Flagstaff Regional Plan 2030: Place Matters

~~DRAFT For CAC Review~~DRAFT II

~~July 1, 2012~~February 2013

EDITED COPY INCORPORATING SUGGESTED EDITS AND UPDATED CHAPTERS
DECEMBER 21, 2012

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Acknowledgments

This plan was realized through the vigorous and dedicated effort of many people in our Greater Flagstaff community. The members of the Citizen Advisory Committee represented a broad spectrum of organizations and businesses, and citizens with a diversity of values and cultures. Their commitment will help us preserve and enhance what we value and move in a direction to revitalize our neighborhoods and create new livable environments based on the goals and policies contained in this plan.

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I. Vision, Scope, Guiding Principles, and Community Goals

A. Regional Plan Vision

The Greater Flagstaff community embraces the region's extraordinary cultural and ecological setting on the Colorado Plateau through active stewardship of the natural and built environments. Residents and visitors encourage and advance intellectual, environmental, social and economic vitality for today's citizens and future generations.

B. Scope of the Plan

The *Flagstaff Regional Plan* applies to the 525 square mile planning area that matches the Flagstaff Municipal Planning Organization (FMPO) area. It extends from Bellemont to Winona and from Kachina Village and Mountainaire to north of the San Francisco Peaks. While the Vision extends to the next 20 years, the goals and policies are intended to serve for the next 10 years. The *Plan* serves as the General Plan for the City of Flagstaff, and in the County areas works in conjunction with the *Coconino County Comprehensive Plan* and the community area plans. While the City and County have limited jurisdiction over federal lands managed by the U.S. Forest Service and National Park Service, the *Plan* includes policies that support the collaborative efforts necessary to protect the integrity of these lands.

C. Guiding Principles

To attain the vision and community goals of the *Flagstaff Regional Plan*, the *Plan* adopts the following guiding principles to promote future development :

1. ***Sustainability matters.*** Environmental, economic, cultural and social sustainability is fundamental to ensuring that present actions continue to be the basis for future health and prosperity.

2. ***The environment matters.*** Natural environmental health is inherent to individual and community health, and healthy ecosystems should be nurtured.

3. ***A smart and connected community matters.*** Smart land use and design based on cohesive communities are respectful of our environment and create efficiencies that benefit community health, social interaction, commerce and infrastructure.

4. ***Prosperity matters.*** Capitalizing on the innovative spirit that exists in the community will support the human, financial and capital infrastructure needed for a sustainable and diverse economy.

5. ***Place matters.*** Regional growth should occur in harmony with the community's historical character, unique cultural resources and its natural environment.

6. ***People matter.*** All residents should be assured equal opportunities for a range of choices in housing, employment, education, health, safety and devotion.

7. ***Trust and transparency matter.*** Regional community leaders, commerce and residents expect transparency, accountability and respect for each other in pursuit of our community vision.

8. ***Cooperation matters.*** Regional partnerships create a strong community while protecting the environment and achieving our common goals.

To attain the vision and community goals of the *Flagstaff Regional Plan*, the *Plan* adopts the following guiding principles to promote future development that:

1. **Embraces sustainability:** *Environmental, economic, cultural and social sustainability is fundamental to ensuring that present actions continue to be the basis for future health and prosperity.*
2. **Nurtures healthy ecosystems:** *Natural environmental health is inherent to individual and community health.*
3. **Pursues smart growth through quality development:** *Smart land use and design based upon cohesive communities are respectful of our environment and create efficiencies that benefit community health, social interaction, commerce, and infrastructure.*
4. **Promotes a resilient, year-round economy:** *Capitalizing on the innovative spirit that exists in the community supports the human, financial and capital infrastructure needed for a sustainable and diverse economy.*
5. **Preserves unique sense of place and community:** *Regional growth occurs in harmony with the community's historical character, unique cultural resources and its natural environment.*
6. **Assures social equity and opportunity:** *All residents should be assured equal opportunities for a range of choices in housing, employment, education, health, safety and devotion.*
7. **Expects and responds to an accountable and responsible community:** *Regional community leaders, commerce and residents expect nothing but best efforts by all, transparency and respect of each other in pursuit of our community vision.*
8. **Encourages partnerships:** *Regional partnerships are necessary to create a strong community while protecting the environment and achieving our common goals.*

D. Community Goals

The Greater Flagstaff community wishes to preserve the region's extraordinary cultural and ecological setting on the Colorado Plateau through active stewardship of the natural and built environments. This plan presents a regional context for the preservation and enhancement of community character and the natural environment while providing for appropriate growth and development. The goals, policies, and recommendations of the *Regional Plan* were, and should continue to be, developed through a coordinated regional planning effort that gives due consideration to local area plans of the communities that make up the region, including state and federal agency plans.

The *Flagstaff Regional Plan* is intended to guide future land use decisions in the City of Flagstaff and surrounding areas. The *Flagstaff Regional Plan's* objective is to present a comprehensive vision for the future of the area, as well as to provide guidance to help that vision become reality. The focus is on comprehensive planning to identify core issues and to create a plan of action focused on sustaining prudently growing our economy, preserving our environment, modernizing our energy systems, enhancing our neighborhoods, and providing convenient transportation choices, to ensure a high quality

of life. Addressing growth management issues in both urban and rural communities, as well as balancing ecosystem health with expected new growth and development, will ensure the desired balance.

The Flagstaff community, through numerous community meetings and working groups, has developed the following specific goals that are explained and expanded throughout this *Plan:*
[Replace list of goals once finalized and reference Appendix B for full list of goals, policies and strategies. Think about instead of a list, providing a general characterization of the types of goals for each element.]

~~**Energy (E):**~~

~~E.1 Increase Energy Efficiency~~

~~E.2 Expand production and use of renewable energy~~

~~**Environment & Conservation (E&C):**~~

~~E&C.1 Integrate the best available science about climate change and its projected regional effects into all policies governing the use and conservation of Flagstaff's natural resources, including development of adaptation strategies to promote sustainable use of energy, water, air, ecosystems, and wildlife for current and future generations.~~

~~E&C.2 Protect, improve and restore ecosystem health and maintain plant and animal community diversity across all land ownerships in the Flagstaff region.~~

~~E&C.3 Control populations of invasive noxious weeds, eradicate where possible, and prevent new infestations.~~

~~E&C.4 Protect indigenous and diverse wildlife populations, localized and larger-scale wildlife habitats, ecosystem processes, and wildlife movement areas throughout the planning area.~~

~~E&C.5 Preserve and enhance the natural qualities of environmentally-sensitive lands.~~

~~E&C.6 Protect soils through conservation practices.~~

~~E&C.7 Protect, preserve, and improve the quality of surface water and groundwater in the region for human health and environmental sustainability.~~

~~E&C.8 Proactively improve and maintain the region's air quality for continued compliance with National Air Ambience Quality Standards.~~

~~E&C.9 Preserve Dark Skies as a natural resource and as an important economic benefit and element of community character.~~

~~E&C.10 Maintain areas of natural quiet and reduce noise pollution.~~

~~Open Space (OS):~~

~~OS.1 The region will have a system of open lands, such as natural areas, wildlife corridors and habitat areas, trails, and greenways to support the natural environment that sustains our quality of life, cultural heritage, and ecosystem health.~~

~~Recreation (Rec):~~

~~Rec.1 The region will have a healthy system of convenient and accessible parks, recreation facilities, and trails.~~

~~Water Resources (WR):~~

~~WR.1 Maintain a sustainable water budget incorporating regional hydrology, ecosystem needs, and social and economic well-being.~~

~~WR.2 The City manages a coordinated system of water, wastewater, and reclaimed water utility service facilities and resources and identifies funding to pay for new resources.~~

~~WR.3 Satisfy current and future human water demands and the needs of the natural environment through sustainable and renewable water resources and strategic conservation measures.~~

~~WR.4 Avoid leap-frog development by logically enhancing and extending public water, wastewater, and reclaimed water services including their treatment, distribution, and collection systems in both urbanized and newly developed areas of the city.~~

~~Community Character (CC):~~

~~CC.1 New and remodeled buildings, public spaces, and landscaping will reflect the design traditions of Flagstaff.~~

~~CC.2 The built environment shall reflect and respect the region's natural setting and dramatic views.~~

~~CC.3 Support and promote art, science, and education resources for all to experience.~~

~~CC.4 Preserve heritage resources.~~

~~CC.5 The Flagstaff region will foster and maintain healthy and diverse neighborhoods, from urban to suburban to rural.~~

~~CC.6 Downtown Flagstaff will serve as the primary focal point of the community character.~~

~~CC.7 Revitalization and Redevelopment of the urban core shall be compatible with and enhance Community Character.~~

~~Public Services & Facilities, Public Buildings, & Safety (PS):~~

PS.1 Sustainable public facilities and services will be provided in an efficient, equitable and effective manner.

PS.2 Regional coordination in planning and implementing regional infrastructure systems [between?] public agencies and private providers will be a priority.

PS.3 Ensure the provision of adequate emergency response and public safety services including police, fire, medical, and ambulance transport services.

PS.4 All government operations will work to prepare for natural and human-caused hazards.

PS.5 All vehicles, facilities, and buildings will be maintained to high standards.

Housing (H):

H.1 Promote housing opportunity for all economic sectors of the population to ensure a variety of types and price points.

H.2 Provide a variety of types of quality housing and related services to ensure affordable housing options along the housing continuum – from homelessness to home ownership.

H.3 Further housing that is decent, safe and sanitary.

Land Use & Growth Areas: UNDER DEVELOPMENT

Circulation & Bicycling (T):

T.1 Improve the mobility of people and goods throughout the region by providing efficient, effective, convenient, accessible, and safe transportation options for travel to employment, education, medical, tourist attractions and other desired destinations. The transportation system will be supportive of desired land use patterns and functional, attractive urban design

T.2 Plan, design, construct, and operate transportation infrastructure and services to reduce crash frequency and severity, and associated hazards.

T.3 Provide transportation systems infrastructure in a way that balances conservation, preservation, and development goals to avoid, minimize, or mitigate impacts to the natural and built context.

T.4 Design regional road, public transit and other modal systems, and their component parts, with a level of service and connectivity appropriate to the context of their built and natural environment. Promote transportation infrastructure and services that enhance the quality of life of the communities within the region.

T.5 Promote an effective, well-planned system of roadways that establish a functional, safe, and aesthetic hierarchy of streets while incorporating the latest advanced technologies.

T.6 Provide a public transportation system that is readily accessible, convenient, efficient, safe, and desirable to an increasing proportion of persons in the region.

T.7 Plan for bikeways and bicycle infrastructure that provide for the safe and efficient means of transportation and recreation throughout the region.

T.8 Plan and encourage the use of pedestrian infrastructure, including the urban trail system (FUTS), as a critical element of a safe and livable community to meet the transportation and recreational needs of the community.

T.9 Strengthen and support rail service opportunities for the region's businesses and travelers.

T.10 Strengthen and expand the role of Flagstaff Pulliam Airport as the dominant hub for passenger, air freight, and other services in Northern Arizona.

T.11 Build and sustain public support for the implementation of transportation planning goals and objectives, including the financial underpinnings of the *plan*, by actively seeking meaningful community involvement.

Economic Development & Cost of Development (ED):

ED.1 Maintain authenticity while enhancing community image.

ED.2 Regional Economic Development partners will support the start-up, retention, and expansion of existing small and micro-business enterprises.

ED.3 Regional Economic Development partners will support the retention and expansion of all compatible businesses.

ED.4 Support efforts to recruit new businesses and industries to the region.

ED.5 Support and encourage an excellent educational system and job training programs at all levels.

ED.6 Promote the continued physical and economic viability of the region's commercial districts by focusing investment on activity centers.

ED.7 Foster redevelopment while maintaining the community image.

ED.8 Develop a financial system to provide for needed infrastructure development and rehabilitation.

ED.9 Government processes will support expedient business retention, expansion, and attraction while supporting the region's unique character and quality of life.

II. Introduction

Working from the existing *Flagstaff Area Regional Land Use and Transportation Plan* (RULTP 2001), this updated *Flagstaff Regional Plan* evolved from an extensive review of the existing physical conditions and planning influences of the region, discussions with citizens, organizations, and elected officials about the community's vision for the future, and an analysis of possible future land use and transportation scenarios. Over the course of 30 months, a 19-member Citizen Advisory Committee consisting of city and county residents helped create the vision, shape the plan, and develop goals and policies to guide future development.

Preface

In Arizona, state statute requires a community's general plan to cover 17 topics, and offers the option of including four additional topics.[1] The statute also requires the plan to be updated every 10 years. The quality of the plans that have been developed varies widely. At best, a general plan captures the aspirations of a community, describes its current condition, tells the truth about the challenges it faces, and lays out a strategy for achieving community aspirations in the face of those challenges. It is a living document, reflecting the ongoing conversations about how the community anticipates and decides on how it will adapt to changing conditions.

Flagstaff's general plan, called the *Flagstaff Regional Plan*, intends to meet the statutory minimum requirements, and addresses the four optional topics mentioned by state statute. Its primary value, however, is in that the intention is for this to be the beginning of an ongoing, community-wide conversation about the Flagstaff region's future, including many critical components of community success not required by statute. It should be updated as required by changing conditions, perhaps more often than the mandatory statutory time line.

Accomplishing these intentions requires the disciplined and artful execution of three activities. First is the collection of four types of critical input. Second those inputs must be incorporated in a planning process that recognizes the high level of economic, social and environmental uncertainty we currently face, and develops community plans that will be robust and resilient in the face of such uncertainty. Third the plan must communicate transparently how those inputs were utilized and why the final plan decisions were chosen over other alternatives.

Critical Input

1. Current Local Conditions and Historical Trends

Current local conditions and historical trends define one of the critical inputs for the *Flagstaff Regional Plan* – our community's current condition, and how it has been changing. Information on community conditions and trends comes from many reputable sources including census data, scientific and economic

[1] The 17 mandatory topics are: Land use; Circulation; Open space; Growth area; Environmental planning; Cost of development; Water resources; Conservation; Recreation; Public services and facilities; Public buildings; Housing; Conservation, rehabilitation and redevelopment; Safety; Bicycling; Energy; and Neighborhood preservation and revitalization. The four optional topics are: Social; Historic preservation; Economic Development; and Community character and urban design.

information, local performance indicators assembled by academic and government bodies as well as by non-profits, and citizen input.

City and county planners and the Citizen Advisory Committee (CAC) have gathered substantial information on current community conditions, and the trends that have produced those conditions. This information includes considerable citizen input on what they like and don't like about our current conditions. Projecting historical trends into the future provides one view of the community's possible future. We might call this a "business as usual" scenario.

2. Larger Trends

A second source of critical input for the *Regional Plan* is a review of the local impact of regional, state-wide, national, and even global trends. Changing economic trends, growing resource constraints, evolving financial market conditions, and many other large scale trends will impact the future of our community, even though we have little ability to influence these trends. While we cannot unilaterally change these trends, community planners have a responsibility to estimate what adaptations may be required, and how the community can become more resilient to unwanted changes.

