



The City of Reno Master Plan

# The great City Plan

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## INTRODUCTION

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## CITYWIDE PLANS

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## CENTER AND CORRIDOR PLANS

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## NEIGHBORHOOD PLANS

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## REFERENCE INFORMATION

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## INTRODUCTION TO RENO'S MASTER PLAN: THE GREAT CITY PLAN

The City of Reno Master Plan, The Great City Plan, is a legislative planning document with respect to the city's vision, goals, and policies relative to such matters as population, housing, streets, and resource use which is governed by NRS 278.150 to and including NRS 278.250 and reflects the City's Making It Great initiative, as well as the 2007 update of the Truckee Meadows Regional Plan as required by State Law. Master Plan and Minor Master Plan Amendments should be processed in the manner specified below.

The Great City Plan includes citywide plans for the City and its sphere of influence, plans for regional centers and transit oriented development (TOD) corridors, and neighborhood plans. These plans are listed below.

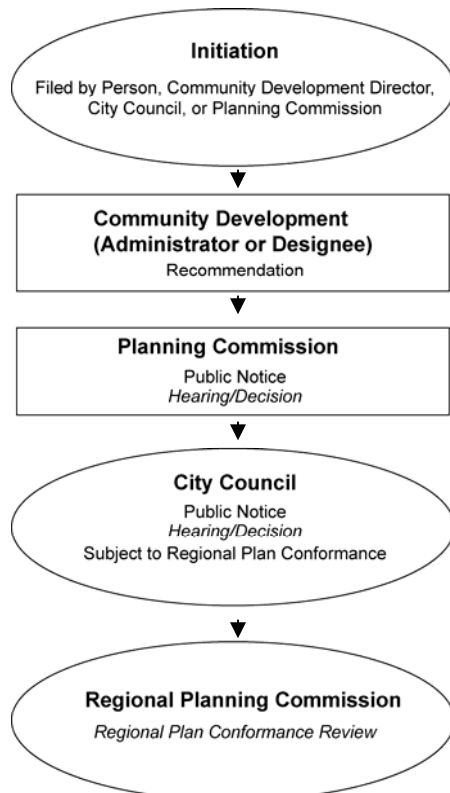
### Master Plan Amendments

Master Plan Amendments shall be initiated by the City Council, City of Reno Planning Commission, City of Reno Community Development Director, or a person's application in accordance with NRS 278.150 to and including NRS 278.250.

The City of Reno Community Development Director or his designee shall make a recommendation regarding all Master Plan amendments to the City of Reno Planning Commission.

### Minor Master Plan Amendments

Minor Master Plan Amendments shall be made in accordance with Reno Municipal Code, Section 18.05.500.



**Citywide Plans (includes sphere of influence):**

- Policy Plan
- Population Plan
- Conservation Plan
- Housing Plan
- Land Use Plan
- Public Services, Facilities and Infrastructure Plan
- Open Space and Greenways Plan
- Historic Resources Plan

**Center and Corridor Plans:**

- Downtown Reno Regional Center Plan
- Convention Regional Center Plan
- Medical Regional Center Plan
- Reno-Tahoe International Airport Regional Center Plan
- University of Nevada Regional Center Plan
- Dandini Regional Center Plan
- Reno-Stead Airport Regional Center Plan
- Redfield Regional Center Plan
- Western Gateway Regional Center Plan
- South Virginia Street TOD Corridor Plan (includes Plumb Lane Crossing station area plan)
- North Virginia Street TOD Corridor Plan
- West Fourth Street TOD Corridor Plan
- East Fourth Street TOD Corridor Plan

- Mill Street TOD Corridor Plan (includes River Landing at Mill Station area plan)

**Neighborhood Plans:**

- Reno-Stead Corridor Joint Plan
- McQueen Neighborhood Plan
- West University Neighborhood Plan
- Newlands Neighborhood Plan
- Plumas Neighborhood Plan
- Greenfield Neighborhood Plan
- Wells Avenue Neighborhood Plan
- Country Club Acres Neighborhood Plan
- Southeast Neighborhood
- Northeast Neighborhood Plan
- Mortensen-Garson Neighborhood Plan

## **CITYWIDE PLANS**

Citywide plans cover the City and its sphere of influence. These plans are listed below. The updated plans contained in this binder are shown in *italics*.

- *Policy Plan*
- *Population Plan*
- *Conservation Plan*
- Housing Plan (revision to be completed after October 2007)
- *Land Use Plan*
- *Public Services, Facilities and Infrastructure Plan*
- *Open Space and Greenways Plan*
- Historic Resources Plan (to be completed after October 2007)

# POLICY PLAN



## **ACKNOWLEDGMENTS**

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# **TABLE OF CONTENTS**

---

## **Introduction**

Plan Organization .....	1
Boundary .....	1
Time Frame .....	1
Relationship to Other Plans .....	1
Need for Policy Plan .....	1

## **Goals .....**

2

## **Policies**

Region, Neighborhood, and Housing.....	4
The City and the Region (C&R) .....	4
Urban Core (UC) .....	4
Neighborhood Conservation (NC) .....	6
Housing (H) .....	7
Cultural Resources and the Environment .....	8
Cultural Resources (C) .....	8
Environment (E).....	9
Open Space and Greenways (OS) .....	13
Public Services, Facilities, and Infrastructure .....	15
General Infrastructure (GI) .....	15
Water and Wastewater (WWW).....	18
Flood Management (FM) .....	19
Transportation (T).....	20
Streets, Parking and Access (P).....	22
Fire (F).....	24
Parks and Recreation (P&R) .....	25
Schools (S) .....	26
Civic Services and Participation .....	27
Human Services (HS).....	27
Citizen Participation (CP) .....	29

Urban Design.....	30
Community Design (CD).....	30
Building Design (BD) .....	33
Site Design (SD).....	34

## **Objectives**

Site Design .....	37
Building Design.....	48
Streets, Parking and Access.....	57

## **INTRODUCTION**

### **Plan Organization**

This plan is divided into four sections: *Introduction, Goals, Policies, and Objectives*. The *Introduction* describes the boundary, time frame, relationship to other plans and why this plan is needed. City goals that are the foundation for the City Master Plan and other City efforts are in the next section. The *Policies* section lists the policies that are intended to ensure that the City achieves its goals. The *Objectives* section provides more specific physical development objectives that are used to review private and public proposals for development in the City.

### **Boundary**

This Policy Plan covers all of the City of Reno and its sphere of influence.

### **Time Frame**

This Policy Plan horizon is to the year 2030.

### **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150 through 278.170.

Policies of the Truckee Meadows Regional Plan are applicable regionwide. The City Master Plan has three different levels of applicability; *Citywide, Center and Corridor, and Neighborhood*. *Citywide* plans include this Policy Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in centers or corridors, which have been designated as appropriate for more detailed planning. Policies in center, corridor and neighborhood plans elaborate, with greater detail, upon general policies contained in the citywide and regional plans. Center, corridor and neighborhood plans must conform with and not be in conflict with policy direction of the citywide plans and the Truckee Meadows Regional Plan. Similarly, Title 18 of the Reno Municipal Code applies at the citywide, center and corridor, and neighborhood levels and must be consistent with these plans.

### **Need for Policy Plan**

The Nevada Revised Statutes enable a City to prepare a Master Plan that can cover all or parts of a city and its sphere of influence. NRS 278.160 states that certain plans are required as part of a Master Plan: Population Plan, Conservation Plan (a.k.a., Open Space and Greenways Plan) and Housing Plan. The City has elected to prepare other plans that also apply on a citywide basis (e.g., Public Services, Facilities and Infrastructure Plan, Land Use Plan, Historic

Resources Plan, etc.) as also allowed by the Nevada Revised Statutes. For ease of use this Policy Plan includes, in a single source, all of the policies from these plans that apply on a citywide basis. Policies that apply to portions of the City are in the respective center, corridor or neighborhood plan.

Additionally, NRS 278.0284 provides for consistency between the Master Plan, development code (Title 18 of the Reno Municipal Code) and capital improvements as follows:

Conformity of local ordinances and regulations to master plan. Any action of a local government relating to development, zoning, the subdivision of land or capital improvements must conform to the master plan of the local government. In adopting any ordinance or regulation relating to development, zoning, subdivision of land or capital improvements, the local government shall make a specific finding that the ordinance conforms to the master plan.

Finally, the policies and more specific physical design objectives included in this plan will be used for other planning efforts in the City of Reno. For example, all private and public development applications that are reviewed by the Planning Commission and City Council are analyzed using these policies and objectives. This ensures consistency between City policies and physical development of the City.

## **GOALS**

The City Master Plan goals and policies were originally prepared and adopted after significant public input and deliberations in the mid-1990s. The process included numerous public meetings as well as the use of survey information, including a visual preference survey.

Goals, by their nature, are broad and general. As such they have also been reflected in other City efforts such as strategic planning and budget preparation which occur on an annual basis. Hence, the nearer term operations of the City are consistent with the longer term vision and development of the City.

- Serve as a leader to promote regional action to ensure effective, efficient and equitable delivery of services for the residents of Reno.
- Develop financial resources to the fullest potential.
- Promote entrepreneurial activities.
- Provide for maximum efficiency and effectiveness in delivery of City services.

- Develop budget policies that promote long-term financial stability.
- Inform, educate and involve citizens.
- Encourage cultural opportunities for residents and visitors.
- Provide effective municipal services, provide for safety and maintain a sound infrastructure through a well-planned and responsive customer oriented delivery system.
- Enhance teamwork, cooperation and problem-solving within the City organization.
- Promote diversity in the work force.
- Plan growth which is sensitive to the environment and recognizes significant community resources.
- Encourage an economic base which provides for long term economic health and improved quality of life.

These goals are the foundation for the policies contained in the next section of this plan.

## **POLICIES**

The City Planning Commission and City Council have adopted and, over time, amended these policies. For example, when the City Council reviewed and modified its position on appropriate locations for gaming, the relevant policies (CD-8, CD-9, and CD-10) were formally amended through the Planning Commission and City Council and found in conformance with the Truckee Meadows Regional Plan.

The policies are organized by categories, and labeled and numbered in subcategories. The categories are Region, Neighborhood and Housing; Cultural Resources and the Environment; Public Services, Facilities, and Infrastructure; Civic Services and Participation; and Urban Design. The subcategories and labels are: The City and the Region (C&R), Urban Core (UC), Neighborhood Conservation (NC), Housing (H), Cultural Resources (C), Environment (E), Open Space and Greenways (OS), General Infrastructure (GI), Water and Waste Water (WW), Flood Management (FM), Transportation (T), Streets, Parking and Access (P), Fire (F), Parks and Recreation (P&R), Schools (S), Human Services (HS), Citizen Participation (CP), Community Design (CD), Building Design (BD), and Site Design (SD).

## **Region, Neighborhood, and Housing**

### ***The City and the Region (C&R)***

- C&R-1      The City should support a fiscally responsible urban form and annexation policy.
- C&R-2      The City should pursue annexation and amendments to the sphere of influence as necessary to allow phased urban expansion.
- C&R-3      The City should develop and implement an annexation program which identifies the City's geographic sphere of influence and proposes measures for actively pursuing annexation of islands of County land.
- C&R-4      The City should pursue annexation of properties requesting, receiving, or benefiting from City services, when such action is consistent with other adopted City Policies.
- C&R-5      The City should pursue a growth pattern which is fiscally responsible in order to maintain and possibly improve existing levels of service for current residents and future generations.
- C&R-6      The City should require applications for annexation to be within Truckee Meadows Water Authority or another authorized water distribution company's service area.
- C&R-7      The City should work with area service providers to ensure that the water supply, water treatment and distribution capacity, sewage treatment and road network is capable of serving present and future demand within the city.
- C&R-8      The City should petition the State Legislature to reassess properties to full value upon resale because of the increasing stock of older properties in the city, limited land area for growth, and the State law which depreciates real properties at 1.5% annually.
- C&R-9      The City should collaborate with the Reno-Sparks Indian Colony, on a government to government basis, in planning land uses, infrastructure and service provision for the area within and surrounding the Colony.

### ***Urban Core (UC)***

- UC-1      In specified downtown, center, and corridor pedestrian retail areas, the City should require retail uses at street level and limit blank walls in order to promote a vibrant pedestrian and retail environment.

- UC-2 The City should maintain a safe pedestrian environment in its downtown, centers, and corridors through sidewalk maintenance and cleaning.
- UC-3 The City should support the development of pedestrian plazas, parks, walkways and commercial enterprises aimed at pedestrians, such as sidewalk cafes and boutiques, with the intent of establishing the Truckee River as the focus of pedestrian activity in the downtown area.
- UC-4 When necessary for pedestrian safety, elevated pedestrianways and skyways connecting existing and proposed hotel/casinos, major commercial and cultural attractions and transportation centers may be permitted in the downtown area. Elevated pedestrianways should not be used if it is demonstrated that they may have a detrimental effect on pedestrian vitality at street level.
- UC-5 The City should support public and private efforts to improve the downtown.
- UC-6 The City should promote public/private partnerships to finance and operate downtown parking garages.
- UC-7 The City should encourage the development of attractively designed public and private off-street parking, consistent with the Downtown Reno Regional Center Plan and other relevant parts of the City Master Plan, in the downtown area. The number of parking facilities approved should be balanced against the City's desire to promote public transportation.
- UC-8 The City should require future parking structures to be integrated into multi-use buildings, which avoid blank walls and encourage pedestrian level activity.
- UC-9 The Redevelopment Agency should, in conformance with the Downtown Reno Regional Center Plan and other relevant parts of the City Master Plan, acquire the needed land and design and develop public parking garages in those parking deficient areas which cannot be provided for by private development.
- UC-10 The City should consider the need for centralized bus parking when designing parking facilities.

- UC-11 The City should in conjunction with the Downtown Reno Regional Center Plan, identify the locations of existing surface only parking lots in the downtown area and target these lots for acquisition and future development.
- UC-12 To protect the health and safety of its residents and visitors, any potential adverse effects of the railroad line should be identified and mitigated.
- UC-13 The City should encourage and promote AMTRAK passenger service to downtown Reno.
- UC-14 The City should encourage attractive landscaping adjacent to the railroad whenever possible.
- UC-15 The City should identify and encourage the refurbishment and reuse of existing buildings along the railroad tracks and public acquisition of railroad right-of-way along the river for public purposes.
- UC-16 The City should work with the Redevelopment Agency to ensure maintenance of applicable roads within the Redevelopment Areas to City standards.

***Neighborhood Conservation (NC)***

- NC-1 The City should give high priority to the use of CDBG funds for neighborhood conservation.
- NC-2 The City should target neighborhoods for conservation and enforce policies on maintaining structures and open lots.
- NC-3 The City should use Neighborhood Advisory Boards to coordinate efforts of neighborhood conservation.
- NC-4 The City should discourage concentrations of uses such as bars, massage, tattoo and body piercing parlors, and the like that are not compatible with the kinds of uses and services provided in neighborhood shopping areas, promenades along the Truckee River, or "Main Streets".
- NC-5 Neighborhood plans cover areas not in centers or corridors, which have been designated as appropriate for more detailed planning. Policies in neighborhood plans elaborate, with greater detail, upon general policies contained in the citywide and regional plans. Neighborhood plans must conform with and not be in conflict with policy direction of the citywide plans and the Truckee Meadows Regional Plan.

## ***Housing (H)***

- H-1 The City should encourage the development of affordable and workforce housing throughout the community with incentives, modified development standards and zoning regulations, waiving certain fees, and/or flexibility in administrative procedures or other regulations/procedures.
- H-2 The City should encourage neighborhood revitalization through housing rehabilitation and infill reuse/conversion for both owner-and renter-occupied units.
- H-3 The existing affordable housing stock should be preserved and rehabilitated to ensure affordability units. The demolition or conversion of sound, affordable housing stock is discouraged.
- H-4 Appropriate locations for mobile home parks should be identified in which the park infrastructure and the majority of units are feasible to preserve.
- H-5 Affordable and workforce housing should be encouraged in transit-oriented developments (TODs) and regional centers, near services, transportation routes, schools, and employment areas.
- H-6 The City should encourage local employers to promote the development of affordable and workforce housing units.
- H-7 The City should encourage housing developments to be accessible to persons with disabilities.
- H-8 The City should promote developments for low-income and affordable senior housing, which are accessible to persons with disabilities.
- H-9 The City should disperse housing types and sizes throughout the City, rather than concentrate similar housing types and sizes in certain areas.
- H-10 The City should encourage mixed-income housing.
- H-11 The City should assist individuals and families at-risk to maintain their current housing and avoid entry into the homeless service system.
- H-12 The City should promote sustainable development and energy efficiency for new and existing housing stock.

- H-13 New housing development should provide pedestrian, bicycle, and transit access to facilitate the reduction of automobile use, where possible.
- H-14 The City should promote owner-occupied housing units and support programs that increase homeownership opportunities.

## **Cultural Resources and the Environment**

### ***Cultural Resources (C)***

- C-1 The City should encourage the inclusion of historic resources on the Historic Register and formation of historic districts and/or conservation districts.
- C-2 The City should develop and maintain a register of historic resources within city limits.
- C-3 The City should work with the State of Nevada to maintain its Certified Local Government status for purposes of securing funds for historic preservation activities.
- C-4 The City should review and, as appropriate, originate or amend ordinances and procedures, policies and standards regarding land use, occupancy, and development standards to encourage adaptive reuse of historic resources as defined by the City Council.
- C-5 The City should develop and implement a process whereby development projects will be reviewed to determine any effects they may have on historic resources included on the Historic Register, or eligible for inclusion.
- C-6 The City should develop mitigation measures deemed appropriate to lessen the impact on the public as a result of the loss or alteration of an historic resource.
- C-7 The City should consider redesign of facilities, relocation of facilities and other means to lessen the effects of development on historic resources.
- C-8 The City should consider economic and other incentives encouraging the preservation of designated historic resources by property owners and the mitigation of proposed actions threatening such historic resources.
- C-9 The City should strive to protect those historic resources which are City property.

- C-10 The Recreation and Parks Commission should establish a regular communication and collaboration process with the Arts and Culture Commission to assure the City's public art program is effectively implemented.
- C-11 The City recognizes that art creates a more humane environment of distinction, enjoyment and pride for all citizens.
- C-12 The City encourages the inclusion of public art within the community to stimulate the vitality and economy of the city and to enhance all public buildings and public spaces with works of art.
- C-13 The City should encourage the use of public art in major projects.

***Environment (E)***

- E-1 The City should discourage outdoor storage or disposal, parking lots, or land uses with the potential to generate pollution within the river environs.
- E-2 The Reno Municipal Code should require a special use permit for all activities that disturb natural drainage courses shown on the Major Drainageways Plan Map.
- E-3 Natural drainage courses should not be channelized. When channelization is deemed necessary by the City, natural materials should be utilized.
- E-4 There should be no net loss of wetlands, stream environments, playas, stream fed riparian and non-404 wetlands in the city in terms of both acreage and value. The goal of no net loss may be achieved in one or more of the following ways: designation of lands for resource or open space use, avoidance of these areas, mitigation of impacts on site, or mitigation off site.
- E-5 The City recognizes the importance of significant fish and wildlife habitats, especially in areas adjacent to wildlands, and should work to mitigate the adverse effects of development.
- E-6 The City should identify and protect the functions of significant hydrologic resources and major drainageways within its jurisdiction to the degree possible.

- E-7 Master Plan maps depicting development constraint areas and areas of biodiversity should be used as a reference tool only in reviewing development applications. Existing entitlements granted by the City that are in conflict with these reference maps should be considered conforming to the Master Plan. When considering whether specific properties contain wetlands, significant hydrologic resources, steep slopes, major drainageways, and/or biodiversity, only technical data, delineations, and reports submitted with applications and approved by the administrator should be used. This technical data should be prepared by licensed professional engineers, surveyors, wetlands biologists, and/or qualified environmental consultants. Where the approved technical data is in conflict with the reference maps, the technical data approved by the administrator should be considered the most accurate depiction of the reference map and should be considered conforming to the Master Plan.
- E-8 Hydrologic resources that are in immediate danger as a result of surrounding land use, development proposals or other human interference, should receive the highest level of protection through public acquisition, application of land use, and/or zoning controls. Acceptable preservation should include, but not be limited to, purchase by the public from a willing seller, voluntary conveyance of conservation easements, or donation in fee title to a local government, resource agency, or land trust.
- E-9 Operation of sewage treatment plants should be reviewed, and where technically, economically, and legally possible, modified so that the effluent is used to create, maintain, restore or enhance wetlands.
- E-10 Where wetlands provide flood control and groundwater recharge functions, they should be preserved to include the 100-year floodplain or jurisdictional wetland boundary if determined to be a significant wetland by the U.S. Army Corps of Engineers.
- E-11 All natural drainageways, even those with limited riparian vegetation and those that are disturbed, should be retained and restored to function as infiltration basins to allow for groundwater recharge and, where possible, to facilitate wildlife movement.
- E-12 The City should make every effort to retain mature trees as part of the development process to continue to improve the City's environment.

- E-13 The City should make provisions such as buffers or open corridors for deer migration along Alum and Hunter Creeks and any other corridor that may be identified.
- E-14 Development of properties within the Hunter Creek soil formation should require greater setbacks from drainageways and creeks, gentler slopes on cuts and fills, and more attention to foundation design and placement.
- E-15 The City should evaluate water features in development projects for their habitat value and potential hazards created by water fowl.
- E-16 The City should ensure that development applications that may impact threatened or endangered species and/or wildlife migration corridors are submitted to and reviewed by the appropriate agency for review and comment.
- E-17 The City should prevent the development of high occupancy land uses on geologically hazardous property.
- E-18 In areas of diatomaceous earth, particular care should be given to timing of construction, phased grading, dust control, and permanent cover or stabilization of the soil mantle.
- E-19 All mine openings (shafts and adits) should be filled prior to development of a site. If a shaft contains standing water, and/or allows contact with groundwater, fill material shall not be highly mineralized or otherwise impact water quality. Dry shafts may be filled with waste rock on the property.
- E-20 Development in areas subject to liquefaction may require special engineering for subsurface drainage and stabilizing fill to construct a suitable building pad.
- E-21 Development of properties below the apex of an alluvial fan should be preceded by a geotechnical investigation of the site which includes evaluation of the surface drainage patterns and potential for mass wasting upslope.
- E-22 The City should endeavor to minimize the impact of development on archaeological resources through investigation, avoidance, capping, recordation, and/or excavation as appropriate.
- E-23 The City should promote energy conservation programs, and development of solar, wind and geothermal energy resources.

- E-24 The City should promote a reduction in the consumption of energy by encouraging the use of products and materials that maximize energy efficiency in the construction of a building.
- E-25 The City should support efforts to promote clean waste reuse and recycling programs.
- E-26 The City should guide noise sensitive development away from critical approach zones and areas subject to noise levels of 65 dB Ldn based on current noise contours and support the continuation of the Airport Authority's program of noise abatement measures.
- E-27 The City should maintain an airport overlay zone which addresses land use compatibility for properties subject to noise levels of 65 dB Ldn or greater from airport activities.
- E-28 The City should adopt amendments to the City building codes establishing soundproofing standards to use in airport noise overlay zones.
- E-29 The City should adopt and maintain land use designations that are compatible with airport operations.
- E-30 New intense urban uses such as hotels, casinos, multi-family housing or places of public congregation should not be located within the critical zones of the Reno/Tahoe International or Stead Airports.
- E-31 The City should promote the protection, conservation, and acquisition of significant wildlife habitats, environmentally significant lands (i.e., wetlands and stream environments), prominent ridgelines, and other natural and scenic resources for purposes of wildlife survival, community education, research, recreation and aesthetics.
- E-32 The City should acquire, relocate and/or protect from encroachment significant trails now enjoyed by residents.
- E-33 The City should acquire and retain as open space, when feasible and necessary, land adjacent to the City limits which provides a scenic vista or community identity.

## ***Open Space and Greenways (OS)***

- OS-1 The City should actively acquire and retain a minimum of a 50 foot strip of property or easements on the banks of Truckee River on either side. Access through properties to the River should be maintained for public use.
- OS-2 Certain federal lands that are desired for open space should be acquired by the City through land exchanges or other means of acquisition.
- OS-3 All regional center, transit oriented development corridor and neighborhood plans, and similar City planning efforts must be consistent with this plan by furthering non-motorized transportation and including provisions for the implementation of bicycle and pedestrian improvements that ensure access and connectivity to the City's trail/bikeway system.
- OS-4 The trail/bikeway system should be designed to address both municipal and local needs by connecting neighborhoods externally with the broader regional system, and internally through connections between open space areas, schools, parks, commercial centers, and clusters of homes.
- OS-5 Ditches that can provide connectivity to other open space areas, such as portions of Steamboat and Highland ditches, should be identified and prioritized for acquisition, easements, or cooperative management arrangements with ditch companies. Ditches that have the capacity to provide connectivity to other open space areas, such as City-owned drainageways, should be given high priority.
- OS-6 A map should be produced that shows the actual alignments (a.k.a., "true trail alignments") of the trails needed to support the policies in this plan and code developed to support the alignments. This should be completed within a year of the adoption of this plan.
- OS-7 The Reno Municipal Code should be updated to include open space and greenways design guidelines including building setbacks, lighting, fencing, signage, landscaping without invasive species, and irrigation. As part of this code amendment a Sensitive Lands Overlay District should be considered as a mechanism to define and set aside areas with a preponderance of sensitive habitat areas, and should provide specific guidance for development in the district.
- OS-8 The City should review development applications for potential open space areas, corridors, and buffers as identified in this plan and require that those areas be protected as a condition of approval.

- OS-9 As annexation of lands occurs, high value open space areas should be protected in accordance with this plan.
- OS-10 New commercial, office, and industrial development should accommodate pedestrian and bicycle access to the local and regional non-motorized transportation network. Access should be accommodated on-street or off-street.
- OS-11 Trail access should be made available through a balanced mixture of access points (no parking) and trailheads (parking). Planned neighborhoods should accommodate trailheads where deemed appropriate.
- OS-12 Signage identifying bike routes, lanes, and trails should be provided along all bikeways on City streets, within approved residential, commercial, and industrial zones with identified bikeways, and within open space areas.
- OS-13 Bike lanes should be constructed on all arterial streets that can accommodate them and striped accordingly as streets are resurfaced or rebuilt.
- OS-14 The City should clarify the use of the term “open space” in all City documents to conform to the definition provided in this plan.
- OS-15 The City should develop maintenance standards for Open Space and Greenways and update them as needed.
- OS-16 The City should obtain public access easements and maintenance easements when entering into agreements with private land owners.
- OS-17 The City should encourage the creation of mechanisms to conserve easements and for donation/dedication of privately owned properties. This should include City procedures for processing donations of private land.
- OS-18 The City should support additional State bond measures, and apply for grant funding as it becomes available.
- OS-19 The City should encourage citizen advocacy for open spaces and greenways.
- OS-20 The City should review and revise the Open Space and Greenways Plan every 5 years, with policy amendments introduced as needed.

## **Public Services, Facilities, and Infrastructure**

### ***General Infrastructure (GI)***

- GI-1           The City should endeavor to protect revenues from franchise fees.
- GI-2           The City should utilize special assessment districts, impact fees, private financing techniques and other methods as appropriate to finance capital improvements and infrastructure.
- GI-3           The City should prepare an annual report on land use and its fiscal impact.
- GI-4           The City should consider offering development incentives to encourage new development projects in areas with existing streets, sewer lines and fire stations with priority given to areas within center and corridor plan areas.
- GI-5           The City should periodically evaluate its levels of service for consistency with its fiscal capacity.
- GI-6           The City should apply level of service standards uniformly to new land development and the existing community dependent upon land use type.
- GI-7           The City should require that new development pay the full cost of all public improvements required by the development within the boundaries of that development.
- GI-8           The City should require that new development pay a proportional share of the cost of public improvements outside the development boundaries that are directly attributable to that development.
- GI-9           The City should develop and utilize a reimbursement mechanism to compensate developers for oversizing public facilities.
- GI-10          The City should prepare and update annually a Five Year Capital Improvement Program which supports the implementation of the Master Plan, including its center, corridor and neighborhood plans.
- GI-11          The Capital Improvement Program should give higher priority to capital projects that are designed to serve existing needs and to prevent the deterioration of existing levels of service. The following characteristics should be considered for ranking projects:
1.           Assign a high priority to infrastructure needs within center and corridor plan areas;

2. The next area of service priority should include areas, developed or not, within the existing City limits as of adoption of this Master Plan Amendment;
3. The next areas of service priority should include areas outside of the existing City limits as of adoption of this Master Plan amendment.

- GI-12 The City should use economic and administrative incentives to encourage the retention of existing industries and the establishment of new industries which offer solid employment prospects. Incentives may include such items as allocation of City owned water, reservation of sewer capacity, postponement of City fees (except roadway impact fees), industrial development bonds or land.
- GI-13 The City should encourage cooperative use of recreational and other public facilities among the City, other governmental units and private organizations when capital costs, maintenance and access to facilities are equitably shared.
- GI-14 Maximum use of existing public facilities and services should be supported through encouraging new development to occur at higher densities, when appropriate, and through the development of vacant and underutilized land with particular emphasis in the center and corridor plan areas.
- GI-15 The City should locate branch community, administrative, and maintenance facilities near the populations they serve.
- GI-16 The level of service for different services and facilities varies somewhat depending on the actual land use, these levels of service are identified in the Land Use Plan, and the levels of service must be maintained as described in the concurrency management section of the Public Services, Facilities, and Infrastructure Plan.
- GI-17 The City should endeavor to preserve the viability of existing and future utility corridors and sites to accommodate new or expanded infrastructure by requiring a minimum setback of ten feet on each side of existing regional utility corridors and allowing only passive uses within these setbacks including, but not limited to parks, trails, parking, landscaping and fencing.
- GI-18 The City should require a discretionary review for any modification or expansion of an existing structure located within the mandatory ten foot setback unless the width of an existing corridor is expanded as the result of expanding the utility infrastructure within

the corridor. In this case a ten foot wide minimum setback should be added to each edge of the expanded easement and the new minimum setback should only apply to new development.

- GI-19 The City should ensure that the edge of an easement associated with a new or expanded above ground or underground electrical transmission line is a minimum of ten feet from existing structures.
- GI-20 The City should ensure that all utility project proponents place new electrical transmission infrastructure in existing utility corridors, unless adequate justification is provided demonstrating why it can not be placed in an existing corridor.
- GI-21 The City should promote the use of utility corridors and sites for the placement of infrastructure related to other utilities such as natural gas and telecommunications. Utility corridors are identified as Maps 9 and 10 in the 2007 Truckee Meadows Regional Plan, as amended.
- GI-22 The City should ensure that new above ground and underground electrical transmission infrastructure be placed according to the following hierarchy:
- a. New above ground or underground transmission infrastructure should be located in an existing corridor that already contains above ground transmission infrastructure, without expanding the corridor width;
  - b. New above ground or underground transmission infrastructure should be located in either a federally designated corridor (i.e. BLM corridor) or an easement that has an approved preliminary or final Environmental Impact Statement;
  - c. New above ground or underground transmission infrastructure should be located in an existing corridor that already contains above ground transmission infrastructure, but with an expanded corridor width;
  - d. Request creation of a new corridor based on the route of an existing above ground distribution line;
  - e. New above ground transmission infrastructure should be located within an existing corridor that already contains underground transmission infrastructure, but with an expanded corridor width; and
  - f. Request the creation of a new corridor for the placement of new transmission infrastructure where no utility infrastructure currently exists.
- GI-23 The City should ensure that any project that proposes new or expanded above ground or underground electrical transmission

infrastructure within the Federal Aviation Regulations (FAR) Part 77 areas of public use airports within the region or in close proximity to a private use airport be carried out in coordination with the Reno Tahoe Airport Authority or applicable airport operator.

- GI-24 The City should support the placement of electrical transmission lines underground in circumstances where it can be determined that doing so will substantially mitigate the safety risk of above ground construction such as in proximity to airports. In these instances, the City should forward applications to the Regional Planning Commission and Regional Planning Governing Board and clearly demonstrate why and how the undergrounding element of the project is necessary for safety reasons.
- GI-25 The City should support the expansion of renewable energy and ensure that, when feasible, existing corridors are utilized for the transmission of electric generating plants.
- GI-26 The City should demonstrate a commitment to the development of regional renewable energy generation that includes the transmission infrastructure originating from renewable energy generation sources.
- GI-27 The City should require the undergrounding of all local electric distribution lines in new development, unless incorporated in an affordable housing program pursuant to an adopted ordinance.
- GI-28 Electric transmission lines should be designed and located to minimize impacts on the population.

***Water and Waste Water (WWW)***

- WWW-1 The City should approve final maps and building permits only when adequate water capacity is procured by the developer and will reserve sewage treatment capacity for final maps and building permits only upon payment of sewer connection fees.
- WWW-2 The City should not support a regionalization plan for water and wastewater treatment that results in subsidizing growth in the unincorporated area by city rate payers or a loss of City equity in the capital facilities.
- WWW-3 The City should participate in the operation and planning decisions affecting water and wastewater systems.
- WWW-4 The City should support the use of Truckee River water rights outside of the Truckee River Basin so long as return flows to the

Truckee River are maintained. Water rights dedicated for the purpose of meeting return flow requirements should be water rights whose current point of use is downstream from the Truckee Meadows except that development projects may continue to dedicate Truckee Meadows water rights for return flow requirements on a temporary basis and later substitute downstream water rights after appropriate applications have been filed and approved by the appropriate authorities.

- WWW-5 The City should support the negotiated settlement and/or other means to resolve conflict amongst different groups holding Truckee River rights.
- WWW-6 The City should support installation of water meters.
- WWW-7 The City should encourage landscaping which utilizes drought tolerant plant materials, efficient irrigation or other low water usage practices.
- WWW-8 The City should require the reuse of gray water and treated effluent in all new subdivision common areas and commercial and municipal developments, where applicable and consistent with the City of Reno TMSA/FSA Water, Wastewater, and Flood Management Facility Plan.

***Flood Management (FM)***

- FM-1 The City should encourage the use of non-structural solutions for flood control.
- FM-2 Flood control facilities should be multi-use to meet community goals of increased recreation and environmental enhancement.
- FM-3 Fill should not be approved for development in floodplains unless it is demonstrated that:
- (a) flood elevations will not be increased;
  - (b) hazards to other properties in the basin will not result; and
  - (c) the fill or associated modifications to drainage patterns will not negatively impact wetlands.
- FM-4 Residential development should maintain a safe distance from dams, spillways and flood pools.

### ***Transportation (T)***

- T-1 The City should encourage pedestrian and bicycle access and parking in commercial developments, employment centers, residential areas, and corridors between these uses.
- T-2 The City should require employment and commercial centers to provide appropriate facilities for bicycle riders.
- T-3 The City should encourage bikeways that offer a mix of speed and beauty, allowing meanders in the path where appropriate given terrain, location and function.
- T-4 The City should identify high-priority elements of the bikeways plan that is part of the Regional Transportation Plan and include these in the City's Capital Improvements Program as funds permit.
- T-5 The City should work with the Nevada Department of Transportation and Regional Transportation Commission to ensure that elements of the bikeways plan are implemented on non-city projects.
- T-6 The City should encourage bikeways as part of a coordinated trip-reduction program. In this context, bikeways are facilities for bicyclists, pedestrians, roller-bladers and the like.
- T-7 The City should support and participate in alternative forms of transportation and programs which would result in decreased vehicle trips and miles traveled within the city such as carpooling and alternative work schedules for its employees.
- T-8 The City should maintain its current employee rideshare program and will seek ways to expand its level of participation.
- T-9 The City should work with the Regional Transportation Commission to develop a rideshare program, and encourage the development of an on-line database for persons looking for rideshare partners.
- T-10 The City should support efforts to reduce air pollution from vehicle emissions and street sanding.
- T-11 The City should encourage businesses and new land development which are substantial generators or attractors of traffic to implement programs to reduce trips and/or mitigate air quality impacts.
- T-12 The City should support a public transportation system including rapid transit, local transit, para-transit, park and ride, bikeways and

trails, etc., which provides timely, efficient service throughout the city.

- T-13 The City should actively participate in the development of the Regional Transportation Plan and Transportation Improvement Program to ensure the plans are responsive to City needs.
- T-14 The City should promote efficient ground connections from the downtown and other major destinations to Reno/Tahoe International Airport, favoring high-occupancy vehicles and other alternative forms of transit over vehicles occupied by one person.
- T-15 The City should encourage the Regional Transportation Commission to provide express service between selected residential areas and employment and commercial centers during peak hours.
- T-16 The City should work toward timing and coordinating the region's traffic signals by encouraging the establishment of a multi-jurisdictional Traffic Management System that would include Reno, Sparks, Washoe County, the Regional Transportation Commission (RTC), and the Nevada Department of Transportation (NDOT), and would link all signals either by fiber optic or wireless means. This system would improve traffic flow and reduce driver delay, fuel consumption and vehicular emissions.
- T-17 The City should sequence traffic signals to favor moving traffic on the leg of the intersection with the greatest traffic volume.
- T-18 The City should evaluate air quality implications of all road and intersection designs.
- T-19 The City should support the State of Nevada in the adoption of the California motor vehicle emission standards for internal combustion engines for new vehicles sold in Nevada.
- T-20 The City should support the requirement of an emission and inspection program throughout the State.
- T-21 The City should develop and implement amendments to the Reno Municipal Code regulating the idling of standing taxis, shuttle buses, tour buses and similar vehicles.
- T-22 The City should encourage the Regional Transportation Commission to continue to offer free transportation on the Citifare Bus System during periods of high pollution levels.

- T-23 The City should encourage the Regional Transportation Commission and Reno-Sparks Convention and Visitors Authority to develop alternate transit systems such as a rubber wheeled trolley or double decker bus system linking the Reno and Sparks downtown areas, the Reno/Tahoe International Airport, Lawlor Events Center, and the Reno-Sparks Convention Center during special events or peak tourist seasons.
- T-24 The City should continue with bond projects, Redevelopment Agency projects and other publicly funded programs to rectify existing deficiencies in the transportation system.
- T-25 The City should allow truck traffic in residential areas and the downtown core only where necessary to serve local residents or businesses.
- T-26 The City should assist in the relief of peak hour traffic congestion by limiting the hours of operation for heavy trucks on certain city streets.
- T-27 The City should work with the railroad in planning new lines and spurs and discourage new railroad lines and spurs through residential areas.

***Streets, Parking and Access (P)***

- P-1 Site access and circulation should be safe, convenient, logical and minimize impacts onto adjoining roads.
- P-2 The City should ensure that access to all new individual residential lots and/or units is provided only from local streets.
- P-3 Local residential streets should be no wider than necessary to accommodate vehicular access, maintain and encourage a safe pedestrian environment , access parking and utilize land efficiently.
- P-4 The existing grid pattern of streets should be preserved; public streets, alleys and ways located in the city center or traditional neighborhoods should not be abandoned.
- P-5 The City should encourage modified street patterns and traffic calming in order to maintain the integrity of neighborhoods by reducing speeds and number of trips.
- P-6 The City should encourage physical traffic calming measures such as roundabouts, chokers and speed undulations in residential areas

to reduce speed, enhance the urban aesthetic and discourage through traffic.

- P-7 The internal circulation plan of a subdivision should not be dependent upon unknown future development plans of adjacent property owners, nor should one subdivision unduly limit the future design options for adjacent property.
- P-8 The City should design the circulation system in a manner which minimizes disruption of single family neighborhoods and established pedestrian patterns.
- P-9 The City should design road and parking system to be sensitive to the location of significant environmental or cultural resources, and planned residential uses.
- P-10 The City should reduce the impact and disruption of development on adjacent residential neighborhoods by requiring every project to provide sufficient parking within a reasonable walking distance.
- P-11 In the older residential areas of the city, the City should consider “pedestrianizing” sections of some local streets in order to make the area more attractive to potential homeowners by eliminating through traffic.
- P-12 The City should encourage new subdivision design which establishes a clear circulation pattern and incorporates an integrated street pattern or a hierarchy of streets; this protects neighborhoods, eliminates unnecessary through traffic, and promotes access to activity areas.
- P-13 The City should require the construction of raised, landscaped medians, with appropriately spaced median breaks, in place of center left-turn lanes on boulevards unless such actions would create unreasonable access restrictions.
- P-14 Maintenance of parkway strips, including landscaping, should be the responsibility of adjacent property owners.
- P-15 The City should plan and fund a tree replacement/replanting program three to five years in advance of roadway improvement projects when there is proposed removal of mature trees.
- P-16 The City should prohibit the use of stubbed local streets except when stub streets are part of a phased development in which the proposed street extension in its entirety has been approved.

- P-17 The City should permit stub streets on residential and commercial collectors provided that the future extension of the street is deemed desirable by the City and/or conforms to an adopted street plan.
- P-18 The City should require that all stub streets longer than the depth of one lot provide a paved temporary turnaround sufficient to accommodate emergency service vehicles.
- P-19 The City should require the provision of parking for bicycles in parking lot design.
- P-20 The City should consider established pedestrian patterns and children's access to schools and parks when classifying, reclassifying or widening streets.
- P-21 Parking areas which accommodate large numbers of cars should be divided into an interconnected series of parking courts, separated by landscaping and buildings, or located behind buildings.
- P-22 The City should evaluate the need for off-street parking and staging areas for tour buses and commercial vehicles at hotel /casinos. Tour buses shall not be allowed to block parking areas or city streets.
- P-23 The City should encourage the construction of multi-level parking garages in lieu of large street level parking lots.
- P-24 The City should plan and provide appropriate pedestrian facilities to access nearby properties with construction of multi-level parking garages.
- P-25 The City should require dedication of all right-of-way necessary to implement multi-modal transportation system improvements as a condition of approval for new development as allowed under the Regional Road Impact Fee Program.
- P-26 The City should maintain the quality of the major street network by prioritizing maintenance and repair needs and correction of existing and projected level of service deficiencies through the City's Capital Improvement Program.
- P-27 The City should include the cost of its boulevard system into the Capital Improvements Program.

## ***Fire (F)***

- F-1 The City should utilize station distribution, interlocal agreements, and private fire protection measures to ensure all residents and properties are provided with suitable fire protection in accordance with the standards set forth in the Master Plan.
- F-2 The City should strive for a four minute response time to 75% of the City, and not exceed a six minute response time for any area of the City without mitigation.
- F-3 The City should explore the feasibility of using land use designations, development intensity, private fire protection measures, relocation of existing stations, or modification to apparatus, as an alternative to constructing a new fire station prior to approving any new fire station.
- F-4 New stations should be situated to improve fire protection services to those areas of the city which are inadequately protected based on the standards and criteria set forth in the Master Plan.
- F-5 If the City Fire Department continues to respond to requests for medical assistance, steps should be taken to provide this service in the most cost effective manner.
- F-6 In order to reduce the cost of building, operating and maintaining new fire stations, the City should encourage the installation of sprinkler systems in new single family units.
- F-7 The City should develop and implement measures to minimize fire hazards in open and sagebrush areas.
- F-8 The City should review development plans for urban/wildland interface issues to ensure that applicable weed management, public safety service provision, wildland fire management, and fuels reduction issues are addressed as appropriate.

## ***Parks and Recreation (P&R)***

- P&R-1 The City should acquire park land through donation, lease, or purchase to meet park acreage standards and ensure equity throughout the City.
- P&R-2 The City should acquire land in future service areas and master-planned communities to meet park acreage standards for both neighborhood and community parks.

- P&R-3 The City should acquire land along the Truckee River for the purpose of park and trail development.
- P&R-4 The City should ensure that trail development and connectivity within parks are planned to compliment Reno's Open Space and Greenways Plan.
- P&R-5 The City should monitor land use, population trends, and development to determine additional park and recreation facility needs.
- P&R-6 The City should maximize resources in the areas of land acquisition, design, construction, and long-term operation through cooperative partnerships with the Washoe County School District and other community agencies.
- P&R-7 The City should encourage private and public investment into year-round recreational opportunities for Reno's youth, and provision of recreational amenities with land development.
- P&R-8 The City should secure funding for park and facility development and long-term operating and maintenance costs.
- P&R-9 The City should rehabilitate existing parks and facilities that are deteriorated and obsolete in order to meet safety and accessibility standards, improve water conservation, and enhance maintenance efficiency.
- P&R-10 The City should maintain all parks at a level which provides proper safety, convenience and appearance in an efficient and effective manner.
- P&R-11 The City should meet or exceed community safety design standards, public art standards, wildlife management plan standards, and urban forestry and horticultural goals.
- P&R-12 All parks should be designed to meet the needs of area users while taking advantage of and enhancing the site's natural features.

### **Schools (S)**

- S-1 The City should collaborate with the Washoe County School District in planning for the design and location of new public schools, and the disposition and reuse of any schools that might become redundant in the City and its sphere of influence.

- S-2 Applications for tentative maps, zone changes, and master plan amendments, whether involved in a concurrency evaluation or not, should be forwarded to the WCSD for review. Applicants should be advised to contact the WCSD from the beginning of the entitlement process to ensure adequate collaboration.
- S-3 New housing developments should accommodate design standards that reflect direct and convenient access to public schools. The Community Development Department should require tentative map applications, when appropriate, to document a “Safe Route to School” plan, clearly showing the recommended pedestrian and bicycle routes to schools.
- S-4 The City should encourage all school sites to be located next to parks and recreation areas and middle and high school locations near public transportation routes and major bikeways.
- S-5 The City should aggressively pursue construction and joint use development in new school facilities, and work with the schools to open existing buildings for community and recreational use (gymnasiums, community meeting rooms, sports fields, etc.) to the benefit of both the school district and the City.
- S-6 The City should ensure that school sites are located in such a manner that will prevent the need for a new speed controlled school zone on an arterial roadway identified in the adopted Regional Transportation Plan, as amended.

## **Civic Services and Participation**

### ***Human Services (HS)***

- HS-1 The City should establish networks of human service providers and the business community to provide a forum for sharing information and enhancing working relationships.
- HS-2 The City should continue interaction with the Truckee Meadows Human Services Association, local human services providers and other funding bodies.
- HS-3 The City should participate in needs assessments with funding entities, human services providers and the community to aid in determining human service priorities.
- HS-4 The City should establish mechanisms by which service recipients directly evaluate services received and report the evaluation results to the City.

- HS-5 The City should work with local non-profits, funding entities, and community members to ensure that information regarding available services reaches those in need of human services.
- HS-6 The City should encourage the establishment of neighborhood based service programs in order to provide accessibility to services.
- HS-7 The City should monitor human service needs annually by use of population trend analysis, needs assessment analysis, citizen participation, and other means.
- HS-8 The City should emphasize programs designed to prevent homelessness and which provide a multi-service approach to persons who are currently homeless.
- HS-9 The City should emphasize programs which are responsive to the needs of seniors, families and children.
- HS-10 The City should emphasize programs providing prevention/intervention programs.
- HS-11 The City should emphasize needs identification, accountability, and effectiveness as priorities in making funding allocations.
- HS-12 The City should discourage duplication of service to clients and programs within the Truckee Meadows.
- HS-13 The City should work in collaboration with other funding bodies to seek private sources where appropriate.
- HS-14 The City should create and uphold legislation to protect the rights of all people.
- HS-15 The City should actively seek passage of progressive humane legislation on the state level.
- HS-16 The City should continue cooperative efforts with other jurisdictions to address issues related to homelessness, services to the elderly, youth, people with disabilities, etc.
- HS-17 The City should encourage the expansion of multi-lingual and multi-cultural competency among human service professionals.

- HS-18 The City should establish a system of reporting, monitoring, technical assistance, and auditing to evaluate and review human service providers.
- HS-19 The City should encourage year end reports from all service providers funded by the Washoe County Human Services Consortium.

***Citizen Participation (CP)***

- CP-1 The City should encourage citizen participation on Neighborhood Advisory Boards and other City advisory boards.
- CP-2 The City should maintain the partnership between Reno's citizens and their government by providing residents thorough, accurate and comprehensive information about City policies and operations through the Neighborhood Advisory Boards and other public information programs.
- CP-3 The City should facilitate interaction and communication between residents and City workers through the Neighborhood Advisory Boards.
- CP-4 The City should continue conducting random surveys of residents in order to evaluate the City's effectiveness and to see what other services and levels of services residents desire.
- CP-5 The City should employ the Neighborhood Advisory Boards to assist in the design and implementation of a Neighborhood Traffic Management Program.
- CP-6 The City should consider the needs and desires of residents when planning, classifying, reclassifying or widening streets.
- CP-7 Changes in classifications to roadways which may have a negative effect on adjoining residential areas must only be approved after public comment and input.
- CP-8 The City should encourage public input from Neighborhood Advisory Boards and residents directly affected during the design and selection of improvements in all City parks.

## Urban Design

### ***Community Design (CD)***

- CD-1 The City should encourage new developments with intense activities to locate in existing and planned center and corridor plan areas and areas well served by public transit.
- CD-2 The City should locate new commercial development in existing or planned center and corridor plan areas so that every major street is not lined with strip commercial development.
- CD-3 The City should encourage PUD zoning, flexible lot sizes and clustering when they provide open space, protect sensitive environmental resources and scenic vistas.
- CD-4 The City should encourage cluster development when the resulting open space protects significant environmental or cultural resources, provides a continuous and usable open space corridor or links existing and/or proposed open space or parks.
- CD-5 Development design that contrasts with the neighborhood may be justified if it enhances rather than conflicts with the existing development or is in an area targeted for redevelopment.
- CD-6 The hours of operation and general activity level of development should be sensitive to surrounding land uses, particularly residential uses. Businesses with 24 hour operations are generally discouraged adjacent to residential uses, the exception being some public facilities, radio stations or other uses with limited activity.
- CD-7 The City should support and encourage the expansion of existing industries when not in conflict with the City's efforts to diversify its economy.
- CD-8 Existing non-restricted gaming uses, and non-restricted gaming allowed by land use, zoning and/or special use permits should be allowed in transit oriented development (TOD) corridors unless eliminated through a Master Plan amendment, zoning map amendment, and/or the expiration or revocation of a special use permit. New and existing non-restricted gaming uses and non-restricted gaming allowed by land use, zoning and/or active special use permits should be allowed in the Downtown Reno Regional Center, Reno-Tahoe International Airport Regional Center, Convention Regional Center, Redfield Regional Center, and Western Gateway Regional Center.

- CD-9 The City should encourage the development of hotel rooms to support the Convention Center. These rooms should be located within a five minute walk of the Convention Center property.
- CD-10 The City should require that all future hotel/casino developments or other major attractions adjacent to the Reno-Sparks Convention Center provide for pedestrian access linking them with the Convention Center property.
- CD-11 The City should encourage activities and projects which will support the Convention Center and increase tourism and convention activity.
- CD-12 The City should recognize the need for additional convention hotels and accommodations near the Convention Center and Bowling Stadium.
- CD-13 Over time, the City envisions an evolution and redevelopment of the use of properties around the Convention Center to provide full services and accommodation for tourists and conventioners.
- CD-14 The City should protect viable industrial areas from encroachment by potentially incompatible land uses or conversion to alternate uses.
- CD-15 The City should encourage the clustering of services in locations convenient to neighboring residential areas in order to promote fewer vehicle trips.
- CD-16 The City should encourage the development of attractive landscaping and green spaces in close proximity to center and corridor plan areas and along arterial streets.
- CD-17 The City should implement the system of landscaped boulevards described in the relevant citywide, center, corridor and neighborhood plans comprising the City Master Plan.
- CD-18 Median landscaping should be predominantly hardscape with accent shrubs and trees irrigated by a drip system. Grass, because of water consumption and maintenance requirements, should not be allowed.
- CD-19 Landscaped areas adjacent to soundwalls should be provided and maintained by owners of commercial and multi-residential properties; developers of subdivisions should create a homeowners association to maintain these landscaped areas.

- CD-20 City streets should be designed to include a landscaped parkway strip between the curb and sidewalk, except in cases where a sidewalk is deemed to be inappropriate. Landscaped parkways may be plants or decorative hardscape.
- CD-21 On residential streets, the preferred design incorporates a landscaped parkway. Where parkways are installed, the minimum setback should be reduced one foot for every foot of parkway which results in no net increase of landscaping; in cases where the City does not require a parkway, street trees and a planting easement should be provided.
- CD-22 Adaptive reuse of properties, particularly those in center and corridor plan areas should be encouraged through regulations and incentives to promote a vital city center and protect neighborhood character.
- CD-23 The City should encourage the Nevada Department of Transportation, Sierra Pacific Power Company and others to give a high priority to incorporating improvements for aesthetic purposes when they are proposing projects along city streets, especially boulevards.
- CD-24 Walkways may be separate facilities on public or private land or combined with bike paths or street rights-of-way.
- CD-28 A high priority should be given to landscaping, undergrounding of utilities and other activities to improve the overall appearance of the boulevard system, arterial network, and areas within center and corridor plan areas.
- CD-29 The City should strive to offer an indoor and outdoor environment which is accessible and meets the requirements of the Americans with Disabilities Act.
- CD-30 The City should encourage all properties located along boulevards, arterial streets, and within center and corridor plan areas to provide landscaped areas appropriate to the related environment. Where the landscaped area is proposed to be dedicated to the City, it should be designed to City standards.
- CD-31 The City should require all new streets and bridges, with the exception of freeways or other potentially hazardous areas for pedestrians, to incorporate provisions for pedestrian and bicycle access which may be separate facilities.

- CD-32 The City should save existing trees and landscaped areas during street widening projects and, when this is not possible, install new landscaping to mitigate for the trees and landscaping that is removed.
- CD-33 Master planned communities, in undeveloped areas and larger developing areas, should contain a center focused upon a green or park, commercial uses like retail and small offices, civic and religious buildings, and a range of housing types all within a five minute walking distance of one another.
- CD-34 Mixed and multiple uses should be encouraged throughout Reno. These developments, whether large or small, should promote walkable neighborhoods with services, housing, employment and transit in close proximity to one another.
- CD-35 Transit Oriented Development Corridors should have minimum residential densities of at least 18 units per acre with an average of at least 30 units per acre. Non residential development should have a minimum floor area ratio (FAR) of 1.5, except in some areas between stations where the FAR may be 0.25 or greater.
- CD-36 The City should ensure compatibility of land uses with each military installation located within its sphere of influence based on the location, purpose and stated mission of the installation and notify installation commanders of certain development applications as outlined in State law.

### ***Building Design (BD)***

- BD-1 Development density, building mass, and architectural details should be sensitive to the context, scale and texture of surrounding development patterns and structures.
- BD-2 Building design should respect the character of a residential area.
- BD-3 New structures should complement adjacent structures and provide a human scale near ground level.
- BD-4 Building mass should not be obtrusively visible in the neighborhood. Methods to mask building mass include the use of multiple, small blocks, stepping back those portions of the building which are taller than surrounding buildings, and using building materials and/or colors which blend with, rather than contrast with, their background.

- BD-5 Multi-family infill developments in predominately single family residential neighborhoods should be designed so that they appear to be single family homes.
- BD-6 Shared front entries or stairways should be permitted only for small groupings of units. Individual balconies or patios are encouraged. Long, exterior balconies served by one or two stairways in a single, continuous path are discouraged.
- BD-7 Developments of more than 150 units should include clustering for each block of 100 units or portion thereof.

***Site Design (SD)***

- SD-1 Design of neighborhood commercial centers should be sensitive to adjacent residential areas.
- SD-2 Commercial centers should incorporate compatible architecture, color, signs and landscaping.
- SD-3 Signs should be designed as an element of the building they advertise, and be of appropriate scale to the building and surrounding neighborhood.
- SD-4 The City should require residential developments to create varied and interesting residential streetscapes through design and architectural features, building and garage placement on site, and by providing a landscaped parkway strip between the curb and sidewalk, in addition to a semipublic edge treatment.
- SD-5 Parking lots should not be permitted in the front of any lot in residential areas, on "Main Streets" or in neighborhood shopping districts.
- SD-6 In new subdivisions, garages should not dominate the streetscape; they should be located in a rear or side yard or behind the front line of the main structure.
- SD-7 Abrupt changes in residential densities should be discouraged unless:
- (a) they are part of an integrated plan;
  - (b) buffers are provided between the residential types;

- (c) lot size is varied within the development to place the largest lots in the development adjacent to adjoining lots of comparable size; or
  - (d) building mass and placement are utilized to provide a smooth transition.
- SD-8 The City should reduce noise impacts in existing and new developments through building placement, construction methods, landscaping and judicious use of walls.
- SD-9 Building orientation, landscaping and other design elements should be used to create buffers between different housing types and to protect housing that backs up to four lane streets or freeways.
- SD-10 Where landscaped parkways and semi-public edge treatments have been provided, front yard setbacks may be reduced.
- SD-11 The City should use lot design, setbacks, building orientation, landscaping, courts, cul-de-sacs or eyebrow roads to protect and separate detached single family residential uses from busy streets, thereby maintaining desirability of the neighborhood.
- SD-12 The City should incorporate crime prevention measures in the design of new developments consistent with the Neighborhood Conservation policies of the Master Plan.
- SD-13 The City should encourage the retention of natural features of hillsides by requiring any grading to achieve an undulating, natural appearance, and require densities to decrease as slope increases.
- SD-14 The City should encourage landscaping over other forms of stabilizing mechanisms to maintain cut and fill slopes, areas of difficult soils or erosion hazards.
- SD-15 The City should encourage all development to be energy efficient, and encourage site design which takes advantage of passive solar opportunities.
- SD-16 New development should be designed to allow public access through to adjoining public open space.
- SD-17 The City should require new subdivisions and planned unit developments to have safe pedestrian walkways and bicycle facilities that provide direct links between streets and major

destinations such as bus stops, schools, parks and shopping centers.

- SD-18 The City should encourage new and existing commercial and office uses to develop landscaped pedestrian pathways.
- SD-19 The City should discourage commercial developments with numerous curb cuts, contrasting building styles and color, competing signs and disparate landscape treatment.
- SD-20 The City should utilize site selection, design, landscaping and buffers to provide an appropriate setting for all neighborhood and regional parks free from excessive noise, dust, fumes or traffic, and separated or screened from incompatible land uses.
- SD-21 All development adjacent to freeways should be designed to utilize buffers for noise and sight screening, staggered fence lines on freeway side of development, attractive landscaping, and to generally conform with the natural topographic gradients in the freeway corridors. Parking, parking facilities, storage sheds, garbage collection facilities and other unsightly development should be prohibited on the freeway side of all such developments.
- SD-22 The City should require the implementation of Low Impact Development (LID) standards, where appropriate, for managing post-construction storm water run-off.

These policies are the basis for the more specific physical development objectives contained in the next section of this plan.

## OBJECTIVES

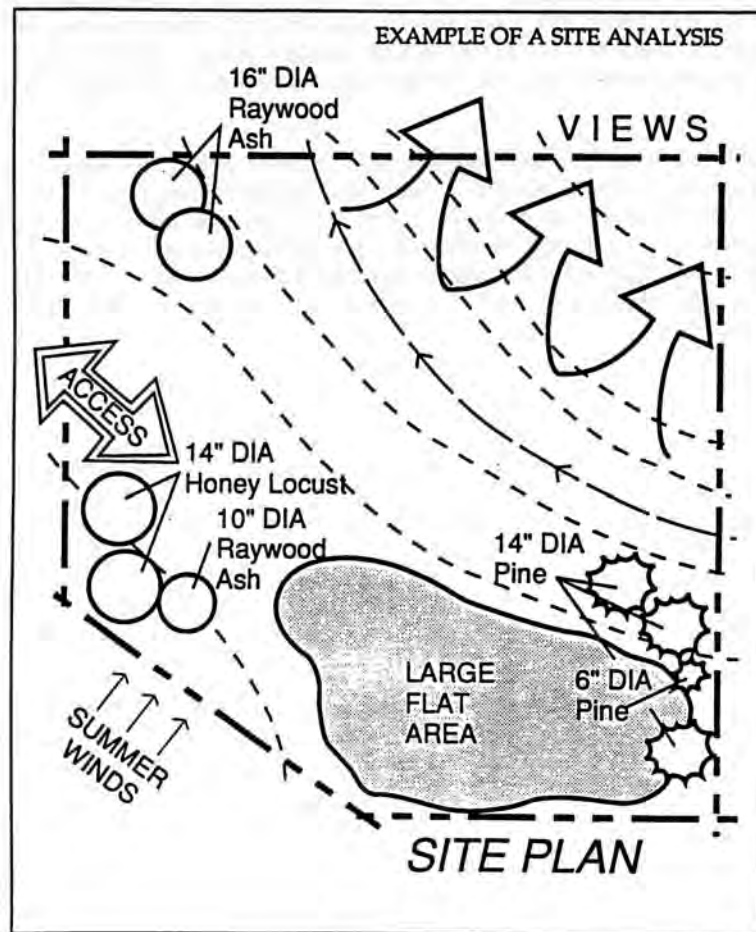
These objectives are numbered and organized by categories. The categories are: Site Design, Building Design and Streets, Parking and Access. These represent the objectives the City has for private and public development. Specific requirements for land development are found in Title 18 of the Reno Municipal Code.

### **Site Design**

#### Objective #1: Site Analysis

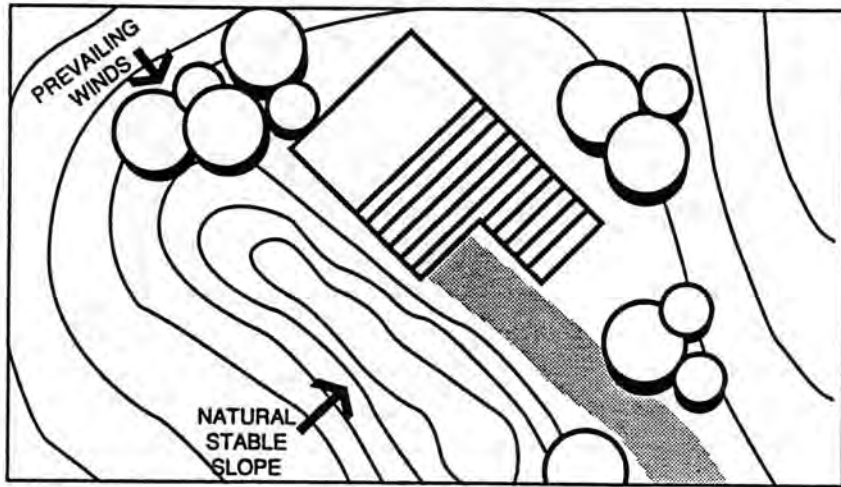
Each plan for development should be based on a thorough analysis of the site in order to fully understand the development's relationship to the physical environment.

The site analysis should include such opportunities and constraints as topography, views, vegetation, drainage, solar path (summer & winter), winter winds, summer breezes, access, adjacent built environments.

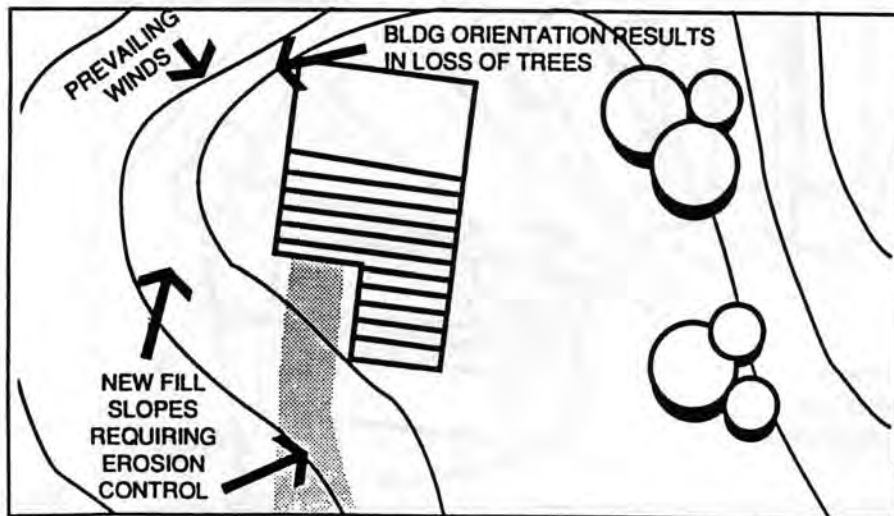


## Objective #2: Significant Natural Features

The significant natural features of a site should be retained and used to advantage. The incorporation of features such as creeks, trees, natural slopes, rocks, views and irrigation ditches should be considered in the design of the site and the placement of the buildings. Only those areas that are needed for construction should be disturbed. Areas that are disturbed should mimic natural features. Destruction of vegetation outside the construction zone should be minimized.



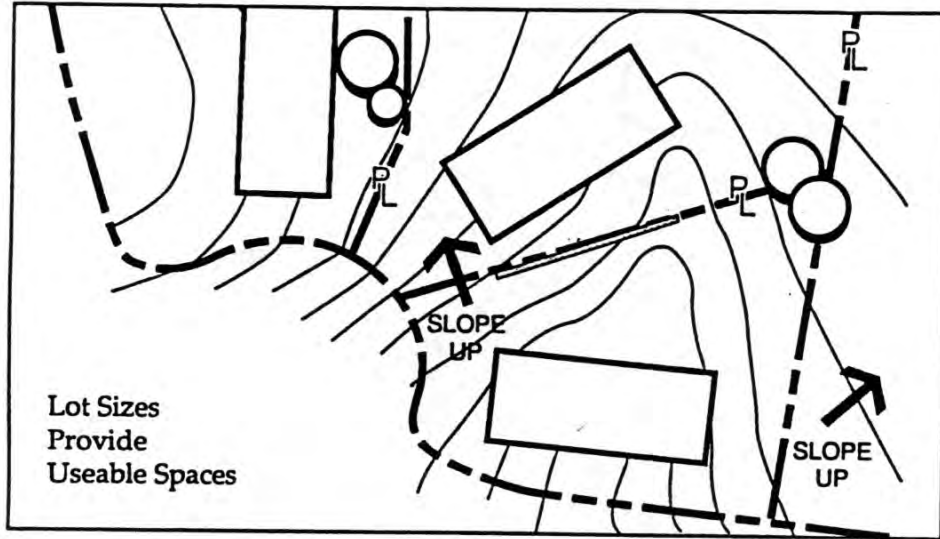
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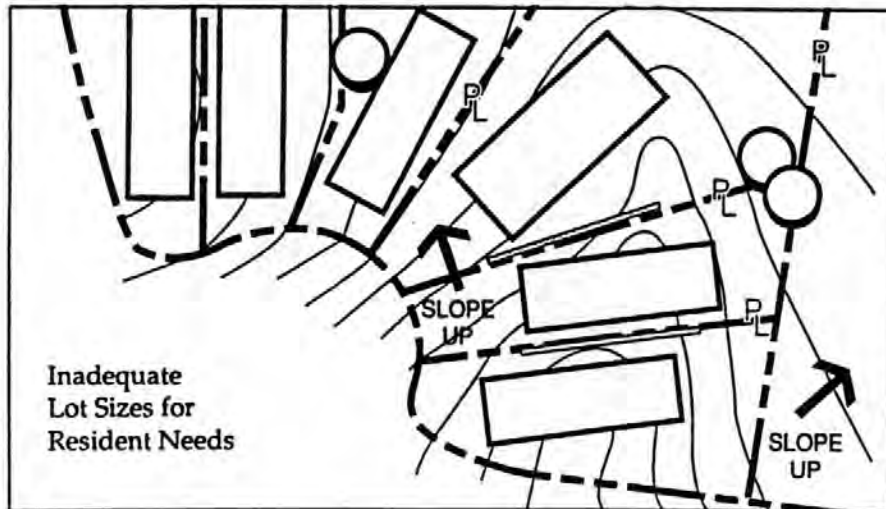
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### Objective #3: Platting Lots

Each subdivision should demonstrate that all lots provide a buildable, usable area. In platting lots, it should be recognized that rear and side yards are important to the proper functioning of residential developments. These areas, which provide privacy, recreation, storage and aesthetic value, must be designed such that they meet the needs of the future residents of the property.



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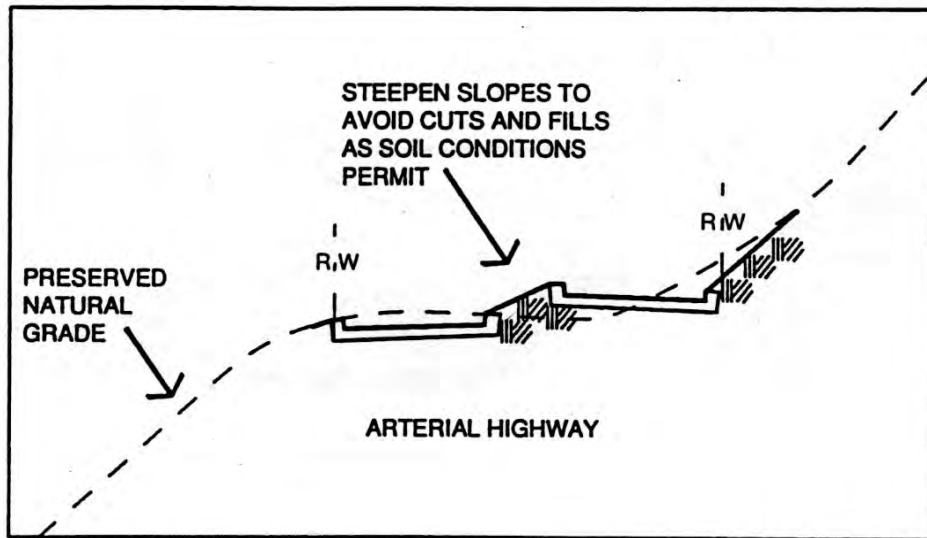


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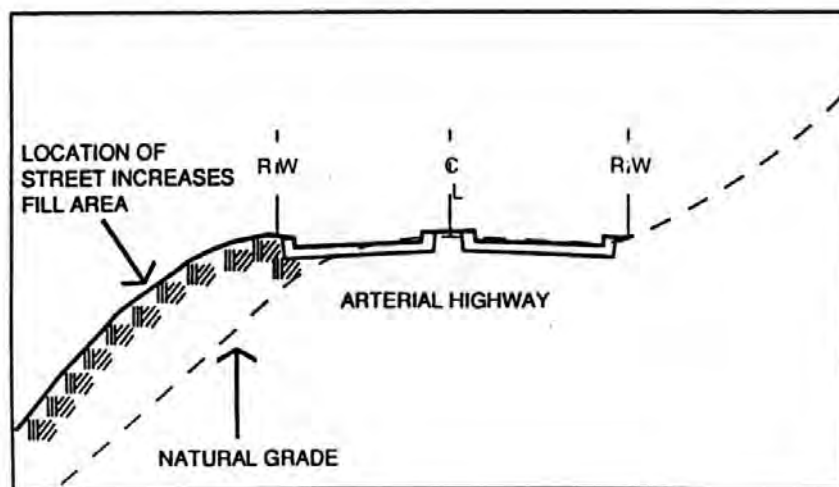
#### Objective #4: Grading

The grading of any hillside should achieve an undulating, naturalistic appearance by varying the gradient of the slope or grading to curvilinear contours. Hillside street alignments should generally parallel contours unless doing so would result in an unsafe street as determined by the City or would preclude solar orientation of lots.

The uniqueness of each site deserves an independent approach to grading. By placing an emphasis on landscaping and naturalizing the developed site, the visual impact on grading can become less harsh and unnaturally imposed. Since development is considered to be an improvement to existing conditions, its characteristics should be altered to fit the terrain and to keep grading at an optimal level.

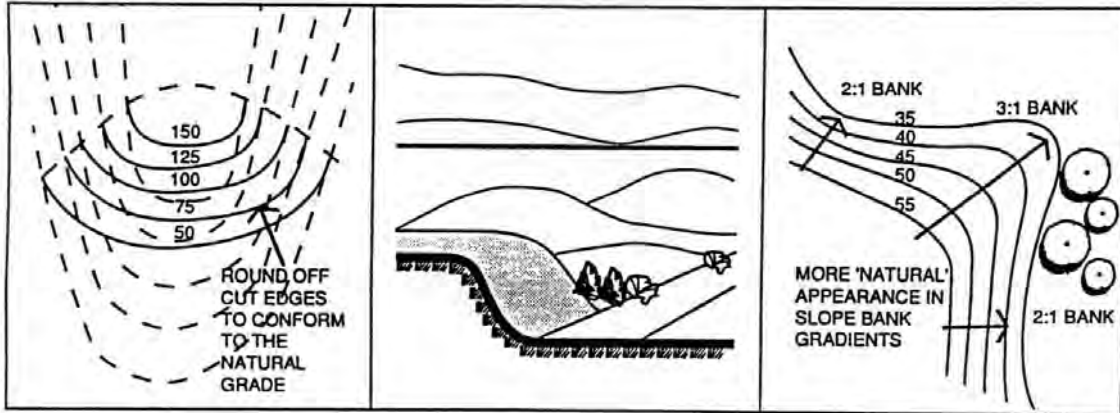


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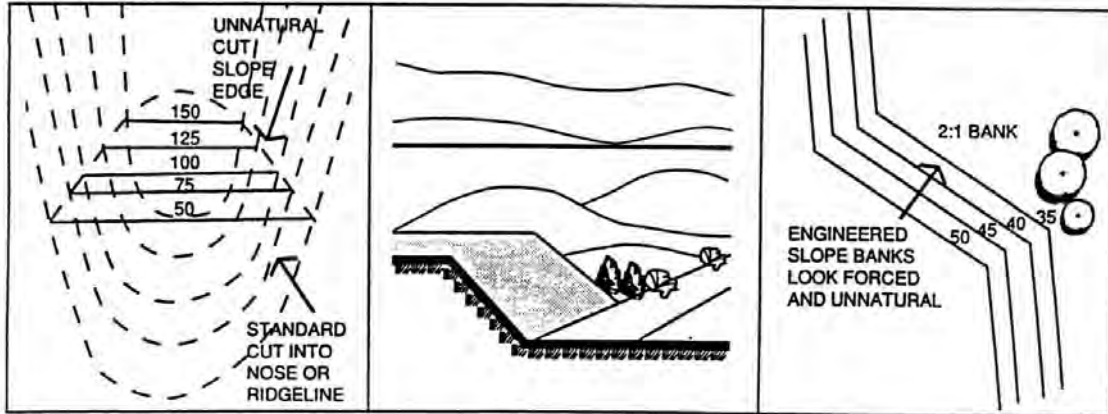


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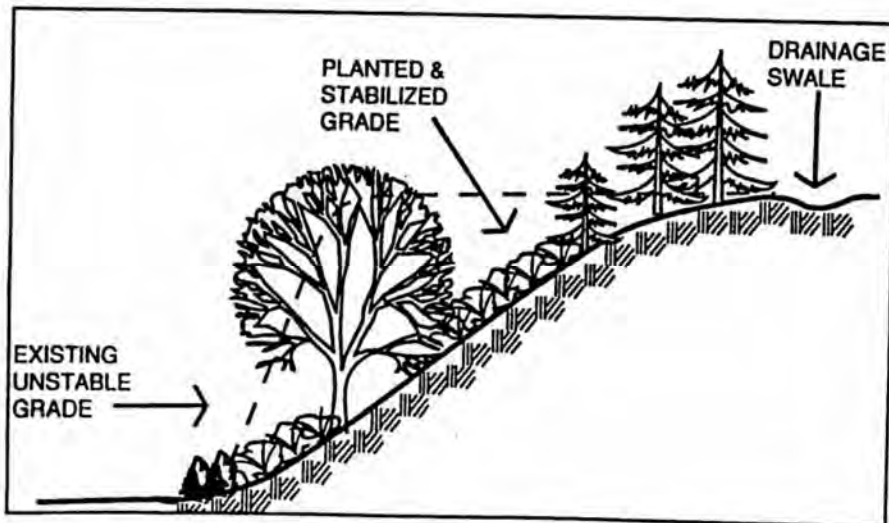
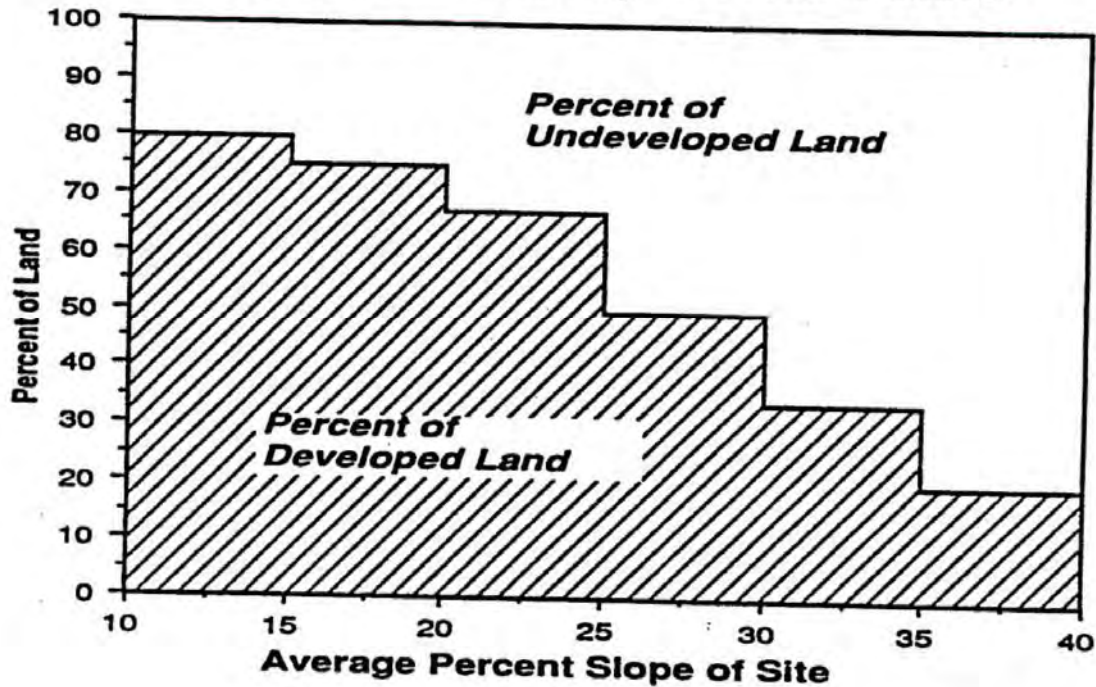
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Objective #5: Percent in Natural State

In hillside developments, the following table indicates those minimum percentages of the ground surface which should remain in a natural state (no cut or fill) based on the average percent slope of a parcel unless a detailed grading plan demonstrates that the subject property can be properly graded with respect to erosion control, slope stability and visual impacts. The area remaining in a natural state should generally comprise the steeper slopes on the site.

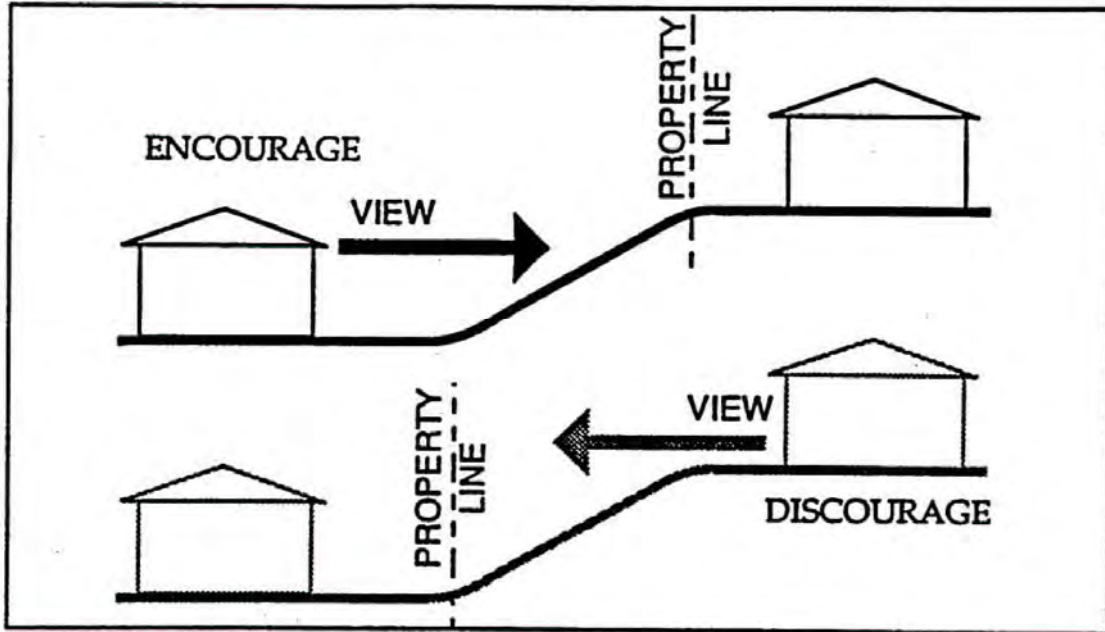
**Hillside Developments Table**



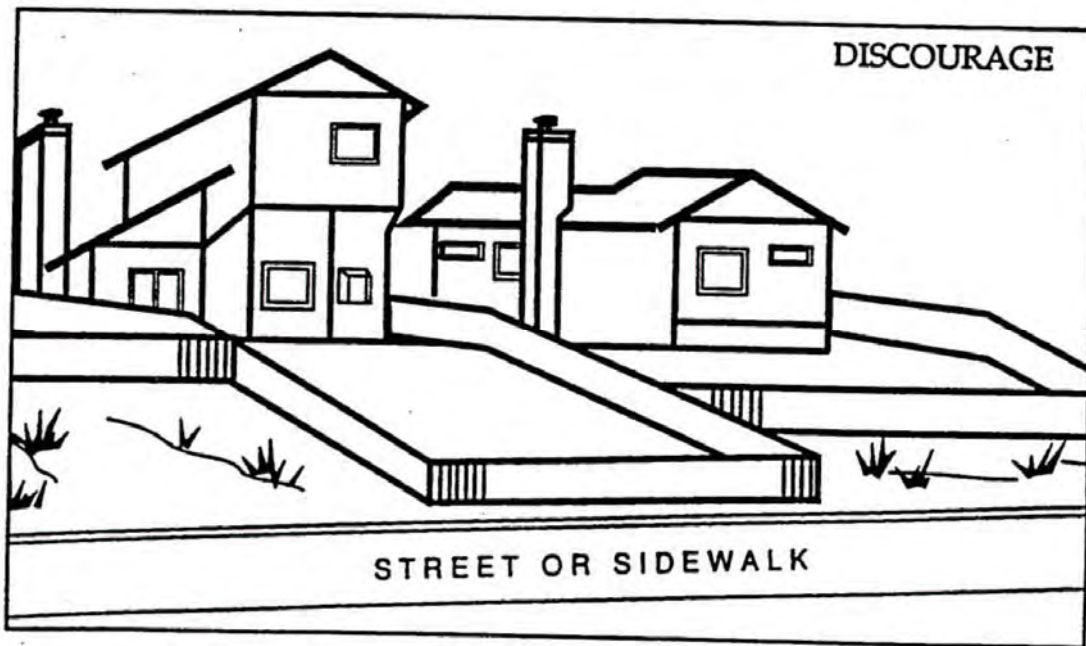
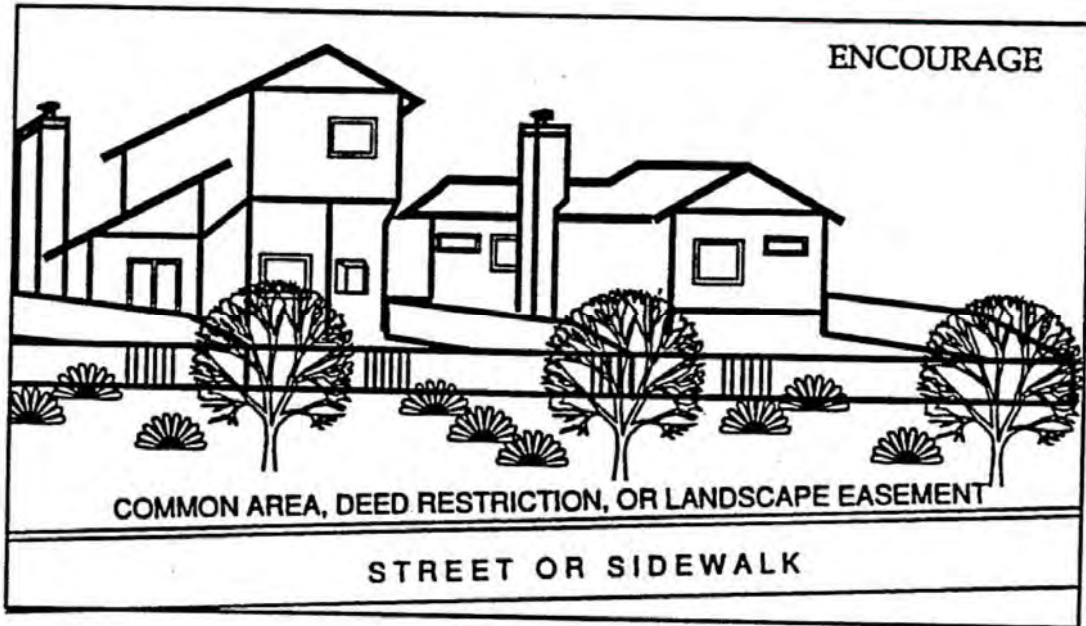
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Objective #6: Cut and Fill Slopes

In order to reduce the negative physical and visual impacts that may be created, cut or fill slopes should be designed such that they are visible from the residence on the property in which they are located. This will encourage property owners to personalize, stabilize and maintain slopes such that erosion is prevented and exterior space is aesthetically treated.

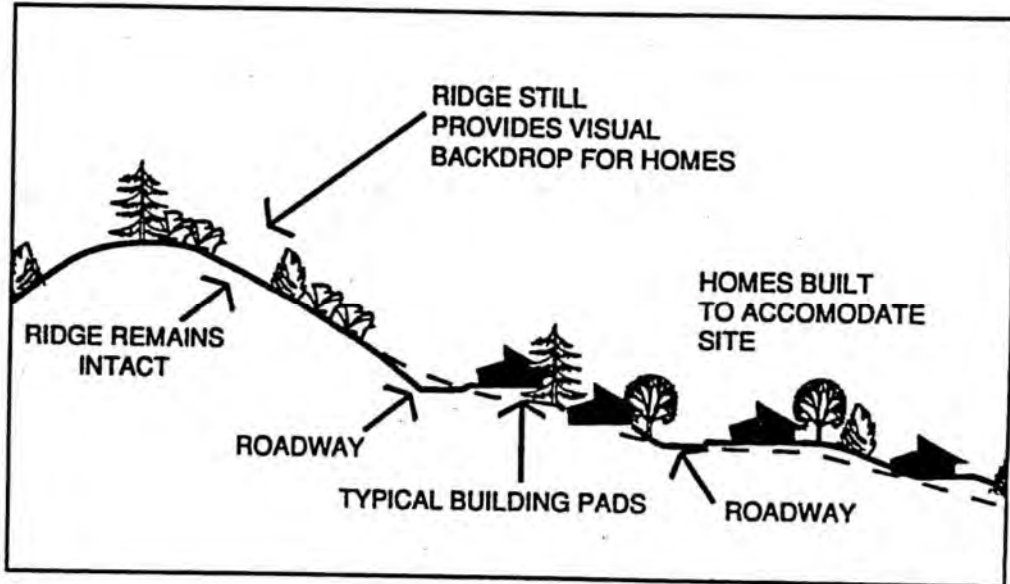


Slopes adjacent to a roadway should be maintained in a uniform manner. This is assured through a homeowners' association, easements or deed restrictions. In addition, cut and fill slopes should not drastically alter the slope's grade with respect to adjacent property owners.



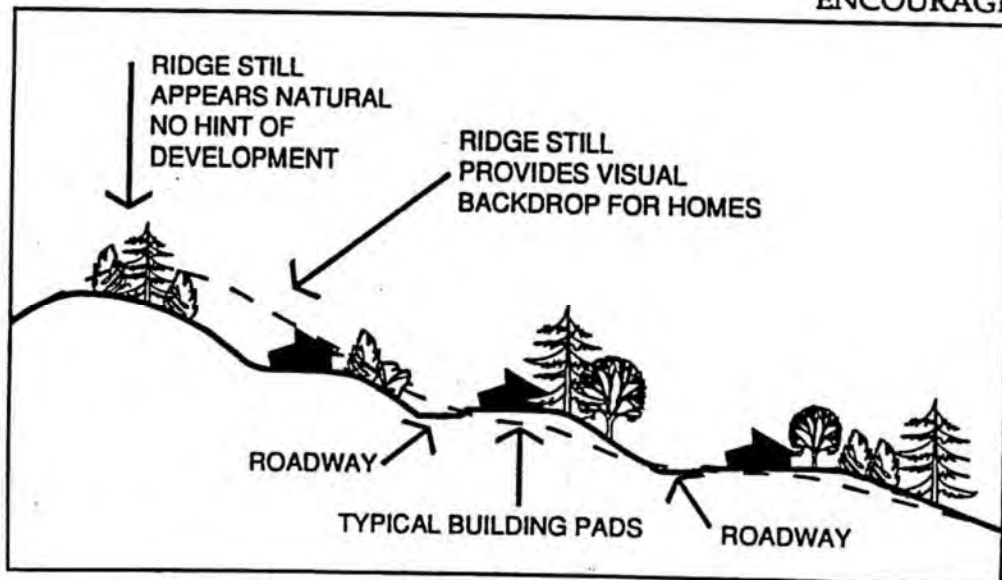
Objective #7: Ridgelines

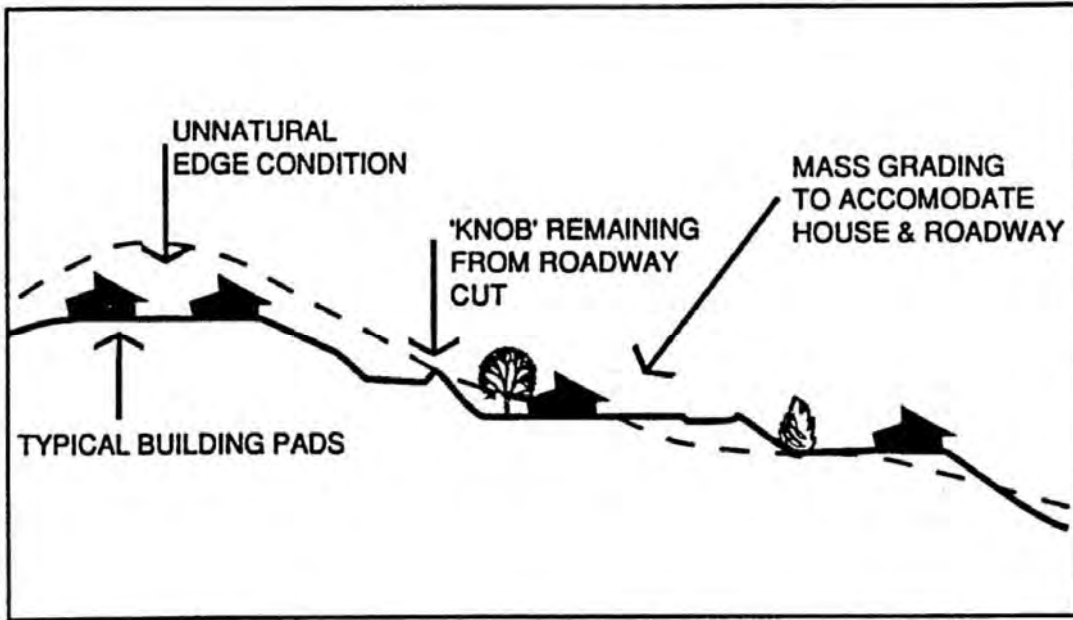
Ridgelines should be preserved as much as possible. Structures located adjacent to prominent ridgelines should complement, rather than provide a stark contrast with, the natural landform(s). Through careful placement, development can help preserve vistas and landforms, provide more access to sensory experiences and create a positive visual impact.



