at URL = [http://www.utah.com/cities/slc\\_history.htm](http://www.utah.com/cities/slc_history.htm).