Some of these larger trends include increases in temperature, drought, insect infestations, extreme weather events, forest fires, resource constraints driving higher prices, and national as well as global economic disruptions. At least for now, the greater Flagstaff area is largely dependent on significant economic imports and exports, including federal and state funding. As a result, the area's ability to respond to such trends will be largely dependent on the strength and effectiveness of the political will to deal with these trends at state and national scales.

The planners and the CAC have identified the most significant of these larger trends, and estimated their potential impact on our community's future over the next decade. This includes consideration of the options that remain under community control, in spite of the actions, or lack of actions, by state and federal bodies. Unfortunately, there are many possible outcomes of these larger trends, each with varying impacts on our community. Planners need a basis for determining what adaptations of our community would be most desired by our citizens. That requires understanding the community's vision for itself.

3. Community Vision

The third source of critical input for the *Regional Plan* is a vision of the community we want to become. The planners and the CAC have utilized previous planning and community visioning documents, plus extensive community focus groups to help make the choices incorporated in this plan.

4. Best Practices

The fourth important source of input to the *Regional Plan* is the lessons learned by other communities in their efforts to achieve similar results as those desired by our community, starting from similar conditions shaped by comparable trends. What policies and strategies have other communities tried, and what can we learn from what worked for them and what didn't? The planners and the CAC have reviewed other community plans and their outcomes, and utilized those lessons in designing the overall approach as well as the detailed elements of the *Regional Plan*.

Planning ~~F~~for Resilience ~~I~~in the Face of Uncertainty

Economists, sociologists, and scientists tell us we have created conditions with significant economic, social, and environmental tipping points. If we move beyond a tipping point, it can trigger abrupt, non-linear changes that are more than normally difficult to predict and undermine the best made plans. The challenge is to develop goals and policies for a 10-year general plan for a very unpredictable future.

Scenario planning is a process designed to provide robust and resilient plans in the face of such uncertainties. It allows planners to project alternative possible futures, and then to design a plan which will be as effective as possible no matter which future unfolds. The planners and CAC have used scenario planning to create as robust a plan as possible given the uncertainties we face.

Transparency

The success of the *Regional Plan* depends on how well the four critical inputs are integrated into a plan for a resilient community in the face of significant uncertainties, and how well the rationale for that plan is communicated to citizens. Transparency is one of the most vital principles for communicating how these critical inputs were utilized in the scenario planning process to produce the following regional plan. Transparency is important for several reasons, including:

1. People reviewing a plan which is transparent about its decisions can understand why planning choices were made, and can provide feedback if the plan's recommendations do not adequately reflect the conditions, trends, vision, and best practice information that went into the planning process.

2. Conditions and trends may and will change. The community's vision for its future may also evolve, and new best practices will emerge. If the decision process for each of the key plan recommendations is transparent, it will be easy to determine if and how elements of the plan need to be modified to incorporate these changes.

3. Decision transparency also allows more effective evaluation of the results achieved. If the community failed to achieve a planning objective, for example, transparency will help reveal whether it was because of problems in implementation, or because of unexpected changes that made success impossible.

The planners and the CAC have worked hard to be transparent about why the plan recommends what it does, and through the annual reporting process, community feedback is always welcome – it is about our community's future over the next decade.

A. Flagstaff Region Description

The Flagstaff area is rich in cultural diversity, beauty, and history, as well as outstanding educational, recreational and scientific opportunities. Flagstaff, the largest city in northern Arizona, is the regional center and county seat for Coconino County. Flagstaff was incorporated as a town in 1894, established because of the construction of the transcontinental railroad in 1882. Because of its fresh water supply and abundant natural resources, the town grew as a railroad hub with the strong economic industries of cattle ranching, sheep herding and lumber exporting products out of the community. The City of Flagstaff is nestled at the base of the San Francisco Peaks, which rise to 12,633 feet, and is surrounded by the largest ponderosa pine forest in the country. At nearly 7,000 feet, Flagstaff is one of the highest elevation cities in the United States, with an annual snowfall that rivals upstate New York cities.

1. Land Constraints

Although the area covered by this *Plan* is quite large, less than 14% of the land is privately owned. Approximately 8%, or 42 square miles, is controlled by the State Land Department. Some of the state sections may be suitable for development, but many are currently identified for conservation and open space. Most of the remainder is managed by the U.S. Forest Service. Most Much of the private land has already been developed, leaving only scattered pockets and a few large parcels left to develop. Most oOf the large vacant parcels located within the city limits, a majority are at the periphery. Besides the large vacant parcels, there are a fairly large number of smaller parcels scattered throughout the city that are suitable for infill development. In the unincorporated county areas, there are very few large vacant parcels remaining.

In the 1990s and early 2000s, the increase in population in the region was about 1200 persons per year. To accommodate this growth required the addition of almost 500 new housing units each year. If 100% of these units were in subdivisions with densities matching historically developed subdivisions, or about 3.5 units per acre, this would require almost 150 acres per year to accommodate new growth. That kind of land consumption would rapidly deplete the remaining available vacant private land. This was the reason for the minimum densities that were applied in the *2001 Regional Plan*.

One of the major concerns in the Flagstaff region is the shortage of available private land and how growth might be accommodated when all the available land is developed. Projections for the ultimate population of Flagstaff and surrounding areas vary. Population projections adopted by the Arizona Department of Economic Security in 1997 showed an anticipated population of the City of Flagstaff of 158,272 in the year 2050. Projections adopted by the state in 2006 show much reduced anticipated growth figures, and the new 2050 projection for the City is 96,418. If this occurs and accommodations have not been made, local housing and land costs will increase substantially, and newcomers may be forced to move to distant communities, creating sprawl and long commutes to work.

Options for accommodating future growth include:

- Redeveloping, infilling, and developing at higher densities within existing communities.
- Expanding the growth boundaries, this would require the exchange of federal lands into private ownership or the sale of state lands for development.
- Creating new communities at the periphery of the city or in outlying areas where little or no development and utility infrastructure currently exists.

This *Plan* allows for a variety of approaches to deal with future growth to meet the needs of existing and future residents.

2. Water Constraints

A major concern for the future development is the availability of water. Estimates indicate that with moderate growth, existing eCity water sources can sustain the city until sometime between 2015 and 2025. By then, the eCity will need to consider a variety of alternatives to supplement the eCity supply. This may come from new wells, and from reducing demand through increased conservation, and reclaimed processing. Another alternative is Red Gap Ranch, a 7,800 acre ranch between Flagstaff and Winslow purchased by the eCity in 2004 (?) for future water supplies. Development of this water source would require a 30 milean energy-intensive (millions of kWh annually) pipeline and major pumping

facilities. A fourth alternative ewould be a pipeline from Cameron to tie in to the proposed western Navajo Nation pipeline. It is not likely that growth will stop as the eCity approaches its capacity, but more likely that the eCity will seek new water supplies.

Water is not supplied by the Coconino County government. Doney Park Water, a cooperative managed by a locally elected board, provides water to the Doney Park, Timberline-Fernwood areas. With about 3300 customers in 2010, Doney Park Water has the capacity to provide water to the area at full build out, about a 60% increase in existing population, assuming there are no major changes in land use or zoning. Kachina Village is served by a water district that also has the capacity to serve the entire subdivision. Private water utilities serve Mountainaire, Flagstaff Ranch, and Bellemont. In Bellemont, additional wells will be needed to accommodate expected future growth. The Fort Valley area is served by private wells and hauled water, and the future is probably water districts with deep wells, of which two have recently been drilled. Many of the outlying county areas also rely on hauled water, and there must be sources for the provision of the water, whether that be the City of Flagstaff or standpipe sales at the rural water companies. Thus far, water has not been a major inhibitor of growth.

B. Themes of the Regional Plan

1. Smart Growth Principles

Health, schools, taxes, traffic, the environment, economic growth, fairness, opportunity are all affected by development decisions. From the length of our daily commute to the price of a new home to access to open space to the safety of our neighborhoods--what, where, and how we build have major impacts on our personal lives, our communities, and our nation. Growth presents a tremendous opportunity for progress. Communities around the country are looking for ways to get the most out of new development and to maximize their investments. And in many communities where development has improved daily life, public health, the economy, and the environment, smart growth principles have been key to that success.

Growth is "smart" when it gives us great communities, with more choices and personal freedom, good return on public investment, greater opportunity across the community, a thriving natural environment, and a legacy we can be proud to leave our children and grandchildren.

When communities choose smart growth strategies, they can create new neighborhoods and maintain existing ones that are attractive, convenient, safe, and healthy. For this reason, the Flagstaff Regional plan uses the 10 Smart Growth Principles listed below as a framework (Reference).

a. 1. Mix Land Uses

By putting residential, commercial and recreational uses in close proximity to one another, alternatives to driving, such as walking or biking, become viable. Mixed land uses also provide a more diverse and sizable population and commercial base for supporting viable public transit, enhance the vitality of an area by increasing the number and activity of people on the street, which helps revitalize community life by making streets, public spaces, and pedestrian-oriented retail become places where people meet. Mixed land uses can contribute economic benefits. From increased property values to increases sales receipts by creating active centers, communities find that by mixing land uses, they make neighborhoods more attractive to workers and employers.

b. 2. Take Advantage of Compact Building Design

Compact building design suggests that communities be laid out in a way that preserves more open space, and that individual buildings make more efficient use of land and resources. This also protects more open land to absorb and filter rain water, as well as reduce flooding and stormwater drainage needs. Compact building design is necessary to support wider transportation choices, a variety of house sizes and types, and creates more social spaces.

~~c.~~ 3. Create A Range ~~O~~of Housing Opportunities ~~A~~and Choices

Providing quality housing for people of all income levels is an integral component in any smart community, as housing constitutes a significant share of new construction and development. Housing availability is also a key factor in determining households' access to transportation, commuting patterns, access to services and education, and consumption of energy and other natural resources. By creating a wider range of housing choices, communities can minimize the cost of auto-dependent development, use efficient infrastructure, ensure a better jobs-housing balance, and generate a strong foundation of support for neighborhood transit stops, commercial centers, and other services. Most importantly, providing a range of housing choices allows all households to find their niche in a smart growth community – whether it is a garden apartment, a row house, or a traditional single-family home.

~~d.~~ 4. Create Walkable Neighborhoods

Walkable communities are desirable places to live, work, learn, worship, and play.
Goods (such as housing, offices, and retail) and services (such as transportation, schools, and libraries) are located within an easy and safe walk, and increased pedestrian activity creates a streetscape for a range of users – pedestrians, bicyclists, transit riders, and drivers. To foster walkability, communities must mix land uses and build compactly, as well as ensure safe and inviting pedestrian corridors.

Communities worldwide and throughout time have created neighborhoods, communities, towns, and cities based on pedestrian access. As the personal and societal benefits of pedestrian-friendly communities are realized – benefits that include lower transportation costs, greater social interaction, improved ~~personal~~ public and environmental health, and expanded consumer choice – many are calling upon the public and private sectors to facilitate development of walkable places. Land use and community design play a pivotal role in encouraging pedestrian environments.

~~e.~~ 5. Foster Distinctive, Attractive Communities with a Strong Sense of Place

Communities with a vision and which set standards for development that respect community values of architectural beauty and distinctiveness, as well as expand choices in housing and transportation, thrive. Smart growth promotes development that uses natural and man-made boundaries and landmarks to define neighborhoods, towns, and regions. It encourages the construction and preservation of buildings that are assets to a community over time, not only because of the services provided within, but because of the unique contribution they make to the look and feel of a city.

By creating high-quality communities with architectural and natural elements that reflect the interests of all residents, there is a greater likelihood that buildings (and therefore entire neighborhoods) will retain their economic vitality and value over time.

~~f.~~ 6. Preserve Open Space, Farmland, Natural Beauty ~~A~~and Critical Environmental Areas

"Open space" refers to natural areas that provide important community space, habitat for plants and animals, and recreational opportunities, as well as agriculture, places of natural beauty, and critical environmental areas (e.g. wetlands). Open space preservation supports smart growth goals by bolstering local economies, preserving critical environmental areas, improving community quality of life, and guiding new growth into existing communities. Open space also provides significant environmental quality and health benefits, protecting animal and plant habitat, places of natural beauty, combating air pollution, attenuating noise, controlling wind, providing erosion control, and moderating temperatures.

~~g.~~ 7. Strengthen and Direct Development towards Existing Communities

Directing development towards existing areas already served by infrastructure utilizes the resources that existing neighborhoods offer, and conserves open space on the urban fringe. The ease of greenfield development remains an obstacle to encouraging more development in existing neighborhoods. Development on the fringe remains attractive to developers for its ease of access and construction, lower land costs, and potential for developers to assemble larger parcels. Nevertheless, developers and communities are recognizing the opportunities presented by infill development and redevelopment, as suggested demographic shifts and market trends.

~~h.~~ 8. Provide a Variety ~~O~~of Transportation Choices

Providing people with more choices in housing, shopping, communities, and transportation is a key aim of smart growth. As traffic congestion worsens, communities are beginning to implement new approaches to transportation planning, such as better coordinating land use and transportation; increasing the availability of high-quality transit service; creating redundancy, resiliency and connectivity within their road networks; and ensuring connectivity between pedestrian, bike, transit, and road facilities.

~~i.~~ 9. Make Development Decisions Predictable, Fair ~~A~~and Cost Effective

Only private capital markets can supply the large amounts of money needed to meet the growing demand for smart growth developments. If investors, bankers, developers, builders, and others do not earn a profit, few smart growth projects will be built. Since the development industry is highly regulated, the value of property and the desirability of a place are affected by government investment in infrastructure and government regulation. Governments that make the right infrastructure and regulatory decisions will support fair, predictable, and cost-effective smart growth.

For smart growth to flourish, state and local governments need to make development decisions about smart growth more timely, cost-effective, and predictable for developers. By creating a supportive environment for development of innovative, pedestrian-oriented, mixed-use projects, government can provide smart growth leadership for the private sector.

~~j.~~ 10.Encourage Community and Stakeholder Collaboration ~~I~~in Development Decisions

Growth can create great places to live, work and play—if it responds to a community's own sense of how and where it wants to grow. Communities have different needs and will emphasize some

smart growth principles over others: the needs of every community and the programs to address them are best defined by the people who live and work there.

Citizen participation can be time-consuming, ~~frustrating~~challenging, and expensive. On the other hand, encouraging community and stakeholder collaboration can lead to creative, speedy resolution of development issues and greater community understanding of the importance of good planning and investment. Involving the community early and often in the planning process vastly improves public support for smart growth and often leads to innovative strategies that fit the unique needs of a particular community.

~~2.~~ Sustainable Flagstaff

In practice, a sustainable Flagstaff is a place where the social well-being of current and future citizens is supported by a vibrant economy and a self-renewing, healthy environment. While there are diverse notions of how sustainability might be defined, for the purposes of this *Plan*, ~~**sustainability means meeting the needs of the present while preserving our land, our history, our culture, our resources, and our communities for future generations**~~**.** sustainability is a balanced approach to economic opportunity, social equity, and environmental quality that is locally driven, encourages citizen involvement and investment, and benefits all residents. The recent past has demonstrated an essential tenant of sustainable development – that environmental, social and economic goals are not only compatible, but also mutually supportive goals.