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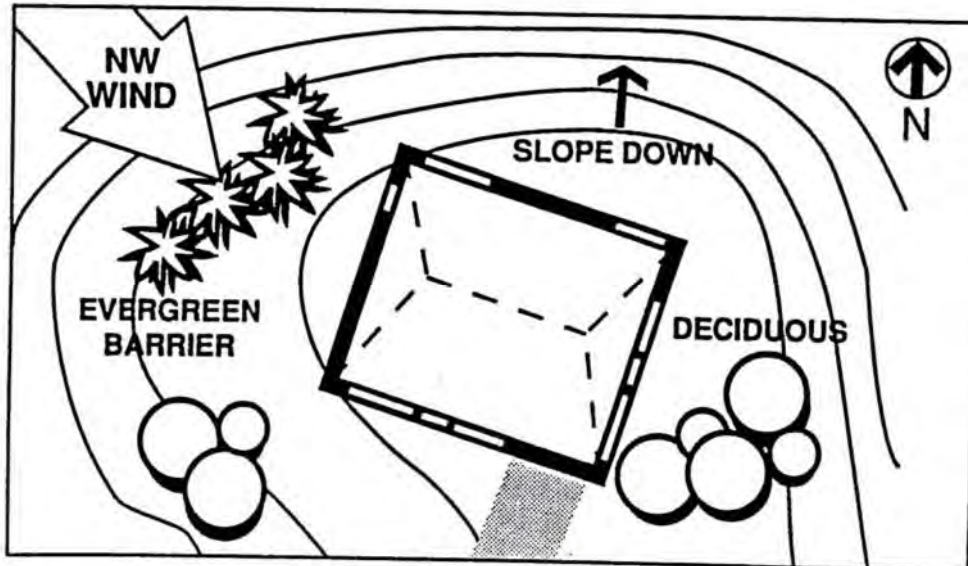
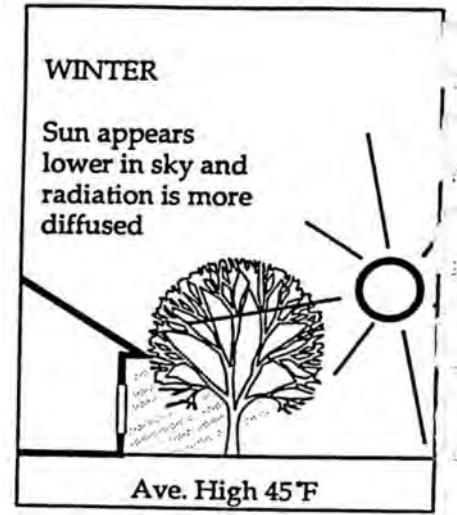
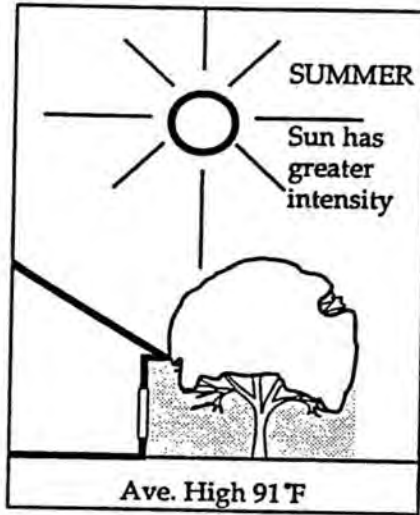
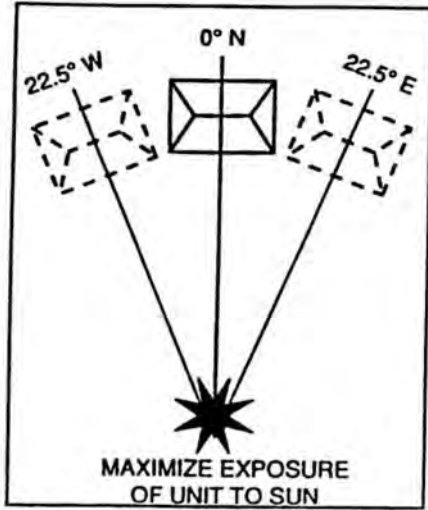




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Objective #8: Wind and Solar Orientation

Each plan for development should analyze wind direction and solar orientation. Consideration of factors such as landscaping, window placement, overhangs, building location and activity areas will improve site utilization and help solve environmental problems.

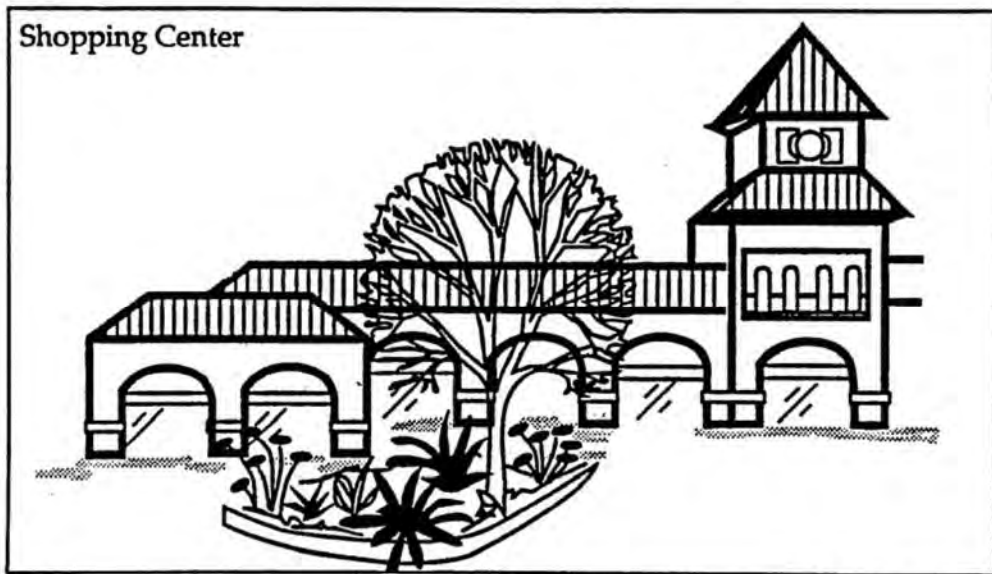


## Building Design

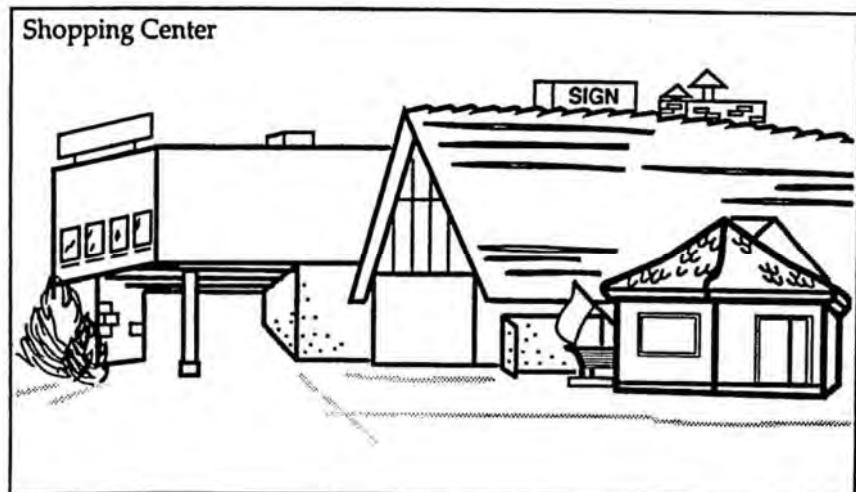
### Objective #9: Integrated Design

Building and site design should be blended to create an architecturally cohesive project. Through the careful selection of building types, materials, textures and color schemes, a positive supporting relationship can be achieved.

Building design does play a powerful role as a communicator. Integrated designs express such information as function, access, circulation and corporate image.



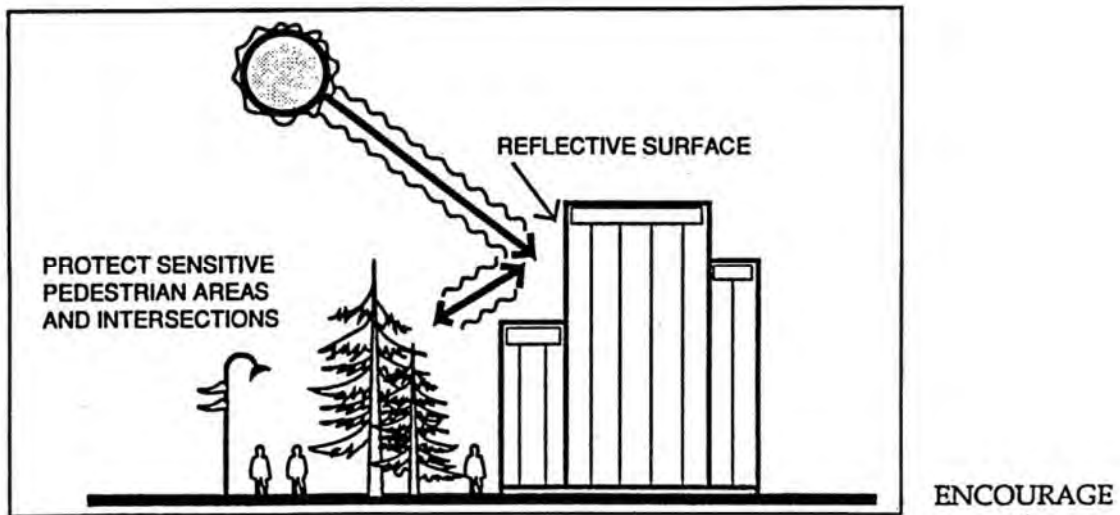
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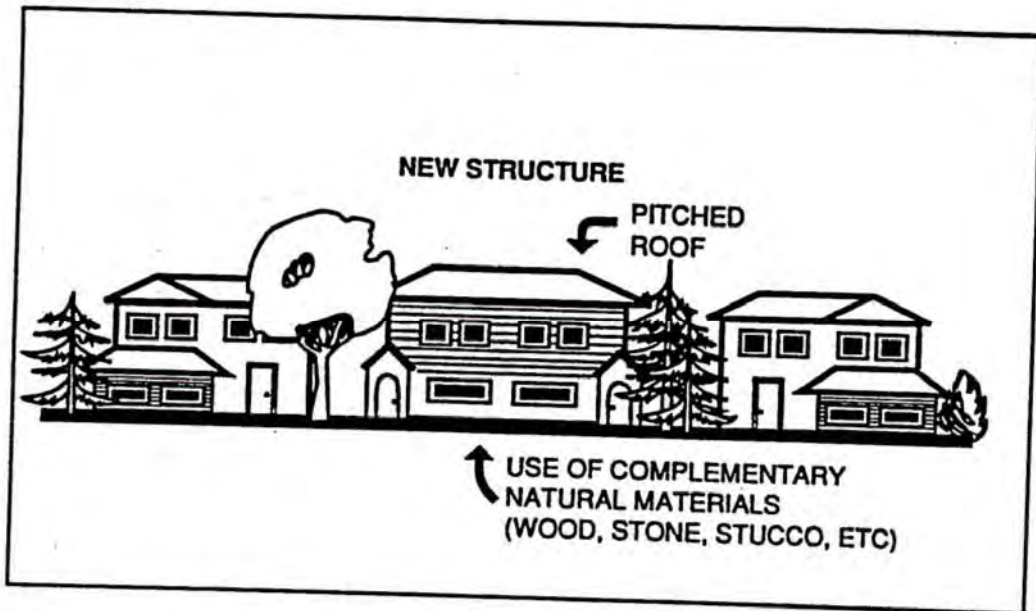
## Objective #10: Glare

Reflected glare on nearby buildings, streets or pedestrian areas should be avoided. Negative impacts can be prevented with the careful selection and cautious use of building materials, incorporation of overhangs, controlled angles of reflection and appropriate placement of landscaping.

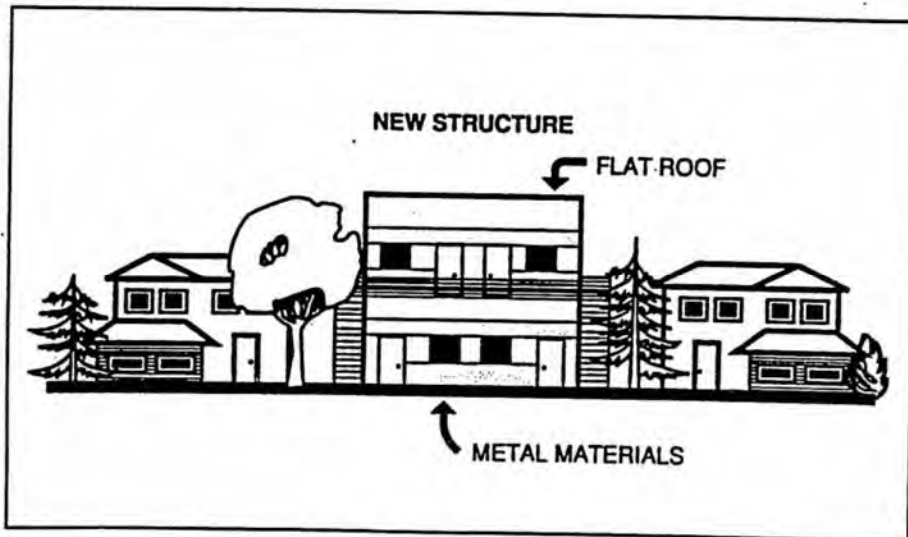


Objective #11: Compatibility

New structures should complement adjacent structures in terms of scale and proportion rather than creating a sense of encroachment. Textures, shadow lines and articulation of details are some of the design elements that could be used. Transition areas can be developed and a balanced interrelationship with existing structures achieved through the use of complementary form, materials and details without necessarily copying existing architectural styles. In addition, establishment of similar organizational schemes will strengthen compatibility with neighboring sites.



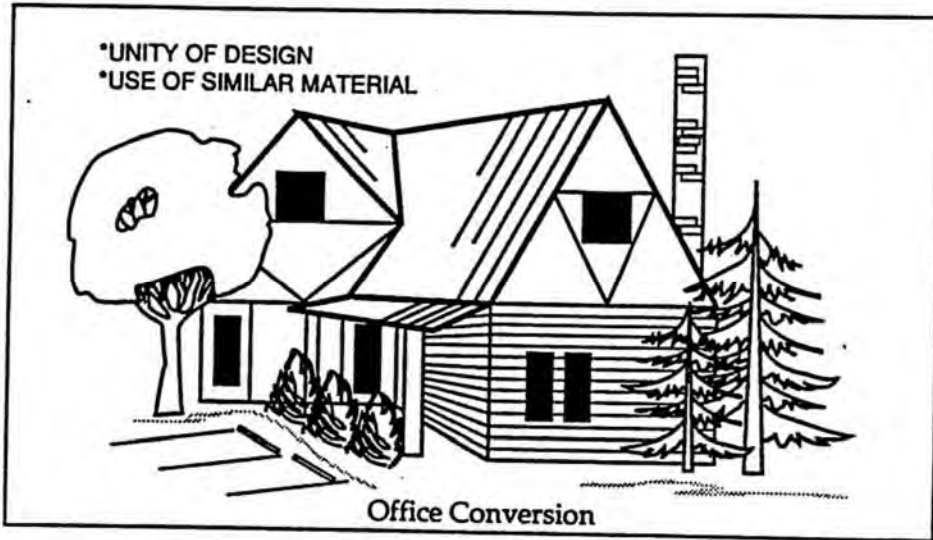
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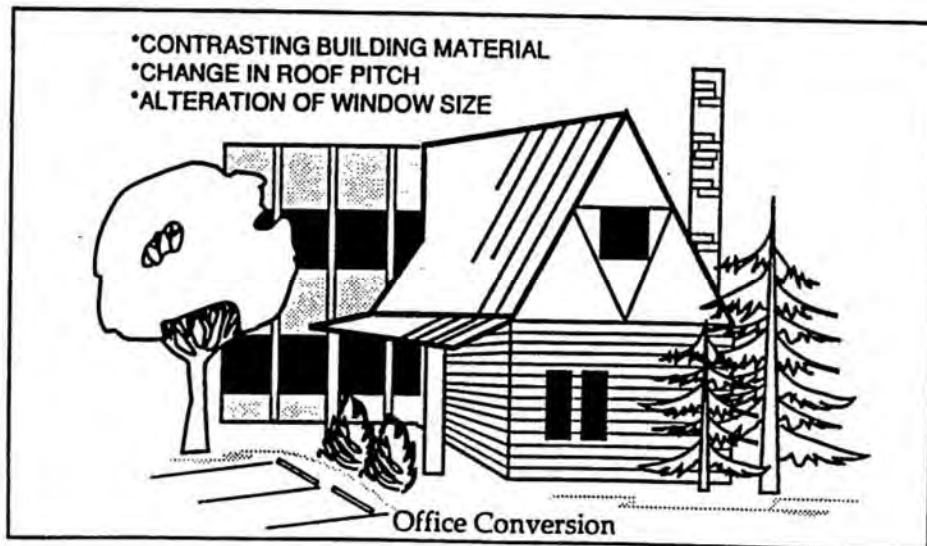
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Objective #12: Additions

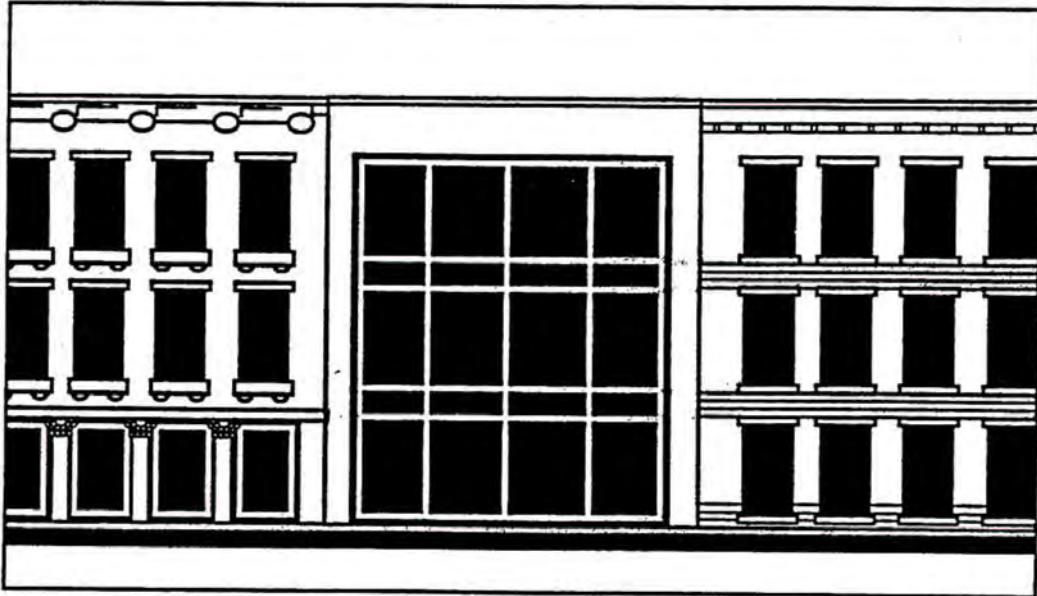
Additions and accessory buildings should have an exterior appearance which is sensitive to the main structure. Color schemes, materials, forms and style should enhance rather than detract from the existing structure.



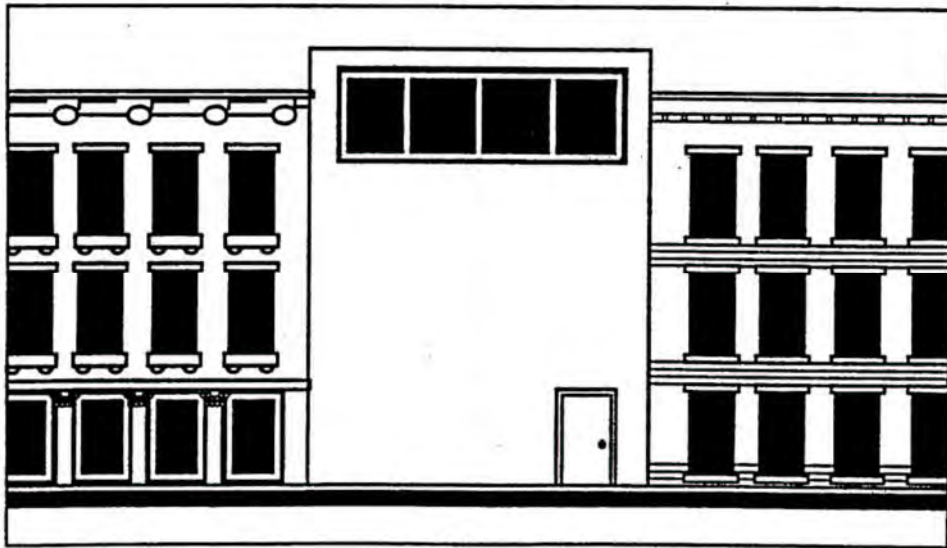
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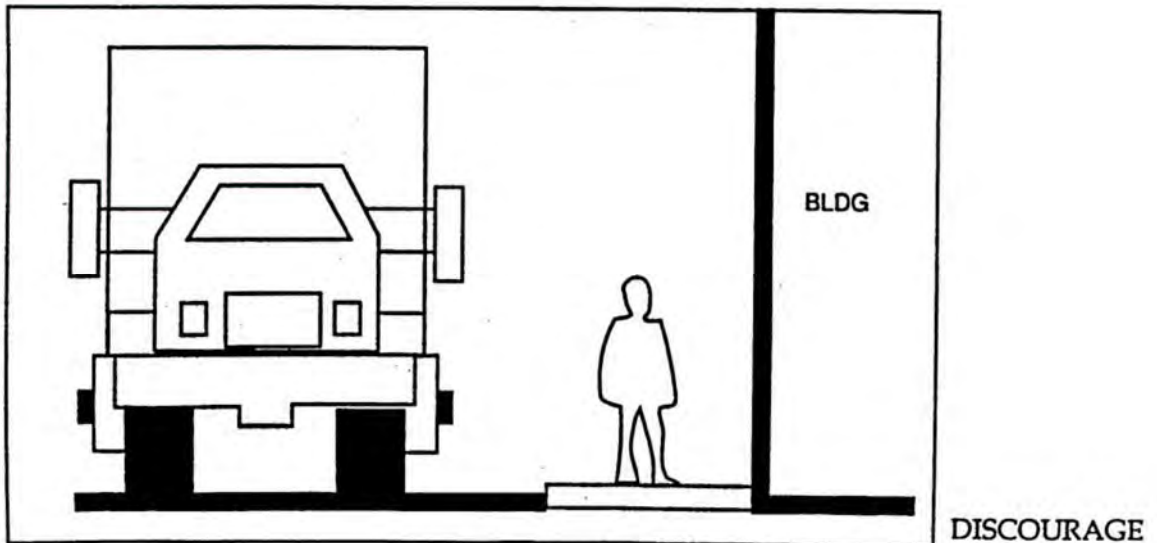
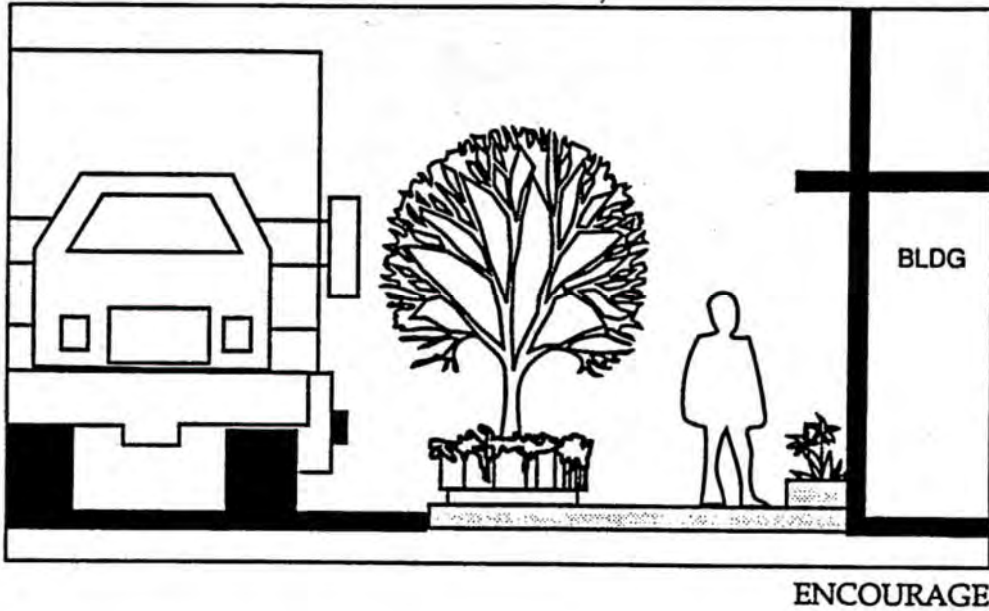
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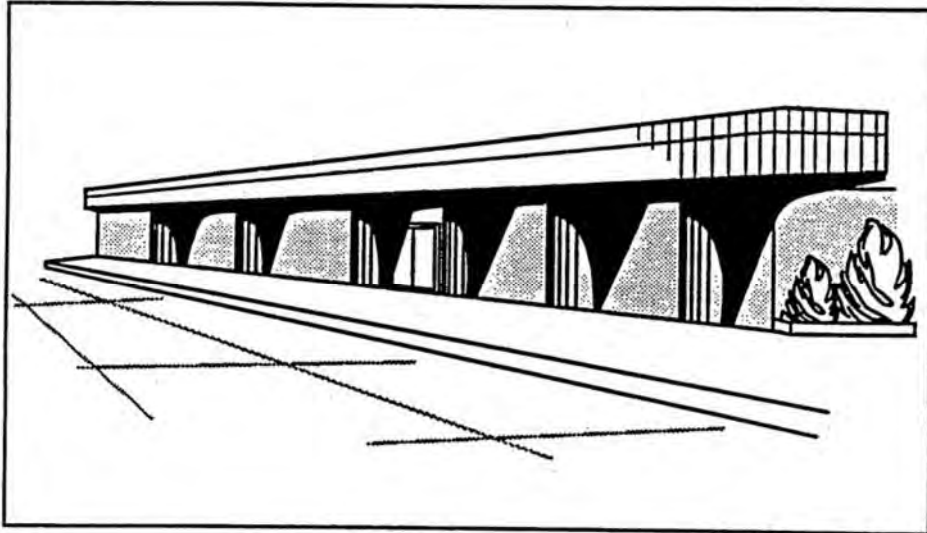
Objective #13: Scale

A human scale should be achieved near ground level on large buildings and along street facades and entryways through the use of such scale elements as windows, doors, columns and beams. Landscaping along a pedestrian way can provide a transition from the street scene, offering buffering and protection. Incorporation of public plazas, public art and fountain areas, along with variations in surface treatment, further promotes areas of human interest and contact.

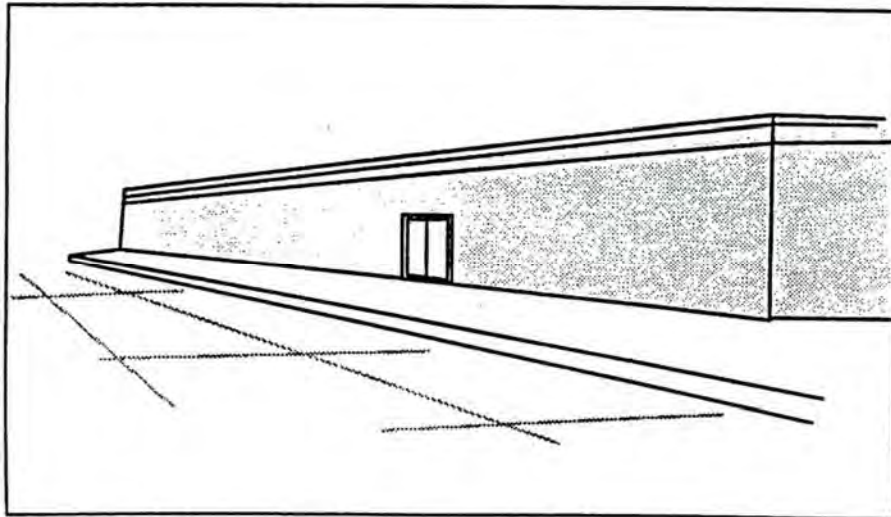


Objective #14: Building Planes

The building should be considered as an integrated whole. Equal consideration shall be given to every side of a building, especially sides adjacent to existing structures and in clear, public view. Facades which are long uninterrupted horizontal planes should be avoided. Exterior treatment shall integrate the use of material, color and texture on every side of the building.



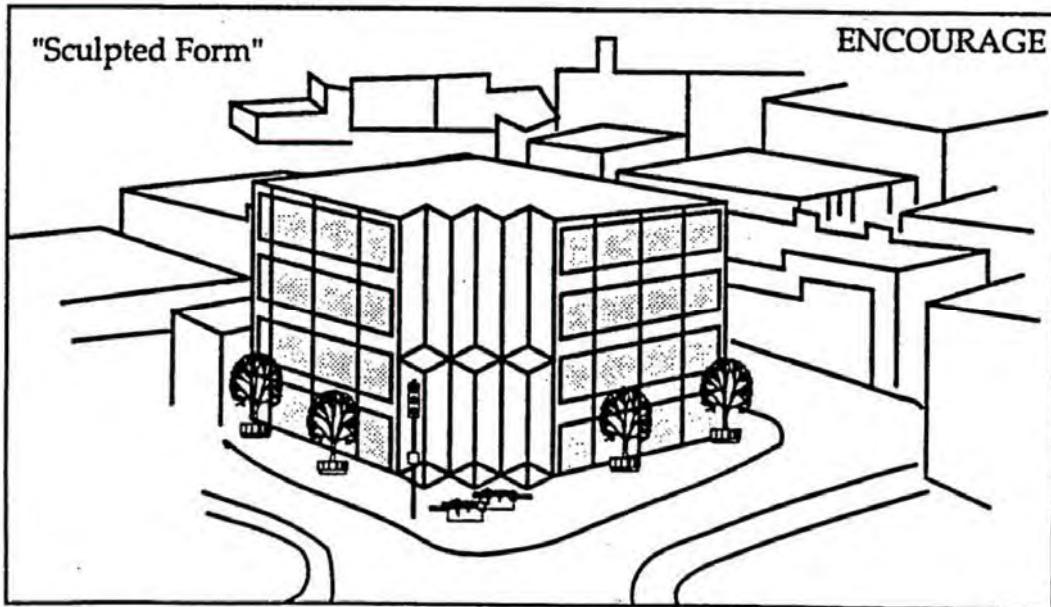
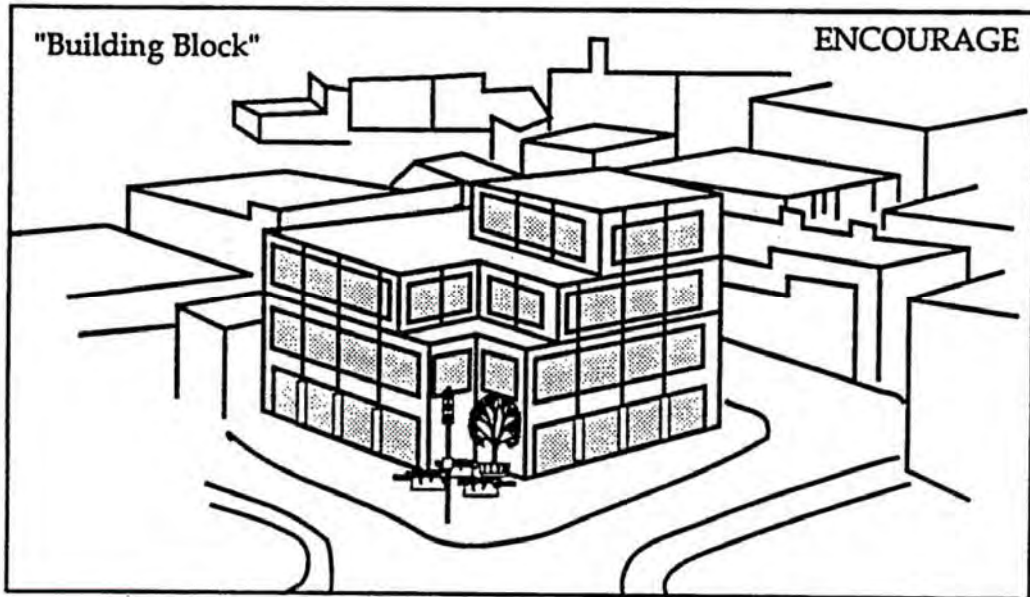
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Objective #15: Building Mass

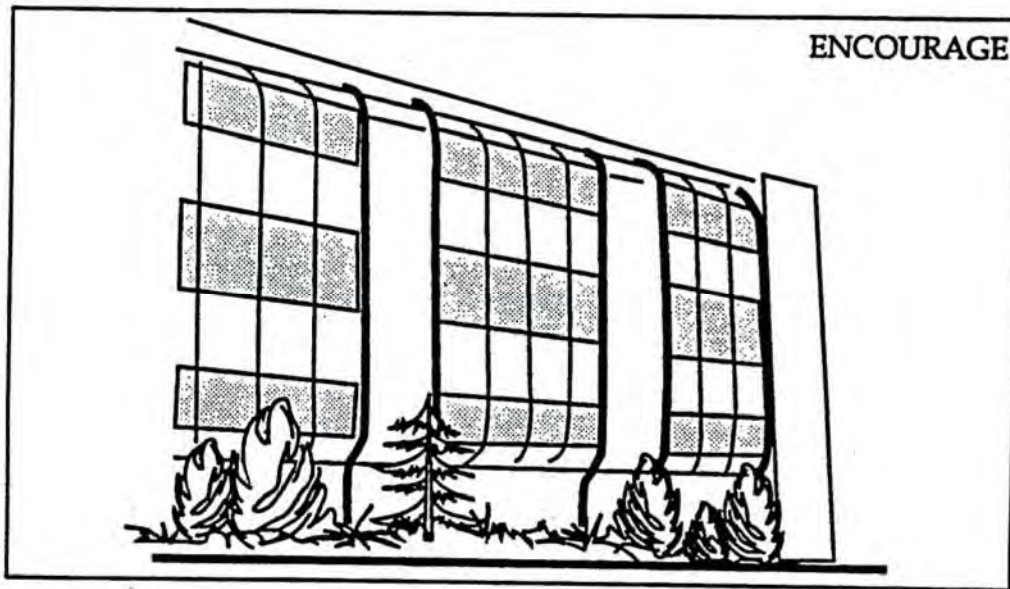
Buildings should be designed with architectural elements to appear more as an aggregation of smaller *building blocks* or as *sculpted forms*, rather than a single large block or box. Transition areas between buildings should be recognized and enhanced, solar access should be considered and building should avoid extending out to the property line.



Objective #16: Visually Defined Structures

Building masses should be arranged so that they cast shadows on each other and emphasize the contrast of light and shaded surfaces.

Vertical planes of a building should be designed with architectural elements in order to articulate the building.

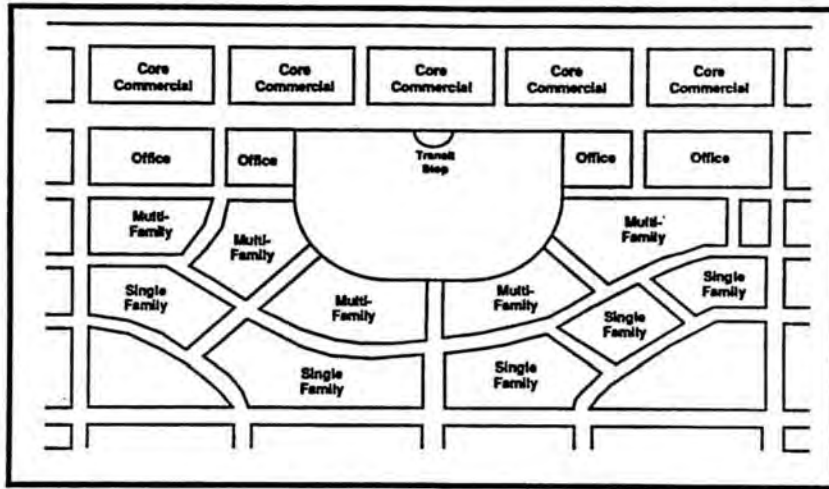


## Streets, Parking and Access

### Objective #17: Pedestrian-oriented Roadways

Use of tree-lined narrow streets with traffic calming devices such as roundabouts, chokers and protected parking is encouraged to reduce through traffic, vehicular speeds, pavement areas and increase open space for pedestrians, thereby fostering a sense of community.

#### INTEGRATED SYSTEM - ENCOURAGE

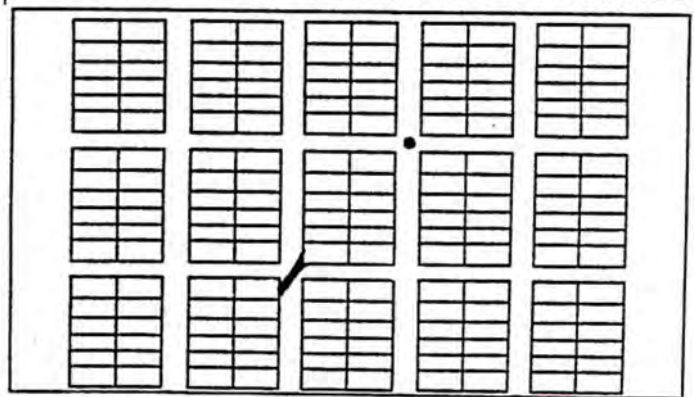


#### LOWER DENSITY SUBURBAN AREAS - ENCOURAGE



should have park access within the subdivision

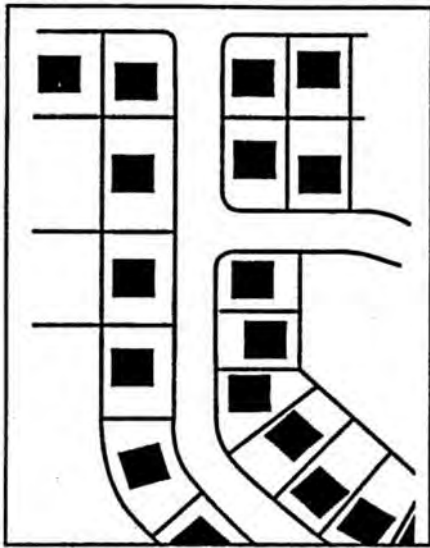
#### MEDIUM DENSITY URBAN AREAS - ENCOURAGE



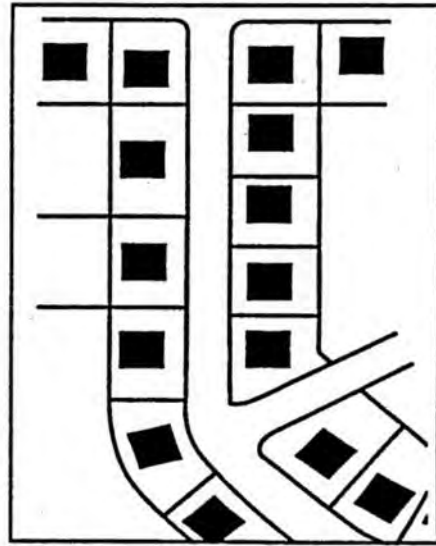
use of traffic calming devices such as roundabouts and diagonal diverters

Objective #18: Intersections

When designing streets, intersections on the inside of curves should be avoided. By improving sight distances for vehicles turning at intersections, potential traffic hazards will be reduced. Where such intersections are needed, streets shall be designed with lower traffic volumes and special setbacks for adjoining properties. Wherever possible, local streets should connect at T-intersections to increase safety and reduce traffic speeds.



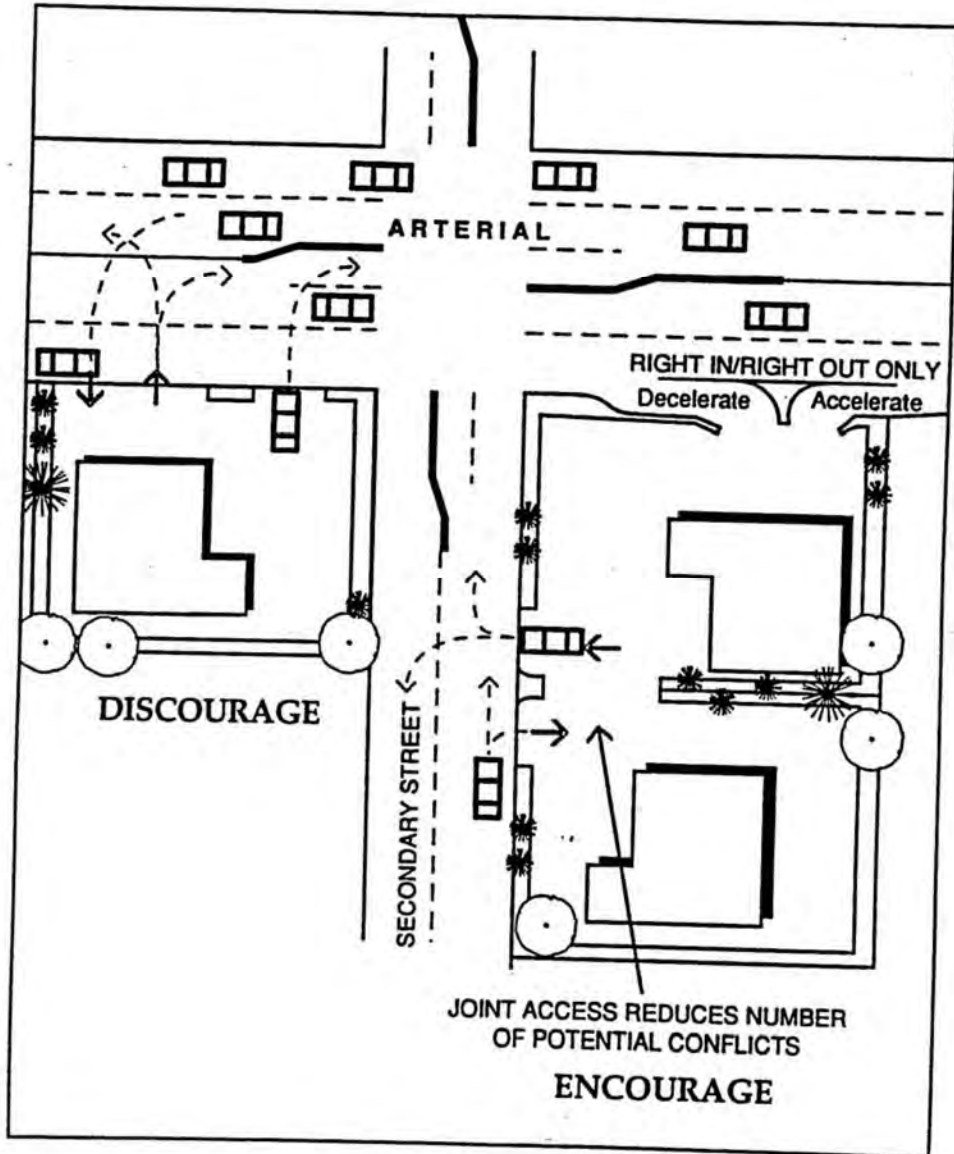
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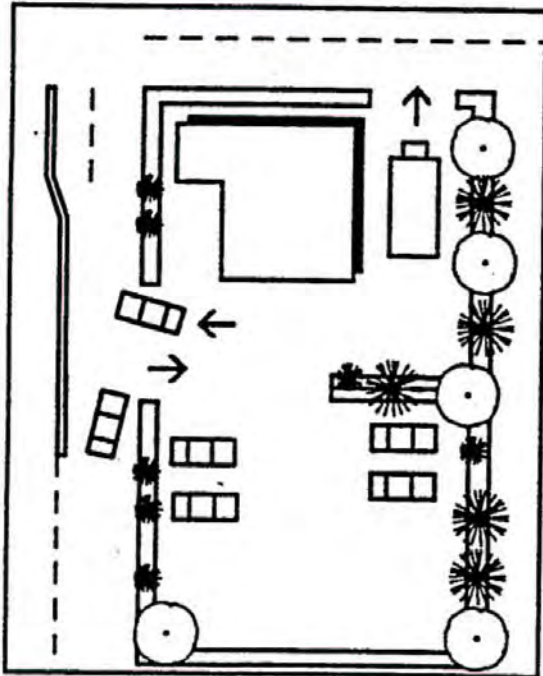
Objective #19: Access

Access points should be kept to a minimum. Joint access between adjacent businesses should be used whenever possible in order to reduce traffic hazards along major routes. When a site has access to two streets, access should utilize the street which has the least impact on traffic flow. If access from an arterial street will not impair traffic flow, limited access may be provided.

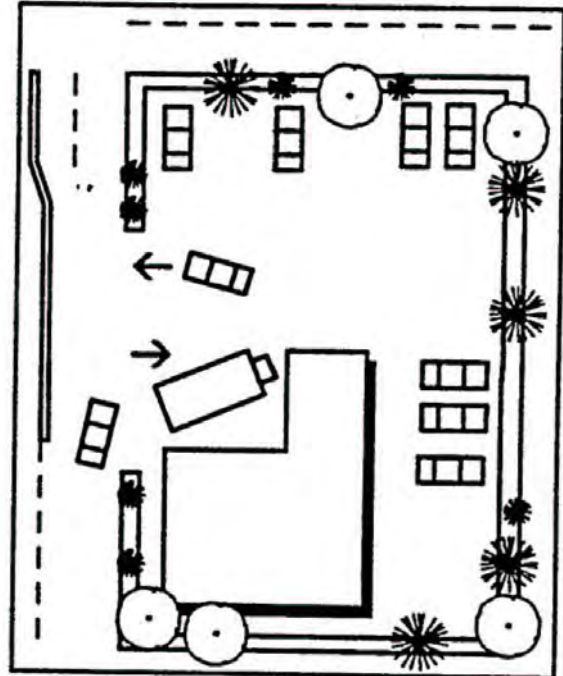


Objective #20: Loading

The parking and circulation plan of a project should be designed such that loading activity does not interfere with other site circulation patterns. This objective will reduce potential conflicts with vehicles accessing the site, as well as those moving within the site, and will encourage screening of loading activity from public view. In addition, placement of loading areas shall be sensitive to and not disruptive to adjoining uses.



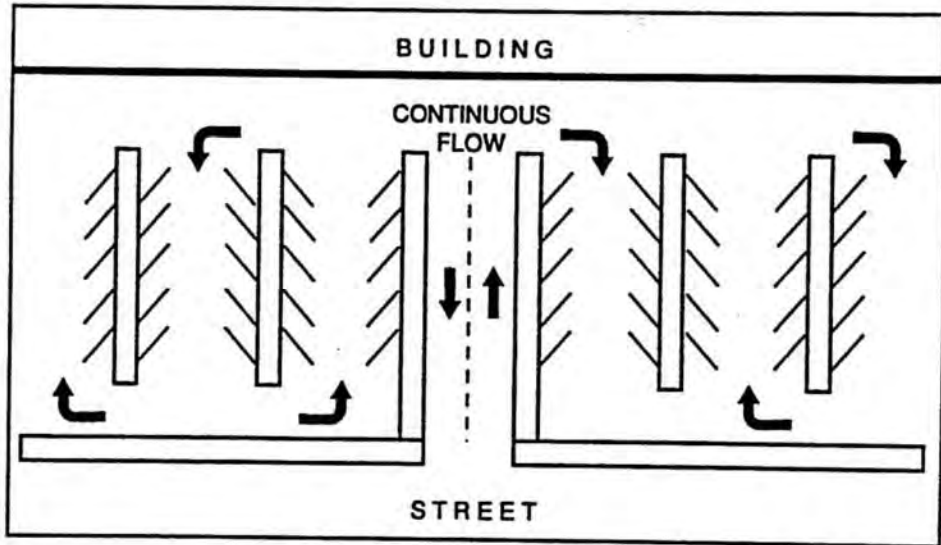
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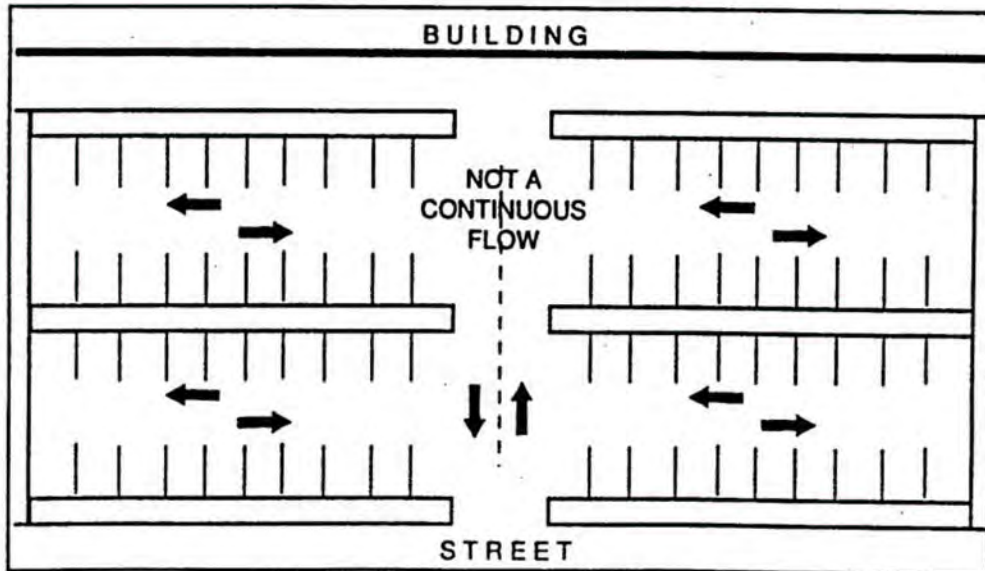
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Objective #21: Parking Circulation

The circulation patterns of parking lots should be logical and easily comprehended by the user. Conflicts should be reduced through the use of berms, landscape areas, stacking spaces and the like.



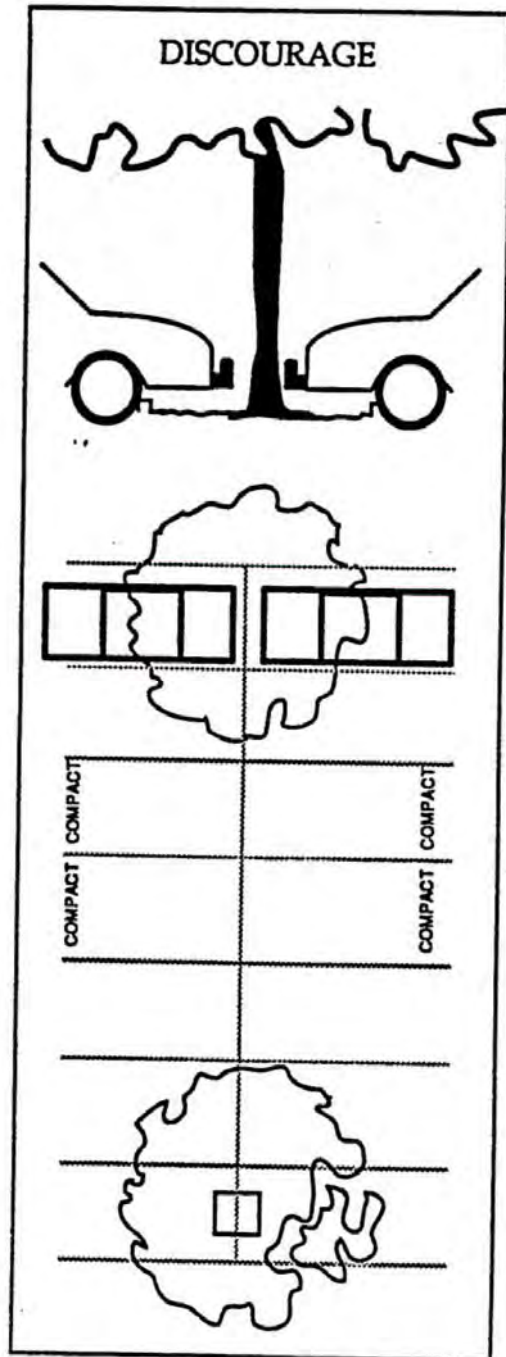
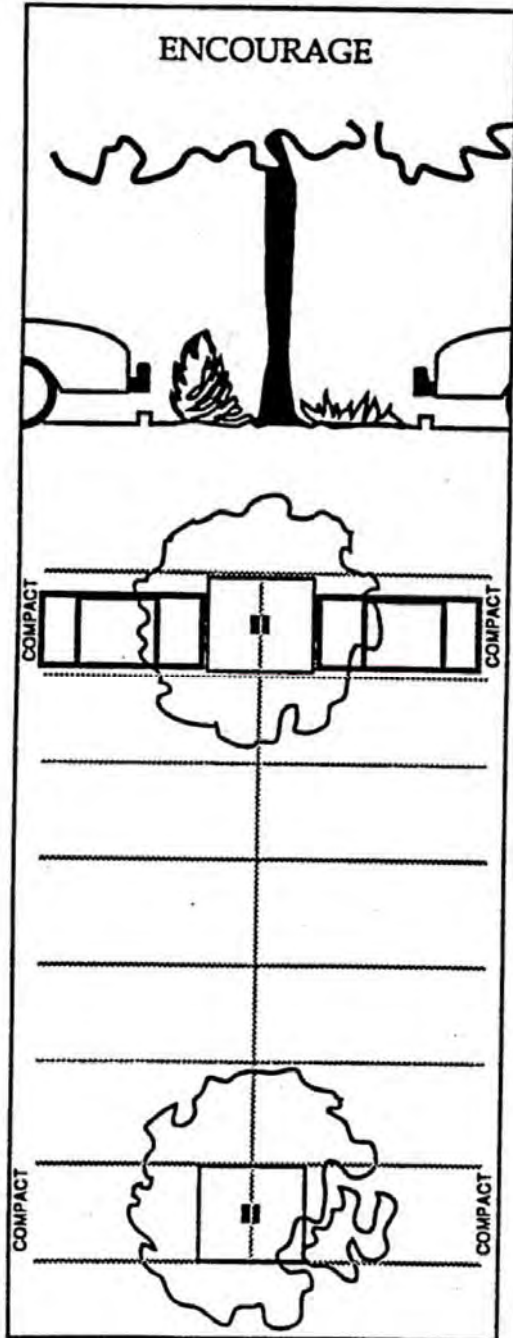
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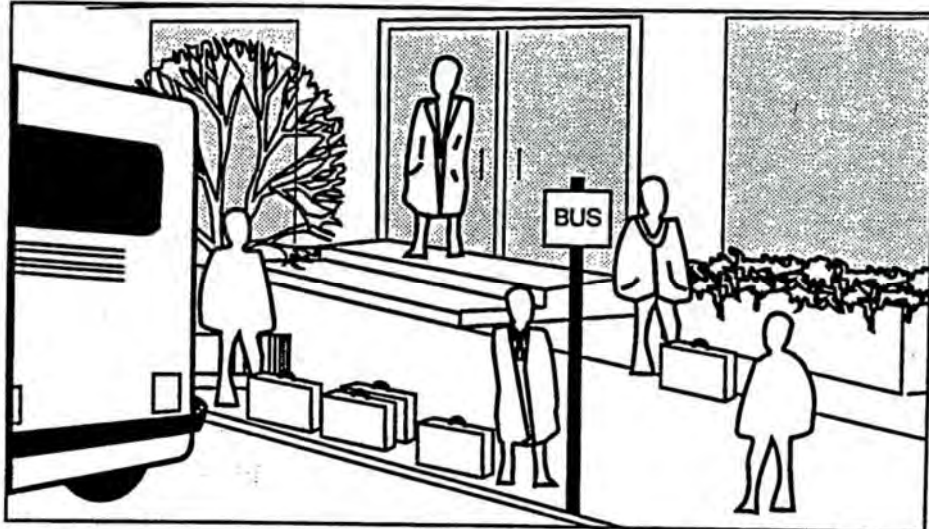
Objective #22: Landscaping

Through the prudent use and placement of compact spaces, adequate area for landscaping within parking areas should be provided. Parking areas should be designed and landscaped to minimize glare, provide shade and reduce the visual impact of large numbers of cars.

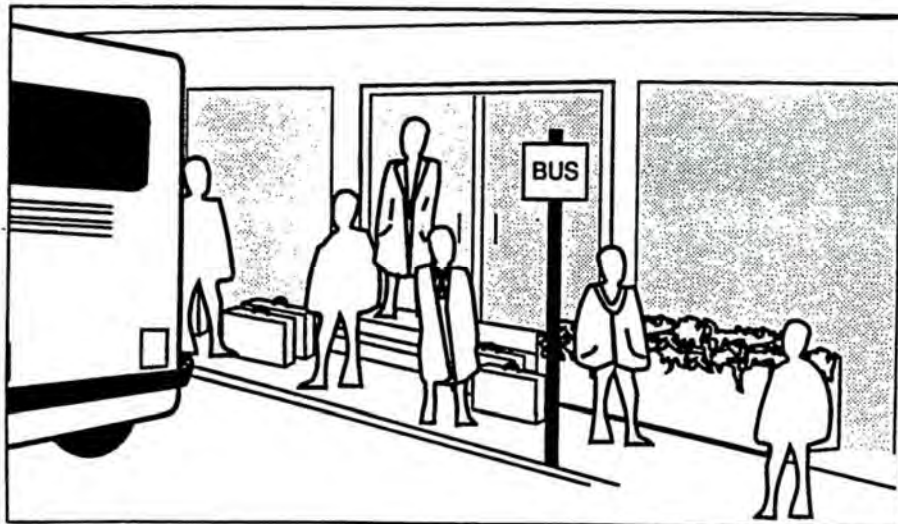


Objective #23: Sidewalks

Sidewalk areas, especially those located at major intersections and areas of significant public exposure shall be wide enough to accommodate such uses as bus loading, news vending, community resource boards, window shopping lanes and other pedestrian traffic needs. In addition to directing activities and movements, sidewalks should provide a safe, public place for people to stand or sit out of the stream of traffic.



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# POPULATION PLAN



## **ACKNOWLEDGMENTS**

---

### **City Council**

Robert Cashell, Mayor  
Pierre Hascheff, At-Large  
Dan Gustin, Ward One  
Sharon Zadra, Ward Two  
Jessica Sferrazza, Ward Three  
Dwight Dortch, Ward Four  
David Aiazzi, Ward Five

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# **TABLE OF CONTENTS**

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## **Introduction**

Plan Organization.....	1
Boundary.....	1
Time Frame.....	1
Relationship to Other Plans .....	1
Need for Population Plan .....	1

## **Population Growth Trends**

Historical Growth.....	2
Population Forecast .....	2

## **Natural Resources**

Developable Land .....	3
Air Quality .....	3
Water Supply and Water Quality .....	4

## **Tables**

Table 1 City of Reno Population Forecast in Thousands.....	2
Table 2 Recent Air Quality Trends.....	3
Table 3 TMSA Water Resources and Demands .....	4

## **INTRODUCTION**

### **Plan Organization**

This plan is divided into three sections: *Introduction*, *Population Growth Trends*, and *Natural Resources*. The *Introduction* describes the boundary, time frame, relationship to other plans and why this plan is needed. Historical growth and population forecasting are discussed in the next section. The *Natural Resources* section describes the impact and availability of developable land, air quality, water supply and water quality on population growth.

### **Boundary**

This Population Plan covers all of the City of Reno and its sphere of influence.

### **Time Frame**

This population forecast horizon is to the year 2030.

### **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150 through 278.170.

Policies of the Truckee Meadows Regional Plan are applicable regionwide. The City Master Plan has three different levels of applicability; *Citywide*, *Center and Corridor*, and *Neighborhood*. *Citywide* plans include this Population Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in centers or corridors, which have been designated as appropriate for more detailed planning. Policies in center, corridor and neighborhood plans elaborate, with greater detail, upon general policies contained in the citywide and regional plans. Center, corridor and neighborhood plans must conform with and not be in conflict with policy direction of the citywide plans and the Truckee Meadows Regional Plan. Similarly, Title 18 of the Reno Municipal Code applies at the citywide, center and corridor, and neighborhood levels and must be consistent with these plans.

### **Need for Population Plan**

The Nevada Revised Statutes require a population plan to be included in the Master Plan. Specifically, NRS 278.160(g) states:

**Population Plan.** An estimate of the total population which the natural resources of the city, county, or region will support on a continuing basis without unreasonable impairment.

The population forecast included in this plan will be used for other planning efforts in the City of Reno. For example, ongoing public services and infrastructure planning is based on this population forecast. This ensures consistency between demand for, and supply of, City services.

Additionally, NRS 278.0284 provides for consistency between the Master Plan and capital improvements as follows:

**Conformity of local ordinances and regulations to master plan.** Any action of a local government relating to development, zoning, the subdivision of land or capital improvements must conform to the master plan of the local government. In adopting any ordinance or regulation relating to development, zoning, subdivision of land or capital improvements, the local government shall make a specific finding that the ordinance conforms to the master plan.

## **POPULATION GROWTH TRENDS**

### **Historical Growth**

Based on Census data, the City of Reno grew from approximately 95,700 people in 1980 to 180,500 people in 2000. This represents an average annual growth of slightly more than 4,200 people annually. The City of Reno share of total County population has been relatively stable during this time with about 55% over this 20 year period.

### **Population Forecast**

Policy 1.1.1 of the 2007 Regional Plan requires local master plans to utilize the Washoe County Consensus Forecast as a primary factor for determining future regional population estimates for the formulation of goals, policies, and service plans. Accordingly, the City of Reno Population Forecast (Table 1) is based on the 2008 County Consensus Forecast jurisdictional distribution of regional population.

The 2008 Washoe County Consensus Forecast uses the Governor’s certified population estimates of 2007 as a starting point for determining jurisdictional forecasts for the year 2030. The forecast establishes only the beginning (2007 certified estimates) and end points (allocated 2030 consensus forecast by jurisdiction) of that forecast series for each jurisdiction through the year 2030. Interpellation of the jurisdictional population forecasts from 2008 to 2030, if desired, is identified as the responsibility of each local jurisdiction.

**Table 1: City of Reno Population Forecast in Thousands**

	<b>2007</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Consensus Forecast	220.6	236.1	262.0	287.8	313,7	339.5

By the year 2030, the City of Reno population is expected to increase to approximately 339,500. The only natural resource constraints that would affect this growth are availability of developable land and water supply. The first constraint can be removed by expanding the amount of land available for development in the City of Reno. This has been achieved through recent expansions of Reno’s share of the Truckee Meadows Service Area and by increasing the density of development on the remaining vacant,

underutilized, and redeveloped land, particularly in the TOD's and Regional Centers. The second constraint can be removed by developing new sources of water supply, particularly in the Lemmon Valley Hydrographic Basin. There are currently efforts underway to do so. Hence, the population forecast is not constrained; it accommodates a continuation of current market trends identified in the consensus forecast.

This population forecast will be used for other planning efforts in the City of Reno. For example, ongoing public services and infrastructure planning is based on this population forecast, described in detail in the Public Services, and Facilities (PSFI) Plan. This ensures consistency between demand for, and supply of, City services.

## **NATURAL RESOURCES**

### **Developable Land**

The Reno portion of the Truckee Meadows Service Area (TMSA) is defined in the Regional Plan as areas within which municipal services and infrastructure will be provided. The City TMSA boundary is synonymous with its Sphere of Influence boundary and is the specific area in which the City can expand its corporate limits. Based on this information, and with its aggressive infill policy, the City can accommodate an increase in population from an estimated 220,600 in 2007 to 339,500 in 2030 at the required average minimum densities of 4 people per acre.

### **Air Quality**

The Washoe County District Health Department, Air Quality Management Division (AQMD) "Air Quality Trends" data for 1995 to 2006 indicate that the air quality has improved as summarized in the following table.

**Table 2: Recent Air Quality Trends<sup>1</sup>**

<b>Pollutant</b>	<b>Recent Trends</b>
Particulate Matter less than 10 microns in size (PM10)	The Truckee Meadows Hydrographic Basin, (Reno/Sparks urban area), defines the boundaries for the PM10 non-attainment area. On January 14, 2005, Washoe County recorded an exceedance of the 24-hr NAAQS. This was the first 24-hr exceedance since 1999.
Particulate Matter less than 2.5 microns in size (PM2.5)	The AQMD began monitoring for PM2.5 in January 1999. The EPA requires three years of complete and quality assured data prior to the classification of an area. In 2005, EPA designated Washoe County attainment of the 24-hr and annual PM2.5 NAAQS.
Carbon Monoxide (CO)	The boundaries for the CO non-attainment area are also considered to be the Truckee Meadows Hydrographic Area 87. The last exceedance of the 8-hr CO NAAQS was recorded on December 13, 1991. In September 2005, Washoe County AQMD submitted a request to EPA for redesignation to an attainment area for the 8-hr NAAQS. Washoe County, including the Truckee Meadows CO NAA, is in attainment for the 1-hr CO NAAQS.
Ozone	Washoe County was designated a marginal ozone non-attainment area until EPA rescinded the 1-hr NAAQS in 2005. EPA has designated Washoe County as attainment of the 8-hr ozone standard.
NO2, Pb, SO2	Attainment for all NAAQS averaging periods.
<sup>1</sup> Washoe County, Nevada Air Quality Trends 1995-2006	

The AQMD is committed to maintaining a regulatory program that will preserve the gains in air quality reflected in the trend information above. Given continuation of these regulatory efforts, it is not anticipated that air quality will constrain City of Reno population growth.

## Water Supply and Water Quality

Table 3 (below) illustrates water resources and demands for areas within the City's portion of TMSA. In several of the planning areas, a potential water supply deficit is forecasted for 2030, based on assumed development and potentially available water resources. Information in this table does not assess the impact of water conservation measures such as reclaimed irrigation water or the potential for future water projects to meet forecasted demand.

**Table 3: TMSA Water Resources and Demands (a)**

TMSA Basins	Supply Net Increase (AFA)	Forecasted 2030 Demand Net Increase (AFA)	Supply/Deficit
Spring Mountain (b)	1,700-2,200	4,874	(2,674-3,174)
Sage	764-1,460	865	(101) - 595
Stead, Lemmon Valley and Cold Springs (b),(c)	11,909	18,485	(6,576)
Truckee Meadows TMSA (c)	22,363	17,020	5,342
South Truckee Meadows TMSA (c)	10,546	12,137	(1,591)

- (a) Reclaimed water is not included as a part of the supply
- (b) 10,000 AF of water resources are potentially available and shared between Stead, Lemmon Valley, Cold Springs, and Spring Mountain TMSA based on the Vidler and Intermountain water supply projects. A combination of imported and onsite water resources will be needed to satisfy the projected demands.
- (c) 22,363 AF of potentially available water resources are identified for the Truckee Meadows TMSA. A portion of this supply will also be needed to serve the projected demands within the Stead, Sun Valley, Spanish Springs, Sparks, and South Truckee Meadows TMSA. Based on current policies, water resources are not reserved for development in one planning area versus another.

While a potential water supply deficiency may exist based on forecasted population, land use and zoning designations do not guarantee an allocation of future water sources. Consistent with Regional Water Management Plan policy 1.3.d, no City development entitlements are permitted unless the facilities and infrastructure in the conforming facilities plan and/or funding are provided at the same time as the impact from the new development. In other words, development permits may not be issued without adequate public services and facilities, including water and wastewater treatment. The intent is to implement a proactive, rather than reactive, approach to facilities planning. It is anticipated that these facilities will be expanded as necessary to accommodate the population and employment growth in each respective service area and not constrain City of Reno population growth.

# CONSERVATION PLAN



## **ACKNOWLEDGMENTS**

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Amended by City Council October 22, 2008

# TABLE OF CONTENTS

---

## **Introduction**

Plan Organization .....	1
Boundary .....	1
Time Frame .....	1
Relationship to Other Plans .....	1
Need for Conservation Plan .....	1

## **Truckee River**.....2

## **Development Constraints**.....4

## **Biodiversity** .....4

## **Drainageways**.....4

Definitions .....	6
Flora and Fauna.....	7
Fences .....	7
Bicycle and Pedestrian Paths .....	7

## **Wetlands/Stream Environments** .....7

## **Geology and Soils**

Structural Geology .....	8
Soils .....	10
Slope Management.....	10

## **Geologic Hazards**

Slope Stability .....	11
-----------------------	----

Diatomaceous Earth .....	11
Altered Volcanics/Minerals.....	11
Ground Shaking/Liquefaction.....	12
Debris Flow .....	13
<b>Air Quality</b> .....	13
Land Use Patterns and Transportation .....	14
<b>Archaeological Resources</b> .....	15
<b>Historic Resources</b> .....	16
<b>Appendices</b>	
Appendix A – Development Constraints Area (DCA) Map .....	A
Appendix B – Biodiversity Value Map .....	B
Appendix C – Potential Wetlands, Stream Environments, and Regionally Significant Hydrologic Resources Map.....	C
Appendix D – Resource Values and Functional Requirements of Significant Hydrologic Resources .....	D
Appendix E – Wetland and Plant Species in Nevada.....	E
Appendix F – Hydric Soils in the Wetland Policy Area.....	F
Appendix G – City of Reno Major Drainageways .....	G

## **INTRODUCTION**

### **Plan Organization**

This plan is divided into nine sections: *Introduction, Truckee River, Drainageways, Wetlands/Stream Environments, Geology and Soils, Geologic Hazards, Air Quality, Archaeological Resources and Historic Resources*. The *Introduction* describes the boundary, time frame, relationship to other plans and why this plan is needed. Additional sections generally describe the conservation, development, and utilization of the natural resources identified.

### **Boundary**

This Conservation Plan covers all of the City of Reno and its sphere of influence at the time this plan was prepared.

### **Time Frame**

This Conservation Plan horizon is to the year 2030.

### **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150 through 278.170.

Policies of the Truckee Meadows Regional Plan are applicable regionwide. The City of Reno Master Plan has three different levels of applicability; *Citywide, Center and Corridor, and Neighborhood*. *Citywide* plans include this Conservation Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in centers or corridors, which have been designated as appropriate for more detailed planning. Policies in center, corridor and neighborhood plans elaborate, with greater detail, upon general policies contained in the citywide and regional plans. Center, corridor and neighborhood plans must conform with and not be in conflict with policy direction of the citywide plans and the Truckee Meadows Regional Plan. Similarly, Title 18 of the Reno Municipal Code applies at the citywide, center and corridor, and neighborhood levels and must be consistent with these plans.

### **Need for Conservation Plan**

The Nevada Revised Statutes enable a city to prepare a master plan that can cover all or parts of a city and its sphere of influence. NRS 278.160 requires that city master plans cover conservation, development, and utilization of natural resources.

Additionally, NRS 278.0284 provides for consistency between the master plan, development code (Title 18 of the Reno Municipal Code) and capital improvements as follows:

Conformity of local ordinances and regulations to master plan. Any action of a local government relating to development, zoning, the subdivision of land or capital improvements must conform to the master plan of the local government.

In adopting any ordinance or regulation relating to development, zoning, subdivision of land or capital improvements, the local government shall make a specific finding that the ordinance conforms to the master plan.

## **TRUCKEE RIVER**

"There is no price that can be placed on the quality of life or the character of our cities or towns which is shaped by our natural systems, and often highlighted by our rivers".<sup>1</sup>

The Truckee River is one of only a few terminal rivers in the United States, beginning and ending in a lake. The Truckee flows from Lake Tahoe, California to Pyramid Lake, Nevada. Along the way, it flows through downtown Reno. Like many towns, Reno's early development was located near the river, but not oriented towards the river in any significant way. Downtown buildings turned their backs on the river. Over the years, heavy industrial uses including open storage, metal works, and a refuse transfer station have cropped up along the Truckee's bank. Many of these uses are no longer deemed suitable for the sensitive river environment.

The Truckee River is a natural catalyst and theme for public and private investment/reinvestment in parks, cultural facilities and downtown. Recognition of the river as an asset will eventually lead to economic revitalization of downtown and the area immediately to its east. While this investment in corridor properties needs to be fostered, it must be done in a way which recognizes the river as an asset and a system. The river system provides the community with recreation, fisheries, flood control, water quality enhancement and abatement of pollution. Abatement of pollution incorporates uptake of nutrients by riparian plants, stabilization of banks, and deposition of sediment. These system attributes are provided to Reno's citizens free of charge. Replicating these systems would be prohibitively expensive. Many public spaces are located along the river corridor which need to be linked in some fashion to allow public access. Linking the existing system of parks, paths, and improvements would enhance their value and the benefit realized from the public investment. Lack of or impaired access is one of the greatest land use issues faced by the Nevada Department of Wildlife along the Truckee River. Before access can be fully developed, legitimate concerns of private property owners regarding trespass and privacy must be addressed.

A significant issue concerning these public spaces is their treatment by adjoining property owners. Where the City has recently acquired public land along the river, and/or not yet improved it, some adjoining property owners take it upon themselves to "improve" the public land. Residents have planted grass, removed riparian vegetation which blocked their view, and laid gravel paths between their gates and the river's edge. All of these actions constitute trespassing under the law. However, if an adjoining property owner wishes to plant vegetation to stabilize the bank, improve shade or

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<sup>1</sup> Bickford, Dymon. An Atlas of Massachusetts River Systems, Environmental Designs for the Future. (Amherst: University of Massachusetts Press, 1990), 31.

habitat for birds for example, the City should encourage it. The City must clearly delineate a process whereby individuals could make select improvements that will not impair use of the property by the public.

The Truckee River supports populations of Brown, Brook and Rainbow Trout, Mountain Whitefish and the threatened Lahontan Cutthroat Trout and endangered Cui ui. Lahontan Cutthroat Trout is the only native trout in the river, the other trout species having been introduced before the turn of the century. Introduced trout species have filled the habitat niche previously occupied by the Lahontan Cutthroat, contributing to its decline.<sup>2</sup>

From the town of Truckee, California to the Mayberry Bridge on the west side of town, the Truckee River is a trophy fishery. The Truckee River is a Class I stream under State guidelines, and the number 2 fishery in all of Nevada. Key to the survival of the fishery is:

- A. Maintenance of riparian vegetation (for food, cover, shading, and bank stabilization);
- B. Maintenance of riffles and gravel bars for cover and spawning;
- C. Limitation of channelization or straightening of streams, injudicious removal of snags, overhangs, undercut banks and boulders;
- D. Controlled introduction of silts introduced into the river which can suffocate fish, impair spawning gravel, and increase turbidity in the water;
- E. Controlled introduction of pollutants (i.e. petrochemical and thermal);
- F. Maintenance of a flood plain for staging of waters and deposition of sediment outside the main river channel.<sup>3</sup>

Maintenance of fisheries is a concern on the Truckee River, Evans Creek, Hunter Creek, Thomas Creek and Whites Creek.

The Department of Wildlife has established guidelines for appropriate bank treatment. The preferred vegetative pattern along the river bank is Fremont Cottonwoods planted on 25' centers, with an under story of willow and rose. A tall canopy is preferred. Larger trees will need to be wrapped to protect against girdling by beavers. Willows provide an alternate food source for beavers and should be planted to reduce demands on the cottonwoods.

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<sup>2</sup> Nevada Dept. of Wildlife. Fishable Waters of Nevada. 1987.

<sup>3</sup> Christopher J. Hunter. Better Trout Habitat: A Guide to Stream Restoration and Management. (Washington, D.C.: Island Press)

## **DEVELOPMENT CONSTRAINTS**

The City should strive to preserve the scenic, natural, public safety, and recreational values of sensitive land areas by constraining development on designated water bodies, AE flood zones, ridgelines, natural slopes over 30 percent, and certain other sensitive lands. These areas should remain in an undeveloped state whenever possible to minimize encroachments into the Development Constraints Area (DCA). Appendix A identifies many, but not all, development constraints found within the City's jurisdiction; however, identification of constraints are not limited to those mapped features.

Commercial, office, industrial and residential development should generally be prohibited in Development Constraints Areas. In some cases, communication facilities, recreational facilities, parks and open space, utilities, agriculture, forestry, mining, and transportation infrastructure necessary to service development may be permitted. Residential development may be allowed at a maximum density of one unit per 40 acres or one unit per parcel in existence in 2002, whichever is greater. Other uses may encroach into the Development Constrained Area in isolated areas if the encroachments enhance the overall project design and a 2:1 ratio of non-constrained area is preserved as open space for every constrained acre that is developed.

## **BIODIVERSITY**

Appendix B, spatially classifies biodiversity values within the City's jurisdiction based on vegetation communities, migration corridors, important bird areas, and the known location of species protected by law of particular interest to the region. Areas of high and medium value on this map generally include vegetation communities that support the most species, provide migration routes, or are a known location of a protected species. Development applications within these classifications should be forwarded to an appropriate agency for review and comment.

## **DRAINAGEWAYS**

Major drainageways are significant geographical features of great public value that should be preserved and/or enhanced in a manner that recognizes them as systems with multiple functions. This section addresses the relationship between major drainageways and water quality, conservation, recreation, connectivity of trails, and aesthetics. Because of the values provided by major drainageways, alterations should be supported only where they result in a situation that is better than what currently exists. To that end "major drainageway enhancement," is defined as follows: the improvement of a major drainageway which results in a treatment that is better than the existing major drainageway in terms of the enumerated objectives identified in this plan.

It is the City's policy to preserve and improve major drainageways as open and recreational space for current and future generations and to ensure that, when practicable, facilities and improvements designed to address storm water discharge and floodplain management are designed to serve other regional objectives such as recreation, open space preservation, and enhancement of water quality. Development projects in major drainageways, generally identified in Appendix G, "City of Reno Major Drainageways," should require additional review and protection in order to implement the following objectives:

- 1) To ensure the safety of people and property by providing for drainage of storm waters and maintaining natural attenuation of peak flows;
- 2) To maintain, preserve or enhance the quality of the water in both the Truckee River and Stead basins, and to promote continued natural infiltration of storm runoff;
- 3) To maintain or improve wildlife habitats, native vegetation, and natural terrain;
- 4) To reduce the need for the expenditure of public funds to remedy or avoid flood hazards, erosion, or other situations caused by inappropriate alterations of natural watercourses;
- 5) To provide open space land and easements for conservation or access, especially in environmentally sensitive areas where development requires new approaches and attention to open space needs;
- 6) To improve or enhance wildlife corridors in urban areas to maintain the quality of life and the ecological balance of the community;
- 7) To ensure that major drainageways are used for public access and recreational facilities, where appropriate;
- 8) To reduce major drainageway erosion;
- 9) To prevent sediments (man-caused or occurring naturally) from reaching the Truckee River;
- 10) To provide for open fencing adjacent to major drainageways to maintain aesthetic continuity, encourage community pride, and encourage self policing; and
- 11) To identify critical drainage areas in the City of Reno and its Sphere of Influence and present strategies for their care, enhancement, protection, and treatment, both for function and appearance.

The design approach to any channel improvements should be appropriate to the site and based on maintaining a natural channel, overall aesthetics, and the quality of the natural environment. Therefore, stripping the channel of vegetation or creating steep, barren side slopes should be prohibited.

## **Definitions**

A "major drainageway" is any drainageway which drains a land area of 100 acres or more. Major drainageways, are further classified into "natural", "disturbed" or "landscaped" major drainageways. These drainageways have some or all of the following characteristics:

- (1) drain an area of 100 acres or more;
- (2) have biological and physical characteristics associated with the conveyance of water;
- (3) connect neighborhoods or developments, schools or open spaces such as parks or public land;
- (4) provide a continuous system which may provide pedestrians/bicycle or wildlife corridor opportunities;

Specifically, the three major drainageway types are defined as follows:

"Disturbed" – Major drainageways which have been or will be significantly graded, filled or otherwise altered by man.

"Natural" – Major drainageways that: 1) have not been or should not be altered by man, or; 2) have significant vegetation, or; 3) by their nature provide for filtration, infiltration, or impoundment of storm waters.

"Landscaped" – Major drainageways that have been or will be improved with landscaping and may include turf or non-native plant species. These major drainageways are generally part of a park or planned unit development and are designed to address aesthetics. They should also address water quality, storm water management and recreation functions where appropriate.

Major drainageways generally operate in two conditions. The first condition marks the presence of storm waters. The second condition exists when waters have subsided, which represents the predominant state of the natural system and its corresponding appearance. Major drainageway systems may also contain a variety of improvements, and range from a natural state, to developed on either side, to piped; however, these systems should not cease to be classified as a major drainageway because of a loss of their natural state or due to deterioration and regardless of the size. Furthermore, the process of disturbing the major drainageway, even if disturbance is later mitigated, can set up a chain of actions and reactions that will progressively degrade the physical form and function of the natural system.

## **Flora and Fauna**

The major drainageways provide an important escape route for deer, which occasionally wander into urbanized areas. Altering the drainage system through grading, dams, and roadways impacts its physical and biological character, often to the detriment of wildlife. Development applications that are within identified wildlife corridors and/or areas with threatened and endangered species should be forwarded to an appropriate agency for review and comment to avoid/mitigate potential impacts.

Our high desert environment sustains a delicate, balanced habitat that requires careful attention to repair itself. Encouragement of desirable vegetation will help reduce maintenance expenditures by preventing erosion, and trapping or filtering sediments and pollutants, among other benefits. Grading, dams, roadways and installation of inappropriate vegetation alter the drainage system and impact its physical and biological character, often to the detriment of wildlife.

## **Fences**

In order to preserve aesthetic continuity, the use of fences that create a solid feature along a major drainageway should be strictly avoided in favor of more open fencing. Chain link fences of brown, green or black wooden split-rail and ornamental iron fences offer protection and provide an open feel and view along the major drainageways. The use of open fencing should also encourage self policing of the major drainageway and help to prevent illegal activities and dumping.

## **Bicycle and Pedestrian Paths**

Development applications along major drainageways that require an SUP (special use permit), divide land into two (2) or more parcels, or develop an undisturbed lot should be reviewed to ensure that applicants provide for construction of appropriate bicycle/pedestrian paths with consideration given to regional connectivity and priorities identified in the Open Space and Greenways Plan.

## **WETLANDS/STREAM ENVIRONMENTS**

Wetlands, stream environments and other water related habitats are indispensable and fragile natural resources. In their natural state, wetlands, stream environments, playas, spring fed stands of riparian vegetation, and small aquatic ecosystems provide habitat areas for fish, wildlife, and vegetation, food chain support; groundwater recharge, groundwater discharge; water-quality maintenance and pollution control such as sediment trapping, nutrient retention and removal, flood control and storage; erosion control including bank stabilization; natural resource education; scientific study; open space; heritage value and recreation opportunities.

Wetlands and streams are a vital natural resource and their protection is a paramount component of the City's environmental policies. Damaging or destroying these water related habitats threatens the health, safety, and welfare of residents of the City. For these reasons, preservation of wetland and stream environments in their natural state are highly preferred over mitigation techniques. A considerable number of these important natural resources have been lost or impaired by draining, dredging, filling, excavating, building, pollution, and other acts generally associated with urban development activities. Piecemeal or cumulative losses may, over time, destroy remaining wetlands, stream environments, and other regional resources of significance.

It is therefore necessary for the City to ensure maximum protection for wetlands, stream environments, playas, spring fed stands of riparian vegetation, and non 404 wetlands by discouraging development activities within those areas and by encouraging restoration of already degraded or destroyed systems. Many of these features are identified as development constraints, consistent with the Regional Plan (Appendix A).

Potential wetlands, stream environments, and regionally significant hydrologic resources within the City's sphere of influence have been identified and mapped in Appendix B. These features are generally identified on the basis of soil type, vegetation, presence of surface water, and local knowledge. In addition to any restrictions imposed by classification as a DCA, development permits requested in these mapped areas, and unmapped areas if applicable, should require additional review, technical surveys, and design modifications to include Low Impact Development practices wherever feasible within site constraints. A critical goal of the review should be to achieve a "no net loss" of these habitats. Incentives should be developed that promote preservation and may include, but are not limited to, allowing development on the property clustered away from the wetland area without reduction in density, allowing wetland habitat to qualify as a portion of the required landscaping, and financing and tax related incentives.

The Environmental section of the Policy Plan includes specific wetlands and stream environment policies. Several wetlands related appendices are included for reference in the Conservation Plan which include information on resource values, wetland plant species in Nevada, and hydric soils.

## **GEOLOGY AND SOILS**

### **Structural Geology**

The Reno area is located in the western most portion of the Basin and Range province at its interface with the Sierra Nevada Province. The geologic structure and present day topography of the area are the results of tectonism (deformation of the earth's crust). The intensity and style of tectonism has varied considerably through time. For the last 12 million years, the primary geologic force has been one of extension. The earth's crust under Nevada is being thinned and pulled apart in an east-west direction. These forces have caused the earth's crust to crack into north-south trending faults. These faults are the bounding features between the down dropping valleys (basins) and rising mountain ranges. Episodic movement along the faults (earthquakes) displaces the ranges

upward. Upward movement of the ranges is counteracted by erosion only to a slight degree. The Sierran block has risen so high, a rain shadow has been cast upon the Basin and Range, further minimizing the potential for erosion.

The Basin Range sequence has created complex geology in Nevada.

"As the great crustal blocks of the Basin and Range have tipped their mountains into the air, with individual fault offsets of as much as twenty thousand feet, they have brought to the surface and randomly exposed former sea floors and basaltic dikes, entombed rivers and veins of gold, volcanic spewings and dunal sands-chaotic, concatenated shards of time".<sup>4</sup>

Present day geology is complicated by the types of rocks which are exposed in the mountain blocks, reactivation of pre-existing faults, and younger fracturing and faulting of the crust in response to local stresses. Area geology is also affected by tectonic forces outside the Basin and Range, such as deformation along the San Andreas Fault system in California.

Faults provide an avenue for hotter, sub-crustal material to rise closer to the surface. Hot springs occur where cool surface waters move down fractures, are heated by hotter sub-crustal material and rise back up in adjacent fractures. Local areas of vulcanism can occur where magma is generated by the heat of this sub-crustal material and then rises to the surface (i.e. the 2.5 million year old volcanic rocks and present day hot springs at Steamboat Hills, south of Reno).

The Walker Lane, a northwest trending zone of faulting more than 500 miles long, passes approximately 30 miles to the northeast of the Reno area. Close to one hundred faults have been mapped in the Truckee Meadows, all but a few have been inactive for at least 1 million years. The majority of faults are located west of U.S. 395, and/or at the base of the mountains at the valley floor. Extensive faulting has created the Steamboat Springs geothermal area outside of city limits. More recent faults have been mapped north of Cold Springs Playa, at the Orr Ditch in Spanish Springs, and at Galena on the Mount Rose Fan. Young, or recently active faults have not been mapped within city limits.

An earthquake frequency map produced in Reno Folio<sup>5</sup> indicates that earthquakes seem to cluster about major water bodies, as opposed to the specific fault traces.

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<sup>4</sup>John McPhee. Basin and Range. (New York: Farrar Straus Giroux, 1981).

<sup>5</sup>Nevada Bureau of Mines, Mackay Schools of Mines, University of Nevada, Reno, Reno Folio, pg. 10

## **Soils**

Soil is that mantle of material over bedrock and other geologic formations that supports life. "It is the natural medium for growth of plants; it serves to stabilize wastes and purify water; and it serves as the foundation for buildings and roads, and many other man made structures."

Soil is grouped into classes on the basis of parent material, chemical composition, particle size and makeup, manner of deposition and other considerations. Each soil class has certain identifying traits, such as good drainage (high permeability) or high shrink swell potential. These inherent characteristics must be taken into account prior to development of property. Highly erodible or fragile soils are not suited for intense recreational use. Soils with high shrink swell or corrosiveness should be avoided when establishing alignments for underground utilities, pipes, or cables. Failure to take into account the soil's characteristics can create personal hardship (foundation or leach field failure), excessive land development and maintenance costs, and public health and safety hazards.

## **Slope Management**

Reno is located between the Carson Range on the west and the Virginia Range on the east in a broad valley called the Truckee Meadows. Nevada is too young geologically to have much in the way of foothills, so the mountains typically rise directly from the valley floor. As the city and adjoining areas have grown, development has pushed outward from the valley floor onto the mountain's alluvial fan or directly onto its hillside. Much of the current development in the northwest and southwest areas, and properties in between Reno and Stead are located in areas where slopes range from 10-30%.

Reno recognizes that as slope increases, so does the potential for environmental degradation including slope failure, increased erosion, sedimentation, storm water runoff and water quality problems. Development that modifies significant natural slopes can also cause irreplaceable damage to the beauty of the natural landscape. Accordingly, land with slopes 30% and over is designated as development constrained. Reno has also adopted a hillside development provision in the zoning code which reduces development density in proportion to increases in slope. Within hillside developments, road widths, on street parking, and sidewalk standards may be modified in response to site specific conditions and cluster development is encouraged.

Grading standards and requirements for erosion control that comply with the National Pollution Discharge Elimination System (NPDES) have been adopted as part of the Municipal Code. These standards generally encourage grading practices which do not result in abrupt, visually jarring landforms and reduce the number of retaining walls and rip rapping proposed in new development at a substantial cost saving to the developer and eventual land owner. The City should ensure that development on land with 15-30 percent slopes does not degrade the scenic, public safety, aquifer recharge potential, and environmental values of the area to be developed and incorporate on-site and off-site mitigation measures for impacts to habitat, water quality, and for identified fiscal effects associated with higher-than-normal costs of infrastructure, public safety facilities and public safety services.

Erosion control is necessary for protection of soil resources, area water quality, and air quality. Grading and erosion control provisions currently in place, when combined with the Hillside Development Provision and Design Guidelines protect soil resources in the city. Additional standards may be required to restrict the amount of land area disturbed at any time to reduce non-point sources of pollution entering storm drains and waterways.

## **GEOLOGIC HAZARDS**

### **Slope Stability**

Slopes are generally stable in the Reno area. Slope movement can be induced by grading or excavating steep-sided cuts where water is present. Sources of water are not limited to drainage swales, and can include runoff from adjoining properties, saturation of turf areas or infiltration of septic tank fluids. According to the Nevada Bureau of Mines, "The greatest hazard derives from disturbing slope equilibrium by grading or cut and fill practices and over watering in areas underlain by the Sandstone of Hunter Creek or Quaternary unconsolidated deposits".

The Hunter Creek Formation covers much of the McQueen area, a corridor south of the Truckee River west of town and portions of Caughlin Ranch.

### **Diatomaceous Earth**

Portions of the Hunter Creek Formation location generally north of McCarran Boulevard in southwest Reno contain Diatomaceous Earth. Diatoms are minute organisms (single celled plankton or algae) whose skeletal remains are made up of silica. Silica is the raw material from which glass is made. Once airborne, silica can be inhaled, contributing to the development of silicosis, a chronic disease of the lungs.

The other hazard associated with diatomaceous earth is that the soil is so fine grained, it is very nearly compacted dust. Removal of vegetative cover (if any), disturbance by vehicles and equipment, or exposure to wind can create severe dust problems. The presence of dust is not just an aesthetic concern. Particulate matter (PM-10) is a large component of the Truckee Meadows air pollution problem. A local court has ruled that dust plumes rolling off of construction sites will not be tolerated.

### **Altered Volcanics/Minerals**

Magma (molten rock) creates volcanoes and volcanic activity. When the magma cools, intrusive bodies can be formed. One constituent in these bodies is volatiles (water). The hot water swirls around below ground, picking up metals (gold, silver, lead, tin, etc.). The water is vented up to the surface through faults where metals are precipitated out. A vein of ore is the filling of a fissure. While not all ore deposits are hydrothermal in nature, more than half of them are.<sup>4</sup>

Volcanic rocks that predate the onset of the Basin and Range tectonism occur in hills surrounding the Truckee Meadows. An east- west trending band of these rocks north of the university are hydrothermally altered and, in places, mineralized. (For more information, see the discussion on the Wedekind and Peavine Mining Districts, Reno

Folio). The large number of prospect pits, shafts, and adits in this area, testify to an earlier period of exploration for precious metals. A potential danger for individuals and their pets is to fall into these vertical openings (shafts and pits) or be injured while entering the horizontal openings (adits).

Non-oxidized sulphide minerals have been observed on waste dumps where excavation extended beyond the zone of surface oxidation. (Pyrite, FeS<sub>2</sub>, chalcopyrite, CuFeS<sub>2</sub>, sphalerite, ZnS, galena and Pbs are reported in the literature). Such dumps may represent point sources of heavy metal pollution, (Cu, Pb, Zn, etc), as the sulfide minerals degrade in oxidizing surface conditions. These metals degrade water bodies and can represent a hazard to humans, plants, and animals.

Oxidation of these waste dumps, and the hazard associated with shafts and adits can be reduced by backfilling the waste rock into the shafts/adits under controlled conditions. Altered volcanics are located north of the university and Rancho San Rafael Park.

### **Ground Shaking/Liquefaction**

Earthquake generated ground shaking caused the bulk of the structural damage attributed to the October 17, 1989 Loma Prieta California earthquake. Structural failures in San Francisco, Oakland and Santa Cruz accounted for dozens of deaths and more than \$2 billion dollars of property damage, even though the 7.1 magnitude earthquake's epicenter was 60 miles north of San Francisco.<sup>6</sup>

Reno is in the earthquake prone part of the Basin and Range tectonic province (UBC Seismic Zone 3 and 4). Bell discusses some specific local areas where earthquake activity has occurred in the historic and recent geologic past.<sup>7</sup>

"Local geology and soil conditions of a site will determine the characteristics of earthquake ground motions that may be experienced. Based on the investigation of the local geology and composition of soils in the area, it is possible to anticipate what type of motions will occur at the site in terms of frequency, acceleration, velocity and amplitude for given earthquakes."<sup>8</sup>

In the southeast Truckee Meadows and adjacent to the playa in Stead are soft, fine grained soils which are subject to severe shaking from earthquakes. Most of these deposits are associated with floodplains and lakes, and have discontinuous layers of sand, silt, and peat.

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<sup>6</sup>EQA Engineering. The October 17, 1989 Loma Prieta Earthquake. 1990.

<sup>7</sup>Bell. Quaternary Fault Map of Nevada – Reno Sheet. Nevada Bureau of Mines and Geology, Mackay School of Mines, University of Nevada, Reno. 1984.

<sup>8</sup>Henry Lagorio. Earthquakes – An Architect's Guide to Non-Structural Seismic Hazards. (New York: Wiley, 1990) 61.

These soils are characterized by low inherent strength, permeability, low-moderate shrink swell and moderate to high compressibility. Deposits with fine silt and sand below the water table are also subject to liquefaction.<sup>5</sup> Soft, fine grained soils can fail, settle differentially, liquefy or amplify ground motions during and after earthquake events. Liquefaction occurs when strongly shaken, water saturated, fine sandy to silty soil behaves like quicksand. It loses its strength and ability to support structures built upon it. The Reno Folio maps an area of possible liquefaction and severe ground motion near the area of the Reno/Tahoe International Airport. Others have mapped a continuation of this area in the southwest past Holcomb Lane. Another area of possible liquefaction is south of the Huffaker Hills and east of South Virginia Street.<sup>9</sup> Strong ground shaking and possible liquefaction has been predicted at the Silver Lake and Lemmon Lake Playas in the Stead area.<sup>10</sup> Based on interpretation of published geologic maps, it can be postulated that much of the Southeast Truckee Meadows is subject to severe ground shaking and potential liquefaction.

Many of the areas susceptible to severe ground shaking and/or liquefaction have been partially developed. It should be remembered that the Reno-Sparks area has not been subjected to a strong earthquake (5.5+ magnitude) and attendant ground-shaking since the mid-1960's. Much of the development in the wet parts of the Truckee Meadows (especially the southeast portion) has occurred since that time. How structures and roads respond to an earthquake here is untested.

## **Debris Flows**

"Debris flows, also generally known as mud flow or earth flow, is a form of mass wasting whereby wet debris moves downslope as a viscous fluid."<sup>11</sup> Development on or near the apex of alluvial fans is especially susceptible to this hazard, especially after extended periods of precipitation. The steep slopes of Peavine Mountain are called out in the Reno Folio as being susceptible to debris flows. Other areas of concern are the McQueen Area, and the White, Thomas and Evans Creek fans in southwest Reno, the Alum Creek drainage above Caughlin Ranch, and the Hidden Valley area.

## **AIR QUALITY**

Due to Reno's location in the Truckee River Basin on the leeward side of the Sierra Nevada Mountains, temperature inversions are a common phenomenon. During inversion periods, a layer of dense cold air settles in the basin, under a layer of lighter, warm air. Vertical mixing of the air column is inhibited. Without vertical mixing, emissions from cars, wood stoves, and other pollution sources can be trapped under the warm air and become concentrated. During inversion periods, the beautiful blue sky of Nevada may be replaced with a brown smudge hanging above the valley.

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<sup>9</sup>Szecsody. Earthquake Hazards of the Reno N.W. Quadrangle. Nevada Bureau of Mines, Mackay School of Mines, University of Nevada, Reno. 1983.

<sup>10</sup>Szecsody. Earthquake Hazards of the Reno Quadrangle. Nevada Bureau of Mines, Mackay School of Mines, University of Nevada, Reno. 1983.

<sup>11</sup>Perry Rahn. Engineering Geology, An Environmental Approach. (New York: Elsevier, 1986) 176.

When inversions occur, air quality alerts may be announced. A number of programs and policies have been initiated in the area to counteract the effect of temperature inversions and to improve air quality in the region. The Truckee Meadows Air Quality Implementation Plan has moved the region closer to attainment of its air quality improvement goals. An annual auto inspection and maintenance program, a ban on non-EPA certified wood burning stoves in residences, and traffic synchronization improvements are just a few of the specific programs to follow from the plan. In addition, a temperature inversion prediction system was developed in the early 1980's to serve as an early warning for those groups who are particularly affected by high levels of air pollution.

### **Land Use Patterns and Transportation**

The largest generator of air pollutants are combustion engines (passenger vehicles and equipment). Significant gains in air quality will not be made without modifying individual modes of travel and length of trips. It has been suggested that dispersion of employment and commercial areas throughout the Truckee Meadows will minimize vehicular travel and trip length. The idea being that people can live, work and shop in a smaller area (i.e. one quadrant of town) instead of commuting across town. While providing for an integration of land uses by city quadrant will provide an opportunity to minimize travel, the reality is people will choose their living environment and jobs independent of neighborhood boundaries.

Minimizing air pollution through land use patterns needs to be done at a regional level. Compact development patterns and commercial centers in the more outlying areas need to be promoted. Then at least people are able to shop in closer proximity to their homes.

In order to meet air quality objectives and reduce reliance on private vehicles, there must be reasonable alternatives and strategies available. The strategies should reduce fuel consumption, minimize the need for future expansions of the roadway system, and provide safe and convenient transportation for all city residents and visitors. The alternative forms of transportation include, but are not limited to, ride share, transit, and bicycle and pedestrian paths. Bus service is provided by the Regional Transportation Commission, primarily in areas with seven dwelling units per acre or greater.

Public transit needs to be expanded to link more residential areas with employment, shopping and service districts. Land development projects must be designed to facilitate transit in their location, type and density.

Programs such as these help to reduce vehicle trips and miles driven from outlying areas, thereby reducing impacts on air quality and relieving peak hour congestion on major roadways leading into and out of the city.

In combination, three alternative modes of transportation, rideshare, transit and bicycle and pedestrian paths, have the potential to offset some increases in vehicular travel that have been experienced in the Truckee Meadows.

The Washoe County District Health Department has an active air pollution control program and air pollution control officer. Some of the specific recommendations to come out of their annual reports which should be implemented include:

- A. Large fleet operators should convert to cleaner burning fuels such as natural gas. The City could take leadership in this area.
- B. Encourage passive and active solar energy in residential structures and developments.
- C. Aggressively implement requirements that all parking areas and roadways be paved.

Existing programs which require continued support include:

- D. Synchronization of traffic signals and circulation system improvements.
- E. Stringent regulation of land grading, dust control and dirt hauling.
- F. Alternative fuels program.
- G. Vehicle inspection and maintenance program.
- H. Wood burning color code program.

A new program should be investigated which would involve sodding dirt play areas on school grounds (reduces PM-10), and restricting vehicle use by high school students during the lunch break.

## **ARCHAEOLOGICAL RESOURCES**

The Washoe and Paiute people inhabited territory which included the Truckee Meadows. Although the boundary between the two peoples is not distinct, the Paiutes seem to be centered more to the east of the Truckee Meadows, and the Washoe centered around Lake Tahoe. The Washoe territory extended from Honey Lake on the north, Truckee on the west, and Carson on the south. They were a hunter gatherer society and did not utilize agriculture, domesticated animals, metallurgy or pottery. The Washoe were premier basket makers and used lithics (obsidian and chert) for tool making. Stone tools used for food grinding and preparation were often left at regular camp sites instead of carried from place to place.

They were a mobile people, moving in response to changes in seasons and abundance of food. No single resource could be counted upon to provide food and other necessities throughout the year. While some plants were widely distributed throughout the valleys, they ripened at different times. A few days of picking in any one area would exhaust the supply, thereby forcing the family to move on.

The yearly cycle included moving west to Lake Tahoe in spring for fishing. Spring was a time of abundant food; when Washoe would gather to renew family ties. By late summer, the Washoe would disperse, trekking down into the valleys for ripening grasses. Early fall would stimulate another move to pinion pine forests on the hills north and west of Reno. Fall was the only season that large game was available and hunted. Some families would remain under the pinion through the winter, although most moved down into the valleys. Most families lived on high ground to avoid flooding, but near sources of water and supplies of fire wood.

The Washoe's knowledge of plants was extensive. Many of their food staples required special treatment and handling before being edible and to enable storage for the long winter months. As hunter gatherers, they were also knowledgeable about climate, soils and optimum times for harvest of different species. Typical food sources for the Washoe included roots, bulbs, grasses, pine nuts, fish, small and large game.

Food sources and lifestyle kept family groups small. Being constantly on the move kept individual and family possessions simple. Given their mobility, simple possessions, and seasonal structures, it is difficult to precisely predict where these people may have camped at different times of the year. Specific areas which may contain artifacts are not known. It can be hypothesized however that the river and stream corridors are sensitive. They provided a supply of drinking water, fish and passage through mountainous terrain to Lake Tahoe. Caughlin Ranch contains some chert quarries.

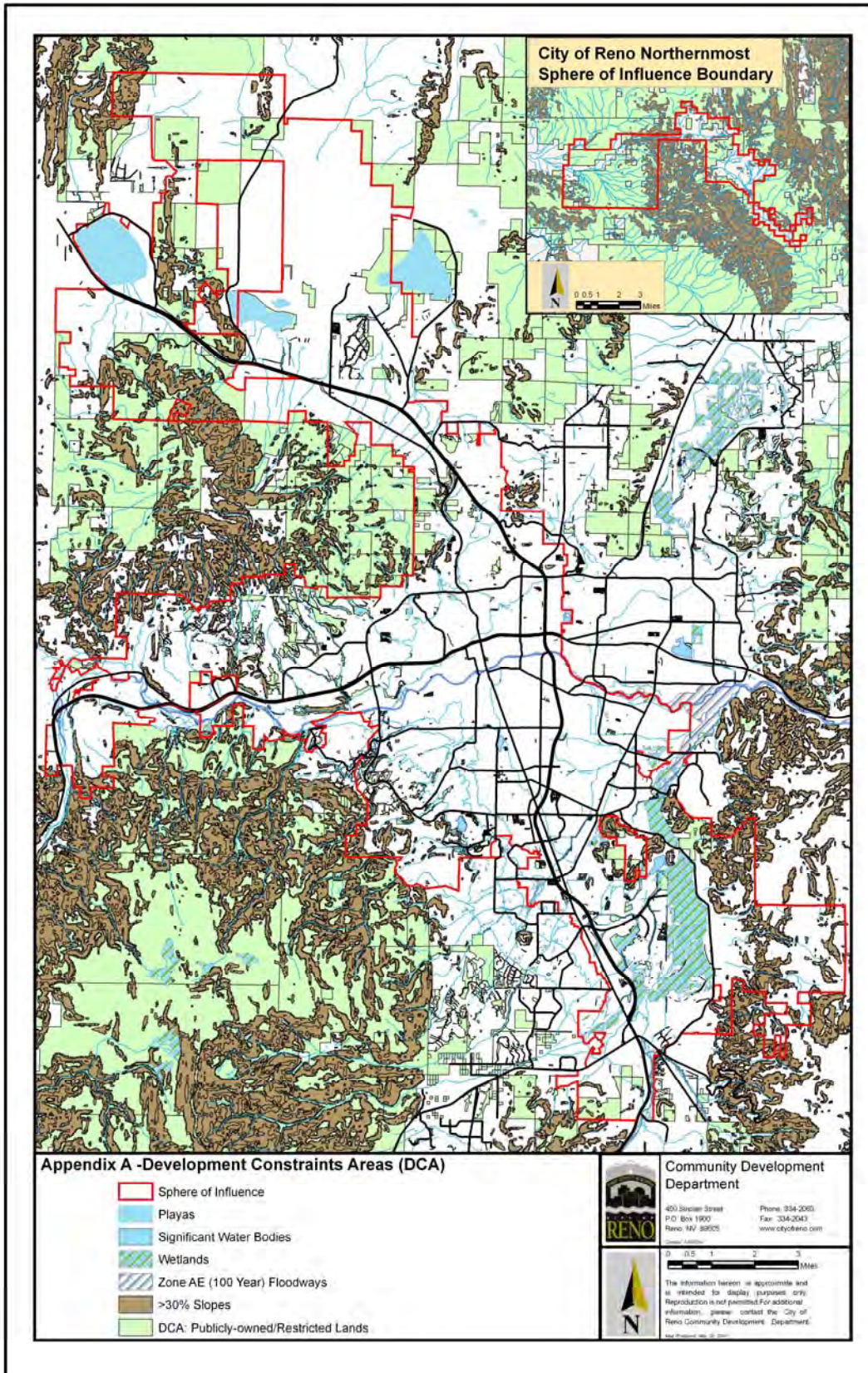
Most of the southwest Truckee Meadows and up onto the Mount Rose alluvial fan has a high degree of archaeological sensitivity from long term habitation. Resources which could be expected include winter villages, task sites, hunting sites, game fences and quarries. The Truckee Meadows also contain historic resources, such as ranch sites.

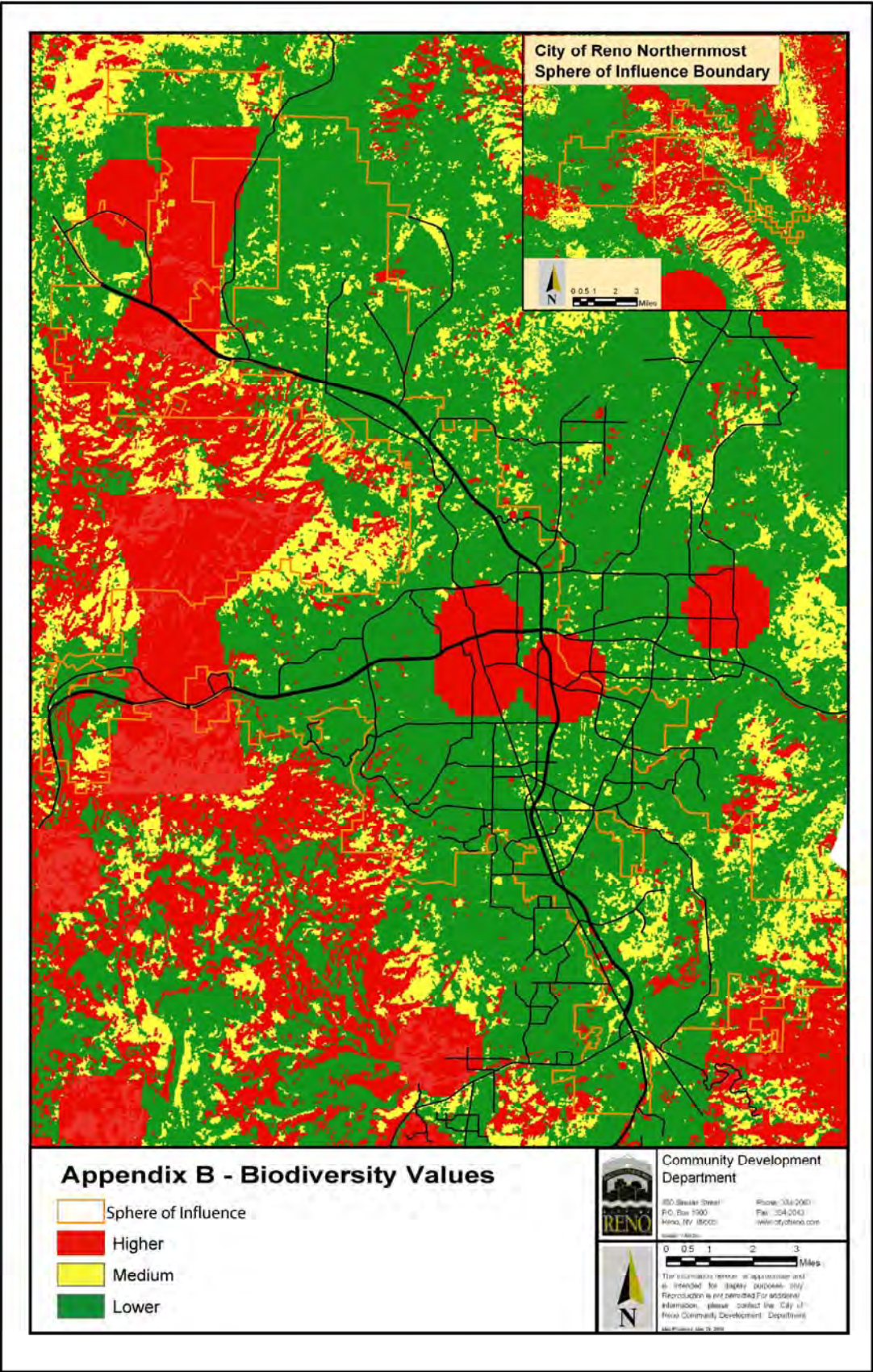
Washoe and Paiute people in more modern times (late 1800's early 1900's) were known to live on land now occupied by the UNR campus, Idlewild Park, near Manogue High School, Vaughn Mill, in the hills north of the Truckee Meadows, along the river and near the railroad in Sparks.

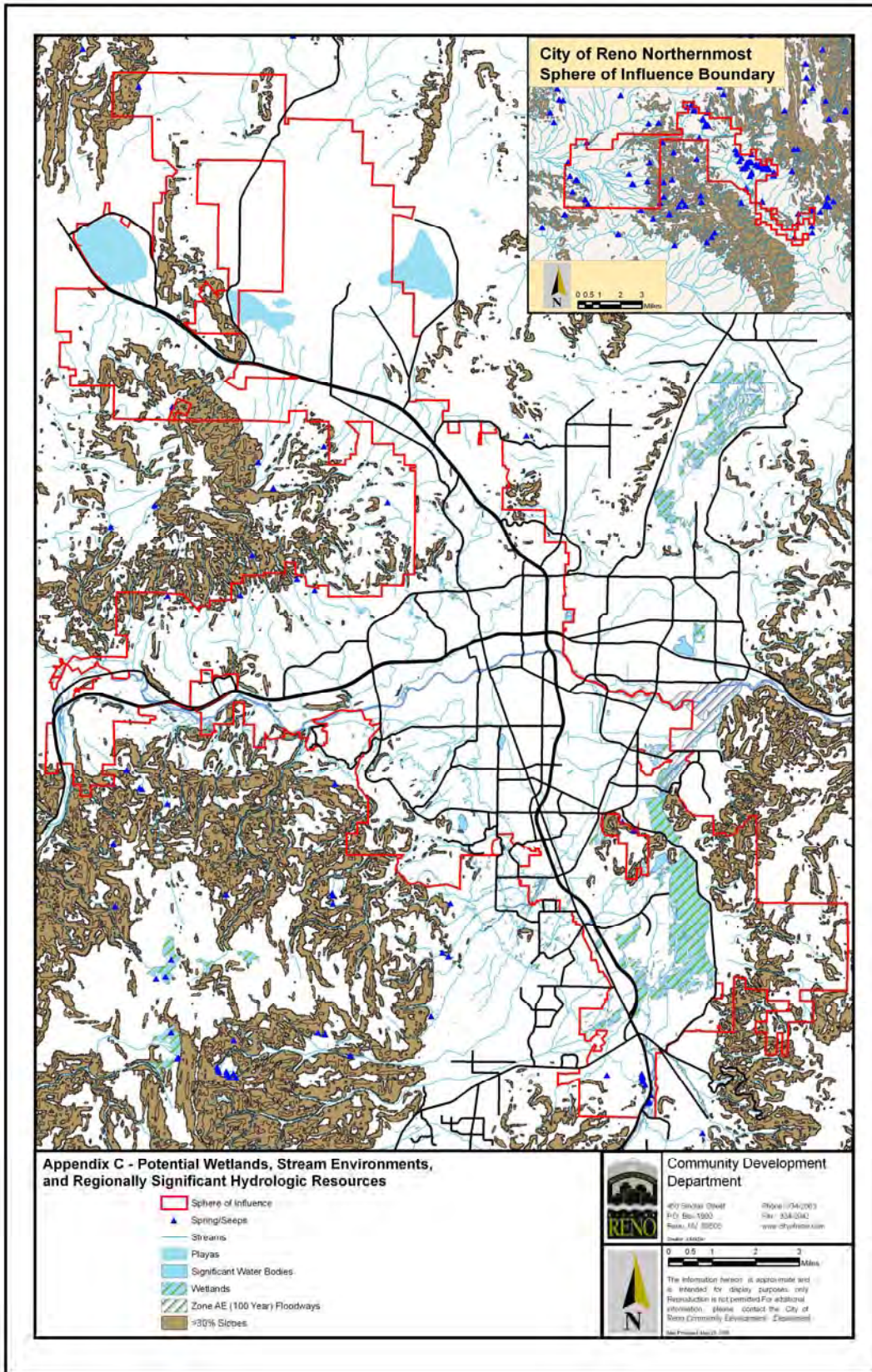
## **HISTORIC RESOURCES**

Movement of population and changes in residential, commercial and industrial uses and customs may threaten the destruction, defacement or deterioration of areas, places, structures, and objects in the city of Reno having special historic, community, architectural, archaeological or aesthetic importance, interest or value (hereafter known as "historic resources"). The preservation and management of these historic resources is necessary and desirable for the enjoyment, beauty, and distinguishing character of Reno and the welfare, education and pleasure of its citizens. In addition, these historic resources help attract numerous tourists and visitors who contribute to the health of the local economy. The preservation and management of historic resources help conserve and enhance property values, as well as promoting rehabilitation and avoidance of urban decay.

Historic resource management and preservation is a comprehensive process that requires the scheduled consideration of such resources as they might be affected by actions proposed, approved, permitted, or sanctioned by the City. The City will encourage and insure the documentation, preservation, and management of historic resources.







# **Appendix D**

## **Resource Values and Functional Requirements of Significant Hydrologic Resources**

### **1. Wildlife and Vegetation**

Habitat diversity of existing and future developed wetlands is required for maintenance and associated resource values. Wetlands, riparian corridors, and other water dependant habitats should include microhabitats within habitats supporting a variety of vegetation, terrain (submerged, terrace) and water depths (and temperature). Habitat includes structural components of depth, natural or artificial cover and suitable water quality. If suitable habitat is provided, the resources will develop with minimal management.

By way of example, shallow water areas, 18” in depth provide emergent and submergent vegetation for dabbling ducks; deep pond areas of 5’ with emergent and submergent vegetation provide habitat for diving ducks; shorebirds provide mud flats, and riparian areas with multiple canopies support a variety of species.

Water bodies and streams should have complex shorelines, maximizing the ratio of shoreline length to surface area. The greater the shoreline length, the greater the productivity of the water body. Riparian areas provide temperature control and food for fisheries, food, and shelter for wildlife. Species diversity will increase with the size of the habitat area. For birds particularly, habitat width is critical.

Lands adjoining the riparian area or playa can be managed to increase their use by providing nest boxes, nest platforms, log piles and large rocks. Wildlife will use these facilities for nesting and cover.

In high elevation upland areas such as Mt. Peavine, spring fed riparian vegetation may be the only water related habitat within range for wildlife. The vegetation provides necessary food and cover; the spring may be the only water source available.

### **2. Natural Water Purification**

Because of their location between land and water, wetlands, and small aquatic areas are particularly good water filters, intercepting runoff from both land and water. Wetlands of sizes filter nitrogen and phosphorous from flood waters and drainage preventing eutrophication or over enrichment of natural waters. Wetlands slow the velocity of water passing through them leading to deposition of sediments. Sediments often transport absorbed heavy metals, pesticides, and other toxins that pollute the water supply.

### **3. Groundwater Recharge**

Some wetlands store water and release it slowly to groundwater deposits. Other wetlands discharge water to streams and water bodies. Recharge often occurs in alluvial soils on the valley floor, but may also occur in mountain blocks, above valley fill. The point of discharge can be a valuable source of public drinking water. The importance of the recharge function is dependant upon the location of the location of the wetland relative to the water table, geology including type and depth of substrate, permeability of substrate, size of wetland, and depth. Aquifer storage capacity, and groundwater flow should also be considered.

### **4. Flood Control and Protection**

Wetlands along streams, rivers, and in large drainage basins have the capacity to intercept storm-flows and store large volumes of water. Storm-flows are redirected into vegetated areas, where water velocity slows and sediments are deposited. Retention of flood-flows desynchronizes flood peaks in tributary channels so flood waters do not all reach the mainstem river at the same time. Reducing flood-flows in the main channel minimizes flood hazards. This function becomes increasingly important in urban areas where development has increased the rate and volume of surface-water runoff, the potential for flood damage, and the number of persons and properties exposed to flood-flows.

Playas, as closed basin lakes, receive the majority of all runoff generated by snowpack, precipitation, and urban uses in the basin. They are a natural flood control facility with a capacity. If the capacity of the playa is reduced from importation of fill, or demand for capacity is increased as a result of urbanization, the result could be increased flood hazards for persons and property.

### **5. Natural Drainage**

Wetlands are components of natural drainage systems. Retention of these areas benefits the public by: minimizing the need for large engineered drainage systems, reducing costs associated with drainage, providing open space, recreational areas, and wildlife habitat.

### **6. Erosion Control**

When located between water courses and uplands, wetlands help protect uplands from erosion. Wetland vegetation and riparian vegetation found along stream corridors and springs, reduce shoreline and bank erosion in several ways: binding sediments to roots increasing sediment durability and retention, dampening waves through friction, and reducing the velocity of the current through friction. Erosion control reduces the potential for mass wasting and failure of land forms with attendant water quality problems and suffocation of fish. Erosion control protects man made structures such as bridges and levees form catastrophic failure.

## **7. Effluent Disposal**

Natural and artificial wetlands are able to provide a cost effective, high level of waste water treatment. Artificial wetlands are engineered to systems that have been designed and constructed to employ wetland type vegetation to treat waste water in a more controlled environment than occurs in natural wetlands.

Wetland water treatment systems have been found to lower BOD, total suspended solids, and total nitrogen concentrations by 80-90 percent. Effluent can be used to create, maintain, and enhance wetlands by providing a needed source of water and nutrients for the ecosystem.

## **8. Aesthetics**

Wetlands and riparian corridors in or near developed areas provide needed definition to communities by providing a sense of space and boundary. Natural open space can be used to accentuate a community's unique features such as ridgelines, prominent peaks, and water bodies. Natural terrain and habitat offer visual relief from urbanization.

## **9. Health**

With proper design, water supply, and management, wetlands and riparian habitats improve environmental quality. However, three potential health hazards have been identified with wetlands: botulism, mosquitoes and waterfowl fecal matter. Poor water quality flowing into wetlands (heavy nutrient loads form sediment, septic tanks, agricultural operations) can promote anaerobic conditions leading to an outbreak of botulism. Water control structures (low flow channels, weirs) can be used to reduce mosquito breeding areas.

The final health issue which must be taken into consideration is the fecal droppings of waterfowl. Migratory birds will be attracted to by water related development. These developments should be planned in such a way that human/wildlife conflicts are minimized.

## **10. Recreation**

Many recreational activities take place in and around wetlands. Hunting and fishing are popular sports. Nearly all freshwater fishing is dependant upon wetlands. Pyramid Lake and the Truckee River support excellent fisheries. Recreational uses of wetlands and streams generate significant resources for local economies.

## **11. Education**

Parks developed in wetland and riparian areas foster environmental awareness, giving visitors a chance to increase their understanding and appreciation of the natural world. Such parks are "living laboratories" promoting the care of important water associated habitats, and the quality of our water.

## Appendix E

### Wetland and Plant Species in Nevada

U.S. Fish and Wildlife Service. 1988. National list of vascular plant species that occur in wetlands: Intermountain (Region 8). U.S. Fish & Wildlife Service Biological Report 88 (26.8). May 1988. Region 8 may be downloaded from the NWI database: <http://www.fws.gov/nwi/Plants/list88.html>

U.S. Army Corps of Engineers produced the Wetlands Delineation Manual (1987) with partial wetland vegetation lists in Appendix C, Table C1: Partial List of Species With Known Morphological Adaptations for Occurrence in Wetlands, and Table C2: Species Exhibiting Physiological Adaptations for Occurrence in Wetlands. These are available at the ACOE Delineation Manual website: <http://www.wetlands.com/coe/87manapc.htm> (Appendix C).

U.S. Fish and Wildlife Service. 1993. 1993 supplement to list of plant species that occur in wetlands: Northwest (Region 9). Supplement to U.S. Fish & Wildlife Service Biological Report 88 (26.8).

## Appendix F

### Hydric Soils in the Wetland Policy Area

#### USDA Soil Conservation Service Soil Surveys and Hydric Soils List

Hydric soils take time to form, and are formed from regular or constant water saturation or inundation, and soil identification is one tool used in wetland delineation (based on the 1987 **Wetland Delineation Manual** (US ACOE 1987)). Soil surveys may be used to identify and delineate hydric soils as identified by the U.S. Soil Conservation Service, however accuracy of the maps is variable. The Soil Conservation Service is now called the Natural Resources Conservation Service (NRCS). Due to the variable accuracy of soils maps, field surveys are necessary to establish presence of hydric soils. This website allows for soil survey reports to be created based on available data.  
<http://websoilsurvey.nrcs.usda.gov/app/>

Soil names and identification numbers below correspond to the Washoe County Soil Survey.

#### Southern Washoe County

<u>0230</u>	<u>Cradlebaugh loam</u>
<u>0430</u>	<u>Sagouspe varient</u>
<u>0431</u>	<u>Sagouspe varient wet</u>
<u>0440</u>	<u>Jubilee si</u>
<u>0441</u>	<u>Jubilee clay loam</u>
<u>0442</u>	<u>Jubilee gr-s</u>
<u>0443</u>	<u>Jubilee is</u>
<u>0450</u>	<u>Voltaire loam</u>
<u>0451</u>	<u>Voltaire loam, sli sal</u>
<u>0452</u>	<u>Voltaire loam, str sal</u>
<u>0514</u>	<u>Settlemeier</u>
<u>0740</u>	<u>Blackwell si</u>
<u>0820</u>	<u>Marla ls, 4-8%</u>
<u>0821</u>	<u>Maria is, 0-4%</u>
<u>0993</u>	<u>Haplaquolls, nearly level</u>
<u>1480</u>	<u>Macareeno-blackwell-carioca</u>

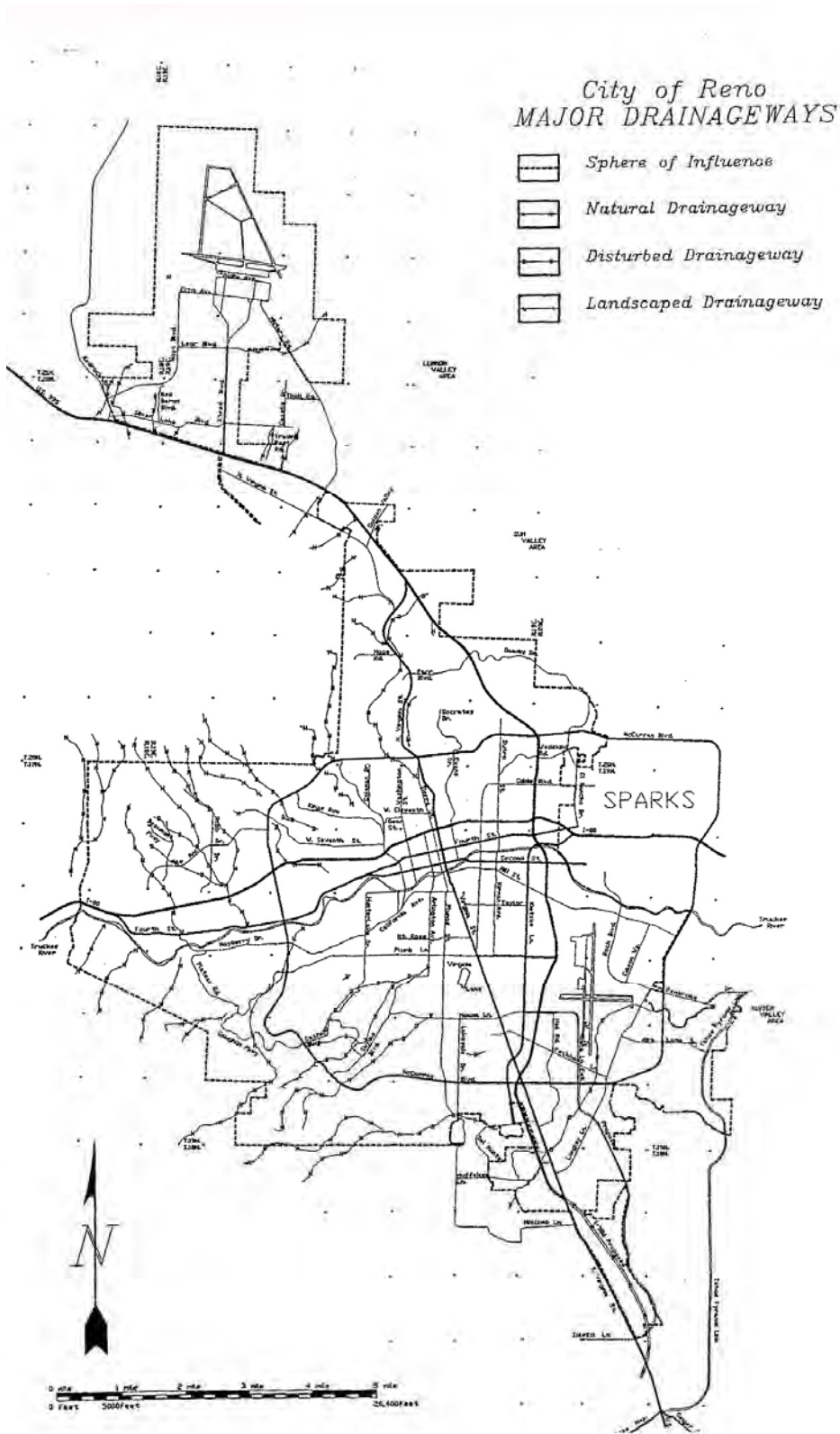
#### Central Washoe County

<u>0240</u>	<u>Umberland</u>
<u>0242</u>	<u>Benin-umberland-umberland (mod wet) complex</u>
<u>0810</u>	<u>Voltaire-truckee association</u>
<u>0811</u>	<u>Voltaire-fluvaquents-holbrook association</u>
<u>1280</u>	<u>Xerix torrifluvents-fluvaquents association</u>
<u>1400</u>	<u>Dedmount-umberland (dry)-umberland association</u>
<u>1440</u>	<u>Umberland-umberland variant complex</u>

- Other soils may be determined to be hydric upon field investigation.

# Appendix G

## City of Reno Major Drainageways



# HOUSING PLAN



## **ACKNOWLEDGEMENTS**

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**The Housing Plan was updated with assistance from the consultant group PMC  
and funded by a grant from**

*charles* **SCHWAB**  
BANK

Adopted by City Council on October 22, 2008

# **TABLE OF CONTENTS**

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## **Introduction**

Plan Boundary .....	1
Housing Needs .....	1
Plan Development.....	1
Housing Plan Requirements .....	2

## **Goals, Policies and Action Strategies**

Goal 1 .....	5
Goal 2 .....	6
Goal 3 .....	7
Goal 4 .....	8
Goal 5 .....	8
Goal 6 .....	10
Goal 7 .....	11
Goal 8 .....	11

## **Appendixes**

Appendix A – Housing Needs Assessment .....	A-1
Appendix B – Glossary of Terms .....	B-1
Appendix C – AB 439 Requirements .....	C-1

# **INTRODUCTION**

## **Plan Boundary**

This plan was developed to address all parcels in the City of Reno including parcels in the Sphere of Influence (SOI).

## **Housing Needs**

Housing is a high priority for the City of Reno. The Housing Plan was updated to reflect the City's desire and commitment to build a balanced and diverse community by providing a mixture of housing choices to match the community needs. Access to adequate and affordable housing is a key component to the economic well-being of the community. As a consistently-evolving employment and education center for the region, Reno attracts residents with varied lifestyles and diverse housing needs. As the housing stock ages, the City must address the rehabilitation and preservation needs of the existing housing stock and the construction of new housing to ensure its affordability to lower income households. The Planning Commission 2008 Priorities identifies the Housing Plan as a priority including "inclusionary housing, affordable housing, and low income housing."



## **Plan Development**

In 2006, the City of Reno began working in cooperation with Washoe County and the City of Sparks to establish housing policies for the region. The joint effort sought to identify housing needs and develop policies and strategies to better address the community's housing needs for affordable and work force housing. The term



"affordable" in this context refers to housing that is affordable to households earning less than 80 percent of the area median income (AMI). The term "work force" refers to housing that is affordable for households earning between 81 and 120 percent of the AMI. Housing is considered affordable for a household if the costs associated with that home do not exceed 30% of the household's monthly income.

In April 2006, the City received a grant from the Charles Schwab Bank to contract with a consultant, to assist in updating the City's Housing Plan. Washoe County and the City of

Sparks also received Charles Schwab grants to update their housing plans. The City hired the consulting company PMC to update the Housing Plan. The City of Sparks and Washoe County also contracted with PMC to update their Housing Plans. With direction and expertise from PMC the three jurisdictions collaborated to develop complementary and supportive housing plans to address housing needs. PMC provided analytical and current data for the Housing Plan. The Plan consists of goals, policies, and actions to provide guidance to address housing needs for all economic segments in the City. The City conducted public outreach sessions that included neighborhood meetings and public hearings. The Regional Housing Task Force, a group made-up of regional stakeholders involved with housing issues, also provided significant input and direction in updating the Housing Plan.

The City's housing needs are analyzed in Appendix A- Housing Needs Assessments where the wide range of demographic, housing, and economic data are analyzed. The Housing Needs Assessment data was collected from the U.S. Census Bureau, state economic and employment forecasts, the Nevada Small Business Development Center, and other local sources. Appendix B includes a glossary of terms, to clarify terminology that is used in the Housing Plan. Appendix C illustrates how the goals, policies, and action strategies of the Housing Plan fulfill the requirements of AB 439. With adoption of the Housing Plan the Reno Municipal Code will be reviewed and updated to further provide assistance in developing affordable and work force housing.

## **Housing Plan Requirements**

Nevada Revised Statutes (NRS) 278.160 specifies criteria for Housing Plans. An adopted Master Plan requires a Housing Plan by the governing body of the city in counties with populations between 100,000 and 400,000. The law requires Housing Plans to "include a plan for maintaining and developing affordable housing to meet the housing needs of the community" (NRS 278.150, 278.160). The Housing Plan must include the following eight components:

- 1) An inventory of housing conditions, needs, plans, and procedures for improving housing standards and for providing adequate housing to individuals and families in the community, regardless of income level;
- 2) An inventory of existing affordable housing in the community including, without limitation, housing that is available to rent or own, housing that is subsidized whether directly or indirectly by this State, an agency or political subdivision of this State, or the Federal Government or an agency of the Federal Government, and housing that is accessible to persons with disabilities;
- 3) An analysis of projected growth and the demographic characteristics of the community;
- 4) A determination of the present and prospective need for affordable housing in the community;

- 5) An analysis of any impediments to the development of affordable housing and the development of policies to mitigate those impediments;
- 6) An analysis of the characteristics of the land that is suitable for residential development. The analysis must include, without limitation: a) a determination of whether the existing infrastructure is sufficient to sustain the current needs and projected growth of the community; and b) an inventory of available parcels that are suitable for residential development and any zoning, environmental, and other land-use planning restrictions that affect such parcels;
- 7) An analysis of the needs and appropriate methods for the construction of affordable housing or the conversion or rehabilitation of existing housing to affordable housing; and
- 8) A plan for maintaining and developing affordable housing to meet the housing needs of the community for a period of at least five years.

In addition to these eight components, AB 439 set forth more specific requirements for the Housing Plan. Housing Plans must also contain policies and actions directing jurisdictions to “adopt at least 6 of 12 specified measures relating to the maintenance and development of affordable housing in the jurisdiction” (AB 439 Sec 1.3). The twelve measures outlined in AB 439 are as follows:

- 1) At the expense of the city or county, as applicable, subsidizing in whole or in part impact fees and fees for the issuance of building permits collected;
- 2) Selling land owned by the city or county, as applicable, to developers exclusively for the development of affordable housing at not more than 10 percent of the appraised value of the land, and requiring that any such savings, subsidy, or reduction in price be passed on to the purchaser of housing in such a development. Nothing in this paragraph authorizes a city or county to obtain land pursuant to the power of eminent domain for the purposes set forth in this paragraph;
- 3) Donating land owned by the city or county to a non-profit organization to be used for affordable housing;
- 4) Leasing land by the city or county to be used for affordable housing;
- 5) Requesting to purchase land owned by the Federal Government at the discounted price for the creation of affordable housing pursuant to the provision of section 7 (b) of the Southern Nevada Public Land Management Act of 1998 (SNPLMA);

- 6) Establishing a trust fund for affordable housing that must be used for the acquisition, construction, or rehabilitation of affordable housing;
- 7) Establishing a process that expedites the approval of plans and specifications relating to maintaining and developing affordable housing;
- 8) Providing money, support, or density bonuses for affordable housing developments that are financed, wholly or in part, with low-income housing tax credits, private activity bonds, or money from a governmental entity for affordable housing;
- 9) Providing financial incentives or density bonuses to promote appropriate transit-oriented housing developments that would include an affordable housing component;
- 10) Offering density bonuses or other incentives to encourage the development of affordable housing;
- 11) Providing direct financial assistance to qualified applicants for the purchase or rental of affordable housing; and
- 12) Providing money for supportive services necessary to enable persons with supportive housing needs to reside in affordable housing in accordance with a need for supportive housing identified in the 5-year consolidated plan adopted by the U.S. Department of Housing and Urban Development for the city or county.

## **GOALS, POLICIES, AND ACTIONS**

To meet the housing needs of the existing and future residents of Reno specific goals, policies and action have been developed. The overarching goals are tied to supporting policies and specific actions. Policies amplify the goal statement and the actions provide a more specific description of a proposed implementing action. The following definitions describe the nature of the statement of goals, policies, and actions as they are used in the Housing Plan document:

**Goal:** Ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

**Policy:** Specific statement guiding action and implying clear commitment.

**Action:** Program, procedure, or technique that implements the policy.

The following goals have been developed to enable the City of Reno to meet the housing needs in the community. Some of these goals and policies will be realized in the long-term because the housing needs of the City may exceed the staffing or financial resources currently available.

**Goal 1:** Remove regulatory barriers to increase the availability of affordable and workforce housing for all.

**Goal 2:** Preserve and rehabilitate affordable and workforce housing.

**Goal 3:** Provide developer incentives.

**Goal 4:** Identify funding sources for affordable and workforce housing.

**Goal 5:** Promote housing for special needs.

**Goal 6:** Encourage sustainable development and energy efficiency for new and existing affordable and workforce housing.

**Goal 7:** Increase homeownership opportunities.

**Goal 8:** Promote regional housing coordination.

**Goal 1: Remove regulatory barriers to increase the availability of affordable and workforce housing for all**

**Policy 1.1:** Encourage flexibility in the zoning, building, and land use regulations to enable affordable housing units to be built throughout the community.



*Cottonwood Village Apartments*

**Action 1.1:** To increase affordable housing the City’s Municipal Code Title 18 and other procedures should be reviewed and if needed amended and updated including condominium conversions, accessory dwelling units (ADUs), single-room occupancy (SRO) housing types allowed by-right, density bonus, special use permit (SUP) requirements.

**Policy 1.2:** Review fees associated with the affordable and workforce housing development.

**Action 1.2:** Evaluate the possible techniques to offset the fees for the development of affordable and workforce housing.

**Policy 1.3:** Review and evaluate City policies and procedures to enable and increase the development of affordable and workforce housing.

**Action 1.3:** Advocate for policies and procedures that promote and encourage affordable and workforce housing, including state and federal legislative changes.

## **Goal 2: Preserve and rehabilitate affordable and workforce housing**

**Policy 2.1:** Encourage neighborhood revitalization in existing areas through housing rehabilitation and infill reuse/conversion for both owner-and renter-occupied units.



*Golden Apartments*

**Action 2.1:** Develop housing rehabilitation programs with incentives to assist in the rehabilitation of owner- and renter-occupied housing through partnerships with public and private organizations and local community groups.

**Policy 2.2:** Coordinate efforts with the Neighborhood Advisory Boards (NABs) to identify and address preservation and rehabilitation housing needs in the NABs area.

**Action 2.2:** Work with the NABs to identify housing that needs rehabilitation and provide information to the NABs on housing rehabilitation and available funding sources to assist homeowners and renters.

**Policy 2.3:** Review rehabilitation programs for owner-occupied homes and for residents making up to 80 percent of the area median income.

**Action 2.3:** Continue the Housing Rehabilitation Program and utilize CDBG and HOME funding for housing rehabilitation.

**Policy 2.4:** Work to preserve the existing affordable housing stock and ensure long-term affordability for new units built with financial assistance.

**Action 2.4:** Provide assistance to local property owners to identify possible state and federal funding that allows them to maintain affordability of a housing project. Review resale controls or rental restrictions for units built with locally generated housing funds.

**Policy 2.5:** Identify mobile home parks in appropriate locations in which the park infrastructure and the majority of units are feasible to preserve.

**Action 2.5:** Develop criteria to review mobile home park viability for preservation, including park location and infrastructure. For park closures, the City should facilitate meetings with park owners and residents, review financial assistance, and/or facilitate the sale of park to the residents. To facilitate a sale to residents, the City should seek state and federal funding to purchase, improve, and manage the parks and/or seek the expertise of a nonprofit organization with mobile home park sales and conversion to resident ownership and management. NABs with mobile home parks should consider establishing a program for the disposal of older dilapidated mobile homes.

**Policy 2.6:** Continue developing a mobile home emergency repair program for all mobile home owners.

**Action 2.6:** Review the Housing Rehabilitation Program and/or other programs to provide funding for mobile homes repairs.

### **Goal 3: Provide developer incentives**

**Policy 3.1:** Create an “Affordable and Workforce Housing Brochure.”

**Action 3.1:** The brochure should be available on the City’s web site and provide information, resources, and incentives for developers.

**Policy 3.2:** Develop programs that allow for flexible development standards, to encourage developers to provide affordable and workforce housing.

**Action 3.2:** Develop a toolkit for development standards for affordable and workforce housing.

**Policy 3.3:** Promote affordable and workforce housing in the transit-oriented developments (TODs) and regional centers.



*Highland Vista - Single-family housing*

**Action 3.3:** Identify programs and/or incentives to increase the building of affordable and workforce housing in TODs and regional centers, including a mixed-income policy.

**Policy 3.4:** Promote and encourage the development of affordable housing near services, transportation routes, schools, and employment areas.

**Action 3.4:** Work with other agencies and departments to foster and promote the development of affordable housing in urban areas and other parts of the City where adequate public facilities and services are available.

**Policy 3.5:** Create financial incentives to encourage developers to provide affordable and workforce housing.

**Action 3.5:** Work with developers to identify financial incentives to increase the development of affordable and workforce housing

## **Goal 4: Identify funding sources for affordable and workforce housing**

**Policy 4.1:** Identify funding mechanisms to increase affordable and workforce housing.

**Action 4.1:** Investigate funding sources and coordinate with state and federal resources to seek any available sources of funding for affordable and workforce housing.

**Policy 4.2:** Review funding subsidy options for development application fees for affordable and workforce housing.

**Action 4.2:** Develop a funding program to provide money for development applications fees for affordable and workforce housing.



*Carriage Stone House for seniors*

include a downpayment assistance program, allow employers or employees to pay into an affordable housing trust fund, and/or, provide housing on-site or at another location.

**Policy 4.5:** Explore the feasibility of assessing a special fee on the demolition of existing housing.

**Action 4.5:** The City should develop a housing demolition fee and the money generated will go into the Affordable Housing Trust Fund.

## **Goal 5: Promote housing for special needs**

**Policy 5.1:** Provide housing units accessible to persons with disabilities.

**Action 5.1:** Promote cooperation with developers in the production of dwelling units accessible to persons with disabilities. Encourage developers to provide a percentage

**Policy 4.3:** Continue to evaluate and utilize local, state, and federal funds.

**Action 4.3:** Identify methods to advocate and/or increase funding resources and programs, including HOME, CDBG, and the Housing Choice Voucher Program.

**Policy 4.4:** Partner with local employers to discuss affordable and workforce housing initiatives.

**Action 4.4:** Work with local employers to develop an employee-housing program. The housing program could

of new units, which are more usable for persons with disabilities while not otherwise affecting their marketability.



*Bethel Senior Apartments*

**Policy 5.2:** Continue to work with advocacy groups that assist people with special housing needs such as modifications to their homes.

**Action 5.2:** Work with local housing groups to assist disabled persons with accessibility modifications to their homes. Continue funding the Minor Housing Rehabilitation Program for disabled persons.

**Policy 5.3:** Encourage developments for affordable senior housing.

**Action 5.3:** Examine programs and requirements to assist developers and provide information on government financing, other government subsidies, and/or surplus government land suitable for multi-family development.

**Policy 5.4:** Utilize methods to assist individuals and families at-risk of becoming homeless so that they are able to maintain their current housing and avoid entry into the homeless service system.

**Action 5.4:** Work to increase the supply of permanent-supportive and affordable housing. Advocate for state and federal policies to increase the availability of permanent-supportive housing opportunities. Review or develop programs to assist individuals and families at-risk of becoming homeless, including the following actions: the creation of new supportive units, a program for hard-to-house clients, increasing short-term and long-term resources, increasing the availability of rent or mortgage payment assistance offering deposit and utility assistance, increasing financial assistance for permanent affordable housing and educating landlords to improve rental opportunities for individuals and families that were homeless or hard-to-house.



*Ridgehouse Residence*

**Policy 5.5:** Participate in efforts to improve the continuum of available housing so that homeless individuals and families have access to appropriate housing resources, ultimately establishing a “housing first” model.

**Action 5.5:** Facilitate and/or provide more emergency and transitional shelters for persons with mental illness or substance abuse disorders and for homeless families. Increase the supply of permanent-supportive and affordable housing and increase short-term and long-term resources to assist in the prevention and recovery from homelessness. The City should advocate for state and federal policies that increase the availability of permanent-supportive housing opportunities.

## **Goal 6: Encourage sustainable development and energy efficiency for new and existing affordable and workforce housing.**

**Policy 6.1:** Promote sustainable and green development and energy efficiency for new and existing affordable and workforce housing stock.

**Action 6.1:** The City should develop guidelines and/or requirements for developers to employ energy conservation measures for building sites, landscaping, and solar access through development standards including the following:

- Pursue Green Building certification programs such as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED).
- Water conservation including landscape techniques, materials, or equipment certified by the Department of Water Resources.



- Low impact grading: Utilization of grading techniques that minimize the amount of cut and fills, use alternatives to large block retaining walls, and generally result in an appearance that mimics the natural slope.
- Common open space development: Development proposals should follow practices that maintain viable habitat or wildlife corridors, create viable passive recreational opportunities, propagate an overall design that utilizes open space, parcel design, road design, and pedestrian facilities in a manner that is consistent with the community character and sensitive to the design of existing neighboring development, and utilizes low impact grading techniques

- Mixed-use developments: Developments that incorporate employment and commercial service opportunities, utilizing integrated designs that stimulate pedestrian and bicycle use for access to internal and external services and amenities.
- Utilize Low Impact Development (LID) techniques as described in the LID Handbook beyond requirements of the LID ordinance.
- The dedication of public Open Space.

**Policy 6.2:** New development should encourage pedestrian, bicycle, and transit access to facilitate the reduction of automobile use.

**Action 6.2:** Developers should provide circulation plans that are pedestrian oriented and encourage alternative modes of transportation.

## **Goal 7: Increase homeownership opportunities**

**Policy 7.1:** The City should support existing programs and develop new programs, if needed to promote owner-occupied housing units.

**Action 7.1:** Methods to increase and maintain owner-occupied units in the City should be investigated, including working with nonprofits, increasing down payment assistance to first-time buyers, lease-to-own programs, and sweat-equity programs.

## **Goal 8: Coordinate regional housing initiatives**

**Policy 8.1:** The City, whenever possible will work cooperatively with the City of Sparks and Washoe County to pursue regional efficiency in all matters related to affordable housing.

**Policy 8.2:** Pursue funding regionally at all levels.

**Action 8.2:** The City in cooperation with the City of Sparks and Washoe County will work with financial institutions to obtain funds to develop a regional housing trust fund, develop a regional clearinghouse for housing data and education, and develop education and outreach programs.



**Policy 8.3:** Publicize and market affordable housing opportunities throughout the region, including rehabilitation and funding.

**Action 8.3:** The City in cooperation with the City of Sparks and Washoe County will work to educate the public about the rehabilitation opportunities by holding workshops with

housing advocacy groups and neighborhood organization to keep the public and developers informed on regulations affecting affordable housing developments.

**Policy 8.4:** Work to preserve the existing viable affordable housing stock and ensure long-term affordability for new units built with financial assistance.

**Action 8.4:** The City will work with other jurisdictions in the region to develop a clearinghouse that will monitor the status of existing affordable housing in the region.

**Policy 8.5:** Consider establishing an Affordable Housing Trust Fund in cooperation with other jurisdictions in the region.

**Action 8.5:** The City will work with other jurisdictions in the region to consider developing an Affordable Housing Trust Fund that will be used for the development of affordable housing throughout the City.

**Policy 8.6:** Support efforts to end homelessness throughout the region.

**Action 8.6:** Continue to implement the regional plan entitled “Housing For All: A Plan to End Homeless”.

# APPENDIX A HOUSING NEEDS ASSESSMENT

## **TABLE OF CONTENTS**

---

<b>Introduction .....</b>	<b>A-1</b>
<b>NRS Requirements.....</b>	<b>A-1</b>
<b>Population Characteristics.....</b>	<b>A-3</b>
Summary of findings .....	A-3
Population Trends .....	A-3
Population by Race .....	A-4
Population by Age .....	A-5
<b>Income Characteristics.....</b>	<b>A-6</b>
Summary of Findings.....	A-6
Household Income.....	A-6
Poverty.....	A-10
<b>Employment Trends.....</b>	<b>A-13</b>
Summary of Findings.....	A-13
Area Employment Trends .....	A-13
<b>Special Needs Groups .....</b>	<b>A-16</b>
Summary of Findings.....	A-16
Seniors.....	A-16
Persons with Disabilities .....	A-18
Families with Female Heads of Household .....	A-19
Large Families.....	A-22
Homeless .....	A-22
<b>Housing Characteristics .....</b>	<b>A-26</b>

Summary of Findings.....	A-26
Housing Composition .....	A-26
Age of Housing Stock.....	A-26
Housing Occupancy and Tenure.....	A-28
Housing Unit Size.....	A-29
Overcrowded Housing.....	A-31
<b>Housing Costs .....</b>	<b>A-32</b>
Summary of Findings.....	A-32
Single Family Home Costs .....	A-33
Rental Housing Costs .....	A-35
Mobile Home Housing Costs.....	A-36
Households Overpaying.....	A-37
<b>Future Development Potential .....</b>	<b>A-39</b>
Summary of Findings.....	A-39
Vacant Land Inventory .....	A-39
Water and Wastewater Service Capacity .....	A-40
Water Supply and Infrastructure.....	A-40
Wastewater Service .....	A-41
Solid Waste Capacity .....	A-41
<b>Constraints to Housing availability and affordability.....</b>	<b>A-41</b>
Summary of Findings.....	A-41
Governmental Constraints .....	A-42
City Development Standards .....	A-42
Land Use Controls .....	A-42
Maximum Permitted Residential Density.....	A-43

Parking.....	A-43
Minimum lot size .....	A-43
Maximum height.....	A-43
Maximum lot coverage .....	A-44
Provision for a Variety of Housing.....	A-45
Residential Zoning Districts.....	A-44
Development Review .....	A-45
Accessory Dwelling Unit Ordinance .....	A-45
Condominium Conversion Ordinance .....	A-45
Regional Centers and Transportation Oriented Developments (TOD's) .....	A-46
Building Permits .....	A-47
Non Governmental Constraints .....	A-47
Land Cost.....	A-48
Availability of Vacant Land .....	A-49
Construction and Labor Costs.....	A-49
Availability of Financing.....	A-49
<b>Housing Programs .....</b>	<b>A-50</b>
Summary of Findings.....	A-51
Assisted Housing .....	A-52
Public Housing .....	A-52
Self Sufficiency Programs.....	A-53
Subsidized Housing .....	A-53
<b>List of Tables</b>	
<b>Table A-1 Population Growth* .....</b>	<b>A-3</b>
<b>Table A-2 Population By Race* .....</b>	<b>A-4</b>

<b>Table A-3 Population By Age*</b> .....	<b>A-5</b>
<b>Table A-4 City-County Household Income*</b> .....	<b>A-6</b>
<b>Table A-5 Percentage of Reno residents in Low-income categories<sup>1*</sup></b> .....	<b>A-7</b>
<b>Table A-6 HUD 2006 Income Limits</b> .....	<b>A-9</b>
<b>Table A-7 Federal Poverty Thresholds (2005)</b> .....	<b>A-11</b>
<b>Table A-8 Local Poverty Rates*</b> .....	<b>A-12</b>
<b>Table A-9 Reno Area Growing Occupations by Income Group*</b> .....	<b>A-13</b>
<b>Table A-10 Five Year Labor Force Statistics</b> .....	<b>A-15</b>
<b>Table A-11 Ten Largest Employers</b> .....	<b>A-16</b>
<b>Table A-12 Senior Population Growth*</b> .....	<b>A-17</b>
<b>Table A-13 Disabled Population by Age (Non-Institutionalized)</b> .....	<b>A-18</b>
<b>Table A-14 Types of Disabilities*</b> .....	<b>A-19</b>
<b>Table A-17 Female Headed Families*</b> .....	<b>A-20</b>
<b>Table A-18 Population in Female Headed Households in poverty*</b> .....	<b>A-21</b>
<b>Table A-19 Large Family Households*</b> .....	<b>A-23</b>
<b>Table A-20 Shelters in Washoe County</b> .....	<b>A-25</b>
<b>Table A-21 Housing Unit Types*</b> .....	<b>A-27</b>
<b>Table A-22 Age of Housing Stock*</b> .....	<b>A-28</b>
<b>Table A-23 Tenure of Occupied Units*</b> .....	<b>A-29</b>
<b>Table A-24 Housing Unit Size*</b> .....	<b>A-30</b>
<b>Table A-25 Rooms per Housing Unit*</b> .....	<b>A-30</b>
<b>Table A-26 Reno Household Size*</b> .....	<b>A-31</b>
<b>Table A-27 Overcrowded Housing*</b> .....	<b>A-32</b>
<b>Table A-28 Reno New Construction Prices 2003 – 2007, All Bedrooms</b> .....	<b>A-33</b>
<b>Table A-29 Reno New Construction Prices By Bedroom, 2007</b> .....	<b>A-33</b>

<b>Table A-30 Reno Resale Prices 2003 – 2007, All Bedrooms</b>	<b>A-34</b>
<b>Table A-31 Reno Resale Prices By Bedroom, 2007</b>	<b>A-34</b>
<b>Table A-32 Monthly Rental Costs for Apartments</b>	<b>A-35</b>
<b>Table A-33 Rental Costs for Single Family Homes</b>	<b>A-35</b>
<b>Table A-34 Mobile Home Prices in the Reno</b>	<b>A-36</b>
<b>Table A-35 Mobile Home Parks in Reno</b>	<b>A-37</b>
<b>Table A-36 Housing Expenditure Rate By Income Level*</b>	<b>A-38</b>
<b>Table A-37 Vacant Land Inventory</b>	<b>A-40</b>
<b>Table A-38 Zoning Classification</b>	<b>A-44</b>
<b>Table A-39 Regional Centers</b>	<b>A-46</b>
<b>Table A-40 Transit Oriented Development</b>	<b>A-47</b>
<b>Table A-41 Total Building Permits FY 2005-2006</b>	<b>A-47</b>
<b>Table A-42 Vacant Land “For Sale”</b>	<b>A-48</b>
<b>Table A-43 Interest Rates for 15- and 30- Year Fixed Loans</b>	<b>A-50</b>
<b>Table A-44 Subsidized Housing Located in Reno</b>	<b>A-54</b>

### **INTRODUCTION**

This chapter analyzes population, housing, and employment characteristics in Reno. Population growth, employment growth, housing conditions, special needs housing and available housing programs are evaluated to support the goals, policies, and programs in the Housing Plan.

### **NRS REQUIREMENTS**

The data used to compile the housing needs assessment was gathered from many sources including: the 1990 and 2000 U.S Decennial Census and other Census Bureau sources, the City of Reno Population Plan (2004), the Nevada Small Business Development Center's 2005 Reno-Sparks Business Activity Report, the U.S. Department of Housing and Urban Development (HUD), the Nevada Department of Employment, Training and Rehabilitation, Reno Gazette-Journal, Sparks Tribune, Craigslist, apartments.com, City of Reno documents, the Washoe County Assessor, and various websites were utilized to gather information.

The Nevada Revised Statutes (NRS) provide eight criteria to be met in the Housing Plan. The criteria include:

- 1) an inventory of housing conditions, needs, plans and procedures for improving housing standards and for providing adequate housing;
- 2) an inventory of affordable housing in the community;
- 3) an analysis of the demographic characteristics of the community;
- 4) a determination of the present and prospective need for affordable housing in the community;
- 5) an analysis of any impediments to the development of affordable housing and the development of policies to mitigate those impediments;
- 6) an analysis of the characteristics of the land that is most appropriate for the construction of affordable housing; and
- 7) an analysis of the needs and appropriate methods for the construction of affordable housing or the conversion or rehabilitation of existing housing to affordable housing; 8) a plan for maintaining and developing affordable housing to meet the housing needs of the community.

Information that fulfills these requirements is located through the Housing Needs Assessment as well as in the Housing Plan Goals, Policy, and Action section. The Housing Needs Assessment provides demographic information such as population projections, race, age, income, low-income categories, federal poverty thresholds, poverty rates, employment trends, special needs, housing composition, type of occupancy and tenure, housing costs, and future development potential in Reno. It outlines the characteristics of the community and identifies those characteristics that may have significant impacts on housing needs. The main body of the Housing Needs Assessment fulfills NRS requirements one, three, and four with current housing conditions, demographic data, and the present and prospective need for affordable housing is explored throughout the Housing Needs Assessment. NRS requirement number four is addressed in many places including the sections describing the special needs populations, housing programs, mobile home cost and availability and owner and

## **Appendix A–Housing Needs Assessment**

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rental housing costs. The entire Housing Needs Assessment analyzes current information and the prospective need for housing in the future. Number six requires an analysis of the character of developable land, which is done here with the vacant land inventory. Finally, number seven is addressed by the goals, policies, and action strategies section.

Constraints to Housing Availability and Affordability are analyzed in the Housing Needs Assessment. This section of the assessment describes governmental and non-governmental constraints. The city zoning code and building standards have an influence over the availability of affordable housing. Non-governmental factors that affect housing availability and affordability include availability of financing, land and building materials costs, labor costs, and market conditions that affect the cost of preparing and developing land for housing. This section provides information to satisfy NRS requirements five and seven by highlighting the different types of constraints put upon development by governmental and non-governmental factors. NRS requirement number seven is also addressed here with information concerning building activity.

Finally, the assessment describes the existing housing programs available to Reno residents. Programs such as those that use federal grant money, the availability of subsidized units for low-income families, senior citizens and disabled persons, the public housing program and other programs. This section addresses NRS requirement two by providing a list of subsidized housing developments and describes the affordable housing programs available to the residents of Reno. Appendix B illustrates how the goals, policies, and action strategies of the Housing Plan fulfill the requirements of AB 439. Appendix C provides a detailed glossary of census and housing plan-related terms.

## POPULATION CHARACTERISTICS

### Summary of Findings

The City grew by 35 percent between 1990 and 2000 and is estimated to have grown another 15 percent between 2000 and 2005. These growth trends are occurring throughout Washoe County. Regional plans state that most of this growth shall be directed toward the urban areas of the county. Additionally, the populations of minority groups appear to be growing. This is evidenced by the slight decline in the white population and the increase in both Asian and Hispanic populations between 2000 and 2005. The age groups that have experienced the most growth are children younger than 9 years old and adults between the ages of 45 and 59 indicating the need for family and senior housing.

### Population Trends

Regional planning has been required by the Nevada Revised Statutes (NRS) since 1989. Since then and particularly since the 2002 Truckee Meadows Regional Plan, Reno’s sphere of influence has been more defined. The regional policies call for growth in the County to occur in the cities rather than in the unincorporated parts of the County. Thus, it is expected that the City of Reno will continue to grow at a steady rate. The 2008 City of Reno Population Plan utilizes the Regional Consensus Forecast, which forecasts 339,500 people by 2030.

According to the U.S. Census Bureau, Reno’s population grew from approximately 133,850 in 1990 to 182,433 people in 2000. The Nevada Small Business Development Center at the University of Nevada published a demographic update as of October 2005. According to this report, the City of Reno had a population of 210,376 in 2005, which represents a growth rate of 15 percent. **Table A-1** illustrates these population trends. In addition, the City of Reno was home to 86,477 households and 49,794 families in 2005.

**Table A-1  
Population Growth\***

	1990	2000	2005	% Change 1990- 2000	% Change 2000-2005
Reno	133,850	182,433	210,376	35%	15%
Washoe County	254,667	339,486	398,404	33%	17%
Nevada	1,201,833	1,998,257	2,414,807	66%	21%

Sources: 2000 Census Summary File 3, Nevada State Library & Archives, & Nevada Small Business Development Center, *Bureau of Business and Economic Research*, 2006

\* percentages may not add up to 100% due to rounding

**Population by Race**

The City of Reno has experienced some shifts in its racial and ethnic populations. Based upon past trends, the city’s white population was expected to decline between 2000 and 2005. The proportion of the white population declined from approximately 77 percent of the total population to 63 percent of the total population. A similar trend occurred in the entire County. There was also a slight increase in the proportion of Asian, Hawaiian and Pacific Islanders and a substantial increase in the Hispanic population. **Table A-2** shows the change in racial and ethnic populations in Reno and Washoe County between 2000 and 2005. The large Hispanic population includes people from Central and South American countries as well as people from other racial categories that claim Hispanic ethnicity. As an urban center, Reno’s minority population represents a larger portion of the total population than in the County where the white population is 67 percent of the population. One exception is the population of Native American people, which is slightly larger in the County than in the City of Reno.

**Table A-2  
Population By Race\***

	Reno				Washoe County			
	2000		2005		2000		2005	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
White	139,515	77%	131,622	63%	72,622	80%	266,821	67%
Black/ African American	4,183	2%	5,400	3%	6,581	2%	8,041	2%
Amer. Indian/Alaska Native	2,306	1%	1,906	1%	6,212	2%	5,406	1%
Asian, Hawaiian/Pac. Island	10,390	6%	14,330	7%	15,829	5%	21,621	5%
Hispanic <sup>1</sup>	16,720	9%	57,118	27%	25,415	8%	96,514	24%
Two or More	7544	4%	n/a	n/a	12,827	4%	n/a	n/a
<b>Total</b>	<b>180,658</b>	<b>100%</b>	<b>210,376</b>	<b>100.0%</b>	<b>339,486</b>	<b>100%</b>	<b>398,404</b>	<b>100.0%</b>

Sources: Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006; U.S. Census Bureau 2000, summary file 3

<sup>1</sup> The 2000 Census category is called “Some other race alone,” which includes people who claim Hispanic, Latino, Mexican, Cuban, Puerto Rican and other Central and Southern American heritages. The category is called Hispanic here due to the local 2005 demographic data source organization. <sup>2</sup> Due to the local data source organization, there is not a comparable category to the 2000 Census’ “Two or More” category. It is assumed that the people in the “Two or More” category in 2000 are put into single race categories in the 2005 estimate data.

\* Percentages may not add up to 100% due to rounding

### Population by Age

The age distribution in Reno and Washoe County is shown in **Table A-3**. The 2000 numbers come from the U.S. Census Bureau while the 2005 numbers are estimates from the Nevada Small Business Development Center at the University of Nevada, Reno. The largest segment of the population in 2000 was between the ages of 25 and 44 years old and this proportion is expected to stay the same. The age groups that grew the most between 2000 and 2005 were children younger than 5 years old (24 percent) and children between 5 and 9 years old (17 percent). Another growing group is adults that are members of the “baby boom” generation, ages 45 to 59 years old (19 percent). Additionally, median ages increased from 34.5 to 35.3 in Reno and from 35.6 to 36.1 in Washoe County. The growing segment of younger children signifies a growth in family households that will require adequate and affordable housing. The growth in the senior segment of the population indicates a need for housing suited to the special needs and fixed incomes of the senior population.

**Table A-3  
Population By Age\***

	Reno				Washoe County			
	2000		2005		2000		2005	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Under 5 years	12,066	7%	14,900	7%	23,084	7%	28,004	7%
5-9 years	12,153	7%	14,118	7%	24,399	7%	28,709	7%
10-14 years	11,517	6%	12,791	6%	23,983	7%	27,581	7%
15-24 years	27,435	15%	31,205	15%	46,183	14%	52,964	13%
25-44 years	57,043	32%	66,962	32%	105,770	31%	123,509	31%
45-59 years	33,597	19%	39,003	19%	67,446	20%	79,819	20%
60-74 years	17,319	10%	20,585	10%	33,297	10%	39,076	10%
75 and over	9,528	5%	10,810	5%	15,324	5%	17,740	5%
Total Population	180,658	100%	210,376	100.0%	339,486	100%	398,404	100%
Median Age	34.5		35.3		35.6		36.1	

Source: U.S. Census Bureau 2000 summary file 3; Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006

\* percentages may not add up to 100% due to rounding

## INCOME CHARACTERISTICS

### Summary of Findings

Median incomes increased by 31 percent in the City of Reno. Income levels are set to determine eligibility for housing assistance programs. The U.S. Department of Housing and Urban Development publishes income levels that are used to determine eligibility for housing programs. HUD defines low income as 80 percent of median household income and below and moderate-income as 80 percent to 120 percent of median household income. Approximately 42 percent of all households fall into the less than 80 percent category and about 18 percent fall into the 80 percent to 120 percent category. Another 40 percent of all households are in the above moderate category (more than 120 percent of median household income). The poverty rate for the total population of Reno is 8 percent. Adults have the highest rate of poverty (5 percent) followed by children (3 percent).

### Household Income

Median income is the mid-point of all incomes for a given area. It provides a benchmark to measure the incomes of the population as a whole and to establish housing affordability. In 2000, the median household income in the City of Reno was \$40,530 and \$45,815 in Washoe County. **Table A-4** illustrates the growth in income by 2005. The median household income in Reno increased by 31 percent and by 32 percent in the County.

**Table A-4**  
**City-County Household Income\***

	Reno				Washoe County			
	2000		2005		2000		2005	
	Number	% of all households	Number	% of all households	Number	% of all households	Number	% of all households
Less than \$14,999	11,007	15%	9,679	11%	15,871	12%	13,801	9%
\$15,000 - \$24,999	10,398	14%	9,421	11%	16,045	12%	14,552	9%
\$25,000 - \$34,999	10,202	14%	10,468	12%	16,663	13%	15,755	10%
\$35,000 - \$49,999	13,100	18%	13,666	16%	23,264	18%	23,365	15%
\$50,000 - \$74,999	14,492	20%	16,761	19%	28,445	22%	37,335	24%
\$75,000 - \$99,999	7,015	10%	13,557	16%	14,870	11%	28,183	18%
\$100,000 - \$149,999	4,884	7%	7,517	9%	10,732	8%	15,662	10%

## Appendix A–Housing Needs Assessment

	Reno				Washoe County			
	2000		2005		2000		2005	
	Number	% of all households	Number	% of all households	Number	% of all households	Number	% of all households
\$150,000 or more	2,761	4%	3,409	4%	6,302	5%	7,916	5%
Total Households	73,859	100%	86,477	100%	132,192	100%	156,540	100%
Median Household Income	\$40,530		\$52,918		\$45,815		\$60,489	

Source: Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006, U.S. Census Bureau summary file 3

\* percentages may not add up to 100% due to rounding

Traditionally, housing assistance programs have served households earning much less than the median. The U.S. Department of Housing and Urban Development housing assistance programs are geared toward extremely low- (less than 30% of median income) and very low-income (30%-50% of median income) households. With the gap between incomes and housing prices growing, more attention has been placed upon programs for households with incomes closer to the median income. In the Reno area, housing discussion center on two main income groups; “affordable”, which are those households earning less than 80 percent of the median income and “workforce”, which are those households making between 80 and 120 percent of the median income.

According to the Nevada Small Business Development Center, Bureau of Business and Economic Research’s 2005 estimates, the City’s 2005 median income was \$52,918. The “affordable” group is those households earning 80 percent of that or \$42,334 and the “workforce” group are those households earning between \$42,334 and 120 percent of the median or \$63,501. **Table A-5** shows these income levels.

**Table A-5**  
**Percentage of Reno residents in Low-income categories<sup>1\*</sup>**

Income Category	% of total households
Affordable (>80%)	42%
Workforce (80% - 120%)	18%
Above Moderate (>120%)	40%

Source: Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006

<sup>1</sup>The percentages of households in each income category are approximations based on the number of households in each income level as they best fit into the income categories.

\* percentages may not add up to 100% due to rounding

**Table A-6** displays the 2006 HUD Income Limits for the Reno-Sparks area. These limits are used to determine eligibility for HUD funded housing programs. Since many federal programs are geared toward families, HUD considers the median family income. HUD’s estimate of median family income is \$62,800 for the area. The table illustrates the breakdown of income levels by household size. The HUD limits would be used by any federally funded program such as Public Housing, Housing Choice Vouchers (Section 8), and Community Development Block Grant (CDBG) funds. The Regional Housing Task Force limits are used to analyze local trends and to develop new housing programs.

**Table A-6  
HUD 2006 Income Limits**

	<b>1 Person</b>	<b>2 Persons</b>	<b>3 Persons</b>	<b>4 Persons</b>	<b>5 Persons</b>	<b>6 Persons</b>	<b>7 Persons</b>	<b>8 Persons</b>
Median Family Income (2006)	\$62,800							
30% of Median	\$13,400	\$15,300	\$17,200	\$19,100	\$20,650	\$22,150	\$23,700	\$25,250
Very Low Income (30%-50%)	\$22,300	\$25,500	\$28,650	\$31,850	\$34,400	\$36,950	\$39,500	\$42,050
Low-Income (50%-80%)	\$35,650	\$40,750	\$45,850	\$50,950	\$55,050	\$59,100	\$63,200	\$67,250

Source: HUD data sets [huduser.org/datasets/il/il06/index.html](http://huduser.org/datasets/il/il06/index.html)

### **Poverty**

Poverty is a federally defined level of income needed for minimum subsistence. The U.S. Census Bureau definition considers gross income but not any non-cash benefits in its poverty figures. Poverty thresholds are set to help determine poverty rates, which are a percentage of people or families who are below the poverty level. The thresholds are dollar amounts adjusted annually for inflation and by household size. A person or family is considered in poverty if their income is below the threshold amount. The poverty rate illustrates the proportion of a population that is in poverty.

**Table A-7** provides the most recently published poverty thresholds established by the Housing and Household Statistics Division of the U.S. Census Bureau. These thresholds are used by census takers to determine poverty information for census documents. These thresholds are not used to determine HUD funded program eligibility.

**Table A-7  
Federal Poverty Thresholds (2005)**

Size of Family Unit	Related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
<b>One person (unrelated individual)</b>									
Under 65 years	10,160								
65 years and over	9,367								
<b>Two persons.</b>									
Householder under 65 years	13,078	13,461							
Householder 65 years and over...	11,805	13,410							
Three persons	15,277	15,720	15,735						
Four persons	20,144	20,474	19,806	19,874					
Five persons	24,293	24,646	23,891	23,307	22,951				
Six persons	27,941	28,052	27,474	26,920	26,096	25,608			
Seven persons	32,150	32,350	31,658	31,176	30,277	29,229	28,079		
Eight persons	35,957	36,274	35,621	35,049	34,237	33,207	32,135	31,862	
Nine persons or more	43,254	43,463	42,885	42,400	41,603	40,507	39,515	39,270	37,757

Source: U.S. Census Bureau, Housing and Household Economic Statistics Division

Poverty rates represent the proportion of the entire population that is below the poverty level. **Table A-8** shows the most recent poverty figures for Reno and Washoe County. The poverty rate for the City of Reno was 8 percent, which was lower than the County’s rate of 10 percent. Poverty rates for the groups listed in **Table A-8** were similar in Reno as in the County. The exceptions are for adults and female-headed households, which were slightly higher in the county.

**Table A-8  
Local Poverty Rates\***

	Reno			Washoe Co.			Nevada		
	Above Poverty Level	Below Poverty Level	Poverty Rate	Above Poverty Level	Below Poverty Level	Poverty Rate	Above Poverty Level	Below Poverty Level	Poverty Rate
Children (under 18 years)	15,646	1,785	3%	71,931	10,686	3%	429,491	69,777	4%
Adults (18-64)	38,644	3,146	5%	196,568	20,482	6%	1,128,991	120,624	6%
Senior (65+)	6,155	359	1%	32,595	2,150	1%	198,781	15,284	1%
Male Only Householder	4,078	478	1%	19,383	3,333	1%	114,670	23,154	1%
Female Only Householder	7,462	1,621	2%	31,486	8,592	3%	198,440	58,817	3%
<b>Total Population</b>	60,445	5,290	8%	301,094	33,318	10%	1,757,263	205,685	11%

Source: 2000 Census Summary File 3

\* percentages may not add up to 100% due to rounding

## **EMPLOYMENT TRENDS**

### **Summary of Findings**

While unemployment rates in the Reno metropolitan area have improved over the past five years, many of the area’s growing occupations offer wages that fall into the affordable and workforce categories making it hard for families to afford housing. The median wage for all occupations in the Reno area is \$13.91 per hour. Based upon the wages of many of the available jobs in the region, the City of Reno will consider programs to help low- and moderate-income members of the workforce to enter into homeownership.

### **Area Employment Trends**

Analyzing job growth trends can be helpful when planning for housing needs. According to the Nevada Department of Employment, Training, and Rehabilitation, the median wage for all occupation industries for the Reno area is \$13.91 per hour. This median wage includes high salaried jobs that are not necessarily plentiful in the region. **Table A-9** displays the occupations that are growing in the Reno area. The table shows the growth rate and the average hourly wage for each occupation. The table is divided by the income categories being used in the Reno area to discuss affordable and workforce housing.

**Table A-9  
Reno Area Growing Occupations by Income Group\***

<b>Occupation</b>	<b>Total % Change 2004- 2014</b>	<b>Average Annual Growth Rate</b>	<b>Average Hourly Wage</b>	<b>Average Yearly Wage</b>
<b>Affordable/Low Income ( &lt; 80% AMI or &lt; \$42,334)</b>				
Combined Food Preparation and Serving Workers, Including Fast Food	34%	4%	\$8.17	\$16,993.60
Child Care Workers	24%	4%	\$8.22	\$17,097.60
Retail Salespersons	32%	3%	\$8.94	\$18,595.20
Preschool Teachers, Except Special Education	54%	4%	\$9.98	\$20,758.40
Pharmacy Aides	47%	3%	\$10.22	\$21,257.60
Landscaping and Groundskeeping Workers	51%	4%	\$10.79	\$22,443.20
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	50%	6%	\$10.82	\$22,505.60
Home Health Aides	65%	5%	\$10.87	\$22,609.60
Office Clerks, General	30%	2%	\$11.41	\$23,732.80
Social and Human Service Assistants	61%	5%	\$11.62	\$24,169.60

## Appendix A–Housing Needs Assessment

Occupation	Total % Change 2004-2014	Average Annual Growth Rate	Average Hourly Wage	Average Yearly Wage
Customer Service Representatives	54%	4%	\$12.37	\$25,729.60
Cabinetmakers and Bench Carpenters	78%	6%	\$13.31	\$27,684.80
Pharmacy Technicians	55%	4%	\$13.87	\$28,849.60
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	54%	2%	\$14.58	\$30,326.40
Medical Assistants	64%	5%	\$14.87	\$30,929.60
Medical Records and Health Information Technicians	51%	7%	\$15.20	\$31,616.00
Bill and Account Collectors	56%	4%	\$15.54	\$32,323.20
Substance Abuse and Behavioral Disorder Counselors	54%	3%	\$19.34	\$40,227.20
Social and Community Service Managers	49%	4%	\$19.95	\$41,496.00
Surgical Technologists	54%	4%	\$20.18	\$41,974.40
Employment, Recruitment, and Placement Specialists	51%	3%	\$17.47	\$36,337.60
Dental Assistants	47%	4%	\$16.55	\$34,424.00
<b>Workforce (80% - 120% AMI or \$42,334 - \$63,501)</b>				
Forensic Science Technicians	56%	2%	\$20.45	\$42,536.00
Physician Assistants	67%	3%	\$20.48	\$42,598.40
Police, Fire, and Ambulance Dispatchers	39%	34%	\$20.57	\$42,785.60
Cardiovascular Technologists and Technicians	48%	6%	\$20.65	\$42,952.00
Physical Therapist Assistants	47%	5%	\$20.69	\$43,035.20
Network and Computer Systems Administrators	59%	5%	\$22.62	\$47,049.60
Database Administrators	55%	6%	\$25.39	\$52,811.20
Network Systems and Data Communications Analysts	67%	6%	\$26.72	\$55,577.60
Industrial Engineers	55%	3%	\$28.84	\$59,987.20
Registered Nurses	51%	4%	\$30.07	\$62,545.60

Source: Nevada Department of Employment, Training and Rehabilitation, March 2007

## Appendix A–Housing Needs Assessment

**Table A-10** shows labor force trends for the Reno-Sparks Metropolitan Statistical Area including Washoe County and Nevada. Beginning in 2005, the annual rates across the state have held steady. In the Washoe County area, the annual unemployment rate has remained at 4 percent. These rates are less than the national average, which was 4.6 for 2006, according to the Bureau of Labor Statistics.

**Table A-10**  
**Five Year Labor Force Statistics**

Year	Labor Force	Unemployment	Unemployment Rate
<b>Reno-Sparks MSA</b>			
2006	218,285	8,665	4.0%
2005	209,949	8,341	4.0%
2004	208,390	8,795	4.2%
2003	205,195	9,485	4.6%
2002	203,710	10,087	5.0%
<b>Nevada</b>			
2006	1,272,175	51,841	4.1%
2005	1,215,957	49,333	4.1%
2004	1,178,889	53,735	4.6%
2003	1,144,529	60,203	5.3%
2002	1,121,862	63,813	5.7%

Source: Nevada Department of Employment, Training and Rehabilitation, March 2007

**Table A-11** shows the ten largest employers in Reno according to the State Department of Employment. Many of the jobs available from these employers would pay wages that would fall within the “affordable” or “workforce” income categories defined by the Regional Housing Task Force. Many of the jobs that would be available through these employers are also essential to the vibrancy of the community. This is more reason to focus upon ensuring the availability of affordable and workforce housing in Reno and the surrounding areas.

**Table A-11  
Ten Largest Employers**

<b>Employer</b>	<b>Number of Employees</b>
Washoe County School District	8000-8499
University of Nevada-Reno	3500-3999
Washoe County	3000-3499
International Game Technology	2500-2999
Washoe Medical Center, INC (Reno)	2000-2499
Circus El Dorado Joint Venture	2000-2499
City of Reno	2000-2499
Peppermill Casinos	2000-2499
Golden Road Motor Inn Inc	1500-1999
Caesars World Business Service	1500-1999

Source: Nevada Department of Employment, Training and Rehabilitation, March 2007

## **SPECIAL NEEDS GROUPS**

### **Summary of Findings**

The senior segment of the population has grown in past years and will continue to grow as people live longer. Approximately one third of the city’s population has a disability of some kind. These two populations tend to have specific housing needs. Some subsidized housing is available for seniors and disabled persons but the long waiting lists are indicative of the demand for such housing. Female-headed households and large families also have special housing needs. Female-headed households comprise 18 percent of all families and 22 percent of those families earn incomes below the poverty line. Large families represent 16 percent of all families in Reno. They require larger homes, which are not necessarily affordable to lower income families. Homelessness is the final special needs housing topic. There are many causes of homelessness and many at-risk of homelessness each year. It is predicted that nearly 7,000 people in Washoe County are at-risk of homelessness each year. Nearly 2,500 homeless individuals were counted in 2005. Among those at-risk are families with children many of which survive by renting rooms in weekly rent motels. The 2004 Continuum of Care Gap Analysis revealed a need for 1,000 more shelter beds to serve the area’s homeless population. Based upon these trends, the City of Reno will work to establish programs that offer support for the needs of seniors, disabled person, and other special needs groups.

### **Seniors**

The senior segment of the population continues to grow. As the “baby boom,” generation moves into this age group there will become more need for housing that meets the needs of senior citizens. The older baby boomers are currently in the 55+

## Appendix A–Housing Needs Assessment

group, and as **Table A-12** shows, this group represents the largest percentage of the senior population in Reno and Washoe County.

As more members of the baby boom generation age (born 1946-1964), there will be an increased need for senior housing and care services. Senior housing and care services are listed in **Table A-15**. Subsidized housing units currently available to the senior in Reno are listed in **Table A-45** but subsidized units often have waiting lists. There are a total of 758 subsidized units in senior-only housing projects (this includes Housing Authority and other developments). Seniors are eligible for residency at many other subsidized housing projects that are also open to low-income disabled persons, families, and singles.

Washoe County completed a Strategic Plan for Senior Citizens in 2006. Key informant interviews and other research indicated a need for many senior services including geriatric trained physicians and daily in-home help. In addition, many seniors expressed concern for a system biased toward seniors aging in their own homes. The survey performed resulted in a set of goals and objectives.

The Strategic Plan’s housing goal is to “reduce the number of seniors living in isolation and unsupported by 15 percent and increase affordable housing options in Washoe County by 25 percent by 2016”. The four objectives to accomplish this goal are:

- develop neighborhood senior resource centers that link seniors to nearby services vital for independence;
- increase the resources available for supportive home care services that assist seniors to live independently;
- support the development of affordable senior housing options, including low-income assisted living that are close to services and transportation; and
- support and promote public policy that increases access to supportive home care services.

Like other special needs and low-income groups, senior citizen housing needs focus on access to services.

**Table A-12**  
**Senior Population Growth\***

	Reno			Washoe Co.		
	2000	2005	Growth	2000	2005	Growth
55+	15,302	17,891	17%	30,480	36,130	19%
65+	10,946	12,659	16%	20,358	23,467	15%
75+	9,528	10,810	14%	15,324	17,740	16%
<b>Total Population</b>	182,433	210,376	15%	339,486	398,404	17%

Source: 2000 U.S Census summary file 3and Nevada Department of Employment, Training and Rehabilitation

\* percentages may not add up to 100% due to rounding

**Persons with Disabilities**

Persons with disabilities may require housing with special features such as wheelchair ramps, special doorbells, roll-in showers, high-set toilets, or other adaptive devices or medical equipment. The disabled population in 2000 represented 30 percent of the total population in Reno and 29 percent for the County. **Table A-13** shows the disabled population by age group for Reno and Washoe County.

**Table A-13  
Disabled Population by Age (Non-Institutionalized)**

	<b>Reno</b>		<b>Washoe County</b>	
	<b>Number</b>	<b>% of total</b>	<b>Number</b>	<b>% of total</b>
5 to 15 years	1,218	2%	2,887	3%
16-64 years	38,954	71%	69,744	71%
65 years and over	14,435	26%	25,233	26%
		<b>% of total</b>		<b>% of total</b>
Total disabilities among population	54,607	30%	97,864	29%
Total Population	182,433	100%	339,486	100%

Source: 2000 Census Summary file 3

**Table A-14** shows the types of disabilities in the community. The most common disabilities in Reno and Washoe County as a whole are employment disabilities, which comprise nearly thirty percent of the total disabled population. The next largest group is physical disabilities followed by “go-outside-home” disabilities, which are disabilities that make it difficult to go outside the home alone.

**Table A-14  
Types of Disabilities\***

	Reno		Washoe Co.	
	Number	% of total disabled	Number	% of total disabled
Sensory disability	5,905	11%	10,583	11%
Physical disability	12,952	24%	23,131	24%
Mental disability	6,368	12%	11,647	12%
Self-care disability	2,992	6%	5,505	6%
Go-outside-home disability	10,188	19%	17,733	18%
Employment disability	16,202	30%	29,265	30%
Total disabled population	54,607	100.0%	97,864	100%

Source: 2000 Census Summary File 3

\* percentages may not add up to 100% due to rounding

One third of the City of Reno’s population has a disability of some kind. Many people have special housing needs as a result of their disabilities. They may have limited incomes and need assisted housing. They may also require special features to help them do every day activities in their homes.

As **Table A-44** shows, a total of 1,247 units in subsidized housing projects in the City of Reno designated for disabled persons. Of that total, only two complexes are disabled persons-only. Other projects are open to the disabled but are also open to seniors (701 units), families (397 units) and seniors and families (128). These projects are usually at 100 percent occupancy and have long waiting lists. Consequently, the actual availability of low-income housing for the disabled is limited.

**Families with Female Heads of Household**

Female-headed households are considered a special needs group because they tend to be elderly women or single mothers, thus having lower incomes. Other than housing, single mothers also have related needs such as affordable and accessible child care, access to public transportation and other services. This can limit the affordable housing options available for female headed households.

## Appendix A–Housing Needs Assessment

As shown in **Table A-17**, female headed families make up 17 percent of the all families in Reno and 15 percent of all families in the County. Of all families, 4 percent of them are in poverty in Reno and 19 percent are below the poverty line in the County.

**Table A-17**  
**Female Headed Families\***

	Reno		Washoe Co.		Nevada	
	Number	% of families	Number	% of families	Number	% of families
Total Female Headed Families	7,342	17%	12,866	15%	80,819	16%
Female Headed Families in Poverty	1,590	4%	2,426	3%	16,598	3%
Other families	33,076	79%	69,226	82%	405,091	81%
Total Families	42,008	100%	84,518	100%	502,508	100%

Source: 2000 Census Summary File 3

**Table A-18** shows the number of people in female-headed families that are above and below the poverty level. One quarter of the population living in female-headed family households subsists below the poverty line.