Nationally, sustainability is the conceptual foundation for a new national economic engine that leverages affordable housing, addresses demographic trends, builds an active clean energy market and liberates pent-up capital. Locally, it is the job engine of the future and the source of greater economic security. As regional "ecosystem services", forests, wetlands and soils provide services ranging from flood protection and groundwater purification to food, lumber, medicines and other products vital to the economy and to public health. The restoration and protection of ecosystem services are critical elements of sustainable development today.

Human and natural systems – including the social, political, economic and physical elements of community – all are interconnected. People and communities are interdependent with natural systems and most often will benefit by collaborating with rather than trying to control them. At a time when threats and challenges appear quickly and unexpectedly, from extreme weather to economic crises and pandemics, resilience is a vital component of community sustainability. Resilience is a community's capacity to absorb disturbance; to undergo change and still retain essentially the same function, structure, and feedbacks.

A healthy, sustainable community requires functioning participatory democracy, civic engagement, civil public discourse, effective political leadership, and high-functioning public institutions from the local scale up to the national scale. This promotes good decisions for the community as a whole, as well as builds a setting in which people can be healthy. That means access to clinical care; a host of environmental and social assets; a food system that delivers healthy food at affordable prices; clean air to breathe and clean water to drink; communities designed for routine physical activity instead of driving everywhere; universal mobility that allows children, elders, people with disabilities, safe and convenient access to community assets and services; freedom from toxic exposures in food, buildings, and the general environment; and regular contact with nature and the outdoors.

III. Framework and Implementation

Introduction

This section is really dull. What is the purpose of reciting all of the previous plans?

WHAT IS "PLANNING FRAMEWORK" ABOUT? This framework explains why we plan and how we bring our plans in to reality. The City of Flagstaff and Coconino County both have long histories of land use planning. The existing *Flagstaff Area Land Use and Transportation Plan* (FLUTP) was adopted by the City Council and Board of Supervisors in 2001. The existing *Coconino County Comprehensive Plan* was adopted by the Board in 2003 Prior County plans were adopted in 1974 and 1990. The predecessor to the FLUTP was the Growth Management Guide 2000 adopted by the City Council in 1990. The FLUTP was an outcome of *A Vision for our Community: Flagstaff 2020* completed in 1997 as a joint effort of the City and County, as well as Northern Arizona University, Coconino Community College, Flagstaff Unified School District, and community organizations. In the goals and strategies under Managing Growth, there are a number of suggested action items that led to the creation of the 2001 Plan.

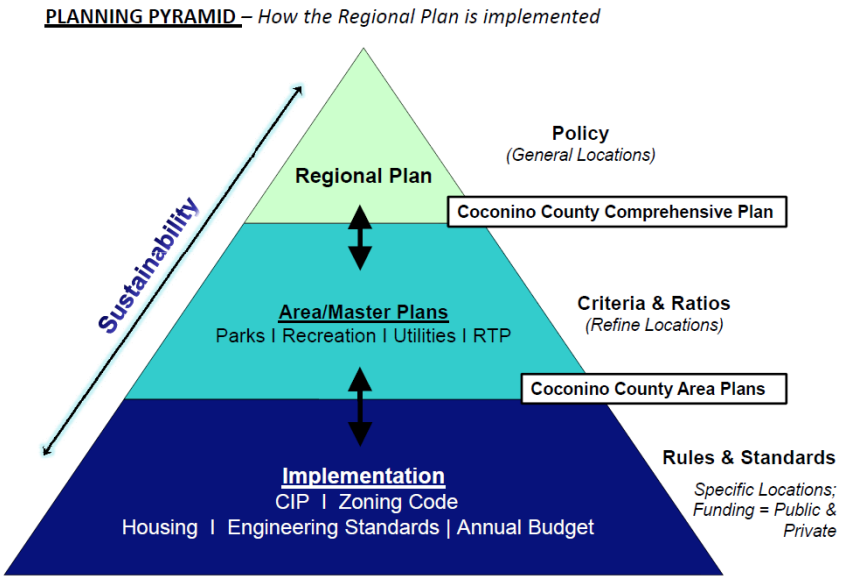
Implementation of the Regional Plan

There are several ways in which this Regional Plan is implemented. The Plan is used as a guide, or roadmap, for the future of the City and the Region. Most importantly, the Plan is used in the regulatory decision-making process by the city and county planning and zoning commissions, City Council and County Board of Supervisors, and city and county planning staffs. The commissions and the Council and Board are responsible for making decisions about zone changes, subdivisions, and conditional use permits, and approval depends on whether the proposed changes or projects are consistent with the Regional Plan's goals and policies. The Plan is also used to guide decisions related to the expansion of public infrastructure, for example the building or improvement of new roads and trails, investment in parks or public buildings, and other facilities. Finally the Plan should be used by all citizens, not only in ensuring that new development conforms to the Plan, but also for assistance in implementing actions that will further the Plan's vision and direction. Many initiatives to improve the community start at the grassroots level. *See list of other entities and planning documents, p. __.*
Implementation of the Regional Plan will evolve over time with new budgets, capital plans, work programs and changing priorities. The following are general points to be considered:

- Prioritize and provide funding in City/County budgets to carry out responsible programs identified in the Regional Plan.
- Modify existing Zoning Code, Engineering Standards, Building Code, Subdivision Regulations, other applicable City and County codes and development policies to align with the Regional Plan 2030
- Modify existing City and County plans and policies to better align with the Regional Plan 2030;
- Incorporate the Regional Plan 2030 into City and County Departments master planning, strategic planning and annual planning processes
- Incorporate the Regional Plan 2030 into the Capital Improvement Program – 5-year planning

- Incorporate the Regional Plan 2030 into Economic Development Strategic Planning Incorporate the Regional Plan 2030; vision, goals, policies and strategies into Housing (HUD) Comprehensive Plan; Annual Action Plan

See full list of 'Relationship to other entities and planning'.



The Need for a Regional Plan

While the Growing Smarter Statutes adopted by the State Legislature in 1998 and 2000 require that all municipalities and counties adopt general or comprehensive plans, and that these plans be updated every 10 years, that is not the principal reason to have a plan. Planning allows us to make informed choices about our future. The ***Flagstaff Regional Plan 2030*** contains goals and policies that provide guidance for making choices about the location and form of future development and improving the livability of the community. **A COUPLE SUCCESS STORIES WITH PICTURES HERE – FUTS, TRANSIT, PICTURE CANYON, ZONING REWRITE, ASPEN PLACE (?)** Why a "regional" plan? While the City and the surrounding communities all have unique identities and characters, the Greater Flagstaff area operates somewhat as a single unified community. Residents of the outlying communities generally work and shop in the City, and schools, stores, and other services are largely located within the City. From a land use standpoint, a hard edge at the City limit line with vastly different expectations on each side of the line hardly makes sense. And environmental issues such as water and air quality, forest protection, and open space, do not adhere to political boundaries. Creation of the Flagstaff 2020 Vision was the first step in bringing the City and County together, and this was continued through the 2001 Regional Plan and enhanced in this *Flagstaff Regional Plan*. **EXAMPLES OF COOPERATION? AN INFORMED ANNEXATION?**

Who This Plan Is For

The *Flagstaff Regional Plan* benefits existing and prospective residents by delineating a direction that the community is moving and by providing the framework that will influence land use decisions. The Plan helps property owners and developers in understanding how their property can be developed and providing predictability in the decision-making process. City and County departments will use the Plan to guide future specific plans and for actions related to capital improvements such as the extension or

improvement of infrastructure. Elected officials will use the plan as the policy document that will affect land use and other decisions. All readers and users of the plan will gather an understanding of how the plan can be utilized to make Flagstaff a model community. These are the primary users in order of frequency or importance of use:

- **City Council/Board of Supervisors (legislative bodies):** Will use the document to make a final decision in most land use decisions including regional plan amendments, zoning cases and permits. Document should quickly provide general background (why/intent), goals and policies (how), and sense of priorities. Document should also be broad enough to permit Council priorities or emphasis to change between major plan updates. This may be especially true during annual budget process to set programs that implement the plan. Will have strong interest in public response and reaction to staff recommendation and legislative interpretation of the plan.

- **City/County Planning & Zoning Commissions:** Advisory to Council/Board. Will use the document similarly. May desire clear connection to supporting technical documents to best justify or explain their recommendations.

- **City/County Management** (including legal counsel and division and section heads): Also advisory to Council/Board. Will use the document to review staff recommendations, assess high level legal implications (e.g., property acquisition or impact issues), and explain budget and program recommendations (e.g., funding for master planning efforts, regulation updates, etc.)

- **City/County Community Development Staff:** Will use the document to develop and evaluate application of regulations to development applications such as regional plan amendments, zoning cases, and subdivision platting and make recommendations to management and governing bodies. Document should permit staff to clearly communicate to applicants the community expectations and concerns relevant to the property in question, subsequent recommended modifications or conditions for approval, and the reasoning behind them. Section heads will also use the document to prioritize budget request for planning efforts such as area plans and regulation updates.

- **Development Community/Realtors/Prospective Buyers/Land owners**: Will use the document to determine permissibility of different development proposals on their property, advise developers or owners on best available properties suitable to a proposed use or "highest and best use" for a given property, inform on the range of possible uses surrounding a property and their potential impacts to that property, inform on long range changes including infrastructure .

- **Interest Groups:** (e.g., Environmental, Business, Education): Like property owners will use the document to advocate for or against proposals or applications but often on a broader range of policy issues. May use the document to advocate for or against new initiatives such as plans, infrastructure investments, educational programs, or business districts.

- **Resource Agencies:** Will use the document in discussions with the City and County on resource/agency management plans, joint agreements, and cooperative initiatives.

- **General Public:** Requires an accessible document that allows them to decide—literally vote—on whether it represents the "right" direction for the region. May use the document as a means of advocating for or against generally larger or more impactful proposals.

- **Future Generations:** Will have the full benefits, as well as address the challenges, of this planning document.

The *Flagstaff Regional Plan 2030* Process

C. The ***Flagstaff Regional Plan 2030*** was created by a 19-member Citizens Advisory Committee (CAC) appointed by the Flagstaff City Council and Coconino County Board of Supervisors. The CAC met monthly or bimonthly for four years to develop the vision, guiding principles, and goals and policies for each of the Plan elements. A Steering Committee composed of two Councilmembers and two Supervisors met quarterly to ensure that the process was on track and that the public participation plan continued to be effective. A core planning team of city and county staff along with the CAC chair and vice-chair met regularly throughout the process to provide staff support of the CAC, to write drafts of the plan, and to carry out all of the aspects of the public participation plan. Hundreds of city and county residents provided very important comments through open houses and focus groups, comments on the web site, blogs and other means that were crucial in defining the Plan's direction. LINK TO FULL REPORT ON PUBLIC PROCESS HERE?

D. Boundaries/ Statutory Authorization

The Regional Plan area coincides with the Flagstaff Metropolitan Planning Organization (FMPO) area, and includes the unincorporated communities of Kachina Village, Mountainaire, Doney Park, Winona, Fort Valley, and Bellemont. *Map reference here*. **DECISION ON HOW TO REFERENCE PLAN AREA THROUGHOUT THE DOCUMENT – "PLAN AREA" is RECOMMEND**

[Insert a discussion of the relevant statutes and the relationship of state to local government]

Relationship to Other Entities and Planning Documents

Many other planning documents work in conjunction with the ***Flagstaff Regional Plan 2030***. Efforts have been made to ensure consistency and minimize conflicts. There are two Federal management plans for Walnut Canyon National Monument and Sunset Crater Monument in the planning area. The Coconino National Forest has been working on a rewrite of the Federal Forest System plan. At the County level, the *Coconino County Comprehensive Plan* adopted in 2003 also applies to the 460 square miles of unincorporated county land within the planning area. In addition, the County has 10 community area plans, of which five are within the Regional Plan area—Bellemont, Fort Valley, Doney Park Timberline-Fernwood, Kachina Village, and Mountainaire. The area plans also have goals and policies specific to each community and four of the five also have Design Review Overlay guidelines which serve to ensure that new commercial buildings are compatible with the character of each community.

The FMPO adopted the ***Flagstaff Pathways 2030 Regional Transportation Plan*** in December 2009 that identifies and prioritizes future transportation investments for roads, public transit and trails. This plan evaluates the cost and effectiveness of projects for each major travel mode and addresses the relationships between land use, transportation, the economy and the environment. This document is updated every five years.

At the regional level, there are two approved planning documents that still provide guidance for future land use and conservation efforts. ***A Vision for Our Community: Flagstaff 2020*** is a detailed vision statement of what Flagstaff should be and what it should look like in the year 2020, developed by approximately 5,000 citizens and adopted? Supported by a memorandum of understanding between ????. The ***Vision 2020*** addressed seven broad target areas: strengthening and sustaining community, protecting

the environment, creating economic opportunity, managing growth, promoting family life, health and safety, fostering human development, and improving housing and livability. The vision is still relevant, and many of the action items continue to be achieved. The other regional document is the ***Flagstaff Area Open Spaces and Greenways Plan*** completed in 1998 as a collaborative effort by the City, County, Forest Service, National Park Service, Arizona State Land Department, and Arizona Game and Fish Department. The ***Open Spaces and Greenways Plan*** identified and categorized the open spaces within and around the region, mapped the open spaces most desirable to retain as open space, and established policies for the protection of open space. This plan was used extensively in development the ***Flagstaff Regional Plan 2030*** document.

The *Flagstaff Regional Plan 2030* is implemented by many various plans, department projects and budget decisions. The following list is an overview of these, but is not exhaustive:

1. **City of Flagstaff Zoning Code** *(2011)*- Zoning Code Administration – Community Development; regulatory code which provides process tools to implement the RP.

2. **Regional Transportation Plan** *(2009)*- Coordination with FMPO; Arterials, Roads, Streets, Sidewalks, Crosswalks, Bridges, NAIPTA, Interstate Interchanges, BNSF, ADOT, FUTS, Pulliam Airport, Snow Bowl Alternative Transit (bus, train, etc.)

3. **Neighborhood, Area and Corridor Plans**
   Understand for all: Urban Design, integration of all transit systems, Smart Growth Strategies, land-use decisions *(incentives and regulations):*
   - Southside 2005 Plan (2005)
   - La Plaza Vieja Neighborhood Plan (2009)
   - Sunnyside Neighborhood Plan (?)
   - Fourth Street Corridor Plan (2009/2010)
   - Milton Road Corridor Plan (unprogrammed)
   - Route 66 Corridor Plan (ADOT Corridor Management Plan)
   - Lone Tree Corridor Plan (2008)
   - County Area Plans: Bellemont, Fort Valley, Doney Park Timberline-Fernwood, Kachina Village, and Mountainaire

4. **5-Year Transit Plan (2013)** – Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) plan for services and infrastructure for the next five years.

5. **Parks & Recreation Organization Master Plan**
   Understand integration and coordination of:
   - Parks & Recreation Operational Masterplan *(2012)*
   - P&R Facilities – needs coordinated and paid with future growth
   - Coordinate with FUTS trails

6. **Economic Development Strategic Plan** (currently ongoing)
   - ECoNA 5-year Strategic Plan
   - Economic Base Analysis (retail only at this juncture),
   - 'Activity Centers' (components: i.e. redevelopment, infill, infrastructure needed)
   - Infill Incentive Districts (in draft mode)
   - Tourism (CVB, Tourism Commission),
   - Airport, Airport Masterplan, Airport Business Park Masterplan (un-programmed)

- Arts & Culture – *economic base analysis, incentives, celebration*
- Historic Preservation – *incentives, regulations, education & outreach*

7. Housing

- 5-year Comp Plan - CDBG; Land Trust; Housing Set-Aside Policies;
- Housing Annual Action Plan;
- Coordination w/ non-profits, employer assisted housing & HUD programs.