**Table A-18**  
**Population in Female Headed Households in poverty\***

	Reno			Washoe Co.			Nevada		
	Above Poverty Level	Below Poverty Level	Poverty Rate	Above Poverty Level	Below Poverty Level	Poverty Rate	Above Poverty Level	Below Poverty Level	Poverty Rate
Female Only Householder	16,755	5,711	4%	31,486	8,592	3%	198,440	58,817	3%
Total Population	154,699	22,232	14%	301,094	33,318	10%	1,757,263	205,685	11%

Source: 2000 Census Summary file 3  
 \* percentages may not add up to 100% due to rounding

## Appendix A–Housing Needs Assessment

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### Large Families

A large family is one with five or more family members. Large families are considered a special needs group because they need larger homes, but do not necessarily make enough money to afford many of the larger homes available. Those homes are luxury homes out of the range of affordability for lower income families. Thus, a large family may struggle to find suitable affordable housing. The number of large families is shown in **Table A-19**. The number of large families in 2000 was 6,680, which was 16 percent of all family households. Washoe County has similar percentages of large families. Overall, five-person families are the most common large family size.

## Appendix A–Housing Needs Assessment

**Table A-19  
Large Family Households\***

	Reno		Washoe Co.		Nevada	
	Number	% of all family households	Number	% of all family households	Number	% of all family households
5-person	3,822	9%	7,979	9%	50,399	10%
6-person	1,593	4%	3,307	4%	23,244	5%
7-or-more person	1,265	3%	2,336	3%	15,844	3%
Total Large Families	6,680	16%	13622	16%	89487	18%
Total Other Families	28,648	68%	-	-	-	-
Total Family households	42,008	100%	84,518	-	502,508	-

Source: 2000 Census Summary file 3

### Homeless

Homelessness can be caused by a number of factors. Job loss, mental illness, substance abuse, lack of affordable health care, domestic violence, and lack of affordable housing options are all factors that can lead to homelessness. The Reno Area Alliance for the Homeless (RAAH) estimates nearly 7,000 people in the County experience homelessness or are at risk of becoming homeless each year. RAAH also has seen an increase of approximately 400 people per year in need of emergency housing assistance. While many homeless are single men, families are becoming a larger percentage of the homeless. A 2005 point in time survey showed that 2,430 (.69 percent of the population) were homeless in Washoe County. Many people at risk of becoming homeless live in weekly rate motels unable to secure housing that is more permanent. A survey performed in January 2005 found approximately 4,000 people living in weekly motels including 87 families. The survey also indicated an increase in the use of weekly motels from the 2002 survey. Weekly motels are not appropriate affordable housing options, as they do not include kitchen facilities; they tend to attract criminal activity and are not necessarily cheaper than traditional apartments.

The approach to homelessness in Reno and Washoe County is a continuum of care model. One part of this process analyzes gaps in housing need. The 2004 Continuum of Care Housing Gaps Analysis found a need for shelter beds of 1,000. The housing continuum begins with emergency housing, which is for short-term immediate assistance for individuals and families. The next type of housing is transitional housing, which is longer-term housing that is supposed to allow an individual or family to prepare to get into permanent housing. The last type of housing on the continuum is permanent supportive housing. This involves long-term affordable housing and services that increase an individual's or family's self-sufficiency. **Table A-20** shows the continuum of housing services available in the Reno area. The housing goal in the 10-Year Plan to End Homelessness is to improve the continuum of available housing in Washoe County so that homeless individuals and families have access to appropriate housing resources, ultimately establishing a "housing first" model. The objectives to accomplish this goal is to create more emergency/transitional shelter in the short-term, increase the supply of permanent-supportive and affordable housing, increase the short-term and long-term resources available to assist in the prevention and recovery from homelessness, and evaluate and advocate for changes in policies at the local, State, and Federal level to impact the community's ability to meet the housing needs of individual and families who are homeless.

**Table A-20  
Shelters in Washoe County**

<b>Emergency Shelters</b>	<b>Family Units</b>	<b>Family Beds</b>	<b>Individual Beds</b>	<b>Total Year-Round</b>
The Children's Cabinet	0	0	6	6
Committee to Aid Abused Women	7	21	0	21
Reno Sparks Gospel Mission	4	12	155	167
ReStart	25	97	0	97
United Way	0	0	0	0
Interfaith Hospitality Network	5	14	0	14
Safe Embrace	1	10	0	10
Ridge House	0	0	6	6
<b>Totals</b>	<b>42</b>	<b>154</b>	<b>167</b>	<b>321</b>
Under Construction	na	na	na	na
Reno Emergency Shelter	0	0	150	150
<b>Transitional Housing</b>	<b>Family Units</b>	<b>Family Beds</b>	<b>Individual Beds</b>	<b>Total Year-Round</b>
Bristlecone Family Resources	0	0	26	26
Center Street Mission	0	10	12	10
Center Street Mission	0	0	45	45
Casa De Vida	0	0	8	8
Committee to Aid Abused Women	7	21	0	21
NNAMHS	0	0	15	15
Grace House	0	0	15	15
Reno Sparks Gospel Mission	0	0	116	116
Step 1	0	0	16	16
Step 2	25	71	20	71
<b>Totals</b>	<b>32</b>	<b>102</b>	<b>273</b>	<b>333</b>

<b>Permanent Supportive Housing</b>	<b>Family Units</b>	<b>Family Beds</b>	<b>Individual Beds</b>	<b>Total Year-Round</b>
Northern Nevada Adult Mental Health Services	0	0	218	218
Northern Nevada Community Housing Resource	9	28	0	28
ReStart	0	0	70	70
Washoe County Social Services	0	0	55	55
<b>Totals</b>	<b>9</b>	<b>28</b>	<b>343</b>	<b>371</b>

Source: City of Reno 2005-2009 Consolidated Plan

## **HOUSING CHARACTERISTICS**

### **Summary of Findings**

Half of the city’s housing stock is single-family dwellings built since the 1950’s. Most were built before 1990. More people rent (49 percent) than own (44 percent) according to the 2000 U. S. Census Bureau but that gap closed somewhat by 2005 but there were still more renters than owners. Most homes have four rooms or less (includes kitchen, living room, bathrooms, and bedrooms) and 30 percent of all homes have two bedrooms as compared to three bedrooms (27 percent) or one bedroom (21 percent). Approximately 10 percent of all household are overcrowded, 6 percent are severely overcrowded, and most of these are renter households. The City will use this information to form a housing rehabilitation program that will help preserve the existing housing stock and ensure a high quality of living for its residents.

### **Housing Composition**

The Nevada Revised Statute stipulates that a Housing Needs Assessment includes an inventory of current housing conditions. These current conditions are then considered when goals and policies are formed in the Housing Plan. The majority of the houses in Reno are single-family homes. This includes both detached homes that are bordered by open space on all sides and attached homes, which are one –unit structures that have one or more wall extending from ground to roof separating it from adjoining structures. The balance of housing units is comprised of multi-family structures that make up approximately 44 percent of the housing stock. Structures with 50 or more units are the most prevalent (12 percent) among the multi-family units. Mobile homes represent 6 percent of housing units and boats, RV’s, and vans only .3 percent. **Table A-21** illustrates the percentages of the different types of housing in Reno, Washoe County, and Nevada.

### **Age of Housing Stock**

**Tables A-22** illustrates the age of the housing stock in Reno. The majority of homes in Reno were built post World War II. Nearly fifty percent of existing homes were built in 1960’s, 1970’s, and 1980’s. There was a slump in the 1990’s but the percentage of homes built since 1995 has continued to climb. Similar trends occurred in greater Washoe County.

**Table A-21  
Housing Unit Types\***

	Reno		Washoe Co.		Nevada	
	Number	Percent	Number	Percent	Number	Percent
1 Single-family	39,930	50%	84327	58%	477414	57%
2 units	2,407	3%	3,651	3%	12,712	2%
3 or 4	5,506	7%	8,407	6%	60,473	7%
5 to 9	8,038	10%	10,883	8%	65,837	8%
10 to 19	5,085	6%	6,719	5%	44,593	5%
20 to 49	4,488	6%	5,327	4%	23,674	3%
50 or more	9,451	12%	11,748	8%	59,031	7%
Mobile home	4,426	6%	12,386	9%	79,861	10%
Boat, RV, van, etc.	261	0.3%	460	0.3%	3,862	1%
<b>Total Housing Units</b>	<b>79,592</b>	<b>100%</b>	<b>143,908</b>	<b>100%</b>	<b>827,457</b>	<b>100%</b>

Source: 2000 Census Summary File 3

\* percentages may not add up to 100% due to rounding

**Table A-22  
Age of Housing Stock\***

	Reno		Washoe County	
	2005	Percent	2005	Percent
Built April 2000 to October 2005	12,851	14%	26,550	16%
Built 1995 to March 2000	11,976	13%	24,234	14%
Built 1990 to 1994	7,635	8%	15,174	9%
Built 1980 to 1989	14,923	16%	29,661	17%
Built 1970 to 1979	18,527	20%	36,005	21%
Built 1960 to 1969	11,969	13%	18,657	11%
Built 1950 to 1959	7,480	8%	10,400	6%
Built 1940 to 1949	4,061	4%	5,089	3%
Built 1939 or earlier	3,719	4%	4,689	3%
<b>Total Housing Units</b>	93,142	100%	170,458	100%

Source: Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006

\* percentages may not add up to 100% due to rounding

### Housing Occupancy and Tenure

In 2000, there were 74,023 housing units and approximately 7 percent of those units were vacant. A rate higher than five percent may indicate a large amount of dilapidated housing units left empty. **Table A-23** exhibits the tenure of all the occupied housing units in the City of Reno. According to the 2000 Census, 44 percent of all housing units were owner occupied. This percentage increased slightly by 2005 to 46 percent. Likewise, the percentage of renter occupied units in 2000 (49 percent) declined slightly to 47 percent in 2005. The table also shows the trends in tenure for the county and how the vacancy rates increased.

**Table A-23  
Tenure of Occupied Units\***

	Reno				Washoe County			
	2000		2005		2000		2005	
	Number	% of Total units	Number	% of Total units	Number	% of Total units	Number	% of Total units
Owner Occupied	35,282	44%	42,466	46%	78,318	54%	94,396	55%
Renter Occupied	38,741	49%	44,012	47%	53,766	37%	62,144	37%
Total Occupied Housing Units	74,023	93%	86,477	93%	132,084	92%	156,540	92%
Total Vacant Units	5,569	7%	6,664	7%	11,824	8%	13,918	8%
Total Housing Units	79,592	100%	93,141	100%	143,908	100%	170,452	100%

Source: Nevada Small Business Development Center, Bureau of Business and Economic Research, 2006

\* percentages may not add up to 100% due to rounding

### Housing Unit Size

It is important for a range of housing sizes be available to accommodate different family sizes and lifestyles. **Table A-24** shows that two bedroom homes are most common representing 30 percent of the housing stock. Three bedroom homes are the second most common representing 27 percent of the housing stock. As shown in **Table A-25**, about half (51 percent) of the Reno housing stock has 4 rooms or less. A room is counted by the Census if it is finished and if the whole room is used for living purposes. Countable rooms include living rooms, bathrooms, full kitchens, and bedrooms. The remaining stock is made up of moderate-sized and larger homes.

As shown in **Table A-26**, Reno has a higher percentage of one- (33 percent) and two-person households (36 percent) than either the County or the State. This may be attributed to a larger population of young professionals and college students. This information suggests a lack of somewhat older and/or smaller homes that would be affordable to lower-income households. As older housing stock is replaced with newer homes, it is important to maintain the variety of housing unit sizes to control affordability.

**Table A-24  
Housing Unit Size\***

	Reno		Washoe Co.		Nevada	
	Number	% of all units	Number	% of all units	Number	% of all units
Studio	7,339	9%	9,153	6%	39,766	5%
1 bedroom	16,885	21%	23,318	16%	125,654	15%
2 bedrooms	23,442	30%	36,672	25%	240,159	29%
3 bedrooms	21,439	27%	51,035	35%	287,007	35%
4 bedrooms	8,681	11%	19,549	14%	111,206	13%
5 or more bedrooms	1,806	2%	4,181	3%	23,665	3%
Total Housing Units	79,592	100%	143,908	100%	827,457	100%

Source: 2000 Census summary file 3

\* percentages may not add up to 100% due to rounding

**Table A-25  
Rooms per Housing Unit\***

	Reno		Washoe County		Nevada	
	Number	% of total units	Number	% of total units	Number	% of total units
1 room	5,964	8%	7,082	5%	29,240	4%
2 rooms	7,793	10%	10,789	8%	56,296	7%
3 rooms	12,072	15%	17,496	12%	99,965	12%
4 rooms	14,585	18%	22,176	15%	141,257	17%
5 rooms	13,322	17%	27,130	19%	175,072	21%
6 rooms	11,188	14%	25,357	18%	148,612	18%
7 rooms	7,153	9%	16,274	11%	88,306	11%
8 rooms	4,110	5%	9,727	7%	49,682	6%
9 or more rooms	3,405	4%	7,877	6%	39,027	5%
Total Housing Units	79,592	100%	143,908	100%	827,457	100%

Source: 2000 Census summary file 3

\* percentages may not add up to 100% due to rounding

**Table A-26  
Reno Household Size\***

	Reno		Washoe County		Nevada	
	Number	%	Number	%	Number	%
1-person	24,063	33%	35,646	27%	186,783	25%
2-person	24,383	36%	45,027	34%	259,300	35%
3-person	10,863	15%	21,129	16%	120,621	16%
4-person	8,034	11%	17,001	13%	96,611	13%
5-person	3,822	5%	7,863	6%%	50,354	7%
6-person	1,593	2%	3,036	2%	22,093	3%
7 or more person	1,265	2%	2,382	2%	15,403	2%
Total	74,023	100%	132,084	100%	751,165	100%

Source: 2000 Census summary file 3

\* percentages may not add up to 100% due to rounding

### Overcrowded Housing

Reno does not appear to have a serious problem with overcrowded housing. Overcrowding is defined as more than 1.01 persons per room by the U.S. Census Bureau. Severe overcrowding occurs when there are more than 1.5 persons per room. **Table A-27** shows the extent of overcrowding for the City, County, and State for both owner- and renter-occupied housing. Ten percent, or just over of all occupied housing units are overcrowded. About 6 percent of these are considered severely overcrowded. The majority of those households are renter-occupied (8 percent).

**Table A-27  
Overcrowded Housing\***

	Reno		Washoe Co.		Nevada	
	Number	% of all occupied units	Number	% of all occupied units	Number	% of all occupied units
Owner occupied total	35,282	48%	78,318	59%	457,245	61%
0.50 or less	26,184	35%	56,916	43%	320,720	43%
0.51 to 1.00	7,545	10%	18,081	14%	114,868	15%
1.01 to 1.50	860	1%	1,907	1%	12,520	2%
1.51 to 2.00	405	1%	984	1%	6,575	1%
2.01 or more	288	0.4%	430	0%	2,562	0%
Renter occupied total	38,741	5%	53,766	41%	293,920	39%
0.50 or less	18,833	25%	25,993	20%	143,623	19%
0.51 to 1.00	14,259	19%	19,932	15%	107,667	14%
1.01 to 1.50	2,160	3%	3,100	2%	19,532	3%
1.51 to 2.00	2,124	3%	2,888	2%	14,848	2%
2.01 or more	1,365	2%	1,853	1%	8,250	1%
Total Occupied Units	74,023	100%	132,084		751,165	

Source: 2000 Census summary file 3

\* percentages may not add up to 100% due to rounding

## **HOUSING COSTS**

### **Summary of Findings**

Single family housing prices generally increased 74 percent between 2003 and 2006. In 2007, the average price decreased by 30 percent from the 2006 average price. There is a lack of large rental housing stock, particularly apartments and town homes. What larger stock is available appears to be pricier new construction homes. Another affordable housing option in Reno is mobile homes. Mobile home prices are not necessarily cheap when the price of the unit and of renting (or buying) land for the mobile home is considered. However, they are in most cases more affordable than site built homes and allow for newer homes at lesser prices. The vacancy rate at mobile home parks is very low, which indicates a demand for this type of housing. Finally, approximately one third of Reno residents are cost burdened by their monthly housing costs. This is more of a problem for renters as nearly 40 percent of them are cost burdened compared to only 28 percent of home owners. The City will address housing

## Appendix A–Housing Needs Assessment

affordability concerns by considering rehabilitation programs that will preserve the more affordable housing stock in the city. The city will work to maintain a regulatory structure that allows various forms of affordable housing by-right and preserved existing affordable housing.

### Single Family Home Costs

Home sales prices were consistently rising through 2006 and began to decrease in 2007. Recent sales prices through December 2007 are shown in **Tables A-28 and A-29**. New home prices increased steadily through the past five years until 2007. Three bedroom homes sold the most in 2007 with an average price of \$307,997.

**Table A-28**  
**Reno New Construction Prices 2003 – 2007, All Bedrooms**

	Minimum	Maximum	Average
2007	95,000	1,359,487	358,919
2006	67,500	2,973,500	498,186
2005	65,000	2,271,126	410,522
2004	45,000	3,159,500	335,471
2003	27,000	2,341,731	286,917

Source: Washoe County Assessor, April 2008

**Table A-29**  
**Reno New Construction Prices By Bedroom, 2007**

Number of Bedrooms	Number of Units Sold	Minimum	Maximum	Average
1	2	278,465	284,946	281,706
2	49	95,000	462,262	285,756
3	210	119,000	539,184	307,997
4	142	125,000	1,271,083,	413,251
5	34	288,600	1,359,487	536,572
6	3	360,000	814,403	527,555
<b>Total:</b>	440			

Source: Washoe County Assessor, April 2008

**Tables A-30 and A-31** shows prices for resale homes. The minimum prices for resale homes are lower than for new homes. This is most likely do to the buying and selling of

## Appendix A–Housing Needs Assessment

used mobile homes. Between 2003 and 2006, resale home prices also increase but not as much as new construction homes. The average price decrease between 2006 and 2007 was also less significant.

Similar to new homes sales, most people bought a three bedroom homes in 2007. More resale homes were sold in general than new homes, perhaps because they are more affordable in general. The number of smaller resale homes sold also indicates that newer homes are larger and that options for one or two bedroom homes are limited to the existing housing stock.

**Table A-30**  
**Reno Resale Prices 2003 – 2007, All Bedrooms**

	<b>Min.</b>	<b>Max.</b>	<b>Ave.</b>
2007	50,000	2,975,000	430,586
2006	54,000	3,250,000	453,241
2005	50,000	2,737,500	425,112
2004	51,318	3,500,000	344,184
2003	33,188	2,600,000	279,056

Source: Washoe County Assessor, April 2008

**Table A-31**  
**Reno Resale Prices By Bedroom, 2007**

<b>Number of Bedroom</b>	<b>Number of Units Sold</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Average</b>
1	19	77,175	790,000	313,039
2	280	50,000	1,314,713	312,778
3	1,412	90,000	2,875,000	377,205
4	839	176,000	2,975,000	512,417
5	221	200,000	2,450,000	595,815
6	18	247,000	2,050,000	731,801
<b>Total</b>	<b>2,789</b>			

Source: Washoe County Assessor, April 2008

**Rental Housing Costs**

According to the 2000 Census, the median contract rent for all rental units in Reno was \$582 a month. Contract rent is only the cost of the unit and does not include utility or other costs. An April 2008 survey of currently available units shows that the median monthly price for a 2 bedroom apartment is \$925 and \$933 for a single family house, duplex, or town home. Three bedroom apartments are advertised for as much as \$1,465 and four bedroom units were advertised for as high as \$3,475. Median single family rental unit prices were similar but some 5 bedroom units were available ranging from \$2,000 to \$4,200 a month. These figures do not include utility costs either.

The results of an April 2008 survey of market rate apartments are shown in **Tables A-32** and **A-33**. The information in the tables represents information available at the point in time the survey was conducted.

**Table A-32  
Monthly Rental Costs for Apartments**

	<b>Studio</b>	<b>1 Bdrm</b>	<b>2 Bdrm</b>	<b>3 Bdrm</b>	<b>4 Bdrm</b>
Total Units Surveyed	12	28	30	25	7
Range	\$4375-\$500	\$580-\$930	\$680-\$1,145	\$850-\$1,465	\$975-\$3,475
Average	\$449	\$695	\$838	\$1,237	\$1,802
Median	\$450	\$750	\$925	\$1,280	\$1,595

Sources: Reno Gazette Journal, rent.com, craigslist.com, , April 2008

**Table A-33  
Rental Costs for Single Family Homes**

	<b>1 Bdrm</b>	<b>2 Bdrm</b>	<b>3 Bdrm</b>	<b>4 Bdrm</b>	<b>5 Bdrm</b>
Total Units Surveyed	9	23	23	21	7
Range	\$525-\$915	\$675-\$1050	\$1,000-\$1,750	\$1,100-\$2,000	\$2,000-\$4,200
Average	\$699	\$839	\$1,335	\$1,571	\$2,812
Median	\$700	\$933	\$1,228	\$1,595	\$2,500

Source Reno Gazette Journal, rent.com, craigslist, April 2008

**Mobile Home Housing Costs**

Mobile homes are an affordable housing option for low-income households. As **Table A-34** illustrates, mobile home sale prices are often lower than those of site built single-family homes. The cost of living in a mobile home includes paying lot rent and usually utilities in addition to a loan payment. Depending on lot rent rates, this may mean that mobile home ownership is not an option for very low-income households. Resale homes can be as little as \$20,000 or as much as \$95,900. New homes sold by manufactured housing dealers are priced much higher – more than \$100,000 in some cases. In any case, the condition of older mobile homes generally deteriorates faster than site built homes. Thus, relying on mobile home ownership as an affordable housing option is not recommended. **Table A-35** lists mobile home parks in Reno. Many of the parks do not have any vacancies, which may indicate a demand for mobile home lots, which may also signify a demand for affordable housing in general.

**Table A -34  
Mobile Home Prices in the Reno**

	Resale		
	2 bdrm	3 bdrm	4 bdrm
Price Range	\$29,995- \$110,000	\$29,000- \$105,900	\$40,000- \$249,900
Average Price	\$60,299	\$61,809	\$116,585

Sources: www.mhvillage.com, www.mfdhousing.com, www.rgj.com, May 2008

**Table A-35  
Mobile Home Parks in Reno**

Park Name	Address	# of Lots	Vacant	Lot rent	Utilities
Chism Trailer Park	1300 W. Second St.	152	9	\$380	Not Included
Sunvilla Estates Manufactured Home Community	91 Cabernet Pkwy	325	No Vacancies	\$525-\$575	Not Included
TJ Mobile Home Park	1485 West 4th St.	75	0	\$360	Not Included
Keystone Trailer Park	1457 W. St. #33	102	34	\$375 & \$400	c/w/s <sup>1</sup>
Lyons Crest Mobile Home Park	1485 W. St.	66	0	\$365	s/w/g
Northgate Mobile Village	13331 Silverada Blvd.	91	7	\$355	Not Included
Travelier Mobile Home Park	777 Gentry Way	241	10	\$460	s/w/g
County Terrace Mobile Village	11 Tuck Circle	103	0	\$460	s/w/g
Reno Cascade Mobile Home Community	3805 Clear Acre Ln.	245	23	\$544 & \$579	s/w/g
Lucky Lane Mobile Home Park	3650 Boyton Ln.	187	0	\$415 & \$445	w/s

Source: Sources: Google maps, Phone survey, 2007

<sup>1</sup>. s-sewer, g-garbage, w-water, c-cable

**Households Overpaying**

Definitions of housing affordability can vary but a common agreement is that a household should pay no more than 30 percent of its monthly income on housing costs. Households that pay more than this are considered “cost-burdened” and households that pay more than 35 percent are considered “severely cost-burdened.” Measuring the amount of people paying more than this percentage helps define an area’s affordability problem. As shown in **Table A-36**, 32 percent of households in Reno experienced a cost burden in paying their monthly housing costs. Renters had higher cost burdens with 39 percent of renters paying more than 30 percent of their monthly income for housing costs. Of all home owners, 28 percent also paid more than 30 percent of their monthly income toward housing costs.

**Table A-36  
Housing Expenditure Rate By Income Level\***

Income	Housing Type				Total
	Owner		Renter		
	30%	35%	30%	35%	
<b>Reno</b>					
Less than \$10,000	0.1%	1%	0.4%	10%	8%
\$10,000 to \$19,999:	0.4%	3%	2%	13%	17%
\$20,000 to \$34,999:	1%	7%	5%	7%	23%
\$35,000 to \$49,999:	3%	6%	1%	1%	15%
\$50,000 to \$74,999:	3%	3%	0.4%	0.4%	9%
\$75,000 and over	1%	1%	0%	0%	2%
% of Total Households	28%		39%		32%
Households	28,730		38,654		
Total Households	74,023				
<b>Washoe County</b>					
Less than \$10,000	0.1%	2%	0.3%	9%	11%
\$10,000 to \$19,999:	0.4%	3%	1%	12%	17%
\$20,000 to \$34,999:	1%	7%	5%	8%	21%
\$35,000 to \$49,999:	3%	8%	1%	1%	13%
\$50,000 to \$74,999:	3%	6%	1%	0.4%	10%
\$75,000 and over	1%	3%	0%	0%	4%
% of Total Households	28%		39%		29%
Households	61,038		53,620		
Total Households	132,192				
<b>Nevada</b>					
Less than \$10,000	0.1%	2%	0.2%	8.%	11%
\$10,000 to \$19,999:	0.3%	3%	1%	13%	18%
\$20,000 to \$34,999:	1%	7%	5%	8%	22%
\$35,000 to \$49,999:	3%	5%	1%	0.9%	10%
\$50,000 to \$74,999:	3%	2%	0.3%	0.2%	5%
\$75,000 and over	1%	1%	0%	0%	2%
% of Total Households	28%		32%		28%
Households	363,321		292,913		
Total Households	751,977				

Source: 2000 Census Summary File 3/ \* percentages may not add up to 100% due to rounding

### **FUTURE DEVELOPMENT POTENTIAL**

#### **Summary of Findings**

The city's vacant land inventory indicates available sites for development. There are many sites zoned for single family, planned unit and mixed use residential developments. Reno primarily gets its water supply from the Truckee River via the Truckee Meadows Water Authority. Agreements with other governmental entities have resulted in a confident projection of enough water reserves through 2030. Wastewater services are managed by the City. Wastewater is treated at the Truckee Meadows Reclamation Facility that is jointly owned by Reno and Sparks. According to the Truckee Meadows Regional Plan, the area's solid waste capacity is adequate for approximately 50 years. Based upon the vacant land inventory, the city will create programs that will allow the appropriate housing types and densities for the land available for residential development.

#### **Vacant Land Inventory**

Land currently zoned in the city indicates infrastructure and land availability for both single and multi-family development. **Table A-37** illustrates the number of vacant acres and unit capacity zoned for residential use. There is a large capacity for new units in the single-family zones that have large minimum lot sizes. Less land is currently zoned for smaller lot developments. There is a large amount of land zoned for high density multi-family developments. The MF 14 zone, which allows fourteen units per acre, has a more than 4,500 unit capacity while the MF 21 zone has comparatively little capacity with less than two thousand potential units. However, vacant land zoned MF 30 has the potential to hold more than twelve thousand acres. Land zoned for mixed uses will allow for some single and multi-family development and the land zoned for planned unit developments will also allow for new residential development.

**Table A-37  
Vacant Land Inventory**

<b>Zone</b>	<b>Acres</b>	<b>Approximate Unit Capacity</b>
Large Lot Residential (LLR 2.5)	98	39
Large Lot Residential (LLR 1)	573	5
Large Lot Residential (LLR .5)	2	4
Single Family Residential (SF15)	3,395	9,846
Single Family Residential (SF 9)	163	789
Single Family Residential (SF 6)	545	3,957
Single Family Residential (SF 4)	231	2,516
<b>Single Family Total</b>	<b>5,007</b>	<b>17,156</b>
Multi-family Residential (MF 14)	326	4,564
Multi-family Residential (MF 21)	88	1,848
Multi-family Residential (MF 30)	410	12,300
<b>Multi Family Total</b>	<b>824</b>	<b>18,712</b>
Mixed Use	4,282	n/a
Planned Unit Development (PUD)	2,644	n/a
Specific Plan District (SPD)	3,023	n/a
Neighborhood Commercial (NC)	90	n/a
Professional Office	15	n/a
Open Space (OS)	1,624	n/a
Public Facility (PF)	117	n/a
<b>Total</b>	<b>17,626</b>	<b>35,868</b>

Sources: Washoe County Digital Parcel Base (Washoe County Community Development) – November 2007 Washoe County Assessor Data – March 2008, City of Reno Boundary (Washoe County Community Development) – February 2008

## Water and Wastewater Service Capacity

### Water Supply and Infrastructure

The Truckee Meadows Water Authority is responsible for most of Reno’s water supply. The Truckee Meadows Water System is comprised of the Truckee River, Pyramid Lake, and Lake Tahoe. The Truckee River is the primary water source for the City of Reno and the Truckee Meadows Region. Recently TMWA reached a number of negotiated settlements with the federal government, States of Nevada and California and the Pyramid Lake Paiute Tribe that will allow for better management of the Truckee Meadows Water System. According to TMWA, this agreement will ensure a reserve of

at least 39,500 acre feet of water for drought supplies for expect population growth through 2030.

### **Wastewater Service**

Wastewater treatment is performed by the City of Reno and Sparks jointly owned Truckee Meadows Water Reclamation Facility. Residential customers are billed according to the type of unit in which they live. Single-family and multi-family are two separate customer classes. Condominiums, townhouses, apartments, and mobile home parks are considered multifamily for the purpose of establishing user fee rates. Duplexes, triplexes, fourplexes, mobile home lots, single-family residence, zero lot line single-family, and mobile home subdivisions are single-family for the purpose of establishing user fee rates.

### **Solid Waste Capacity**

According to the Truckee Meadows Regional Plan, the Washoe County District Health Department (WCDHD) says that the Lockwood landfill (in Storey County) had about 65 years of remaining capacity in 1995. Based on this information the Lockwood landfill can accommodate all projected regional growth.

## **CONSTRAINTS TO HOUSING AVAILABILITY AND AFFORDABILITY**

### **Summary of Findings**

In general, the City's current land use controls do not constrain the development of affordable housing. However, the requirement of special use permits in some cases may deter some affordable housing development. Development review standards are do not constrain development as the City has set timelines for review of each type of application and has been successful in keeping to those timeframes. The City has a wide range of zones that allow a variety of densities throughout the city. However, multi-family developments require special use permits (SUP's), which may limit the flexibility required to promote affordable housing development. In addition, single-family housing such as attached products, condominiums, and zero lot line homes are restricted or disallowed in many zones while single family detached homes are allowed by right in all zones.

The City has permitted accessory dwelling units but they have not been utilized as affordable housing. The City placed a moratorium on accessory dwelling units to give the City Council an opportunity to re-evaluate the regulations for these units. In May 2007, the City Council decided to continue allowing accessory dwelling units in the City except in single family zones.

The City also has an ordinance protecting against the over-conversion of apartments into condominiums. The cost of land and of construction and labor are high enough to cause affordability problems for people in the affordable and workforce income categories. Based upon the analysis of the current land use regulations, the city will examine the possibility of adjusting the zoning code to allow more uses by-right in

certain zones. To address ever-increasing land costs, the city will consider forming a kind of land banking system to help alleviate land costs for affordable housing development.

### **Governmental Constraints**

There are possible constraints on development that can be attributed to local land use controls and ordinances. Minimum lot requirements, special use permits, length of development review, and ordinances dictating development are some of the possible governmental constraints.

### **City Development Standards**

In accordance with the Nevada Revised Statutes concerning Housing Plans, the following provides examples of possible impediments to the development of affordable housing. The City of Reno's Land Development Code is the guiding document for residential development policies. The policies establish and control the type, location, and density of residential development in Reno. The zoning regulations serve to protect and promote the health, safety, and general welfare of the community's residents.

### **Land Use Controls**

Land use controls are the primary source of governmental constraints on affordable housing development. They include site plan requirements, permit requirements and fees, building code requirements and permit processing times. In addition, land use controls may limit the density of development, thus increasing the cost of housing per unit. Allowing lower density uses without restriction and limiting the options for higher density development can constrain affordable housing options as well.

The city currently offers a density bonus and parking requirement reductions for affordable housing developments, but developers have not taken advantage of these incentives to a great degree. The TOD's and Regional Centers do encourage higher density and parking requirement flexibility.

**Maximum Permitted Residential Density** - The City's single-family residential zones permit densities as low as 1 dwelling unit per 2.5 acres to 4,000 square foot dwelling units per acre. The multi-family zones range from a lower density of 14 units per acre to 30 units per acre. The TOD's have no density maximum and the Regional Center's have no density minimum. The code provides for sufficient grades of density within both single-family and multi-family zones to allow for a variety of housing types.

The code also provides for a density bonus for both single-family and multi-family zones. Both types of developments are allowed a maximum density bonus of 25 percent of the district maximum. A developer can add 2.5 units for every one unit built that is affordable to households earning no more than thirty percent of the median household income. Two additional units are allowed for every unit built for household earning forty percent of median housing income, and 1.5 additional units are allowed for each unit built for households earning no more than 50 percent of median household income.

## Appendix A–Housing Needs Assessment

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**Parking** - The general citywide single-family zones require one parking space per bedroom. However, subdivisions with “small lots” or those less than 4,000 square feet in size have less parking requirements. The general city-wide multi-family parking requirement is 1.2 per efficiency, 1.5 per one bedroom, 2 per two bedroom, 2 per three bedroom, 2 plus .5 for each bedroom in units with more than 3 bedrooms. There is also a one guest space per 10 unit requirement.

Parking reductions are available to developers in the TOD’s and Regional Centers. Additionally, the City has parking reductions for affordable unit development. For each unit set aside for a household earning less than sixty percent of the median household income, the developer may receive a twenty percent reduction to parking requirements. For each unit set aside for a household earning less than fifty percent of the median household income, the developer may receive a thirty percent reduction to parking requirements. For each unit set aside for a household earning less than forty percent of the median household income, there can be a forty-five percent reduction to parking requirements. It may be appropriate to include an incentive for building moderate-income or “workforce” housing as well.

**Minimum lot size** - Minimum lot sizes range from 2.5 acres in the Large Lot Residential zone to 3,000 square feet in the highest density multi-family zone, MF 30. Minimum lot sizes do not represent a strong constraint due to the availability of infrastructure and vacant land.

**Maximum height** - The maximum height for the least dense zones is 3 stories or 45 ft. The densest single-family zone, SF4 allows up to 2 stories at 30 ft. The least dense multi-family zone is also allowed 2 stories but up to 35 ft in height. The densest multi-family zones (MF21 and MF30) are allowed more height with 3 stories at 45 ft. Land costs in high density zones could be further off-set by allowing 3.5 to 4 stories. The Regional Centers do not place height restrictions on development.

**Maximum lot coverage** - Maximum lot coverage requirements do not seem to constrain development. In single-family zones, the maximum building coverage is 40 percent of the lot or common open space shall be provided equal to 20 percent of gross project area. Multi-family buildings must be 20 feet apart for developments of 50 units or more and 10 feet apart for developments of less than 50 units.

### **Provision for a Variety of Housing**

The statutes also require an analysis of land characteristics that are appropriate for development. The following zoning and vacant land information addresses this point. The City has a wide range of zones that allow a variety of densities throughout the city. However, multi-family developments require special use permits (SUP’s), which may limit the flexibility required to promote affordable housing development.

**Residential Zoning Districts**

The densities permitted in the residential base zone districts of Title 18 of the Reno Municipal Code range from one dwelling unit per 2.5 acres in the Large Lot Residential District (LLR 2.5) to one dwelling unit per 1,450 square feet in the Multi-family and Limited Non-Residential District (MF 30). In total, there are ten residential zoning districts in the City of Reno. Other zones such as the Mixed Use (MU), Planned Unit Development (PUD), and Specific Plan District (SPD) allow residential developments. In addition to those, there are four single family districts and three multi-family districts. **Table A-38** illustrates the range in densities allowed throughout the city.

**Single Family Residential** – There are 7 zoning districts for Single Family Residential. The districts are: LLR2.5 (Large Lot Residential 2.5 acres), LLR1 (Large Lot Residential 1 acres), LLR.5 (Large Lot Residential .5 acres), SF15 (Single Family Residential - per 15,000 sq. ft.), SF9 (Single Family Residential - per 9,000 sq. ft.), SF6 (Single Family Residential - per 6,000 sq. ft.), and SF4 (Single Family Residential - per 4,000 sq. ft.). These zoning districts have specific allowed land uses and design standards.

**Multi-Family Residential** – There are 3 zoning districts for Multi-Family Residential. The districts are: MF14 (Multi-Family 14 units per acre), MF21 (Multi-Family 21 units per acre), and MF30 zone (Multi-Family 30 units per acre). These zoning districts have specific allowed land uses and design standards.

**Table A-38  
Zoning Classification**

<b>Zoning District Name</b>	<b>Allowed Density</b>
Large Lot Residential (LLR2.5)	1 unit per 2.5 acres
Large Lot Residential (LLR1)	1 unit per 1 acre
Residential(LLR.5)	1 unit per .5 acre
Single-Family Residential (SF15)	1 unit per 15,000 square feet (approximately 3 per acre)
Single-Family Residential (SF9)	1 unit per 9,000 square feet (approximately 5 per acre)
Single-Family Residential (SF6)	1 unit per 6,000 square feet (approximately 7 per acre)
Single-Family Residential (SF4)	1 unit per 4,000 square feet (approximately 11 per acre)
Multi-Family (MF14)	14 units per acre
Multi-Family (MF21)	21 units per acre
Multi-Family (MF30)	30 units per acre

City of Reno Municipal Code Title 18

### **Development Review**

The amount of time the development review process takes can also be a constraint upon affordable housing development. The City of Reno has established development review time requirements for most types of review. Zoning map amendments are required to be review within 65 days of the Planning Commission approval. Special use permits and variances also have a 65 day requirement. A tentative map approval is required by the Nevada Revised Statutes to be reviewed within 45 days. Development agreements do not have time requirements. Development fees are review by the City of Reno and the fees can possible constraints some development.

### **Accessory Dwelling Unit Ordinance**

The Accessory Dwelling Unit (ADU) Ordinance was adopted in 2000 as a mechanism for encouraging more affordable housing without contributing to urban sprawl. The initial ordinance allowed ADU's by right and required the property owner of record to reside in either the main dwelling or ADU. By 2004, a moratorium was placed upon ADU permits so that the City could perform a study to determine if the ADU ordinance was an effective tool for creating more affordable housing. Few ADU permits were issued since the ordinance was adopted. Fears about overbuilding in older single-family neighborhoods and design concerns seemed to be confirmed when the existing ADU's were surveyed.

The City of Reno staff recommended a revised ordinance that would not require either the ADU or principle structure to be inhabited by the property owner of record and to allow more than two people to live in an ADU (maximum size 800 sq. ft.). However, in order to keep ADU's subordinate in design to the main dwelling, the size limitations were not increased. In May 2007, the Reno City Council decided to ban ADU's from all single-family zones. Subsequently, the Regional Housing Task Force recommended that accessory dwelling units be permitted by all jurisdictions in Washoe County without regard to whether the units are owner-occupied or rental units.

### **Condominium Conversion Ordinance**

As apartment buildings age, owners may decide to rehabilitate the units and convert them into for-sale condominium units. In cities with a large rental housing stock of some age, the temptation to convert units to condominiums is strong. The negative impact, however, is that the affordable rental housing stock is diminished. The City of Reno has addressed the condominium conversion issue within its development code. Article IV of Chapter 18.10 of the development code was adopted to regulate condominium housing to "maintain the adequate supply of rental housing for low and moderate-income persons and families." Condominium conversions require a special use permit and Article IV outlines the criteria for the approvals of these conversions. If the vacancy rate for multi-unit rental housing is below five percent, the conversion will not be allowed. The one exception to this rule is if seventy percent of the tenants residing in the rental housing sign a statement approving the conversion.

**Regional Centers and Transportation Oriented Developments (TOD's)**

The City currently has five TOD's and fifteen Regional Centers at different stages of development. The future housing development will occur at densities between 14 -30 units per acre. The City will propose Housing Plan incentives that will assist developers with building affordable housing in these areas. **Tables A-39** and **A-40** list these development areas and the minimum densities allowed in them.

**Table A-39  
Regional Centers**

<b>Regional Center Plans</b>	<b>Minimum Density or Floor Area Ration (FAR)</b>
Convention Regional Center Plan (CRC)	NA
Dandini Regional Center (DRC)	14 D/U or .75 FAR
Downtown Reno Regional Center (DRRC)	
Entertainment District	45 D/U or 3.0 FAR
Keystone District & Well District	30 D/U or 20 FAR
California District	21 D/U or 1.0 FAR
Truckee River District	21 D/U or 1.0 FAR
Redfield Regional Center (RRC)	
Tourist Commercial areas	14 D/U or .5 FAR
Retail Commercial/Academic areas	14 D/U or .25 FAR
Open Space, Transitional Mixed Use, & Industrial areas	No minimums
Reno Stead Airport Regional Center (RSARC)	30 D/U or 1.5 FAR
Reno Tahoe International Airport Regional Center (RTIARC)	30 D/U or 1.5 FAR
University of Nevada Regional Center (UNRC)	30 D/U or 1.5 FAR, for parcels zoned MU
Washoe Regional Center (WRC)	30 D/U or 15 FAR

Source: City of Reno, Planning Department

**Table A-40  
Transit Oriented Development**

Transit Oriented Developments (TOD)	Minimum Density or Floor Area Ratio (FAR)
Mill Street TOD (MSTC)	30 D/U or 1.5 FAR
West 4 <sup>th</sup> Street TOD (W4TC)	14 D/U or .25 FAR
East 4 <sup>th</sup> Street TOD (E4TC)	14 D/U or .5 FAR
South Virginia Street TOD (SVTC)	14 D/U or .5 FAR (north section) & .25 FAR (south section)
North Virginia Street TOD (NVTC)	14 D/U or .25 FAR

Source: City of Reno, Planning Department

**Building Permits**

**Table A-41** shows the building permit activity for the five year period between 2002 and 2006. New residential permits increased greatly from 2002 to 2004 nearly doubling in number. By 2006, however, the number of permits had dwindled. A majority of the new building permits were for single-family homes in 2006. A fair number of multi-family units with more than five units were planned or constructed. The table shows a lack of higher density duplexes, town homes and other types of two family homes. **Table A-41** shows the building permit activity between 2003 and 2007. Overall development significantly declined from 2005 through the end of 2007.

**Table A-41  
Total Building Permits FY 2005-2006**

	2003	2004	2005	2006	2007
Single Family Residential Units	1,794	2,825	2,885	1,497	985
Multi Dwelling Units	711	656	1,025	387	82
<b>Total</b>	2,505	3,481	3,910	1,884	1,067

Source: City of Reno Community Development Department Building Permits Construction Activity Ten Year History of Development report, May 2008

<sup>1</sup>Includes some Townhomes and Condominiums

**Non Governmental Constraints**

The total amount of vacant single family zoned land was 2,958.6 acres and 485.9 acres of multi-family land, which will accommodate future growth throughout the City. However, construction and land costs continue to rise above what is affordable for prospective home buyers at current wages. Other types of constraints on affordable

## Appendix A–Housing Needs Assessment

housing are not necessarily linked to laws or ordinances. The price of land, construction, and labor dictates housing prices and in turn determines the amount of subsidies needed to build affordable housing. The availability of financing and land zoned appropriately for affordable housing can also be factors.

### Land Cost

The cost of raw, developable land creates a direct impact on the cost for a new home and is considered a possible constraint. A higher cost of land raises the price of a new home. Therefore, developers sometimes seek to obtain City approvals for the largest number of lots allowable on a parcel of land.

**Table A-42** shows vacant land for sale as of May 2008. Depending on the size and location of the parcel, the vacant single-family residential parcels located in Reno range from \$25,000 to \$3,921,052 per unit.

**Table A-42  
Vacant Land “For Sale”**

Type	Lot Size	Price	Price/Acre
Residential	17.13 acres	\$2,300,000	\$134,267
Residential	4.10 acres	\$1,700,000	\$414,634
Residential	160 acres	\$4,000,000-5,000,000	\$25,000-\$31,250
Residential	5.69 acres	\$360,000	\$63,269
Residential	25 acres	\$2,500,000	\$100,000
Residential	3.7 acres	\$539,000	\$145,675
Residential	36.45 acres	\$2,370,000	\$65,020
Residential	6.21 acres	\$1,550,000	\$249,597
Residential	.96 acres	\$450,000	\$468,750
Residential	22 acres	\$3,962,500	\$180,113
Residential	1.25 acres	\$450,000	\$360,000
Residential	216 acres	\$2,205,000	\$10,208
Residential	1.15 acres	\$800,000	\$695,652
Residential	.13.31 acres	\$645,000	\$48,459
Residential	5 acres	\$150,000	\$30,000
Residential (MF)	3 acre	\$1,725,000	\$575,000
Residential (MF)	.97 acres	\$337,500	\$347,938
Residential (MF)	11.5 acres	\$3,000,000	\$260,869
Residential (MF)	4.4 acres	\$1,677,000	\$381,136
Residential (MF)	.35 acres	\$299,000	\$854,285
Residential (MF)	9.3 acres	\$2,043,000	\$219,677

Type	Lot Size	Price	Price/Acre
Residential (MF)	.17 acres	\$175,000	\$1,029,411
Residential (MF)	.38 acres	\$1,490,000	\$3,921,052
Residential (MF)	4.5 acres	\$585,000	\$130,000
Residential (MF)	.09 acres	\$89,000	\$988,888

Source: Loopnet.com May 2008

**Availability of Vacant Land**

The total amount of vacant single family zoned land was 5,007 acres. More than four thousand acres are zoned for mixed uses and 2,644 are zoned for planned unit developments. Approximately 824 acres are currently zoned for multi-family. Since mixed-use development and PUD’s allow for multi-family development, infrastructure and vacant land for both multi-family and single-family development are available.

**Construction and Labor Costs**

Many factors affect the cost of building a house, including the type of construction, materials, site conditions, finishing details, amenities, and structural configuration. An Internet source of construction cost data ([www.building-cost.net](http://www.building-cost.net)), provided by the Craftsman Book Company estimates the per square foot cost of a single-story four-cornered home in the Reno area to be between \$95 -\$103 per square foot. This cost estimate is based on a 2,000 square foot house of good-quality construction including a two-car garage, central heating, and air conditioning inside the Reno metropolitan area. The total construction costs excluding land costs are estimated at \$189,397 for a house built in a subdivision and \$205,338 for a house built outside of a housing tract.

If labor or material costs increased substantially, the cost of construction in Reno could rise to a level that impacts the price of new construction and rehabilitation. Therefore, increased construction costs have the potential to constrain new housing construction and rehabilitation of existing housing.

**Availability of Financing**

The cost of borrowing money to finance the construction of housing or to purchase a house affects the amount of affordably priced housing in Reno. Fluctuating interest rates can eliminate many potential homebuyers from the housing market or render a housing project that could have been developed at lower interest rates infeasible. When interest rates decline, sales increase. The reverse has been true when interest rates increase. Over the past decade, there has been a dramatic growth in alternative mortgage products, including graduated mortgages and variable rate mortgages. These types of loans allow homeowners to take advantage of lower initial interest rates and to qualify for larger home loans.

However, variable rate mortgages are not ideal for low- and moderate- income households that live on tight budgets. Variable rate mortgages may allow lower income household to enter into homeownership, but there is a definite risk of monthly housing costs rising above the financial means of that household. Therefore, the fixed

## Appendix A–Housing Needs Assessment

interest rate mortgage remains the preferred type of loan, especially during periods of low, stable interest rates.

Most governmental programs that seek to increase homeownership among low- and moderate-income households rely on loan products that provide fixed interest rates below prevailing market rates, either for the principal loan or for a second loan that provides part of the down payment for home purchase. Many programs offer deferred second loans to facilitate homeownership. **Table A-43** shows interest rates for a 15- and 30-year fixed loan in the Reno area interest rates change on a daily basis. The trend from January to February 2007 was an increase in interest rates in Reno while the national rates decreased slightly.

**Table A-43**  
**Interest Rates for 15- and 30- Year Fixed Loans**

Loan Type	Interest Rate	APR
Conforming <sup>1</sup>		
40-Year Fixed	6.375%	6.573%
30-Year Fixed	6.000%	6.226%
20-Year Fixed	6.000%	6.301%
15-Year Fixed	5.625%	5.999%
5-Year ARM	5.500%	5.642%
Jumbo <sup>2</sup>		
40/30 Fixed-Rate Balloon	7.750%	7.899%
30-Year Fixed	7.250%	7.408%
15-Year Fixed	6.500%	6.749%
10-Year ARM	7.875%	7.239%
5-Year ARM	6.500%	5.960%

<sup>1</sup> **Traditionally**, conforming loans are those up to \$417,000. However, conforming loan amounts for certain loan products have been temporarily increased in some metropolitan areas.

<sup>2</sup> Loans that exceed conforming loan limits.

Rates are subject to change on a daily basis.

## **HOUSING PROGRAMS**

Most of the housing programs in Reno are either partially or wholly funded by federal grants like HOME and Community Development Block Grants (CDBG). Other federal subsidies are utilized by the Reno Housing Authority, which administers public housing and housing choice voucher programs. The most recent Consolidated Plan emphasizes family rental units, senior units, supportive housing or other homeless rental program, home maintenance projects and homeownership programs.

## Appendix A–Housing Needs Assessment

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The Reno Housing Authority (RHA) owns many units that are rented to very low and extremely low income people. In total RHA owns 764 units. All but four were occupied in February 2007 and 829 families were on the waiting list. RHA also administers Housing Choice Vouchers (Section 8). More than 2,300 vouchers are currently in use and more than 1,600 families are on that waiting list. There are many other subsidized, deed restricted rental units in the city that are not owned or managed by RHA. Most of these units have long waiting lists as well. The city will work to develop programs that create a regulatory and financing environment that spurs the development of more affordable housing.

### Summary of Findings

Between the City of Reno and Washoe County, many types of housing programs exist in Reno. Federal money like CDBG and HOME funds maintain the programs. The City's Consolidated Plan focuses on a range of goals from rental programs to homeownership and repair programs to supportive housing for the homeless. The Washoe County HOME Consortium administers the HOME money and also partners with private and non-profit developers to build affordable housing in the region. RHA provides assisted housing in the form of RHA-owned public housing units and with rental vouchers. RHA is also involved in many supportive programs with their residents to assist with employment, school, and mentorship opportunities. In addition to RHA's efforts, there are other non-profit agencies that provide assisted housing opportunities. Table A-44 below provides more information about these opportunities.

City of Reno housing programs are largely funded through federal grants. The City receives CDBG and Emergency Shelter Grant (ESG) money as an entitlement city. This means the City receives these funds directly from the U.S. Department of Housing and Urban Development (HUD) rather than through the state's allocation. The City's direct allocation of CDBG funds for fiscal year 2006-2007 was \$2,073,769. In addition, the City receives ESG money from the state. The ESG amount for fiscal year 2006-2007 was \$88,479. The state ESG money totals \$66,921 in 2006-2007. While Reno cooperates with Sparks and Washoe County to administer each allocation of HOME funds, each city is responsible for administering its own CDBG money. A portion of the CDBG funds go to the Neighborhood Revitalization Program and well as to Public Works for infrastructure needs.

Some of the City of Reno's CDBG money supports the Washoe County Human Services Consortium (WCHSC), which is a partnership with the City of Sparks and Washoe County. The WCHSC funds public service programs. The City's HOME program allocation is directed to the Washoe County HOME Consortium (WCHC) in partnership with the City of Sparks and Washoe County. The direct allocation for fiscal year 2006-2007 was \$1,584,602. The State awarded \$304,601 HOME funds to the City for 2007-2008 and the WCHC receives a pro-rata award from the State Housing Division's Low Income Housing Trust Fund (LIHTF). Altogether over \$3 million in funds passed through the WCHC. The 2007-2008 WCHC pro-rata funding priorities for the City of Reno are: new family rental housing in the redevelopment areas excluding the Boomtown sub-area, for households at or below 50 percent of area median income, an

## **Appendix A–Housing Needs Assessment**

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affordable housing project located within one of the five Transit Oriented Development Corridors, supportive housing or rental programs that address homelessness, homeownership programs for households making below 80 percent of area median income to buy homes in designated redevelopment areas, and a senior apartment complex on Wells Avenue.

The City of Reno/Washoe County HOME Consortium 2005-2009 Consolidated Plan presented the goal of continuing to fund the construction and rehabilitation of units for extremely-low and very-low income households. The following are more specific goals for affordable housing for the five year period:

- establish a tenant-based rental assistance program; create and expand homeownership opportunities for low-income households;
- provide home maintenance assistance for low-income homeowners;
- create transitional and permanent-supportive housing for persons discharged from institutions, homeless, or who are at-risk of homelessness; and
- partner with other organizations to improve the housing outcomes for low-income households by more effectively leveraging funds, and educational programs for providers and clients.

The consortium staff found there to be no significant local regulatory barriers to the development of affordable housing within the City of Reno regarding land use control, zoning, or growth limits. Several developers had indicated that building permit costs may impact the cost of an affordable housing development.

The City, as the lead agency of the WCHC, partners with a variety of entities to disperse the affordable housing funds made available. Most notably are partnerships with certified Community Housing Development Organizations (CHDO). In addition to the three certified CHDO's, WCHC also partners with private developers that build affordable housing. Another partner is the Reno Housing Authority (RHA), which is a separate entity from the City. RHA has used HOME money in the past, but the bulk of its funding comes from HUD's Public Housing and Section 8 programs.

### **Assisted Housing**

#### **Public Housing**

The Reno Housing Authority (RHA) offers assisted housing services to low-income residents in the Reno area through its own properties and by partnering with other housing organizations. As of February 2007, RHA owned and managed approximately 764 units of Public Housing (475 family units) in seven locations throughout the City of Reno and one in the City of Sparks. These units tend to have low vacancy rates. In February of 2007, only four public housing units were vacant. At that time, there were approximately 829 applicants on the waiting list

RHA also administers the Section 8 Housing Choice Voucher program, which was serving approximately 2,382 households as of February 2007. At that time, approximately 1,665 households were on the waiting list. This number is actually lower than it would be at other points in the year because during the first three months of 2007 the waiting list was closed in order to give the RHA staff time to focus on processing

## Appendix A–Housing Needs Assessment

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applications in hopes that they can give more applicants a chance to receive housing assistance. This process usually occurs about once a year.

In the past, the RHA managed three Section 8 project-based developments but is currently in the process of turning these housing projects over to the Project-Based Contract Administration (PBCA). The RHA was awarded a contract by the U.S. Department of Housing and Urban Development (HUD) to take over management of all Section 8 project-based developments in Nevada. The PBCA is a non-profit created by RHA to manage the developments that were formerly managed by HUD.

RHA also administers the Section 8 Moderate Rehabilitation Program (“Mod Rehab”) with approximately 22 units. The mod rehab assistance was created to help improve blighted rental housing. Unlike the voucher program, the assistance is tied to the unit and thus does not offer the flexibility of the voucher. RHA’s contracts with the owners of mod rehab units began to expire in 1997. Some were renewed on a year-to-year basis. However many owner’s are opting out of the program and tenants are receiving vouchers instead. The mod rehab units left in Reno are Single Room Occupancy (SRO) units for homeless adults.

### Self Sufficiency Programs

While RHA’s focus in the community is on housing, it also works to help its residents obtain job training, credit counseling, and child care and transportation assistance. The Resident Opportunity and Self-Sufficiency Grant (ROSS) and the Family Self-Sufficiency Program (FSS) are examples of how RHA helps its residents in this way. The ROSS program enables RHA staff to help residents receive job or vocational training, financial management and credit counseling, guidance with child care and transportation needs, and job search assistance. The FSS program gives residents a chance to build savings with an escrow account that can be used to buy a home. Additional home financing opportunities are available to RHA residents through the Washoe County HOME Consortium and the Individual Development and Empowerment Account (IDEA) program from Charles Schwab Bank.

### Subsidized Housing

The Nevada Revised Statutes require an inventory of affordable housing in the community. Rental assistance is available to low-income residents by way of the Federal Housing Choice Voucher (formerly known as Section 8) rental assistance program, public housing and other subsidized housing projects. The Reno Housing Authority (RHA) administers the Housing Choice Voucher program for all of Washoe County. In total, there are 8,730 assisted rental housing units that are not tied to the Reno Housing Authority, most of which are located in the City of Reno. **Table A-44** lists the subsidized housing projects that are located within the City of Reno city limits.

**Table A-44**  
**Subsidized Housing Located in Reno**

Project	Address	Type	Funding Source	Units	Year Built
Austin Crest Apartments	1295 Grand Summit Dr.	Family, Seniors	WCHC- Bond-Tax Credits	268	1998
Bluffs, The	4050 Gardella Ave.	Family	Bond- Tax Credits	300	2002
Butterworth Estates	430 Linden St.	Disabled	HUD Sec. 811- Sec. 8- WCHC	24	2003
Carriage Stone Senior Apartments	652 S. Virginia St.	Senior	WCHC- Bond-Tax Credits	96	2006
Carville Park Apartments	1244 Carville Dr.	Seniors, Disabled	HUD 221(d) (3)- Sec. 8- Bond	208	1970's
Centennial Park Annex	1652 Wedekind Rd.	Family	HUD 236j (1)- Sec. 8	38	1969-70
Citivista	650 Record St.	Seniors	WCHC-Bond-Tax Credits	152	2001
City Center	160 Sinclair St.	Family	Bond- Tax Credits	258	2001
Community Gardens Apartments I	2338 Wedekind Rd.	Family	Sec. 8- HUD 233(f)- Bond-Tax Credits	93	1978
Community Gardens Apartments II	2055 Cannan St.	Family	Sec. 8- Bond-Tax Credits	79	*
Cottonwood Village	2655 Yori Ave.	Family	WCHC- McKinney- Tax Credits	43	*
Courtyard Center	695 W. 3rd St.	Singles	Bond- Tax Credits	240	2000
D & K Horizons Apartments	1225 Carville Dr.	Family	HUD Grant	4	*
Dakota Crest Apartments	446 Kirman	Family, Seniors, Disabled	WCHC- Tax Credits	48	*
Diamond Creek Apartments	1205 S. Meadows Parkway	Disabled, Family	WCHC- Bond-Tax Credits	288	2000
Essex Manor Apartments	7760 Carlye Court	Family	Public Housing	106	1984

## Appendix A–Housing Needs Assessment

Project	Address	Type	Funding Source	Units	Year Built
Fourth Street I	801 E. 4th St.	Family	WCHC- Tax Credits	20	1940's
Fourth Street II	801 E. 4th St.	Family	WCHC- Tax Credits	30	*
Golden I Apartments	520 Brinkby Ave.	Family	HUD 221(d)(4)- Sec. 8	100	1975
Golden II Apartments	3025 Lymbery	Family	HUD 221 (d)(4)- Sec. 8	200	1977
Hawk View Apartments	1542 Steelwood Ln.	Family	Public Housing	100	1984
Hill Street Apartments	244 Hill St.	Family	Sec. 8- Mod Rehab- Tax Credits	8	1980's
Inn at the Summit	4880 Summit Ridge Dr.	Senior	Bond	15	1999
John McGraw Court	2455 Orovada	Family	Public Housing	34	1996
Joseph's Inn	101 State St.	Singles	SRO- Mod Rehab- WCHC	29	*
Lakeside Manor	855 Brinkby Ave.	Seniors	Sec. 8	90	1982
Lighthouse/ Sierra	Clearacre Ln. & Crystal Ln.	Singles	WCHC- Tax Credits	25	*
Manhattan Place	930 Manhattan St.	Family	Tax Credits	10	1992
Mineral Manor	1525 E. 9th St.	Family	Bond- Tax Credits	143	1959-60
Myra Birch Manor	3585 Mazzone Ave.	Family	Public Housing	56	1981
Oak Tree Apartments	3410 Neil Rd.	Family	WCHC	25	*
Orvis Ring I	325 E. 7th St.	Seniors, Disabled	HUD- Sec. 202/8 Direct Loan- Sec. 8	40	1987

## Appendix A–Housing Needs Assessment

Project	Address	Type	Funding Source	Units	Year Built
Orvis Ring II	726 Evans	Senior, Disabled	HUD- Sec. 202/8 Direct Loan- Sec. 8	43	1989
Paradise View Apartments	2685 Carville Dr.	Singles	Bond	43	1983
Park Manor	33 Park St.	Family	WCHC- Tax Credits	85	*
Parkway Lodge	49 S. Park St.	Seniors, Singles	WCHC	51	1999
Pilgrims Rest	Hillboro Ave.	Seniors	WCHC	7	*
Pinewood Terrace	1455 Evelyn Way	Family	HUD 221(d)(4)- Sec. 8- Bond	50	*
Reno Apartments I-IV	2300 Wedekind Rd.	Family	Section 8	129	*
Reno Silvercrest Apartments	1690 Wedekind Rd.	Seniors	Section 202	56	1996
Ridge House	940 W. 1st St.	Transitional Housing	WCHC	3	1982
Ridge House	78 Keystone Ave.	Transitional Housing	WCHC	3	1982
Riverside Artist Lofts	17 S. Virginia St.	Singles	WCHC-Tax Credits	35	2000
Sarrazin Arms Apartments	541 W. 3rd St.	Senior, Singles	WCHC	20	1950's
Sierra Manor Apartments	2350 Paradise Dr.	Seniors, Disabled	HUD Sec. 202/8 Direct Loan- Sec. 8	145	1979
Sierra West Apartments	1380 Riley Ave.	Family	Tax Credits	26	*
Silver Sage Seniors	4895 S. McCarran Blvd.	Seniors	WCHC- Tax Credits	41	*
Silver Terrace Apartments	1611 Wedekind Rd.	Family	WCHC- Bond- Tax Credits- Sec. 8	126	*
Silverada Manor	1400 Silverada Blvd.	Senior, Disabled	Public Housing	150	1966
Skyline Apartments	1570 Sky Valley Dr.	Family, Seniors, Disabled	WCHC- Tax Credits	80	*

## Appendix A–Housing Needs Assessment

Project	Address	Type	Funding Source	Units	Year Built
Skyview Apartments	1590 Sky Valley Dr.	Disabled, Family	WCHC- Tax Credits	55	1997
Southridge Apartments	1550 Sky Valley Dr.	Family	WCHC- Tax Credits	92	1995
Stead Manor	Mt. Vida & Mt. Cocoa	Family	Public Housing	68	1982
Sunrise West	4205 Neil Rd.	Family	Tax Credits	28	1987
Sunset Ridge Apartments	2441 Centennial Way	Family	WCHC	26	1978
Sutro Apartments	2450 Sutro St.	Family	Sec. 8- Mod Rehab	32	*
Terracina Apartments	2175 Sierra Highlands Dr.	Family	Tax Credits	142	1994
Tom Sawyer Village	2565 Tom Sawyer	Seniors	Public Housing	100	1962
Trembling Leaves Apartments	115 Booth St.	Family	WCHC	27	1980
Vintage Hills Apartments	4195 W. 7th St.	Seniors	WCHC-Bond- Tax Credits	201	1999
Vista Point Apartments Homes	5401 N. Virginia St.	Family	Sec. 8- Tax Credits	44	*
Washoe Mill Apartments	1375 Mill St.	Seniors, Disabled	HUD 221 (d)(4)- Sec. 8	115	*
Westridge Apartments	5250 Villa Verde Dr.	Family	Bond	148	1985
Whittell Pointe Apartments I	1855 Selmi Dr.	Family	Bond- Tax Credits	120	2004
Whittell Pointe Apartments II	1855 Selmi Dr.	Family	Bond- Tax Credits	108	2006
William Raggio Plaza	48 S. park St.	Disabled	WCHC- Section 811	21	2006
Yorkshire Terrace Apartments	1529 E. 9th St.	Disabled, Family	WCHC- Tax Credits	30	1997
Zephyr Pointe	10640 N. McCarran	Family	Bond	216	2005

\*Information not available

Source: Bureau of Business and Economic Research, University of Nevada Reno

## **Appendix B–Glossary of Terms**

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The following definitions are commonly used terms in a Housing Element:

**Above Moderate-Income:** Above moderate-income households are defined as households with incomes over 120 percent of the county median.

**Accessory Dwelling Unit:** A dwelling unit that is a separate living quarter from the principle dwelling unit and has its own kitchen and bathroom

**Affordability:** Annual cost of housing includes mortgage, principle and interest payments as amortized over 25 years with a 25 percent down payment or gross rent that does not exceed 30 percent of gross annual household income or 30 percent of gross annual income devoted to rental housing, including utilities are defined as "affordable".

**Affordability Covenant:** A property title agreement that places resale or rental restrictions on a housing unit; also known as a deed restriction.

**Affordable Housing:** "Affordable Housing" refers to the relationship between the price of housing in a region (either sale price or rent) and household income. Affordable housing is that which is affordable to households of very low, low and moderate incomes. For housing to be affordable, shelter costs must not exceed 30 percent of the gross annual income of the household.

**American Dream Down payment Initiative (ADDI):** As part of the HOME Investment Partnership grant program, ADDI helps lower income and minority households who are first time homebuyers with down payments and closing costs. The money may also be used for certain rehabilitation needs within one year of the home purchase.

**Assisted Housing:** Assisted housing refers to a unit that rents or sells for less than the prevailing market rate due to governmental monetary intervention or contribution. The terms "assisted" and "subsidized" are often used interchangeably.

**Attainable Housing:** A term often used instead of or interchangeably with "workforce" housing. It refers to the idea that all income groups should have accessible housing. Attainable housing as a policy measure seeks to create housing for affordable to a variety of income levels.

**At-Risk Housing:** Applies to existing subsidized affordable rental housing units, especially federally subsidized developments, that are threatened with conversion to market rents because of termination of use restrictions, due to expiration or non-renewal of subsidy arrangements.

**Below Market Rate (BMR) Unit:** A BMR unit is a housing unit that sells or rents for less than the going market rate. It is typically used in reference to housing units that are directly or indirectly subsidized or have other restrictions in order to make them affordable to very low, low or moderate-income households.

## **Appendix B–Glossary of Terms**

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**Bureau of Business and Economic Research (BBER):** BBER performs applied research projects for business, non-profit agencies and government entities. They may be original studies, where the Bureau gathers and analyzes new data or secondary studies, where they search for existing studies and data.

**Community Development Block Grant (CDBG):** The State CDBG program was established by the federal Housing and Community Development Act of 1974, as amended (42 USC 5301, et seq.). The primary federal objective of the CDBG program is the development of viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for persons of low and moderate income. "Persons of low and moderate income" or the "targeted income group" (TIG) are defined as families, households, and individuals whose incomes do not exceed 80 percent of the county median income, with adjustments for family or household size.

**Condominium:** A building or group of buildings in which units are owned individually, but the structure, common areas and facilities are owned by all owners on a proportional, undivided basis.

**Continuum of Care:** An approach that helps communities plan for and provide a full range of emergency, transitional, and permanent housing and service resources to address the various needs of homeless persons at the point in time that they need them. The approach is based on the understanding that homelessness is not caused merely by a lack of shelter, but involves a variety of underlying, unmet needs – physical, economic, and social. Designed to encourage localities to develop a coordinated and comprehensive long-term approach to homelessness, the Continuum of Care consolidates the planning, application, and reporting documents for the U.S. Department of Housing and Urban Development's Shelter Plus Care, Section 8 Moderate Rehabilitation Single-Room Occupancy Dwellings (SRO) Program, and Supportive Housing Program. (U.S. House Bill 2163).

**Cost Burden:** A household has a "housing cost burden" if it spends 30 percent or more of its income on housing costs. A household has a "severe housing cost burden" if it spends 50 percent or more of its income on housing. Owner housing costs consist of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property; real estate taxes; fire, hazard, and flood insurance on the property; utilities; and fuels. Where applicable, owner costs also include monthly condominium fees. Renter calculations use gross rent, which is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Household income is the total pre-tax income of the householder and all other individuals at least 15 years old in the household. In all estimates of housing cost burdens, owners and renters for whom housing cost-to-income was not computed are excluded from the calculations.

**Decennial Census:** Every ten years, the Census Bureau conducts a national household survey, producing the richest source of nationally-available small-area data.

## **Appendix B–Glossary of Terms**

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Article I of the Constitution requires that a census be taken every ten years for the purpose of reapportioning the U.S. House of Representatives. The federal government uses decennial census data for apportioning congressional seats, for identifying distressed areas, and for many other activities. Census data are collected using two survey forms: the short form and the long form. Short form information is collected on every person and includes basic characteristics, such as age, sex, and race. The long form is sent to one out of every six households and collects more detailed information, such as income, housing characteristics, and employment. Most of the indicators in DataPlace are from the long form, and are thus estimates based on the sample of households. These values may differ considerably from the same indicators based on the short form data, particularly for small areas.

**Density:** This refers to the number of housing units on a unit of land (e.g. ten units per acre).

**Density Bonus Programs:** Allows minimum density increase over the zoned maximum density of a proposed residential development, if the developer makes a specified amount of units affordable to lower income households.

**Disability:** A long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.

**Downpayment Assistance:** The most popular loans for these programs are with the Federal Housing Administration (FHA). FHA allows 100 percent gift funds for your down payment and some allowable closing costs. The gift can be from any relative or can be collected through charitable organizations like Neighborhood Gold / The Buyer Fund. Another popular tactic, which can be used in a broader range of loan programs, is to borrow from a 401K. A withdrawal can be made without a penalty and pay it back over a specified period.

**Department of Business and Industry:** Its main objective is to encourage and promote growth, development, and legal operation of business within the State of Nevada. The Department's activities also include: Regulation of business and industrial enterprises Promotion of worker safety, protection, and rights Administration of bond programs to encourage growth and development of business within the state Educating and informing the public and business and industry of their legal rights and responsibilities.

**Development Impact Fees:** A fee or charge imposed on developers to pay for a jurisdiction's costs of providing services to new development.

**Development Right:** The right granted to a land owner or other authorized party to improve a property. Such right is usually expressed in terms of a use and intensity allowed under existing zoning regulation.

## **Appendix B–Glossary of Terms**

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**Dwelling Unit:** Any residential structure, whether or not attached to real property, including condominium and cooperative units and mobile or manufactured homes. It includes both one-to-four-family and multifamily structures. Vacation or second homes and rental properties are also included.

**Elderly Units:** Specific units in a development are restricted to residents over a certain age (as young as 55 years and over). Persons with disabilities may share certain developments with the elderly.

**Element:** A division or chapter of the General Plan, Master Plan or Comprehensive Plan.

**Emergency Shelter:** A facility designed to provide free temporary housing on a night-by-night basis to homeless families and individuals.

**Emergency Shelter Grants (ESG):** A grant program administered by the U.S. Department of Housing and Urban Development (HUD) provided on a formula basis to large entitlement jurisdictions.

**Entitlement City:** A city, which based on its population, is entitled to receive funding directly from HUD. Examples of entitlement programs include CDBG, HOME and ESG.

**Extremely Low-Income Limit:** The upper limit for the extremely low-income category, set at 30 percent of the HUD area median family income. This is not an official program eligibility income limit, except when associated with a specific family size (e.g., "single person", "family of two", "family of three", etc.).

**Fair Market Rent (FMR):** Fair Market Rents (FMRs) are freely set rental rates defined by HUD as the median gross rents charged for available standard units in a county or Standard Metropolitan Statistical Area (SMSA). Fair Market Rents are used for the Section 8 Housing Choice Voucher Program and other HUD programs and are published annually by HUD.

**Farm Labor Housing (Farm Worker):** Units for migrant farm workers that can be available for transitional housing for the homeless when not occupied by migrant farm workers.

**Family Households:** A family household is one in which the householder lives with one or more individuals related to him or her by birth, marriage, or adoption.

**Family Income:** In decennial census data, family income includes the incomes of all household members 15 years old and over related to the householder. Although the family income statistics from each census cover the preceding calendar year, the characteristics of individuals and the composition of families refer to the time of enumeration (April 1 of the respective census years). Thus, the income of the family does not include amounts received by individuals who were members of the family during all or part of the calendar year prior to the census if these individuals no longer resided with the family at the time of census enumeration. Similarly, income amounts

## **Appendix B–Glossary of Terms**

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reported by individuals who did not reside with the family during the calendar year prior to the census but who were members of the family at the time of enumeration are included. However, the composition of most families was the same during the preceding calendar year as at the time of enumeration.

**Fannie Mae:** Established in 1938 by the Federal government and becoming a private company in 1968, Fannie Mae operates under a congressional charter that directs it to channel their efforts into increasing the availability and affordability of homeownership for low-, moderate-, and middle-income Americans. Yet Fannie Mae receives no government funding or backing, and they are one of the nation's largest taxpayers. They do not lend money directly to home buyers. Instead, they work with lenders to make sure they don't run out of mortgage funds, so more people can achieve their goal of homeownership.

**FHA-Insured:** The Federal Housing Administration insured mortgages so that lower- and moderate- income people can obtain financing for homeownership.

**First-time homebuyer:** A first-time homebuyer program provides low-income first time homebuyers down-payment assistance in the form of a second mortgage loan to serve as "gap financing". These loans can be up to \$ 40,000 depending on the amount of assistance required by the individual homebuyer.

**General Plan:** The General Plan is a legal document, adopted by the legislative body of a City or County, setting forth policies regarding long-term development.

**Groups Quarters:** A facility which houses groups of unrelated persons not living in households such as dormitories, institutions and prisons.

**Habitable (room):** A habitable room is a space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, storage or utility space, and similar areas, are not considered habitable space.

**Habitat for Humanity:** Habitat for Humanity is a nonprofit, ecumenical Christian housing ministry that seeks to eliminate poverty housing and homelessness from the world, and to make decent shelter a matter of conscience and action. Through volunteer labor and donations of money and materials, Habitat builds and rehabilitates simple, decent houses with the help of the homeowner (partner) families. Habitat houses are sold to partner families at no profit, financed with affordable, no-interest loans. The homeowners' monthly mortgage payments are used to build still more Habitat houses.

**Handicap Accessible Units:** Indicates certain units or all units in the property are wheelchair accessible or can be made wheelchair accessible. Accessible units also may include those that are accessible to people with sensory impairments or can be made accessible for people with sensory impairments.

**Hispanic or Latino:** In decennial census data, Hispanics or Latinos are those who classify themselves in one of the specific Hispanic or Latino categories listed on the

## Appendix B—Glossary of Terms

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census questionnaire — “Mexican,” “Puerto Rican,” or “Cuban” — as well as those who indicate that they are “other Spanish, Hispanic, or Latino.” People who do not identify with one of the specific origins listed on the questionnaire but indicate that they are “other Spanish, Hispanic, or Latino” are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, the Dominican Republic, or people identifying themselves generally as Spanish, Spanish-American, Hispanic, Hispano, Latino, and so on. People who are Hispanic or Latino may be of any race. There are two important changes to the Hispanic origin question for Census 2000. First, the sequence of the race and Hispanic origin questions for Census 2000 differs from that in 1990; in 1990, the race question preceded the Hispanic origin question. Second, there was an instruction preceding the Hispanic origin question in 2000 indicating that respondents should answer both the Hispanic origin and the race questions. This instruction was added to give emphasis to the distinct concepts of the Hispanic origin and race questions and to emphasize the need for both pieces of information.

**Home Investment Partnership Program (HOME):** HOME provides formula grants to States and localities that communities use—often in partnership with local nonprofit groups—to fund a wide range of activities that build, buy, and/or rehabilitate affordable housing for rent or homeownership or provide direct rental assistance to low-income people.

**Homeless Person:** An individual living outside or in a building not meant for human habitation, or which they have no legal right to occupy, in an emergency shelter, or in a temporary housing program which may include a transitional and supportive housing program if habitation time limits exist. This definition includes substance abusers, mentally ill people, and sex offenders who are homeless. (U.S. House Bill 2163).

**Household:** A household is made up of all persons living in a dwelling unit whether or not they are related by blood, birth or marriage

**Housing Authority:** An organization established under state law to provide housing for low- and moderate-income persons. Commissioners are appointed by the local governing body of the jurisdiction in which they operate. Many housing authorities own their own housing or operate public housing funded by HUD.

**Housing Choice Voucher Program:** Housing Choice Voucher Program (formerly known as Section 8) is a subsidy program funded by the federal government and overseen by the Reno Housing Authority to provide low rents and/or housing payment contributions for very low and low-income households.

**Housing Element:** Even though Nevada does not have a state agency that reviews local comprehensive plans, state law does require every jurisdiction in Washoe and Clark County to adopt a housing element with following included:

- An inventory of housing conditions, needs and plans and procedures for improving housing standards and for providing adequate housing.

## Appendix B–Glossary of Terms

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- An inventory of affordable housing in the community.
- An analysis of the demographic characteristics of the community.
- A determination of the present and prospective need for affordable housing in the community.
- An analysis of any impediments to the development of affordable housing and the development of policies to mitigate those impediments.
- An analysis of the characteristics of the land that is the most appropriate for the construction of affordable housing.
- An analysis of the needs and appropriate methods for the construction of affordable housing or the conversion or rehabilitation of existing housing to affordable housing.
- A plan for maintaining and developing affordable housing to meet the housing needs of the community.
- Establish goals that relate to land use, transportation, economic development, parks & recreation, conservation and other Master Plan goals.

**HUD:** The United States Department of Housing and Urban Development is cabinet level department of the federal government that oversees program and funding for affordable housing laws, development, and federally funded financial assistance.

**HUD Area Median Family Income:** HUD is required by law to set income limits that determine the eligibility of applicants for HUD's assisted housing programs. Income limits are calculated annually for metropolitan areas and non-metropolitan counties in the United States. They are based on HUD estimates of median family income, with adjustments for family size. Adjustments are also made for areas that have unusually high or low income to housing cost relationships.

**Inclusionary Zoning (IZ):** Requires developers to make a percentage of housing units in new residential developments available to low- and moderate-income households. In return, developers receive non-monetary compensation-in the form of density bonuses, zoning variances, and/or expedited permits-that reduce construction costs. By linking the production of affordable housing to private market development, IZ expands the supply of affordable housing while dispersing affordable units throughout a city or county to broaden opportunity and foster mixed-income communities. IZ, sometimes called "inclusionary housing," can take many forms. Some IZ programs are mandatory, while others are voluntary or incentive-driven. Some jurisdictions require developers to construct affordable units within the development, while others allow affordable units to

## **Appendix B–Glossary of Terms**

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be constructed in another location. Some require developers to build the units, while other communities allow developers to contribute to an affordable housing fund.

**Income Categories:** The federal and state governments require that local jurisdictions consider the housing needs of households in various "income categories." Income categories are determined by the median household income at the local level.

**Large Family or Household:** A household or family with 5 or more members.

**Low-Income Limit:** Low-income households are defined as households with incomes between 50 percent and 80 percent of the area median household income.

**Low-Income Housing:** Housing that is made available at prices lower than market rates. These lower prices are achieved through various financial mechanisms employed by state and local government authorities.

**Low-Income Housing Tax Credit (LIHTC):** The LIHTC Program is an indirect Federal subsidy used to finance the development of affordable rental housing for low-income households. The LIHTC Program may seem complicated, but many local housing and community development agencies are effectively using these tax credits to increase the supply of affordable housing in their communities. This topic is designed to provide a basic introduction to the LIHTC Program.

**Market Rate Housing:** Housing that is not built or maintained with the help of government subsidy. The prices of market rate homes are determined by the market and are subject to the laws of supply and demand.

**Manufactured Home:** Housing that is constructed of manufactured components, assembled partly at the site rather than totally at the site. Also referred to as modular housing

**McKinney-Vento Act:** The primary federal response targeted to assisting homeless individuals and families. The scope of the Act includes: outreach, emergency food and shelter, transitional and permanent housing, primary health care services, mental health, alcohol and drug abuse treatment, education, job training, and child care. There are nine titles under the McKinney-Vento Act that are administered by several different federal agencies, including the U.S. Department of Housing and Urban Development (HUD). McKinney-Vento Act Programs administered by HUD include: Emergency Shelter Grant Program Supportive Housing Program, Section 8 Moderate Rehabilitation for Single-Room Occupancy Dwellings, Supplemental Assistance to Facilities to Assist the Homeless, and Single Family Property Disposition Initiative. (U.S. House Bill 2163).

**Median-Income:** Each year, the federal government calculates the median income for communities across the country to use as guidelines for federal housing programs. Area median incomes are set according family size.

**Mental Illness:** A serious and persistent mental or emotional impairment that significantly limits a person's ability to live independently.

## Appendix B–Glossary of Terms

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**Mixed Income Housing:** See Inclusionary Zoning.

**Mixed Use:** This refers to different types of development (e.g. residential, retail, office, etc.) occurring on the same lot or in close proximity to each other. City and County’s sometimes allows mixed-use in commercial zones, with housing typically located above primary commercial uses on the premises.

**Mobile Home:** A type of manufactured housing. A structure movable in one or more sections, which is at least 8 feet in width and 32 feet in length, is built on a permanent chassis and designed to be used as a dwelling unit when connected to the required utilities, either with or without a permanent foundation.

**Mobile Home Park:** A parcel or tract of land having as its principal use the rental, leasing or occupancy of space by two or more mobile homes on a permanent or semipermanent basis, including accessory buildings, or uses customarily incidental thereto.

**Mobile Home Subdivision:** A subdivision of land, platted in conformance to NRS Chapter 278 and applicable city ordinances for the purpose of providing mobile home lots.

**Moderate-Income:** Moderate-income households are defined as households with incomes between 80 percent and 120 percent of the county median.

**Mortgage Credit Certificate Program (MCCs):** The MCC is a Federal Income Tax Credit Program. An MCC increases the loan amount you qualify for and it increases an applicant's take-home pay. The MCC entitles applicants to take a federal income tax credit of twenty percent (20 percent) of the annual interest they pay on their home mortgage. Because the MCC reduces an applicant's federal income taxes and increases their net earnings, it helps homebuyers qualify for a first home mortgage. The MCC is registered with the IRS, and it continues to decrease federal income taxes each year for as long as an applicant lives in the home.

**Mortgage Revenue Bond:** A state, county or city program providing financing for the development of housing through the sale of tax-exempt bonds.

**Multi-family Dwelling:** A structure containing two or more dwelling units for the use of individual households; an apartment or condominium building is an example of this dwelling unit type.

**Nevada Housing Division:** The Nevada Housing Division was created by the Nevada Legislature in 1975 when it was recognized that a shortage of safe, decent, and sanitary housing existed throughout the State for persons and families of low- and moderate-income. Its mission is to assist and encourage the private sector and other government entities in the creation and maintenance of affordable housing throughout the State.

**Nevada Small Business Development Center:** The Nevada Small Business Development Center is a statewide business assistance outreach program of the

## **Appendix B–Glossary of Terms**

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University of Nevada, Reno and the University of Nevada, Las Vegas. They provide an abundance of free and low cost information, assistance, counseling and training for Nevada Businesses.

**Non-Hispanic:** In decennial census data and in Home Mortgage Disclosure Act data after 2003, non-Hispanics are those who indicate that they are not Spanish/Hispanic/Latino.

**Permanent Housing:** Housing which is intended to be the tenant’s home for as long as they choose. In the supportive housing model, services are available to the tenant, but accepting services cannot be required of tenants or in any way impact their tenancy. Tenants of permanent housing sign legal lease documents. (U.S. House Bill 2163).

**Permanent Supportive Housing:** Long-term community-based housing and supportive services for homeless persons with disabilities. The intent of this type of supportive housing is to enable this special needs population to live as independently as possible in a permanent setting. The supportive services may be provided by the organization managing the housing or provided by other public or private service agencies. There is no definite length of stay. (U.S. House Bill 2163)

**Persons with a Disability:** HUD’s Housing Choice Voucher (formerly Section 8) program defines a “person with a disability” as: a person who is determined to : 1) have a physical, mental, or emotional impairment that is expected to be of continued and indefinite duration, substantially impedes his or her ability to live independently, and is of such a nature that the ability could be improved by more suitable housing conditions; or 2) have a developmental disability, as defined in the Developmental disabilities Assistance and Bill of Rights Act. (U.S. House Bill 2163)

**Project-Based Rental Assistance:** Rental assistance provided for a project, not for a specific tenant. A tenant receiving project-based rental assistance gives up the right to that assistance upon moving from the project.

**Public Housing:** The U.S. Department of Housing and Urban Development (HUD) administers Federal aid to local housing agencies (HAs) that manage the housing for low-income residents at rents they can afford. HUD furnishes technical and professional assistance in planning, developing and managing these developments. It provides decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing can be in the form of high-rise apartments or scattered site single family homes.

**Rehabilitation:** The upgrading of a building previously in a dilapidated or substandard condition for human habitation.

**Reno Area Alliance for Homeless:** A county-wide coalition that works to address issues affecting the area homeless population.

## **Appendix B–Glossary of Terms**

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**Rental Assistance:** A rental subsidy for eligible low and very low income tenants. This assistance provides the share of the monthly rent that exceeds 30% of the tenants' adjusted monthly income.

**Rent-to-Own:** A development is financed so that at a certain point in time, the rental units are available for purchase based on certain restrictions and qualifications.

**Rural Housing Service (RHA):** A part of the United States Department of Agriculture's Rural Development. The RHA offers financial aid to low-income residents of rural areas.

**Second Units:** Also referred to as "granny" or "in-law apartments." Second units provide a second housing unit on the same lot as a single-family dwelling unit.

**Section 8:** Section 8, now known as the Housing Choice Voucher Program is a subsidy program funded by the federal government and overseen by the Reno Housing Authority to provide low rents and/or housing payment contributions for very low and low-income households.

**Service Needs:** The particular services required by special populations, typically including needs such as transportation, personal care, housekeeping, counseling, meals, case management, personal emergency response, and other services preventing premature institutionalization and assisting individuals to continue living independently.

**Single-Room Occupancy Dwelling (SRO):** The SRO Program provides rental assistance for homeless persons in connection with the moderate rehabilitation of SRO dwellings. SRO housing contains units for occupancy by one person. These units may contain food preparation or sanitary facilities, or both.

**Special Needs Projects:** Housing for a designated group of people who desire special accommodations, such as services, in addition to the housing. Services may or may not be provided as part of the rental project. Examples of special needs populations are people with physical disabilities, developmental disabilities, mental illness, or those who need assisted living. It also includes health care facilities.

**Substandard Housing:** This refers to housing where major repair or replacement may be needed to make it structurally sound, weatherproofed and habitable.

**Subsidized Housing:** Typically refers to housing that rents for less than the market rate due to a direct financial contribution from the government. There are two general types of housing subsidies. The first is most commonly referred to as "project-based" where the subsidy is linked with a particular unit or development and the other is known as "tenant-based" where the subsidy is linked to the low income individual or family. The terms "assisted" and "subsidized" are often used interchangeably.

## **Appendix B–Glossary of Terms**

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**Supportive Housing:** Housing with a supporting environment, such as group homes or Single Room Occupancy (SRO) housing and other housing that includes a supportive service component such as those defined below.

**Supportive Services:** Services provided to residents of supportive housing for the purpose of facilitating the independence of residents. Some examples are case management, medical or psychological counseling and supervision, child care, transportation, and job training.

**Transitional Housing:** Housing for people recovering from substance abuse issues or transitioning from homelessness. Transitional housing provides longer term accommodations to homeless families and individuals than emergency shelter housing. Transitional Housing provides a stable living environment for the period of time necessary to learn new skills, find employment, and/or develop a financial base with which to re-enter the housing market.

**VA-Guaranteed:** VA guaranteed loans are made by private lenders to eligible veterans for the purchase of a home which must be for their own personal occupancy. To get a loan, a veteran must apply to a lender. If the loan is approved, VA will guarantee a portion of it to the lender. This guaranty protects the lender against loss up to the amount guaranteed and allows a veteran to obtain favorable financing terms.

**Very Low-Income Limit:** Very low-income households are defined as households with incomes less than 50 percent of the area median household income.

**Veteran:** Anyone who has been discharged from the military generally after at least two years of service whether they served on active duty in a conflict or not. (U.S. House Bill 2163).

**Washoe County HOME Consortium (WCHC):** Administers housing programs for Washoe County; allocates federal HOME, Community Development Block Grant (CDBG) and Affordable Dream Downpayment Initiative (ADDI) monies. Oversees the Consolidated Plan process, which guides the full range of decisions and activities in Sparks, Reno, and Washoe County relating to the provision of decent and affordable housing, the development of a suitable living environment, and creating expanded economic opportunities for the community members.

**Workforce Housing:** Refers to housing that is meant for residents making low, moderate to above moderate area median income. Some programs focus on employers providing assistance to their employees; some are instituting inclusionary programs, while others give preference to this group in their homeownership programs. Some jurisdictions have programs for specific segments of the workforce that are vital for the everyday function of the community such as teachers, policeman and other public employees.

**Zoning:** Zoning is an activity under taken by local jurisdictions to direct and shape land development activities. The intent of zoning is to protect the public health, safety, and welfare by ensuring that incompatible land uses (e.g. residential vs. heavy industrial)

## **Appendix B–Glossary of Terms**

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are not located next to each other. Zoning also impacts land values, creating and taking away "capitol" for and from property owners. For example, a lot that is zoned for commercial development is more valuable (in financial terms) than a lot that is zoned for open space. Typically, lots that are zoned for higher densities have greater value on the market than lots that are zoned for lower densities. Zoning is one of the most important regulatory functions performed by local jurisdictions.

### **U.S. CENSUS TERMS**

**Children:** The term "children," as used in tables on living arrangements of children under 18, are all persons under 18 years, excluding people who maintain households, families, or subfamilies as a reference person or spouse.

**Own Children:** Sons and daughters, including stepchildren and adopted children, of the householder. Similarly, "own" children in a subfamily are sons and daughters of the married couple or parent in the subfamily. (All children shown as members of related subfamilies are own children of the person(s) maintaining the subfamily>) For each type of family unit identifies in the CPS, the count of "own children under 18 year old" is limited to never-married children; however, "own children under 25" and "own children of any age," as the terms are used here, include all children regardless of marital status. The counts include never-married children living away from home in college dormitories.

**Related children:** Includes all people in a household under the age of 18, regardless of marital status, who are related to the householder. It does not include householder's spouse or foster children, regardless of age.

**Ethnic Origin:** People of Hispanic origin were identified by a question that asked for self-identification of the persons' origin or descent. Respondents were asked to select their origin (and the origin of other household members) from a "flash card" listing ethnic origins. People of Hispanic origin in particular, were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. It should be noted that people of Hispanic origin may be of any race.

**Family:** A group of two or more people who reside together and who are related by birth, marriage, or adoption.

**Family household (Family):** A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in census tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may comprise a group of unrelated people or one person living alone.

## Appendix B–Glossary of Terms

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**Family size:** Refers to the number of people in a family.

**Family type:** Refers to how the members of a family are related to one another and the householder. Families may be a "Married Couple Family," "Single Parent Family," "Stepfamily," or "Subfamily."

**Household:** A household includes all the people who occupy a housing unit as their usual place of residence.

**Household Income:** The total income of all the persons living in a household. A household is usually described as very low income, low income, moderate income, and above moderate income based on household size and income, relative to regional median income.

**Household size:** The total number of people living in a housing unit.

**Household type and relationship:** Households are classified by type according to the sex of the householder and the presence of relatives. Examples include: married-couple family; male householder, no wife present; female householder, no husband present; spouse (husband/wife); child; and other relatives.

**Householder:** The person, or one of the people, in whose name the home is owned, being bought, or rented. If there is no such person present, any household member 15 years old and over can serve as the householder for the purposes of the census. Two types of householders are distinguished: a family householder and a non-family householder. A family householder is a householder living with one or more people related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him are family members. A non-family householder is a householder living alone or with non-relatives only.

**Housing unit:** A house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall. For vacant units, the criteria of separateness and direct access are applied to the intended occupants whenever possible.

**Median:** This measure represents the middle value (if  $n$  is odd) or the average of the two middle values (if  $n$  is even) in an ordered list of data values. The median divides the total frequency distribution into two equal parts: one-half of the cases fall below the median and one-half of the cases exceed the median.

**Median age:** This measure divides the age distribution in a stated area into two equal parts: one-half of the population falling below the median value and one-half above the median value.