8. Utilities Planning –

- Water adequacy study (Sep. 2010)
- Utilities Masterplan (2012)
- Red Gap Ranch

9. Public Facilities Planning – Public Works –

- Capital Projects (Ex: Public Works Yard, Courthouse, etc.)
- Identify other needs

10. Capital 5-Year Plan – annual review with all departments and coordination

11. Engineering Standards

- Update annually to reflect policies

12. Community Sustainability Plan –

- Sustainability Commission / Sustainability Program (2010)

13. Current Planning

Implements Regional Plan by project through the development process.

14. Police & Fire Department – facilities; capital; community/public safety plan.

15. Commissions – review of commission's mission & focus; coordinate goals and projects with RP policies

- Airport Commission
- Beautification and Public Art Commission
- Bicycle Advisory Committee (sub Traffic Commission)
- Community Housing Land Trust Commission
- Disability Awareness Commission
- Flagstaff Housing Authority
- Heritage Preservation Commission
- Industrial Development Authority
- Library Board
- Open Space Commission
- Parks & Recreation Commission
- Pedestrian Advisory Committee (sub Traffic Commission)
- Planning & Zoning Commission
- Sustainability Commission
- Tourism Commission
- Transportation Commission – Traffic Commission
- Water Commission

16. **City Administration**
    - Recommends programs, policies and budgets to City Council to implement plan

17. **City Council** - budgeting / decisions to implement Regional Plan

Outside Agencies:

1. **Coconino County** – RP is an amendment to Coconino County Comprehensive Plan; County uses RP, CCCP and area plans in approving all projects

2. **NAU –** (Dec. 2009); coordinate with future growth area needs, esp. housing for students, transportation to / from campus, etc.

3. **Coconino Community College –** Coordinate campus planning with RP

4. **State Trust –** ongoing coordination

5. **US Forest Service –**coordinate plans for trails, recreation, forest health & water quality

6. **National Park Service** - coordinate management plans

7. **AZ Game & Fish –** Coordinate with wildlife habitat, wildlife corridors & watchable wildlife areas

8. **FUSD –** Coordinates future needs with policies, growth areas, potential shared resources

Administration

Introduction

The Flagstaff Regional Plan is intended to be a dynamic document, one that responds to emerging issues, new ideas, and changing conditions. To assess the Plan's effectiveness the City will need to monitor actions affecting the Plan. As a result of these monitoring efforts or private development requests, the City will need to amend the Plan periodically. The Planning and Zoning Commission and City Council members should consider each proposed amendment carefully to determine whether or not it is consistent with the Plan goals and policies. In addition, the cumulative effect of many changes may result in a change in policy direction. For this reason, Plan amendments must be evaluated in terms of their significance to overall City policy. Appendix *B* of this document provides a summary listing of the Goals, Policies and Strategies for the Plan.

Annual Plan Review and Monitoring

The Plan should be reviewed annually to evaluate progress and to ensure that it continues to reflect community values. In order to achieve this, Department Directors will provide to the City Manager, and the City Council, an annual review of Regional Plan related activities prior to the initiation of the budget process each year. The annual review is intended to accomplish the following:

- Measure the City's success in achieving plan goals and policies through recommended strategies;
- Proposed strategies to be pursued under the coming years' budget;

- Identify unlisted strategies that will achieve Plan goals;
- Document growth trends and compare those trends to plan objectives;
- List development actions which affect the plans provisions;
- Explain difficulties in implementing the Plan.
- *Community Indicators ??*
- *Overview of Outside Agencies' actions affecting the plan*

Major Plan Review

To ensure that the Flagstaff Regional Plan remains an effective guide for decision-makers, Flagstaff will conduct major evaluations of the plan every ten years as required by Arizona State Law and should address the following in addition to any state mandated requirements.

- Progress in implementing the Plan;
- Changes in community needs and other conditions that form the basis of the Plan;
- Fiscal conditions and the ability to finance public investments recommended by the Plan:
- Community support for the Plan goals and policies
- Changes in State or Federal laws that affect the City's tools for Plan implementation.

Amendments and Development Review Processes

The following codified processes serve as tools for city staff to implement the goals, policies and strategies of the Regional Plan. In addition, through public hearings when applicable, these processes provide opportunities for citizens to make recommendations to the Planning and Zoning Commission and City Council regarding the goals and policies of the Regional Plan.

Annexations

All proposed annexations shall be evaluated for consistency with the goals and policies of this Plan. The proposed annexation should not be detrimental to the majority of the persons or property in the surrounding area or the community in general. The City's basic position regarding annexation is that the annexation must demonstrate a favorable benefit to the taxpayers of the city. All applications for annexations of real property shall be reviewed, processed and approved in conformance with A.R.S. 9-471 et. seq. (Annexation of territory; procedures; notice; petitions; access to information; restrictions). Annexations may be initiated by the following:

- Council or City Manager – The Council or the City Manager may direct the Planning Director to review specific property to determine whether it may be legally annexed and to contact property owners to determine whether they will sign an annexation petition.

- Property Owners – One or more property owners may submit an application to annex property they own into the City.

Regional Plan Amendments

All requests for amendments to the ***Flagstaff Regional Plan 2030*** as it relates to land within the corporate boundaries of the City of Flagstaff shall follow the procedures in accordance with the City Code Title 11, Chapter 11-10 (General Plans).

All requests for amendments to the Plan shall identify the reason(s) for the proposed amendment(s) and how the proposed amendment(s) will appropriately implement the written goals and policies of the Plan that are most relevant to the proposed amendment. When a proposed amendment(s) is inconsistent with the Plan goals and policies, the proposed amendment(s) must include one of the following:

- Justification for an exception to the written goals and policies.
- A proposal to modify or eliminate the inconsistent goals and policies.

Except for Plan updates, which may be initiated by the Planning Director, Planning & Zoning Commission or the City Council, [KS1]requests for amendments may be made by one or more of the following:

- Planning Agency – the public planning department shall review the General Plan on an annual basis and may initiate amendments to the Plan in accordance with A.R.S. 9-461.07.
- City Council or Planning Commission – The Council or Planning and Zoning Commission may initiate an amendment to the map or to the text of the General Plan.
- Property Owners – A property owner or an agent authorized in writing may apply for an amendment to the map or the text of the Plan governing the subject property.

All requests for amendments to the Plan shall, at a minimum, include the following public review:

- A Citizen Review or Neighborhood Meeting prior to formal public hearings.
- A Public Hearing conducted by the Planning and Zoning Commission.
- A Public Hearing conducted by the City Council.

Zoning Code Amendments

In accordance with the City of Flagstaff Zoning Code, Section 10-20.50.040.E, an amendment to the Zoning Map or the text of the Zoning Code may be approved only if;

- The proposed Zoning Map Amendment(s) is consistent with and conforms to the goals and policies of the General Plan *(Flagstaff Regional Plan 2030)* and any applicable specific plans.

- If the application is not consistent with and does not conform to the General Plan (*Flagstaff Regional Plan 2030*),and any other specific plan, the applicable plan must be amended in compliance with the procedures established in the City Code Title 11, Chapter 11-10 (General Plans) prior to consideration of the proposed amendment(s).

Amendments may be initiated by the following:

- Property Owners – A property owner or an agent authorized in writing may apply for a Zoning Map amendment or a text amendment for a zoning regulation governing the property.

- Council – The Planning Director on behalf of the Council may initiate a Zoning Map amendment or a text amendment.

All requests for amendments to the Code shall, at a minimum, include the following public review:

- A citizen review or neighborhood meeting prior to formal public hearings.

- A public hearing conducted by the Planning and Zoning Commission.
- A public hearing conducted by the City Council.

Conditional Use Permits

The Planning and Zoning Comission may attach conditions of approval to a Conditional Use Permit as are necessary to carry out the purpose of the Regional Plan and other adopted plans in addition to the required findings in accordance with the City of Flagstaff Zoning Code, section 10-20.40.050 (Conditional Use Permits)

- A property owner or an agent authorized in writing may apply for a Conditional Use Permit.
- All requests for a Conditional Use Permit shall, at a minimum, include a Public Hearing conducted by the Planning and Zoning Commission.

Private Development Project Review

The majority of private development projects occur on properties with the appropriate zoning for the proposed use. These projects are permitted by right and are processed in accordance with the City of Flagstaff Zoning Code, Section 10-20.40.1-40 (Site Plan Review and Approval), and City Code Title 11, Chapter 11-20 (Subdivision and Land split Regulations).

The Development requirements for these projects are established by the Zoning Code, Subdivision Regulations, Engineering Standards, and the International Building Code. The majority of these projects are reviewed and approved by an internal City staff review team from initial application through project completion and occupancy.

Applicable policies and goals established in the Regional Plan are implemented by staff through the Zoning Code by way of requirements that are in concert with the Regional Plan such as Site Planning Design Standards, Resource Protection Standards, Landscaping Standards, Architectural Design Standards, Outdoor Lighting Standards, Affordable Housing Incentives, Heritage Preservation, Residential Sustainable Building Standards, Traditional Neighborhood Community Plans, and Transect Zoning Standards.

The goals and policies established in the Regional Plan can be further implemented through private development projects if a Zoning Code amendment and/or a Regional Plan amendment is required, as discussed above.

~~**III.**~~

Public Development Projects

City/County sponsored projects and Capital Improvement Programs should be required to adhere to all applicable goals, policies and strategies of the Regional Plan elements through project planning and budgeting to insure funding is available to implement the Regional Plan as determined.

~~IV. Planning Framework~~

A. Introduction

The City of Flagstaff and Coconino County both have a long history of land use planning. The existing *Flagstaff Area Land Use and Transportation Plan* (FLUTP) was adopted by the City Council and Board of Supervisors in 2001. The existing *Coconino County Comprehensive Plan* was adopted by the Board in 2003. Prior County plans were adopted in 1974 and 1990. The predecessor to the FLUTP was the Growth Management Guide 2000 adopted by the City Council in 1990. The FLUTP was an outcome of *A Vision for our Community: Flagstaff 2020* completed in 1997 as a joint effort of the City and County, as well as Northern Arizona University, Coconino Community College, Flagstaff Unified School District, and community organizations. In the goals and strategies under Managing Growth, there are a number of suggested action items that led to the creation of the 2001 Plan.

1. The Need for a Regional Plan

While the Growing Smarter Statutes adopted by the State Legislature in 1998 and 2000 require that all municipalities and counties adopt general or comprehensive plans, and that these plans be updated every 10 years, that is not the principal reason to have a plan. Planning allows us to make conscious informed choices about our future. The *Flagstaff Regional Plan* contains goals and policies that provide guidance for future decision-making, for making choices about the location and form of future development, and for the improvement of the livability of the community. Why a regional plan? While the City and the surrounding communities all have unique identities and characters, the Greater Flagstaff area operates somewhat as a single unified community. Residents of the outlying communities generally work and shop in the City, and schools, stores, and other services are largely located within the City. From a land use standpoint, a hard edge at the City limit line with vastly different regulations on each side of the line hardly makes sense. And environmental issues such as water and air quality, forest protection, and open space, do not adhere to political boundaries. Creation of the Flagstaff 2020 Vision was the first step in bringing the City and County together, and this was continued through the 2001 Regional Plan and enhanced in this *Flagstaff Regional Plan.*

2. Who This Plan Is For

The *Flagstaff Regional Plan* benefits existing and prospective residents by delineating a direction that the community is moving and by providing the framework that will influence land use decisions. The *Plan* helps property owners and developers in understanding how their property can be developed and providing predictability in the decision-making process. City and County departments will use the *Plan* to guide future specific plans and for actions related to capital improvements such as the extension or improvement of infrastructure. Elected officials will use the p*lan* as the policy document that will affect land use and other decisions. All readers and users of the p*lan* will gather an understanding of how the p*lan* can be utilized to make Flagstaff a model community.

3. The Planning Process

The *Plan* was created by a 19-member Citizens Advisory Committee (CAC) appointed by the Flagstaff City Council and Coconino County Board of Supervisors. The CAC met monthly or bimonthly for three years to develop the vision, guiding principles, and goals and policies for each of the *Plan* elements. A Steering Committee composed of two Councilpersons and two Supervisors met quarterly to ensure that

the process was on track and that the public participation plan continued to be effective. A core planning team of city and county staff met regularly throughout the process to provide staff support of the CAC, to write drafts of the plan, and to carry out all of the aspects of the public participation plan. Hundreds of city and county residents provided very important comments through open houses and focus groups, comments on the web site, blogs and other means that were crucial in defining the *Plan's* direction.

B. Boundaries

The Regional Plan area coincides with the Flagstaff Metropolitan Planning Organization (FMPO) area, and includes the unincorporated communities of Kachina Village, Mountainaire, Doney Park, Winona, Fort Valley, and Bellemont. *Map reference here.*

C. ARS Authorization

[Insert a discussion of the relevant statutes and the relationship of state to local government]

D. Administration and Implementation

There are several ways in which this *Regional Plan* is implemented. The *Plan* is used as a guide, or roadmap, for the future of the City and the Region. Most importantly the *Plan* is used in the regulatory decision-making process by the city and county planning and zoning commissions, City Council and County Board of Supervisors, and city and county planning staffs. The commissions and the Council and Board are responsible for making decisions about zone changes, subdivisions, and conditional use permits, and approval depends on whether the proposed changes or projects are consistent with the Regional Plan's goals and policies. If a proposal deviates from the p*lan*, staff may suggest modifications to bring the project into conformance. The decision makers may also decide to add conditions of approval to projects that reflect the p*lan's* goals and policies. The *Plan* is also used to guide decisions related to the expansion of public infrastructure, for example the building or improvement of new roads and trails, investment in parks or public buildings, and other facilities. Finally the *Plan* should be used by all citizens, not only in ensuring that new development conforms to the *Plan*, but also for assistance in implementing actions that will further the *Plan's* vision and direction. Many initiatives to improve the community start at the grassroots level.

E. Relationship to Other Entities

[Insert a discussion of the relationship of the City and County, and then to other governmental Agencies]

F. Relationship to Other Planning Documents

There is a broad array of other planning documents that work in conjunction with this *Flagstaff Regional Plan*. Efforts have been made to ensure consistency and minimize conflicts. At the federal level, there is a management plan for the Flagstaff area national monuments two of which are in the planning area – Walnut Canyon and Sunset Crater. The Coconino National Forest has been working on a rewrite of the

forest plan. At the County level, the *Coconino County Comprehensive Plan* adopted in 2003 also applies to the 460 square miles of unincorporated county land within the planning area. In addition, the County has 10 community area plans, of which five are within the Regional Plan area—Bellemont, Fort Valley, Doney Park Timberline-Fernwood, Kachina Village, and Mountainaire. The area plans also have goals and policies specific to each community and four of the five also have Design Review Overlay guidelines which serve to ensure that new commercial buildings are compatible with the character of each community.

The FMPO adopted the Flagstaff Pathways 2030 Regional Transportation Plan in December 2009 that identifies and prioritizes future transportation investments for roads, public transit and trails. The Plan evaluates the cost and effectiveness of projects for each major travel mode and addresses the relationships between land use, transportation, the economy and the environment.

At the regional level there are two previously approved planning documents that still provide major guidance and direction for future land use and other decisions. *A Vision for Our Community: Flagstaff 2020* is a detailed statement developed by a large citizen task force of what Flagstaff should be and what it should look like in the year 2020. Approximately 5,000 citizens participated in the public process in helping to create the vision. The Vision addressed seven broad target areas: strengthening and sustaining community, protecting the environment, creating economic opportunity, managing growth, promoting family life, health and safety, fostering human development, and improving housing and livability. Citizen groups were formed to develop action plans for each of the seven areas. The vision is still a very relevant document, and many of the action items continue to be achieved. The other regional document is the Flagstaff Area Open Spaces and Greenways Plan completed in 1998. Completed as a collaborative effort by the City, County, Forest Service, National Park Service, Arizona State Land Department, and Arizona Game and Fish Department, the plan identified and categorized the open spaces within and around the region, mapped those open spaces that were most desirable to retain as open space, and established policies for the protection of open space. The plans policies and maps were used extensively in the development of the RLUTP.

There are other planning documents that should be integrated with the Regional Plan. One is the campus master plan for Northern Arizona University. Others include parks master plans for both the City and County, individual department plans such as facilities master plans, sustainability plans, and housing plans.

While not a plan, certainly deserving of mention is the rewrite of the City of Flagstaff Zoning Ordinance, which is scheduled for adoption in 2011 and which will replace the Land Development Code that was adopted by the City Council in 1991. This effort has paralleled the development of the Regional Plan.

Reference to Planning Pyramid here.

G. Amendments

The *Flagstaff Regional Plan* will likely need amending during the 10-year planning horizon. Conditions change, new issues emerge, and good ideas come forward that may result in the need to change the plan. The *Plan* should be reviewed annually to evaluate progress in achieving the goals of the *Plan* and to ensure that it continues to reflect community values.

Arizona Revised Statutes limits consideration of major plan amendments to once per year, and in the City require a two-thirds vote of the entire Council for adoption. Criteria as to which changes or modifications to the plan constitute major amendments are contained in the Land Use Element of the *Plan*, and the process for consideration of all *Plan* amendments are contained in the respective Codes of the City and Coconino County.

V. IV. Community Profile

A. Introduction

The *Regional Plan* area coincides with the Flagstaff Metropolitan Planning Organization (FMPO) area and includes the unincorporated county communities of Kachina Village, Mountainaire, Doney Park, Winona, Fort Valley, and Bellemont. Nearly 75% of the land in the planning area is under the jurisdiction of the U.S. Forest Service (72%) and National Park Service (2%), 8% is under the jurisdiction of the Arizona State Land Department, and approximately 3.5% is under the Department of Defense at Camp Navajo. [Illustrate this data] These lands are managed for a multitude of uses. The remaining 14%, or about 73 square miles, is private land used for residential, commercial and industrial uses. The City of Flagstaff encompasses just over 64 square miles of the planning area, and is the regional commercial hub of northern Arizona where rural residents come to shop, seek medical care, and conduct business. Historic settlement patterns created population centers along the railroad, Route 66, and then later along routes to and from the Grand Canyon.

The planning area is home to about 80,000 year round residents, with about roughly 64,000, or 80%, within the Flagstaff city limits. This population number includes Northern Arizona University students, many who do live year-round in the community. The growth rate for the FMPO region has fluctuated between 2.2% in the 1990's and early 2000's, to about 1.1% annually in the late 2000's. The area's population is expected to grow to approximately 91,000 over the next ten years and to 103,000 [compare with data in Table 1.0] by 2030. This would mean over 20,000 additional residents in the planning area, the majority of whom would settle in the City of Flagstaff. Growth graphs here

There are a number of unique physical and social characteristics that have either affected growth or amplified the impacts of recent growth, such as the fact that Northern Arizona University students comprise over 20% of the city's population. There is a large seasonal population, with up to 20% of the region's houses being second homes. In addition, there are over 4 million visitors to the area annually. People from all over the world come to visit area natural attractions such as Grand Canyon National Park and the Flagstaff area national monuments as well as cultural attractions such as the Museum of Northern Arizona. The region has become a destination of choice for people seeking an active, outdoor lifestyle.

Flagstaff's elevation of 7,000 feet ensures a four-season climate with cold winters and mild summers, low-humidity, and considerable temperature changes. The average precipitation for Flagstaff is 21.77 inches. Summer temperatures are cool, with a short growing-season. Summer culminates with the annual monsoon season, with rain and thunderstorms daily during July and August. Winter averages 45 degrees with 94" snowfall per year. Adequate snowfall plays a key role in providing the economic benefits that arise from Flagstaff's abundant winter recreational opportunities. Snow may fall in any season and extreme winter snowstorms do occur. Flagstaff is on the ten sunniest locations in the United States. Local variations in climate play a major role in shaping the range of vegetation communities, ecosystems, and associated wildlife found in the region.

People who live and work in the area see the cumulative effects of the region's growth. For many, growth is seen as positive for the expansion of economic opportunities, while for others growth is increasingly being associated with negative impacts such as traffic congestion, air and water pollution, loss of open space and traditional agricultural uses, and loss of the "small town feel." In addition, the high growth rate and the demand for housing have exacerbated the shortage of affordable housing.

B. Demographics

Population and~~&~~ Profile Trends – *PEOPLE*

Source: DES, Census.gov and ESRI, AZ Board of Regents, Flagstaff CVB

Population is THE driver for many aspects of a community. Sheer numbers demand for housing, jobs and public and private services which in turn drive the amount of land and other resources consumed or preserved. Characteristics of the population such as age will influence the type of services needed. Younger populations require more schools; older populations more medical services. Education can influence employment. Some communities react to trends in population and its characteristics. Others attempt to influence them through a supply-side approach to attract certain demographic niches.

Table 1.0: Overall ~~p~~Population ~~g~~Growth ~~t~~Trends

POPULATION	City of Flagstaff	Coconino Co. w/ in FMPO	FMPO Total
2000	52,894	14,709	67,603
2010	65,870	22,528	88,398
2020	77,500	26,350	103,850
2030	87,000	29,600	116,600
2050	106,000	36,000	142,000

Source: Estimates generated by The Arizona Rural Policy Institute using trend line estimates based on 50-year growth pattern and adjusting to projected growth of Northern Arizona University [DATE].

Table 1.1: Northern Arizona University ~~s~~Student ~~p~~Population ~~g~~Growth ~~t~~Trends

NAU Population	Total enrollment	NAU Flagstaff campus population	% of City population
2000	19,964	14,495	21%
2010	25,204	17,529	27%
2020	34,000	25,000	32%
2030	36,000	25,000	29%
2050	41,000	25,000	24%

Source: The Board of Regents has indicated that they want Flagstaff campus enrollment to be 25,000 in the year 2020. Due to development constraints, the Flagstaff NAU population projections do not rise above this amount. Total enrollment includes satellite campus growth, which is projected at the same rate as the Flagstaff campus, 2010-2020 (1.92%) [DATE].

Table 1.2: Visitor Population growth trends

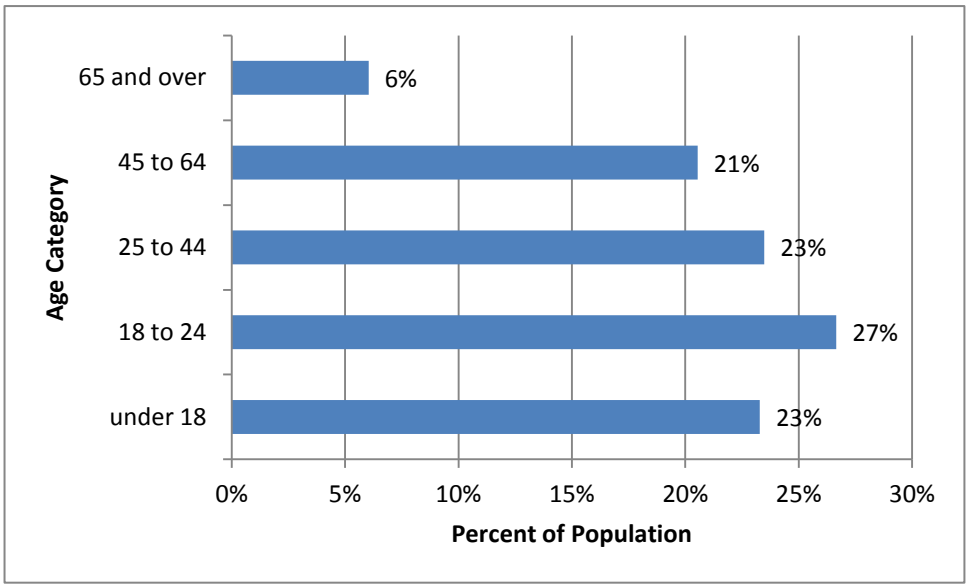
Visitor Population	City of Flagstaff	Northern Arizona Region
2000	2,421,331	6,106,328
2010	2,593,100	6,539,509
2020	2,777,053	7,193,460

2030	2,974,057	7,912,806
2050	3,410,981	9,574,496

Source: ~~2008 Survey,~~ Arizona Hospitality Research and Resource Center Survey, 2008.

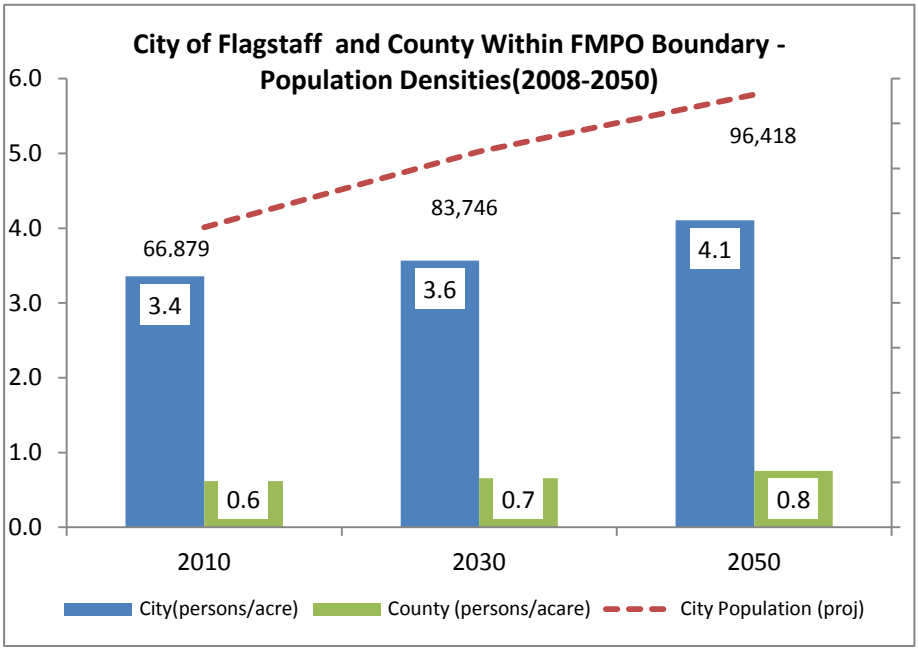
POPULATION of the city of Flagstaff: In 2009 Flagstaff had a total population of 59,280 – 29,866 (50%) female and 29,414 (50%) male. The median age was 25 years. Twenty-three percent of the population was under 18 years old and six percent was 65 or more years old.

Table 1.3: Age ~~c~~Cohorts of ~~r~~Regional ~~p~~Population



Source: 2005-2009 ACS 5-Year Estimates for Flagstaff, AZ

Table 1.4: Population ~~d~~Densities – ~~p~~Persons per ~~a~~Acre



Population density will slowly increase over the next 40 years. Net residential density – land committed solely to residential areas and subtracting out roads, open space and other uses - is higher. Planning and regulation can influence the market to achieve higher or lower densities. Changes in density patterns will influence the

sub-area demand for services and the efficiency with which they are used or delivered. Higher densities are easier to serve with transit and use less water, for instance. Lower densities might be viewed as having "built-in" open space. The table below compares to City population projections to estimated water supply. Demand exceeds supply shortly after 2020. How can we influence supply, demand or both?

Table 1.5: Population ~~g~~Growth ~~p~~Projections with Water Supply ~~p~~Projections

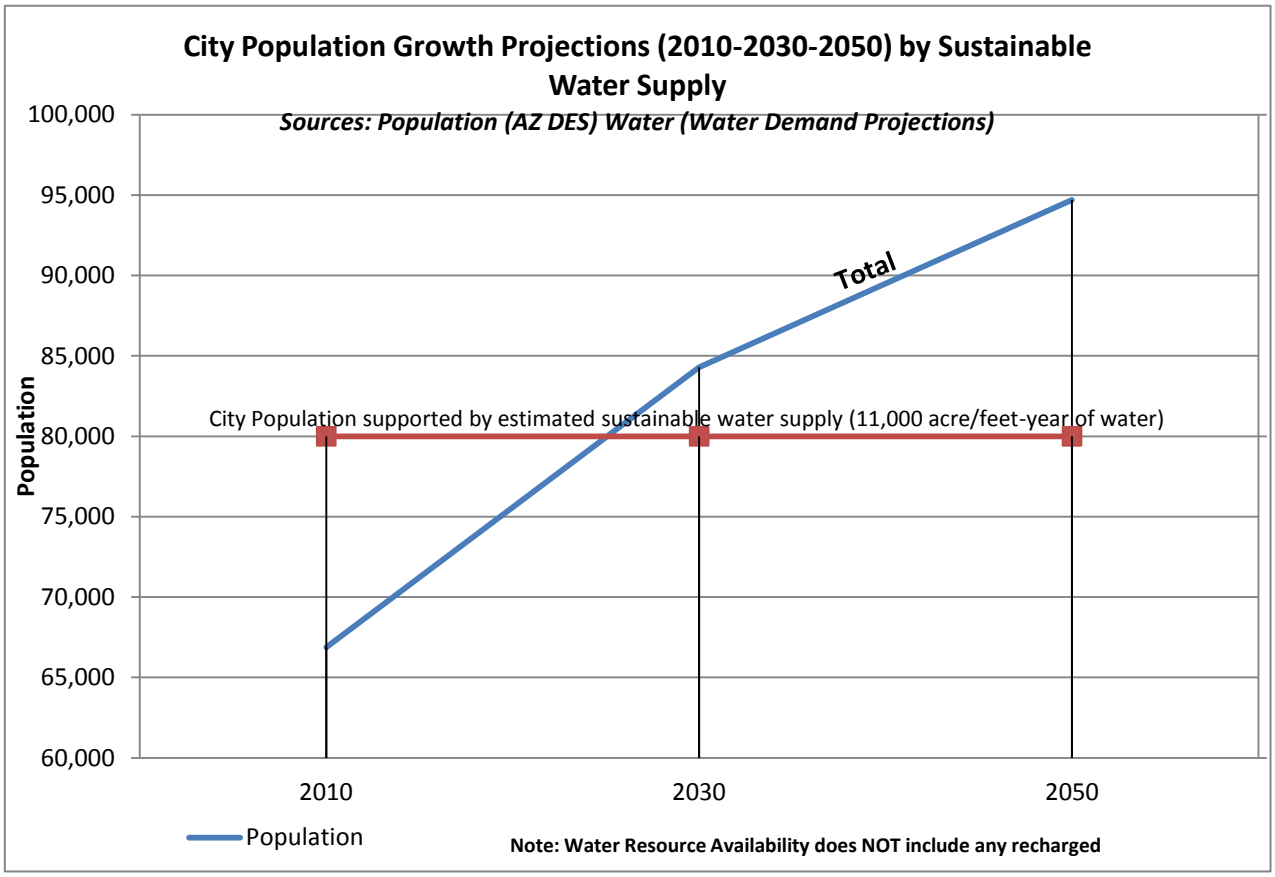


Table 1.6: Historic Neighborhood Demographics

Name	2000 POPULATION	2000 POPULATION 0 - 17	2000 POPULATION 65+	2000 HOUSING UNITS	2000 HU - VACANT	2000 HU - OWNER OCCUPIED	2000 HU - RENTER OCCUPIED	2008 POPULATION	2008 HOUSING UNITS	2008 HU - OWNER OCCUPIED	2008 HU - RENTER OCCUPIED	2008 HU - VACANT	2013 POPULATION	2013 HOUSING UNITS	2013 HU - OWNER OCCUPIED	2013 HU - RENTER OCCUPIED	2013 HU - VACANT	AREA (ACRES)	Density (*dwelling unit per acre*)
Greenlaw	2491	837	178	814	33	502	279	2448	828	514	267	47	2482	851	509	289	53	274.4	9
Pine Knoll	1436	231	39	552	25	61	466	2186	869	102	715	52	2552	1032	111	851	70	329.9	8
Plaza Vieja	846	168	42	410	26	30	354	837	422	32	348	42	836	427	30	351	46	58.5	14
Southside	1417	216	93	646	47	128	471	1260	633	124	415	94	1221	636	115	411	110	335.6	4
Sunnyside	5469	1872	249	1949	104	484	1361	5593	2049	529	1368	152	5798	2151	518	1459	174	786.8	7