## Appendix B—Glossary of Terms

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**Median income:** The median income divides the income distribution into two equal groups; one has incomes above the median and the other having incomes below the median.

**Occupied housing unit:** A housing unit is classified as occupied if it is the usual place of residence of the person or group of people living in it at the time of enumeration, or if the occupants are only temporarily absent; that is, away on vacation or a business trip. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated people who share living quarters.

**Overcrowded units:** Overcrowded units are occupied housing units that have more than 1 person per room.

**Per capita income:** Average obtained by dividing aggregate income by total population of an area.

**Population estimate (Population Estimates Program):** The Census Bureau's Population Estimates Program (PEP) produces July 1 estimates for years after the last published decennial census (2000), as well as for past decades. Existing data series such as births, deaths, Federal tax returns, Medicare enrollment, and immigration, are used to update the decennial census base counts. POP estimates are used in Federal funding allocations, in setting the levels of national surveys, and in monitoring recent demographic changes.

**Population projections:** Estimates of the population for future dates. They illustrate plausible courses of future population change based on assumptions about future births, deaths, international migration, and domestic migration. Projections are based on an estimated population consistent with the most recent decennial census as enumerated. While projections and estimates may appear similar, there are some distinct differences between the two measures. Estimates usually are for the past, while projections typically are for future dates. Estimates generally use existing data, while projections must assume what demographic trends will be in the future.

**Poverty:** Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

**Poverty rate:** The percentage of people (or families) who are below poverty.

**Race:** The race of individuals was identified by a question that asked for self-identification of the person's race. Respondents were asked to select their race from a "flashcard" listing racial groups.

**Severely Overcrowded:** Are occupied housing units with 1.51 or more persons per room.

## Appendix B–Glossary of Terms

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**Single family detached homes:** This is a one-unit residential structure detached from any other house (i.e., with open space on all four sides). A house is considered detached even if it has an adjoining shed or garage.

**Single family attached housing:** This is a one-unit residential structure that has one or more walls extending from ground to roof separating it from adjoining structures. This category includes row houses, townhouses, and houses attached to non-residential structures.

**Tenure:** Refers to the distinction between owner-occupied and renter-occupied housing units. A housing unit is “owned” if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. A cooperative or condominium unit is “owned only if the owner or co-owner lives in it. All other occupied units are classified as “rented, “ including units rented for cash rent and those occupied without payment of cash rent.

**Two-family buildings:** These dwellings may also be referred to as single family attached because a duplex with a shared wall would qualify in both categories. Other two family buildings would include older single family homes that have been converted into two separate living spaces or “flats” that do not share walls, but a floor/ceiling.

**Units in structure:** A structure is a separate building that either has open spaces on all sides or is separated from other structures by dividing walls that extend from ground to roof. In determining the number of units in a structure, all housing units, both occupied and vacant, are counted.

**Unemployed:** All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.

**Unemployment Rate:** The proportion of the civilian labor force that is unemployed, expressed as a percent.

**Vacant Housing Unit:** A housing unit is vacant if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant. New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded from the housing inventory if they are open to the elements; that is, the roof, walls, windows, and/or doors no longer protect the interior from the elements. Also excluded are vacant units with a sign that they are condemned or they are to be demolished.

**Vacancy Rate:** The housing vacancy rate is the proportion of the housing inventory that is available “for sale” or “for rent.” It is computed by dividing the number of available units by the sum of occupied units and available units, and then multiplying by 100.

## **Appendix B—Glossary of Terms**

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**Year Structure (housing unit) Built:** Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted. For housing units under construction that met the housing unit definition—that is, all exterior windows, doors, and final usable floors were in place—the category “1999 or 2000” was used for tabulations. For mobile homes, houseboats, recreational vehicles, etc, the manufacturer’s model year was assumed to be the year built. The data relate to the number of units built during the specified periods that were still in existence at the time of enumeration.

**White:** In decennial census data, the White category includes persons having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as “White” or report entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish. The "alone" designation, as used with decennial census data, indicates that the person reported only one race.

## **Appendix B–Glossary of Terms**

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### **SOURCES INCLUDE:**

<http://www.dataplace.org/gloss.html>

U.S. Census Bureau at <http://www.census.gov>

Riverside, CA Housing Element Glossary

U.S. Department of Housing and Urban Development at <http://www.hud.gov>

## Appendix C—Compliance with AB 439

The table below lists the twelve specified measures included in AB 439. The legislation states that jurisdictions must adopt at least six of the following measures into their Housing Plan to maintain existing and development new affordable housing opportunities. This table also illustrates which action programs in the Housing Plan meet the requirements are these measures.

AB 439 Requirements		Action
1	At the expense of the city or county, as applicable, subsidizing in whole or in part impact fees and fees for the issuance of building permits collected;	Action 1.2: Evaluate the possible techniques to offset the fees for the development of affordable and workforce housing; Action 4.1: Investigate funding sources and coordinate with state and federal resources to seek any available sources of funding for affordable and workforce housing.
2	Selling land owned by the city or county, as applicable, to developers exclusively for the development of affordable housing at not more than 10 percent of the appraised value of the land, and requiring that any such savings, subsidy, or reduction in price be passed on to the purchaser of housing in such a development. Nothing in this paragraph authorizes a city or county to obtain land pursuant to the power of eminent domain for the purposes set forth in this paragraph;	
3	Donating land owned by the city or county to a non-profit organization to be used for affordable housing;	
4	Leasing land by the city or county to be used for affordable housing;	
5	Requesting to purchase land owned by the Federal Government at the discounted price for the creation of affordable housing pursuant to the provision of section 7 (B) OF THE Southern Nevada Public Land Management Act of 1998 (SNPLMA);	

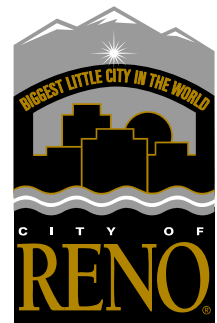
## Appendix C—Compliance with AB 439

AB 439 Requirements		Action
6	Establishing a process that expedites the approval of plans and specifications relating to maintaining and developing affordable housing;	Action 4.4: Work with local employers to develop an employee-housing program. The housing program could include a down payment assistance program, allow employers or employees to pay into an affordable housing trust fund, and/or, provide housing on-site or at another location; Action 4.5: The City should develop a housing demolition fee and the money generated will go into the Affordable Housing Trust Fund; Action 8.2: The City in cooperation with the City of Sparks and Washoe County will work with financial institutions to obtain funds to develop a regional housing trust fund, develop a regional clearinghouse for housing data and education, and develop education and outreach programs Action 8.5: The City will work with other jurisdictions in the region to consider developing an Affordable Housing Trust Fund that will be used for the development of affordable housing throughout the City.
7	Establishing a process that expedites the approval of plans and specifications relating to maintaining and developing affordable housing;	
8	Providing money, support, or density bonuses for affordable housing developments that are financed, wholly or in part, with low-income housing tax credits, private activity bonds, or money from a governmental entity for affordable housing;	Action 1.1: To increase affordable housing the City's Municipal Code Title 18 and other procedures should be reviewed and if needed amended and updated including condominium conversions, accessory dwelling units (ADUs), single-room occupancy (SRO) housing types allowed by-right, density bonus, special use permit (SUP) requirements; Action 2.1: Encourage neighborhood revitalization in existing areas through housing rehabilitation and infill reuse/conversion for both owner-and renter-occupied units; Action 2.4: Provide assistance to local property owners to identify possible state and federal funding that allows them to maintain affordability of a housing project. Review resale controls or rental restrictions for units built with locally generated housing funds; Action 3.5: Work with developers to identify financial incentives to increase the development of affordable and workforce housing
9	Providing financial incentives or density bonuses to promote appropriate transit-oriented housing developments that would include an affordable housing component;	Action 3.3: Identify programs and/or incentives to increase the building of affordable and workforce housing in TODs and regional centers, including a mixed-income policy; Action 3.5: Work with developers to identify financial incentives to increase the development of affordable and workforce housing

## Appendix C—Compliance with AB 439

AB 439 Requirements		Action
10	Offering density bonuses or other incentives to encourage the development of affordable housing;	Action 1.1: To increase affordable housing the City's Municipal Code Title 18 and other procedures should be reviewed and if needed amended and updated including condominium conversions, accessory dwelling units (ADUs), single-room occupancy (SRO) housing types allowed by-right, density bonus, special use permit (SUP) requirements; Action 3.1: The brochure should be available on the City's web site and provide information, resources, and incentives for developers; Action 3.5: Work with developers to identify financial incentives to increase the development of affordable and workforce housing.
11	Providing direct financial assistance to qualified applicants for the purchase or rental of affordable housing; and	Action 7.1: Methods to increase and maintain owner-occupied units in the City should be investigated, including working with nonprofits, increasing down payment assistance to first-time buyers, lease-to-own programs, and sweat-equity programs.
12	Providing money for supportive services necessary to enable persons with supportive housing needs to reside in affordable housing in accordance with a need for supportive housing identified in the 5-year consolidated plan adopted by the U.S. Department of Housing and Urban Development for the city or county.	Action 5.2: Work with local housing groups to assist disabled persons with accessibility modifications to their homes. Continue funding the Minor Housing Rehabilitation Program for disabled persons; Action 5.4: Work to increase the supply of permanent-supportive and affordable housing. Advocate for state and federal policies to increase the availability of permanent-supportive housing opportunities. Review or develop programs to assist individuals and families at-risk of becoming homeless, including the following actions: the creation of new supportive units, a program for hard-to-house clients, increasing short-term and long-term resources, increasing the availability of rent or mortgage payment assistance offering deposit and utility assistance, increasing financial assistance for permanent affordable housing and educating landlords to improve rental opportunities for individuals and families that were homeless or hard-to-house.

# LAND USE PLAN



## **ACKNOWLEDGMENTS**

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# **TABLE OF CONTENTS**

---

## **Introduction**

Plan Organization.....	1
Boundary .....	1
Time Frame.....	1
Relationship to Other Plans.....	1
Need for Land Use Plan .....	1

## **Physical Development Pattern**

Centers.....	3
Overlay or Special Regulation Areas .....	4
Transit Oriented Development Corridors .....	4
Overlay or Special Regulation Areas .....	4
Neighborhoods.....	5
Overlay or Special Regulation Areas .....	6
Main Streets .....	6
Sphere of Influence .....	6
Cooperative Planning .....	7

## **Land Use Designations**

Residential Land Use Designations.....	7
Single Family Residential.....	7
Mixed Residential.....	8
Mixed and Non-Residential Land Use Designations .....	9
Urban Residential/Commercial .....	10
Industrial .....	11
Public Facility .....	12
Parks/Recreation/Open Space.....	12
Special Planning Area.....	13
Unincorporated Transition.....	13

**Land Use Plan/Zoning Conformance** ..... 14

**Maps**

- Map 1 Master Plan Land Use Designations
- Map 2 Regional Centers and Transit Oriented Development Corridors
- Map 3 Areas Subject to Cooperative Planning

**Tables**

- Table 1 Land Use Designations and Conforming Zoning Districts ... .15
- Table 2 Translation of County Land Use to City Land Use Zoning... .16

## **INTRODUCTION**

### **Plan Organization**

This plan is divided into four sections: *Introduction*, *Physical Development Pattern*, *Land Use Designations*, and *Land Use Plan/Zoning Conformance*. The *Introduction* describes the boundary, time frame, relationship to other plans and why this plan is needed. The physical development pattern and key features of that pattern are discussed in the next section. The *Land Use Designations* section describes the land use categories in terms of uses and public service levels. The *Land Use Plan/Zoning Conformance* section outlines how the plan relates to zoning. Maps and tables that are referenced are included in the document.

### **Boundary**

This Land Use Plan covers all of the City of Reno and its sphere of influence.

### **Time Frame**

This plan is intended to provide guidance for development and redevelopment for the next twenty year period.

### **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150 through 278.170.

Policies of the Truckee Meadows Regional Plan are applicable regionwide. The City Master Plan has three different levels of applicability; *Citywide*, *Center and Corridor*, and *Neighborhood*. *Citywide* plans include this Land Use Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in centers or corridors, which have been designated as appropriate for more detailed planning. Policies in center, corridor and neighborhood plans elaborate, with greater detail, upon general policies contained in the citywide and regional plans. Center, corridor and neighborhood plans must conform with and not be in conflict with policy direction of the citywide plans and the Truckee Meadows Regional Plan. Similarly, zoning code is adopted at the same levels and must be consistent with these plans.

### **Need for Land Use Plan**

The Nevada Revised Statutes lists a land use plan as appropriate information to be included in the Master Plan. Specifically NRS 278.160(f) states that land use may be addressed as described below:

Land Use Plan - An inventory and classification of types of natural land and of existing land use cover and uses, and comprehensive plans for the most desirable utilization of land.

The land use plan:

- (1) Must address, if applicable, mixed-use development, transit-oriented development, master-planned communities and gaming enterprise districts.
- (2) May include a provision concerning the acquisition and use of land that is under federal management within the city, county or region, including, without limitation, a plan or statement of policy prepared pursuant to NRS 321.7355.

Additionally, NRS 278.0284 provides for consistency between the Master Plan and local ordinances as follows:

Conformity of local ordinances and regulations to master plan - Any action of a local government relating to development, zoning, the subdivision of land or capital improvements must conform to the master plan of the local government. In adopting any ordinance or regulation relating to development, zoning, subdivision of land or capital improvements, the local government shall make a specific finding that the ordinance conforms to the master plan. Within 1 year after its adoption of any portion of a master plan, the local government shall review and, if necessary, amend its existing ordinances to ensure their conformity with the provisions of the master plan. If any provision of the master plan is inconsistent with any regulation relating to land development, the provision of the master plan governs any action taken in regard to an application for development.

(Added to NRS by 1989, 766)

## **PHYSICAL DEVELOPMENT PATTERN**

The Plan is based on a regional development pattern that follows transportation corridors to the south, west, and north. Between the corridors there are significant areas of open space and much lower intensity development. The pattern of development in the City reflects the following features:

- Centers
- Transit Oriented Development Corridors
- Neighborhoods
- Truckee River
- Spheres of Influence

Some sections described in this Plan should be cross referenced with other parts of the Master Plan. Specifically, most of the land use designations outline required streets, access, and parks. Support data for each of these requirements are in other plans. A table that cross references land use designations with corresponding zoning code districts is also included in this Land Use Plan.

### **Centers**

Centers shape and define the skyline, and the intensity of urban areas. Centers are those areas where the most intense urban activity is planned and rapid transit is prioritized. The centers typically have planned residential development with minimum densities of 21 units per acre and average densities of 30 units per acre. Non-residential development is planned for a minimum floor area ratio of 1.5. In response to neighborhood concerns regarding compatibility, several of the center plans have adopted alternative minimum residential and nonresidential densities to those described above. The City zoning code identifies strategies for intensifying these areas over time that include generous height maximums permitted through discretionary review, significant reductions in parking requirements, encouraged use of shared parking, and the accommodation of pedestrian and transit amenities. Additionally, the Policy Plan and Public Services, Facilities, and Infrastructure Plan both identify the prioritization of infrastructure investment in centers and corridors at capacities to serve anticipated high intensity development.

Reno has nine centers:

- Downtown Reno Regional Center – Downtown Core
- Convention Regional Center – Meadowood Mall/Reno-Sparks Convention Center area
- Medical Regional Center – Renown Medical Center area
- Reno-Tahoe International Airport Regional Center – Reno-Tahoe International Airport area
- University of Nevada Regional Center – University of Nevada, Reno area
- Dandini Regional Center – Truckee Meadows Community College/Justice Facility/DR1 area

- Reno-Stead Airport Regional Center – Reno-Stead airport area
- Redfield Regional Center – Redfield Campus/St. Mary's Galena medical facility/Summit Sierra area
- Western Gateway Regional Center – Verdi/Garson Road area

These centers are shown on Map 2, entitled Regional Centers, Transit Oriented Development Corridors. More detailed plans for each regional center are included as separate components of the Reno Master Plan.

### ***Overlay or Special Regulation Areas***

Variation or supplements to the city-wide standards are generally implemented through the use of zoning overlay districts. These are used for each center plan.

### **Transit Oriented Development Corridors**

Transit oriented development (TOD) corridors are designated along major transit routes with higher intensity development and well developed pedestrian circulation. The designated corridors essentially follow the route of former major highways (US 40 and old US 395) and complement rapid transit. Except as noted below, these corridors will have minimum residential densities of at least 18 units per acre with an average of at least 30 units per acre. Non-residential development will have a minimum floor area ratio (FAR) of 1.5, except in some areas between stations where the FAR may be 0.25 or greater.

Reno has five TOD corridors that originate from Downtown:

- South Virginia Street TOD Corridor – Virginia Street south to the Mt. Rose Highway and west to the Redfield Regional Center
- North Virginia Street TOD Corridor –Virginia Street north to Stead Boulevard and along Stead Boulevard to the Stead Regional Center
- West Fourth Street TOD Corridor Fourth Street west to the Interstate 80 intersection
- East Fourth Street TOD Corridor East Fourth into City of Sparks
- Mill Street TOD Corridor – South to Mill Street, east along Mill Street to Terminal Way and south on Terminal Way to the Reno-Tahoe International Airport

These TOD corridors are shown on Map 2, entitled Regional Centers and Transit Oriented Development Corridors. More detailed plans for each TOD corridor are included as separate components of the Reno Master Plan. In response to neighborhood concerns regarding compatibility, several of the corridor plans have adopted alternative minimum residential and nonresidential densities to those described above. The City zoning code identifies strategies for intensifying these areas over time that include generous height maximums permitted through discretionary review, up to 50% reduction in parking requirements, encouraged use of shared parking, and requirements of major employers to provide documentation of an implemented employee trip reduction program. Additionally, the Policy Plan and Public Services, Facilities, and Infrastructure Plan both identify the prioritization of infrastructure

investment in centers and corridors at capacities to serve anticipated high intensity development.

### ***Overlay or Special Regulation Areas***

Variation or supplements to the city-wide standards are generally implemented through the use of zoning overlay districts. These are used for each TOD plan.

### **Neighborhoods**

The conservation of existing neighborhoods, and the creation of new ones--as opposed to subdivisions, has a very high priority both with our citizens and our civic leaders. Neighborhoods are places where people know and interact with one another. They are comfortable and safe because there are people on the streets and people watching the streets. In old Reno, where the traditional pattern of narrow streets with parkways and houses with front entrances and porches close to the street prevails, many of the physical elements needed to encourage safe streets are already in place. The community design standards incorporated in or mandated by this plan will assure that new neighborhoods share these features.

Activity on the streets, as well as people watching the streets, is necessary but not sufficient to assure safe neighborhoods and shopping districts. To enhance the safety and security of an area, we must also make sure its buildings and public spaces are designed with safety in mind and that it is clean and well maintained. The entrances and public and semi-public areas of apartment complexes must be designed to create a sense of ownership and community in the residents. Commercial areas must be well lighted and visible from the street. Throughout the city, maintenance must become a high priority.

Numerous studies have proven the "broken window" theory true. A broken window that is not repaired shows that people do not care about their community. This lack of caring encourages criminal activity because of fewer "eyes on the street". Proper maintenance, upkeep and repair of a community, which includes buildings, as well as yards and streets, demonstrate that people care, are watching and are involved in their community. Not only should buildings be kept clean and well painted, but yards should be neat and vacant lots free of weeds and junk cars. The City of Reno, by requiring proper design and maintenance, can create tomorrow's gardens and avoid tomorrow's ghettos.

Environmental design and maintenance will create successful residential communities. The success of a residential community is measured by neighborhood stability. Reno has many stable neighborhoods, however some are in transition and must be conserved. These neighborhoods provide a variety of housing styles and prices. They, as part of the built city, surround and support the urban core. Preservation of these areas tie into the community goals of reducing sprawl and automobile trips and enhancing the walkability of the community.

Neighborhood plans discuss the residents' preferences for their community including land use and zoning. Some plans accompany a rezoning program that is adopted in ordinance form at the time the plan is adopted. Other plans contemplate acceptable and likely future land use changes. Neighborhood plans provide policy guidance to evaluate zoning changes requests over time. In this respect, neighborhood plans are agents of change or preservation.

In Reno, many neighborhoods have well maintained houses in which residents enjoy living and wish to remain. It is the City's aim to assist in the conservation of these areas through the affordable rehabilitation loan and the first time home ownership programs. In conserving these neighborhoods, the City must also look at neighborhood traffic management plans. Implementing the use of traffic calming devices reclaims space for the people which reinforces a sense of community; putting people before cars relates back to the central point of good design: creating semi-private space for which residents have a feeling of ownership and will take pride in and properly maintain.

### ***Overlay or Special Regulation Areas***

Variation or supplements to the city-wide standards are generally implemented through the use of zoning overlay districts. These are used for each neighborhood plan. Existing examples include, for example, the Plumas Neighborhood Residential Core overlay.

### **Main Streets**

Cities need shopping areas, both in the city center and in neighborhoods. Successful neighborhood shopping areas (grocery stores or supermarkets, drugstores, hardware stores, convenience services, boutiques, cafes, specialty foods, etc.,) cater not only to the needs of neighborhood residents, who might walk or bicycle, but also to non-residents who drive to the area. They provide attractive, convenient and safe pedestrian environments and parking areas. Successful local shopping areas are a key factor in preserving neighborhoods and maintaining the economic vitality of the city. It is then the intent and policy of the City to encourage and support designated local shopping areas by providing for street and sidewalk improvements and furniture, landscaped areas, street and area lighting, lighted covered bus stops, and additional parking (e.g., angle parking on-street). Designated "Main Street" areas include: California Avenue, between South Virginia Street and Arlington Avenue; Vassar Street, between South Virginia Street and Wilson Street; Wells Avenue, segments between Moran Street and Casazza Drive; and, East Fourth Street, between Lake Street and Wells Avenue.

### **Sphere of Influence**

All land shown on Map 1, Master Plan Land Use Designations, is either within city limits or the sphere of influence. The sphere of influence is an area into which the City could be expected to expand its limits over a twenty-year period. City of Reno land use designations are assigned to land in the sphere of influence based upon a conversion described in the zoning ordinance. In addition, developments approved by the County are allowed to directly transfer that approval into the City as the City takes jurisdiction for that property. This process is described further in the Land Use Plan/Zoning Conformance section of this plan.

## **Cooperative Planning**

Map 3 illustrates areas subject to cooperative planning within Reno's City limits and sphere of influence. The adopted cooperative planning process is described within the City's zoning code.

## **LAND USE DESIGNATIONS**

The nine land use designations used by the City of Reno are grouped into two categories: 1) residential land use designations and, 2) mixed and non-residential land use designations. These are described in more detail below and shown in a generalized form on Map1, Master Plan Land Use Designations.

Each of the land use designations describe in general the public services and facilities needed for that designation (e.g., community water, community sewer, access, response times, etc.). The land use designation on any given parcel is partly based on the current available information on the adequacy of the public services and facilities infrastructure within the Truckee Meadows Services Area (TMSA). The Public Services, Facilities, and Infrastructure (PSFI) Plan addresses these issues in more detail and identifies the facilities and infrastructure required to service development occurring within specific land use designations and further defines how facility and infrastructure needs should be reevaluated as land uses and zoning are changed or assigned.

## **Residential Land Use Designations**

These designations are primarily residential and may be appropriate for parks, churches, schools, child care facilities or private clubs. Utility and public uses such as water storage tanks or pumping and booster stations that are necessary infrastructure are also appropriate. All of the residential designations may contain development constraints such as slopes greater than 30%; wetlands, drainageways or floodways; ridges or scenic vistas; wildlife habitats; or, unstable soils. When these conditions exist on a designated property, Planned Unit Development zoning or clustering may be employed to direct development to the most suitable portion of the site, leaving sensitive areas as open space. In addition, residential development should not be located within an exterior 65 dB Ldn or greater airport noise corridor unless mitigated.

### ***Single Family Residential***

This land use designation is for up to 3 dwelling units per acre with the following characteristics:

- Lots 15,000 square feet or larger.
- May be located where public service and infrastructure are limited; in area where full urban services are available, lots one acre or larger are appropriate only as part of a large master planned development. Also appropriate between rural and more intensive residential uses, or at city edge to assure compatibility with unincorporated land.

- Often include development constraints (e.g., slope, limited access); development must be situated to avoid negative impact to sensitive environmental features.

The service levels required for this land use are:

Community Water	Lots larger than one acre - Requirement is based upon state water law and service area. Lots one acre and less - Required.
Community Sewer	Generally required. Lots larger than one acre may not require sewer so long as District Health regulations are met and there is not a risk of contamination to the Truckee River or other watercourses.
Access	Local streets.
Fire Response Time	Lots larger than one acre - Within eight minutes or greater from an existing or proposed fire station. Lots one acre and less - Within six minutes maximum to 90% of the property, over six minutes to no more than 10% of property from an existing or proposed fire station.
Police Response Time	Lots larger than one acre - Beyond 15 minutes. Lots one acre and less - Within ten minutes.
Neighborhood Park	Lots larger than one acre - One mile or more from the nearest existing or proposed neighborhood park. Lots one acre and less - One-half mile from a neighborhood park, or one mile from a community park, existing or proposed.

### ***Mixed Residential***

This land use designation is for 3 to 21 dwelling units per acre with the following characteristics:

- Predominate range of densities in the city. Provides for single family, additions of units in the rear of single family residences, low and medium multi-family housing, and cluster residential development.
- Suitable where all urban services and utilities are available.
- Developments greater than 14 dwelling units per acre are appropriate downtown, near a transit line and retail center that includes a grocery store. Developments less than 14 dwelling units per acre are appropriate throughout the remainder of the City. In areas that are single family in character, developments with less than 14 dwelling units should appear similar to surrounding single-family and two-

family structures. Similarity may be achieved by clustering multi-family development in groupings of structures with four units or less, consistent building materials, or street level entrances for individual units.

- May be appropriate for neighborhood commercial uses of less than 4 acres. Desirable uses include fitness centers, offices, small-scale retail, and restaurants.

The service levels required for this land use are:

Community Water	Required
Community Sewer	Required
Access	Single family, seven dwelling units to the acre or less - local or collector (if below trip generation threshold). Multi-family/cluster developments, neighborhood commercial - arterials, collectors, local streets. Bicycle, pedestrian, bus access to link residential with neighborhood commercial centers.
Fire Response Time	Within six minutes from an existing or proposed fire station.
Police Response Time	Within ten minutes.
Neighborhood Park	Within 1/2 mile of a neighborhood park, and/or 1 mile from a community park, existing or proposed. On site recreational facilities, open space, or parks should be provided for developments with small yards or no yard area for individual dwellings. These include: multi-family developments that have any dwellings with two or more bedroom units; multi-family developments with more than 14 units; and single-family developments with lot sized of four thousand square feet in area or smaller.

### **Mixed and Non-Residential Land Use Designations**

Development within these areas should contain public, as well as open space. Large centers should provide public outdoor spaces, while individual commercial or office properties should provide small plazas, seating areas or benches in combination with landscaping. Properties along the river should provide or link with paths, plazas, or promenades. Residential development greater than 21 dwelling units to the acre is appropriate when located in or adjacent to intense urban activities- employment centers, downtown, shopping centers with a grocery store, and a transit line with minimum service of 30 minutes.

These types of development should not occur on prominent ridges or vistas with natural slopes greater than 30%. Property suitable for development should be relatively free of

geologic hazards, outside the 100 year floodway, major drainageways, wetlands and significant wildlife corridors. When these sensitive areas exist on site, attempts should be made to retain them as open space. A strong justification must be presented if these areas are to be disturbed or proposed for development.

***Urban Residential/Commercial***

- Allows for a full range of commercial activities with increasing degrees of intensity. Intensity is determined by vehicular trip generation, size and scale of development and compatibility with residential development. Includes uses of lesser intensity with an immediate service area such as a neighborhood oriented retail or small office compound to regional employment or retail complexes of high intensity. Individual building and shops within shopping centers should share a common architectural treatment.
- May be appropriate for police substations, other public offices and residential development of more than 40 units and a density greater than 21 dwelling units per acre located within intensely developed areas of the city. Residential development less than 40 units or 21 dwelling units per acre may be appropriate on the second floor of small scale commercial developments with ground floor office or retail uses.
- 4-10 acre shopping centers with a grocery store and neighborhood commercial and office uses are appropriate immediately adjacent to single family residential areas. Commercial centers larger than 10 acres are designed to serve a City quadrant or an entire subregion of the Truckee Meadows and may contain one or more major retailers with many ancillary stores, or can stand alone as a mall. These commercial centers are most often separated from single family neighborhoods. Where adjacent to single family residences, development plans should use techniques of buffering and screening between commercial centers and neighborhoods. Features such as pedestrian access between residential and commercial centers, separation by open space, natural features or extensive landscape buffering can mitigate impacts of proximity. In some instances community centers are not appropriate adjacent single family residential development.
- May be appropriate for commercial recreational activities (i.e., amusement park).

The service levels required for this land use are:

Community Water                      Required

Community Sewer                      Required

Access                                      Commercial centers or malls should be at the intersection of two arterial roads or an arterial road and a freeway ramp. Development smaller than 10 acres in size may be located

on an arterial and/or collector roads. All development must accommodate pedestrian, bicycle, bus and vehicular circulation and integrate like development into one shopping district.

Fire Response Time            Within six to eight minutes from an existing or proposed fire station.

Police Response Time        Within fifteen minutes.

***Industrial***

- Designation for full range of industrial activity and supporting uses. Examples of uses include manufacturing/processing operations, maintenance and repair shops, and warehousing/distribution facilities.
- Also appropriate for research facilities, compatible offices, light assembly, light manufacturing, and minor commercial activities (less than 4 acres) that are for the convenience of employees (i.e., deli, newsstands). Small commercial activities may serve to transition between industrial and residential development uses. Features such as pedestrian access between residential and commercial centers, separation by open space, natural features, extensive landscape buffering and arterial or collector roads can mitigate impacts of proximity. Generally, industrial uses are not appropriate adjacent residential development.
- Compatible with major transportation and/or utility facilities. Should be concentrated in districts to allow proper sizing of utilities, roads, railroads.
- Not appropriate on hillsides. Office development should be outside an exterior 65 dB Ldn airport noise corridor unless mitigated, but manufacturing can be located in a noise corridor as high as an exterior 75 dB Ldn; high numbers of people should not be located in airport critical zones.

The service levels required for this land use are:

Community Water            Required

Community Sewer            Required

Access                         Arterial streets (collector or local if within a large area of industrial designated lands which are served by arterials streets) that must accommodate large truck traffic and have nearby access to a freeway, or alternatively in a railroad corridor; must not travel through residential areas, except on an arterial.

Fire Response Time            Within six to eight minutes from the nearest existing or proposed fire station; over eight minutes may be considered for building with fire suppression sprinklers.

Police Response Time        Within ten minutes.

### ***Public Facility***

- Uses may include public institutions, airports, cultural centers, religious institutions, government centers, libraries, hospitals, schools and utility installations. Ownership may be public, quasi-public or private.
- Depending on intensity of use, some major facilities may have significant impacts on adjacent properties which need to be mitigated. Intensity is determined by vehicular trip generation, size and scale of development, compatibility with residential development. Uses of higher intensity such as regional performing arts center or hospital require buffering from residential development less than 14/du acre.
- Frequently located in close proximity to higher density residential development and within or near major urban centers to serve needs of Reno residents. Public facilities may serve a neighborhood or have a larger service area such as a city quadrant or the entire Truckee Meadows region.

The service levels required for this land use are:

Access                            Can be from local, collector, or arterial streets depending on intensity and use.

### ***Parks/Recreation/Open Space***

Parks devoted primarily to large open space for outdoor sports, walking trails or nature study should take advantage of prominent ridges, drainageways, stream corridors, wetlands, floodplains, or other locations which have physical constraints not suitable for urban development; these open space areas should be usable, accessible and protect or offer something unique, like open space on a mountain to protect both views of and from the ridgeline, historic trails along agricultural ditches or meadows or oxbows for nature study.

Lands intended for open space as a result of significant environmental resource or hazards may not be suitable for extensive development. Some of these lands will be in public ownership which provides protection from and management of the resource for public benefit.

- Appropriate for land devoted to parks or recreational activity, available for public access, use or enjoyment, containing significant environmental resources, or that pose safety hazards and/or extreme development constraints; may be appropriate for joint use with public schools or other public facilities.



## **LAND USE PLAN/ZONING CONFORMANCE**

Conformance with the Land Use Plan is intended to mean that conformance is achieved by zoning districts which most closely conform to the goals, objectives, plans and policies expressed in a plan. The table below (Table 1) identifies land use designations and corresponding zoning districts that best achieve this conformance.

Stability of land use and zoning is desirable; therefore, an applicant must provide a sound justification for change. Applicants are required to indicate specific Master Plan policies that support Land Use Plan and zoning change requests. Reno Municipal Code Title 18 establishes findings that the Commission and Council must make to amend the Land Use Plan and zoning map.

Policy 1.2.16 of the Regional Plan requires that in the expanded sphere the land use and zoning assigned by the City be based on the County Master Plan designation as shown on the land use and zoning translation table included as Table 2. This table is used for assigning these land uses, with the exception that the Special Planning Area land use designation is also considered compatible with any listed category and may be used as an alternative because by definition it requires “uses which are compatible and complementary with adjoining properties.”

**Table 1: Land Use Designations and Conforming Zoning Districts**

Land Use Designation	Conforming Zoning District <sup>1</sup>
Single Family Residential (≥1 acre/du to 3du/acre)	<b>Large Lot Residential - 2.5 acres, Large Lot Residential - 1 acre, Large Lot Residential - .5 acre, Single Family Residential - 15,000 square feet, Planned Unit Development<sup>2</sup>, Specific Plan District<sup>2</sup>, Public Facility<sup>3</sup>, Open Space</b>
Mixed Residential (3-21 du/acre and some commercial uses)	<b>Single Family Residential - 15,000 square feet, Single Family Residential - 9,000 square feet, Single Family Residential - 6,000 square feet, Single Family Residential - 4,000 square feet, Multi-Family - 14 d.u./ac, Multi-Family - 21 d.u./ac, Professional Office, General Office, Neighborhood Commercial, Planned Unit Development<sup>2</sup>, Specific Plan District<sup>2</sup>, Public Facility<sup>3</sup>, Open Space</b>
Urban Residential/Commercial	<b>Multi-Family - 21 d.u./ac, Multi-Family - 30 d.u./ac, High Density Multi-Family, Professional Office, General Office, Neighborhood Commercial, Arterial Commercial, Community Commercial, Planned Unit Development<sup>2</sup>, Specific Plan District<sup>2</sup>, Public Facility<sup>3</sup>, Open Space</b>
Industrial	<b>General Office, Industrial, Industrial Commercial, Industrial Business, Airport Operations, Planned Unit Development<sup>2</sup>, Specific Plan District<sup>2</sup>, Public Facility<sup>3</sup>, Open Space</b>
Parks/Recreation/Open Space	<b>Public Facility, Open Space</b>
Public Facility	<b>Public Facility, Airport Operations, Open Space</b>
Special Planning Area	<b>Planned Unit Development, Specific Plan District, Open Space, <i>Mixed Use</i></b>
Unincorporated Transition	<b>Unincorporated Transition – 40 ac, Unincorporated Transition – 10 ac, Unincorporated Transition – 5 ac, Public Facility, Open Space</b>

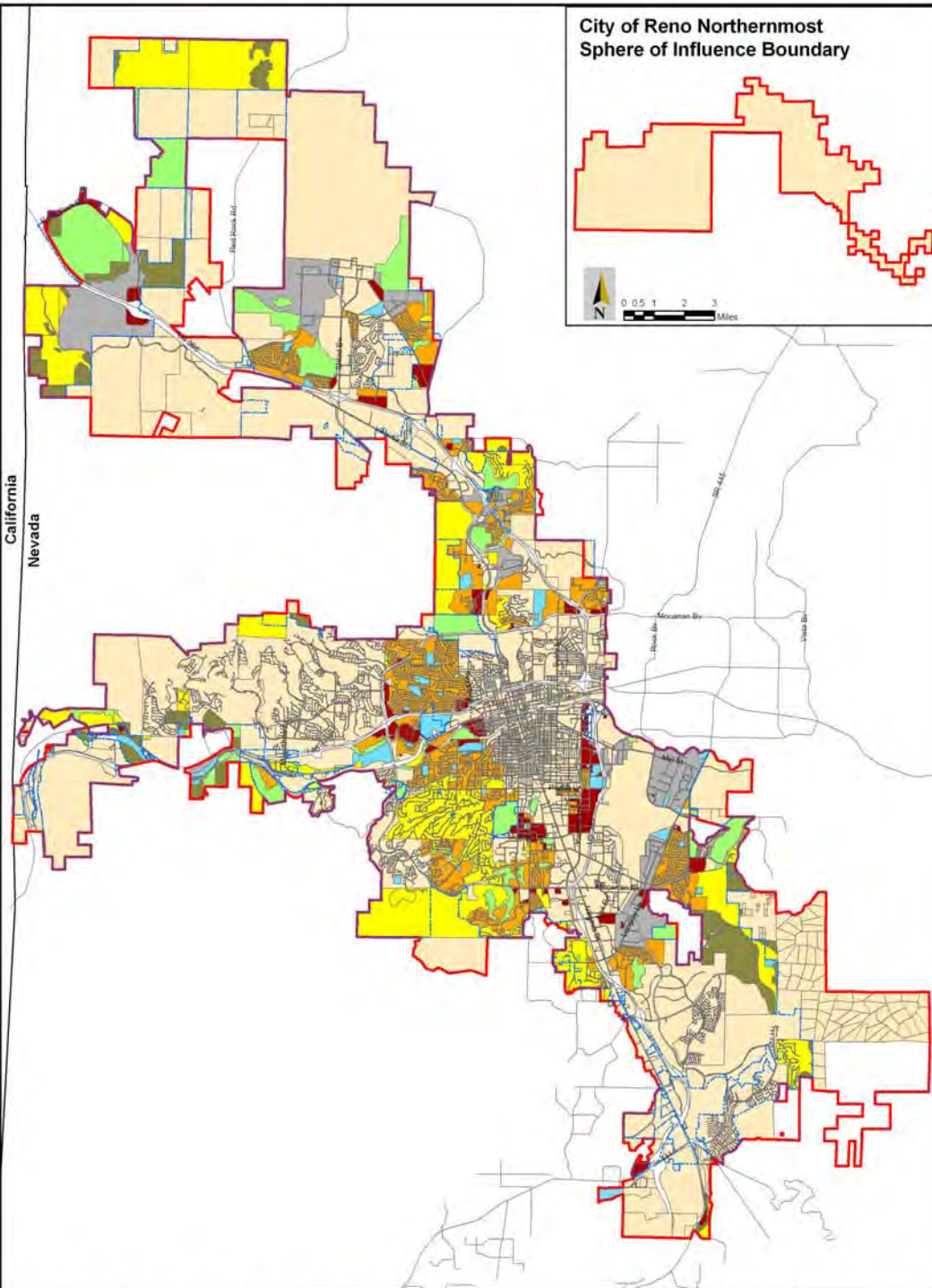
Notes:

1. Zoning districts in bold text are districts that directly correspond to the Land Use Plan land use designations. Parcels zoned Multi-Family 30 d.u./ac correspond to any land use designation. Zoning changes to Multi-Family 30 d.u./ac correspond only to the Urban Residential Commercial, Tourist Commercial, and Industrial land use designations.
2. Planned Unit Developments and Specific Plan Districts conform to any land use designation if proposed uses are those allowed in conforming zoning districts.
3. Publicly owned parcels that are not zoned Public Facility conform regardless of zoning or Land Use Plan land use designation. This policy position is appropriate because publically owned parcels could be zoned Public Facility, and the Public Facility district is consistent in all land use designations.

**Table 2: Land Use Designations and Conforming Zoning Districts**

CITY OF RENO MASTER PLAN LAND USE AND ZONING BASED ON COUNTY PLAN OR ZONING			
RENO MASTER PLAN LAND USE (1)	RENO ZONING (2)	WASHOE COUNTY COMPREHENSIVE PLAN DESIGNATION	WASHOE COUNTY ZONING DISTRICT (3)
Unincorporated Transition	UT10	Low Density Rural	A-5, A-6
Unincorporated Transition	UT5	Medium Density Rural	A-4, E-5
Single-Family Residential	LLR2.5	High Density Rural	A-2, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-4, E-5
Single-Family Residential	LLR1	Low Density Suburban	A-1, A-2, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-3, E-4, E-5, C-1
Single-Family Residential	SF15	Medium Density Suburban	A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-1, E-2, E-4, E-5, C-1
Mixed Residential	SF6	High Density Suburban	R-1, R1-a, R-1b, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-1, E-2, E-4, E-5, C-1
Mixed Residential	MF14 (4)	Low Density Urban	R-1, R-1a, R-1b, R-2, R-2a, R-3, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-1, E-2, E-4, E-5, C-1
Mixed Residential	MF21 (4)	Medium Density Urban	R-1, R-1a, R-1b, R-2, R-2a, R-3, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-1, E-2, E-4, E-5, C-1
Urban Residential/Commercial	MF30	High Density Urban	R-1, R-1a, R-1b, R-2, R-2a, R-3, A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, A-9, A-10, A-11, M-3, E-1, E-2, E-4, E-5, C-1
Urban Residential/Commercial	CC, AC (5)	General Commercial	C-1, C-2
Urban Residential/Commercial	NC	Neighborhood Commercial/Office	C-1, C-2
Industrial	I	Industrial	M-1, ME, MS, MW, C-2
Public Facility	PF	Public/Semi-Public Facilities	A-R, L-R
Park/Recreation/Open Space	OS	Parks and Recreation	A-R, L-R
Unincorporated Transition	UT40	General Rural	A-7, A-8, A-9, A-10, A-11, M-3
Special Planning Area	SPD	General Rural Residential	A-7, A-8, A-9, A-10, A-11
Special Planning Area	SPD (7)	Specific Plan Area	Any zone if included in an adopted specific plan.
	MH		TR Overlay District

<b>CITY OF RENO MASTER PLAN LAND USE AND ZONING BASED ON COUNTY PLAN OR ZONING</b>			
<b>RENO MASTER PLAN LAND USE (1)</b>	<b>RENO ZONING (2)</b>	<b>WASHOE COUNTY COMPREHENSIVE PLAN DESIGNATION</b>	<b>WASHOE COUNTY ZONING DISTRICT (3)</b>
<b>Notes</b>			
<b>(1) This column only applies to the classification of annexed land that does not already have a city master plan land use designation.</b>			
<b>(2) This column only applies to the classification of annexed land that does not already have a city zoning designation. (3) Washoe County zoning shall only be used for properties without a Washoe County Comprehensive Plan Designation.</b>			
<b>(4) Where the existing land use is nonresidential, the zoning assigned will be NC.</b>			
<b>(5) Parcels fronting on a major arterial as designated on the City of Reno Master Plan shall be zoned AC. Other parcels shall be zoned CC.</b>			
<b>(6) Where neither a hotel nor casino has been approved on site (by virtue of a business license, building permit, or special use permit), the master plan land use shall be Urban Residential/Commercial and the zoning shall be CC.</b>			
<b>(7) Individual zoning districts may be assigned at the time of annexation which are consistent with the uses adopted in the specific plan.</b>			



**Map 1 - Master Plan Land Use Designations**

Industrial	Special Planning Area
Mixed Residential	Unincorporated Transition
Parks/Recreation/Open Space	Urban Residential/Commercial
Public Facility	Reno City Limits
Reno-Sparks Indian Colony	Sphere of Influence
Single Family Residential	

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Scale: 0 0.5 1 2 3 Miles

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Updated: April, 2010

## Map 2 Regional Centers and Transit Oriented Development Corridors

### Regional Centers

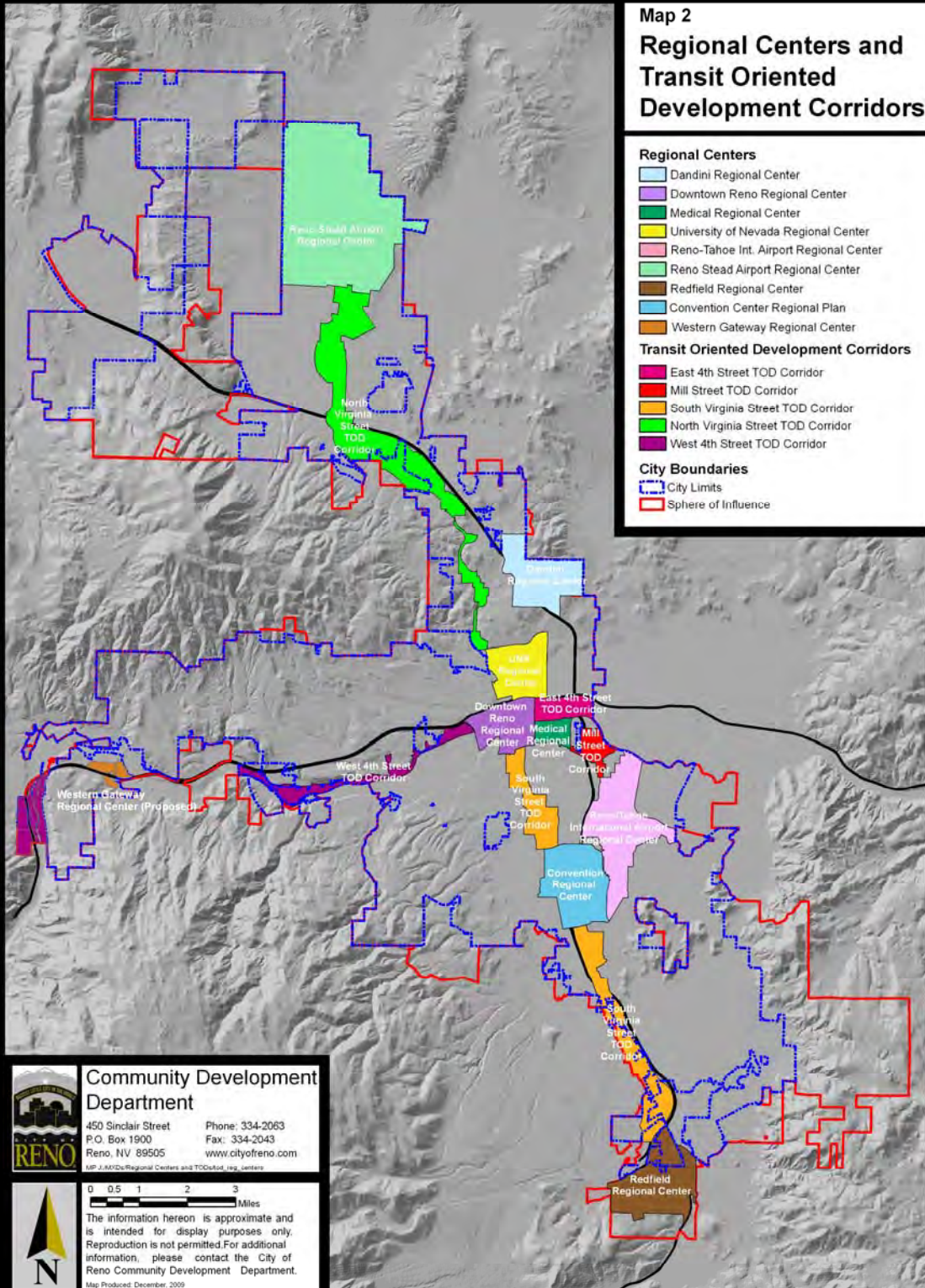
- Dandini Regional Center
- Downtown Reno Regional Center
- Medical Regional Center
- University of Nevada Regional Center
- Reno-Tahoe Int. Airport Regional Center
- Reno Stead Airport Regional Center
- Redfield Regional Center
- Convention Center Regional Plan
- Western Gateway Regional Center

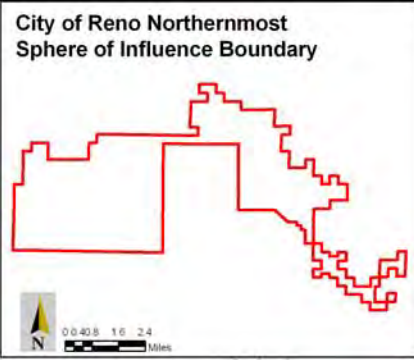
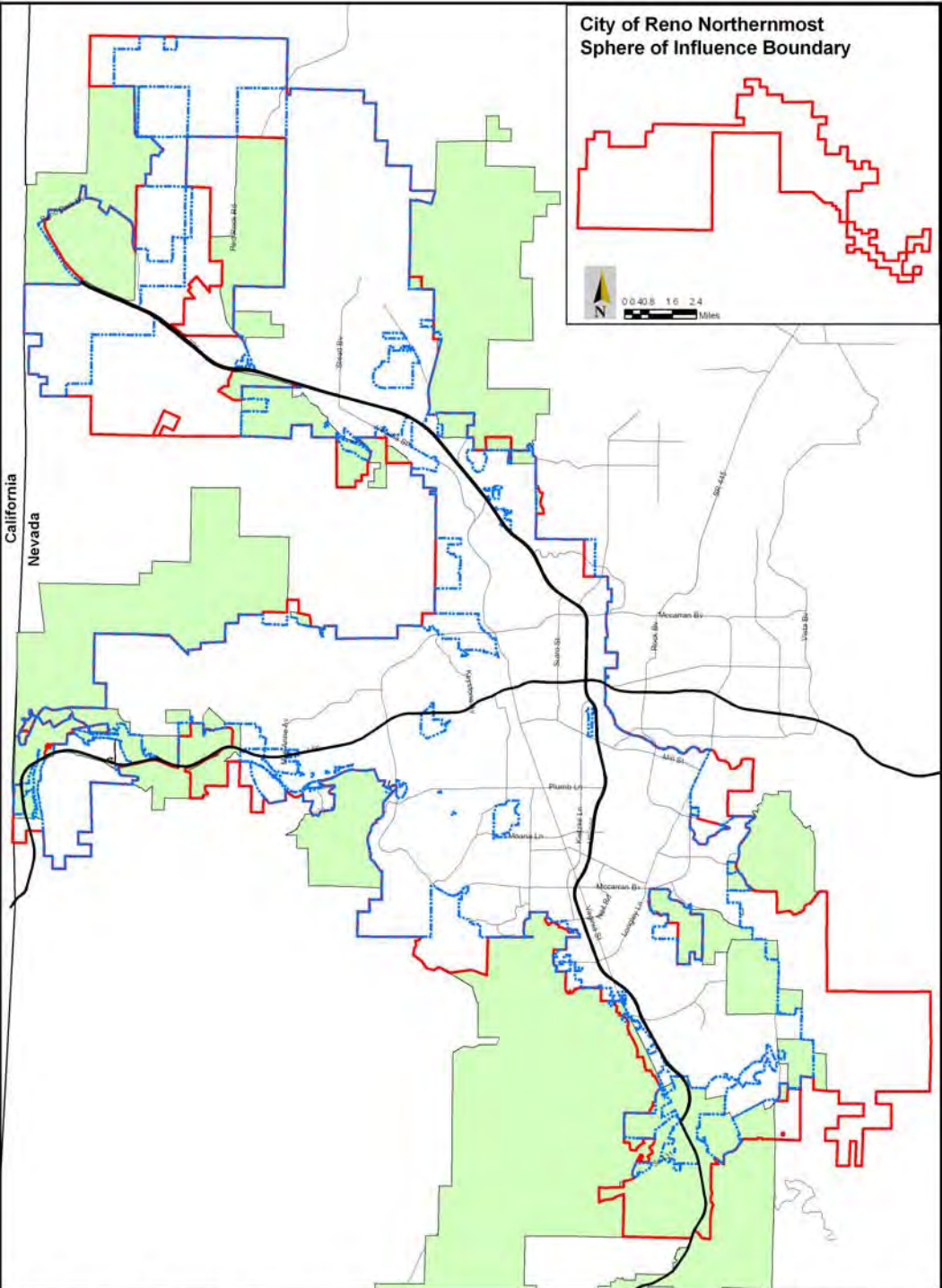
### Transit Oriented Development Corridors

- East 4th Street TOD Corridor
- Mill Street TOD Corridor
- South Virginia Street TOD Corridor
- North Virginia Street TOD Corridor
- West 4th Street TOD Corridor

### City Boundaries


- City Limits
- Sphere of Influence





**Map 3 - Areas Subject to Cooperative Planning**

- Cooperative Planning Area
- City Limits
- Sphere of Influence




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0 0.5 1 2 3 Miles

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Updated April, 2010

# PUBLIC SERVICES, FACILITIES, AND INFRASTRUCTURE PLAN



## **ACKNOWLEDGEMENTS**

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Dwight Dortch, Ward Four  
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Donna Dreska, Chief of Staff

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Adopted by City Council October 24, 2007  
Amended September 23, 2009

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**TABLE OF CONTENTS**

---

**Introduction**

Summary ..... 1

Plan Organization.....2

Boundary ..... 2

Time Frame.....2

Relationship to Other Plans ..... 2

**Concurrency Management**

Discussion.....3

Concurrency Management System.....3

Public Facilities: Resource Conservation and the Environment ..... 7

**Public Services, Facilities, and Infrastructure**

Water, Waste Water, and Flood Management

    Discussion.....9

Mobility

    Discussion..... 11

    Pedestrians and Bicycles ..... 12

    Streets and Parking..... 13

    Airports ..... 33

    Railroads ..... 36

Fire Protection

    Discussion..... 37

    Fire Station Facilities..... 38

    Fire Infrastructure Standards ..... 42

Police Protection

    Discussion..... 45

    Police Station Facilities ..... 45

Parks and Recreation

    Discussion ..... 49

    Types of Parks and Recreation Facilities..... 50

    Development of Parks and Recreation Facilities ..... 54

---

Public Works and Parks Maintenance	
Discussion .....	69
Public Works and Parks Maintenance Facilities .....	69
Schools	
Discussion .....	73
Education Facilities.....	73

## Maps

Map 1	Major Street System - Central .....	25
Map 2	Major Street System - South .....	27
Map 3	Major Street System - West .....	29
Map 4	Major Street System - North .....	31
Map 5	Fire Facilities .....	39
Map 6	Police Facilities .....	47
Map 7	Existing Neighborhood Parks.....	59
Map 8	Existing Community Parks .....	61
Map 9	Existing Park Amenities.....	63
Map 10	Existing Aquatics and Recreation Facilities.....	65
Map 11	Planned Aquatics and Recreation Facilities .....	67
Map 12	Public Works and Parks Maintenance Facilities .....	71

## Appendices

Appendix A – City of Reno TMSA/FSA Water, Wastewater, and Flood Management Facility Plan

Appendix B – Fire

Fire Mitigation Measures .....	B-1
Fire Hazard and Response Evacuation Matrix .....	B-2
Fire Required Fire Flow by Type of Land Development .....	B-3
Fire Infrastructure Requirements .....	B-4
Fire Definitions.....	B-5
Fire Facilities and Land Use (4 Minute Response).....	B-6
Fire Facilities and Land Use (6 Minute Response).....	B-7
Fire Facilities and Land Use (8 Minute Response).....	B-8

---

Appendix C – Parks and Recreation

Parks and Recreation Facility Inventory .....C-1  
2007 Level of Service / Gap Analysis Report ..... C-2

Appendix D – Explanation of Population and Employment Forecast

Used for Facility Planning

Explanation of Population and Employment Forecast Used for  
Facility Planning.....D-1

**Tables**

1. Summary of Concurrency Options .....5  
2. Parks: Service Characteristics of Parks Categories.....51  
3. Parks: Levels of Service Standards .....57

**Figures**

1. 1996 Airport Noise Contours .....34  
2. 2010 Airport Noise Contours .....35

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## **INTRODUCTION**

### **Summary**

Public services, facilities, and infrastructure are the essential public functions that shape a community, its fiscal soundness, its quality of life, and its ability to grow responsibly. Implementation of these objectives requires defined facility and infrastructure standards and a system of concurrency management. This plan defines a coordinated and sustainable pattern for infrastructure and facility expansion and identifies the facility and infrastructure standards for both existing and forecasted populations. It guides how they will interconnect and support the planned growth within the City of Reno and its sphere of influence. By combining land uses, facility and infrastructure provision, and concurrency management policies, this plan and the related Master Plan elements create a framework for the evaluation of individual development proposals and capital improvement projects.

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## **Plan Organization**

This plan is divided into three sections: Introduction, Concurrency Management, and Public Services, Facilities, and Infrastructure. It works in concert with all elements of the Master Plan, serving as the policy guide and technical resource for identifying the public facility and infrastructure needs of water, waste water, flood management, mobility, fire, police, parks and recreation, and public works services. Referenced maps are included in this document and its appendices. Specific development standards and processing provisions are included in the Reno Municipal Code.

## **Boundary**

This plan was developed to address lands within the City of Reno and its sphere of influence (SOI). If these boundaries are redefined, lands falling within the newly defined area will also become subject to plan policies.

## **Time Frame**

The time horizon for this plan is twenty-two years. Dialogue about planning horizons extending beyond 2030 addresses conceptual level planning.

## **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150-170. The City Master Plan has three different levels of applicability; *Citywide*, *Center and Corridor*, and *Neighborhood*. *Citywide* plans include this Public Service, Facilities, and Infrastructure Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in *Centers* or *Corridors*, which have been designated as appropriate for more detailed planning.



## **CONCURRENCY MANAGEMENT**

### **Discussion**

It is the intent of the City of Reno to provide a timely, orderly, and efficient arrangement of adequate public facilities and infrastructure that support existing and planned land use patterns and densities. This section outlines the concurrency management system used to ensure that new development does not come as a financial burden to existing communities or result in decreased service for City residents. This system applies to capital facilities and infrastructure only and is intended to provide a high level of predictability for both developers and the community regarding the timing and type of infrastructure required to support development in all areas of the City and its sphere of influence. Future amendments to this plan should include provisions for impact fees as a means of demonstrating concurrency for certain facilities (e.g. police, fire, and parks) as an expanded concurrency option.

### **Concurrency Management System**

The City should make certain that adequate facilities and infrastructure are available to support development concurrent with demand or else prohibit development

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approval when such development does not meet the concurrency requirements established in this plan. The City's concurrency management system should monitor the implementation of an established facility and infrastructure standard and ensure that:

1. Identified facilities and infrastructure are in place concurrent with demand;
2. Facilities and infrastructure that supply a proposed development are operational and meet the facility and infrastructure standards discussed in this plan; and
3. Capital facilities and infrastructure are funded by new development to the extent necessitated by new development.

### ***Concurrency Options***

This system is designed to ensure that the entire cost for site acquisition, facilities, and infrastructure, when required to service new development, are addressed without placing a financial burden on existing communities. The following Summary of Concurrency Options (Table 1) identifies those services requiring concurrency and outlines how concurrency standards should be applied.

### ***Facilities and Infrastructure Standards***

The following Public Services, Facilities, and Infrastructure section identifies the City's minimum standards for public facilities and infrastructure used to determine the adequacy of serving existing and future development. Individual service providers have established these standards to identify current and future facility needs and existing deficiencies, when applicable, based on current and proposed land use and zoning designations.

### ***Evaluation of Facility and Infrastructure Needs***

Facility and infrastructure needs should be reevaluated by the service providers as land uses and zoning are changed or assigned. During the review process of individual developments, new facilities or modifications to facilities may result. During the review process, the Administrator should determine whether the new facility or modification is consistent with the intent of the approved facility plan. If it is determined that there is a significant change, the Master Plan should be modified to reflect the change. This plan includes a brief section discussing water, waste water, and flood management facility and infrastructure principles with detailed standards referenced in Appendix A (City of Reno TMSA/FSA Water, Wastewater, and Flood Management Facility Plan). New development must demonstrate that facilities and infrastructure are consistent with Appendix A of the PSFI Plan unless, and until, a Regional Water Management Plan (RWMP), per SB487, is adopted. At that point, submitted plans must be consistent with the RWMP.

## Summary of Concurrency Options

(Table 1)

Service	Determined by Community Development Department With Input From Service Providers		
	Full Facilities	Impact Fee / RCT	Discretionary Improvements
<b>Water</b> – <i>New development must demonstrate an adequate water supply system for domestic use plus fire protection before occupancy of each structure per RMC and consistent with Appendix A of the Master Plan.</i>	✓		
<b>Waste Water</b> – <i>New development must connect to the City's sanitary sewer system or other system before occupancy of each structure per RMC and consistent with Appendix A of the Master Plan.</i>	✓		
<b>Flood Management</b> – <i>New development must demonstrate compliance with RMC floodplain management regulations and all pertinent state and federal regulations before occupancy of each structure. New development must be consistent with Appendix A of the Master Plan.</i>	✓		
<b>Transportation – Local Streets</b> <i>New development must implement and demonstrate compliance with local transportation system standards before occupancy of each structure.</i>	✓		
<b>Transportation – Regional Road Network</b> (RTC Review) – <i>Payment of the Regional Road Impact = Demonstration of RTC Concurrency.</i>		✓ (Impact Fee)	
<b>Transportation – Freeways / Federal and State Road Network</b> (NDOT Review) <i>Development that would initiate a Traffic Impact Analysis as outlined in RMC Section 18.12.903, or at the discretion of the Community Development Department, will be forwarded to NDOT for review. Improvements to access roadways, acceleration and deceleration lanes, interchanges and similar upgrades may be required before occupancy of structure.</i>			✓
<b>Police</b> – <i>Before issuance of a building permit, new development shall identify and fund options so that concurrency will be met before occupancy of each structure. See options.</i>		✓ (Impact Fee)  For improvements covered by NRS 278B	✓  Police Department For improvements not covered by NRS 278B
<b>Fire</b> – <i>Before issuance of a building permit, new development shall identify and fund options so that concurrency will be met before occupancy of each structure. See options.</i>		✓ (Impact Fee)  For improvements covered by NRS 278B	✓  Fire Department For improvements not covered by NRS 278B
<b>Parks and Recreation</b> – <i>Payment of Residential Construction Tax and / or impact fee = Demonstration of Parks Concurrency.</i>		✓ (RCT and / or Impact Fee)	

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### ***Oversizing of Facilities***

It can be more cost effective and less disruptive to provide service capacity in excess of current service demands if it extends the useful life of the facility in order to accommodate planned growth. Accordingly, facilities and infrastructure identified in this plan should be sized to serve forecasted growth as well as the immediate needs of a particular development. For example, water and sewer infrastructure should be designed to meet both current and anticipated needs. Facility designs may also embody this principle by providing adequate room for expansion to meet forecasted population needs through the life of the building (e.g. Fire stations expected to be viable for 50 years should be sized to house expected personnel and equipment needs of the forecasted service area population at the term of the facility's expected useful life).

To assist developers in constructing facilities and infrastructure beyond their proportional impact, the City may contract with the owner to provide a means of reimbursement for all costs incurred for construction of the oversized portion of the facility and/or infrastructure as new development benefiting from it occurs until fully reimbursed. These agreements require future beneficiaries of the facility and/or infrastructure to repay the developer who funded the constructed facilities and/or infrastructure for the portions in excess of what the original development required.

### ***Existing Deficiencies***

It is the City's policy that those who benefit from infrastructure and public facilities should pay for them. Residents who live where facilities and infrastructure are adequate should not have to fund these capital improvements for new growth where adequate facilities and infrastructure are not available or where development would negatively impact public service. In turn, it should be the responsibility of the City and/or affected area residents to correct existing deficiencies in facility and infrastructure standards. In some cases, facility service areas will overlap between new and existing development and the costs for these facilities will have to be distributed on a proportional basis. Implementation of an impact fee system will facilitate a more consistent process that addresses proportionality.

### ***Target Area Development***

The Capital Improvement Program should give higher priority to capital projects that are designed to serve existing needs and facility and infrastructure deficiencies, with priority given to areas within transit oriented development corridors and regional centers. Because the land use policies within these areas encourage high density development, significant improvements in infrastructure will be required to support the planned infill. The City should prioritize the allocation of scarce resources to projects that fall within these areas and consider offering incentives to encourage new development projects as outlined in the Policy section of the Master Plan. In this way the economic viability and desirability of targeted areas can be enhanced while cost effectively leveraging capital investments for maximum efficiency.

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## **Public Facilities: Resource Conservation and the Environment**

The City of Reno is committed to promoting resource conservation, use of renewable materials, and sustainable technologies to reduce demand for and in the provision of public facilities and infrastructure. The City should strive to become a leader in implementing green building technology and resource conservation while developing policies that strongly encourage private development to follow its example. The City should further demonstrate its commitment to environmental and fiscal stewardship of public resources by taking a long term look at construction and facility/infrastructure costs and their environmental impacts. Infrastructure efficiency and sustainable building techniques can save money on utility bills, decrease maintenance costs, and help protect the value of public investment. They can also enhance the health and well-being of citizens and City employees by minimizing waste, creating indoor environments with better air quality and daylighting, and preserving natural resources, air and water quality.



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## **PUBLIC SERVICES, FACILITIES, AND INFRASTRUCTURE**

### **Water, Wastewater, and Flood Management**

#### ***Discussion***

The City of Reno TMSA/FSA Water, Wastewater, and Flood Management Facility Plan (Appendix A) provides a conceptual level analysis for the projected water, wastewater, and flood management control infrastructure improvements necessary to meet existing and forecasted demand for areas under the City of Reno's jurisdiction. Information on infrastructure requirements, costs, and policy issues for consideration are specifically addressed within the plan's seven sub-regions (South Truckee Meadows, Truckee Meadows, Stead/Lemmon Valley, Cold Springs, Bedell Flat, Spring Mountain, and Sage).

As noted in the Concurrency Management section, new development must demonstrate that facilities and infrastructure are consistent with those identified in Appendix A, which are intended to provide the foundation for subsequent detailed planning and design. The City should serve as the final authority regarding necessary

infrastructure improvements. Preparation of updated facility plans will be necessary based on current information and the specific needs of the development at that time. These future planning efforts will further refine and define the exact facility requirements presented in this plan. The Regional Water Planning Commission should ultimately determine whether a proposed revision to Appendix A will require a review for conformance with the Regional Water Management plan (RWM) pursuant to Policy 4.1a of the RWM plan.



## **Mobility**

### ***Discussion***

Mobility, the movement of people and goods, is a key factor in achieving sustainable development and in improving the City's quality of life. Reno's citizens have expressed their preference for walkable neighborhoods that include a mix of housing, retail stores and service businesses - - neighborhoods that offer safety and convenience as well as the option of walking or using a bicycle. They have also told the City they want neighborhoods with narrow streets to slow traffic, and sidewalks separated from the roadways by landscaped parkways. They want to travel between neighborhoods, centers, and corridors on landscaped boulevards with convenient and attractive shopping opportunities and see main streets, such as California Avenue, Vassar Street and parts of Wells Avenue, be redesigned to provide convenient parking and attractive pedestrian space.

The City should balance the interests of commuters from the suburbs against those of local businesses and residents. This means that in some cases roadway capacity and travel speed should be reduced to foster the kind of neighborhoods Reno's citizens desire. We recognize that streets are public spaces used by different people

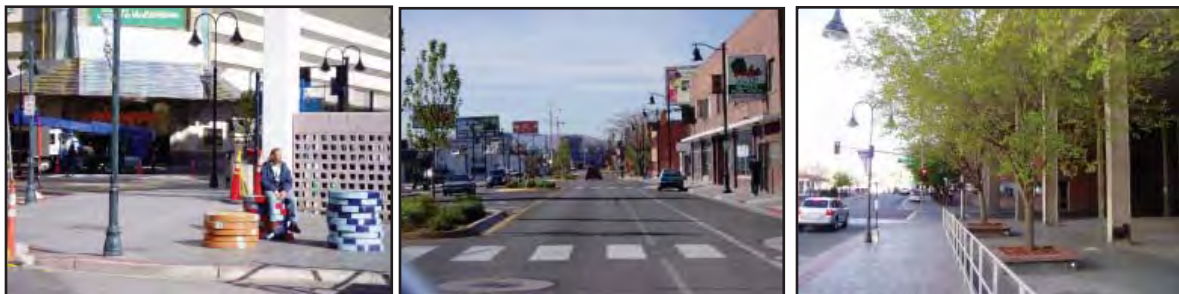
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for different purposes, all of which are entitled to be taken into account as we plan our community. Autos, transit, bicycles, commercial trucks, and pedestrians each place varied and sometimes conflicting demands on a street system. Street space should be allocated among these uses in conformance with the following goals:

- Balance the needs of commuter traffic with the goal of providing safe, efficient, and attractive roadways
- Protect neighborhoods by slowing traffic and discouraging through traffic
- Create bicycle and pedestrian friendly environments
- Ensure adequate capacity for transit
- Encourage the use of transit, car or van pools, bicycling, walking, and other forms of alternative transportation.

### ***Pedestrians & Bicycles***

As “America’s Adventure Place”; Reno should accommodate the active lifestyles of its citizen’s and visitors by implementing a convenient, attractive and safe pedestrian and bicycle system into the urban fabric. As the City retrofits its streets during regularly scheduled reconstruction, it must also ensure adequate linkage of neighborhoods to parks and open spaces, corridors and centers, and main streets. To achieve our community’s vision, the City should prioritize accommodations for pedestrians and bicyclists. New development should be sensitively designed to implement multimodal transportation options and functional and aesthetically pleasing pedestrian and cyclist design. In existing neighborhoods, these transportation enhancements should take place incrementally through infill, redevelopment, and public investments.



*(Above) Recent pedestrian and cyclist improvements downtown and in the Wells Avenue Neighborhood*

### ***Pedestrian Design***

Almost all trips involve walking outdoors at one or both ends. People enjoy walking in lively, well designed environments with wide sidewalks, shade trees, interesting scenery, and neighborhood destinations. The success of commercial, civic, and mixed-use areas, and even transit and auto-oriented facilities like parking garages, depends largely on the quality of the pedestrian experience leading to and from the site. The City should ensure that the pedestrian environment is safe, accessible, interconnected, easy to use, and enjoyable.

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As with streets, paths lined with activities and people are safer paths. Except when a part of an open-space system; urban paths should generally be bordered by public spaces, the fronts of residences, and streets. Sidewalks in residential districts should be separated from the roadway by landscaped parkways of no less than five and 1/2 feet. In commercial districts, sidewalks should be no less than six feet in width and include additional amenities like parkways.

### ***Bicycles***

Cyclists need safe interconnected bikeways, easy access on public transit, and convenient and secure bicycle parking. The City's adopted Open Space and Greenways Plan identifies priority bikeway and trail projects. Reno should implement an attractive and safe bicycle system by expanding and improving the bikeway network and ensuring that new development provides attractive and functional facilities at commercial and public destinations.



*(Above) Street improvements include designated bikeway and pedestrian ways and traffic calming measures such as roundabouts and an unsignalized pedestrian crossing.*

### ***Streets and Parking***

#### ***Street Dimensions***

All streets within the City should be as narrow as possible without compromising auto safety. In the twenty-first century, Reno will be a city where people can travel safely and smoothly between walkable neighborhoods and centers and corridors on public transit, in their car, on a bicycle, or on their feet. Except for freeways, the primary function of which is to move large volumes of traffic as quickly as possible, our street system will be designed or retrofitted to provide for the convenient and safe use of pedestrians, bicycles and transit as well as autos and trucks. Narrower streets can continue to accommodate safe vehicular movements and additional parking while improving pedestrian accessibility and safety. Smaller streets also cost less to build, providing an opportunity for builders to pass on savings to citizens, and cost the City less to maintain. To ensure that residential streets are attractive and safe for pedestrians, the City should obtain or provide sufficient right-of-way to install a landscaped parkway between sidewalks and the roadways, where appropriate.

#### ***Traffic Management***

New developments should provide multiple direct linkages, such as the integrated plan illustrated in the Policy Plan Objectives. Where appropriate, projects should incorporate,

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traffic calming and pedestrian enhancement features such as lighted crosswalks, rumble strips, pedestrian refuge islands, chokers, curb bulbs, curb extensions, and traffic circles, in order to ensure walkable and pedestrian-friendly neighborhoods and shopping areas. The retrofitting of existing traffic and pedestrian improvements in neighborhoods, corridors, centers, and commercial shopping districts should be incorporated into the City's capital improvement and street reconstruction programs.

### ***Boulevard Enhancements***

Many of the roads used by residents and tourists to access the City's downtown, corridors, and centers were built without benefit of landscaping or aesthetic considerations, and much of the development that borders them was allowed to take place without accommodating for their appearance or pedestrian enhancements. In consequence, many of the City's high profile roads are cluttered, unsightly, and unwalkable.

The City should expand its existing program of installing landscaping and other improvements on the designated system of boulevards to include major roadways within the corridor and center plan areas. Streetscape standards should be developed with improvements installed in stages as streets come up for major reconstruction with general priority given to:

1. Gateways identified in corridor and center plans;
2. Arterial streets within or adjacent to corridor and center plans;
3. Streets identified as Boulevards in the Major Street System list but not within or adjacent to corridor or center plan areas;
4. Collector streets within or adjacent to corridor or center plan areas.

Boulevard enhancements incorporate features to a new or existing roadway that are designed to change and improve the experience of the roadway's users. Features used can include landscaped medians, parkways, stone pavers, narrowed travel lanes, widened walkways, and traffic calming devices such as chokers and semi-diverters. Construction of boulevard streetscapes may take place even when they might result in less than optimum roadway capacity, however; the enhancements used should not reduce the level of service of a roadway segment or intersection from an acceptable level to an unacceptable level.

The City should incorporate the construction of new boulevards and the retrofitting of existing rights-of-way into its capital improvement and street reconstruction programs. In the case of arterial streets that are not a part of the boulevard system, the longstanding City policy to require lateral landscaping should continue to apply.

### ***Trip Reduction***

Our community aims to improve air quality, reduce traffic congestion, and contain unnecessary expenditures of public funds maintaining roadway systems built to accommodate single occupant vehicle work trips. The most effective method of

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achieving these goals is to reduce the number of vehicle trips and miles traveled in the region. Fewer trips mean reduced demand for parking, less money spent on building and maintaining parking structures and lots, and more land that can be used for productive or recreational uses. Fewer vehicle trips also reduces traffic congestion and demand for new roads or unnecessary widening of existing roads within City neighborhoods.

It is the intent and policy of the City to encourage the use of car-pools, van-pools, transit, bicycles and walking as alternatives to single occupant vehicle occupation based trips and to assist developers and employers implementing trip reduction measures such as ridesharing, the provision of free or reduced rate transit passes, bicycling, walking, and alternative work schedules. New development should provide free or reduced cost employee parking for van/car pools and bicycles; free or reduced cost bus passes in lieu of employee parking spaces usually required by City regulations; and paid employee parking (the minimum rate never to be less than the cost of a monthly bus pass) for those unable to use alternative modes. The City should consider allowing a modest reduction in parking requirements when demonstrated facilities and employer programs are in place.

### ***On-Street Parking***

In any area where on-street parking is encouraged, such parking should be included in the parking calculation provided in fulfillment of City parking requirements.

### **Residential Areas**

On-street parking on narrow streets visually narrows the street for those traveling along it and can dramatically reduce travel speeds. Narrow streets with high parking density have the highest “traffic calming” effect and also provide a buffer between pedestrians and traffic. Thus, on-street parking (parallel, center-street, or angle, depending on the situation) should be encouraged and supported on all residential streets except those specifically designed or built to exclude the possibility of on-street parking.

### **Commercial and Industrial Areas**

Since it is the policy of the City to encourage commercial areas that are attractive and safe for pedestrians, on-street parking designed to safely accommodate the maximum amount of on-street parking feasible should be encouraged in all commercial districts except those located on major arterial streets necessary to maintain the movement of traffic through the city. The City should consider, when appropriate, parking in the center lane as a means of adding parking and traffic calming to wide streets. In industrial areas and along truck lanes, street parking is encouraged in all areas except those where streets have been specifically designed or built to exclude parking.

### ***Parking in the Urban Core***

The urban core comprises several distinct districts. The Casino/Entertainment District constitutes the focus of the region’s tourism industry and thus is the major engine of economic activity in the region. Convenient and attractive parking facilities adequate to serve the needs of our visitors are necessary for the continued life and health of our major industry. The City should ensure that new development provides convenient and

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attractive parking, in accordance with City design policies, the Downtown Regional Center Plan, and the guidelines within the Final Downtown Reno Circulation and Parking Plan.

Surface parking lots should generally be avoided in the downtown core. Parking garages should be an intricate part of the urban fabric and surrounded on all sides by active uses at the ground level to maximize pedestrian activity and safety. Other acceptable designs include garages with display windows, public, art, and articulated design. Investment in the downtown pedestrian environment will encourage walking in the downtown and utilization of underused parking facilities with increased public and private investment.



*(Above) This Virginia parking garage incorporates architectural features of surrounding structures and provides commercial uses on the ground floor*

## Street and Roadway Design by Types of Facilities

The following definition of major street types and the “City of Reno Major Street System” list is provided for ease of reference. City of Reno street classifications are generally based on the parameters defined in the Public Works Design Manual and are not limited to the major street system designations listed within the Master Plan.

A **freeway** provides high speed intra-city and inter-region movement of large volumes of traffic. It is not intended for direct access to adjoining properties. Limited access ramps provide connection to other freeways or arterial roads.

A **major arterial** accommodates large volumes of through traffic between city districts. Direct access is strongly discouraged to individual properties, although limited access to major projects (i.e., business park, shopping mall, etc.) is allowable, provided such access does not compromise the roadway’s ability to handle large volumes of through traffic. Access, parking and loading may be restricted to improve capacity. New major arterials should be intersected by other major arterials, minor arterials, and collectors only. Signalization occurs at intersections with major and minor arterials and some collector streets.

A **minor arterial** provides access between neighborhoods and city centers. It is subject to limiting access control, channelized intersections, and parking restrictions. Direct access to residential areas should be precluded whenever an alternate access is available. It is signalized at intersections with major and other arterials, and some collectors.

A **collector** functions as a connection between local streets in neighborhood areas and arterial streets. When average daily traffic for a commercial collector exceeds 4,000 trips, direct access to new residential properties is prohibited. Stop signs are often found at the intersections with local streets and intersections with arterial streets may have traffic signals. For those collectors with less than 4,000 projected trips, no truck traffic, and no frontage provided to adjacent lots, the constructed width of the collector may be reduced.

A **local street** provides direct access to abutting properties. Local streets are designed for the lowest traffic volumes of any street. Narrower widths are encouraged to reduce travel speed in residential areas for maximum safety.

A **boulevard** designation functions as an overlay on several of the above street and roadway designations. Streets with this designation are generally required to have landscaped medians, traffic calming devices, and heightened aesthetic considerations.

**Truck Route** designations and regulations are described in Section 6.14.160 of the Reno Municipal Code.

## **City of Reno Major Street System**

\* The Street Functional Classifications Listed May Not Be Indicative Of Actual ADT Volumes.

### Freeway

SR 431  
Interstate 80  
US 395

### Limits

Wedge Parkway to US 395  
West City Limits to East City Limits  
South City Limits to North City Limits

### Major Arterial

Arrowcreek Parkway  
Clear Acre Lane  
Damonte Ranch Parkway  
Double R Boulevard  
Fourth Street  
Golden Valley Road  
Kietzke Lane  
Lemmon Drive  
Longley Lane  
McCarran Boulevard  
Moana Lane  
Plumb Lane  
Second Street  
South Meadows Parkway  
Stead Boulevard  
Veterans Parkway  
Virginia Street

### Limits

West City Limit to S. Virginia Street  
N. McCarran Boulevard to Dandini Boulevard  
South Virginia Street to Steamboat Parkway  
South Meadows Parkway to Longley Lane  
West City Limit to East City Limits  
N. Virginia Street to Beckwourth Drive  
Del Monte/Neil Road to North City Limits  
N. Virginia Street to Military Road  
S. Virginia Street to S. McCarran Boulevard  
Entire Length  
S. Virginia Street to Double R Boulevard  
S. Virginia Street to Terminal Way  
Keystone Avenue to East City Limits  
S. Virginia Street to Veterans Parkway  
N. Virginia Street to Silver Lake Road  
Geiger Grade Road to S. Meadows Parkway  
Golden Valley Drive to South City Limits

### Minor Arterial

Arlington Avenue  
Avenida De Landa Avenue  
Beaumont Parkway  
California Avenue  
Center Street  
Damonte Ranch Parkway  
Dandini Boulevard  
Del Monte Lane  
Double Diamond Parkway  
Echo Avenue  
Evans Avenue  
Fifth Street  
Garson Road

### Limits

Fifth Street to Urban Road  
Entire Length  
Entire Length  
Mayberry Drive to S. Virginia Street  
S. Virginia Street to Ninth Street  
Steamboat Parkway to Geiger Grade  
Entire Length  
Kietzke Lane to S Virginia Street  
Double R Boulevard to Prototype Drive  
Entire Length  
Fourth Street to N. McCarran Boulevard  
Keystone Avenue to Evans Avenue  
Blue Heron Circle to Boomtown Entrance

## Minor Arterial

Golden Valley Road  
Greg Street  
Keystone Avenue  
Kings Row  
Kirman Avenue  
Kuenzli Street  
Kumle Street  
Lake Street  
Lakeside Drive  
Las Brisas Parkway  
Lear Boulevard  
Lemmon Drive  
Liberty Street  
Longley Lane  
Mae Anne Avenue  
Mayberry Drive  
Military Road  
Mill Street  
Mira Loma Drive  
Moana Lane  
Moya Boulevard  
Neil Road  
North Virginia Street  
Oddie Boulevard  
Parr Boulevard  
Peckham Lane  
Plumb Lane  
Redfield Parkway  
Red Rock Road  
Rio Wrangler Parkway  
Robb Drive  
Rock Boulevard  
Ryland Street  
Seventh Street  
Sharlands Avenue <sup>(1)</sup>  
Sierra Street  
Silver Lake Road  
Sixth Street  
Sky Vista Parkway  
Somerset Parkway  
Somerset Ridge  
Stead Boulevard  
Steamboat Parkway  
Stoker Avenue

## Limits

Beckwourth Drive to East City Limits  
Mill Street to North City Limits  
California Avenue to Coleman Street  
Keystone Avenue to N. McCarran Boulevard  
Ryland Street to Sutro Street  
Kietzke Lane to Second Street  
Redfield Parkway to S. Virginia Street  
Sinclair Street to Sixth Street  
S. McCarran Boulevard to Moana Lane  
Entire Length  
Entire Length  
Military Road to North City Limits  
Arlington Avenue to Ryland Street  
S. McCarran Boulevard to Rock Boulevard  
Sharlands Avenue to N. McCarran Boulevard  
West Fourth Street to California Avenue  
Entire Length  
Ryland Avenue to S. McCarran Boulevard  
S. McCarran Boulevard to Rosewood Lakes G.C.  
Pioneer Drive to S. Virginia Street  
Entire Length  
S. Virginia Street to S. McCarran Boulevard  
Red Rock Road to Golden Valley Road  
Sutro Street to East City Limits  
N. Virginia Street to U.S. 395  
Baker Lane to Longley Lane  
S. Virginia Street to West City Limits  
Kumle Street to S. Virginia Street  
N. Virginia Street to Moya Boulevard  
Veterans Parkway to Steamboat Parkway  
I-80 Interchange to Las Brisas Boulevard  
S. McCarran Boulevard to N. McCarran Boulevard  
Liberty Street to Mill Street  
Robb Drive to Keystone Avenue  
Robb Drive to Mae Anne Avenue  
California Avenue to N. Virginia Street  
Red Rock Road to Sky Vista Parkway  
Sierra Street to Fourth Street  
Silver Lake Road to Lemmon Drive  
Eagle Bend Trail to Mae Anne Avenue  
US 40 to Del Web Parkway East  
Silver Lake Road to Echo Avenue  
Damonte Ranch Parkway to Rio Wrangler Parkway  
Fourth Street to Seventh Street

Minor Arterial

Sutro Street  
Terminal Way  
Vassar Street  
Village Parkway  
Wedge Parkway  
Wells Avenue  
White Lake Parkway

Limits

Truckee River to N. McCarran Boulevard  
Mill Street to Plumb Lane  
S. Virginia Street to Terminal Way  
US 395 to Coldsprings Drive  
SR431 to Arrowcreek Parkway  
S. Virginia Street to Sutro Street  
Village Parkway to US 395

Collector

Airway Drive  
Alturas Avenue  
Back Nine Trail  
Baker Lane  
Beckwourth Drive  
Bennie Lane  
Booth Street  
Boynton Lane  
Brinkby Avenue  
Buck Drive  
Caliente Street  
California Avenue  
Carat Avenue  
Casazza Drive  
Cashill Boulevard  
Caughlin Parkway  
Chisholm Trail  
Clear Acre Lane  
Coggins Street  
Colbert Drive  
Coleman Street  
College Drive  
Comstock Drive  
Country Estates Circle  
Court Street  
Curti Ranch Road  
Dant Boulevard  
Del Monte Lane  
Del Web Parkway East  
Delucchi Lane  
East Huffaker Lane  
Edison Way  
Eleventh Street  
Enterprise Drive

Limits

West Terminus to Longley Lane  
Keystone Avenue to Putnam Drive  
Del Web Parkway to Somersett Parkway  
Redfield Parkway to W Moana Lane  
North Hills Boulevard to East Terminus  
Entire Length  
Entire Length  
Spring Drive to Mira Loma Drive  
Plumas Street to S. Virginia Street  
Lemmon Drive to North Hills Boulevard  
Plumas Street to S. Virginia Street  
Idlewild Drive to Arlington Avenue  
Entire Length  
S. Wells Avenue to Kietzke Lane  
Entire Length  
Entire Length  
Newport Lane to Opal Station Drive  
Wedekind Road to N. McCarran Boulevard  
Entire Length  
Longley Lane to Maestro Drive  
Keystone Avenue to Ives Avenue  
Washing Street to Sierra Street  
Entire Length  
W. Huffaker Lane, North Back to W. Huffaker Lane  
Arlington Avenue to S. Virginia Street  
Veterans Parkway to Equestrian Road  
Manzanita Lane to Moana Lane  
Huffaker Lane to Kietzke Lane  
Somersett Ridge to Somersett Parkway  
Neil Road to Moana Lane  
Offenhauser Drive to Longley Lane  
Rock Boulevard to Mill Street  
Washington Street to N. Virginia Street  
Evans Avenue to Valley Road

Collector

Epley Road  
Equestrian Road  
Evening Rock Trail  
Ferrari Mcleod Boulevard  
First Street  
Foothill Road  
Forest Willow  
Foster Drive  
Gardella Avenue  
Garson Road  
Gear Street  
Gentry Way  
Golden Valley Drive  
Grandpoint Way  
Greensburg Drive  
Grove Street  
Harvard Way  
Hidden Valley Drive  
Highland Avenue  
Hoge Road  
Holcomb Avenue  
Holcomb Ranch Lane  
Houston Drive  
Huffaker Lane, West  
Hunter Lake Drive  
Idlewild Drive  
Keystone Avenue  
Kings Row  
Kirman Avenue  
Lakeside Drive  
Link Lane  
Locust Street  
Longley Lane  
Lymbery Street  
Mae Anne Avenue  
Maestro Drive  
Manzanita Lane  
Market Street  
Markridge Drive  
Marsh Avenue  
Mary Street  
Meadow Vista Drive  
Memorial Drive  
Mesa Park Road

Limits

Clear Acre Lane to Scottsdale Road  
Geiger Grade Road to Curti Ranch Road  
Forest Willow Trail to Somerset Parkway  
Entire Length  
Keystone Avenue to Second Street  
West City Limits to S. Virginia Street  
Evening Rock Trail to Somerset Parkway  
Entire Length  
Entire Length  
Boomtown Entry to S. Verdi Road.  
Keystone Avenue to Washington Street  
Brinkby Avenue to Neil Road  
Yorkshire Drive to N. Virginia Street  
Mae Anne Avenue to Simons Drive  
S. McCarran Boulevard to Bridgewater Drive  
Lumberly Street to Harvard Way  
Grove Street to Market Street  
Mira Loma Drive to 4141 W. Hidden Valley Drive  
Evans Avenue to Valley Road  
Entire Length  
S. Virginia Street to Mill Street  
S. Virginia Street to West City Limits  
Longley Lane to S. McCarran Boulevard  
S. Virginia to City Limits  
Entire Length  
Booth Street to California Avenue  
Coleman to N. McCarran Boulevard  
N. McCarran Boulevard to North Terminus  
Plumb Lane to Ryland Street  
Brinkby Avenue to Mt Rose Street  
Entire Length  
E. Plumb Lane to Kuenzli Street  
Rock Boulevard to North Terminus  
W. Moana Lane to Lakeside Drive  
Mesa Park Road to Sharlands Avenue  
S. Virginia Street to Longley Lane  
S. McCarran Boulevard to Warren Way  
Villanova Drive to Kietzke Lane  
Hunter Lake Drive to Susileen Drive  
Sharon Way to Newlands Circle  
Plumas Street to S Virginia Street  
W. Patriot Boulevard to W. Huffaker Lane  
Entire Length  
Fourth Street to Mae Anne Avenue

Collector

Limits

Mill Street	S. Virginia Street to Ryland Street
Mira Loma Drive	Longley Lane to McCarran Boulevard
Moana Lane	Pioneer Drive to Skyline Boulevard
Monroe Street	Sharon Avenue to Plumas Street
Montello Street	E. Ninth Street to Wedekind Road
Moraine Way	Entire Length
Mt. Anderson Street	Stead Boulevard to Alpha Avenue
Mt. Babcock Street	Stead Boulevard to Mt. Anderson Street
Mt. Rose Street	Sharon Way to S. Virginia Street
Neil Road	S. McCarran Boulevard to Gentry Way
Newport Lane	Entire Length
Ninth Street	Wells Avenue to East City Limits
Ninth Street	Sierra Street. to Evans Avenue
North Hills Boulevard	Buck Drive to East Terminus
Old Virginia Road	S. Virginia Street to S. Meadows Parkway
Opal Station Drive	Chisholm Trail to Golden Valley Road
Panther Drive	N. Virginia Street to Western Road
Patriot Boulevard	S. Virginia Street to Longley Lane
Peavine Road	Putnam Drive to Van Ness Avenue
Peckham Lane	Lakeside Drive to Baker Lane
Pembroke Drive	5980 Pembroke Drive to East City Limits
Pioneer Drive	W. Moana Lane to Skyline Boulevard
Plateau Road	Entire Length
Plumas Street	Ridgeview Drive to California Avenue
Putnam Drive	Entire Length
Rainbow Ridge Road	Mae Anne Avenue to Simons Drive
Ralston Street	Riverside Drive to Citadel Road
Rio Poco Drive	Mira Loma Drive to City Limits
Rio Wrangler Parkway	Steamboat Parkway to Desert Way
Ridgeview Drive	Plumas Street to Lakeside Drive
Riverside Drive	Entire Length
Sadlier Way	Valley Road to N. Wells Avenue
Scottsdale Road	Entire Length
Second Street, West	Keystone Avenue to Dickerson Road
Selmi Drive	Sutro Street to Clear Acre Lane
Severn Drive	Kings Row to Gulling Road
Sharon Way	Entire Length
Sierra Center Parkway	Maestro Drive to S. Virginia Street
Sierra Highlands	N. McCarran Boulevard to Seventh Street
Sierra Madre Drive	Rio Poco Road to S. McCarran Boulevard
Silverada Boulevard	E. Ninth Street to Wedekind Road
Silver Shores Drive	Silver Lake Boulevard to Moya Boulevard
Silver Sky Parkway	Silver Lake Road to Sky Vista Parkway
Simons Drive	Sierra Highlands Drive to Robb Drive

Collector

Sinclair Street  
Sixth Street  
Sky Mountain Drive  
Sky Vista Parkway  
Skyline Boulevard  
Smithridge Drive  
Socrates Drive  
Spring Drive  
State Street  
Stead Boulevard  
Stone Valley Drive  
Somerset Parkway  
Summit Ridge Drive  
Sutro Street  
Talbot Lane  
Talus Way  
Taylor Street  
Terminal Way  
Timber Way  
University Terrace  
Urban Road  
Valley Road  
Valley Wood Drive  
Vassar Street  
Verdi South  
Village Green  
Villanova Drive  
Vista Rafael Parkway  
Washington Street  
Wedekind Road  
Wellington Way  
West Ranger Road  
Western Road  
Western Skies Drive  
Wilbur May Parkway  
Woodland Avenue  
Wyoming Avenue  
Yori Avenue  
Yorkshire Drive

Limits

Holcomb Avenue to State Street  
Ralston Street to Sierra Street  
S. McCarran Boulevard to Summit Ridge Drive  
Silver Lake Road to Lear Boulevard  
S. McCarran Boulevard to S. Arlington Avenue  
S. McCarran Boulevard to Peckham Lane  
Entire Length  
Longley Lane to Rio POCO Drive  
S. Virginia Street to Lake Street  
U.S. 395 to N. Virginia Street  
Entire Length  
Del Web Parkway to Eagle Bend Trail  
Sky Mountain Drive to Fourth Street  
N. McCarran Boulevard to US 395  
South Terminal End to Redfield Parkway  
Buckhorn Way to N. Virginia Street  
Holcomb Lane to Kietzke Lane  
Gentry Way to Plumb Lane  
Valley Road to Sutro Street  
Sierra Street to Lodge Avenue  
Arlington Avenue to Plumas Street  
Fourth Street to Enterprise Drive  
Avenida De Landa Avenue to Mae Anne Avenue  
S. Virginia Street to Kirman Avenue  
Bridge Street to Garson Road  
Caughlin Parkway to Caughlin Parkway  
Harvard Way to Terminal Way  
Stoltz Road to N. Virginia Street  
Riverside Drive to San Rafael Drive  
Sutro Street to East City Limits  
Yorkshire Drive to N. Virginia Street  
Coggins Road to Panther Drive  
Panther Drive to East Terminus  
9041 N. Western Skies Drive to Rio Wrangler Parkway  
Entire Length  
Sugar Pine Court to W. Fourth  
W. Seventh Street to Keystone Avenue  
W. Moana Lane to Mill Street  
Wellington Way to Golden Valley Drive

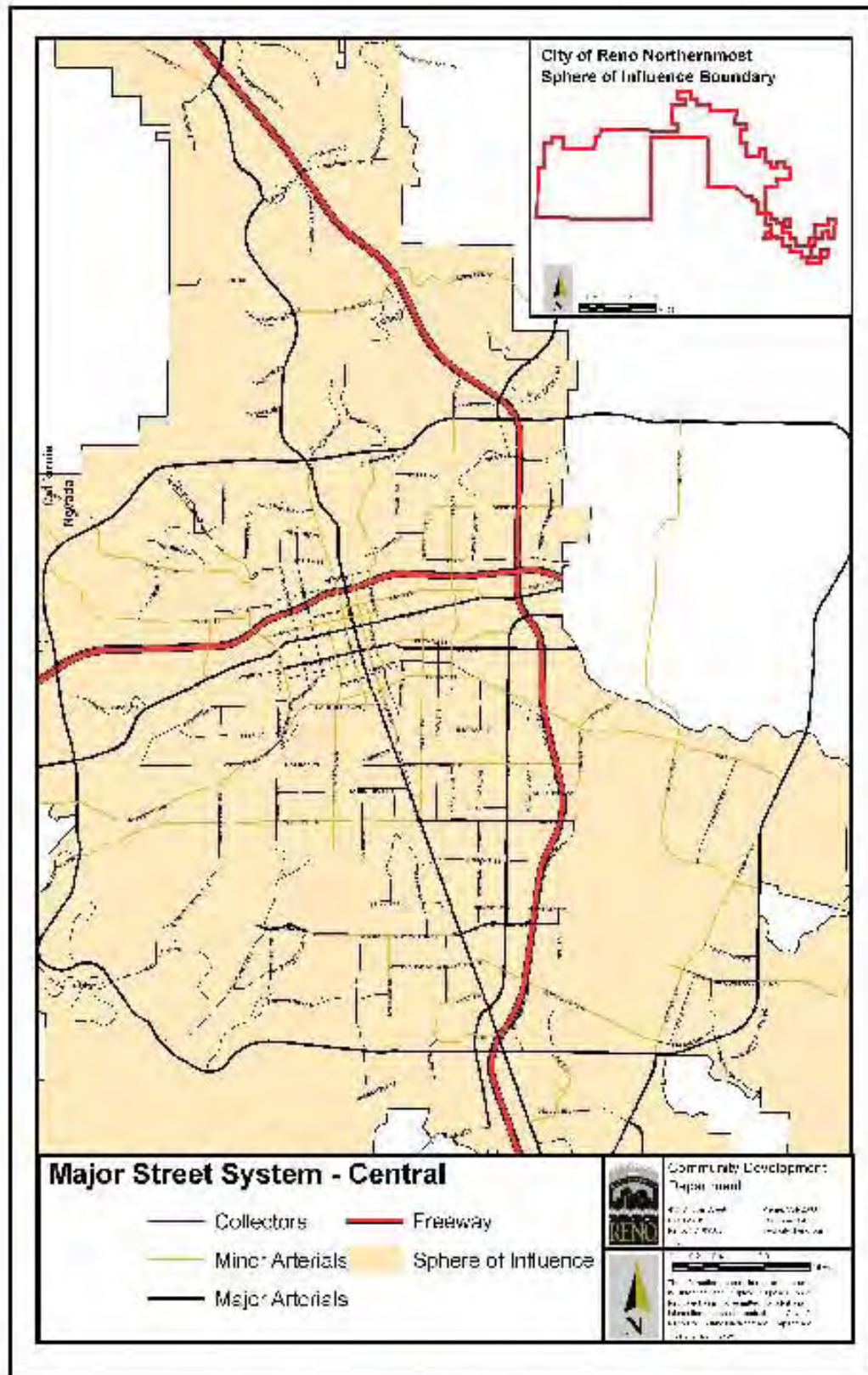
Boulevard

Limits

Arlington Avenue	1-80 to Urban Road
Fourth Street	Entire Length within City limits
Keystone Avenue	Entire Length within City limits
Longley Lane	McCarran Boulevard to S. Virginia Street
Mayberry Drive	McCarran Boulevard to S. Virginia Street
McCarran Boulevard	Entire Length within City limits
Moana Lane	Pioneer Drive to U.S. 395
Oddie Boulevard	Wells Avenue to east City Limits
Plumas Street	California Avenue to McCarran Boulevard
Plumb Lane	Entire Length within City limits
South Meadows Parkway	Entire Length
Vassar Street	S. Virginia Street to U.S. 395
Virginia Street	Entire Length within City limits
Wells Avenue	Entire Length within City limits

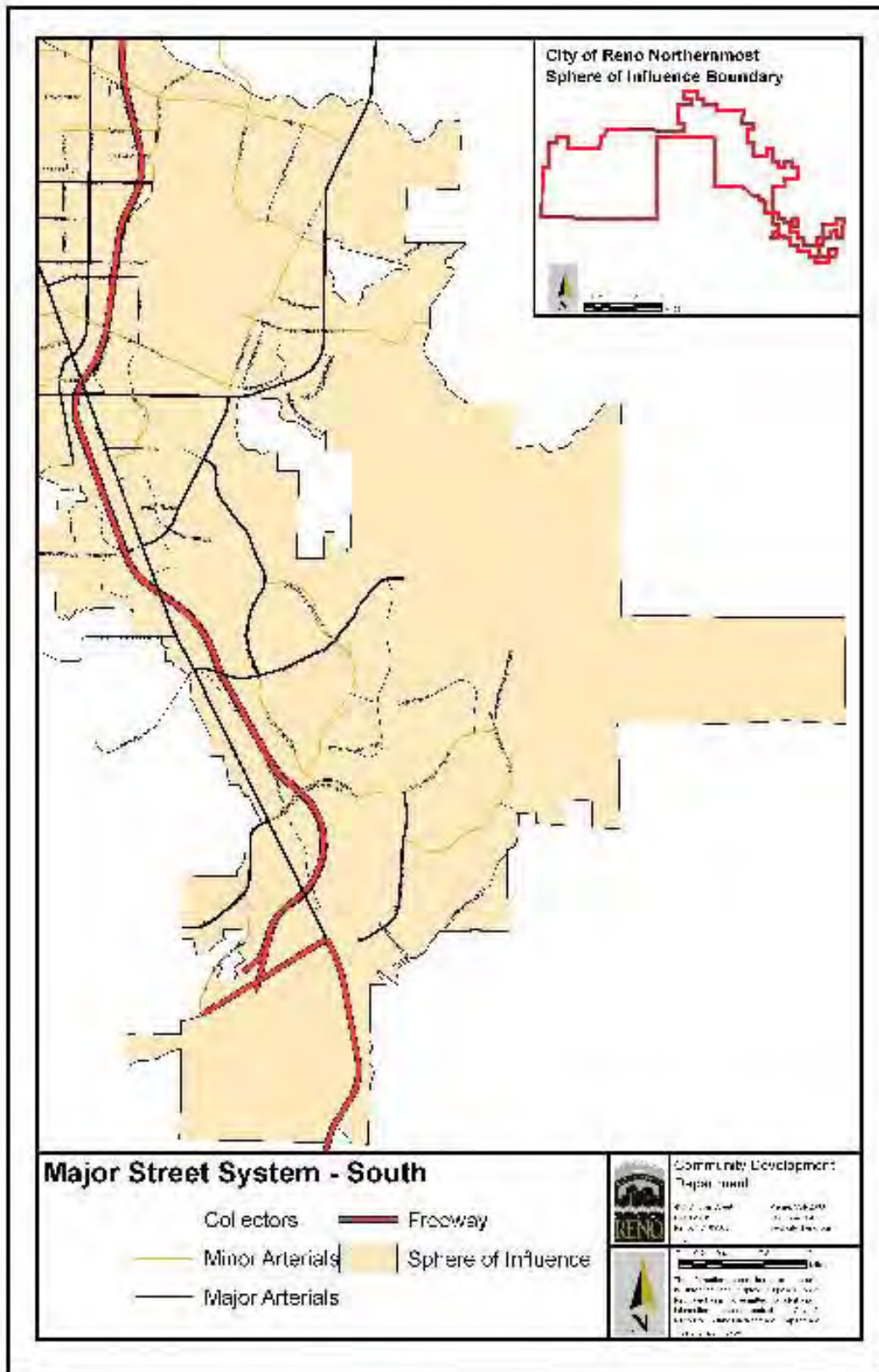
\* Boulevard designations apply to all arterial and collector streets within or adjacent to a corridor or center plan area.

Map 1



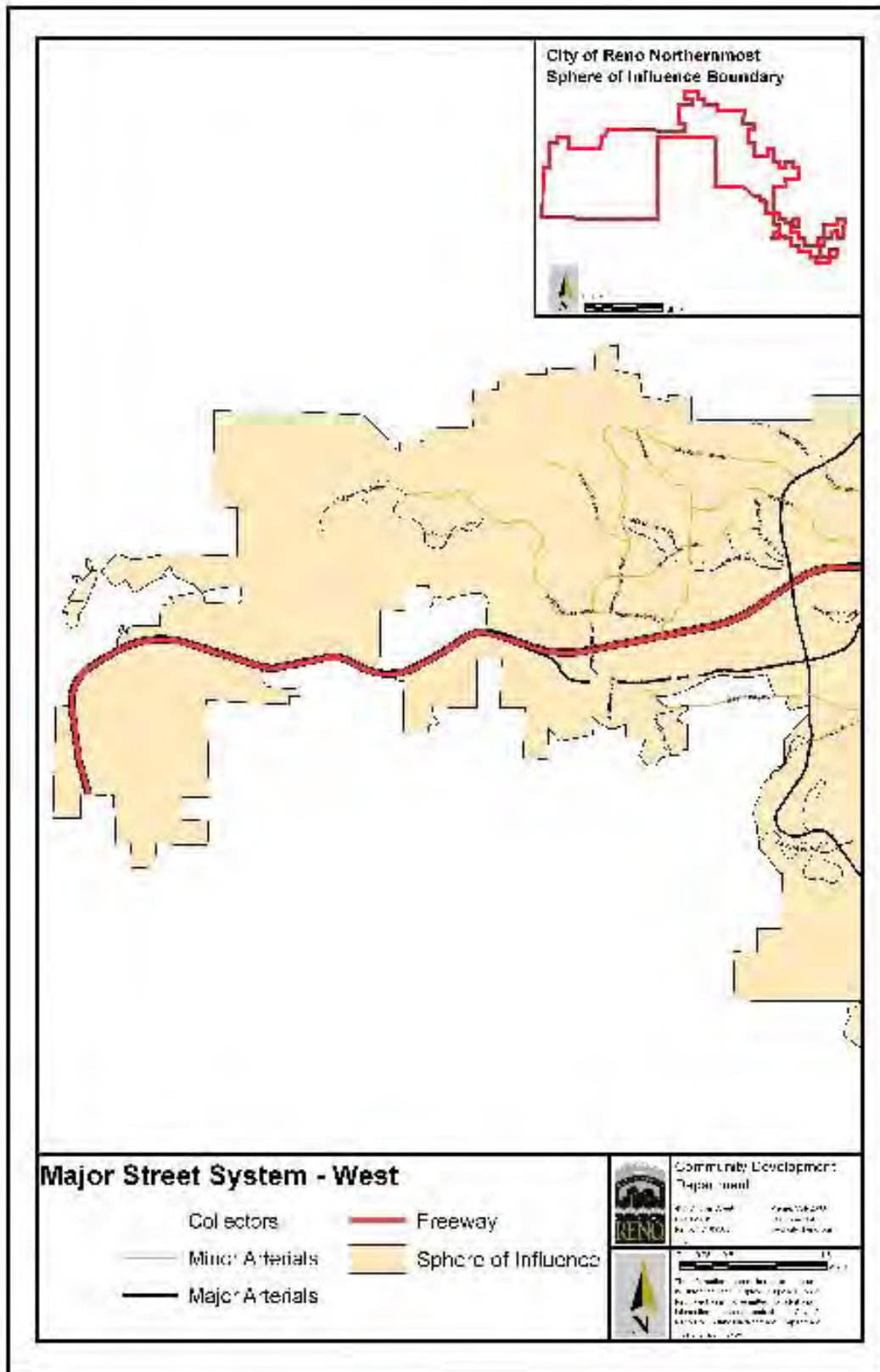
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Map 2



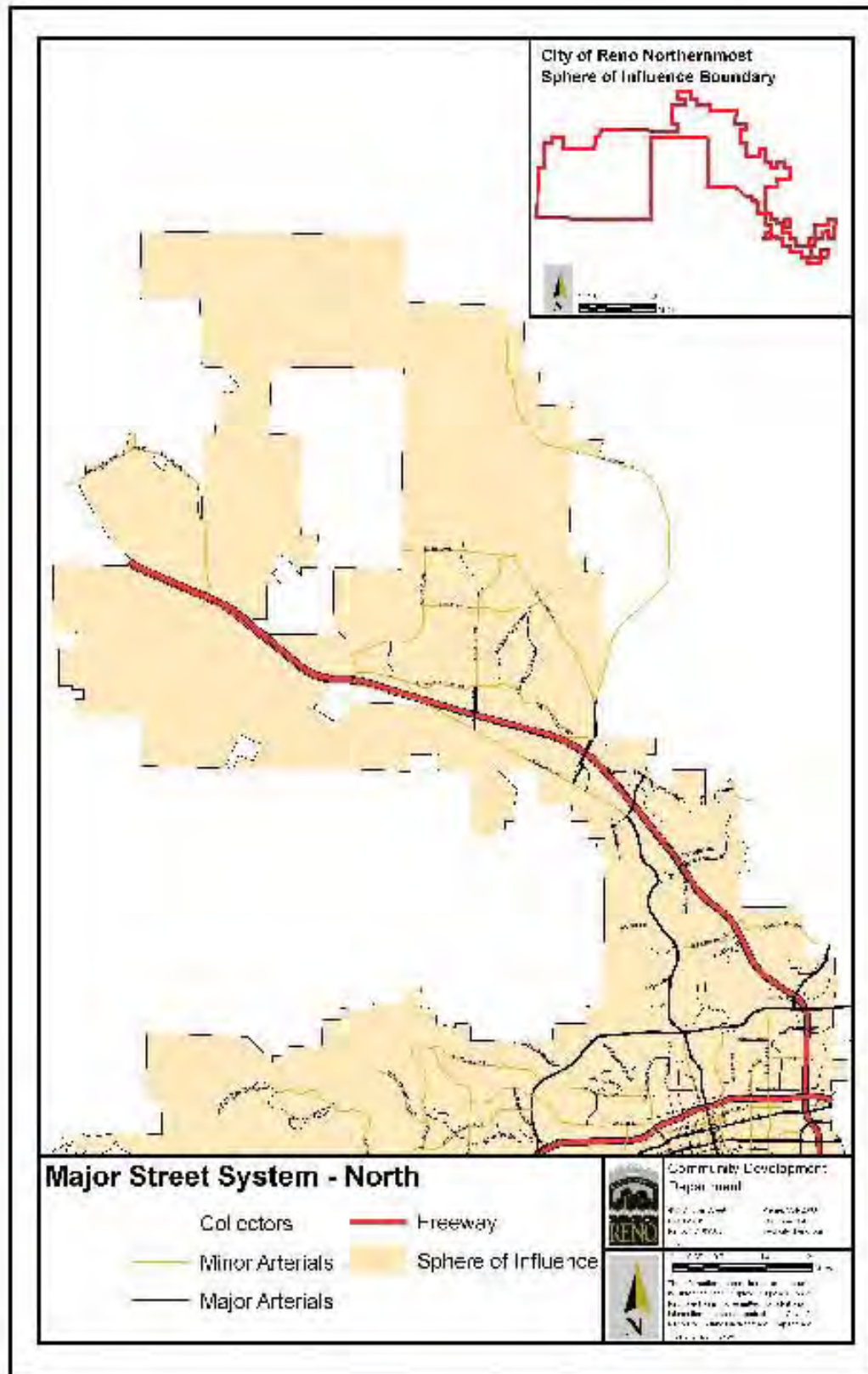
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Map 3



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Map 4



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## ***Airports***

Aviation is an important segment of the economic vitality of the Truckee Meadows. Air passenger counts at the Reno-Tahoe International Airport have seen moderate increases in recent years, serving just over five million persons in 2006. Air Cargo has seen more than a 12 percent increase over 2005 levels with 2006 cargo statistics peaking at 122 million pounds.

Future improvements identified in the Airport's development plans, include renovations and expansion of passenger terminal facilities, development of air cargo apron and facilities in the southwest quadrant of the airport, expansion of the fuel farm, creation of more general aviation facilities in the southeast and northeast quadrants of the airport, and continued property and development rights acquisition based upon the F.A.R. Part 150 Study. In cooperation with the Reno-Tahoe Airport Authority, the Federal Aviation Administration will also be constructing a new 200-foot tall Air Traffic Control Tower at the airport.

In order to preserve the long term operational integrity and viability of the Reno-Tahoe International and Reno-Stead Airports, the Reno-Tahoe Airport Authority desires compatible land uses within certain distances of the runways, ground operations and within certain noise contour levels at both airports (see Figures 1-2). The City recognizes these factors in land use decision making and should continue to support policies that protect the safe and efficient operation of the Reno-Tahoe International Airport and Reno-Stead Airport



The runway configuration at the Reno-Tahoe International Airport consists of three runways: Runway 16R 34L (11,000' long), which is the main runway for commercial aircraft operations; Runway 16L 34R (9,000' long), which is parallel to Runway 16R 34L and is used by both commercial and general aviation aircraft; and Runway 7 25 (6,102'), which is the cross wind runway used primarily by general aviation aircraft. The airport can accommodate wide body aircraft on longer stage lengths and non stop international flights. The Reno-Tahoe International Airport development plans identify improvements over a 20 year time span.

Figure 1

**1996 AIRPORT NOISE CONTOURS**

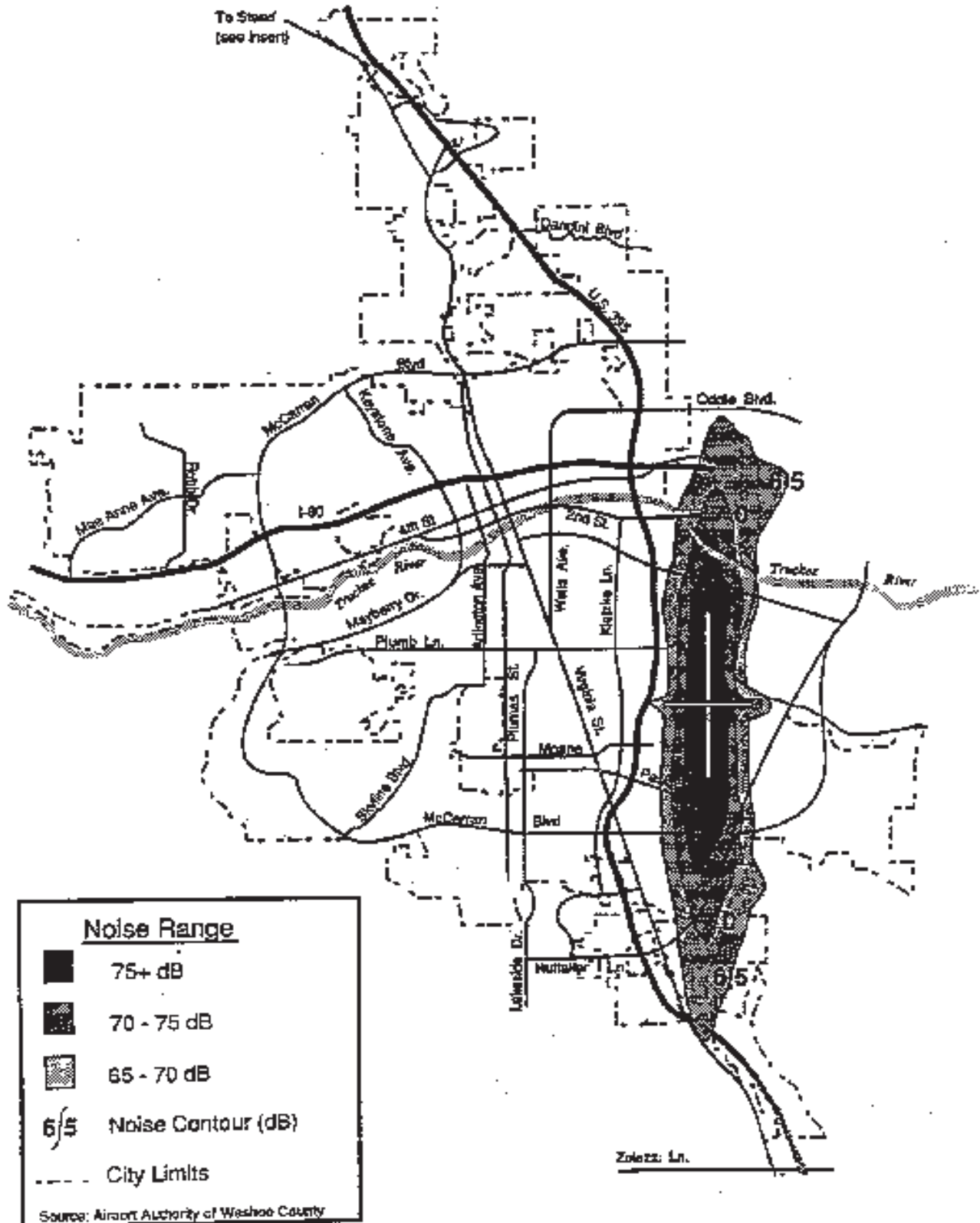
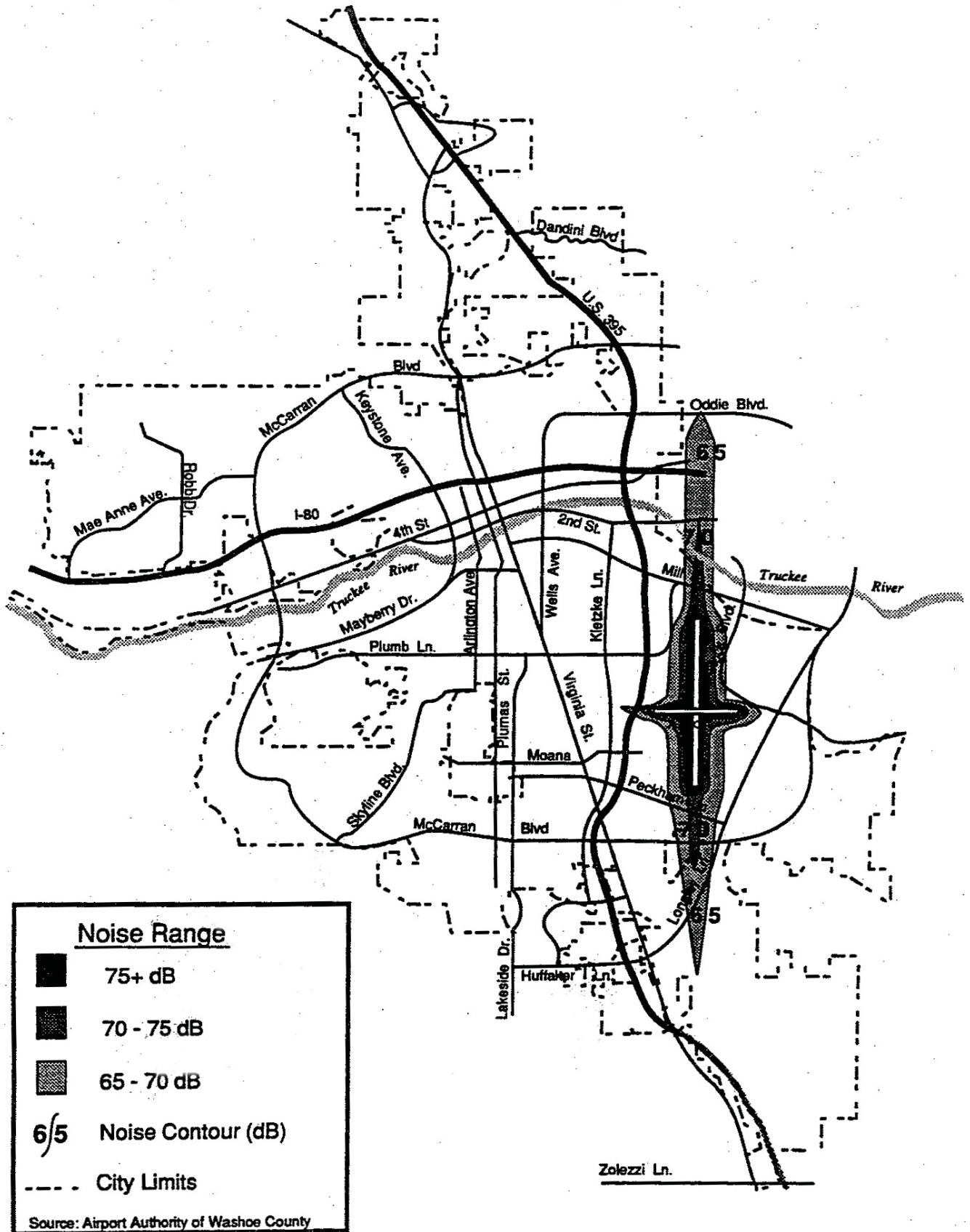


Figure 2

**2010 AIRPORT NOISE CONTOURS**



## Railroads

The presence of a railroad is important in meeting Reno's economic development objectives. The City of Reno is strategically located on the U.S. railroad network and plays an important role in the national freight system. Reno will continue to pursue opportunities to enhance its position as a goods distribution center for the nation.

Railroad tracks run east, west, and north through the city, and are used for AMTRAK passenger rail and freight service. A rail spur off of the northern tracks services the Stead industrial area. The proposed merger of the Union Pacific (UP) and Southern Pacific (SP) Railroads in 1995 and the subsequent approval by the U.S. Department of Transportation, Surface Transportation Board (STB) presented the City of Reno with a unique opportunity to solve a major transportation and public safety problem by eliminating several at grade crossings in the downtown core through the RETRAC Project. This project brought rail service below ground in an effort to increase public safety, lessen congestion, enhance environmental safety, reduce air pollution, and enhance the downtown urban landscape.

Portions of the rail line go through downtown and along the river. In order to protect the health, safety and welfare of Reno's residents and visitors, any potential adverse effects of this line must be identified and mitigated. The City is concerned about the transportation of hazardous materials through the urbanized area on these rail lines; however, the City can not control the carriage of such materials. The City has taken significant steps in reducing the number of at-grade crossings to reduce the risk of a significant train-vehicle accident and the possibility of a train derailment as a result. It is the policy and intent of the City to work with State and Federal regulators to minimize the risks associated with the transport of hazardous material.



*(Above) The City's RETRAC project has significantly enhanced the downtown environment, emergency response times and regional air quality caused by idling cars waiting for trains to pass.*



## Fire Protection

### *Discussion*

The City of Reno provides fire suppression needs through the use of codes related to built-in protection such as early warning and detection systems, automatic sprinklers, fire resistant design of structures and materials, and through the fire fighting and public safety capabilities of the Fire Department. This section serves as the fire prevention and fire suppression guide for public and private decision makers working in all areas of the city and identifies Fire Department facility needs. The plan should be reviewed and amended periodically to reflect changes in service resulting from land use patterns, fire protection techniques, development of new roads into neighborhoods, and apparatus needs.

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## ***Fire Station Facilities***

### ***Distribution of Fire Stations***

The factors affecting the location and staffing of fire stations in the city of Reno include: land use; response distances; street patterns and traffic volume; population density; topographic and geographic barriers or obstructions; building size, height, density and type of construction; building occupancy; and built-in fire protection. These factors are given relative values in determining the adequacy of Fire Department resources to adequately serve a developed area of the city. General fire station locations are based on Fire Department response distance over established roadways while the types of equipment, number of companies and staffing levels are predicated on the above criteria.

Changes in the use of land do not necessarily mean that the number of fire protection facilities must be increased to ensure adequate protection. However, it may be necessary to expand, add, or relocate existing facilities as land use patterns change. Therefore, the plan designates general rather than precise locations for proposed fire protection facilities. Applications involving amendments to land use and zoning map designations should require an evaluation of facility and infrastructure standards to ensure that fire facilities remain adequate and that facility mapping is current.

### ***Existing and Planned Fire Station Locations***

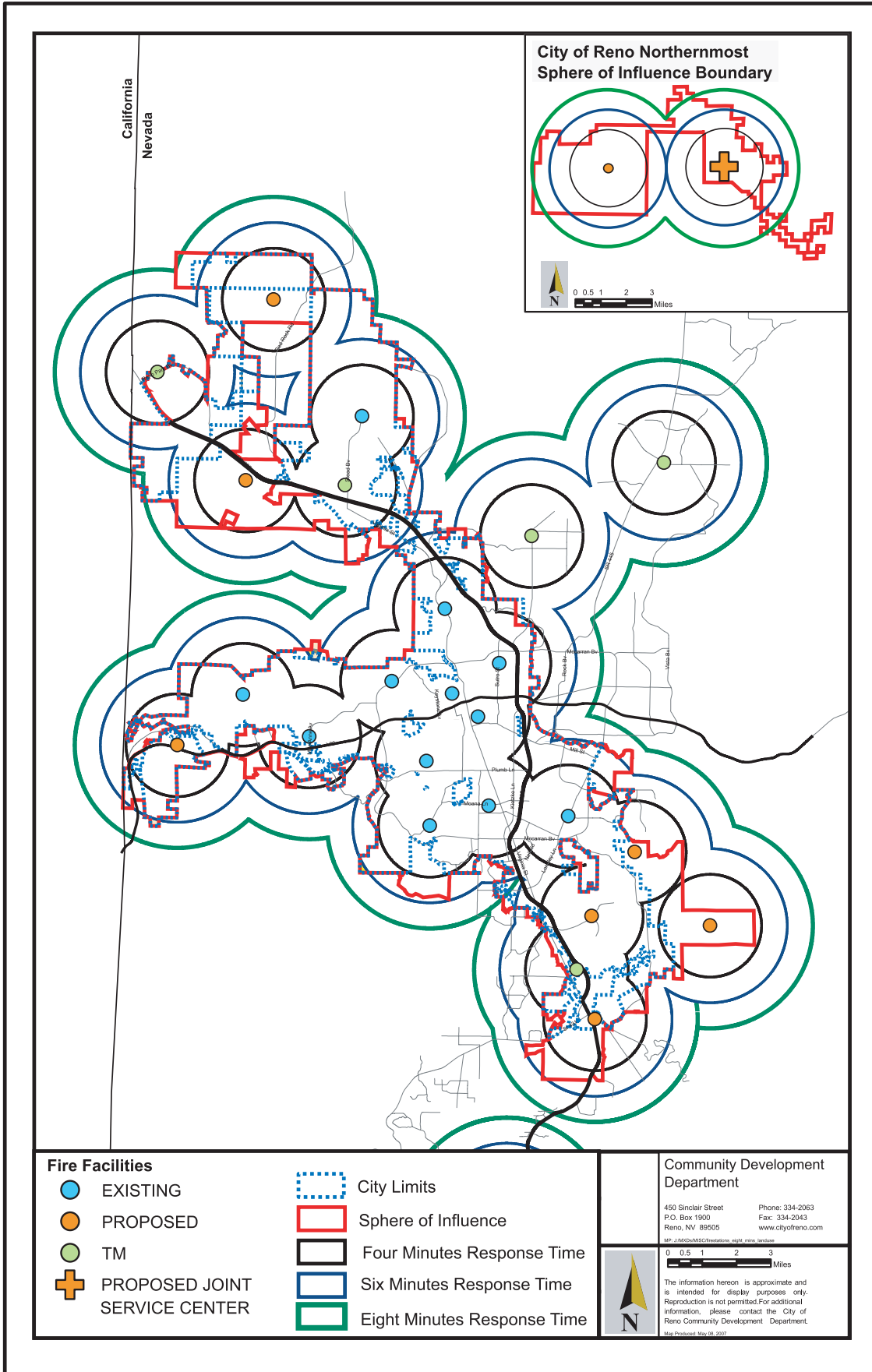
The City currently operates twelve stations throughout the City's sphere of influence. Reno's service net is augmented by five additional stations operated by the City in the Truckee Meadows Fire Protection District. Together, these seventeen stations provide a four minute response time to most of the city. Map 5, "Fire Facilities," depicts the location of existing and planned stations and their service area response times. Additional fire facility mapping, illustrating station response times over land use designations, is included in Appendix B. The City may also require improvement to the fire service delivery system to be implemented prior to occupancy of any structure beyond an eight minute service distance.

### ***Facilities Standards***

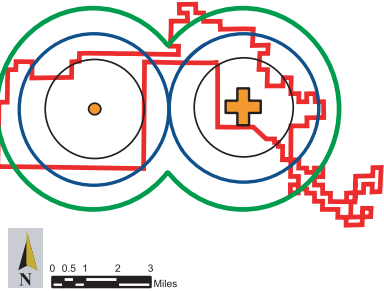
Fire stations should be distributed to provide adequate fire protection for the entire city and to provide any one area of the city with an adequate response time. A response distance of 1-1/2 miles from a fire station results in an average response time of four minutes. The stations identified in Map 5, "Fire Facilities", serve as the department's facility standard.

The City has identified a four minute response as the preferred standard of service for intense urban development such as the downtown, residential uses with 21 or more units per acre, or development with hazardous occupancies (i.e. high fire loads or explosion potential). Response times of four to six minutes can be suitable for most types of residential or commercial uses, as a baseline standard. However,

Map 5



**City of Reno Northernmost  
Sphere of Influence Boundary**



**Fire Facilities**

- EXISTING
- PROPOSED
- TM
- + PROPOSED JOINT SERVICE CENTER

- City Limits
- Sphere of Influence
- Four Minutes Response Time
- Six Minutes Response Time
- Eight Minutes Response Time

**Community Development Department**

450 Sinclair Street Phone: 334-2063  
 P.O. Box 1900 Fax: 334-2043  
 Reno, NV 89505 www.cityofreno.com



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 Map Produced May 08 2007

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for properties that are beyond a four minute response time from a fire station, private fire protection measures may be necessary. Response times over six minutes will affect the types of development allowed on a piece of property. Properties beyond a six minute response are most suitable for low intensity uses, such as Suburban Residential, Neighborhood Commercial, or Distribution and Warehousing. Response times over eight minutes are strongly discouraged.

In calculating the response time to most properties, a 1.5 minute dispatch time and 35 miles per hour travel speed should be assumed. Where local traffic conditions or roadway features are known to affect travel speed, the Fire Department may adjust the assumed travel speed in calculating response times. The reporting station may be a Reno or Truckee Meadows Facility, pursuant to the Interlocal Agreement for Fire Services and Consolidation between the City of Reno and Truckee Meadows Fire Protection District (2000 and renewed 2004).

### ***Fire Station Sites***

Fire station sites are selected so that each is specifically located in relation to all other stations. The sites should be large enough, a minimum of one acre of usable land area, to accommodate an adequate structure, additional pieces of apparatus, areas for routine training, on-site circulation, off-street parking, future expansion and landscaping.

Fire stations should accommodate multiple use requirements including such items as communications, personnel dormitories, routine training, equipment maintenance, community meeting rooms, storage of City equipment, garaging of emergency medical equipment.

The following criteria should be used in station site selection:

- A. Fire station sites should be located along improved major or minor arterials. If, in a given service area the best available site is on a local street, then the site should be on a street which leads directly to an improved major or minor arterial.
- B. Corner lots or through lots having a street or an improved alley at the rear are most desirable.
- C. If the site is on the side of a street or highway where the flow of traffic is toward a signalized intersection, access to the site should be at least 200 feet from that intersection to avoid blockage during ingress and egress.
- D. Original and lifetime cost to the City.

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## ***Facilities Mitigation Procedures for Fire Department Response in Excess of Four Minutes***

A point system is used to evaluate the increasing hazard to life and property for excessive Fire Department response times. The Hazard Points, as shown in Appendix B-1, are based on a relative hazard rating based on the potential for a fire to grow out of control and lead to multiple structure fires or a conflagration. In addition to the hazard to property from excessive response times, there is a substantial risk of multiple structure fires in the wildland hazard zone and moderately increased risk to life and property in the urban/wildland transition zone. The combined effect of these two impacts on the Fire Department's ability to control fires is represented in the matrix format and accumulated point system in Appendix B-2. Additional hazard points are assessed for obstructions or other hindrances to Fire Department response and fire suppression operations which may limit the Fire Department's ability to control a multiple structure fire.

Appendix B-2 shows the normal requirements for construction of projects with a four minute or less response time for reference. For projects without any area exceeding a six minute response time and with only 25% of the area exceeding a response time of four minutes, development should be permitted without mitigation requirements provided no high fire or explosion hazard exists.



For projects with areas exceeding six minute Fire Department response times, the points accumulated in Appendix B-2 should be mitigated by the developer from the list of mitigation measures included in Appendix B-1. Response times in excess of eight minutes are strongly discouraged by the imposition of increased fire protection mitigation measures. Response times in excess of eight minutes should ultimately be satisfied by the construction and staffing of permanent fire station facilities concurrent with demand. Before such fire station facilities are in-service, development projects should not be relieved from providing appropriate mitigation measures.

### ***Fire Infrastructure Standards Private Fire Protection Responsibilities***

Fire prevention and protection of life and property should be a cooperative venture between the public fire department and private developers and citizens. The City

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should be responsible for ensuring the construction and staffing of stations to deliver personnel and equipment to the scene of an emergency in a timely manner. The City should also be responsible for planning future land uses in accordance with this plan and the locational guidelines in the Land Use Plan. The private sector should be responsible for providing a water supply to meet fire flows, fire hydrants, and adequate access to the property.

### **Fire Flows**

The required fire flow, as outlined in appendix B-3, is closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy and the degree of fire hazard.

Fire flow requirements vary from 1,500 gpm in single family residential areas up to 3,000 gpm or more in commercial and industrial areas. Additional fire flow may be required by the Fire Department for districts of dense industrial uses and high hazard warehousing and commercial occupancies grouped in a manner that simultaneous fires might occur in the area. Fire flow requirements are in addition to normal peak domestic and irrigation demands of the water supply system.

Special consideration must be given to the required fire flow needs in the hills and mountainous areas of the city. The water mains in these areas usually do not follow a grid system and have unusual water supply problems. In addition, areas of the city in higher terrain utilize pumping systems to supply the water system. All pump systems should be required to provide a gravity supply or, as a less desirable alternative, an auxiliary generator in the event of a power outage. All projects should comply with the required fire flows shown in Appendix B-3.

### **Hydrants**

Hydrants are the vehicle by which the water supply can be tapped and directed to the fire. Hydrants should be installed at the time of land development in accordance with the standards identified in Appendix B-4. Supplemental fire protection is not limited to fire hydrants and may include automatic systems or other systems or appliances.

### **Access**

The Fire Department is dependent on a well developed roadway system to arrive at the scene of an emergency in a timely manner. Area roadways should provide two means of ingress and egress for emergency vehicles and evacuation of residents. Area roadways should be of sufficient width, surfacing and grade to accommodate a fire truck and adhere to access standards in Appendix B-4. The standards augment, but do not replace, other City of Reno design standards for development projects.

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## **Police Protection**

### ***Discussion***

The City's police department strives to maintain a sense of personal safety and security while forming closer relationships between Reno's neighborhoods and its officers. Demographic and economic trends, combined with expanded City limits will have tremendous influence on the demand for police services and facilities. Decentralizing police facilities into Community Service Centers and substations will meet these demands and ensure that police facilities are adequate to serve the needs of existing and future residents.

### ***Police Station Facilities***

#### ***Existing Police Station Locations***

The City of Reno Police department currently operates out of a centralized police station with an additional three storefront sub-stations. The existing central police station is inadequate to meet the department's future facility needs. Recent expansions to the City's political boundaries have resulted in new areas requiring City police service, particularly in the northwest and southern geographic areas.

Policing expanded areas from the central station detracts from the department's service objectives, involves inefficient driving time from the main police facility to the areas served and contributes to significant wear on the vehicles.

### ***Distribution of Police Stations***

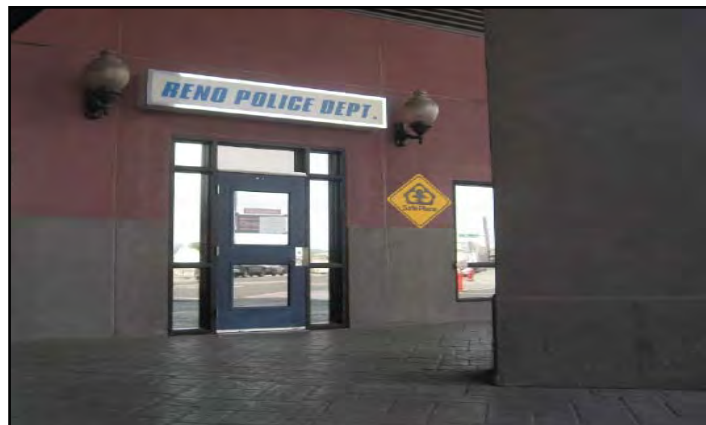
Map 6 "Police Facilities" illustrates the locations of required police facilities and their service areas. The Police Department has identified these as their public facility standard, given existing land uses and zoning. Changes in the use of land do not necessarily mean that the number of police stations must be increased to ensure adequate protection. However, it may be necessary to add, expand, or relocate



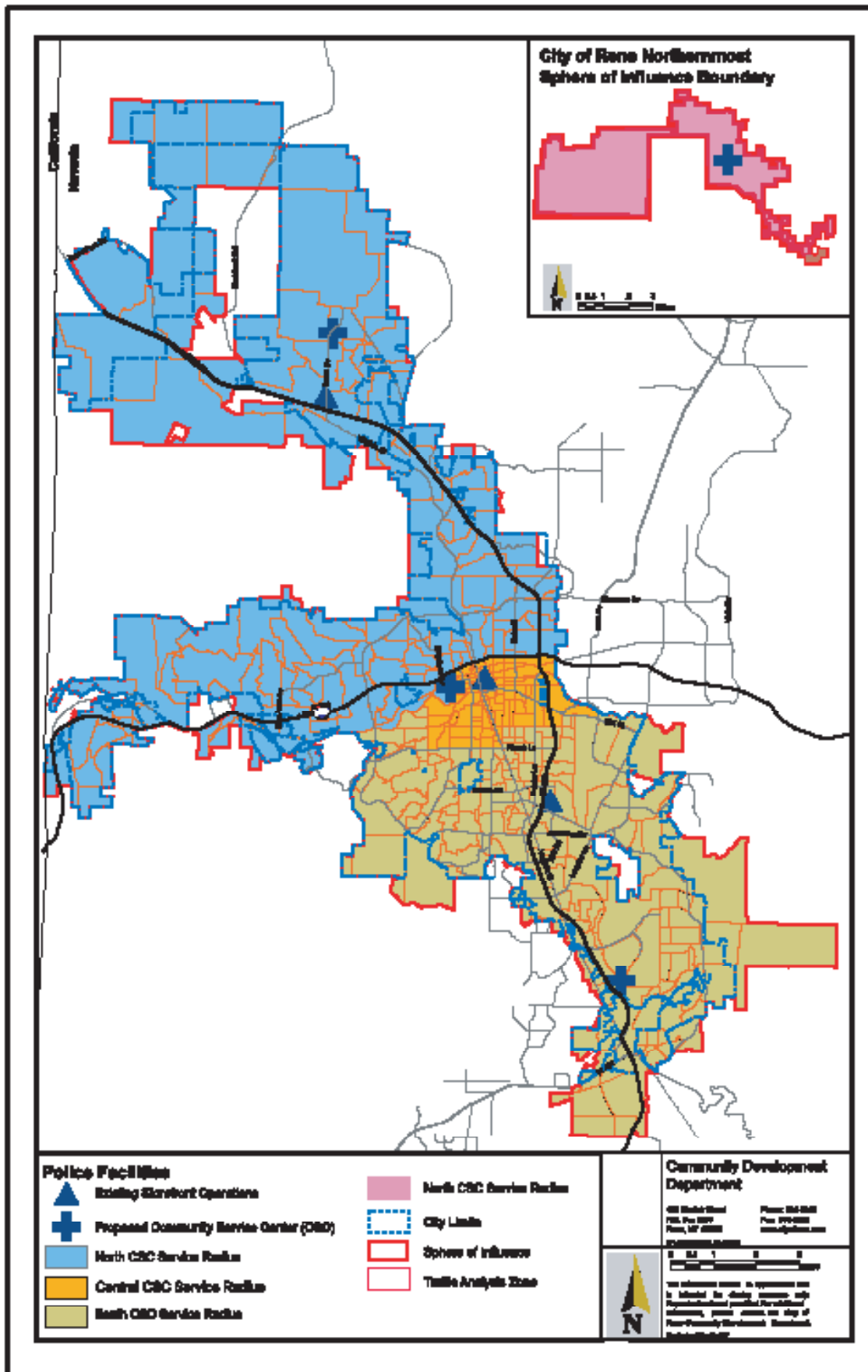
facilities as land use patterns change. Applications involving amendments to or assignments of land use or zoning designations should require an evaluation of facility needs, as outlined in the concurrency management section of this plan, to ensure that police facilities remain adequate and that facility mapping remains current.

### ***Police Department Facilities and Concurrency Options***

The police facilities identified in this plan should be provided concurrent with the impacts from development as defined in Table 1. At the discretion of the Community Development Department, options identified in the concurrency management section of this plan may meet concurrency requirements when the identified police facilities are not yet operational at the time a development application is submitted. These defined measures should be implemented before issuance of a building permit and new development should identify and fund options so that concurrency will be met before occupancy of each structure. If it is determined that public facility standards can not be mitigated through concurrency options, then the identified police facility should be operational before occupancy of a proposed structure.



Map 6



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## Parks and Recreation

### *Discussion*

Parks and recreation facilities are public investments that enhance economic development and quality of life. Park venues are community gathering places and provide recreation, health and wellness outlets for Reno residents. Park systems enhance economic development efforts for business relocation, as well as bolster tourism with cultural, outdoor adventure, and sports programs and events. Communities throughout the United States have noted enhanced social, personal, economic, and environmental benefits for the residents and community as a whole when a well planned and quality-driven park system is established.

The Parks and Recreation section of this Public Services, Facilities and Infrastructure Plan serves as the Recreation Plan (Plan) required by Nevada Revised Statute 278.160. The Plan addresses a comprehensive approach to the establishment and expansion of a park system to include recreation areas, natural areas, recreational facilities, riverbank areas, playgrounds, and other programmable space set aside for recreational uses for the residents of Reno.

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## ***Types of Parks and Recreation Facilities***

Parks within the City of Reno have been classified by park category, programmable park acreage, recreational facilities and site amenities. The park size/acreage noted in Table 2 reflects the entire site acreage necessary in order to achieve the appropriate amount of programmable park acreage for the service area/population. Programmable park acreage is defined as the acreage intended for recreation and play, in contrast to beautification and parkway areas (e.g. landscape medians and buffers), parking lots, and sidewalks. It is Reno's intent to maintain and improve upon the City's natural beauty through selection and development of park sites that are connected through trail, greenway, and street systems. Each park should have an outstanding feature and Reno's parks should reflect the diversity of the City's environment and culture.

### ***Parks***

Park categories include neighborhood, community, pocket, and regional. Each park category fulfills a different role in meeting the recreation needs of Reno residents. Neighborhood parks are the cornerstone of the City of Reno's overall park system and a primary focus for attainment. As such, the greatest care must be taken in selecting the properties acquired for neighborhood parks, how they are designed, and the amenities that are planned to meet the needs of residential neighborhoods. Community parks are equally important in that they serve as community gathering places within the urban boundary for organized recreational activities, cultural and special events, and as locations for recreational facilities and centers. Community parks should be equitably distributed.

### **Pocket Parks**

Pocket parks are less than one acre and may include urban plazas, tot lots, settings for public art, and gardens. When incorporated into residential settings, pocket parks serve a limited population and service area. Pocket parks should only be pursued by the City in specific instances, for example, in the downtown or other intense urban areas where land is at a premium. In new residential development, pocket parks should be built by developers, at their cost, and the parks should be owned, funded, and maintained by homeowner associations.

### **Neighborhood Park**

Neighborhood parks are 5-15 acres, serving 3,000 – 6,000 residents in an approximately 1/2 mile service radius. Neighborhood parks are meant to provide the basic recreational needs of the residential population in the surrounding neighborhood. As such, the park should be centrally located within its service area in order to accommodate pedestrian access. Due to safety and access considerations, the service radius should not be divided by natural or artificial barriers, such as arterial roads, railroads, commercial or industrial areas. The City encourages development of neighborhood parks adjacent to elementary schools. This co-build/joint use planning



and operation maximizes use of public funds and is a direct benefit to residents and the neighborhood school.

The design of a neighborhood park will vary due to the needs of the residents within the service area. However, neighborhood parks generally consist of some combination of the following amenities: youth play equipment, sports courts, picnic facilities, turf areas, walking/exercise paths, restrooms, and parking. New neighborhood parks will include permanent restroom facilities in the

design when the site totals five acres or more, is located in a residential area, and a permanent restroom is not otherwise provided at a contiguous public facility. Due to the active nature of many of the features provided at the neighborhood park, the site selected should contain areas of relatively level terrain and stable soils. The majority of the acreage should be programmable space (not to include parking lot, sidewalks, buffer landscaped areas).

**(Table 2) SERVICE CHARACTERISTICS OF PARK CATEGORIES**

<u>Park Category</u>	<u>Service Area</u>	<u>Service Population</u>	<u>Park Size/Acreage</u>
<b>Pocket</b>	¼ Mile Radius	up to 1,000	up to 1 acre
<b>Neighborhood</b>	½ Mile Radius	3,000 – 6,000	5 – 15 acres
<b>Community</b>	1 – 2 Mile Radius	20,000 – 40,000	15 – 50 acres
<b>Regional</b>	Metropolitan Area	Metropolitan Area	50 or more acres

**Community Park**

Community parks are 15 – 50 acres in size, serving the needs of 20,000 – 40,000 residents in a service radius of approximately 1–2 miles. Community parks offer a wide range of recreational opportunities for area residents and larger segments of the community, and include, but are not limited to sports fields/complexes, aquatic facilities, recreation centers, dog parks, cultural and special event venues, natural features that may require preservation, and on-site parking, in addition to amenities mentioned under neighborhood parks. Community parks are often adjacent to other public facilities such as middle schools, libraries, golf courses or open space. Co-build/joint use planning and operations



maximize public funds and is a direct benefit to residents and other public agencies.

### **Regional Park**

Regional parks are primarily provided by Washoe County for the enjoyment of all residents in the Truckee Meadows. Regional parks are typically 50 acres or more and serve the outdoor recreational needs of the entire

metropolitan area. Traditional regional parks may have environmental preservation and education as a primary focus. With this in mind, sport, aquatic and recreation center facilities are generally not the predominant feature of a regional park. The facilities and activities offered at a traditional regional park generally include special interest use such as equestrian activities, historic interpretation, and nature observation. Regional parks are designed to promote important natural environmental features within their boundaries and provide significant open space.

### ***Recreational Facilities***

Recreational facilities include recreation centers, community halls, arts and culture centers, pools, aquatic complexes, athletic fields and tennis courts among such other basic features as playgrounds, picnic shelters, benches and walkways. Each amenity fulfills a different role in meeting the recreation needs of Reno residents. The descriptions below provide general guidelines for major/specific purpose amenities.

### **Recreation Center**

Recreation centers are developed to serve multiple neighborhoods within an approximately 3 mile service radius and are typically 20,000 square feet or greater on a park site of at least 15 acres. Recreation centers are often adjacent to other significant community amenities, such as aquatics complexes. Recreation centers offer a wide range of recreational services for all ages in an enclosed climate controlled setting.



Facility amenities include but are not limited to the following features; reception areas, gymnasiums, dance and cardio/fitness rooms, multi-purpose rooms, classrooms, kitchens, art galleries, climbing walls, performance stage, racquetball courts, running track, and on-site parking. Some centers may have the facility

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capacity to include designated space for age-specific use such as a teen area or senior citizens wing. The preferred design is that of a multi-generational center that provides a recreational venue for all ages, as opposed to construction of separate youth and/or senior centers.

### **Community Hall**

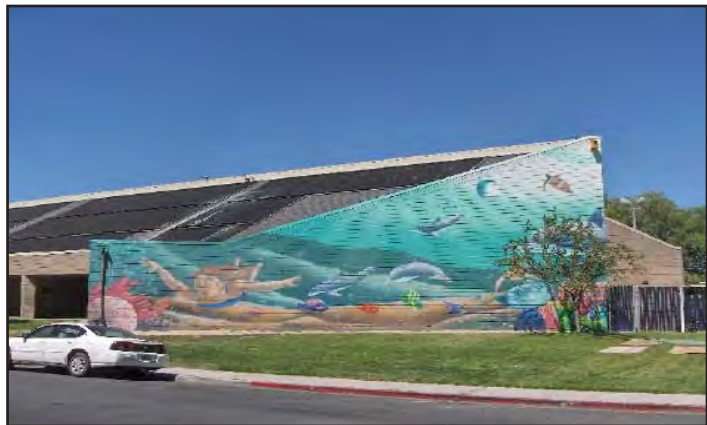
Community halls are developed for localized special events and private rental opportunities. They are typically no less than 2,500 square feet. Community halls may include the following amenities: multipurpose room, storage, office, kitchen facilities and appropriate on-site parking. Due to the limited usefulness of community halls, they generally are not staffed for public hours of operation.

### **Arts & Culture Center**

Arts and culture centers are generally developed for community and regional-based events and are located within downtown corridors or art districts. They are typically 20,000 square feet or greater and provide venues for arts programming, and rental space opportunity for arts and culture organizations. The centers typically include the following amenities; performance and rehearsal space, auditorium with a minimum of 200 seating, gallery space, tenant office space, wet and dry visual arts studio space, conference room, reception area, kitchenette, staff offices, and appropriate on-site parking.

### **Aquatic Complexes**

The trend in aquatic venues includes indoor/outdoor family water park elements and competitive pool facilities that are generally located within an aquatic complex setting. Complexes are larger facilities designated for several simultaneous uses that serve residents of all ages. Aquatic complexes typically include zero depth entry, spray/splash pads, current channels, wave pool, therapy pool, teaching pool, lifeguard office, storage, reception area, changing rooms and restroom facilities, on-site parking, and are often adjacent to, or within the same building as, recreation centers. As such, a minimum square footage of 20,000 square feet is desired so that aquatic complexes can serve residents and visitors within an approximately 3 mile service radius, or region-wide, depending on the amenities offered.



### **Neighborhood Pools**

Neighborhood pools are typically rectangular pools built to accommodate a localized area of residents. Neighborhood pools generally are used by residents living within one mile

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of the facility that accommodate limited programming opportunities. Neighborhood pools are not recommended for future development due to limited programming and high cost of associated operations.

### **Rectangular Athletic Fields/Complexes**

Rectangular athletic fields are generally used for soccer and football programs. The recommended field size is approximately 160x300 feet. Rectangular fields are constructed in both neighborhood and community park settings, however, ideally they are grouped for operational efficiency in community parks in order to optimize oversight and provide sufficient on-site parking and buffer zones.

### **Ball Diamonds/Complexes**

Ball diamonds with 45 foot and 60 foot base paths are used by youth organizations. Ball diamonds with a 70 foot base path are used by youth and adult organizations. Ball diamonds are generally located in both neighborhood and community parks, but ideally they are located in community parks and are grouped in a complex setting for operational efficiency and sufficient on-site parking and buffer zones.

### **Tennis Courts/Complexes**

Tennis courts are located in both neighborhood and community parks. Neighborhood parks may have one or two tennis courts used by residents within a localized area. A tennis complex typically has six courts or more, and is located within a community park setting. Tennis complexes provide a venue for organized play, instruction, leagues, and tournaments, and capacity for on-site parking.

### **Golf Courses**

Golf courses generally meet the needs of residents and guests on a regional basis. Courses are considered special/single purpose facilities that typically provide 18 holes, a driving range, clubhouse/pro shop, practice green, cart storage, equipment rental, on-site maintenance area, parking, and irrigation ponds. Golf course acreage is not counted within the park acreage standard.

### ***Development of Parks and Recreation Facilities***

Pursuant to Nevada Revised Statute 278.4983, the City of Reno has adopted an ordinance for Residential Construction Tax (RCT) presently codified as Reno Municipal Code 18.14.401 – 18.14.406 to impose a tax upon the construction of apartment houses, residential dwelling units and mobile home lots, and establish a method for collection of the RCT to enable the City to provide neighborhood parks and facilities. In the past, as the City experienced new development and growth, a large portion of RCT funds were used to purchase land. Due to the caps placed on the collection of RCT funds and the increased land and construction costs it will be necessary to explore alternate land acquisition options such as Bureau of Land Management (BLM) Recreation & Public Purpose leases, developer contributions, land trusts, and other partnership efforts.

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As outlined in the Concurrency Management section of this plan, an impact fee may be an option for meeting concurrency for certain park facilities as allowed by NRS.

The Parks, Recreation and Community Services (PRCS) Department works with the Community Development Department and land developers with Planned Unit Developments (PUDs) to ensure parks and recreational amenities are planned and



constructed within master planned communities. PRCS and developers have the option to enter into park development agreements to provide developer built parks when mutually beneficial.

A well planned park system includes large parks that accommodate the active recreational needs of residents and support organized sports. In future service areas (FSA) land acquisition through the BLM reservation process should be enacted. Appropriate park acreage in the south will need to be acquired through developer contribution in addition to RCT funding sources.

In addition to designing and constructing park amenities previously outlined, park development also includes attention to public art, accessible design/features, community safety by design, “green” planning initiatives, planning to reduce conflicts with wildlife, and sound urban forestry and horticultural practices.

The City of Reno should incorporate public art within all new park development projects. Public art creates a distinctive environment that fosters civic pride and provides unique community collaboration that defines Reno communities. Parks should be designed with accessibility in mind: paths of travel, accessible play structures and picnic amenities, and minimal transition sloped areas are necessary. Parks should be designed with low unobstructed landscaping for ease of police and security patrol. Planning for the urban forest is essential within the park system: trees aide in improved air quality, compliment existing natural features and buildings, provide an urban canopy for natural heat reduction, and provide residents with urban relief outlets. The ornamental use of turf is discouraged in Reno’s high desert environment, therefore, drought tolerant landscapes should be utilized to minimize the use of water. The use of turf should be confined to areas of active recreational play. Future facilities should be designed with “green planning” in mind to ensure sustainability and environmental conservation and to enhance wildlife habitat where possible.

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### ***Parks and Recreation Facility Standards/Level of Service Objectives***

Other communities of similar size and characteristics were reviewed as part of the process leading to the development of Reno's standards; however, other cities' standards do not necessarily reflect the needs and diversity of our community and opportunities provided by Reno's environment. The National Recreation and Park Association (NRPA) recommends the creation of local standards in order to address the unique circumstances or requirements of local entities.

Parks and Recreation Facility Standards/Level of Service Objectives are important in achieving the overall recreational needs of the community. Levels of Service Objectives are a planning tool used to measure park acreage and/or facility need to a spatial standard within a land use area. Level of Service is usually defined utilizing service radius and/or population figures. Park sites and facilities, including major amenities at each site location, are inventoried to compare actual results to the objectives. In addition to quantitative standards, qualitative standards are used to refine park designs and review each park development individually.

Table 3 summarizes the facilities standards, or level of service (LOS) objectives, for Reno's parks and recreation facilities. A calculation of existing deficiencies and/or oversupply based on a specific population and the LOS objectives is also indicated.

This Parks and Recreation section outlines the facilities standards to be achieved for future parks. However, it must be recognized that there are existing deficiencies within the system of which growth can not be expected to resolve. Therefore, it shall be necessary to secure land and funding to bridge gaps within the existing inventory wherever possible.

### ***Existing Parks and Recreation Facilities/ Inventory***

Appendix C-1 lists the existing inventory of parks, including category, acreage and selected amenities. The inventory is meant to provide a snapshot of existing quantities as of the date of publication. Maps 7-10 illustrate the location and distribution of existing park inventory.

### ***Long Range Planning – Parks and Recreation Facilities by Specific Planning Areas***

Using population estimates, land use designations, and application of LOS objectives, Map 11 represents the potential service areas of planned aquatics and recreation facilities. Parks and recreation facility needs should be reevaluated as land use and zoning designations are changed or assigned as described in the Concurrency Management section of this plan. A gap analysis is provided in Appendix C-2 to further illustrate the estimated needs of the park system using 2002 population estimates.

(Table 3) Park Development Level of Service Minimum Objectives  
Calculation of Deficiencies and Oversupply per Population

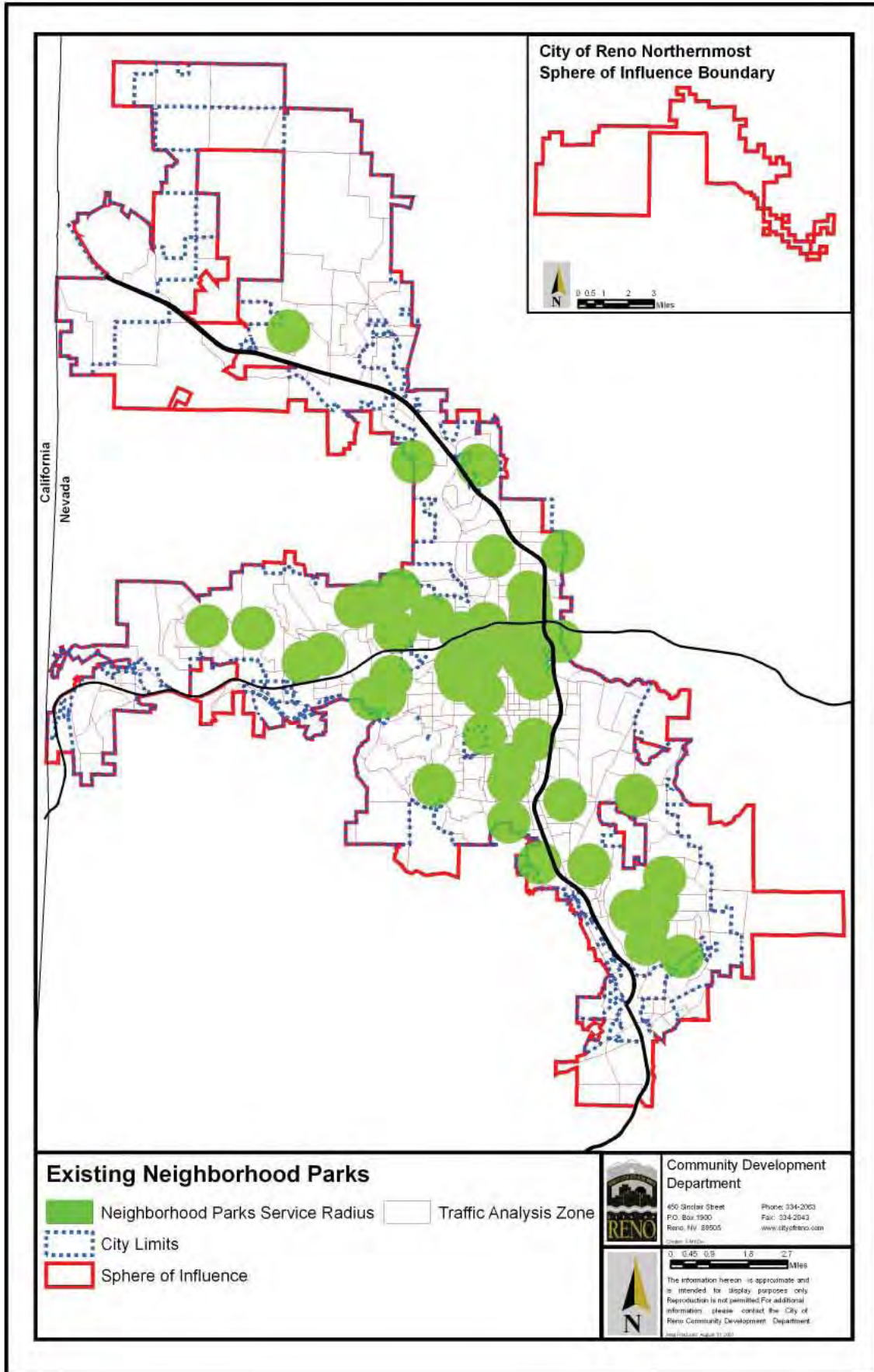
	Reno Proposed LOS	Current Inventory 2006 (Acres)	Level of Service Standard for 2002 Population (190,114)	Acres Difference ( +/- )
Pocket Park	Provided by H.O.A	10.71	10.71	0
Neighborhood Park	3.5 ac. / 1,000	275.43	665.4	-389.97
Community Park	2.5 ac. / 1,000	416.63	475.29	-58.66
Regional Park	County Provides	143.07	143.07	0
Total Park Acres		845.84	1294.47	-448.63

Park Amenities (Quantity per Population)	Reno Proposed LOS	Current Inventory 2006 (Acres)	Level of Service Standard for 2002 Population (190,114)	Difference ( +/- )
Permanent Restroom	1 / 5,000	48	38	10
Picnic Shelter	1 / 5,000	46	38	8
Basketball Court	1 / 5,000	49	38	11
Tennis Court	1 / 10,000	37	19	18
Volleyball Court	1 / 20,000	10	10	0
Ball Diamond	1 / 7,500	33	25	8
Flat Field	1 / 10,000	11	19	-8
Playground	1 / 5,000	49	38	11
Skate Park	1 / 50,000	4	4	0
Spray Pad/ Sprayground	1 / 20,000	7	10	-3

Special Use Facilities	Reno Proposed LOS	Current Inventory 2006 (Acres)	Level of Service Standard for 2002 Population (190,114)	Difference ( +/- )
Community Hall	1 / 50,000	4	4	0
Recreation Center	1 / 50,000	2	4	-2
Arts & Culture Center	1 / 100,000	1	2	-1
Aquatic Complex	1 / 50,000	2	4	-2
Neighborhood Pool	N/A	3	3	0

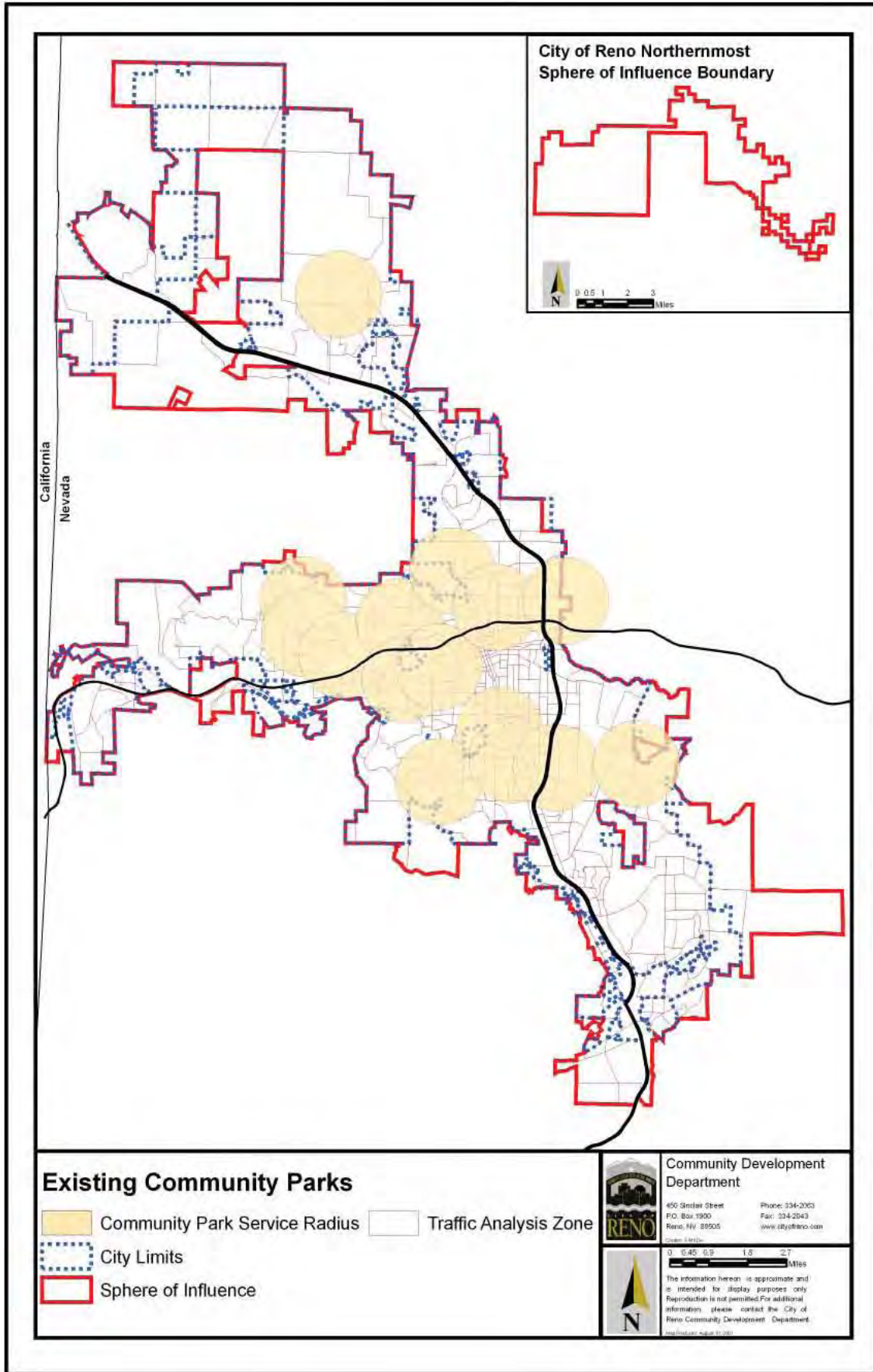
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Map 7

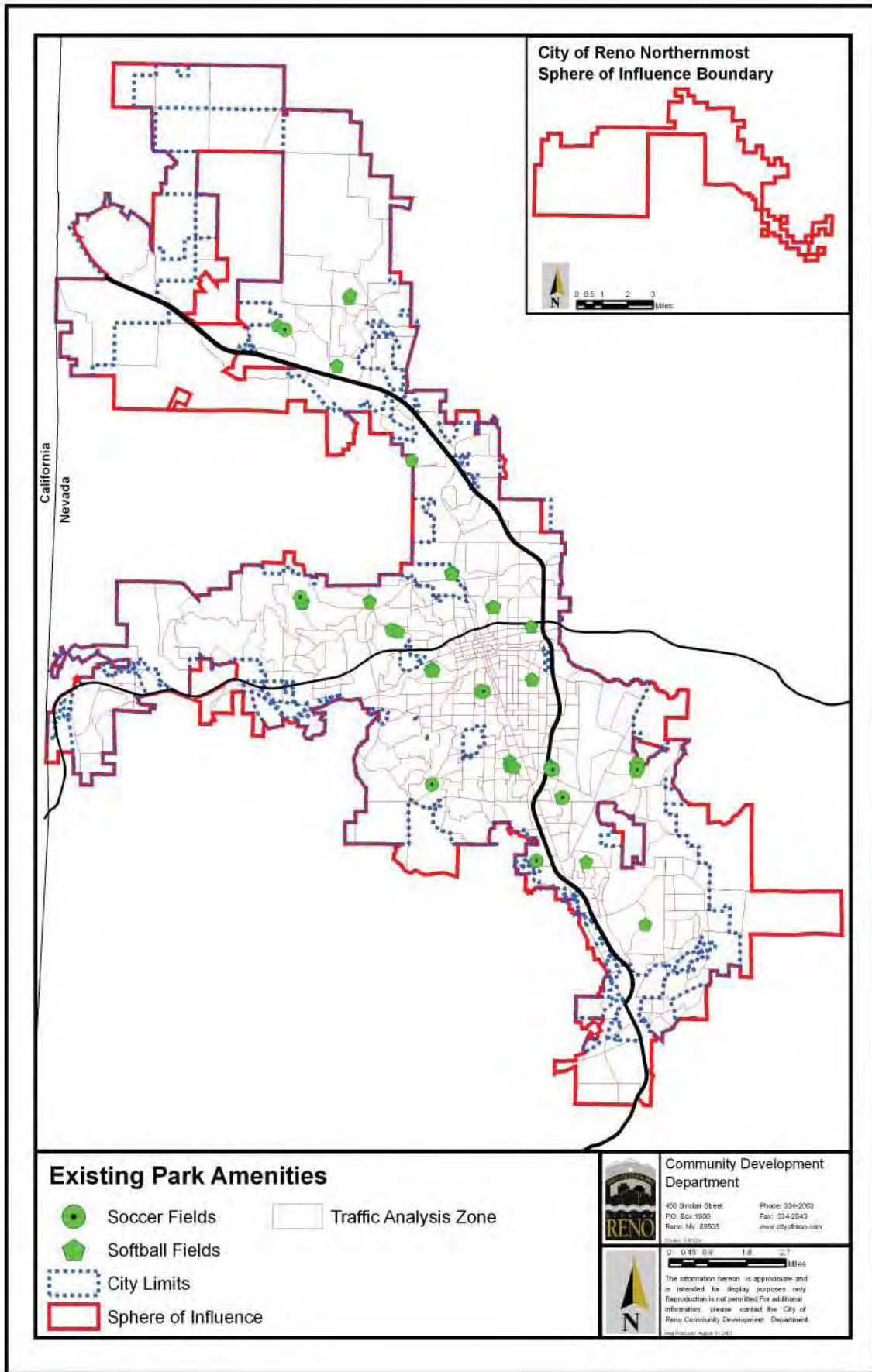


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# Map 8

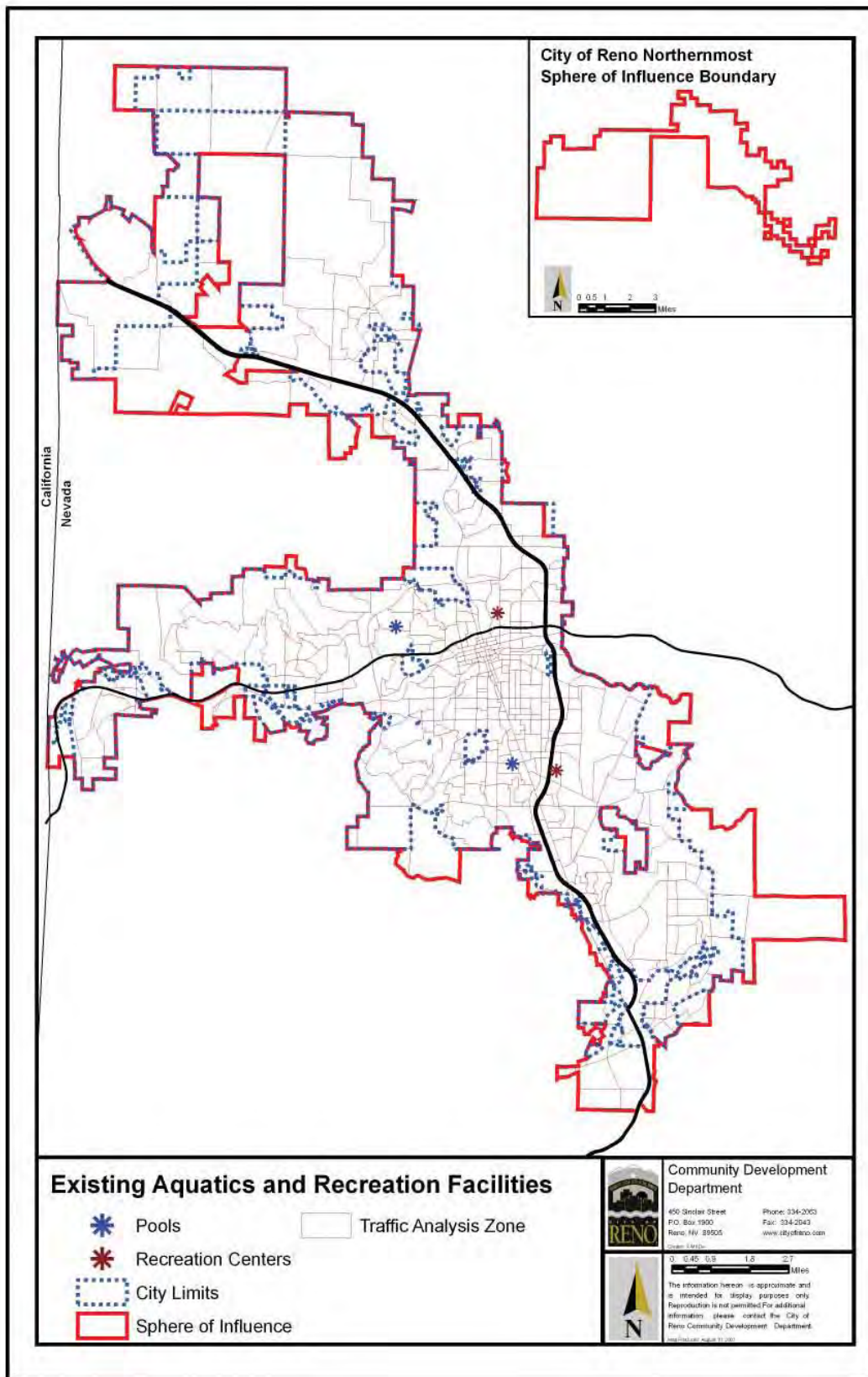


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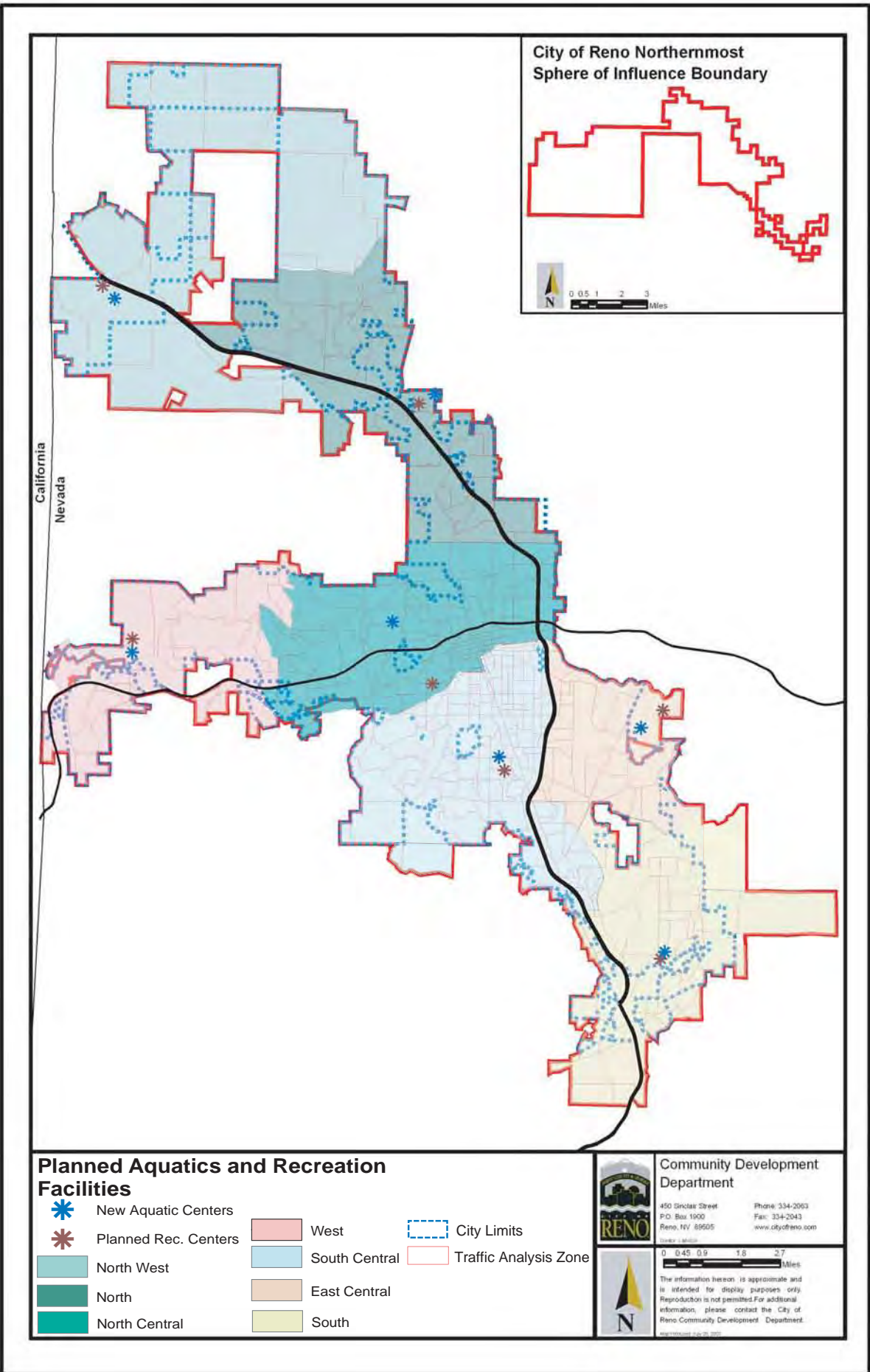
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# Map 10



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Map 11



**City of Reno Northernmost Sphere of Influence Boundary**

N 0 0.5 1 2 3 Miles

**Planned Aquatics and Recreation Facilities**

- New Aquatic Centers
- Planned Rec. Centers
- North West
- North
- North Central
- West
- South Central
- East Central
- South
- City Limits
- Traffic Analysis Zone

**Community Development Department**

450 Girardin Street Phone: 334-2063  
 P.O. Box 1900 Fax: 334-2043  
 Reno, NV 89505 www.cityofreno.com

**RENO**

0 0.45 0.9 1.8 3.7 Miles

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RENO COMMUNITY DEVELOPMENT DEPARTMENT

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## **Public Works and Parks Maintenance**

### ***Discussion***

Materials, equipment, and machinery are stored, serviced, and dispatched at City Public Works and Parks, Recreation, and Community Service (PRCS) maintenance facilities. During the winter months, the Public Works yard also serves as a dispatch point for snow removal equipment. In order to provide cost effective and timely delivery of vital City services, Public Works and PRCS maintenance facilities should be efficiently distributed throughout the City. As the City grows, so will the needs of these departments to efficiently serve all geographic areas within it.

### ***Public Works and Parks Maintenance Facilities***

#### ***Existing and Planned Maintenance Facilities***

The City of Reno's Public Works Department currently operates out of one large centralized facility, while the PRCS Department utilizes three smaller decentralized maintenance areas. These existing facilities are inadequate to efficiently serve anticipated growth and detract from the City's service objectives, involve inefficient driving time from the main facilities to the areas served, and contribute to significant wear on fleet vehicles. PRCS can meet its expansion needs through shared use of

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the maintenance facilities identified in this plan and/or by establishing additional decentralized facilities located within community parks.

***Distribution of Maintenance Facilities***

Map 12 “Public Works/Parks Maintenance Facilities” illustrates the service areas and general locations of required maintenance facilities and serves as the facility standard, given existing land uses. With the exception of the central service facility, which is an existing facility requiring rehabilitation and expansion, all identified facilities illustrate a general location within the defined service areas.



New facilities or facility upgrades should be prioritized for all identified service areas. Changes in use of land do not necessarily mean that the number of maintenance facilities must be increased to ensure provision of adequate service; however, it may be necessary to add, expand, or relocate them as land use patterns change. Applications involving amendments to or assignments of land use or zoning designations should require an evaluation of facility needs, as outlined in the Concurrency Management section of this plan, to ensure that maintenance facilities remain adequate and that facility mapping remains current.



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## **Schools**

### ***Discussion***

The City recognizes the important role educational facilities play in its civic, cultural, and economic wellbeing and strives to strengthen the connectivity between campuses and the community at large. The City's school policies generally relate to enhancing the interaction between the Washoe County School District (WCSD), the Truckee Meadows Community College, the University of Nevada, and the City during the development review process. The City has also adopted plans to improve the integration of our area's higher educational facilities within the neighborhoods they reside and continues to monitor their successful implementation.

### ***Education Facilities***

#### ***Primary Education***

Reno's elementary educational services are provided by the WCSD, which plans and develops new or expanded campuses to meet the demands of new development. The City should strive to facilitate the needs of the WCSD by involving the district

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in the review of development to ensure the implementation of mutual development goals. For example, school siting and design can help strengthen communities by providing a center for community activities that extends beyond the school day; the joint-use of school facilities can result in a more efficient use of public resources; and pedestrian and mobility standards between the two entities can be coordinated early on in the development review process.

### ***Higher Education***

The City of Reno is fortunate to have the campuses of the Truckee Meadows Community College and the University of Nevada, within its planning area. These higher educational institutions are major community amenities that serve as catalysts for business growth and community improvements as well as a positive marketing tool for the City. The City should continue to strive to unify these facilities into the urban fabric through the use of cohesive design, landscaping, signage, enhanced pedestrian connections, and consideration of parking. Detailed policies are included in the West University Neighborhood Plan and the University of Nevada, Redfield, and Dandini Regional Center Plans.



# **PSFI APPENDICES**

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**APPENDIX A**  
**City of Reno TMSA/FSA Water,  
Wastewater and Flood Management  
Facility Plan**

**Appendix A of this plan is included by reference and is on file with the Office of the City Clerk and the Community Development Department.**

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# **APPENDIX B**

## **FIRE**

## Fire Mitigation Measures B-1

<b>Project features or characteristics</b>	<b>Point Value</b>
<ul style="list-style-type: none"> <li>• Development not exceeding three residential dwelling units per acre (may be used in conjunction with 25' minimum building separation and irrigated landscaping for one additional point).</li> </ul>	2
<ul style="list-style-type: none"> <li>• Building separations:               <ul style="list-style-type: none"> <li>Minimum 25 feet with irrigated landscaping in-between</li> <li>Minimum 50 feet with hardscape or drought-tolerant landscaping in-between</li> <li>Minimum 100 feet with native vegetation in-between</li> </ul> </li> </ul>	2 2 2
<ul style="list-style-type: none"> <li>• Flame resistant/retardant siding and box eaves on structures (if not already required)</li> </ul>	2
<ul style="list-style-type: none"> <li>• Class A, non-wood roofing (if not already required)</li> </ul>	2
<ul style="list-style-type: none"> <li>• Second public vehicle access constructed to full City standards -- not emergency access standards (if not already required)</li> </ul>	2
<ul style="list-style-type: none"> <li>• Automatic sprinkler protection</li> </ul>	5
<ul style="list-style-type: none"> <li>• Fire alarms monitored by a central station service</li> </ul>	3
<ul style="list-style-type: none"> <li>• Formation of snow removal district</li> </ul>	1
<ul style="list-style-type: none"> <li>• Positive development characteristics as determined by the Fire Chief and the Zoning Administrator</li> </ul>	Up to 2
<ul style="list-style-type: none"> <li>• In lieu exactions to the City of Reno:<sup>1</sup> <ul style="list-style-type: none"> <li>110% of sprinkler cost (at \$2.00/sq. ft.)<sup>2</sup></li> <li>100% of sprinkler cost (at \$2.00/sq. ft.)<sup>2</sup></li> <li>90% of sprinkler cost (at \$2.00/sq. ft.)<sup>2</sup></li> </ul> </li> </ul>	5 4 3

<sup>1</sup> Based on the assumption that if the City had projected fire protection facilities in place and in service, an acceptable level of response would be provided. In lieu exactions would be used to expedite the establishment of the facilities and equipment necessary for this service. In lieu exactions are not an option if the development would not benefit from the planned capital improvements as determined by the Fire Chief.

<sup>2</sup> In 2005 dollars. Costs are tied to the "ENRCC" Index and may be adjusted annually. Source: national Institute of Standards and Technology (NIST), Economic Analysis of Residential Fire Sprinkler Systems, December 2005.

## Fire Hazard & Response Evacuation Matrix B-2

Response Time	Non-Wildland Zone	Wildland Fire Hazard Transition Zone	Wildland Fire Hazard Zone
0 to 4 minutes  (for reference only)	IFC/IBC Code requirements  0 points	IFC/IBC Code; Class A, non-wood roofing; chimney spark arrestor required.  0 points	IFC/IBC Code; Class A, non-wood roofing; chimney spark arrestor; and 30 ft. vegetation clearance required.  0 points
Above 4 minutes but less than 6 minutes	IFC/IBC Code requirements.  2 points	IFC/IBC Code; Class A, non-wood roofing; and chimney spark arrestor required.  2 points	IFC/IBC Code; Class A non-wood roofing; fire resistant siding/box eaves; chimney spark arrestor; and 30 ft. vegetation clearance required.  2 points
6 minutes, but less than 8 minutes	IFC/IBC Code requirements.  3 points	IFC/IBC Code; Class A, non-wood roofing; and chimney spark arrestor required.  3 points	IFC/IBC Code; Class A non-wood roofing; fire resistant siding/box eaves; chimney spark arrestor; and 30 ft. vegetation clearance required.  3 points
8 minutes or greater	IFC/IBC Code; and full public second access to city standards are required.  6 points	IFC/IBC Code; Class A non-wood roofing; chimney spark arrestor; and full public second access to city standards required.  6 points	IFC/IBC Code; Class A non-wood roofing; fire resistant siding/box eaves; chimney spark arrestor; 30 ft. vegetation clearance; and full public second access to city standards are required.  6 points

For all projects exceeding four minute response time and the following characteristics, add the following points to the values in Table 1 above:

Road grades in excess of 8% -- 1 point.

Difficult access (Fire access roads not conforming to IFC 503 and RFD Policy) -- 1 point.

High fire hazard (includes IBC Group H-1,-2,-3 and and/or high hazard commodity occupancies) -- 1 point.

Negative development characteristics (i.e., localized weather conditions, topography, excessive conflagration potential, etc.) as determined by the Fire Chief and the Zoning Administrator -- up to 2 points.