Housing Trends - *HOUSING*

Housing mix is generally a response to the market. Markets operate within local regulatory, economic and financial environments. The following tables and charts illustrate the high percentage of single family houses in the FMPO region. They also show a high percentage of renters suffering a housing burden. How can the environment be changed to provide a housing mix to address this issue?

Table 1.7: Housing ~~u~~Units

RESIDENTIAL UNITS	City of Flagstaff	Coconino Co. w/ in FMPO	FMPO Total
2000	18,136	13,064	34,460
2008	21,764	14,526	36,290
2010	22,836 [1.]	14,775	36,875
2020	27,336	15,779	38,615
2030	31,836	18,494	45,830
2050	40,836	21,209	53,043

1. *QTR2 Data*
2. *Note: City of Flagstaff Build-out is estimated at 10,000 more units without forest service land exchange – sale of state land parcels are factored in at current Regional Plan densities. Average housing starts for 2008-2010 are 400-450 per year, including multi-family. Continuing this average per year of new housing, this would take 22 years, or until 2032.*
3. *These numbers do NOT include NAU housing units;*

Table 1.8: Northern Arizona University Housing Units

Northern Arizona University Housing Units (by number of 'beds')	
2010	7,250 *[6,695 single; 208 married]*
2012	8,350 *[campus dorms managed by NAU]* 1,100 *[on-campus dorms managed by private company]* 9,459 total
2020	???

Source: NAU Planning & Institutional Research

Table 1.9: Average Community Household Size

Household Size	1990 Census	2000 Census	2009 ACS*	2020 Estimate**
Average household size	2.75	2.60	2.60	2.55
Owner occupied	2.94	2.74	2.74	2.67
Renter occupied	2.56	2.46	2.46	2.43

2009 ACS Source: U.S. Census Bureau, 2005-2009 American Community Survey*

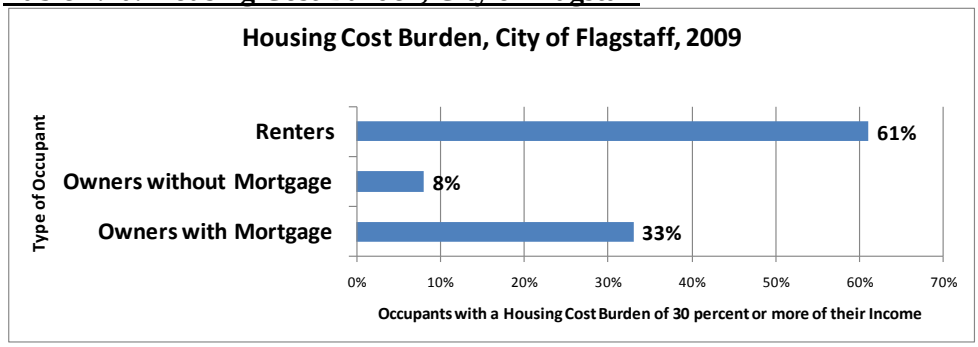
*2020 Estimate** based on 30 year average household size*

OCCUPIED HOUSING UNIT CHARACTERISTICS: In 2009, the city of Flagstaff had **21,080 occupied housing units** –

- 10,174 (48%) owner occupied and 10,906 (52%) renter occupied.
- 12% percent of the units were vacant. Of the total housing units,
- 55% were single-unit structures, 38%were multi-unit, and 7% were mobile homes.
- 41% of them had been built in 1990 or more recently.
- 5% of the households did not have telephone service
- 40% of the households had two vehicles; 20% had three or more; and 4.6% had no vehicle available.

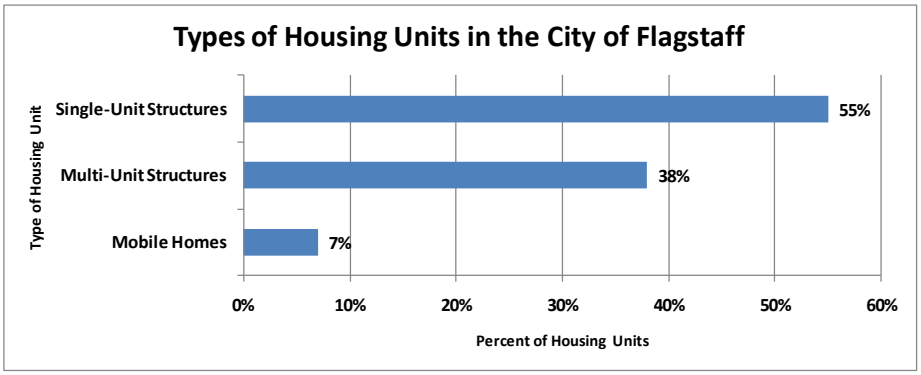
HOUSING COSTS: The median monthly housing cost for mortgaged owners was $1,505. For non-mortgaged owners it was $363, and for renters it was $925. Sixty one percent of renters, 33 percent of owners with a mortgage, and eight percent of owners without a mortgage in Flagstaff spent 30 percent for more of their household income on housing costs.

Table 1.10: Housing Cost Burden, City of Flagstaff



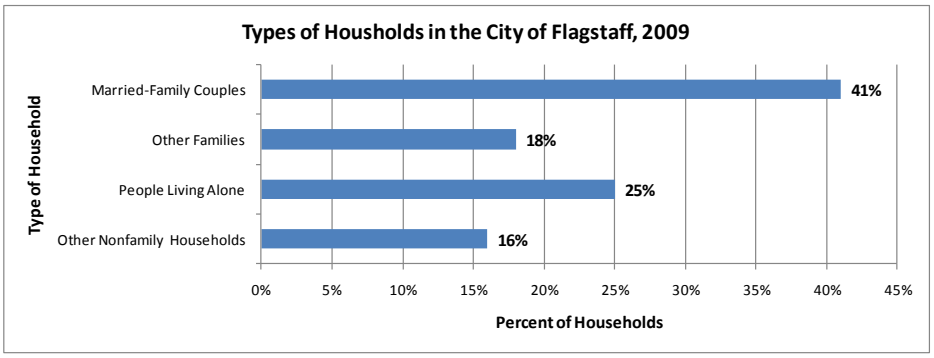
Source: 2005-2005 ACS 5-year Estimates for Flagstaff, AZ

Table 1.11: Types of Housing Units



Source: 2005-2005 ACS 5-year Estimates for Flagstaff, AZ

Table 1.12: Household Demographics



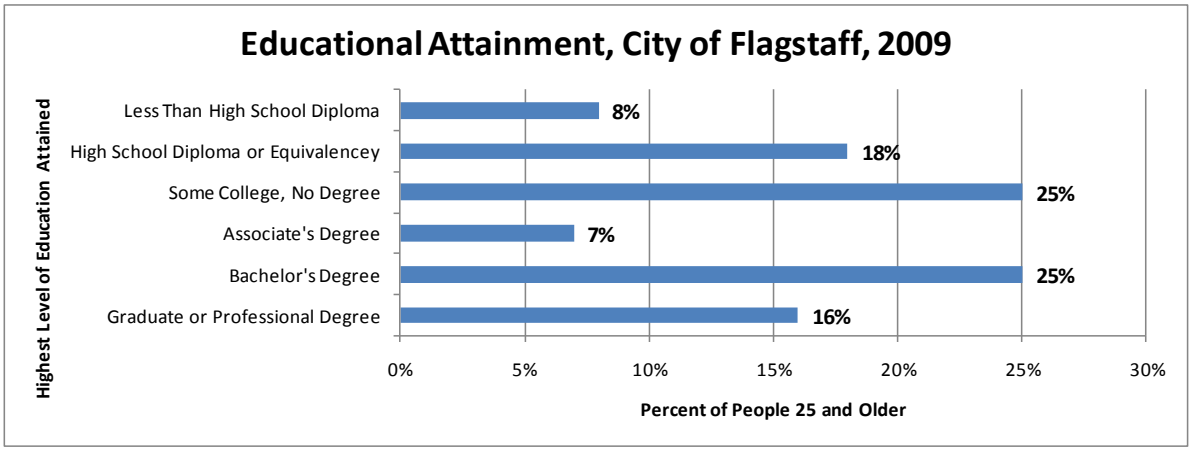
Source: 2005-2005 ACS 5-year Estimates for Flagstaff, AZ

Employment Trends – *JOBS*

Employment trends and employment location trends, like population, influence the DEMAND for services and the efficiency with which they are provided. Like housing, concentrations of employees are easier to serve with transit. TYPES of employment – occupation and industry mix – will influence salary and wages which affect the quantity and quality of goods and services consumed in and delivered to an area. The location decision of major employers is influenced by many factors that a community may wish to address: transportation, tax policies, workforce development, and land availability to name a few.

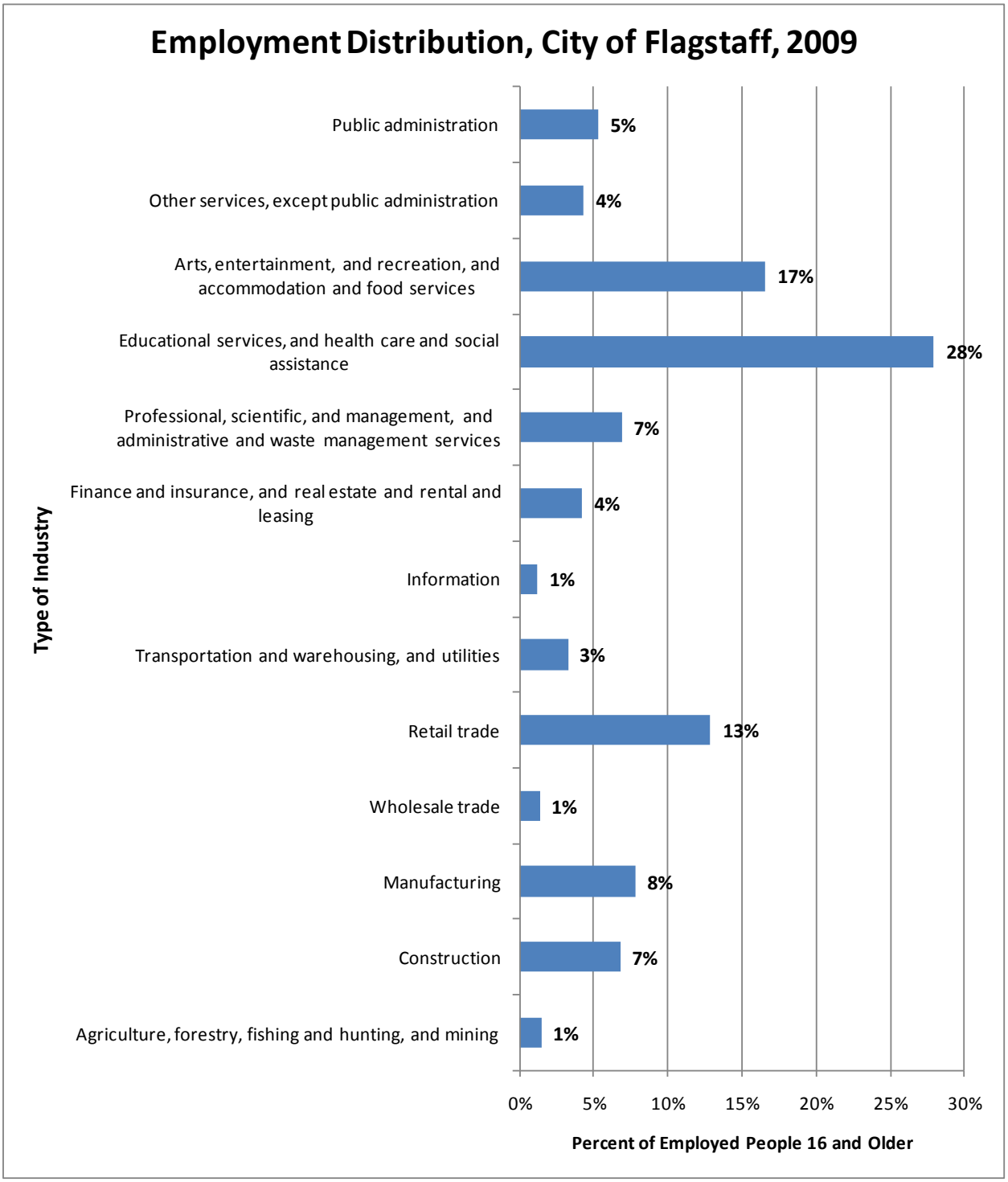
The median age of Flagstaff's population is about 25 years. The median income for a household is about $47,000, and the **median income for a family is about $62,000**. As a college town, Flagstaff's population is considerably more educated than the U.S. average: around 90 percent of the population has a high school diploma or higher (the national average is 80 percent). Over 40 percent has a Bachelors degree or higher, compared to the national average of 24 percent.

Table 1.13: Educational Attainment



Source: 2005-2005 ACS 5-year Estimates for Flagstaff, AZ

Table 1.14: Employment Distribution



Source: 2005-2005 ACS 5-year Estimates for Flagstaff, AZ

NATURAL ENVIRONMENT

V. Environmental Quality

A. Environmental Planning and Conservation Elements

B. Open Spaces Element

C. Water Resources Element

D. Energy Element

A. Environmental Planning and Conservation Elements

1. Introduction
2. Relationship to Vision and Guiding Principles
3. Goals and Policies
   - k. Climate
   - l. Ecosystem Health
   - m. Noxious and Invasive Weeds
   - n. Wildlife
   - o. Environmentally Sensitive Lands
   - p. Soils
   - q. Water Quality
   - r. Air Quality
   - s. Dark Skies
   - t. Natural Quiet

[Reorganize resources and Goals and Policies in alphabetical order ?].

1. Introduction

The abundance of natural resources was instrumental in the early settlement of Flagstaff in the 1870s, and the availability of water, timber, and forage provided the basis for the town's economy. As time passed, the economy shifted from a focus on extracting natural resources to preserving (not the right word) them. For example, tourism, recreation and quality of life based on the natural environment have become more important to the Flagstaff area's economy than logging. The natural environment, however, remains the critical foundation on which the region's ly important to the economy, character, and quality of life rely. of the region, and remains of primary importance to residents and visitors.

In the Flagstaff region, Eenvironmental Pplanning and Cconservation are inextricably linked as the conservation of natural resources and the natural environment is critically important for the future prosperity of the Flagstaff community. Underlying the *Regional Plan*, therefore, is the basic principle that a healthy natural environment is necessary for a healthy and prosperous human community and economy, and future development, if not sensitive, could have adverse impacts on the natural environment. This section of the plan addresses air quality, climate, dark skies, ecosystem health, environmentally sensitive lands, natural quiet, noxious and invasive weeds, soils, water quality, air quality, soils, and wildlife.,

environmentally sensitive lands, dark skies, and natural quiet in the context of natural resources systems worthy of conservation and protection.

2. Relationship to Vision and Guiding Principles

The protection of the natural environment is a common thread running through virtually all elements of this p*Plan* update. The *Plan's* Vision Statement prominently features stewardship of the region's ecological setting and the future vitality of its natural environment. Likewise, conservation of the natural environment is consistent with the adopted Guiding Principles, especially pertaining to sustainability, healthy ecosystems, smart growth and quality development, a vibrant and resilient economy, sense of place and community character, and partnerships. The long-term health and viability of our natural landscapes is essential to achieving the future envisioned by this p*Plan*.

Climate Change and Adaptation

Climate Change

Warming of the climate system is undeniable, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level (IPCC 2007). At the same time, weather patterns have become more extreme, with more intense and longer droughts, more extreme precipitation events, and increased heat waves.
Human activities, such as using fossil fuels energy sources, have poured excessive amounts of carbon dioxide into the atmosphere. The outcomes of this human activity are annual average temperature increases: temperatures are expected to increase 1-4 degrees F during the period of 2021-2060, increasing another 2-4 degrees F by 2099. The impacts of these temperature increases include decreased precipitation (drought) and warmer summers, which will result in drastic changes to our natural communities – such as changes in vegetation, animal communities, etc. -as well as declines in agricultural productivity and food security.

The impacts of these temperature increases are decreased precipitation (drought) and warmer summers, which will result in drastic changes to our natural communities – such as changes in vegetation and animal communities - as well as declines in agricultural productivity and food security. Temperature increases also put great strain on the infrastructure of water management, energy supply, transportation, public health, communications, housing, national security, as well as insurance and emergency preparedness. This in turn greatly affects a community's economic vitality and emergency response.

A quote box here about "Start hoarding your beans - up to 70 percent of the world's coffee supply could be gone by 2080 due to climate change." Read more: http://blogs.smithsonianmag.com/food/2012/12/start-hoarding-your-beans-thanks-to-climate-change-7-coffee-may-be-the-norm/#ixzz2FdXAMTm4

Climate change impacts to the Flagstaff region:

Recent warming in the Southwest has been among the most rapid in the nation. This is driving declines in spring snowpack and Colorado River flow. The key issues that the American Southwest, including the Flagstaff Region has to address include:

- Water supplies will become increasingly scarce
- Reduction in annual snowpack and decrease in snowmelt
- Depleted soil moisture

- Increasing temperature, drought, wildfire, tree mortality and invasive species will accelerate transformation of the landscape.
- Increased frequency and altered timing of flooding.
- Unique tourism and recreation opportunities are likely to suffer.
- Cities and agriculture face increasing risks from a changing climate.
- Worsen the vulnerabilities of the community's lower-income, poor, and elderly
- Native Americans are particularly vulnerable to projected changes in climate, as the communities are closely tied to specific reservation boundaries that restrict relocation abilities, limiting opportunities to cope with a change in water resources, agriculture and ecosystems.

Climate Adaptation and Mitigation – Building Resiliency and Reducing Risk

Actions taken today can contribute to a safer, more resilient and adaptable community in the future. Adaptation to climate change means preparing for potentially drier, hotter and more extreme weather conditions. Mitigating climate change includes reducing greenhouse gas emissions with a goal of stabilizing climate in the future. Climate mitigation efforts can reduce the severity of climate change, but they cannot completely prevent it from happening. As a result, not only must greenhouse gas emissions be curbed, but we must increase the region's climate resilience, which is our ability to withstand and recover from extreme events and climate changes. Both adaptation and mitigation strategies are needed, at the community and personal level.

The Region has always faced climate risks, including forest fires, record warming, snow storms, high winds, flooding, and drought. These events affect every resident, and as the regional climate changes, these risks will become more frequent and severe. For instance, the 2009 Shultz Pass Wildfire destroyed 15,870 acres of National Forest, and the subsequent Shultz Pass flood of 2010 caused millions of dollars in damages to homes, property and roads. The effects of this extreme event could have been lessened with preventative measures.

The Flagstaff Region has the opportunity to help mitigate the changes in climate, and simultaneously be ready for its effects by understanding the potential of wildfire, flooding, drought and other effects of climate change and then preparing for such hazards. Individual preparation measures could be preparing our homes for potential fire, implementing stormwater management best practices, and becoming more water efficient, for example. There are also many personal choices community members can make that will reduce greenhouse gas emissions and help better prepare people for the impacts of climate. Personal home or business investments in water conservation and stormwater collection, energy-efficiencies, walking, biking, bus-riding, recycling, re-using and sharing all contribute to mitigating climate change.

At the community level, investing in critical public infrastructure, such as reclaimed water, conservation and stormwater collection, efficient use of energy resources, self-reliance on transportation options, food production and the ability to generate energy by means other than fossil fuels; protecting and preparing the community for extreme weather events, flooding, wildfires and other natural and human caused hazards are large-scale preparation. *See the City of Flagstaff Resiliency and Preparedness Study (2012).* For the purposes of the Regional Plan, how we develop land, and transition to compact development and walkable communities, will have the biggest impact on our reduction of greenhouse gas emissions and mitigating climate change through local action.

Goals and Policies - Climate Change and Adaptation

An effective response to climate change must combine mitigation—to avoid the unmanageable—with adaptation, to manage the unavoidable.

Goal E&C 1. Reduce greenhouse gas emissions.

Policy E&C.1.1. Reduce fossil-fuel generated aggregate energy consumption in public, commercial, industrial, and residential sectors

Strategies examples:
- Energy efficiency programs
- Investments in transitioning to renewable energy generation and usage
- Implementation of fiscal tools to change public's commuting behavior
- Workplace policies to support telecommuting
- Minimize energy-intensive transport and pumping of water
- Track greenhouse gas emissions to gauge success

Policy E&C.1.2. Promote investments that strengthen climate resilience and discourage those that heighten climate vulnerability.

Strategies examples:
- Implement systematic application of climate risk assessment to projects considered for development
- Others…

Goal E&C.2. Strengthen community and natural environment resiliency through climate adaptation efforts.

Policy E&C.2.1. Develop and implement a comprehensive and pro-active approach to prepare the community for and to minimize the impacts of climate change induced hazards.

Strategies examples:
- Enhance food and water security
- Strengthen public health systems
- Protect public infrastructure and resources
- Explore and identify suitable climate insurance instruments to deal with climate impacts
- Others…

Policy E&C.2.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community's vulnerability from climate change impacts.

Strategy examples:
- Building standards in the Zoning Code

Policy E&C.2.3. Invest in forest health and watershed protection measures.

Strategies examples:
- Reduce forests vulnerability to high-severity, landscape level wildfire and insect pest outbreaks
- Protect forests from development
- Others…

Policy E&C.2.4. Increase the region's preparedness for extreme climate events.

Strategies examples:

- Maintain emergency response plans.
- Protect public health from the effects of weather and climate with….
- Use public education and outreach to help the community be more prepared.

Goal E&C.1.: **To integrate the best available science about climate change and its projected regional effects into all policies governing the use and conservation of Flagstaff's natural resources, including development of adaptation strategies to promote sustainable use of energy, water, air, ecosystems, and wildlife for current and future generations.** *(CAC Approved 10-21-10)*

Suggested re-wording: Goal E&C.3. Integrate the best available science into all policies governing the use and conservation of Flagstaff's natural resources.

See Water Conservation, Energy, Eco-system, Wildlife and Transportation for collaborated policies.

Policy E&C.1.1. Develop water use policies which attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources, emphasize conservation and water harvesting, and minimize the energy-intensive transport and pumping of water. Moved to WATER

Policy E&C.1.2. Encourage energy efficiency and conservation in the public, commercial and residential sectors through policies that promote more efficient lighting, better insulation, and increased use of alternative energy for generation of electricity. Moved to ENERGY

Policy E&C.1.3. Promote management strategies such as the Four Forests Restoration Initiative to increase the resiliency of our ecosystems to the effects of climate change, including thinning and other restoration techniques for our ponderosa pine forests to reduce their vulnerability to catastrophic wildfire and insect pest outbreaks while maintaining natural diversity of plants and animals. Moved to STRATEGIES

Policy E&C.1.4. Promote transportation options such as increased public transit and more bike lanes that will reduce congestion, fuel consumption, and overall carbon emissions and promote walkable community design. Moved to TRANSPORTATION

Policy E&C.1.5. Maintain and restore important wildlife corridors throughout the planning area to allow wildlife to find suitable habitat in the face of climate change by moving along vegetational and elevational gradients. Moved to WILDLIFE

Policy E&C.3.1. Assess vulnerabilities and risks of Flagstaff's natural resources.

Source that informed this section:

1. *http://climatechange.worldbank.org/overview/climate-change-mitigation*
2. *http://www.epa.gov/climatechange/impacts-adaptation/society.html*
3. *http://www.c2es.org/docUploads/PEW_Adaptation.pdf*
4. *http://www.iucn.org/news_homepage/all_news_by_theme/social_policy_news/?5715/climatechangerestorationandreslience*
5. *http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts/regional-climate-change-impacts/southwest*

a. Climate

As a result of its high elevation, geographic location, and low humidity, Flagstaff is characterized by a pleasant four-season climate with average winter highs of 45 degrees, average summer highs of around 80 degrees, and almost 300 days of sunshine a year (Hereford 2007). The greater Flagstaff area is a year-round recreational haven for residents and visitors alike. Climate also plays a pivotal role in shaping the abundance and quality of our region's natural resources, including our water supply, the composition of our ecosystems, and the availability of wildlife habitat.

True to the general pattern of precipitation across the southwest, on average almost two-thirds of Flagstaff's annual rain falls in distinct winter and summer peaks. Afternoon thunderstorms originating from the south typically develop during the July to September "monsoon" season. Summer rain is more abundant than winter, and less variable than rainfall in winter and spring. Long-term average annual precipitation in Flagstaff is 21.6 inches per year, and the amount can vary considerably from year to year (Hereford 2007). Winter and summer precipitation do not contribute equally to Flagstaff's water supply. Due to the greater amount of evaporation and surface runoff that occurs during monsoon season, summer precipitation does not appreciably increase available water supply, but can reduce peak water demand. Conversely, winter precipitation in the form of rainfall or snow increases the annual springtime surface water yield of bodies such as Lake Mary reservoir and the Inner Basin springs, despite its greater variability (Hereford 2007). Adequate snowfall plays a key role in providing the economic benefits that arise from Flagstaff's abundant winter recreational opportunities. Snow may fall in any season and averages, about 100 inches annually in the city. Extreme winter snowstorms may occur.

Local variations in climate play a major role in shaping the range of vegetation communities, ecosystems, and associated wildlife found in the region. While ponderosa pine forests predominate, elevation gradients of temperature and precipitation result in a diversity of plant communities ranging from arid grassland and pinyon-juniper shrubland at lower elevations of 4,000 feet [check facts] to mixed conifer and alpine tundra at the summits of the San Francisco Peaks at 12,800 feet [check facts].

Historic records from weather stations and prehistoric climatic indicators such as tree ring widths suggest that Flagstaff and the southwest in general have long been characterized by alternating dry and wet periods, and that these have sometimes lasted for many decades or even longer (Hereford et al. 2002, Hereford 2007). The past decade has seen a prolonged period of elevated temperatures and drought across the southwest and associated water level drops in many regional reservoirs (Univ. Colorado at Boulder 2009), and 1950-2007 records from the National Weather Service station at Pulliam Airport indicate the period since 1996 has been the driest during this interval in the Flagstaff area (Hereford 2007). Compared

to other areas of the country, the increase in average temperatures in the southwest in recent years has been among the highest (U.S. Global Change Research Program 2009).

An unanswered question with large implications for future planning and conservation efforts in the Flagstaff area is the extent to which the recent trend toward a drier and hotter climate reflects a permanent shift associated with global climate change, and how this predicted warming will impact our region. Scientists cannot yet predict with precision how global temperature increases in coming decades will affect our regional climate due to uncertainty regarding future rates of greenhouse gas emissions and the relatively imprecise resolution of current global climate models. Nonetheless, most models predict that the American southwest will become warmer and drier overall and experience decreased snowfall and shorter winters (Seager et al. 2007, U.S. Global Change Research Program 2009, Mearns, 2010). The future climate predicted for the southwest is expected to cause a range of effects, many of which may interact and be exacerbated by a growing population. These include a dwindling water supply, increased frequency and severity of wildland fires, spread of invasive species and insect pests, tree die-offs, increased risk of flooding and erosion in areas of vegetation loss, and shifts in the location of suitable habitat conditions for various plant and animal species (Southwest Climate Change Network 2008, U.S. Global Change Research Program 2009, Allen et al. 2010).

While planning in the face of uncertainty presents considerable challenges, the consequences of predicted climate change for Flagstaff and their implications for natural resource policy can already be glimpsed on the landscape. A recent interagency study of northern Arizona's water supply led by the U.S. Bureau of Reclamation (U.S. Department of the Interior 2006) projected unmet [water?] demands in the region by 2050 even with enhanced conservation measures unless further resources are developed, and cautioned that further development of the Colorado Plateau's C- and N-aquifers could become unsustainable. All of the study's proposed alternatives included some provision of water from Lake Powell, yet the likely reduction in Colorado River reservoirs expected under most climate change scenarios was not factored into the analysis. Therefore, it would be proactive to ensure that planning efforts incorporate the likelihood that future water supplies may be even more limited than predicted.