IFC - International Fire Code; IBC - International Building Code; Class A roofing is fire retardant roofing as per IBC.

## REQUIRED FIRE FLOW BY TYPE OF LAND DEVELOPMENT<sup>1</sup>

### B-3

**Required fire flow provisions for private sites will be determined by the Type of Construction, Occupancy Group, surrounding risk factors or be specified by the Fire Chief.**

Type of Land Development	Required Fire Flow in Gallons Per Minute
1. Detached one and two single family dwellings, or triplex residential occupancies, not exceeding 5,000 square feet.	1,500 GPM (includes automatic sprinkler system flows) available to the proposed development.
2. Neighborhood commercial*; single story, commercial buildings associated with residential development; multi-family residential occupancies of four or more including townhouse, condominiums or apartments. One and two single family dwellings greater than 5,000 square feet.	2,000 GPM (includes automatic sprinkler system flows) available to the proposed development.
3. Arterial Commercial* and neighborhood commercial not included above, multi-story office buildings and complexes, other commercial, institutional, elementary schools and similar public uses.	2,500 GPM (includes automatic sprinkler system flows) available to the proposed development.
4. Community Commercial* and Central Business*; high-rise structures, principal business districts, focal points and major retail centers. Middle schools and high schools.	3,000 GPM (includes automatic sprinkler system flows) available to the proposed development.
5. High hazard occupancies, including all industrial and/or warehouse occupancies covered by IFC Chapter 23, "High-Piled Combustible Storage", all occupancies classed as H-1, H-2 and H-3, and those occupancies determined by the fire department to have a severe fire hazard due to the fuel load or significant exposure risk.	Fire flow shall be calculated by using the IFC Appendix B, Table B105.1, but never shall available fire flow be less than 3,000 GPM.

A minimum residual water pressure of 20 PSI is required. Water flow for fire protection purposes is to be considered in the design of water mains.

In all developments, including in-fill type construction, fire hydrants shall individually deliver not less than 2,000 GPM (1,500 GPM for detached one and two single family or triplex residential occupancies) fire flows at a minimum residual pressure of 20 PSI. The water supply system shall not deliver less than the minimum flows required by type of land development as noted above.

<sup>1</sup> Fire flows are based upon buildings with approved automatic sprinkler systems, excluding one and two single family residential occupancies. Fire flows for non-sprinklered buildings are to be calculated based upon IFC Appendix B, Table B105.1.

\* Uses as defined in the City of Reno "Zoning Ordinance."

## **Fire Infrastructure Requirements**

### **B-4**

#### **Fire Hydrants**

All fire hydrants should have two 2-1/2 inch and one 4-1/2 inch outlets and should conform to the minimum standards of the American Water Works Association as annotated by regulations on file with the Fire Department for dry barrel, traffic model hydrants. A minimum of one fire hydrant is to be provided at each roadway intersection. In all new development, including in-fill type construction, fire hydrant installations should deliver the minimum required fire flows without exception. Streets with raised median center dividers or more than 60 feet curb to curb in width require the installation of hydrants on both sides of the street.

In single family residential subdivisions, fire hydrants are required every 400-500 feet along roads and fire lanes. For all other development, fire hydrants are required every 300-400 feet. Additional intermediate hydrants are required in areas where restricted access, depth of lots or blocks exceeding the maximum hydrant spacing intervals exist. All fire hydrant locations shall be approved by the Reno Fire Department.

#### **Access for Fire Fighting**

Access should be required as follows unless otherwise approved by the Fire Chief:

##### General Requirements

1. Where required, dead-end streets and alleys should terminate in a cul-de-sac or other approved turning area. Fire apparatus should be able to turn around without a backing maneuver. Dead-end roadways are limited to a maximum 600 foot length.
2. At least two different ingress-egress roads for each project should be provided which will accommodate major fire apparatus and provide adequate evacuation during emergency situations.
3. Secondary fire access should be at least 20' wide.
4. Construction and surfacing of all roads, fire lanes or emergency access ways should conform to the City of Reno Public Works Design Manual.
5. No proposed development which clusters or groups structures; or condominiums of one- or two-family dwellings should be more than 150 feet from an improved street, access road, designated fire lane, or paved parking area.
6. No portion of an exterior wall or any multiple family or non-residential building should be constructed more than 150 feet from an improved street, access roadway, designated fire lane, or paved parking area.

7. Additional vehicular access may be required by the Fire Department where buildings exceed 150 linear feet in length or width; where access to other building areas is restricted, or where buildings or portions of buildings are more than 35 feet in height.
8. Overhead clearance of all walkways, bridges or other obstructions should not be less than 13'6" to provide access for Fire Department apparatus.

#### Fire Lanes

1. Where fire lanes, including emergency access easements, are required to provide access for emergency vehicles, they should be granted to the City without cost as easements from a public street or alley to the required terminal point. The fire lanes should be designated and privately maintained as follows:
  2. Fire lane width should not be less than 20 feet. When a fire lane must accommodate the operation of Fire Department aerial ladder apparatus or where fire hydrants are installed those portions of the fire lane should not be less than 28 feet in width.
  3. Fire lanes should be paved to the City Engineer's standards for public streets.
  4. Where access for a given development requires accommodation of Fire Department apparatus, minimum centerline radius of culs-de-sac or turnaround areas should be 40 feet. An additional six feet of clear space should be maintained beyond the outside radius to a vertical point 13'-6" above the paved surface of the roadway.
5. All access roads, including fire lanes, should be maintained at all times by the property owner. The condition of the roadway surface and base, drainage and any deterioration should be regularly maintained and necessary repairs promptly made. Unobstructed access is required at all times. Removal of obstructions should be at the owner's expense. The entrance to all required fire lanes or required private driveways should be posted with a sign no less than three square feet in area in accordance with Reno Municipal Code. All fire lanes should have red curbing and "NO PARKING - FIRE LANE" signs posted.

## **Fire Definitions**

### **B-5**

Required Fire Flow - Rate of water flow measured in gallons per minute (gpm) residual pressure measured in pounds per square inch (psi) and duration needed for fire fighting purposes to confine a major fire to the building of origin. The determination of this flow depends upon the size, construction, occupancy, separation and exposure of building within and surrounding the subject building.

Fire Service Delivery System - A combined public and private system including but not limited to stations, fire personnel and equipment, dispatch equipment and personnel, roadways, water supply, fire hydrants, fire sprinklers and other apparatus and fire detection devices.

Fire Station Types - There are two principal types of fire stations:

Single Company Stations - A fire station housing one engine company.

Multi-Company Stations - A fire station housing more than one company. A typical configuration would be an engine company and one truck company.

Personnel and Apparatus - The personnel and apparatus housed in these two types of stations are:

Engine Company - Typically four (4) personnel and a pumper apparatus responsible for the first-in response to any incident within the district where the fire station is located.

Truck Company - Typically four (4) or more personnel and an aerial ladder truck which operates as a component on all significant fire responses within a large territory of the city. The truck has an aerial ladder, ground ladders of various sizes, an assortment of special tools, salvage, rescue and ventilation equipment.

Special Duty Apparatus and Personnel - Specialized equipment, apparatus and trained personnel are located to handle incidents particular to a given area.

Brush Fire Apparatus - Special apparatus designed to combat off-road wildland fire hazards are located in fire stations whose districts have a high wild fire potential. This apparatus is staffed with personnel from the engine company at the assigned station.

Regional Hazardous Materials Response Team - Located at one fire station is a fully equipped response van designed to respond to hazardous materials incidents. Specially trained and qualified personnel are assigned to this station to respond to these types of emergencies throughout the region in cooperation with other fire protection providers in the region.

Rescue Company - A special response unit with heavy rescue and ventilation equipment responding to all rescue, extrication and fire incidents throughout the city.

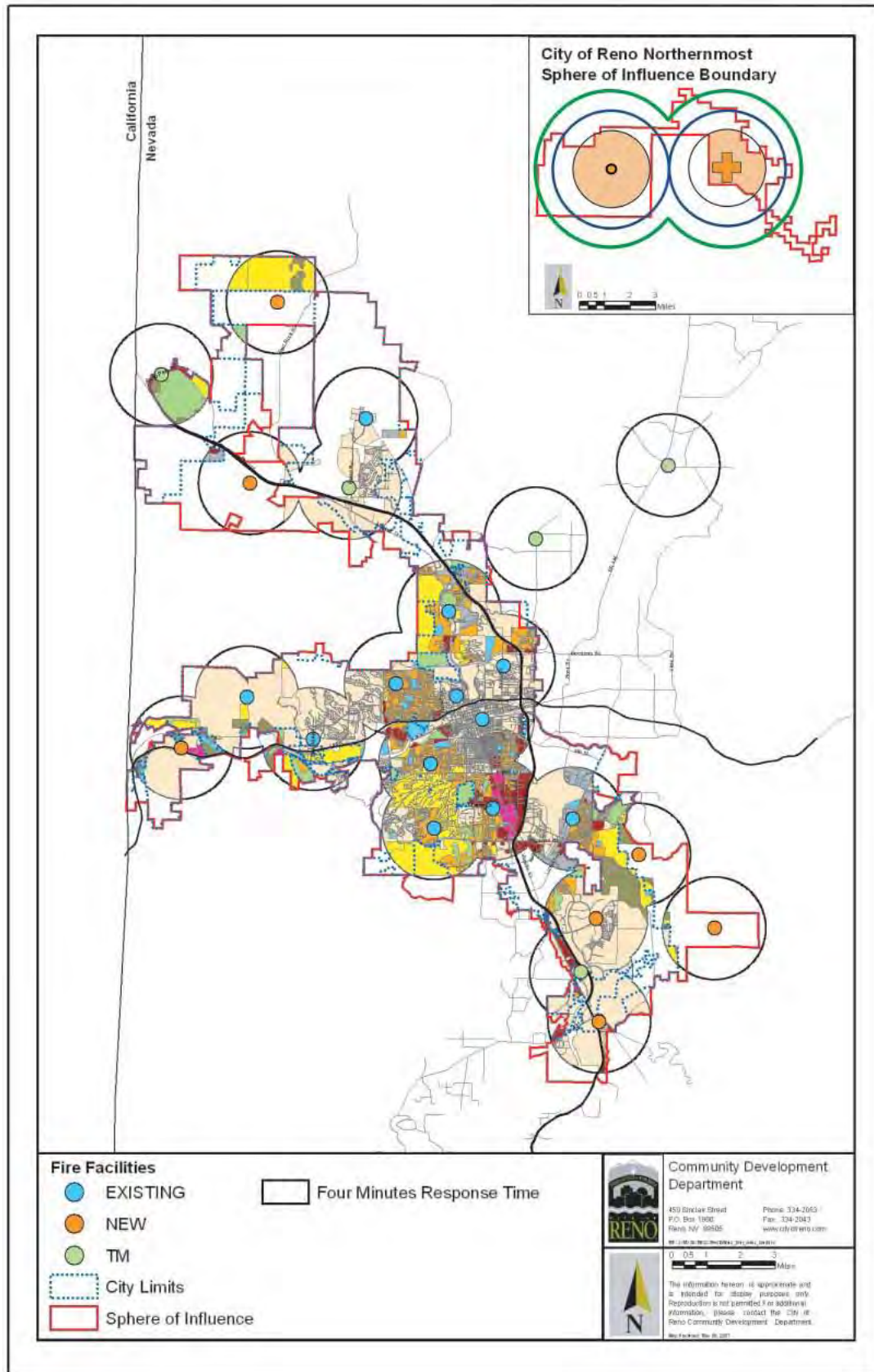
High Fire Hazard Occupancies - Includes Uniform Building Code (UBC) Group H-1, H-2, and H-3 and Uniform Fire Code (UFC) Class V commodity warehousing occupancies and those occupancies determined by the Fire Department to have severe fire exposures due to extreme fuel loading or hazards.

Wildland Fire Hazard Zone - An area determined by the State Forester under NRS 472.100 to have an extreme fire hazard potential due to terrain and fuel loads. The potential for a conflagration from a wild land fire is extreme.

Wildland Fire Hazard Transition Zone - An area determined by the State Forester under NRS 472.100 to have an increased fire hazard potential due to its location between the Wildland Fire Hazard Area and heavily urbanized or low hazard vegetation areas. The potential for a conflagration from a wild land fire is moderate to severe.

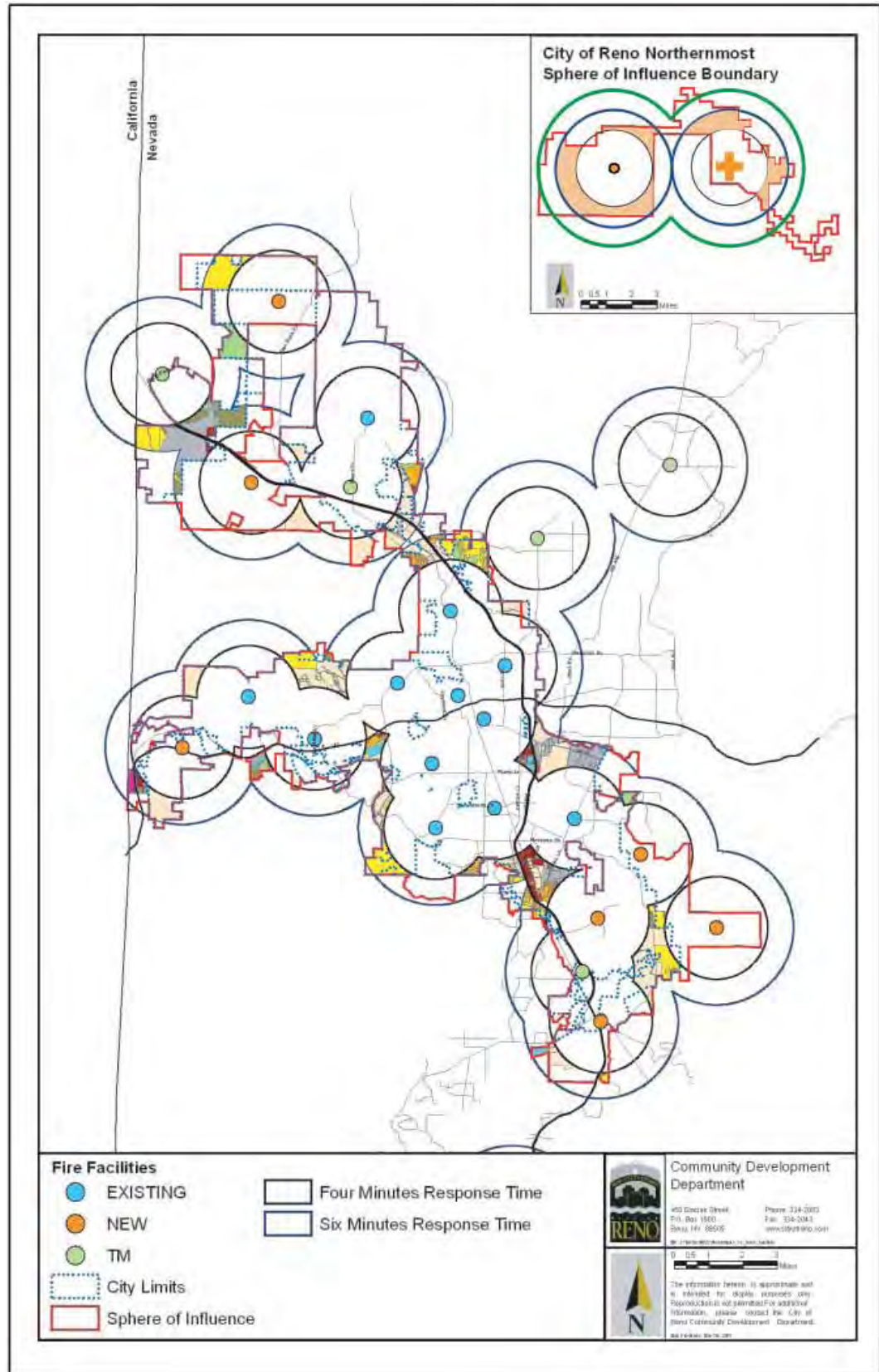
# Four Minute Response Time and Land Use Map

B-6



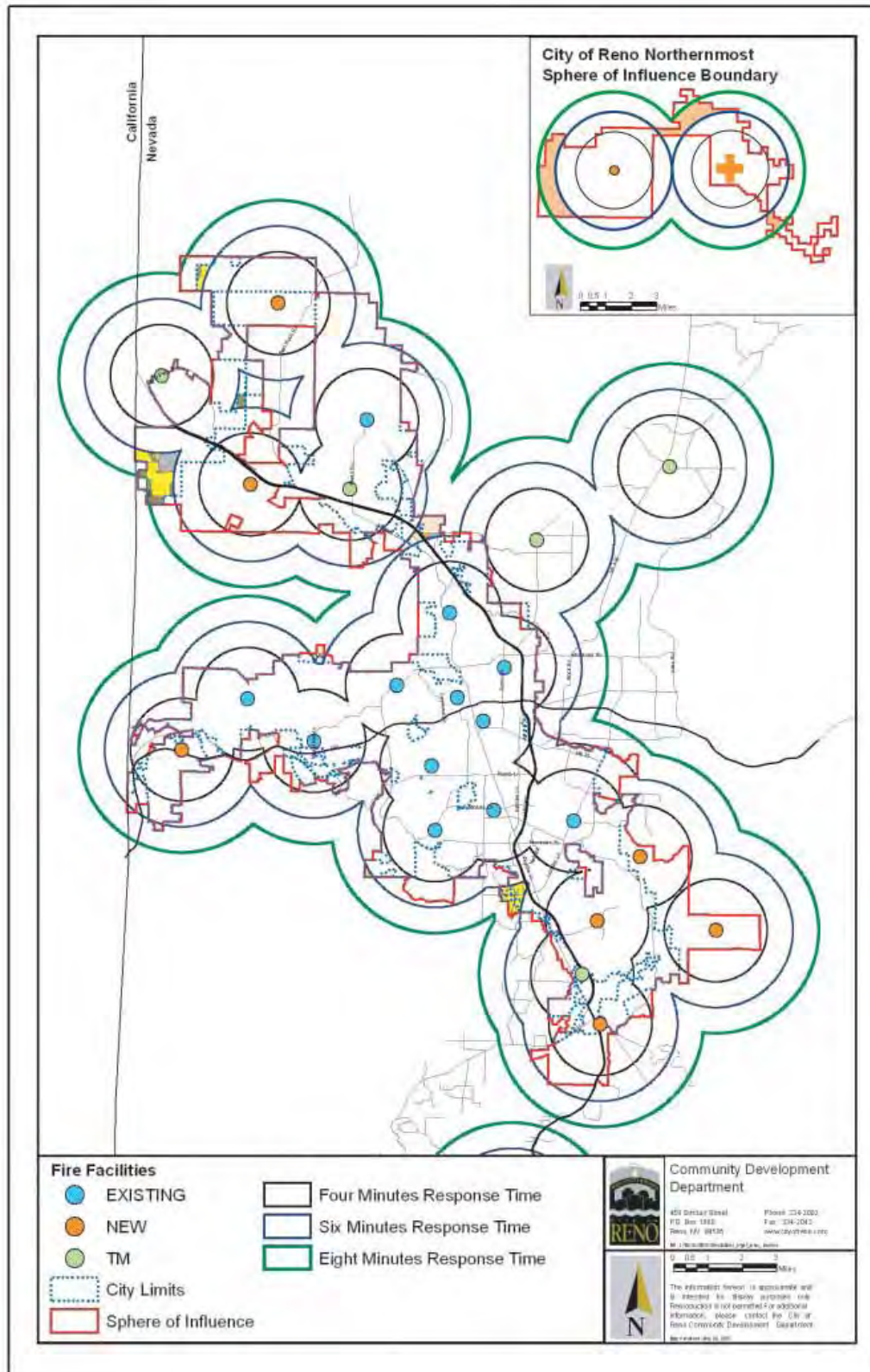
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# Six Minute Response Time and Land Use Map B-7



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# Eight Minute Response Time and Land Use Map B-8



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**APPENDIX C**  
**PARKS AND RECREATION**

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# City of Reno Parks and Recreation Facility Inventory C-1

## City of Reno Parks and Recreation Facility Inventory

Park	Park Category	Acres	Restroom	Picnic Shelter	Water Play/Mist	Parcourse	Playground	Tennis Ct.	Full Basketball Ct.	Half Basketball Ct.	Softball Fields	Baseball Fields	Flat Fields	Horseshoes	Swimming Pool	Volleyball Ct.	Skate Park	Commun. Bldg.	Indoor Gym
10 North Virginia St. Plaza	P	1.10																	
Barbara Bennett Park	N	2.84	1				1	4	2										
Bicentennial Park	P	1.79																	
Brodhead Park	N	2.01																	
Canyon Creek Park	N	7.90	1	2		2	1			1				2		1			
Center Creek Park	N	5.64		1			1			3							1		
Comstock Park	N	5.37	1	1			1			1									
Crissie Caughlin Park	N	5.00	1	1			1	2						1					
Crystal Lake Park	N	5.00	1	1		1	1	2	1				1	2		1			
Damonte Ranch Park	N	8.03	1	1			1			3									
Dick Taylor Park & NECC	C	14.65	2	2			2	2	4		2				1			Y	Y
Donner Party Park	P	1.27																	
Dorothy MacAlinden Park	C	25.00	1	1			1							2		1			
Double Diamond Park	N	10.00																	
Eighth St. Parkway	P	0.71																	
Evans Park	N	2.07	1											26					
Evergreen Park	N	1.77																	
Fisherman's Park #1	N	5.57																	
Fisherman's Park #2	N	4.03																	
Fulton Corner	P	0.12																	
Governor's Bowl	N	7.43	1									1							
Hilltop Park	N	5.24	1	1			1				2								
Holcomb Historic Site	P	0.70																	
Horizon View Park	N	5.00		1			1			3									
Horseman's Park	N	12.35																Y	
Huffaker Park	N	9.22	1	1			2	2	1		1		1	2		1			
Idlewild Park	C	49.00	2	3	1	1	2				3				1	3	1	Y	
Irving Circle Park	P	0.81																	
Ivan Sack Park	P	0.96		1															
Jack Tighe Ballfields	N	8.12	2									4							
Jamaica Park	N	7.80	1	1			1				1		1	4					
John Champion Park	N	1.53		1															
Lake Park	N	4.17					1												
Las Brisas Park	N	10.32	1	1	1		1			3									
Liston Park	P	1.03					1												
Lunsford Triangle	P	0.25																	
Manzanita Park	N	11.19	1	1		1	1	2	1					2		1			
Mary Gojack Park	N	4.68	1				1						2						
Mayors Park	C	59.12									2								
McKinley Park & Ctr.	N	2.99																Y	
Melody Lane Park	N	5.20		1			1												
Miguel Ribera Park & Ctr.	C	19.34		1			1		2		1		3					Y	Y
Mira Loma Park	C	37.52	3	1		1	1	4			1	2	3	2			1		

# City of Reno Parks and Recreation Facility Inventory C-1

## City of Reno Parks and Recreation Facility Inventory

Park	Park Category	Acres	Restroom	Picnic Shelter	Water Play/Mist	Parcourse	Playground	Tennis Ct.	Full Basketball Ct.	Half Basketball Ct.	Softball Fields	Baseball Fields	Flat Fields	Horseshoes	Swimming Pool	Volleyball Ct.	Skate Park	Commun. Bldg.	Indoor Gym
Moana Park, Pool & Stadium	C	13.67					1				5			1					
Newlands Circle Park	N	2.40					1												
Northgate Park	N	5.73	1	1			2												
NW Park and Pool	N	13.00					1							1					
Oxbow Nature Study Area	C	18.41	1																
Panther Valley Park	N	5.00	1	1	1		1			3							1		
Pat Baker Park	N	1.31		1			1		2										
Peavine Fields	N	5.00	1								2	1							
Pickett Park	N	5.33	1	1		1	1	1	1										
Plumas Park & Gym	N	4.68	1						2				2					Y	Y
Powning Park	P	0.27																	
Rainbow Ridge Park	C	23.50	1	1			1			3									
Raleigh Heights Park	N	5.00		1			1		1			1							
Reggie Rd. Exercise Area	N	5.15																	
Reno Sports Complex	C	18.60	1								4								
Reno Tennis Center	N	5.30	1					16											
Riverside Dr.	N	1.86																	
Robinhood Park	P	0.57		1			1		2										
Rotary Centennial Park	P	0.30		1			1			1									
Sage Street Park	N	1.08		1			1												
Schiappacasse Park	N	5.37																	
Seminary Park	P	0.14																	
Silver Lake Park	N	10.50	1	1	1		1		2			1	2				1		
Sky Country Park	N	7.00					1							2		1			
Sky Tavern Ski Area	R	143.07																Y	
Sterling Village Tot Lot	P	0.23		1			1												
Stewart Park	N	1.29	1	1			1		1										
Summit Ridge Park	N	5.99	1	1	1	1	1			2				2					
Teglia's Paradise Park & Ctr.	C	38.39	2	2		1	1											Y	
Terrace Sports Complex	C	25.00	1	1			1					4	3						
Traner Park and Pool	N	2.50													1				
University Ridge Park	N	12.72	1	1			1			3									
Valleywood Park	C	20.22	1	1			1			3									
Virginia Lake Park	C	31.58	1	1			1												
West Street Plaza	P	0.46																	
Wheatland Park	N	6.08	1	1	1		1							1					
Whitaker Park	N	8.15	1	1			1	2						1					
Wilkinson Park	N	4.29	1				1	2				2							
Wingfield Park	N	3.21																	
Yori Park	N	3.13	1	1	1		1			2							1		
<b>83</b>	<b>839.32</b>		<b>46</b>	<b>46</b>	<b>7</b>	<b>9</b>	<b>52</b>	<b>39</b>	<b>22</b>	<b>31</b>	<b>17</b>	<b>23</b>	<b>18</b>	<b>49</b>	<b>5</b>	<b>9</b>	<b>6</b>	<b>5</b>	<b>3</b>

Park Types: P=Pocket, N=Neighborhood, C=Community, R=Regional

As o

# City of Reno Parks and Recreation Facility Inventory C-1

## City of Reno Parks and Recreation Facility Inventory

Types of Parks	#	Acres	Annex.	North	Central	South
Pocket	16	10.71	0.00	0.00	9.44	1.27
Neighborhood	52	291.54	0.00	27.50	202.78	61.26
Community	14	394.00	0.00	102.72	291.28	0.00
Regional	1	143.07	0.00	0.00	0.00	143.07
Total	83	839.32	0.00	130.22	503.50	205.60

Geographic Location	Acres
Annexation Area	0.00
North Valleys	130.22
Central City	503.50
South Valleys	205.60
Total	839.32

*As of March 16, 2007*

# City of Reno Parks and Recreation 2002 Level of Service / Gap Analysis Report

## C-2

Park Acreage per Population	North Valleys					West Reno					Central Reno					South Valleys					Future Service Area					Total									
	24,902					88,433					56,966					19,813					N/A														
<b>2002 Population Data</b> (Data Provided by the City of Reno Community Development Department )																																			
<b>Pocket Parks</b>																																			
Existing Standard Gap	0	N/A	N/A	N/A	N/A	5	N/A	N/A	N/A	N/A	5	N/A	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	11	N/A	N/A	N/A	N/A
<i>Pocket parks may be provided by private owners, but are not a desired city-owned category.</i>																																			
<b>Neighborhood Parks</b>																																			
Existing Standard Gap	20	87	-67	20	87	155	310	-155	155	310	60	199	-139	60	199	56	69	-13	56	69	0	0	0	0	0	0	0	0	0	0	291	665	-374	291	665
3.5 acres per 1,000 population																																			
<b>Community Parks</b>																																			
Existing Standard Gap	103	62	40	103	62	181	221	-40	181	221	110	142	-32	110	142	0	50	-50	0	50	0	0	0	0	0	0	0	0	0	0	394	475	-82	394	475
2.5 acres per 1,000 population																																			
<i>Regional Parks are provided by Washoe County.</i>																																			
<b>Special Use Facilities</b>																																			
<b>Recreation Centers</b>																																			
Existing Standard Gap	0	1	-1	0	1	0	2	-2	0	2	2	1	1	2	1	0	1	-1	0	1	0	0	0	0	0	0	0	0	0	0	2	5	-3	2	5
1 center up to 50,000 population																																			
<b>Aquatic Complex</b>																																			
Existing Standard Gap	0	1	-1	0	1	2	2	0	2	2	0	1	-1	0	1	0	1	-1	0	1	0	0	0	0	0	0	0	0	0	0	2	5	-3	2	5
1 complex up to 50,000 population																																			
<b>Flat Athletic Fields</b>																																			
Existing Standard Gap	2	3	-1	2	3	7	9	-2	7	9	7	6	1	7	6	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	18	20	-2	18	20
1 field up to 10,000 population																																			
<b>Ball Diamonds</b>																																			
Existing Standard Gap	8	4	4	8	4	21	12	9	21	12	10	8	2	10	8	1	3	-2	1	3	0	0	0	0	0	0	0	0	0	0	40	27	13	40	27
1 field up to 7,500 population																																			

# City of Reno Parks and Recreation 2002 Level of Service / Gap Analysis Report

## C-2

Park Amenities per Population	North Valleys					West Reno					Central Reno					South Valleys					Future Service Area					Total	
	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap	Existing	Standard	Gap			
<b>Picnic Shelters</b> 1 shelter up to 5,000 population	4	5	-1	19	18	1	16	12	4	7	4	3	0	0	0	0	0	0	0	0	0	0	0	0	46	39	7
<b>Permanent Restrooms</b> 1 restroom up to 5,000 population	4	5	-1	23	18	5	14	12	4	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	46	39	7
<b>Playgrounds</b> 1 playground up to 5,000 population	4	5	-1	24	18	6	16	12	4	8	4	4	0	0	0	0	0	0	0	0	0	0	0	0	52	39	13
<b>Basketball Courts</b> 1 outdoor court up to 5,000 population	6	5	1	22	18	4	13	12	4	12	4	8	0	0	0	0	0	0	0	0	0	0	0	0	53	39	14
<b>Tennis Courts</b> 1 court up to 10,000 population	0	3	-3	26	9	17	9	6	3	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	39	20	19
<b>Volleyball Courts</b> 1 up to 20,000 population	1	2	-1	6	5	1	0	3	-3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	11	-2
<b>Water Spray Pads</b> 1 pad up to 20,000 population	2	2	0	3	5	-2	1	3	-2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	11	-4
<b>Skate Parks</b> 1 park up to 50,000 population	2	1	1	1	2	-1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	1

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**APPENDIX D**  
**EXPLANATION OF POPULATION AND**  
**EMPLOYMENT FORECAST USED FOR**  
**FACILITY PLANNING**

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This appendix documents the population forecast and land use assumptions used in preparing the Public Services, Facilities and Infrastructure Plan (facility plan) and concurrency management system.

### **Population Forecast**

The forecast for the City and its sphere of influence for 2030 is 339,500 as documented in the Washoe County Consensus Forecast 2008-2030. This forecast consists of two components: the existing population from the 2004 State Demographer's Estimate (200,000) and new population of 140,000. The year 2004 was used as the base year for the distributions as it was the most recent data set with population, employment, and land use at the traffic analysis zone level. The State demographer's 2004 City estimate is consistent with the 2007 estimate and part of the same time series. The existing population and 120,000 of the 140,000 new population was distributed to the traffic analysis zones developed by the Regional Transportation Commission of Washoe County. The existing population was distributed based on 2002 estimates for traffic analysis zones. The new population of 120,000 was distributed using recent market research indicating that in the United States, it is possible to achieve up to 35% infill development. Based on this information, 35% of the new population (42,000) was distributed to regional centers and transit corridors and 65% (78,000) was distributed to all other areas of the City and its sphere of influence (SOI).

Based on the population forecast for the City and the adopted TMRP policy used to determine the amount of land that the City can have in its SOI, additional developable land can be added to the Reno SOI. The remaining 20,000 population (140,000 – 120,000) has not been distributed in the facility plan and will be distributed to areas that have been and will be added to the Reno SOI after the facility plan was initiated in 2007. This population, employment, and land use will be allocated to traffic analysis zones in the new SOI areas using citywide data, excluding centers and corridors, tempered with information provided by developers.

Using the same method as used for 2004-2030, population allocations were made beyond the year 2030 and outside of the existing Reno portion of the Truckee Meadows Service Area (TMSA) for conceptual planning purposes only. This conceptual planning is intended to help determine the size for facilities that last beyond the 2030 TMRP planning horizon and to gain a conceptual understanding of the general need for resources (e.g., water supply), identify general approaches to providing facilities, and to determine the amount and location of land that should be set aside for flood management in the Future Service Area (FSA). Because these figures extend beyond the statutory time frame for regional planning (2030), they should be considered conceptual in determining conformance with the Truckee Meadows Regional Plan.

It was necessary to make the land use and density assumptions outlined below to complete this distribution.

### **Land Use Assumptions**

The uses in the Land Use Plan can not be used to directly determine population and employment, and subsequently the demand for public facilities, in each traffic zone as they allow ranges of density and intensity. For example, the Special Planning Area Land Use

Designation allows for mixed land uses in regional centers and transit corridors, where there are minimum residential densities and floor area ratios and in many cases, no density caps. Similarly, in other areas there are maximum densities that may not be exceeded but may not be realized.

To address this, the following process was used for all traffic analysis zones unless more specific information (approved unbuilt projects, specific developer assumptions) was available. The first step in the distribution to the traffic analysis zones was to remove acreage classified as Development Constraints Area, or DCA, in the Truckee Meadows Regional Plan. The distribution of population was based on the assumption that the maximum residential development in centers and corridors will be at a density of 134 units per acre. The basis for this assumption is the average density for recently approved projects in the table below.

Project	Units/Acre
Thoma Street Lofts	25
Palladio	78
Arterra	228
Belvedere	260
8 on Center	16
De Novo	194
<b>Average</b>	<b>134</b>

The average density for the recently completed projects, shown below, was used to validate this assumption.

Project	Location	# Units	Acreage	Units/Acre	# Stories
City Center	Sinclair & State	258	1.284	201	4
Cortyard Centre	Washington & Third	240	1.343	171	4
Citi Vista	Record & Sixth	152	1.014	150	5
<b>Average</b>				<b>174</b>	

For the regional centers and transit corridors, a population forecast and land use assumptions for a 100 year horizon were also prepared. Population was distributed to areas outside of regional centers and transit corridors using existing zoning and assumed zoning generally based on the percentage mix of citywide land uses (residential, industrial, etc.) and specific developer assumptions in order to assess backbone infrastructure needs. The 4 people per acre standard from the Regional Plan (Policy 1.1.7.1) was generally applied as a minimum population density to determine if a traffic analysis zone had additional capacity for growth.

At the time the facility plan was initiated, there were approximately 69,500 acres of developable land in the City and its sphere of influence. Allocation of the 320,000 population over this amount of land results in a population of over 4.5 people per acre. This is not intended to imply that the facilities plan was designed to accommodate 4 persons per acre in every traffic analysis zone. For example, some traffic analysis zones have a relatively larger proportion of non-residential land uses and some have unutilized capacity for growth. In addition, there may be a minor variation (+/- 1%) in total population figures

due to differences in the methodology used for the 2004 State Demographer's estimate and the 2002 traffic analysis zone estimates.

The population forecast and land use assumptions outlined above were approved by the Reno Planning Commission and the Reno City Council before being used for facility planning. Consistent with Appendix 7 of the Regional Plan and State law, Master Plan land uses must be assigned to all areas of designated TMSA. The Reno Master Plan indicates that the Special Planning Area land use designation is the most appropriate for large holdings which could be developed with a mix of land uses (e.g. planned unit developments) and are appropriate for areas undergoing a transition in land use to more intense development.

The facility plan covers these areas in the same manner as described above. If a proposed development is inconsistent with the population and employment assumptions used for facilities planning, then a master plan amendment would be necessary to update the facilities plan as outlined in page 4 of the facility plan.

### **Facilities Planning**

The Public Services, Facilities and Infrastructure Plan addresses water, wastewater, flood management, transportation, police, fire, parks and maintenance facilities.

The consultants used to prepare the water, wastewater and flood management portions of the facility plan (Eco:Logic and HDR) utilized the traffic analysis zone data as the basis for those facilities. Because development in regional centers and transit corridors is the highest priority and as most of these facilities will last well beyond the 2030 horizon, the 100 year forecast was used to plan the facilities in the centers and corridors.

The same TAZ data were provided to the Regional Transportation Commission of Washoe County for update of the Regional Transportation Plan.

Other facilities utilize the forecasts differently. The police component of the facility plan is based on serving approximately 100,000 residents from 3 facilities in the central, north and south parts of the Truckee Meadows, and an additional smaller facility in the Winnemucca Ranch (a.k.a., Spring Mountain) area. This compares favorably to a standard of 125,000 residents per station used by the Las Vegas Metropolitan Police Department. The fire component of the facility plan is based on response time so stations are generally located based on geographic coverage. The parks component of the facility plan is based on both population and geographic coverage standards which vary by type of park facility. The maintenance facilities in the facility plan (i.e., public works and parks maintenance facilities) are distributed geographically like the police facilities.

All new development projects are evaluated against and required to provide the facilities in the facility plan to be consistent with the concurrency management requirement outlined in the Public Services, Facilities and Infrastructure Plan.

### **Concurrency Management**

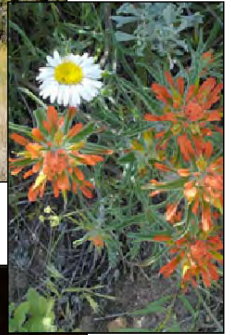
The requirements for concurrency are included in the Public Services, Facilities and Infrastructure Plan to implement the concept of concurrency management (i.e., public facilities are available concurrent with the impact from new development), These are summarized in Table 1, Summary of Concurrency Management Options, in that plan (table shown below).

## Summary of Concurrency Options

Service	Determined by Community Development Department With Input From Service Providers		
	Full Facilities	Impact Fee / RCT	Discretionary Improvements
<b>Water</b> – New development must demonstrate an adequate water supply system for domestic use plus fire protection before occupancy of each structure per RMC and consistent with Appendix A of the Master Plan.	✓		
<b>Waste Water</b> – New development must connect to the City's sanitary sewer system or other system before occupancy of each structure per RMC and consistent with Appendix A of the Master Plan.	✓		
<b>Flood Management</b> – New development must demonstrate compliance with RMC floodplain management regulations and all pertinent state and federal regulations before occupancy of each structure. New development must be consistent with Appendix A of the Master Plan.	✓		
<b>Transportation – Local Streets</b> New development must implement and demonstrate compliance with local transportation system standards before occupancy of each structure.	✓		
<b>Transportation – Regional Road Network (RTC Review)</b> – Payment of Regional Road Impact Fee = Demonstration of RTC Concurrency.		✓ (Impact Fee)	
<b>Transportation – Freeways / Federal and State Road Network (NDOT Review)</b> Development that would initiate a Traffic Impact Analysis as outlined in RMC Section 18.12.903, or at the discretion of the Community Development Department, will be forwarded to NDOT for review. Improvements to access roadways, acceleration and deceleration lanes, interchanges and similar upgrades may be required before occupancy of structure.			✓
<b>Police</b> – Before issuance of a building permit, new development shall identify and fund options so that concurrency will be met before occupancy of each structure. See options.			✓ Police Department
<b>Fire</b> – Before issuance of a building permit, new development shall identify and fund options so that concurrency will be met before occupancy of each structure. See options.			✓ Fire Department
<b>Parks and Recreation</b> – Payment of Residential Construction Tax = Demonstration of Parks Concurrency.		✓ (RCT)	

As with most local governments, development cases are circulated to all service providers for comments. If a service provider indicates that the development will create an impact beyond what was anticipated in preparing their respective component of the facility plan (i.e., it has greater density, intensity, geographic scope and/or phasing issues), that is evaluated using the population, land use and facility planning information outlined above. At that point an amendment to the City Land Use Plan and/or Public Services, Facilities and Infrastructure Plan may be required before proceeding. As an example, a recent development proposal included building the police facility identified in the facility plan and the service provider (i.e., Reno Police Department) indicated additional interim facilities in earlier phases of the development are required.

# OPEN SPACE AND GREENWAYS PLAN



## **ACKNOWLEDGEMENTS**

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Adopted by City Council March 7, 2007

# TABLE OF CONTENTS

---

## Introduction

Plan Organization .....	1
Boundary .....	1
Time Frame .....	1
Relationship to Other Plans .....	1
Summary .....	2
Key Strategies for the Open Space and Greenways Plan .....	3
The Urban/Rural Interface .....	3
Urban/Periphery Connectivity .....	3
Connectivity within the Urbanized Areas .....	4

## Natural Resources and Open Space

Open Space Criteria .....	5
Watershed Function .....	5
Wildlife Habitat and Connecting Corridors .....	5
Sensitive Plant Communities .....	5
Existing Development Constraints .....	5
Equity .....	5
Ease of Implementation .....	6
Proposed Open Space Priority Areas .....	6
North Valleys Playas .....	8
Significant Drainageways on Peavine Peak and Mount Rose Base ...	11
Truckee River Corridor .....	15
Steamboat Creek Corridor .....	16
Plants and Wildlife Habitat .....	19
Riparian Areas .....	19
Agricultural and Natural Grasslands and Meadows .....	19
Desert Playas .....	19
Great Basin Mixed Sagebrush Shrubland .....	20
Conifer Forests .....	20

## **Greenways**

Overview .....	21
Challenges to be Overcome .....	21
Criteria .....	21
Accessibility .....	21
Proximity of Activity Centers .....	22
Connectivity .....	22
Equity .....	22
Ease of Implementation .....	22
Proposed Greenway Priority Areas .....	22
Trail and Bikeway Priority Projects .....	22
North Valleys to Southwest Suburban Priority Route .....	25
4th Street to Prater Way Priority Route .....	27
West Plumb Lane to Mira Loma Drive Priority Route .....	29
Steamboat Creek to Sparks Boulevard Priority Route .....	30
Priorities for the Urban/Rural Interface on the City's Periphery .....	32
Connecting the North Valleys to Peavine Peak .....	33
Connectivity on the South Side of Peavine Peak .....	34
Connectivity to Mount Rose via Drainageways and Creeks .....	36

## **Open Space and Greenways System**

Overview .....	38
The Regional Context .....	38

## **Implementation**

Overview .....	41
Code Revisions .....	41
Funding Mechanisms .....	41
Funding Mechanisms Currently Used .....	41
Potential Funding Mechanisms .....	42
Partnership Agencies and Organizations .....	44
Government Agencies and Entities .....	44
Conservation Organizations .....	44
Local Volunteer Organizations .....	45

Land Acquisition..... 45

Maintenance ..... 46

**Appendices**

Appendix A – Trail and Bikeway Standards .....A-1

Appendix B – Secondary Priorities.....B-1

Appendix C – Glossary ..... C-1

Appendix D –Rare Plant Species..... D-1

**Tables**

3.1 North Valleys to Southwest Suburban Bikeway Existing Conditions and  
Proposed Improvements ..... 26

3.2 West 4th to Prater Way Bikeway Existing Conditions and Proposed  
Improvements ..... 28

3.3 West Plumb Lane to Mira Loma Drive..... 29

**Figures**

2.1 Key Open Space Areas..... 7

2.2 North Valleys Open Space Areas..... 8

2.3 Swan Lake to Silver Lake Connection..... 9

2.4 Peavine Peak Open Space Corridors ..... 11

2.5 Mogul Open Space Corridors..... 12

2.6 Southwest Open Space Corridors..... 14

2.7 Truckee River Open Space ..... 15

2.8 Steamboat Creek Open Space Areas ..... 18

3.1 Key Trails/Bikeways ..... 24

3.2 North Valleys to Southwest Suburban Trails/Bikeways ..... 25

3.3 4th Street Trails/Bikeways..... 27

3.4 West Plumb Lane to Mira Loma Bikeways ..... 28

3.5 Steamboat Creek Trail ..... 30

3.6 Trailheads and Access Points on the Urban Periphery ..... 31

3.7 North Valleys Access ..... 32

3.8 Peavine Peak Access..... 34

3.9 Mount Rose Base Access ..... 36

4.1 Regional Connections Concepts ..... 40

# **INTRODUCTION**

## **Plan Organization**

This plan is divided into five sections: Introduction, Natural Resources and Open Space, Greenways, Open Space and Greenways System and Implementation. The Introduction describes the goals and policies developed through the planning process. The Natural Resources and Open Space section describes the primary habitats found in the Reno Sphere of Influence (SOI), along with their associated flora and fauna. Criteria for identifying and prioritizing open space areas for potential preservation are defined. Based on these criteria, several high priority open space areas are described and mapped. The Greenways section addresses connectivity and access, focusing on the importance of connections of trail systems in the City. The Open Space and Greenways System section describes the entire interconnected system of open space areas and greenways. Trails and bikeways play a vital roll in the plan by filling in the gaps between existing facilities and proposed activity centers in the area. The Implementation section identifies potential marketing efforts as well as revisions to City code that can contribute to the successful implementation of the plan.

## **Boundary**

The plan was developed to address lands within the sphere of influence (SOI). If the SOI is redefined, lands falling within the newly defined area will also become subject to the plan policies.



*Mountains surrounding Reno afford access to the public lands.*

## **Time Frame**

This plan forecast horizon is to the year 2030.

## **Relationship to Other Plans**

This plan is an element of the City of Reno Master Plan prepared in accordance with Nevada Revised Statutes (NRS) 278.150-170. It also satisfies the conservation element called for in the Truckee Meadows Regional Plan.

The City Master Plan has three different levels of applicability; *Citywide, Center and Corridor, and Neighborhood*. *Citywide* plans include this Open Space and Greenways Plan and other plans that apply to the entire City and its sphere of influence. *Center and Corridor* plans are for the eight centers and five transit oriented development corridors in the City and its sphere of influence. *Neighborhood* plans cover other areas, not in centers or corridors, which have been designated as appropriate for more detailed planning.

## Summary

The Vision statement created with citizen involvement is: The City of Reno Open Space and Greenways Plan will preserve and enhance quality of life by long range of planning an interconnected network of open spaces and greenways. Implementation of the Plan will conserve natural ecological systems, provide a variety of recreational opportunities, and support non-motorized transportation opportunities between community destinations.

The statement above sets the key principles of this planning document. This plan will serve as the primary regulatory document for the protection and acquisition, of open spaces and greenways for the City of Reno for the next 20 years. This document was developed through a lengthy public involvement process including many meetings with a working group of stakeholders, Neighborhood Advisory Board meetings, City and County Parks Commissions, and other interested citizens.

The plan employs a number of terms which are defined in Appendix C, *Glossary*. However, the two key concepts throughout the document are Open Space and Greenways. It is important to keep in mind that open spaces and greenways are interconnected and can serve many purposes from the active use of a trail to the protection of a particular open space habitat area.

Open Space is defined as property that is generally undeveloped and remains in a natural state. Open space provides native plant and wildlife habitat, recreational opportunities, and enhances the scenic character of the region. Open space may or may not be open to public access, as some sensitive environments or hazardous areas may be inappropriate for access or development. Open space may be publicly or privately owned and managed. Open space can involve a variety of areas including floodplains, aquifer recharge areas, steep slopes, ridgelines, wetlands and other water bodies, playas, and habitat areas.



*A shared use trail adjacent to wetlands*

Greenways are linear open spaces established along a corridor, such as rivers, ditches, drainageways, streams, ridgelines, trails, canals, or other routes for conservation, recreation, or alternative transportation purposes. Greenways can connect parks, major drainageways, nature preserves, cultural facilities, and historic sites with each other, commercial areas and residential neighborhoods.

## Key Strategies for the Open Space and Greenways Plan

The Open Space and Greenways Policies in the City Master Plan take their inspiration from several key strategies that guide the future protection and enhancement of Reno's open space and greenways. These strategies address:

- Interface of urban/rural areas at the perimeter of the City
- Urban/periphery connectivity
- Connectivity within the urbanized areas

These concepts are shown graphically on Figure 4.1, Regional Connections Concepts on page 40. The Regional Connections Concepts is conceptual only, and should not be construed as promoting specific alignments for trails or locations for access points. Rather, the concept map emphasizes overall connectivity and access throughout the City. These concepts support bringing the “outside inside the City”. This is accomplished by the connecting the edges of the City to the center of the City. The “outside inside the City” also suggests that open space and greenways can take a variety of forms and do not necessarily have to be in the form of traditional parks or trails.



*Access point to Peavine Peak*

### ***The Urban/Rural Interface***

Reno is surrounded by open space and trails, many of which are administered by the United States Forest Service (USFS), the Bureau of Land Management (BLM), or Washoe County. Maintaining access to these valuable natural and recreational resources at the perimeter is essential. The City can also seek to maintain access around the perimeter of the City by acquiring land to supplement existing lands on the perimeter and ensure access to those areas, and by requiring new residential and commercial development adjacent to perimeter open space to maintain an open space buffer and public access points. The potential also exists for a ring trail that runs along the mountainous edge of the City. Segments of a ring trail already exist adjacent to the Steamboat and Last Chance ditches along the Sierra foothills.

### ***Urban/Periphery Connectivity***

Open space at the perimeter of the City should be linked with urbanized areas through an interconnected system of greenways, trails, and bikeways. The City should coordinate with other agencies and government entities to ensure the development of corridors that extend across jurisdictional boundaries. Depending on location, urban/periphery greenways can range from earthen trails, to paved, Class I shared use paths in the urbanized suburbs, to on-street bike lanes within the urban area.

### ***Connectivity within the Urbanized Areas***

Trails, bike lanes, and urban pedestrian streets should also be developed to connect open space destinations within the City, as well as parks, schools, and commercial areas. These linear connections should be developed along natural or man-made features, where feasible, including drainageways and ditches. Natural drainageways that are owned by the City provide opportunities for this kind of linear connection.



*The River Walk in downtown Reno*

Within the urbanized city core, connections should take the form of urban bicycle/pedestrian streets, which include such improvements as bike lanes, street trees separating sidewalks from streets, sidewalks that are 13 feet wide or wider as dictated in the regional centers and transit corridors, and pedestrian amenities, such as seating and enhanced lighting. California Avenue, portions of West 4<sup>th</sup> Street and East 4<sup>th</sup> Street, Wells Avenue, Mill Street, and Virginia Street are being redesigned for this kind of streetscape treatment to encourage cyclist and pedestrian activity.

## **NATURAL RESOURCES AND OPEN SPACE**

### **Open Space Criteria**

Criteria has been used to identify and prioritize open space areas in need of protection for the benefit of the community. The priorities are based, in part, on the inclusion of areas that are already constrained, including flood zones, rare plant and wildlife habitat, and slopes over 30%, as shown on the Key Open Space Areas figure (Figure 2.1). Most of the areas identified for protection in this document fall into multiple categories, fulfilling a number of criteria for protection.

### ***Watershed Function***

Watershed function areas include perennial streams; natural and man-made drainageways, and landscape or habitat buffers adjacent to these drainageways; critical flood pools, floodways, and floodplains; stormwater storage; and groundwater recharge areas.



*Drainageway*

### ***Wildlife Habitat and Connecting Corridors***

Wildlife habitat includes primary plant communities found in the area. Corridors connecting large open space areas promote habitat functionality, species migration, and biodiversity. Mule deer migration corridors require particular attention for protection.

### ***Sensitive Plant Communities***

Rare and sensitive plant communities are defined by the Nevada Natural Heritage Program, which maintains a database of rare plants in the state, as well as maps that identify local occurrences of these plants.



*Webber's ivesia, a rare plant species in Reno*

### ***Existing Development Constraints***

Existing development constraints are defined as slopes greater than 30%. Development is generally not permitted on these slopes by the existing development code.

### ***Equity***

All of Reno's residents should have access to open space areas. However, Reno's most significant open spaces are concentrated along the Truckee River and around the mountainous periphery of the City, with some neighborhoods better served by open space access and amenities than others. Projects that provide lesser-served neighborhoods with increased access and amenities should be given priority.

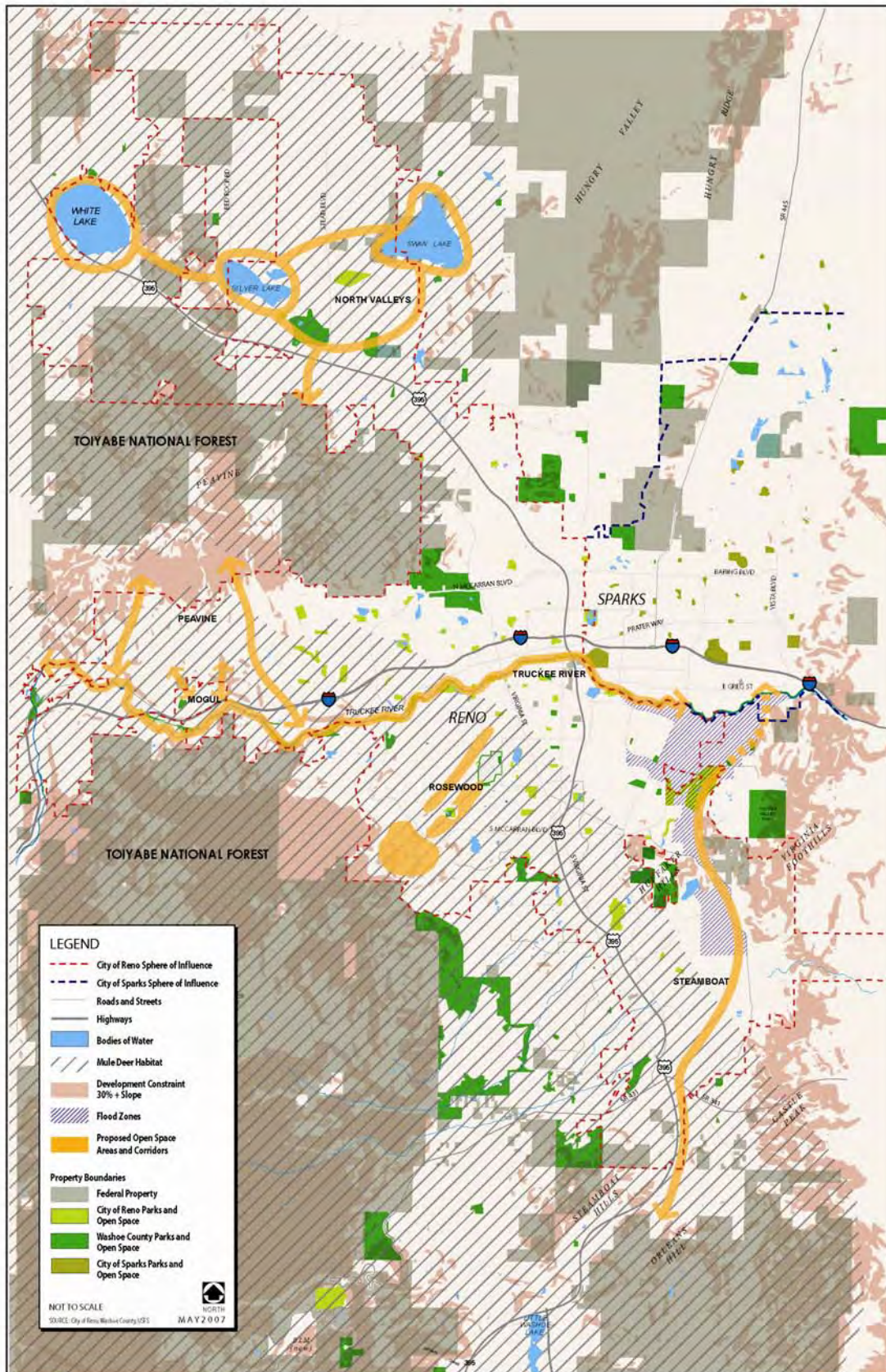
### ***Ease of Implementation***

Ease of implementation includes such factors as cost, availability of land, and intangible elements such as project support.

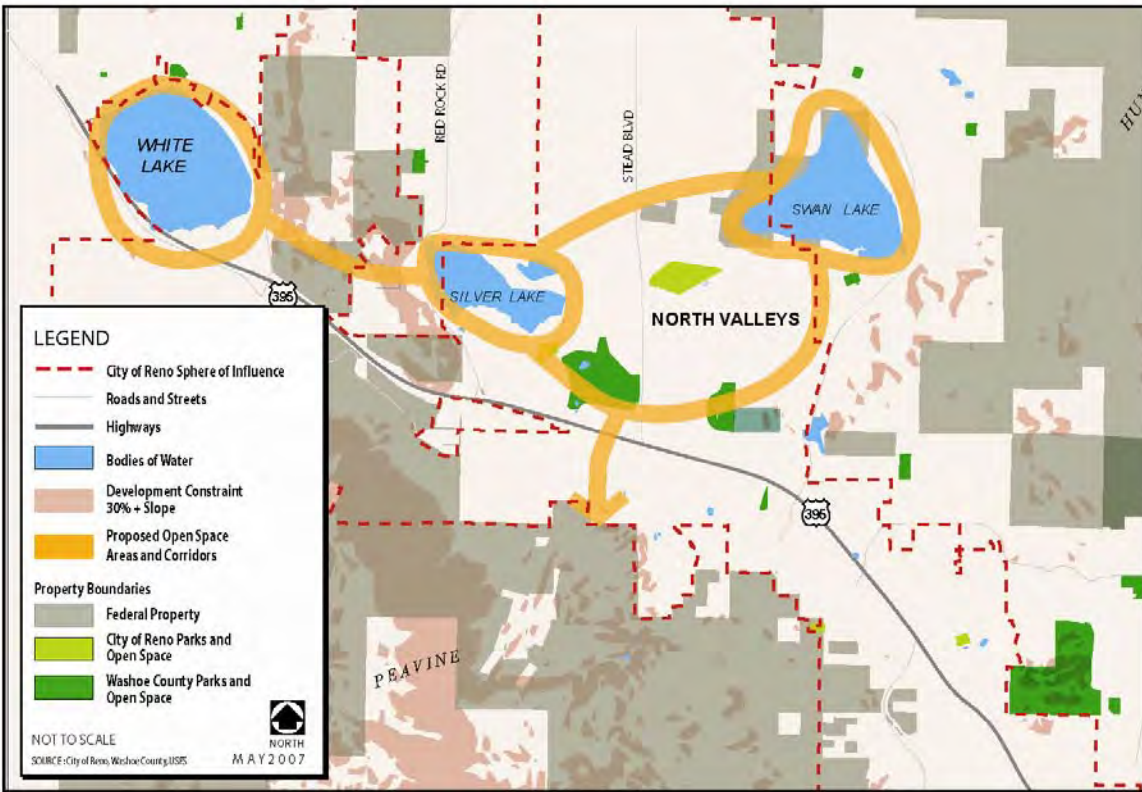
### **Proposed Open Space Priority Areas**

The open space criteria have been used to prioritize open space areas for protection as identified in Figure 2.1, Key Open Space Areas. All four of the proposed projects ranked high for most of the open space criteria listed above. Secondary priorities are also identified in Appendix B of this plan and should be reviewed after the first priorities have been addressed.

Figure 2.1 Key Open Space Areas



**Figure 2.2 North Valleys Open Space Areas**



***North Valleys Playas***

Three playa lakes, White Lake, Silver Lake, and Swan Lake, are located in the North Valleys area, as shown in Figure 2.2. Each lake is unique and offers slightly different open space opportunities. All three playas provide watershed functions, wildlife and native plant habitat, opportunities for connectivity, and recreational opportunities. These areas should be preserved, or where disturbed, restored to their native conditions to maximize habitat values. The setting, characteristics, and open space opportunities for each lake are described below.

**White Lake**

White Lake is bordered by residential development on the north with sporadic commercial and light industrial development to the east and south. The lake is owned by a limited number of private landowners.



*White Lake, view to west*

White Lake provides significant groundwater recharge and watershed protection value, offers visual relief, and serves as a large open space node with potential corridors connecting to Peavine Peak and the surrounding hills.

The undeveloped land surrounding White Lake is a mixture of seasonal wetland and sage scrub that should be preserved as an open space buffer between the lake and surrounding development. Trails and lake access could be accommodated in this buffer.

### Silver Lake

Silver Lake is bordered by residential development to the north and south, with light industrial and commercial development to the east. Silver Lake and the lands around it are owned by a limited number of private landowners. Silver Lake offers groundwater recharge value, and includes a sage scrub zone that should be preserved as an open space buffer.

**Figure 2.3 Swan Lake to Silver Lake Connection**



Silver Lake should be part of a larger system of open space corridors in the Stead area. Trails could be developed around the southern perimeter of the lake that connects to the North Valleys Regional Park. This corridor/trail system could be further developed to connect Silver Lake with Swan Lake through the existing neighborhoods via existing

drainages east of Stead Boulevard. The final northern connection from Swan Lake to Silver Lake should be made via Dorothy McAlinden, Mayor's Park, and drainageways connecting these parklands to Swan Lake across Military Boulevard. Connectivity is lost through the light industrial area to the west along Lear and Stead Boulevards. Patches of BLM land between Silver and White Lakes could be set aside as an established open space corridor. Suitable pedestrian and cyclist crossings at Reno Parkway Boulevard and Red Rock Road are also needed.

### Swan Lake

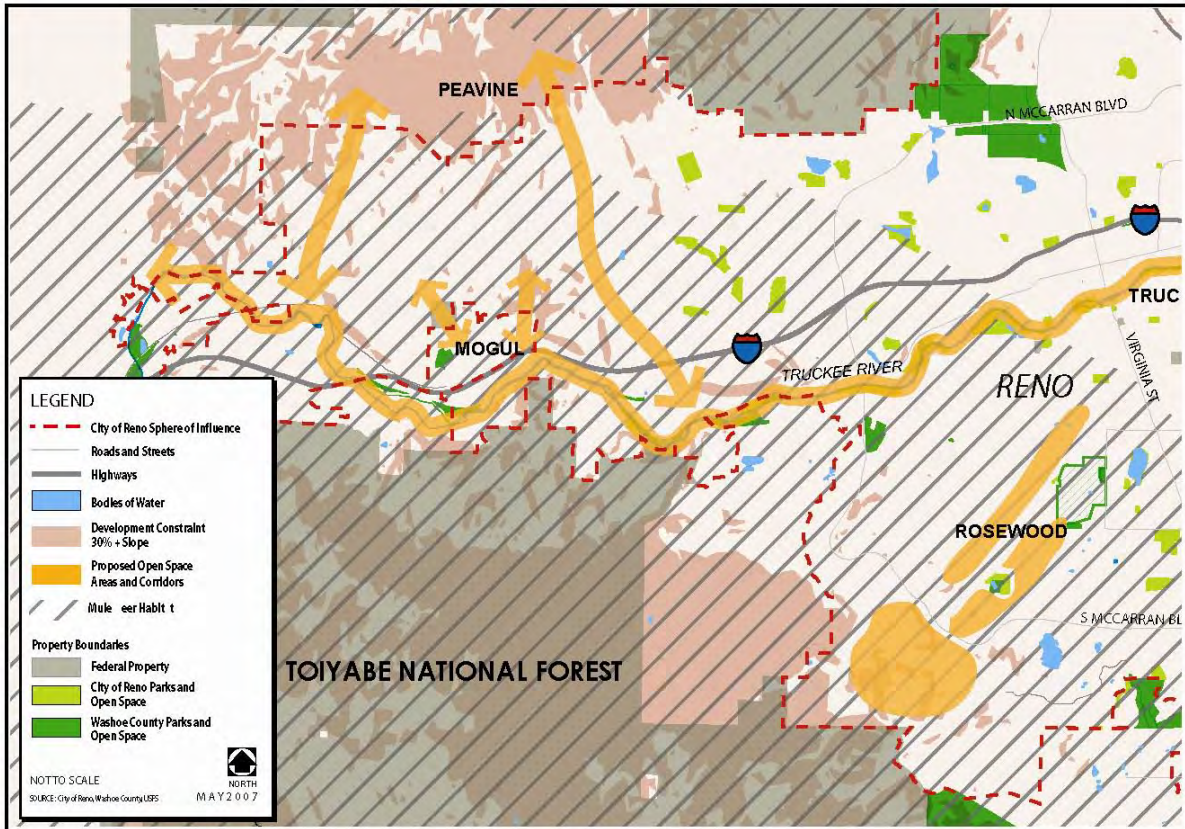
Swan Lake is bordered by low density residential development. The playa ranges from 50 to 100 acres of permanent wetlands during drought cycles to as much as 1,000 acres of wetlands during high water cycles. The lake is primarily publicly owned by the BLM, Washoe County, and Nevada National Guard, with the remaining property consisting of private in-holdings. Effort has been made in recent years to acquire private parcels from willing sellers using conservation funding. This area of public land should be rezoned to open space.



*Swan Lake wetlands*

According to the Lahontan Audubon Society, Swan Lake is an important bird area, with 150 recorded bird species, including unusual migrants such as tundra swans and snow geese. The lake serves as an important nesting site for resident birds, and a foraging site for winter migrants. Large numbers of shorebirds and wading birds depend on Swan Lake as a migration stopover, staying days to weeks as they forage in the shallow waters. The Lemmon Valley Sewage Treatment Facility system of ponds immediately adjacent to the lake also provides nesting, feeding, and migratory resting areas for significant bird populations, especially when Swan Lake is frozen over during the winter months. Swan Lake is an active interpretive site with kiosks, reader boards, a marsh boardwalk, bus parking, and trails. It is being managed through the Washoe County Parks and Open Space Department with management guidelines drawn up by the eight cooperating agencies.

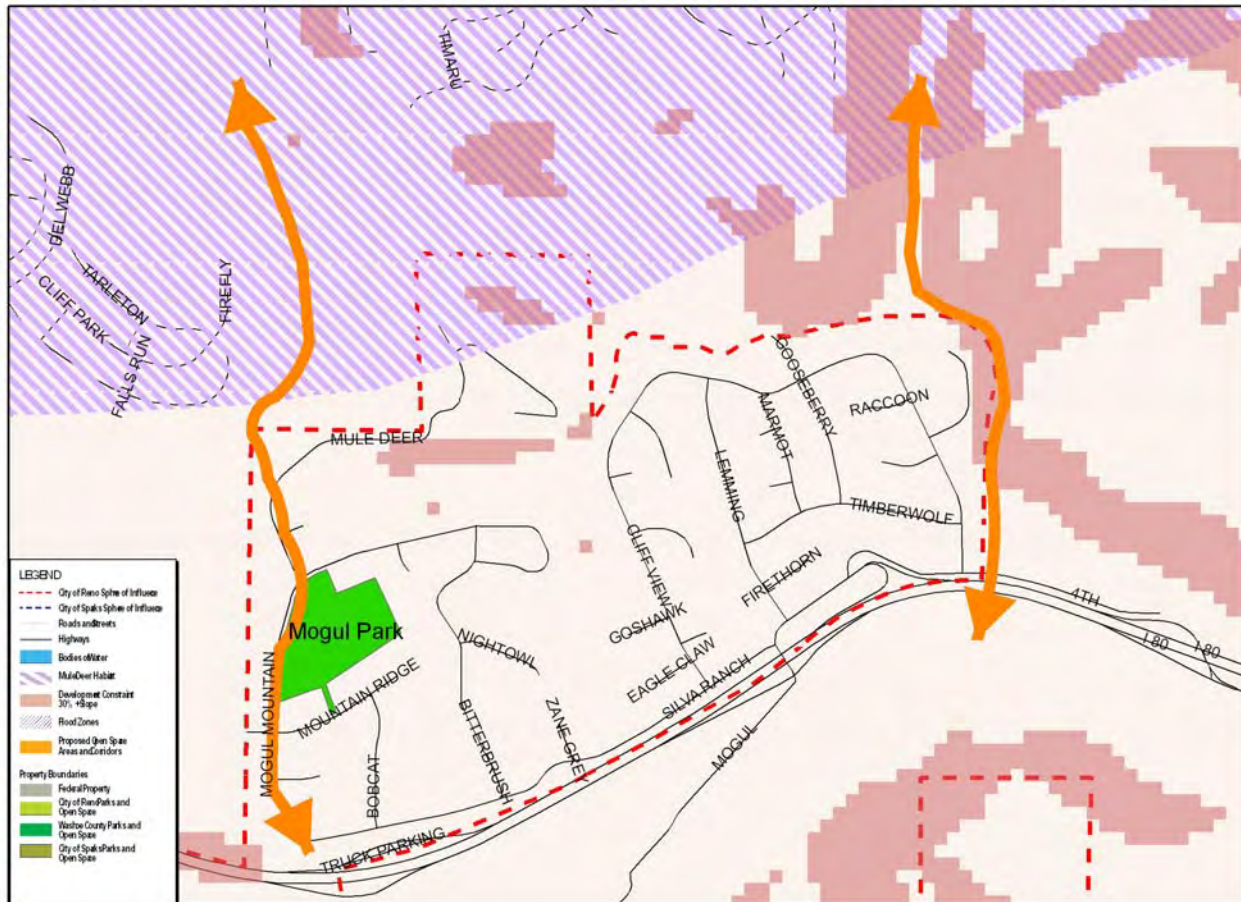
Figure 2.4 Peavine Peak Open Space Corridors



**Significant Drainageways on Peavine Peak and Mount Rose Base**

There are several significant drainageways and mule deer migration corridors connecting Peavine to the Truckee River, as shown in Figure 2.4. Portions of these drainageways fall within the Reno SOI, while other segments are within the unincorporated county. These drainageways include riparian areas along the drainage bottom, with sagebrush scrub along the adjacent drainageway slopes, creating an interesting and diverse assemblage of plant and animal species in close proximity.

**Figure 2.5 Mogul Open Space Corridors**



**Mogul**

A drainage connecting the Somerset subdivision with Mogul is slated for a paved trail in the Somerset development plan and will provide recreational access between the two neighborhoods. An unnamed creek is located south of Somerset in a steep canyon to the west of this trail. The creek has intact riparian vegetation that supports a variety of wildlife, including deer, coyote, small mammals, and birds. The upper and middle reaches of the creek include an existing multi-use trail. A portion of the middle reach of the creek passes through a 40-acre parcel owned by the USFS (APN 234-021-05), which is a good candidate for acquisition to provide wildlife habitat and public access. The lower reach of the creek is located in the Mogul neighborhood and shows significant noxious weed infestation, which makes it suitable for restoration. The entire creek should be protected, the multi-use trail extended, and access points developed.

### Chalk Creek

Chalk Creek flows somewhat parallel to Robb Drive, east of McQueen High School. The creek also provides riparian habitat supporting numerous plant and animal species. An existing shared use trail has been developed along a portion of the trail that could be extended. This drainageway should also be protected, the shared use trail extended, and additional access points provided. Noxious weed infestations should be addressed, as needed, to restore native habitat.

Existing trails that follow lower elevation contours on Peavine provide recreational access from numerous locations. These trails have the potential to be consolidated into a continuous east/west contour trail connecting Rancho San Rafael Regional Park with Verdi. This trail corridor could also serve as an open space buffer between residential development and public lands on Peavine.

### Rosewood Canyon and Rosewood Wash

Rosewood Canyon and Rosewood Wash make up a large, intact drainageway on the north side of Skyline Drive at the base of the Sierra Range in west Reno. The canyon is comprised of the narrower upper reaches of the drainageway between Hemlock Way and Corey Drive, and is bisected by Cashill Boulevard. A portion of Steamboat Ditch runs through the canyon. The wash



*Rosewood Wash*

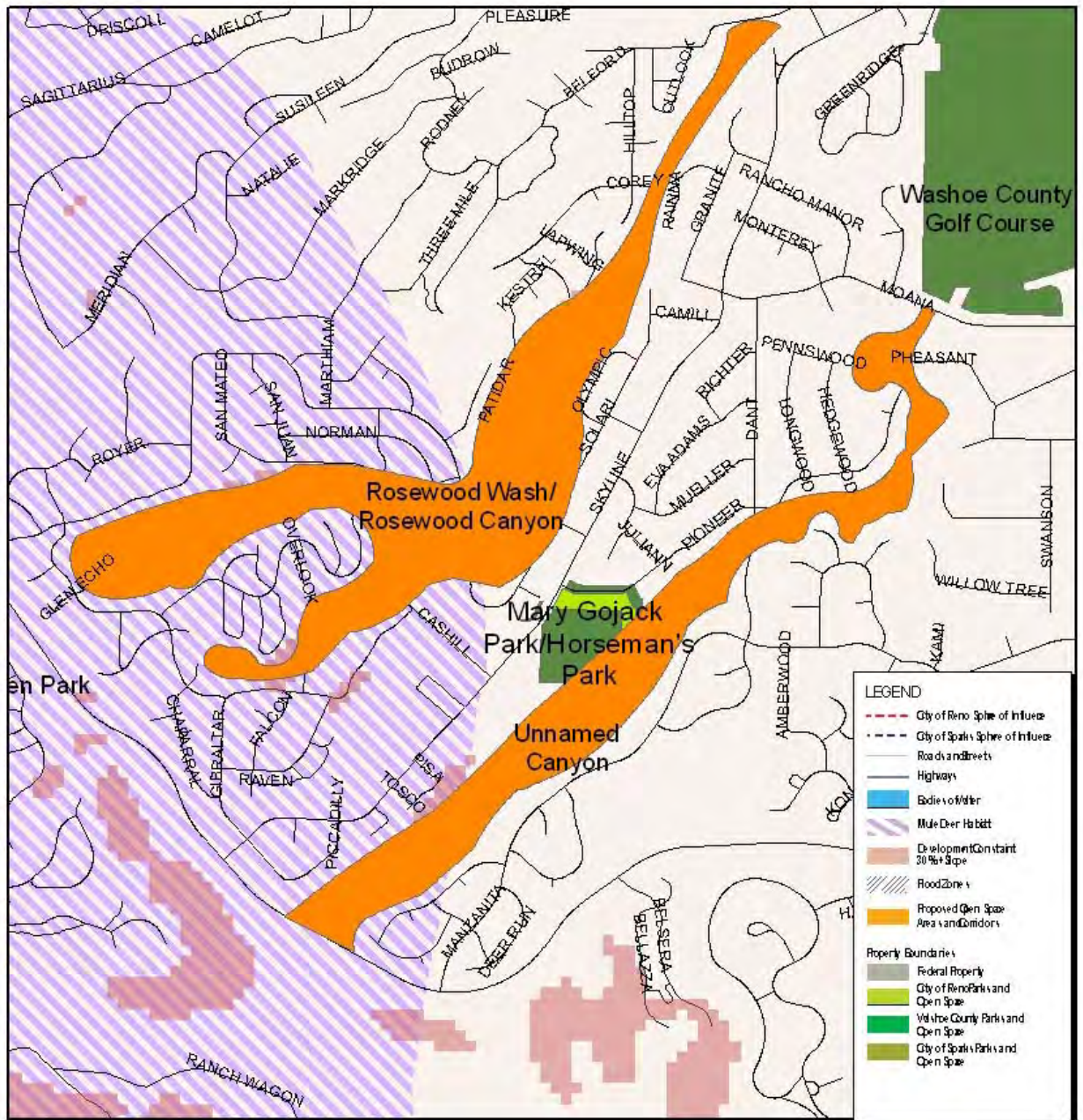
includes the lower, relatively flatter portion of the drainageway between Corey Drive and Belford Road. A portion of the Highland Ditch runs through the wash. Lands along the canyon and wash are privately owned. The area also includes portions of Steamboat and Highland Ditches.

Another unnamed canyon runs parallel to Rosewood Canyon that is partially owned by the City and partially privately owned. This canyon would also serve as a valuable asset to the network.

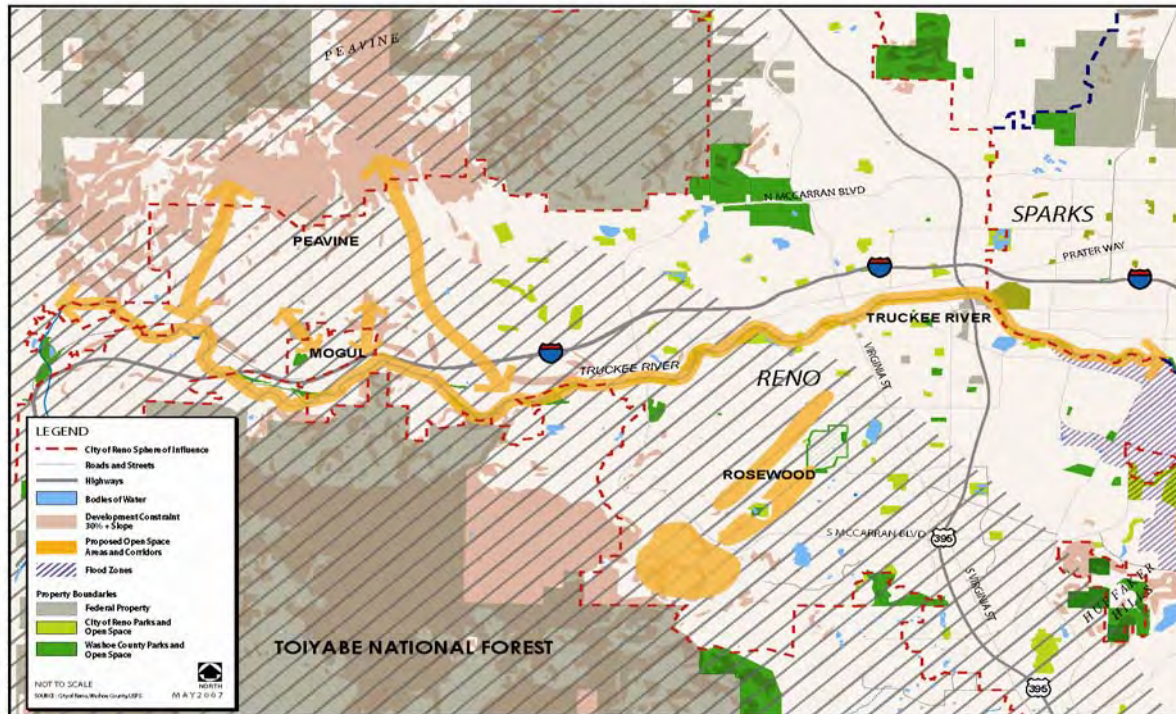
Both canyons and the wash include riparian habitat with native cottonwoods and willows at the base of the drainageway, and sagebrush scrub on the upper slopes. The proximity of these habitat zones results in an abundance of wildlife, including raptors, songbirds, and small mammals.

The area thus offers significant wildlife viewing opportunities. The area may be suitable primarily for pedestrian and bicycle use, as the steep slopes make erosion a concern for motorized uses, and the canyon may not allow for sufficiently wide trails to support equestrian uses.

**Figure 2.6 Southwest Open Space Corridors**



**Figure 2.7 Truckee River Open Space**



***Truckee River Corridor***

The Truckee River is the most significant natural resource in the plan area. Native riparian habitat still exists along much of the river, supporting associated animal species. Oxbow Nature Study Area, a largely intact segment of river habitat, supports populations of beaver and muskrat, as well as numerous bird species. A number of more developed parks along the river, such as Idlewild Park, include both native riparian habitat adjacent to the river, and nearby developed areas with non-native, ornamental plant species.



*Cottonwoods along the Truckee River*

A small portion of the Truckee River within the Reno SOI is subject to the Truckee Meadows Flood Control Project. This project is intended to restore riparian habitat, while also serving to minimize flood damage and extend recreational access in the area.

Segments of the river further upstream should also be subject to efforts to preserve and restore native habitat; enhancing the area’s capacity as a functioning wildlife corridor. Other areas, such as portions of the Downtown Redevelopment Districts, may be more suitable for a combination of restored native habitat with developed urban parks. Key

areas that could benefit from open space acquisition and restoration are mentioned below.

### Downtown Redevelopment

A portion of the river approximately between Bell Street and Wells Avenue is within Downtown Redevelopment District One. The district includes several parcels adjacent to the river that could be enhanced through restoration efforts, while ensuring connectivity for the anticipated increase in residents, visitors, and recreational users in the area. This is an especially important priority due to the fact that downtown Reno is shifting from tourist commercial land uses to a mix of land uses with a large residential component.



*A balance of natural habitat and recreational amenities should be emphasized in open space in the redevelopment areas.*

### River Inn Area

The vacant River Inn buildings and surrounding properties should be rehabilitated with an open space corridor included as part of any new development. Depending on the type of development that occurs, this could serve as an additional access point to the River for activities such as rafting, kayaking and fishing.

### Boomtown-Garson Road Area

The portion of the river south of Boomtown has been zoned for commercial and residential development. The City should strive to preserve riparian habitat, along the river banks and incorporate the open space into the design of any development in the future. If this is accomplished it will ensure connectivity and access from the river corridor to public lands in the vicinity. This will also provide wildlife with access from the Peavine Range to the river.

### Verdi

There is much land held in public ownership in the Verdi Area that should be preserved as riparian habitat. Limited public access could be continued to maintain habitat values in this area. Public agencies should be approached and zone changes suggested protecting these areas.

### ***Steamboat Creek Corridor***

The Steamboat Creek area offers one of the greatest remaining opportunities in the Truckee Meadows to create a linear open space area that would run adjacent to the creek (see Figure 2.8). This linear open space could potentially connect valuable wetland areas in the Reno SOI with



*Steamboat Creek, south*

Rosewood Lakes and Hidden Valley, Hidden Valley Regional Park, and ultimately the Truckee River to the north.

The City should actively support the efforts of the numerous private landowners and the Washoe-Storey Conservation District by incorporating the Steamboat Creek Restoration Plan into development guidelines for the Steamboat Creek area, as well as promoting this effort as an example for other smaller significant streams in the Reno SOI. Although the City should be the lead organization for conservation efforts in the SOI, conservation easements and outright land dedication along Steamboat Creek can be coordinated with the assistance of the Washoe-Storey Conservation District. Since the Steamboat Creek watershed falls within United States Army Corps of Engineers (USACE) purview as “waters of the United States” under Section 404 of the Clean Water Act, the USACE also reviews all pertinent construction activities along the creek.

The portion of Steamboat Creek in the Reno SOI reaches into the South Meadows area and Bella Vista Ranch. Much of this area is privately owned. The City should work with private landowners to identify possible open space areas. Areas with habitat and recreational value, such as Alexander Lake, in proximity to the creek should also be considered for acquisition.

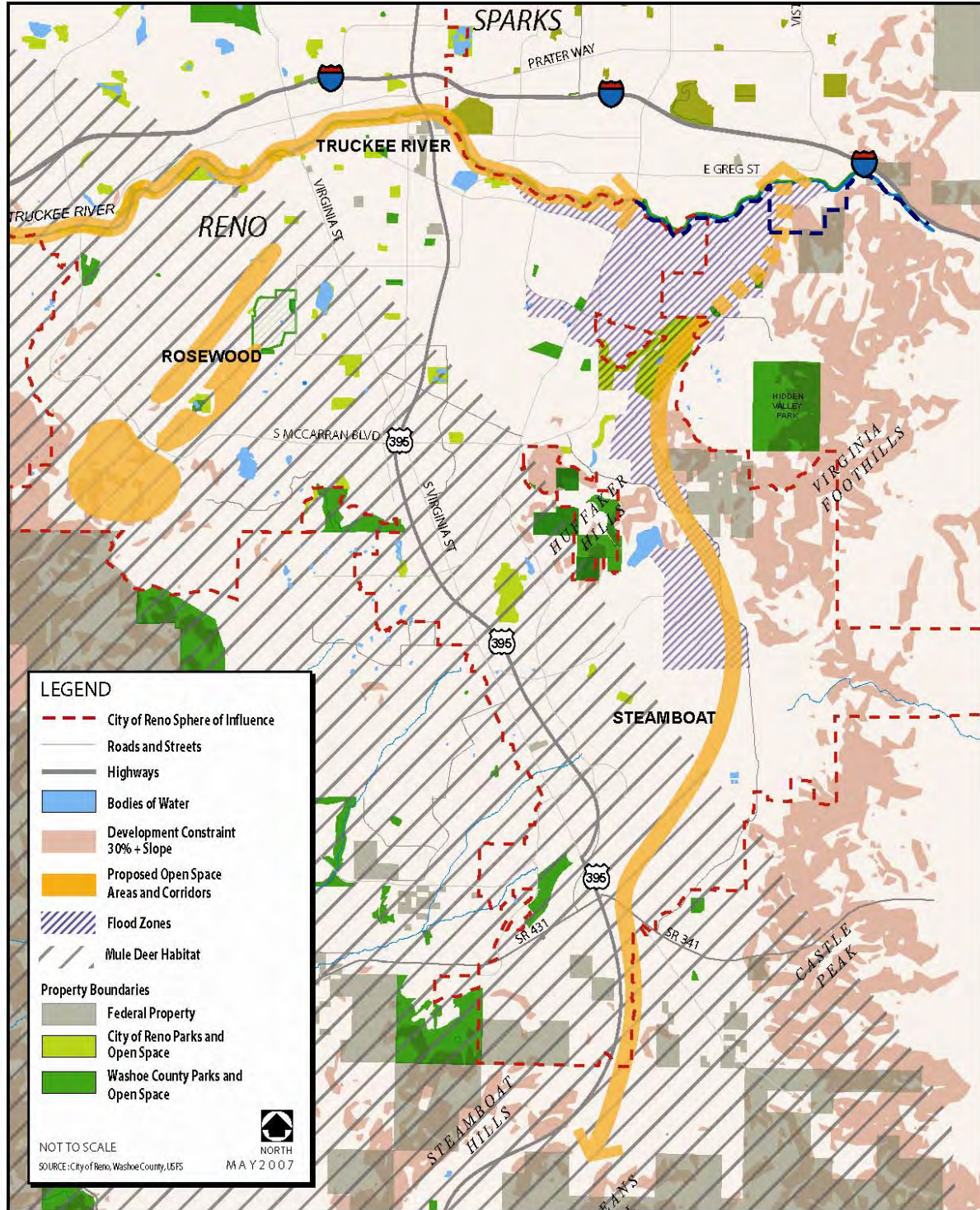
The northern portion of the creek is under County jurisdiction, but is critical to habitat protection and the creation of an open space corridor. The City should coordinate with the County to ensure connectivity between various reaches of the creek.

Steamboat Creek has been used in the Reno area for a variety of reasons over the years that include both agriculture and mining. This use has led to some environmental damage and concern. Steamboat Creek is the largest non-point pollution source to the Truckee River. Pollutants include naturally occurring arsenic and boron. Some pollutants, like mercury, are a result of historic mining activities. Much of the pollution is derived from several sources including livestock manure, residential and other uses of fertilizers and urban runoff from Reno.

Steamboat Creek is recognized as a significant resource to the Reno area and as a result a restoration plan was created to repair and control the pollution to this water way. The Steamboat Creek Restoration Plan emphasis maintaining public access to the creek while providing residents an opportunity to learn about this resource and ways they can help to protect them. The plan also focuses on working with adjacent land owners to prevent damage and reduce pollution. The Steamboat Creek Restoration Plan has been implemented on sections of the creek and continues to be with the help of residents and adjacent landowners. This plan will not supersede any of the policies

from the Steamboat Creek Restoration Plan and is only meant to further compliment progress made on the clean up of this area.

**Figure 2.8 Steamboat Creek Open Space Corridors**



## **Plants and Wildlife Habitat**

The open spaces in the plan area include diverse habitat zones ranging from mountain pine forests to sagebrush scrub and playa wetlands, and account for an equally abundant variety of plant and animal species. According to the Nevada Department of Wildlife, Nevada ranks eleventh among the 50 states in overall biological diversity. Approximately 3,000 plant species, 120 mammals, 340 birds, 55 reptiles and amphibians, 65 fish, and an unknown number of insect species occur in the state, although not all of the numbers reflect native species. 250 of these species are considered threatened, endangered, or are at risk of becoming extinct.



*Cassin's Finch*

Rare species in the Truckee Meadows can be found on the lower slopes of Peavine Peak, on the lower slopes of the Carson Range, in the Steamboat geothermal area, and along the Steamboat Creek drainage. Plant and animal species in the Reno SOI can primarily be found within the five plant communities described below. These plant communities vary by such features as soil type, elevation, and water availability and typically have specific wildlife species associated with them (see Appendix D).

### ***Riparian Areas***

Riparian areas include those distinct plant communities adjacent to streams and rivers. Although riparian plant communities consist of a small portion of the Reno landscape due to the scarcity of water, they serve as critical centers of wildlife diversity, with more than 75 percent of bird and wildlife species spending some portion of their lives in them.



*Agricultural grassland,  
Butler Ranch area*

### ***Agricultural and Natural Grasslands and Meadows***

The Reno area historically encompassed many agricultural pasturelands, the most productive of which lay in the lowest portions of the valley and commonly had creeks and irrigation ditches crossing them. Remaining pasturelands in the Truckee Meadows include the University Farm, Butler Ranch, Bella Vista Ranch, and remnants of ranches along the foothills of the Carson Range, in Verdi, and in the Double Diamond/Damonte Ranch area. Pasturelands and associated wetlands, such as Alexander Lake and the wetlands found along Steamboat Creek, can provide groundwater recharge and floodplain functions.

### ***Desert Playas***

Desert playas are valley bottoms where seasonal water collects in pools during periods of high precipitation or run-off, but which have little or no water during drier portions of

the year. Playas that have a perennial source of water, such as Swan Lake, may shrink in size but not go completely dry. Playas in the SOI are located primarily in the North Valleys area.

### ***Great Basin Mixed Sagebrush Shrubland***

Sagebrush is one of the more common plants throughout northern Nevada, and is generally found in areas above 4,500 feet that receive at least 8 inches of precipitation per year. Great Basin mixed Sagebrush shrub communities are generally comprised of various species of shrubs, including Rabbitbrush, Desert Peach, Serviceberry, Mormon Tea, and Bitterbrush. Bitterbrush is a favorite food source for mule deer and is critical for their winter survival. Sage Sparrow, Sage Thrasher, Brewer's Sparrow, Greater-Sage Grouse, and Desert Horned Lizard are typically found in the sage community, although they have become rarer in recent years due to habitat loss.

### ***Conifer Forests***

Conifer forests are found in the Carson Range along the western edge of the SOI and along the Verdi Range in northwestern Reno. The conifer forest in these areas is comprised of Jeffrey Pine, White Fir, Incense Cedar, with an occasional Ponderosa Pine. The rare Washoe Pine grows in Hunter Creek Canyon and Galena Creek. Common shrubs include Sagebrush, Snowberry, Gooseberry, Manzanita, and Bitterbrush. Mountain Mahogany is found scattered in the foothills, and Juniper grows in and around the Caughlin Ranch area.



*Jeffery Pine*

## **GREENWAYS**

### **Overview**

The plan area has many existing shared-use trails, bike lanes, and local neighborhood paths. These are valuable local resources and contributors to a larger municipal and regional network of non-motorized facilities. Proposed projects that can fill gaps between existing facilities or provide access to public lands on the periphery of the City are prioritized and identified.



Trail near Steamboat Creek

### ***Challenges to be Overcome***

Obstacles to non-motorized travel in the plan area include both natural features and constructed barriers. Reno has the challenge of accommodating the needs of different transportation users within limited public rights-of-way. Automobiles, public transit, private parking, bicyclists, and pedestrians compete for limited public rights-of-way, with non-motorized transportation sometimes left without adequate facilities. To accommodate and encourage non-motorized transportation throughout the downtown area, some compromise must be made with existing automobile access. Transit-oriented development should mitigate some these problems. The signage for the entire City should also be standardized. Trails and trailheads throughout the City have various forms of signage providing directional information and trail usage rules.

Several high-traffic volume streets and highways pose challenges for pedestrians and cyclists attempting to cross them. While some streets have existing features to protect pedestrian and cyclist safety, additional safety features such as lighted crosswalks, raised crosswalks and other options should be installed at high-volume intersections that convey heavy bicycle and pedestrian traffic.

### **Criteria**

These criteria have been used to identify and prioritize potential trail, bikeway, and access improvements. Most of the areas identified for protection in this document fall into multiple categories, fulfilling a number of criteria for protection.

### ***Accessibility***

Accessibility refers to a combination of factors, including the presence of access points or trailheads, mapping, and signage that allow potential users to find a site, as well as adequate parking if the site is intended to serve users from outside the immediate neighborhood. Consideration should



Access to the Tom Cooke Trail

be given to the access needs of a variety of user groups, ranging from all terrain vehicle (ATV) users to mountain bicyclists and disabled users, where suitable.

### ***Proximity of Activity Centers***

Activity centers include regional centers, transportation oriented development corridors, schools, parks, employment and commercial districts, and other activity hubs. Projects that have the potential to serve a greater number of user generators should be given priority. Consideration should be given to special needs populations, children, and the elderly, as potential users.

### ***Connectivity***

Connectivity refers to the ability of a trail or greenway to connect one place with another place. Fragmented segments of trail or bike lanes provide little connectivity and, as a consequence, may receive only limited local use. Trails that provide good connectivity by allowing users to move easily between destinations and amenities should be given priority.

### ***Equity***

All of Reno's residents should have access to the City's trails, bikeways, and open space areas. However, Reno's most significant open spaces are concentrated along the Truckee River and around the mountainous periphery of the City, with some neighborhoods better served than others. Projects that provide lesser-served neighborhoods with increased access and amenities should be given priority.

### ***Ease of Implementation***

Ease of implementation can include cost, availability of land, and such intangible factors as public support. The City should seek both short-term projects that are easily implemented, as well as longer term projects that may be complex to implement but meet the other criteria.

## **Proposed Greenway Priority Areas**

The greenway criteria have been used to prioritize areas for improvements. These new greenways and connections are described in more detail on the following pages. Many of the proposed greenways in this section also correlate to proposed open spaces in the last section. Secondary priorities are identified in Appendix B and should be reviewed after the completion of the first priorities.

### ***Trail and Bikeway Priority Projects***

This Plan describes five proposed urban trail/bikeway routes that would provide extensive north/south or east/west connectivity, as shown in Figure 3.1. These routes

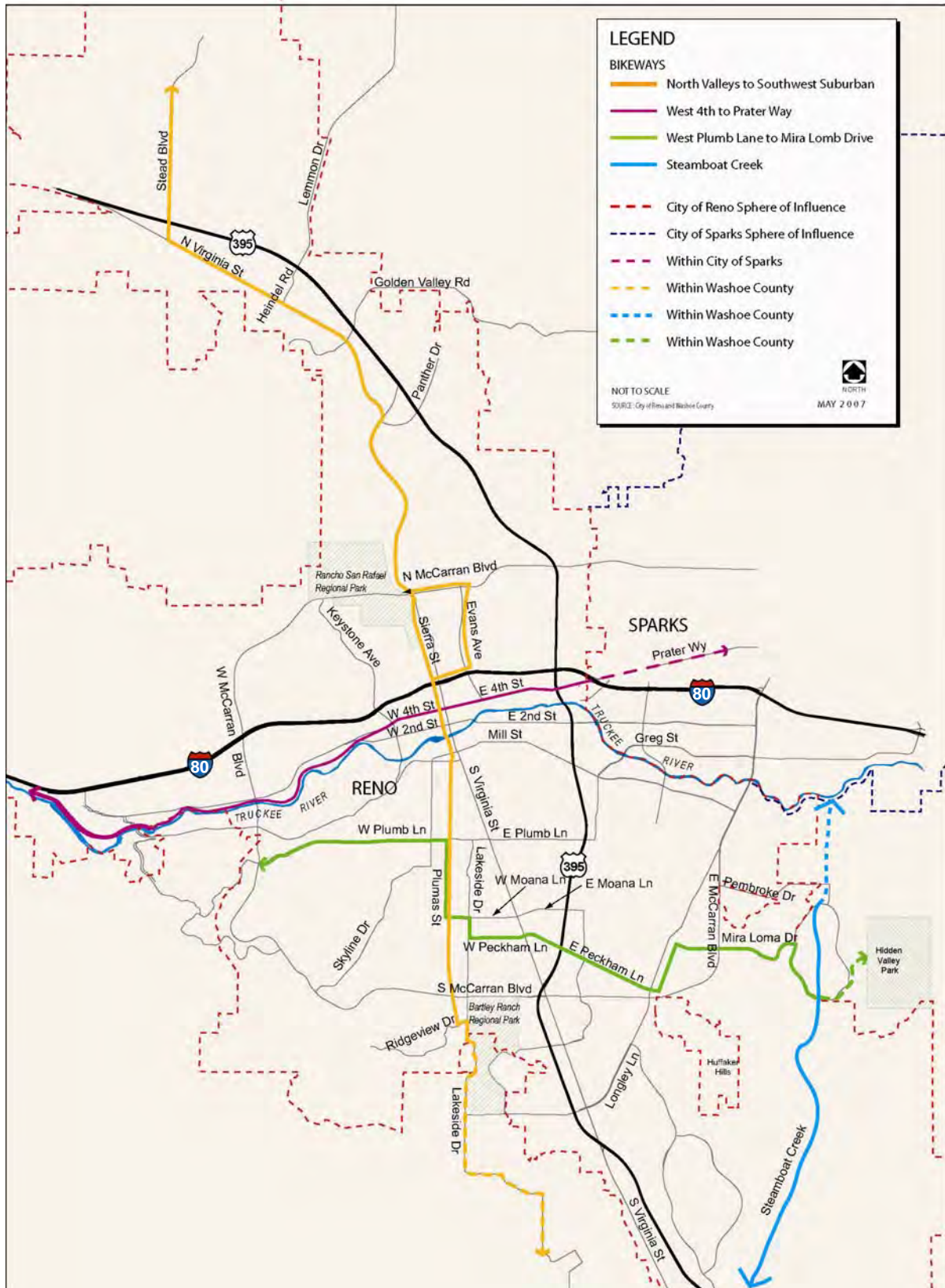
encompass sections of trails or bikeways identified as local priorities during the working group and public meetings, but that will also contribute to a larger, interconnected trail system. The five proposed trail/bikeways intersect, further enhancing their connectivity and increasing the number of potential users.

The routes identified as priorities in the area for improvements include:

- North Valleys to Southwest Suburban (north/south)
- West 4th Street to Prater Way (east/west)
- West Plumb Lane to Mira Loma Drive (east/west)
- Steamboat Creek to Sparks Boulevard (north/south)
- Truckee River (east/west)

Portions of several of these streets have been identified for improvements by the Regional Transportation Commission (RTC), which requires bike lanes to be provided on regional roadways (roads with an average of 5,000 or more daily trips), such as portions of North Virginia Street. This plan supplements those roadways identified by RTC by adding connectivity between open spaces and recreational use as high priorities for on-street bikeways.

**Figure 3.1 Key Trails/Bikeways**



**Figure 3.2 North Valleys to Southwest Suburban Trails/Bikeways**



**North Valleys to Southwest Suburban Priority Route**

This proposed trail/bikeway would serve as the primary north/south route, extending more than 30 miles to connect the North Valleys, the northern campus of the University of Nevada, Reno (UNR), downtown, and southwest suburban neighborhoods (see Figure 3.2). Most of the bikeway would consist of on-street bike lanes, although portions of street rights-of-way may be adequate for an off-street shared-use trail, particularly along North Virginia north of McCarran Boulevard.

Additional routes should be considered, as opportunities arise. For instance, a portion of the Union Pacific rail alignment north of North McCarran Boulevard and adjacent to North Virginia Street has the potential for reutilization as a rails-to-trails project connecting UNR and

Truckee Meadows Community College (TMCC). The rail line is already informally used as route between the two campuses, and segments of the rail line and adjacent unnamed creek are owned by the City. Table 3.1 describes the route, its existing conditions, and planned improvements.

**Table 3.1 North Valleys to Southwest Suburban Bikeway Existing Conditions and Proposed Improvements**

Street	Existing Conditions	Proposed Improvements
Stead Boulevard	8-foot min. shared pedestrian/bike lane from Lear Blvd. to US 395 on-ramp	Sidewalk improvements and signage to allow safe passage under US 395 overpass
North Virginia/Old US 395 (Stead Blvd. to Lemmon Valley Drive)	2-lane road with minimal gravel shoulder	Road is adjacent to utility corridor that should be developed as off-street shared-use path
North Virginia/Old US 395 (Stead Blvd. to Heindel Road)	2-lane road with wider paved shoulders	Bike lanes should be striped with next resurfacing of street; off-street shared-use path recommended if utility corridor suitable
North Virginia/Old US 395 (North Golden Valley Road to Panther Drive)	2-lane road with wider paved shoulders	Bike lanes should be striped
North Virginia to North McCarran Boulevard	4 travel lanes with center lane, paved shoulders	Bike lanes should be striped; off-street shared-use path recommended on creek side; center lane used only at intermittent intersections
Sierra Street (south) and Evans Avenue (north) (McCarran to Liberty Street)	Various	Bike lanes striped; High traffic and limited rights-of-way must be balanced with bike/pedestrian circulation
Plumas Street (Liberty to Plumb)	2 lanes, parking both sides	Bike lanes striped; move parking to one side of the street
Plumas Street (Plumb to Moana)	4 travel lanes with center turn lane, no parking	Bike lanes striped; need slower traffic speed
Plumas Street (Moana to South McCarran Blvd.)	2 travel lanes, center turn lane, bike lanes	No changes recommended
Ridgeview Drive (Plumas to Lakeside)	2 travel lanes	Bike lanes striped
Lakeside (Ridgeview to Bartley Ranch Regional Park)	4 travel lanes with center turn lane	Bike lanes striped

**Figure 3.3 4<sup>th</sup> Street Trails/Bikeways**



**4<sup>th</sup> Street to Prater Way Priority Route**

4th Street is already a heavily used bicycle route that connects Mogul with downtown due to the presence of wide shoulders adjacent to the roadway. This proposed bikeway would extend that connection east to Sparks via East 4th Street to Prater Way, as shown in Figure 3.3. This bikeway offers additional connectivity by allowing potential users to access such nearby facilities as the Washoe Regional Center, the downtown transit center, and the Virginia Transit Corridor.

West and East 4<sup>th</sup> Streets are transit oriented development corridors. Through the downtown area the corridor has yet to be decided. Options include possibly Commercial Row or Retrack areas.

Fourth Street from Keystone Avenue to Wells Avenue is within the City’s Redevelopment District One and therefore has the potential to be developed through redevelopment funding. The residential and commercial densities proposed for the redevelopment area make this bikeway a good candidate to be developed as an urban bicycle/pedestrian street, with lane striping, signage, and other pedestrian improvements. Table 3.2 describes the route, its existing conditions, and planned improvements.

**Table 3.2 West 4th to Prater Way Bikeway Existing Conditions and Proposed Improvements**

Street	Existing Conditions	Proposed Improvements
West 4 <sup>th</sup> Street (I-80 on-ramp to West McCarran Blvd.)	2 travel lanes, paved shoulders	Bike lane striped on north side
West 4 <sup>th</sup> Street (West McCarran to Keystone Blvd.)	2 travel lanes transition to 4 lanes	Bike lanes striped at 4-lane transition
West 4 <sup>th</sup> Street (Keystone Blvd. to Virginia Street)	4 travel lanes with center turn lane	Bike lanes striped, sidewalk improvements
East 4 <sup>th</sup> Street (Virginia Street to Prater Way)	4 travel lanes	Bike lanes striped, sidewalk improvements, reduce 4 lanes to 2 plus center turn lane

**Figure 3.4 West Plumb Lane to Mira Loma Bikeways**



### **West Plumb Lane to Mira Loma Drive Priority Route**

This bikeway would serve as a major east/west bikeway connecting the old southwest neighborhoods, commercial areas on Moana Lane and South Virginia Street, and the Hidden Valley neighborhood, as shown in Figure 3.4.

Portions of the bikeway are already designated with signage as a bike route, including segments on Plumb, Peckham, and Boynton Lanes, with sections of bike lanes on Peckham Lane. These streets appear to have sufficient rights-of-way for additional bike lane striping. In some instances, it may be necessary to modify existing parking arrangements to ensure a right-of-way sufficient to accommodate bicycle traffic.

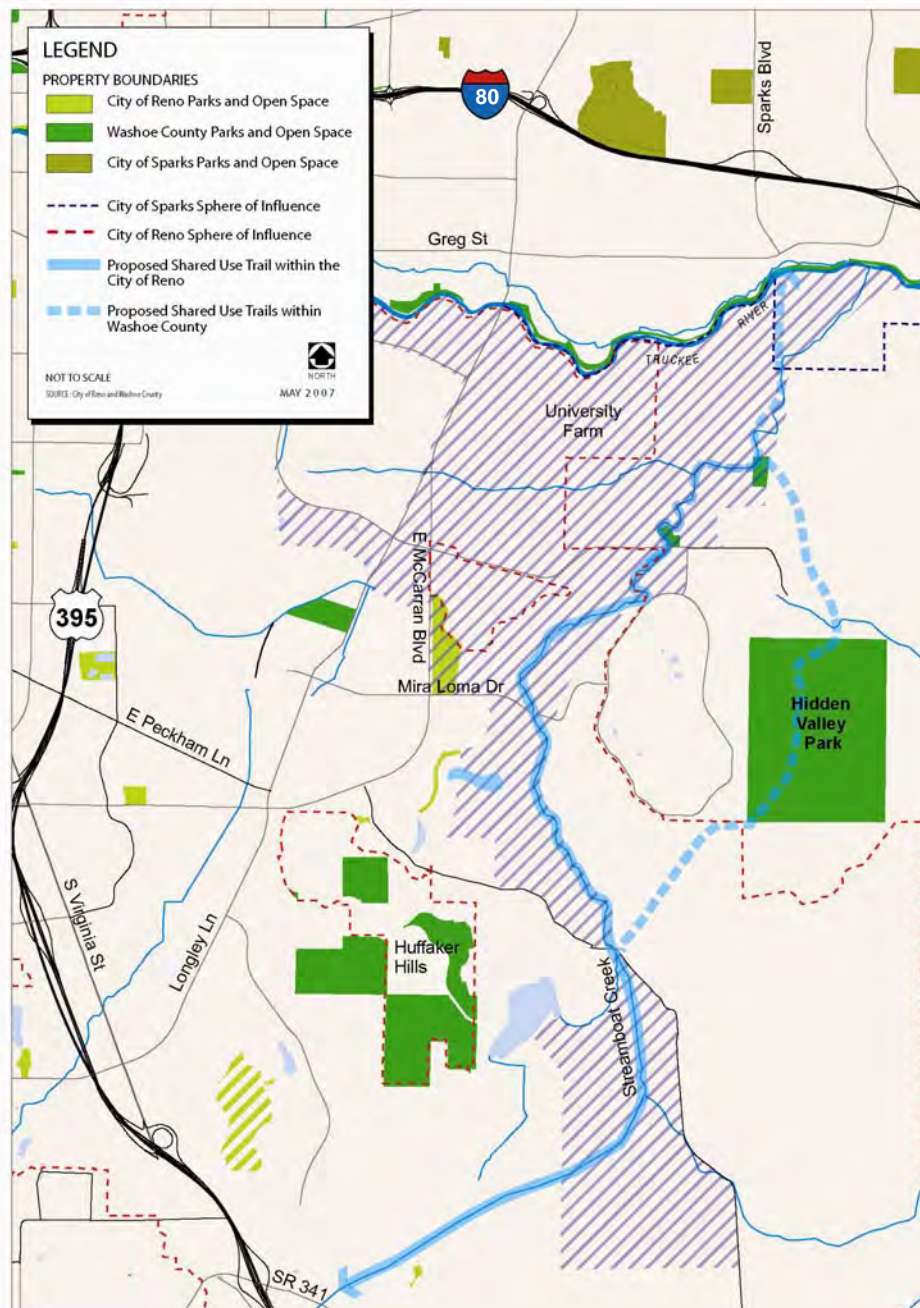
Portions of these streets may also be suitable for additional pedestrian improvements, such as street trees, crosswalks, and sidewalk ramps for wheelchair accessibility. For example, an extension of Plumb Lane streetscape enhancements to Lakeside Drive could promote additional connectivity to the pedestrian path on Virginia Lake.

Table 3.3 describes the route, its existing conditions, and potential improvements.

**Table 3.3 West Plumb Lane to Mira Loma Drive**

Street	Existing Conditions	Proposed Improvements
Plumb Lane (West McCarran Blvd. to Hunter Lake Drive)	2 travel lanes, gravel shoulders	Bike lanes feasible in some areas, difficult in others; check right-of-way
Plumb Lane (Hunter Lake Drive to Plumas Street)	2 travel lanes transition to 4 lanes, bike route signage	Bike lanes striped at 4-lane transition
Plumas Street (Plumb Lane to Moana Lane)	See North Valleys route	See North Valleys route
Moana Lane (Plumas Street to Lakeside Drive)	4 travel lanes	High traffic segment; Plumas/Moana intersections difficult for pedestrians and cyclists to negotiate; Bike lanes striped
Lakeside Drive (Moana Lane to West Peckham Lane)	4 travel lanes, center turn lane	High traffic segment; Plumas/Moana intersections difficult for pedestrians and cyclists to negotiate; Bike lanes striped
West Peckham Lane (Lakeside Drive to Smith Drive)	2 travel lanes, intermittent parking lanes	Bike lanes striped
West Peckham Lane (Smith Drive to Kietzke Lane)	4 travel lanes, with center turn lane	Bike lanes striped
East Peckham Lane (Kietzke Lane to Boynton Lane)	4 travel lanes, intermittent bicycle lane striping	Consistent striping
Boynton Lane (East Peckham Lane to Mira Loma Drive)	2 travel lanes, bike route (signage)	Bike lanes striped
Mira Loma Drive	2 travel lanes, center turn lane, 2 parking lanes	Bike lanes striped

**Figure 3.5 Steamboat Creek Trail**



**Steamboat Creek to Sparks Boulevard Priority Route**

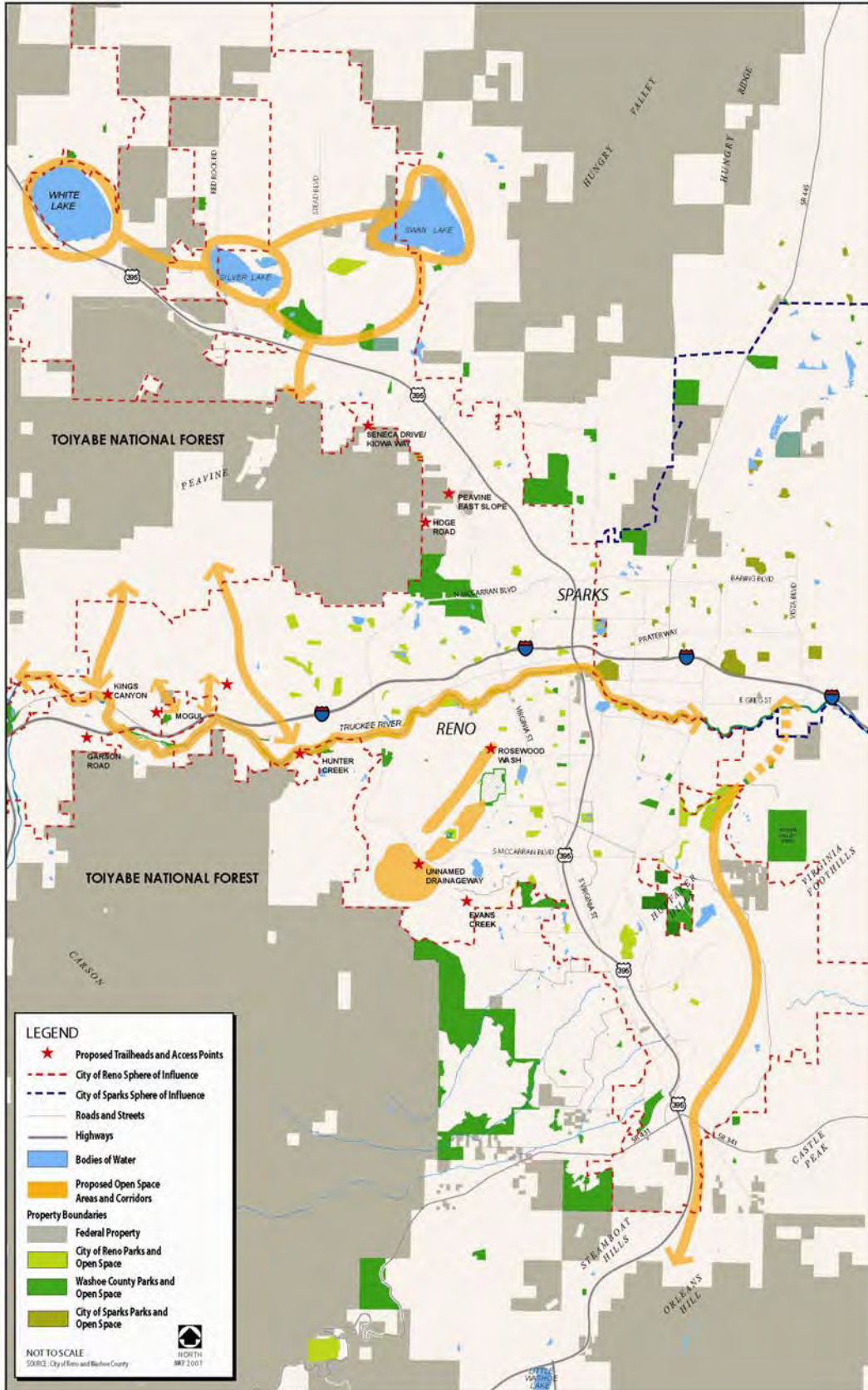
The portion of Steamboat Creek in the Reno SOI traverses the South Meadows area between SR 341 and Pembroke Drive, passing through existing subdivisions, remnant ranch lands, and lands owned by private housing development firms.

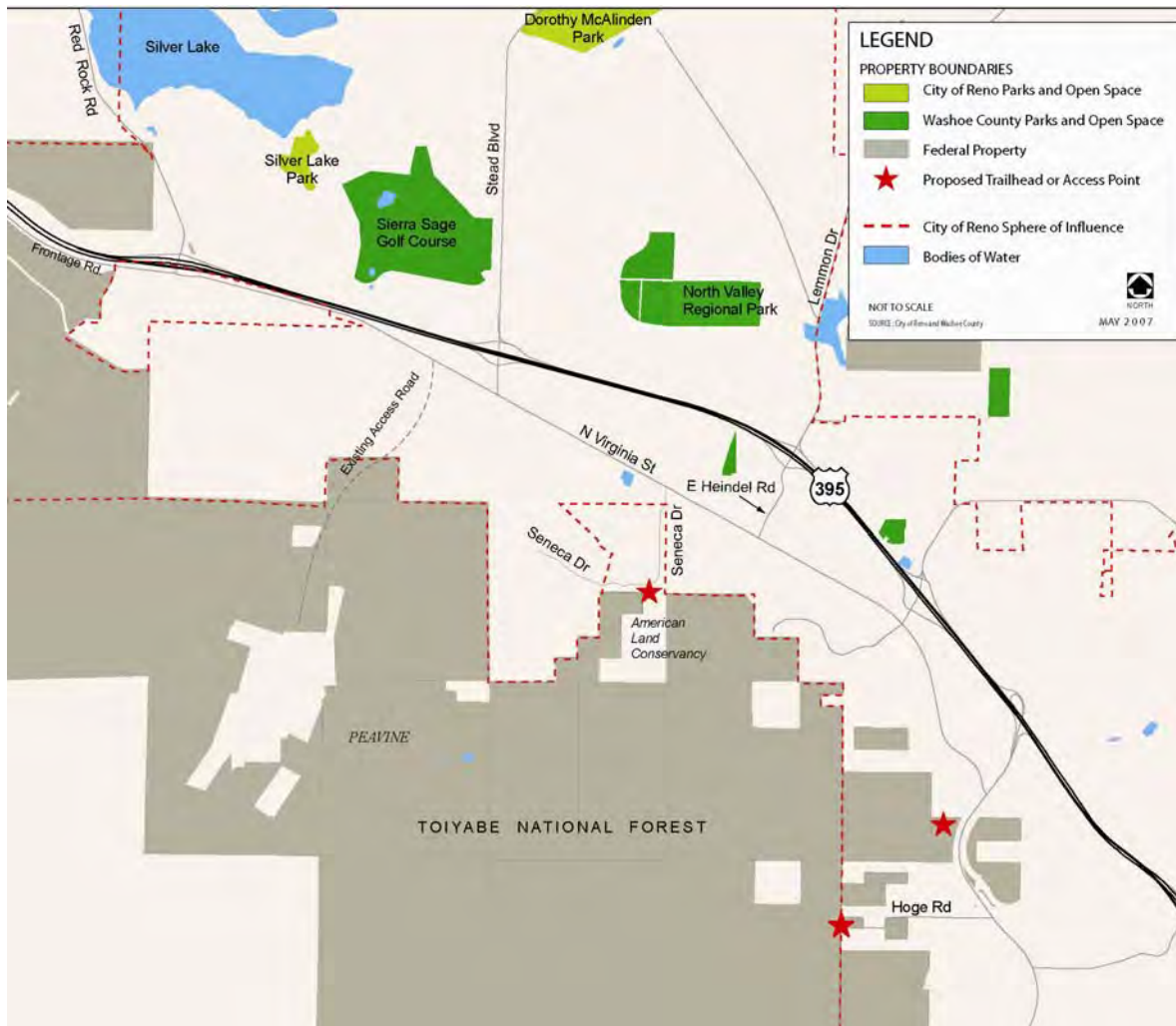
Steamboat Creek, and its adjacent wetlands, is the most significant opportunity to protect habitat and create a long-distance shared-use trail system in the Reno SOI. A

shared-use trail developed adjacent to or in the vicinity of the creek could run along the eastern side of the Truckee Meadows to connect the South Meadows (and potentially Washoe Valley) with the Truckee River Trail, as shown in Figure 3.5.

As development progresses in areas adjacent to Steamboat Creek, such as the Butler and Bella Vista Ranches, the City should ensure the development of a publicly accessible shared-use trail that runs adjacent to the creek. Adequate access points and trailheads should be included in the design of any trail in this area.

**Figure 3.6 Trailheads and Access Points on the Urban Periphery**





### ***Priorities for the Urban/Rural Interface on the City's Periphery***

The urban interface lies at the intersection of the urban and suburban portions of the City and the less developed lands on the periphery, as illustrated in Figure 3.6. Most of the areas on the periphery of the City are federally managed public lands, including Peavine Peak and Mount Rose, although a portion of the Virginia Foothills in the South Meadows area is privately owned.

Access to open spaces on the periphery is essential to ensuring the continued availability of public lands as a community recreational resource. This plan identifies several areas that should receive priority for new trails, access points, and trailheads that will provide additional connectivity to undeveloped lands on the periphery. These areas include:

- Connecting the North Valleys to Peavine Peak
- Connectivity on the south side of Peavine Peak
- Connectivity to Mount Rose via drainageways and creeks

As new development occurs on the periphery, projects should be reviewed for the potential to ensure that access to these areas is maintained. Policies OS-1 through OS-22 in the Policy Plan are designed to address this issue.

### ***Connecting the North Valleys to Peavine Peak***

Peavine Peak is the largest area of public land adjacent to the North Valleys and offers a variety of recreational opportunities, from mountain biking to wildlife viewing. Most of Peavine Peak is managed by the USFS, with privately owned parcels at the summit and a number of privately owned parcels adjacent to North Virginia Street. Informal access is currently available from several unimproved dirt roads located on the north and east sides of the mountain. Proposed new trailheads and improvements to existing trailheads are shown in Figure 3.7.

Although the North Valleys are located at the base of Peavine Peak, they are separated from it by US 395. Underpasses are located at Red Rock Road, Stead Boulevard, Lemmon Drive, and East Golden Valley Road. North Virginia Street also runs adjacent to Peavine Peak along the eastern base of the mountain. Signage along North Virginia Street can help direct potential users to Peavine access points. This plan suggests several existing and potential access points that should receive improvements.

#### North Virginia Street between US 395 and Parr Boulevard

Federal lands adjacent to North Virginia Street provide a possible access point for mountain bikers and hikers to Peavine between the US 395/North Virginia interchange and Parr Boulevard. Hoge Road also provides informal access to USFS land via an unimproved road. The Hoge Road access point should be formalized with signage and parking.

#### Seneca Drive

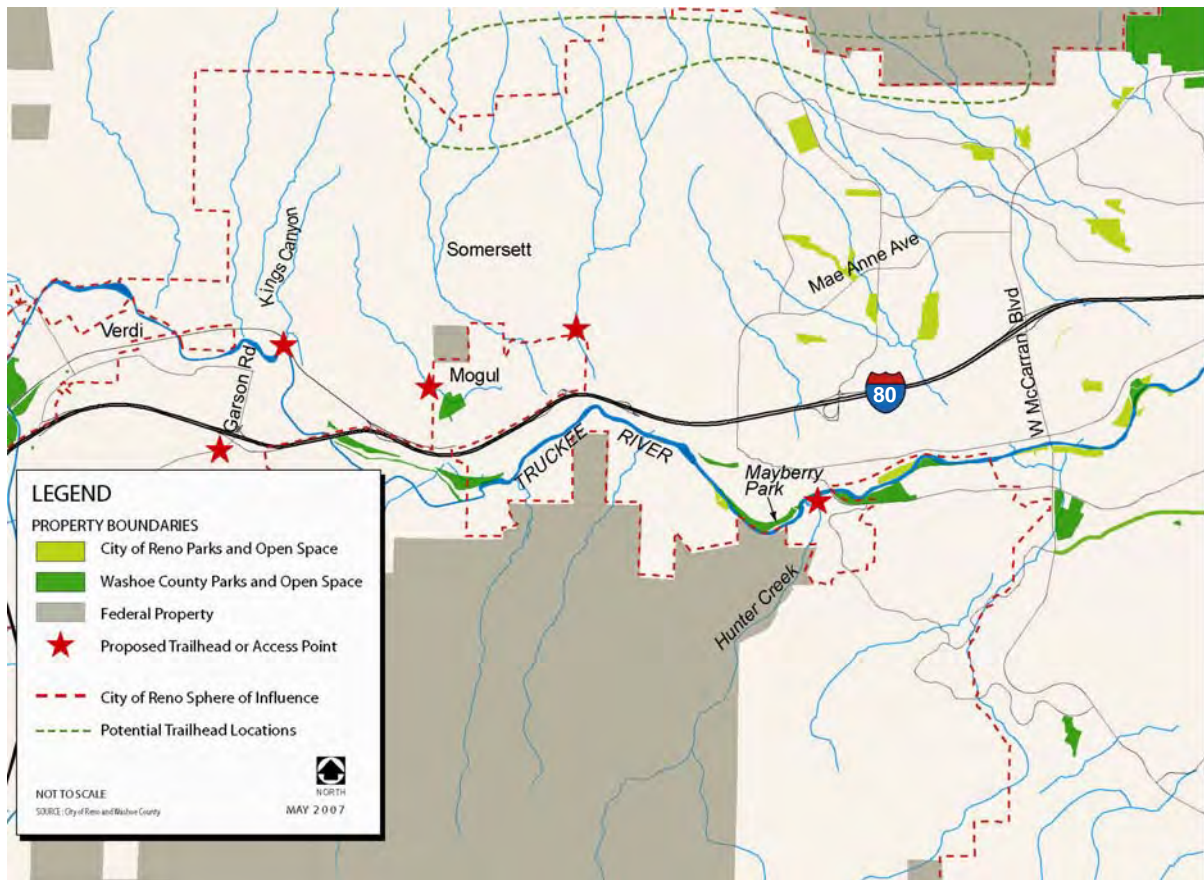
The American Land Conservancy owns a number of parcels at the base of Peavine Peak that can be accessed via Seneca Drive and Kiowa Way, just west of East Heindel Road. The City should work with the American Land Conservancy to identify a suitable trailhead that provides access to the public and includes signage and parking on either of these streets.

The City should also consider working with the American Land Conservancy to acquire additional lands at the base of Peavine roughly between Stead Boulevard and East Heindel Road, where several private landholders have large inholdings.

### Existing Unnamed Road

An unimproved road just west of Stead Boulevard provides access to USFS land after passing through private lands. Again, additional signage should direct potential users to this access point. The City should work with private landowners to formalize access in this area.

**Figure 3.8 Peavine Peak Access**



### **Connectivity on the South Side of Peavine Peak**

Unlike the north slope of Peavine Peak, the south slope has established subdivisions running from West McCarran Boulevard to Verdi. Although the undeveloped portions of the south slope are also managed by the USFS, there are many private parcels that checkerboard the area. Access to public lands on Peavine is available in some of the subdivisions adjacent to public lands via existing trails (4-foot typical, with asphalt paving) that run within the drainageways extending down the mountain. Proposed new trails and trailheads shown in Figure 3.8.

As new development occurs on Peavine, it will be essential for the City to review projects to ensure the creation of an interconnected network of trails. New trails should

logically connect to existing trails and unimproved roads and trails on the undeveloped, upslope side of new development. As in the North Valleys, all access in this area should be coordinated with the USFS Peavine Mountain Roads and Recreation Strategy.

Although there are many existing access points on Peavine Peak that serve local residents, the City should facilitate the development of a few full trailheads that include parking, signage, and other trailhead facilities. This will ensure that Peavine Peak is not simply a neighborhood benefit, but remains a community recreational resource.

#### Trails from Mogul to Somerset

A number of drainageways run between the Somerset community and the established Mogul neighborhood located down slope. Some of these drainageways include perennial creeks and serve as important deer migration corridors. The City should work with Washoe County and multiple landowners in this area to identify suitable locations for trails that connect Mogul to Somerset. Some possible alignments could follow the open space priority identified in Figure 2.5 of the previous section. Easements across private land should be considered, where feasible.

#### King's Canyon Access

Informal access is used by individuals accessing the King's Canyon area, although land in the area is privately held. To provide access for both neighborhood residents and the broader community, easements across private land should be considered, as discussed above.

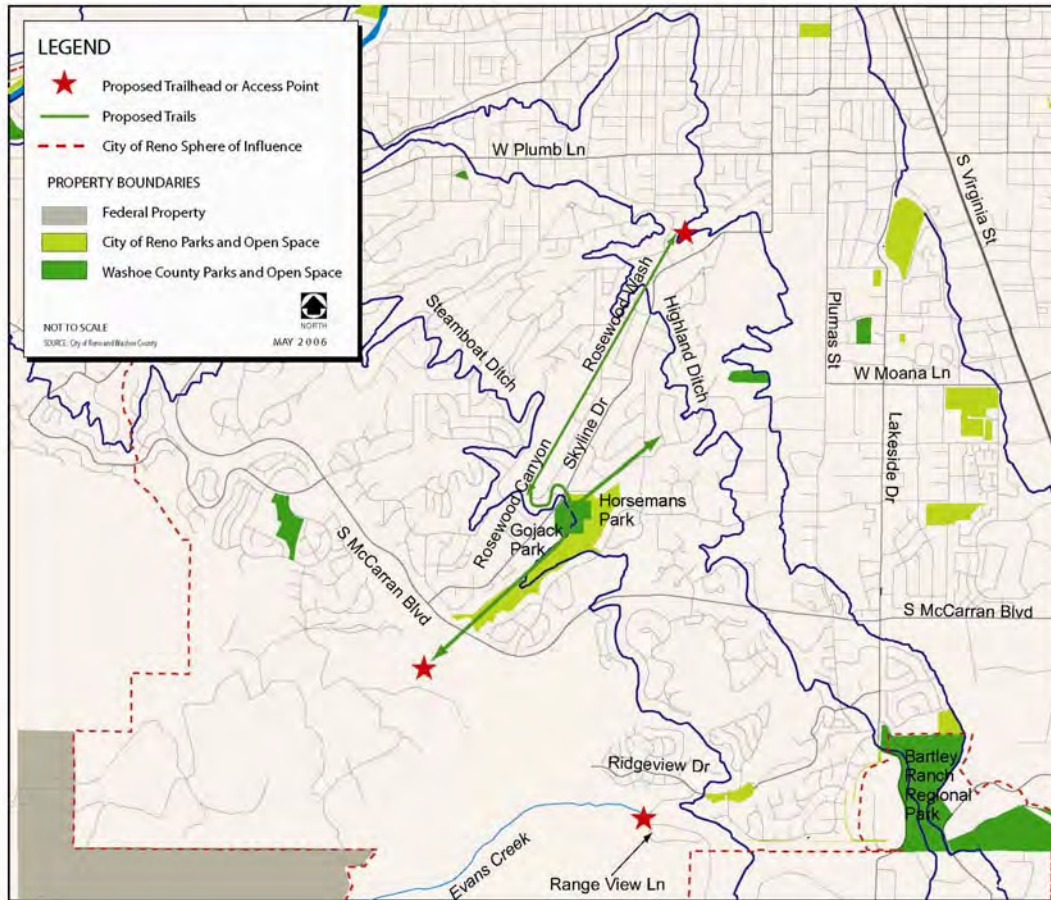
#### Lower Hunter Creek

The lower reach of Hunter Creek is within the City's SOI, but flows through Washoe County lands and privately owned property. The City should coordinate with private landowners and the County to develop an access point from Mayberry Drive as shown on Figure 3.8 Peavine Peak Access.

#### Garson Road

The segment of Garson Road south of I-80 affords access to USFS land through private property. This access point should be preserved if new development occurs in the area.

**Figure 3.9 Mount Rose Base Access**



***Connectivity to Mount Rose via Drainageways and Creeks***

Mount Rose is also predominantly on USFS land and provides excellent recreational opportunities, with trails running adjacent to many of the perennial creeks including Hunter, Alum, White’s, and Thomas Creeks. Proposed new trailheads and improvements to existing trailheads are shown in Figure 3.9.

Two irrigation ditches, Last Chance and Steamboat, also have trails within or near public lands on the north side of Mount Rose. These trails form the beginning of a rim or ring trail that could be continued around the base of Mount Rose to connect with the Thomas Creek and White’s Creek Trail in the southwest meadows.

Like Peavine Peak, the Mount Rose area is heavily developed, with newer subdivisions constructed around the base. The challenge in this area is to provide sufficient access through existing and new subdivisions to ensure entry to public lands.

### Rosewood Canyon and Wash

Rosewood Canyon and Wash runs roughly parallel and on the north side of Skyline Drive. The canyon and wash are also bisected by Steamboat and Highland Ditches. The canyon and wash are under private ownership, while lands on the south side of Skyline Drive are owned primarily by the City.

The area also offers significant opportunities for the creation of a loop trail that could connect the canyon and wash with City lands in the drainageway east of Skyline Drive (which includes Horseman's and Gojack Parks). The portion of the trail on City lands could potentially be connected to USFS lands west of McCarran Boulevard via proposed trails and trailheads in The Pines, a subdivision tentatively slated to be constructed in 2007.

Due to the patchwork nature of land ownership in the canyon and wash, the City should consider requiring new development to protect the riparian zone and provide for trail easements. Property owners with existing development in the area should be encouraged to allow trail easements along the undevelopable portions of the drainageway, including the riparian zone.

### Evans Creek

Evans Creek flows east from Mount Rose to Bartley Ranch Regional Park. A portion of the Evans Creek drainageway east of Range View Lane is within the City's SOI and is owned by the City, with other sections under private ownership.

A trail could be developed along the drainageway that provides equestrian and pedestrian access from Bartley Ranch Regional Park to public lands along Evans Creek. In addition, a formal trailhead should be developed to ensure access to Evans Creek west of Range View Lane. The City should coordinate with the County and private land owners to identify a trail alignment and location for the trailhead.

## **OPEN SPACE AND GREENWAYS SYSTEM**

### **Overview**

This plan was developed to address lands within the SOI. While the plan focuses on lands within the SOI, many open spaces and greenways cross jurisdictional boundaries. A mountain bicyclist, for example, could start a ride on City streets and pass through a County park and trailhead to gain access to an earthen trail on U.S. Forest Service land without being aware of any of these jurisdictional boundaries. The complexity of open space management in the Truckee Meadows shows the value of regional cooperation to ensure good connectivity between urban/rural open spaces and to create a high quality open space system. The City will continue to work with other government agencies and private entities to manage open space and greenways that cross jurisdictional boundaries. The plan will be implemented in coordination with other local, state and federal plans as part of a regional open space planning process.

### ***The Regional Context***

The Nevada State Demographer estimated the population in the Truckee Meadows was 386,000 in 2005. New subdivisions and associated commercial properties have been developed, particularly in the northwest at the base of Peavine Peak, in the southwest along Mount Rose, and in the southeast adjacent to the Virginia Foothills. This plan implements policies to support keeping current connections and increasing the opportunity for increased connectivity to other jurisdictions through open spaces and greenways. The plan also attempts to balance the benefits of growth with the need to ensure that the community's quality of life is also protected.

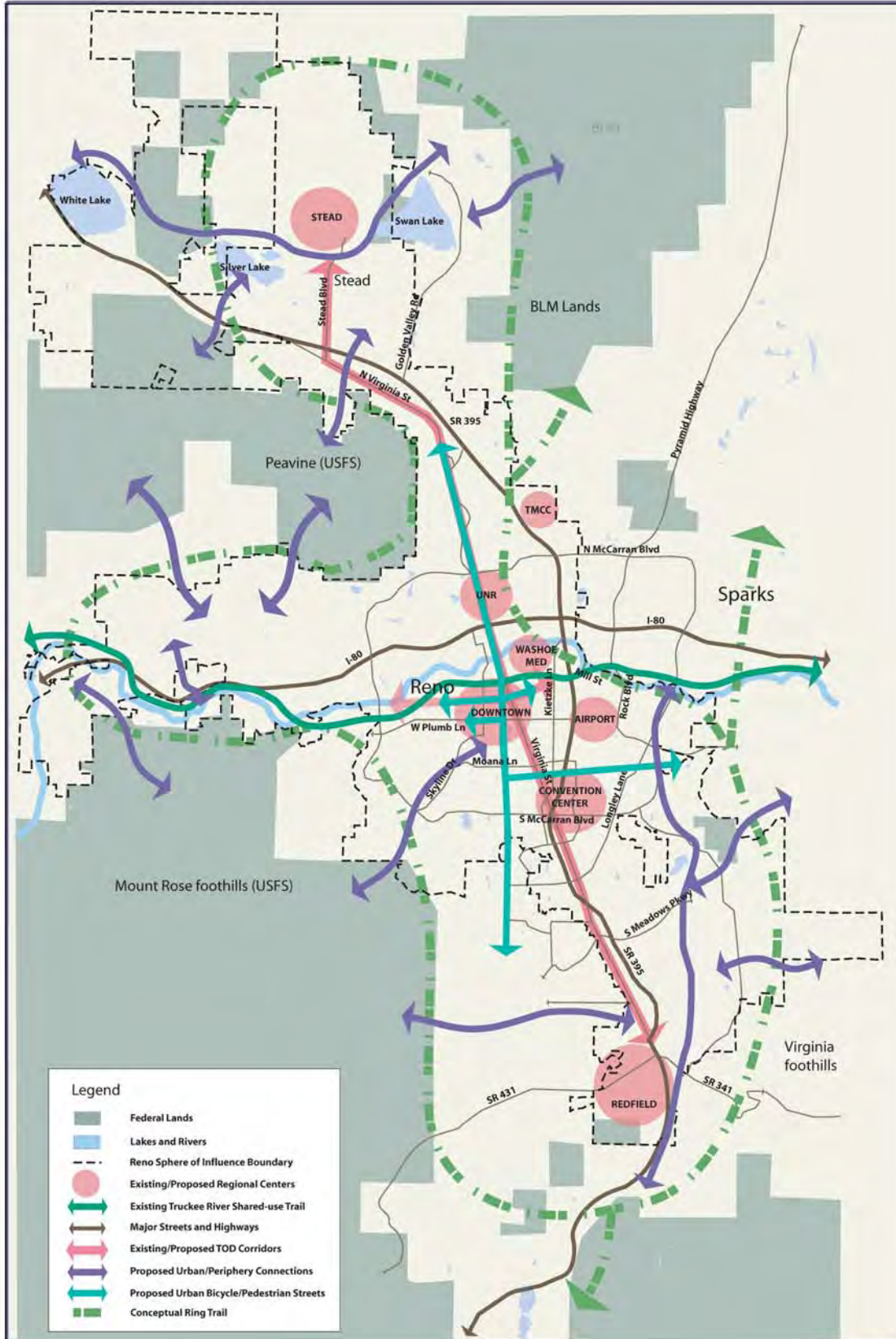
The Reno-Sparks Convention and Visitors Authority (RSCVA) is giving greater attention to the City's recreational amenities as a marketing strategy. The RSCVA is presenting Reno as "America's Adventure Place" with an emphasis on the area's year-round outdoor opportunities with four seasons of natural beauty, unparalleled outdoor recreation and adventure, top-name entertainment, and commitment to the arts among a foundation of amenities and services. In addition to expanding tourism, the RSCVA, the Reno Chamber of Commerce, and other business development organizations have sought a greater diversification of business and industry in the region, with the area's outdoor and recreational attractions serving as a significant draw for companies considering relocation. This plan in conjunction with other agencies plans will assist in the realization of this community goal.

In the previous chapters specific locations were identified for improvement to the Open Space and Greenways network as a whole. Figure 4.1 shows the overall Open

Space and Greenways concept the City is pursuing. The Truckee River Corridor is a defining spine through the City's jurisdiction carrying on through Washoe County and the City of Sparks. On the following map this is represented by the solid dark green line. Crossing this spine runs Virginia Street. Virginia Street has been designated as a transit corridor serving a multitude of uses including pedestrians, bicyclist, buses, and automobiles. It is represented on the map as a solid pink line. From these two corridors are a variety of routes to take out into various portions of the City and connect to the regional activity centers. These routes represented by the teal lines show the street connections. The purple lines on the map show the connections to the outer areas of the region. All concepts on the following map will to be further refined to create a seamless network from the interior of the City to the periphery connecting with other surrounding jurisdictions.

An opportunity for a ring trail around the valley also exists. This is represented by the dashed green line. The creation of the ring trail would require further coordination between the many entities in the region as the alignment would cross many boundaries. This should be actively pursued as development occurs.

**Figure 4.1 Regional Connections Concepts**



## **IMPLEMENTATION**

### **Overview**

This section explores the practical aspects of implementing the plan, covering the following topics:

- Code Revisions
- Funding Mechanisms
- Land Acquisition
- Partnership Opportunities
- Maintenance

Although some of the recommendations in this section are discretionary, policies have been included in the Policy Plan, also part of the City Master Plan, that identify important tasks for implementation.

### **Code Revisions**

Through the planning process on the Open Space and Greenways plan many areas of municipal code were identified as needing to be modified to meet the new policies in this planning document. It is the intention of staff to follow the adoption of this plan with these specific changes.

### **Funding Mechanisms**

It may be possible to work with the developers of new subdivisions on a case-by-case basis to negotiate for open space, parks, and trail improvements. The acquisition of land, and trail and bikeway improvements not located on private land, will be important to the success of this plan. As the City's current sources of funding are not adequate for the implementation of this plan, new sources of funding will need to be identified and developed.

This section reviews current and alternative funding mechanisms that are used by the City and need to be enhanced to cover aspects of this plan. New alternative funding sources that are not used by the City are also described, along with suggestions for how they can contribute to the implementation of this plan.

#### ***Funding Mechanisms Currently Used***

These funding mechanisms are already available to the City and used in some form. The utility of some of these mechanisms could be extended or modified to support the goals and policies of the Plan.

### Regional Transportation Commission

The RTC receives regional road impact fees collected on behalf for construction of “regional roadways” – those carrying more than 5,000 trips per day or roads that cross jurisdictions or major geographic barriers. Under RTC regulations, new regional roadways must provide for bicycle circulation in the form of shared-use trails or bike lanes. RTC impact fees do not affect local and neighborhood road improvements. RTC fees also include a 9% flat fuel tax fee.

### City of Reno Street Rehabilitation Program

The City allocates funding to neighborhood street repairs and maintenance through its street rehabilitation program. Streets that have been identified by the City as needing reconstruction (repairs down to and including the base) or surface patching and overlays are also good candidates for bicycle improvements, such as lane striping. Bicycle improvements listed in this document should be included in this street rehabilitation program and included in the budget.

### General Fund Allocations

The General Fund is a likely source of funding for ongoing operations and maintenance for open space and trails, as well as other capital improvements. General Fund allocations should be increased to fund the additional operations and maintenance costs associated with implementation of the Plan.

### Residential Construction Tax (RCT)

Residential Construction Tax is currently used to purchase and develop park land and has been a limited funding source due to the cost of land purchase. Currently appropriate level of service standards for the overall park system in the areas of equity and service radius has not been achieved, with this in mind staff does not recommend this funding source as a viable option for funding this plan.

## ***Potential Funding Mechanisms***

### State of Nevada Bond for Open Space

Nevada voters passed Question 1 in 2002 to issue general obligation bonds “... to preserve water quality; protect open space, lakes, rivers, wetlands, and wildlife habitat; and restore and improve parks, recreational areas, and historic and cultural resources.” Funds are distributed by the Nevada Division of State Lands as grants to local agencies and municipalities.

### Voter-Approved Property Tax

Another potential source of revenues that could be approved by Reno residents is an additional property tax increment. This could be used to fund acquisition of open space and trails, as well as for ongoing operation and maintenance.

### Impact Fees

Impact fees are typically levied on new development to fund the extension of services. To the degree allowed by NRS 278B, the City should consider the application of impact fees to all residential development, and adding impact fees to commercial, office, and industrial development to fund the construction of bikeways, trails, and access facilities on these properties that connect them to the city-wide non-motorized system.

### Local/Project Specific Funding

Community Facilities or Local Improvement Districts are specified areas that are empowered to levy fees for internal improvements. Local Improvement Districts can be used to fund improvements to specific areas, such as existing master planned communities or redevelopment areas.

### Redevelopment Districts

The City has several Redevelopment Districts with funding that could be used for open space improvements, especially in the Downtown area for improvements to the Truckee River. Likewise, as part of the ReTRAC project the City has acquired certain properties adjacent to the Union Pacific Railroad corridor through the downtown, and has some funding available that could be used for open space improvements.

### In Lieu Fees

In addition to requiring the developer to pay into the residential construction tax, which funds programmable parks, the City should also develop criteria for requiring developers to build trails and paths to City standards by charging in lieu fees. These fees could be deposited in an account administered by the City to be used on behalf of open space and greenway improvements. This option would need to be further researched and could possibly require legislative change.

### Conservation Areas on Private Property

Since it is likely that much of the available open space in the Reno SOI will remain in private hands, it will be important to offer incentives, such as density bonuses or reduced processing requirements, to property owners and developers to encourage them to allow the creation of open space areas on their property.

### Nevada Landowner Incentive Program

A federally funded competitive grant program administered by the Nevada Department of Wildlife should be pursued to establish positive working relationships with Nevada landowners to maintain or increase healthy wildlife habitats on private property that supports sensitive species.

### Community Foundation of Western Nevada

The foundation administers more than 100 separate philanthropic funds whose donors range from private individuals to local corporate and non-profit sources. Some of these funds are unrestricted community funds and some should be suitable for the preservation of open space in the Reno area, including those that have goals such as Truckee River preservation.

## **Partnership Agencies and Organizations**

A number of public agencies and volunteer organizations listed in this section have contributed to the development of this Plan, and will continue to be critical to its successful implementation.

### ***Government Agencies and Entities***

Many federal, state, and local agencies can contribute to the success of this plan, including:

Bureau of Land Management	Sparks, City of
Desert Research Institute	Truckee Meadows Water Authority
Nevada Department of Transportation	U.S. Army Corps of Engineers
Nevada Department of Natural Resources	Nevada Partners in Flight
Nevada Department of Wildlife	U.S. Forest Service
Nevada Division of State Parks	University of Nevada
Regional Transportation Commission	Academy for the Environment
Reno-Sparks Convention and Visitors Authority	Cooperative Extension
Reno/Sparks Indian Colony	Great Basin Institute
U.S. Fish and Wildlife Service	Washoe County Washoe-Storey Conservation District

### ***Conservation Organizations***

Land trusts are often critical intermediaries in the open space acquisition process. There are several land trusts actively operating in the Reno area, including:

American Land Conservancy	Nevada Land Conservancy
The Nature Conservancy	

## ***Local Volunteer Organizations***

The members of numerous local organizations have volunteered their time and expertise to such tasks as constructing and maintaining trails, clean-up of open space areas, carrying out wildlife inventories, banding wild birds, and so forth. These volunteer groups can continue to be valuable partners in open space management. The City's Parks, Recreation and Community Services Department could implement outreach and education programs that target volunteers willing to contribute their efforts to public open space. Some of the groups that have contributed in the past include:

Keep Truckee Meadows Beautiful  
Lahontan Audubon Society  
Nevada Conservation Corps  
Nevada Wetlands  
Procrastinating Pedalers  
Scenic Nevada

Sierra Club  
Silver State Striders  
Swan Lake Advisory Board  
Tahoe Pyramid Bikeway  
Truckee Meadows Trail Association

## **Land Acquisition**

### Liability and Public Safety

One of the disincentives for private property owners to dedicate easements for public use is concern about liability. Nevada has a Recreational Use Statute (NRS 41.510) that limits the liability of private property owners who make their land available for recreational uses. Under this law, landowners have no duty to keep their lands safe or give assurance of the safety of their lands for recreational use.

This law is a useful tool for the City as it seeks to develop easements across private lands or otherwise develop agreements with private landowners for the public recreational use of private lands. The City may wish to supplement this law with its own regulations. The City may also wish to reinforce the law with additional signage at access points to private lands that reminds users of these limits on liability – similar to signage that has been installed at Wingfield Park, which is City property.

### Prioritization of Donated Land

The criteria developed in this plan should be used for prioritizing open space acquisition and disposal. The City upon adoption of the plan will use and supplement these criteria, as necessary, to determine whether gifts of land should be kept as open space, or may be sold to acquire additional open space.

### Title Transfer

The City will develop standards for title transfer to make the process as easy as possible to encourage residents to donate land in accordance with the legislative mandates of Assembly Bill No. 312, as amended by Senate Bill No. 394 of the 73rd Session of the Nevada Legislature, as amended. The City should also develop standards for public use easements of private land.

### **Maintenance**

The maintenance of any Open Spaces or Greenways will be addressed after plan adoption through internal procedure. Some specific standards were developed during the Open Space and Greenways planning process in conjunction with the staff's of other agencies in the region.

## **APPENDIX A - TRAIL AND BIKEWAY STANDARDS**

This plan provides definitions and standards for trails, bikeways, and roadway crossings. These standards meet or exceed other approved standards in the Truckee Meadows, including RTC's bikeway standards and Washoe County's bikeway and pedestrian standards.

Proposed locations have been included with each standard; however, these preliminary recommendations do not exhaust the potential application of these standards, which should be applied to new improvements as appropriate.

### **Shared-Use Trail**

Shared-use trails (also known as Class I trails) could serve as the backbone of Reno's citywide trail system. Local access trails can provide access to longer shared-use trails linking regional destinations. Primary shared-use trails should be constructed as north/south and east/west spines and a perimeter ring system.

#### **Physical Components/Amenities**

- Physically separated from adjacent roadway or follows independent alignment
- Paved or unimproved, if meeting ADA requirements
- Wide, soft shoulders or separate trails for equestrians
- Lighting, furniture, benches, trash receptacles in urban locations
- Fencing, where appropriate

#### **Potential Locations**

- Steamboat Creek
- North Virginia Street
- Truckee River

### **Bicycle Lanes**

Bicycle lanes (also known as Class II bikeways) follow major roadways and serve both local and regional users and destinations. Bike lanes are typically distinguished by 6-foot striped bicycle lanes, marked by a 6-inch white stripe, pavement markings, and signage. The width of bicycle lanes can be modified to reflect the volume and speed of vehicles on the roadway and the anticipated number of non-motorized users.

Some arterial and collector streets can accommodate a shared-use trail on one side of the roadway and on-street bicycle lanes on both sides of the street for commuter cyclists. The trail provides a comfortable walking space for pedestrians and enables children and recreational bicyclists to ride without the discomfort of riding on a busy

street. This configuration works best along roadways with limited driveway crossings and services primarily located on one side of the street.

### **Physical Components/Amenities**

- Striped bicycle lanes (on roadways with more than 3,000 vehicles per day)
- Landscape buffers, where possible

### **Some Potential Locations for Bike Lanes**

- Mayberry Drive
- Plumb Lane
- Peckham Lane
- Plumas Street

## **Bicycle Route**

Bicycle routes (also known as Class III bikeways) are located on streets with low vehicle speeds and traffic volumes (collector and local streets) and serve local users and destinations. The low traffic volumes and speeds enable bicyclists to safely share the road with motorists. The route width should depend on the traffic volume and speed on the adjacent roadway. Bicycle routes should include signage warning motorists to share the road with bicyclists.

### **Potential Locations**

- Idlewild Drive

### **Physical Components/Amenities**

- Directional and informational signage
- Landscape buffers where possible

## **Urban Bicycle/Pedestrian Street**

Urban bicycle/pedestrian streets are intended to enhance non-motorized transportation on urbanized streets with commercial uses and the potential for high residential densities. These streets are intended to support the City's goals for transit oriented development.

Urban bicycle/pedestrian streets include bicycle lanes, sidewalks with landscape buffers, curb extensions to reduce pedestrian crossing distances, pedestrian-scaled ornamental lighting, and street furniture. Urban bicycle/pedestrian streets along fixed transit routes also have enhanced transit stop amenities such as bus shelters, benches, posted maps and schedules, and trash receptacles. These amenities could be added to several existing streets to increase the attractiveness of bicycling and walking.

### **Physical Components/Amenities**

- Bicycle lanes
- Sidewalks with landscape buffers
- Curb extensions (bulb-outs)
- Ornamental lighting
- Street trees
- Street furniture
- Enhanced transit stop amenities

### **Locations**

- Fourth Street
- California Street
- Virginia Street
- Wells Avenue
- Virginia Street
- Mill Street

## **Neighborhood Connector Path**

Neighborhood connector paths provide direct connections for trail users to local destinations. These facilities should be located in all new subdivisions, and any new commercial, office, or industrial development over 10 acres in size.

### **Physical Components/Amenities**

- Paved asphalt surface
- Slopes not exceeding 5 percent
- Lighting

### **Potential Locations**

- Existing neighborhoods, as needed
- New residential, commercial, office, and industrial development

## **Earthen Trail**

Earthen trails can vary in width depending on existing topographic and environmental constraints. Design should take into account issues like drainage, erosion, slope, presence of waterways, vegetation, riparian and habitat areas, environmental requirements and regulations, among other considerations. Areas with earthen trails should have a connecting shared-use path, bike lane, or bike route that meets or exceeds ADA standards and provides access to the multi-purpose trail. Trail width depends on the intended users.

### **Physical Components/Amenities**

- Granular stone surface or cleared native material
- Clear passage through vegetation
- Signage

### **Potential Locations**

- Steamboat Ditch
- Highland Ditch
- Peavine Peak Trails
- Virginia Foothills Trails
- North Playas Loops

## **Water Trail**

The Truckee River has become a true water trails throughout the city center. The river should be maintained as a water corridor dedicated to activities augmented with special features like small craft boat ramps, interpretive areas, and public beach sites for camping and picnicking. The intent of the water trail is to create awareness, preserve public access to the waterway, and provide a natural experience. It also provides an excellent opportunity for viewing open space without any negative impacts.

### ***Physical Components/Amenities***

- Trailhead (parking, interpretive area, small craft boat ramp)

### ***Potential Locations***

- Truckee River

## **Access Points and Trailhead**

Good access to the trail system is a key element for its success. Access points serve local neighborhoods by providing entry to local trails, marked by signage, but without parking facilities. Minor trailheads include parking areas and serve the local and

regional population reaching the trail system by car or public transit. Major trailheads also provide parking and offer additional amenities like parking for bicycles and horse trailers, signage for trail users, and restrooms.

### **Physical Components/Amenities**

- Signage and maps
- Parking
- Restrooms (at major trailheads)
- Landscaping

### **Potential Locations**

- Hunter Creek
- Thomas Creek
- Rosewood Wash
- Peavine Peak (north and south)
- North Valleys Playas
- Steamboat Creek

## **Type I Shared-Use Trail Roadway Crossing**

Type I roadway crossings are unprotected (without signals or grade-separation), and consist of a crosswalk and varying levels of signage. The design of mid-block crossings depends on vehicular traffic, sight distance, trail user traffic patterns, vehicle speed, road type and width, and other safety issues such as proximity to schools. Care should be taken to prevent vegetation and other obstacles from blocking the sight lines of motorists and trail users. Engineering studies should be conducted to determine the appropriate level of traffic control and design at each location.

### **Physical Components/Amenities**

- Crosswalks and warning signs to alert motorists on two-lane residential and collector streets below 15,000 average daily trips and where average vehicle speeds are 35 miles per hour or less
- Stop signs and slowing techniques (bollards, geometry) on the trail approach
- Raised crosswalks (on roadways with less than 12,000 ADT where traffic speeds need to be reduced)
- Flashing beacons to alert motorists (to supplement warning signs where appropriate)
- Curb cuts and ramps, as necessary
- Pedestrian-activated signals at major crossings, such as McCarran Boulevard

## **Potential Locations**

- Citywide

## **Type 2 Roadway Crossing**

Type 2 roadway crossings use existing signalized crossings when they are within close proximity to a trail. Trails meeting roadways within 250 feet of an existing signalized intersection with pedestrian crosswalks are typically diverted to the signalized intersection for safety purposes.

For this option to be effective, barriers and signage may be needed to direct trail users to the signalized crossings. In most cases, signal modifications should be made to add pedestrian detection and to comply with ADA requirements.

### **Physical Components/Amenities**

- Barriers to discourage crossings where trail meets roadway
- Signage to direct trail users to signalized intersection
- Marked crosswalks at signalized intersection
- Curb ramps at signalized intersection
- Pedestrian activation buttons at signalized intersection

## **Potential Locations**

- Citywide

## **Type 3 Roadway Crossing**

Type 3 roadway crossings are new signalized crossings installed for the specific use of trail users. The need for a Type 3 crossing is based on several variables, including existing traffic volumes, vehicle speeds, and trail proximity to existing signalized intersections. Each crossing, regardless of traffic speed or volume, requires additional review by a registered engineer to identify sight distance, potential impacts on traffic progression, timing with adjacent signals, capacity, and safety.

Trail signals are normally activated by push buttons, but may also be triggered by motion detectors. The signals may rest on flashing yellow or green for motorists when not activated, and should be supplemented by standard advanced warning signs.

### **Physical Components/Amenities**

- Traffic signal
- Pedestrian activation buttons
- Marked crosswalk
- Warning signs to alert motorists and trail users

## **Potential Locations**

- Citywide

## **Type 4 Trail/Roadway Crossing**

Type 4 trail/roadway crossings consist of grade-separated crossings. The need for grade-separated crossings is generally based on observed vehicle speeds and traffic volumes, although other factors like street width can be considered. This is the preferred crossing for major thoroughfares, such as freeways.

Although user safety is sometimes a concern with Type 4 crossings, design and operation measures are available and can include lighting and good visibility for the crossing's entire length.

### **Physical Components/Amenities**

- Access ramps meeting ADA requirements
- Lighting
- Emergency phones (if appropriate)

### **Potential Locations**

- I-80
- US 395
- Other streets with high vehicle speeds and volumes

## **APPENDIX B – SECONDARY PRIORITIES**

### **Secondary Open Space Priorities**

These potential projects were also identified during the planning process by the public. However, they are ranked lower on the basis of the identified criteria used to rank the priority areas described in the beginning of the section.

**Table 2.1 Secondary Open Space Priorities**

Action	Ease of Implementation	Watershed Function	Habitat Value	Equity
Open Space Corridor between Petersen Range and Peavine Peak	Moderate	Low	High	High
Interface properties at Mount Rose base	Low	High	High	Moderate
Expand Truckee River open space corridor	Moderate	Moderate	High	High
Identify Urban Open Space in the Redevelopment Areas	Moderate	Low	Low	High
Unnamed Wash north of Rosewood Wash	Moderate	High	High	Low
Protect corridors to Virginia Foothills (connect Washoe/Storey Counties)	Moderate	Moderate	Moderate	Moderate
Fill open space gaps along Thomas Creek corridor	Moderate	Moderate	Moderate	High






### **Secondary Trail, Bikeway, and Trailhead Priorities**


The potential projects below were also identified during the Open Space Working Group and public meetings as areas of interest for trails. After the public meeting held to rank trail priorities these were ranked lower. They should still be examined during any development in the areas and for the future planning.

**Table 3.3 Secondary Trail Priorities**

Action	Ease of Implementation	Access	Connectivity	Equity
Complete Gaps in Tahoe-Pyramid Trail	Low	High	High	High
Connection to Peavine Peak via Kings Row Drainageway	High	Moderate	Moderate	Moderate
Connection to Peavine Peak via Kings Row Drainageway	High	Moderate	Moderate	Moderate
California Street Urban Pedestrian Street	Moderate	High	Moderate	High
Virginia Street Urban Pedestrian Street	Moderate	High	High	High
Trail Access and Connections along Steamboat Ditch and Mount Rose base	Low	Moderate	Moderate	Moderate
Bike lanes on Mayberry Drive (Hunter Lake to W. 4 <sup>th</sup> Street)	High	High	Moderate	Moderate
Access to Virginia Foothills from South Meadows	Moderate	Moderate	Low	Moderate
Shared use trail adjacent to Western Skies Drive and Rio Wrangler Parkway, from SR 341 to Desert Way	Moderate	Moderate	Moderate	Moderate
Earthen Trail along lower reaches of White's Creek	Moderate	Moderate	High	Moderate

## **Appendix C - Glossary**

<p><b><i>Bike Lane</i></b></p>		<p>Also referred to as a Class II bikeway, a bike lane is a portion of a roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists.</p>
<p><b><i>Bike Route</i></b></p>		<p>Also referred to as a Class III bikeway, a bicycle route is a right-of-way usually shared with automobiles and designated with appropriate “bike route” directional and information signs.</p>
<p><b><i>Earthen Trail</i></b></p>		<p>Unimproved route on land with protected status and public access for recreation purposes such as walking, jogging, motorcycling, hiking, bicycling, off-road-vehicle riding, horseback riding, mountain biking, and backpacking.</p>
<p><b><i>Greenway</i></b></p>		<p>A linear open space established along a corridor such as a river, stream, ridgeline, railway, canal, or other route for conservation, recreation, or alternative transportation purposes. Greenways can connect parks, major drainage ways, nature preserves, cultural facilities, and historic sites with commercial and residential areas.</p>
<p><b><i>Neighborhood Connector Path</i></b></p>		<p>A temporary or permanent path that may be granular or paved. A path typically indicates the common route taken by pedestrians between two locations.</p>

<p><b><i>Open Space</i></b></p>		<p>Property that is generally undeveloped and remains in a natural state. Open space provides native plant and wildlife habitat, recreational opportunities, and enhances the scenic character of the region. May or may not be open to public access, as some sensitive environments or hazardous areas can be inappropriate for access or development. May be publicly or privately owned and managed.</p>
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## **Appendix D - Rare Plant Species**

A number of rare plant and insect species can be found in the Reno SOI, primarily around the City's mountainous perimeter. Concentrations of rare plants and insects are located at the base of Peavine Peak, in the Steamboat geothermal area, and in the foothills of the Carson Range, as described below. The precise location of these plants has been mapped by the Nevada Natural Heritage Program, which can provide this information to the City on request.

The Steamboat geothermal area has several rare plants, including the Steamboat Buckwheat, which is found nowhere else; the Steamboat Monkey Flower, which has only been inventoried at this site and on Peavine Mountain, but may occur to the south in Carson City in similar habitats; and the Altered Andesite Buckwheat species. The Steamboat Buckwheat is listed under the Endangered Species Act (ESA) as endangered and is also fully protected by the State of Nevada.

The unique altered andesite formations which occur on the lower slopes of Peavine and in the surrounding hills (i.e. the Virginia Range near Truckee Meadows Community College) also host rare endemic plants. These sites tend to be very acidic, often precluding the establishment of other plants except for certain pine species. These sites are also the reason certain pines occur on lower than normal elevations, particularly on Peavine. The Altered Andesite Buckwheat and Altered Andesite Popcorn Flower occur within and adjacent to Reno's SOI, as well as in Storey County. The Altered Andesite Buckwheat, mentioned above, occurs in other unique locations, presumably due to the restrictive nature of the parent soils. While these plants are very limited in their range, occurring only in Washoe and Storey Counties, neither of these plants have designations under the ESA or the State. However the Nevada Native Plant Society (NNPS) has these plants on watch lists in an attempt to monitor potential threats to these populations. The City's SOI creates a significant risk of loss to these populations, threatening the viability of the entire population of these plants.

A rare butterfly, the Peavine Blue, is limited in its range to the lower northern slopes of Peavine. This butterfly depends on buckwheat plants found in the sagebrush community in the area.

The following plants are not endemic to Nevada, as they also occur in California; however their range is quite limited in Nevada. Webber Ivesia occurs along the northwest flanks of Peavine and along the foothills of the Carson Range in moister areas with high shrink-swell clays derived from andesite. Lemmon's clover also occurs on the northeast flanks of Peavine and until recently was thought as only occurring in

California. The extent of this plant is unknown within the Reno SOI, as well as within Washoe County. Lemmon's Clover currently has no status with the state or NNPS. The extent of the plant is quite limited as there are only a handful of known populations of this plant in Nevada. Webber Ivesia is currently recommended by NNPS for full protection by the State, is considered threatened by NNPS, and is a candidate species under the ESA.

All of these plants fall within areas that are ranked as high priority conservation sites by the NNHP in their Draft *2005 Score Card of Highest Priority Conservation Sites for Nevada*. According to NNHP these sites are defined as a landscape unit defined by occurrences of at-risk species that are appropriately managed as a unit based on common biological, land-ownership, and conservation-planning criteria. Sites which are most at risk are deemed highest-priority conservation sites where these sites need further protection or better land management in order to prevent these at-risk species from become further imperiled, threatened, endangered, or extinct.

# HISTORIC PLAN



## **ACKNOWLEDGEMENTS**

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Sharon Zadra, Ward Two

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Adopted by City Council on November 7, 2012

# **TABLE OF CONTENTS**

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## **Introduction**

Location .....	1
Plan Development.....	1
Purpose .....	1
Vision .....	1

## **Goals, Policies and Action**

Goal 1 .....	2
Goal 2 .....	2
Goal 3 .....	3

## **Registers**..... 4

City of Reno Register of Historic Places .....	4
State of Nevada Register of Historic Places .....	4
Federal Register .....	4

## **Districts**

Historic Districts .....	5
Conservation Districts .....	5
Powning Conservation District.....	6
Wells Avenue Neighborhood Conservation District .....	7

## **Appendixes**

Appendix A – Glossary of Terms .....	10
Appendix B - Groups and Organizations.....	14

# **INTRODUCTION**

## **Location**

The Historic Plan was developed to address all parcels in the City of Reno including parcels in the sphere of influence (SOI).

## **Plan Development**

In 2006, the City of Reno began working in cooperation with the Historical Resources Commission (HRC) to establish city-wide historic policies. The Historic Plan was developed through a lengthy public involvement process including meetings with a working group of stakeholders. Goals were developed which are supported with policies and actions to further establish and maintain the City of Reno's historic resources, i.e. buildings, sites, structures, objects etc.

## **Purpose**

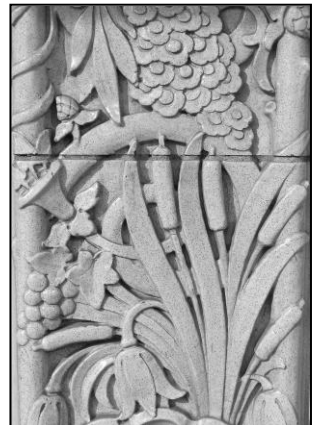
The key concept of the Plan is to develop mechanisms to identify buildings, sites, structures, or objects that are prehistoric or historic and are listed or are eligible for listing on the National, State, or City Registers of Historic Places and to raise community awareness of historic resources. The historic resources range in architectural styles throughout the City, from Queen Anne and Bungalow to Commercial and Art Deco and include structures such as the Virginia Street Bridge, as well as landscapes and streetscapes, such as mature trees, landscaping and street widths. These historic resources exemplify and reflect cultural values and economic, political, and architecture history of Reno, working together to create a historic framework of Reno's sense of place.

The need for a historic plan is also provided in NRS 278.160(d), which states that the "master plan may include a historic properties preservation plan." Specific criteria for historic properties preservation plan includes "an inventory of significant historical, archaeological, and architectural properties and a statement of methods to encourage the preservation of those properties."

## **Vision Statement**

*Identify, recognize, and encourage the preservation of Reno's historic resources that include historic buildings, structures, objects, neighborhoods, emigrant trails and highways, archeological sites, and landscapes in an effort to foster civic and neighborhood pride so that future generations will have the opportunity to appreciate and understand Reno's unique cultural heritage.*

This vision statement was created to establish the key principles for this Plan and to allow this Plan to serve as the primary document for the protection, maintenance, and acquisition of historic resources within the City of Reno.



## **GOALS, POLICIES, AND ACTION**

Reno has a variety of architectural styles, significant historical routes, and unique structures spread throughout its boundaries. The diversity and widespread location of historic resources makes preservation a challenge in our community. Specific goals, policies, and actions have been developed to facilitate and address the historical concerns. The overarching goals are tied to supporting policies and specific actions. The policy amplifies the goal statement and the action provides a more specific description of proposed implementation of the action. City staff will work with the HRC to monitor and implement the following goals, policies, and actions. The need for additional staff, with education and experience in historic preservation, should be reviewed in the future so historic resources are maintained in the City.

### **Goal 1: The City should identify, recognize, and increase historic resources**

**Policy 1.1:** Historic resources should be identified to preserve and to protect and to increase public awareness of historic resources in the City of Reno.

**Action 1.1:** The *Historical Resources Commission Survey* should be updated, as needed and as directed by the HRC, to identify properties that are or will reach the 50 year status within the next two decades.

**Policy 1.2:** Increase the number of properties and landmarks on the city, state, and national registers that are within the City and sphere of influence.

**Action 1.2:** Identified historic properties' owners should be contacted and notified of their property's historic status. The requirements of the city, state, and/or national registers should be explained and property owners should be encouraged to register their property.

**Policy 1.3:** Recognized historic resources should be acknowledged and mechanisms developed to preserve all historic resources within the City of Reno.

**Action 1.3:** A program should be established to recognize, list, maintain, and rehabilitate historic properties and landmarks.



## Goal 2: The City should strive to protect historic resources

**Policy 2.1:** Historic characteristics should be respected and maintained when possible and new development should demonstrate an effort to retain the historic character throughout the City.



**Action 2.1:** Guidelines should be established to address modifications to historic properties, to maintain and preserve overall character, architectural styles, and preserve a sense of place. Any new construction should preserve the historic character of the area and neighborhood character and design should be maintained. The guidelines should include building in context to the surrounding area through building scale and density, landscaping, signage, building material, etc.

**Policy 2.2:** An incentive program should be developed for property owners to maintain and protect historic resources.

**Action 2.2:** A variety of tools and/or mechanisms should be developed to provide incentives or funds to ensure historic preservation.

## Goal 3: Districts should be establish throughout the city to preserve and maintain historic resources

**Policy 3.1:** Historic and conservation districts should be encouraged where historic resources are located.

**Action 3.1:** Historic and conservation districts guidelines should be developed.



## **REGISTERS**

### **City of Reno Register of Historic Places**

The City of Reno Register of Historic Places was established along with Reno's historic preservation ordinance in 1993. The body that administers the City Register and the City's preservation ordinance is the HRC. The purpose of the City Register is to recognize and honor buildings and sites that are important to Reno's history and to our sense of community. The preservation ordinance recognizes the importance of maintaining our historic character, so the City Register carries with it minimal requirements, which pertain only to exterior modifications. Exterior modifications involving



substantial change to buildings listed in the City Register of

Historic Places require a Certificate of Appropriateness approved by the HRC before a building permit is issued. The intent of these regulations is to insure that buildings, structures, or districts on the Register shall be in harmony with their surroundings. It is not the intention of these regulations to require the reconstruction or demolition of individual or original buildings, to prohibit the demolition or removal of such buildings, or to impose architectural styles from particular historic periods



### **State of Nevada Register of Historic Places**

The State of Nevada has a State Register of Historic Places that was created by the state legislature in 1979. The State Historic Preservation Office (SHPO) administers the State Register. The State Register recognizes and honors designated property and does not place any requirements or restrictions on the property.

### **National Register**

The National Register was established in 1966 with the passage of the National Historic Preservation Act (NHPA). The NHPA came out of national concern over the effects of major highway-building and post-war development on the historic fabric of our country. The National Register is intended to recognize and honor properties, specifically sites, districts, buildings, structures, and objects, that are significant in local, state, and/or national history. The NHPA also guides federal agencies to consider the effects of their activities on historic resources. Private property owners listed in the National Register does not place any conditions or restrictions on the property. The recognition can bring benefits in the form of rehabilitation tax credits and federal and state preservation grants.

## **DISTRICTS**

The establishment of districts throughout the city increases public awareness, education, and visibility of Reno's historic resources and brings greater appreciation of the resources. These districts have the potential to create a greater sense of community and to create economic benefits for the area especially when linked with other areas and/or programs.

When and where Reno's unique architectural structures have been built make the tasks of identifying and creating specific protected areas difficult. However, there are neighborhoods that have either consistency in architectural styles or a specific design/layout. These historic resource areas have been previously recognized as: Downtown, Newlands, Plumas, Ralston, Wells, and the West University. These areas are not officially designated as historic or conservation districts; however this Plan encourages the development of districts and these areas and other areas should be reviewed to see if any are viable as either a historic or conservation district.

### **Historic Districts**

Historic Districts are definable geographical areas that contain a number of related historic sites, buildings, structures, features, or objects united by past events or aesthetically by plan or physical development, and have been designated on a local, state, or national register or historic places. The District may encompass a neighborhood or may comprise of individual elements separated geographically but linked by association or history. Districts can include but are not limited to architecture styles, neighborhood design, locations of historical significance, or clustering of structures of importance. Creating historic districts brings a sense of community and pride to the neighborhood or area that is designated. Districts bring public awareness and interest to an area of historical importance and significance. Districts have the potential to be an economic benefit to the designated area, protect values of property, and bring localized and regional tourism to the area. Historic districts are regulatory by nature and require acceptance by property owners prior to establishment.

### **Conservation Districts**

A conservation district provides for a method of achieving preservation without regulations of a traditional historic district approach. A conservation district can include historic resources that share a similar form, character, unique elements and/or visual qualities derived from a combination of topography, vegetation, space, scenic vistas, architecture, unique features, or places of natural or cultural significance, that create a district which exhibits stability, livability, and specific identity.

A conservation district is designated through the establishment of precise boundaries and is non-regulatory. The designation does not impose on property owners any regulatory requirements other than those currently required through zoning. The Historic Plan establishes the conservation district and no other ordinance is required. Conservation districts will provide educational opportunities to residents and property owners. Information

on what makes the conservation district unique and how to best preserve and enhance their appearance should be addressed through specific guidelines for each conservation district.

A comprehensive survey of the conservation district should be conducted to identify elements which make the conservation district a unique stand-alone area. Simple design changes to the right-of-way including signage, lighting, corner monuments, street signs, etc. can give the conservation district a cohesive feel, while maintaining individual property rights. Street signs, entrance markers, and other types of identifiers will facilitate this process. By identifying each area, conservation districts will be distinct and foster a sense of community belonging.

### **Powning Conservation District**

The first designated conservation district located in the City of Reno is the Powning Conservation District. The Powning Addition was established by C. C. Powning in the 1880's. The earliest buildings were modest in size and were typically working-class homes, however significant buildings are now found in the area designed by well-known architects. Some of the buildings in the area include the McKinley Park School, Lora J. Knight House, Ginocchio Craftsman style home, Lear Theater (First Church of Christ, Scientist), Ambassador Apartments, 20th Century Club and a Hewitt Wells designed contemporary office building.



To distinguish the area as the Powning Conservation District, distinct and unique standards should be developed for signage, lighting, street signs, and other unique amenities, including corner monuments, entrance markers, and other types of identifiers. These standards will be developed under the direction of the City Council as funds become available. HRC and City staff should develop informational guidelines to maintain the character of the area and address future developments.

The Powning Conservation District includes parcels north of the Truckee River, south of parcels that front Second Street, west of Arlington Avenue, and east of Keystone Avenue. The District boundary is shown below.



**Wells Avenue Neighborhood Conservation District**

The second designated conservation district located in the City of Reno is the Wells Avenue Neighborhood Conservation District. After the death of Sheldon O. Wells in 1900, his son-in-law Samuel Wheeler managed Wells' estate. In 1905, Sheldon O. Wells' estate was approved to be subdivided into the Wells Addition. With the Wells Addition came Wells Avenue, which established the eastern boundary of Reno and also



*Reid's Cash Grocery Store,  
Wells Avenue at Moran Street*

extended Cheney Street as its southern boundary. In 1909, trolley service was extended to the area, increasing access and providing a connection for residents of the Wells Avenue Neighborhood to other parts of Reno.



*137 Burns Street, in the Wells Avenue Neighborhood Conservation District*

Many of the residences in the area pre-date the mid 1940's and are characteristic of the time period in which they were constructed. Since the Virginia and Truckee Railroad bordered the Wells Addition to the west, the area fostered a unique character which includes an eclectic mixture of vernacular architectural styles that span several decades. The different architectural styles include Queen Anne Revival, craftsman type Bungalows made of brick and cut rock, Minimal Traditional, and Ranch styles.

The area experienced a rapid change from primarily residential use to becoming a commercial corridor with the emergence of the Lincoln Highway, a transcontinental highway that was connected to Wells Avenue. The increased demand for services that was created by the Lincoln Highway travelers resulted in the conversion of former residences to commercial uses and new commercial development.

To distinguish the area as the Wells Avenue Neighborhood Conservation District, distinct standards should be developed for signage, lighting, street signs, and other identifiers including, but not limited to, corner monuments and entrance markers. These standards will be developed under the direction of the City Council as funds become available. Information guidelines should be developed to maintain the character of the area and address future developments.

The Wells Avenue Neighborhood Conservation District includes the parcels located south of Ryland Street, north of Vassar Street, east of Holcomb Avenue, and west of Locust Street. The District boundary is shown below.

Wells Avenue Neighborhood Conservation District Boundary



## **APPENDIXES**

### **Appendix A – Glossary of Terms**

**Adaptive use**—the process of converting a building to a use other than that for which it was originally designed.

**Alteration**—any act or process that changes one or more of the exterior architectural features of a structure, including but not limited to the erection, construction, reconstruction, or removal of any structure.

**Archaeological site**—a location that has yielded or may yield information on history or prehistory, or that contains physical remains of the past. A place containing evidence of previous human activity that has been or can be investigated by an archaeologist.

**Architectural significance**—importance of a property based on physical aspects of its design, materials, form, style, or workmanship.

**Building**—a resource, such as a house, barn, store, hotel, factory, or warehouse that shelters some form of human activity.

**Certificate of Appropriateness**—a document awarded by a preservation commission or architectural review board allowing an applicant to proceed with a proposed alteration, demolition, or new construction in a designated area, district, or site, following a determination of the proposal's suitability to applicable criteria.

**Certified Local Government**—a local government that has met special requirements set by the State Historic Preservation Office and the National Park Service, and is eligible to receive 10 percent of the Historic Preservation Fund to finance local historic preservation activities.

**City Register of Historic Places**—established by ordinance 4313, the city register is a listing of properties important in the prehistory and history of the City of Reno.

**Conservation District**—is a geographically definable area that conveys a distinct character that demonstrates its history and development patterns.

**Construction**—the act of adding to an existing structure or the erection of a new principle or accessory structure on a lot.

**Contributing resource**—a building, site, structure, or object that adds to the historic significance of a property or district.

**Cultural resource**—structures, buildings, features (roads, ditches, bridges, etc.), and historic and prehistoric archaeological sites.

**Demolition**—the complete or constructive removal of any or part or whole of a building or structure upon any site when same will not be relocated to a new site.

**Design**—quality of integrity applying to the elements that create the physical form, plan, space, structure, and style of a property.

**Design Guidelines**—criteria developed by a preservation commission, board, or review body to identify design concerns in an area or historic district, and to help property owners ensure that rehabilitation and new construction respect the character of designated buildings or districts.

**Design review**—the process of ascertaining whether modifications to historic structures, sites, or districts meet standards of appropriateness established by a governing or advisory review board.

**Determination of eligibility**—an action through which the eligibility of a property for National, State, or City Register listing is confirmed without actual listing in a register.

**District**—a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

**Eligibility**—ability of a property to meet the National, State, or City Register criteria.

**Exterior architectural appearance**—the architectural character and general composition of the exterior of a structure, including but not limited to the kind and texture of the building material, and the type, design, and character of all windows, doors, landscape elements, light fixtures, signs, and appurtenant elements.

**Evaluation**—process by which the significance and integrity of a historic property are judged and eligibility for the National, State, or City Registers is determined.

**Historic**—related to the known or recorded past.

**Historic district**—a significant concentration or continuity of sites, buildings, structures, and or objects united historically or aesthetically by plan or physical development.

**Historic function**—use of a district, site, building, structure, or object at the time it attained historical significance.

**Historical Resources Commission**—the board of citizens created by City of Reno ordinance 4313, and charged with enforcing provisions of local laws governing historic districts and buildings.

**Historical significance**—the importance of an element, building, or site owing to its involvement with a significant event, person, or time period, or as an example of a past architectural style.

**Historic resource**—(or property) any prehistoric or historic district, building, site, structure, or object; specifically, any such resource that is listed in or eligible for listing in the National, State or City Registers of Historic Places.

**Historic survey**—a comprehensive survey or inventory involving the identification, research, and documentation of buildings, sites, and structures of any historical, cultural, archaeological, or architectural importance.

**Integrity**—the unimpaired authenticity of a property’s historic or prehistoric identity, evidenced by surviving physical characteristics.

**Inventory**—see historic survey.

**Landmark**—a designated building, site, or structure having historical, architectural, or archaeological significance.

**Landscape**—the whole of the exterior environment of a site, district, or region, including landforms, trees and plants, rivers and lakes, and the built environment.

**Listing**—the formal entry of a property in the National Register of Historic Places, the State Register of Historic Places, or the City Register of Historic Places.

**Mitigation**—any action taken to reduce environmental impact; methods include avoidance, documentation, or moving the affected building or structure.

**National Register of Historic Places**—the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

**Nomination**—an official proposal to list a historic resource in a historic register.

**Noncontributing**—a building, site, structure, or object that does not add to the historic significance of a property or district.

**Notification**—process through which property owners, public officials, and the general public are notified of nominations to, listings in, and determinations of eligibility for the National Register.

**Object**—a construction artistic in nature, or technologically significant, relatively small in scale, and simply constructed, such as a statue, train engine, or milepost.

**Ownership**—legal status in which an owner holds fee simple title to a property, or a portion of it.

**Physical characteristics**—visible and tangible attributes of a historic property or group of historic properties.

**Prehistoric**—related to the period before recorded history.

**Preservation**—generally, saving from destruction or deterioration old and historic buildings, sites, structures, and objects, and providing for their continued use by means of maintenance, restoration, rehabilitation, or adaptive use. Specifically, the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site.

**Property**—area of land containing a single historic resource or a group of resources, and constituting a single entry in the National Register, State Register, or City Register of Historic Places.

**Reconstruction**—the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or part thereof, as it appeared at a specific period of time.

**Rehabilitation**—the act or process of returning a property to a state of utility through repair or alteration that makes possible an efficient contemporary use while preserving those features of the property significant to its historical, architectural, and cultural values.

**Registration**—process by which a historic property is documented and nominated for listing in the National, State, or City Register of Historic Places.

**Removal**—any relocation of a structure on its site or to another site.

**Renovation**—modernization of an old or historic building that may produce inappropriate alterations or eliminate important features and details.

**Repair**—any change that is not construction, removal, or alteration.

**Resource**—any building, structure, site, or object that is part of or constitutes a historic property.

**Restoration**—the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of removal of later work or by the replacement of missing earlier work.

**Revitalization**—the imparting of new economic and community life in an existing neighborhood, area, or business district while at the same time preserving the original building stock and historic character.

**Setting**—quality of integrity applying to the physical environment of a historic property.

**Site**—location of a significant event, a prehistoric or historic occupation or activity, or building or structure, whether standing, ruined, or vanished, where the location itself possesses significance independent of the value of any existing structure at that location.

**State Register of Historic Places**—created by Chapter 383.085 of the Nevada Revised Statutes, the State Register is a listing of properties important in the prehistory and history of Nevada.

**Street furniture**—municipal equipment placed along streets, including light fixtures, fire hydrants, police and fire call boxes, signs, benches, and kiosks.

**Structure**—a functional resource constructed for purposes other than to provide shelter, such as a bridge, windmill, or silo.

**Note:** Words not defined above shall have the meaning commonly assigned to them. The reference for common meanings shall be the latest edition of Webster's *New World Dictionary-College Edition*.

## **Appendix B - Groups and Organizations**

The Reno community has many active historic preservation groups. These groups are important in the identification and preservation of the community's historic resources. They are also great resources for historic resource owners to learn more about researching and documenting the history of the resource.

The HRC has recently (2006/2007) published educational materials that include resource guides for historic resource owners wanting to list their resources, walking guides and maps for residents and visitors, and an new interactive website listing current resources and locations.

Community Development Department  
1 East First Street, 2<sup>nd</sup> floor  
P.O. Box 1900, City of Reno, NV 89505  
<http://reno.gov/index.aspx?page=87>

Historic Reno Preservation Society (HRPS)  
P. O. Box 14003  
Reno, NV 89507  
<http://historicreno.org/>

Historical Resources Commission  
c/o Claudia Hanson, HRC Liaison  
Community Development Department  
P.O. Box 1900, Reno, NV 89505  
(775) 334-2381

<http://www.reno.gov/hrc>

The Nevada Historical Society  
1650 North Virginia Street, Reno, NV 89557  
(775) 688-1190  
[www.Nevadaculture.org](http://www.Nevadaculture.org)

Getchell Library/322  
The University of Nevada Reno  
1664 North Virginia Street, Reno, NV 89557  
(775) 784-6500  
<http://www.library.unr.edu/>

The State of Nevada  
State Historic Preservation Office  
100 North Stewart Street, Carson City, NV 89710  
(775) 684-3448  
[www.Nevadaculture.org](http://www.Nevadaculture.org)

Washoe County Assessor's Office  
1001 East 9th Street, Reno, NV 89501  
(775) 328-2270  
<http://www.washoecounty.us/assessor>

Washoe County Library  
301 South Center Street, Reno, NV 89501  
(775) 785-4190  
<http://www.washoe.lib.nv.us/>

The University of Nevada, Reno  
Historic Preservation Program/096, Reno, NV 89557  
(775) 682-7524

## CENTER AND CORRIDOR PLANS

Center and corridor plans cover the regional centers and transit oriented development (TOD) corridors identified in the citywide Land Use Plan and the Truckee Meadows Regional Plan. These plans are listed below. The updated plans contained in this binder are shown in *italics*.

- *Downtown Reno Regional Center Plan*
- *Convention Regional Center Plan*
- *Medical Regional Center Plan*
- *Reno-Tahoe International Airport Regional Center Plan*
- *University of Nevada Regional Center Plan*
- *Dandini Regional Center Plan*
- *Reno-Stead Airport Regional Center Plan*
- *Redfield Regional Center Plan*
- Western Gateway Regional Center Plan (to be completed after October 2007)
- *South Virginia Street TOD Corridor Plan (includes Plumb Lane Crossing station area plan)*
- *North Virginia Street TOD Corridor Plan*
- *West Fourth Street TOD Corridor Plan (to be extended west from intersection with I 80 to Gold Ranch area after October 2007)*
- *East Fourth Street TOD Corridor Plan*
- *Mill Street Corridor Plan (includes River Landing at Mill station area plan)*