Consideration of how climate change may affect conservation of our region's natural resources underlies the goals and policies in this element. Climate change "adaptation strategies" inform many of the policies in the sections that follow, and include actions designed to improve the resiliency of our treasured natural landscape to respond to long-term climate change. We can take actions such as thinning and prescribed fire to improve the health and resiliency of our forests, and conservation of wildlife corridors so species can move in response to shifts in their habitat. Above all, climate change will likely affect the quality of life for Flagstaff's residents in coming years in both predictable and unexpected ways, and influence the long-term sustainability of our community.

Goal E&C.1.: To integrate the best available science about climate change and its projected regional effects into all policies governing the use and conservation of Flagstaff's natural resources, including development of adaptation strategies to promote sustainable use of energy, water, air, ecosystems, and wildlife for current and future generations.

> ***Policy E&C.1.1.*** Develop water use policies which attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources, emphasize conservation and water harvesting, and minimize the energy-intensive transport and pumping of water.
>
> ***Policy E&C.1.2.*** Encourage energy efficiency and conservation in the public, commercial and residential sectors through policies that promote more efficient lighting, better insulation, and increased use of alternative energy for generation of electricity.

~~***Policy E&C.1.3.*** Promote management strategies such as the Four Forests Restoration Initiative to increase the resiliency of our ecosystems to the effects of climate change, including thinning and other restoration techniques for our ponderosa pine forests to reduce their vulnerability to catastrophic wildfire and insect pest outbreaks while maintaining natural diversity of plants and animals.~~

~~***Policy E&C.1.4.*** Promote transportation options such as increased public transit and more bike lanes that will reduce congestion, fuel consumption, and overall carbon emissions and promote walkable community design.~~

~~***Policy E&C.1.5.*** Maintain and restore important wildlife corridors throughout the planning area to allow wildlife to find suitable habitat in the face of climate change by moving along vegetational and elevational gradients.~~

~~b.~~ Ecosystem Health

Planning for ecosystem health is important in the Flagstaff region because the forest crosses all ownership and management boundaries including private lands, Coconino National Forest, Walnut Canyon and Sunset Crater National Monuments, State Trust Lands, and Camp Navajo. Almost three quarters of the land within the Regional Plan study area lies within the Coconino National Forest (72.24% -- see Table 1). Ecosystem health issues do not respect jurisdictional and ownership boundaries, and, therefore, it is important that all landowners and land management agencies work in concert to achieve common goals. Similarly, while much of this discussion focuses on ecological conditions in the ponderosa pine forest itself, this ecosystem and the others found in the planning area represent a biologically interconnected landscape for which land use and management decisions should be approached holistically.

Table 1: Flagstaff Region Land Ownership

Owner	Acres	Percent
Public Multiple-Use Lands		
Coconino NF Lands	243,005	72.24
State Trust Lands	25,627	7.62
Camp Navajo	12,017	3.57
Walnut Canyon NM	3,228	.96
Sunset Crater NM	3,048	.91
County Land	374	.11
Other	705	.21
Total Public Lands	**288,004**	**85.62**
Total Private Lands	**48,375**	**14.38**
Total FMPO	**336,379**	**100.00**

As the largest land management agency in the region, the U.S. Forest Service manages national forest lands for multiple uses including timber, grazing, mining, watersheds, and recreation. For much of the 20th century, management objectives were focused primarily on logging, grazing, and fire suppression. These practices – although well-intended and based on generally accepted management practices and the public policies of the time – resulted in a general decline of forest health. Most notably, the attempt to

eliminate fire from a fire-adapted ecosystem resulted in drastically increased fire danger: instead of periodic low-intensity surface fires which help to keep the forest healthy, more extreme stand-replacing crown fires completely destroyed large areas. In addition to the threat of catastrophic wildfire, the forests surrounding Flagstaff are increasingly threatened by insect infestation, disease, and loss of native biodiversity. Long term climate change is another factor that could have dramatic effects on the composition, structure, and function of the forests surrounding Flagstaff in the years to come. Although extensive work has been done around Flagstaff to improve forest health and reduce wildfire risk, much remains to be done. Forest health was in decline for more than a century before restoration efforts began, and it will be a long term and ongoing process to restore the ecosystem to a healthier condition. While significant progress has been made in the last decade, it is important that such efforts continue into the future.

The greater Flagstaff area features a number of important habitat types found within or adjacent to the ponderosa pine forest, each with its own unique characteristics and conservation needs. For example, much of the region's grasslands, including Forest Service areas on Anderson Mesa and private ranchlands north and east of the San Francisco Peaks, have been altered by historical grazing, invasive weeds, shrub encroachment, and climatic changes. Recent collaborative restoration projects by private landowners and public agencies including the Forest Service have recreated more healthy grassland conditions through shrub and weed removal and the return of native plants, and further efforts should be encouraged. Similar projects to restore pinyon-juniper woodlands through thinning, seeding, and selective prescribed fire may help to return these habitats to a more natural fire regime and species composition, while improving the diversity of understory forbs and grasses to provide more desirable forage for wildlife.

The Flagstaff area also boasts a number of largely ephemeral wetlands, including Rogers Lake, Dry Lake, ephemeral ponds on Anderson Mesa, and spring-fed wet meadow systems such as Pumphouse Meadow near Kachina Village. While these habitats are rare, they represent highly sensitive areas and valuable resources for wildlife, recreation, flood control, aquifer recharge, and other functions. Thus, their continued conservation, including restrictions on nearby development and where possible the maintenance of water flows, remain a high priority. Greater Flagstaff features riparian areas with primarily intermittent flows which, like our wetlands, are prized by residents for their scenic, recreational, ecological, flood control, and other values; the Rio de Flag, Walnut Creek, and Pumphouse Wash are among our more prominent examples. The riparian ecosystems associated with these channels have been affected by urbanization and human use to different extents, and in many cases could benefit from active restoration. Restoration can include reconstruction of bank morphology, noxious weed removal, the return of native plants including grasses, forbs, and oaks, depending on site conditions, and when possible the increase of in-stream flows, e.g. from treated sewage. The multi-stakeholder effort to restore and preserve Picture Canyon on the Rio de Flag east of the city provides a good example of collaborative conservation, and this plan encourages further efforts along other reaches of this highly-valued urban watercourse and others in the planning area.

~~Connection of forest health and water quality?~~

There is a direct connection between the health of our forests and water in our community. Our forests are the **source** of our water, and a critical aspect of our overall water infrastructure, no less as important as wells, reservoirs, storm-water channels, water treatment facilities, pipelines, meters, and taps. Declines in forest health often lead to unnatural, catastrophic wildfire, a growing reality throughout the western US. Our southwestern ponderosa pine forests are especially vulnerable to this type event.

Such fires often result in devastating post-fire flooding, such as we saw, and continue to experience, in the aftermath of the 2010 Schultz Fire. The impact of this type event is loss of soil, severe erosion, mud-and-debris flows, property damage, loss of life, and long-term decreases in property value and tax revenue.

Repair and recovery efforts associated with post fire flooding events and other associated damage now far exceed, on a national average, the suppression cost of the fire itself, and such effort extends for years afterwards as well.

In recognition of this threat, the City of Flagstaff passed a $10 million "Forest Health and Water Supply Protection Project" bond in Nov 2012, the first-of-its kind in the US. This effort will fund planning and forest treatment activities on nearly 11,000 acres of federal and state lands within two watersheds critical to the City. Reducing destructive fire potential in these will two areas will prevent inevitable flooding into the community (Rio de Flag/Dry Lake Hills watershed) following such a fire, and protect storage capacity and water quality of the Lake Mary reservoir (Lake Mary watershed).

This work, in combination with other on-going efforts by individuals, agencies (City, County, State, and Federal), and partnerships
(Greater Flagstaff Forests partnership and Four Forest Restoration Initiative), to restore our forests will pay great dividends in ensuring healthy forests and the protection of our water system.

Goals and Policies - Ecosystem Health

Goal E&C.42.: Protect, restore and improve and restore ecosystem health and maintain native plant and animal community diversity across all land ownerships in the Flagstaff region.

Policy E&C.42.1. Encourage public awareness that the region's ponderosa pine forest is a fire-dependent ecosystem and strive to restore more natural and sustainable forest composition, structure, and processes.

Policy E&C.42.2. All landowners and land management agencies are encouraged to emphasize forest ecosystem restoration and catastrophic fire risk reduction for the lands under their respective jurisdictions.

Policy E&C.42.3. The City of Flagstaff and Coconino County support the efforts of land management agencies to manage dispersed camping, campfires, off-road motor vehicle travel, and other forms of recreation consistent with resource protection and community fire risk reduction.

~~***Policy E&C.2.4.*** Community residents, property owners, and other agencies are encouraged to participate in forest planning, management, and restoration efforts as opportunities arise.~~

~~***Policy E&C.2.5.*** Residents, property owners, and government agencies are encouraged to pursue opportunities for interagency cooperation and community collaboration to accomplish natural resource goals that might not be accomplished individually.~~

Policy E&C.42.6. Promote conservation and ecological restoration of the region's diverse ecosystem types and associated animals including grassland, pinyon-juniper, wetland, and ponderosa pine forests on both public and private lands in a landscape context.

PolicyE&C.42.7. Support collaborative efforts to return local native vegetation, channel structure and, where possible/applicable, preservation and restoration of in-stream flows.

Policy E&C.42.8. Preserve Flagstaff's wetland areas and discourage inappropriate development that may adversely affect wildlife habitat, recreational opportunities, viewsheds, riparian and ecosystem health.

c. Noxious and Invasive Weeds

Invasive and noxious weeds pose an increasing economic and ecological threat throughout the West, and the Flagstaff region is no exception. Invasive weeds have increased costs for landscape and maintenance along roads, school yards, parks, and other areas. Forest and grazing lands have been degraded, and unchecked infestations threaten greater losses. Such plants tend to spread rapidly, out-compete and displace native species, and disrupt ecosystem processes. If not controlled, invasive non-native plants reduce biodiversity, degrade wildlife habitat, and jeopardize endangered species.

Goals and Policies - Noxious and Invasive Weeds

Goal E&C.43.: Use best environmental practices to Ccontrol populations of invasive noxious weeds, eradicate where possible, and prevent new infestations.

> ***Policy E&C.53.1.*** Develop vegetation/noxious weed management program. The City and County will cooperate with the San Francisco Peaks Weed Management Area (SFPWMA) to inventory, eradicate, and control invasive non-native weeds, including those required for compliance with State regulations; prevent establishment of new infestations through public awareness and education; and restore disturbed areas with native species.
>
> ***Policy E&C.3.2.*** Weed management plans shall be required for new development projects where applicable to control existing populations and prevent new infestations.
>
> ***Policy E&C.53.3.*** The City and County will adopt weed control measures to be applied to road and utility infrastructure construction and maintenance projects, and will pursue aggressive weed-control strategies in public rights-of-way and other City and County-owned properties.
>
> ***Policy E&C.35.4.*** The City and County Parks and Recreation Departments will pursue opportunities with other agencies and volunteer groups to control the spread of non-native invasive plants and noxious weeds on public park lands and natural areas.
>
> ***Policy E&C.35.5.*** Disturbed areas for improvements and landscaping for new developments shall emphasize the use of native, drought-tolerant or edible species appropriate to the area.
> ***Policy E&C.3.6.*** Limit use of herbicides, insecticides and similar materials.

d. Wildlife

The greater Flagstaff area boasts an abundance and diversity of wildlife that is highly valued by residents and visitors alike. Due to Flagstaff's location in the ponderosa pine ecosystem of the Coconino National Forest, amidst diverse habitats including rocky canyons, seeps and springs, open meadows and grasslands, and wilderness areas, wildlife are a prominent aspect of our local environment and help define our regional character. Wildlife-based recreation ranging from bird-watching to hunting draws visitors from around the state and contributes directly to the region's economy. Our community supports the stewardship of the full range of our native wildlife, from highly visible large mammals, such as elk and bear, to less conspicuous species, such as birds, reptiles, amphibians, and invertebrates, as well as of the ecosystems on which they depend. We recognize the role of proactive planning in minimizing the impacts of development and human activities on important wildlife habitat and wildlife movement corridors, and of promoting wildlife conservation.

Variations in physical features of the landscape, including topography, elevation, slope, and surface water, influence vegetation type and resource availability at particular locales around Flagstaff, which in turn shapes local biodiversity by providing varied habitat for wildlife species. Taking proactive steps to promote the conservation of sensitive and declining species now may prevent their listing as threatened or endangered species in the future, and by doing so help avoid the considerable land use restrictions which listing often entails.

Most of our native wildlife species require the use of multiple habitats during the day and/or seasonally to support their activities. Breeding songbirds often forage in areas different from where they nest, while animals ranging from bald eagles to pronghorn to elk migrate seasonally each year in response to the distribution of food or other conditions. Less predictable annual variations in resources, such as water, can also influence animal movements. Species with large home ranges, including mountain lions and black bears, typically depend on large areas of contiguous habitat, and individual animals can range from the San Francisco Peaks to the Mogollon Rim. Both the quality of the different habitats animals utilize and the connectivity between habitats across the landscape can affect individual survival and reproductive success as well as influence the long-term stability of whole populations. For these reasons it is important to consider the effects of land use decisions on wildlife, and to develop conservation strategies in the broader landscape context. It is also important to conserve localized habitat types that provide habitat for less-mobile species with small home ranges, such as amphibians (wetlands and riparian areas), reptiles (rocky outcrops), and small mammals (open prairie and other habitats). These species, which often form the prey base for larger, wider-ranging carnivores and other animals, are less likely to move to new habitats if their environment is degraded.

Maintaining habitat connectivity through conservation of important wildlife movement areas or "corridors" in the greater Flagstaff area is a critical and growing conservation need. In addition to allowing animals to obtain essential resources and avoid climatic extremes through daily and seasonal movements, intact wildlife movement areas serve many essential functions, including helping to maintain genetic diversity, aiding in dispersal of young from their natal area, facilitating the "rescue" of populations decimated by fire, flooding, or other extreme weather events, and, in coming years, will allow wildlife to shift their range and colonize new habitat in response to climate change. Wildlife movement areas may be relatively broad and diffuse or limited to narrower corridor-like features such as forested ridges, canyons, and riparian zones, or even more localized as in the case of Arizona treefrogs and chorus frogs, which make short-distance seasonal breeding movements from uplands to ephemeral ponds in the spring and rainy summer months.

Wildlife are adapted to cope with the range of environmental variation associated with the ecosystems in which they are found, including even large-scale disturbances such as fire or flooding. However, ongoing natural and human-caused modification of our regional landscape may drastically change wildlife habitat quality and quantity within our local ecosystems. Altered fire frequency and severity stemming from forest management practices, shrub encroachment of grasslands, invasion of ecosystems by non-native plants and animals, drought, introduction of domestic pets, fragmentation of habitat by urban and rural development, and climate change can alter resource availability, directly reduce and/or degrade habitat, and affect ecological processes such as competition, predation, and disease transmission, and impact ecosystem services provided by the habitat to humans. Invasive species – animals, plants, and fungi that are not native to an ecosystem and whose introduction is likely to cause economic, environmental or human harm -- represent an emerging area of concern for the conservation of Arizona's wildlife. Invasive plants are a significant problem in the Flagstaff area, and may affect wildlife by outcompeting native species, reducing plant diversity, modifying fire regimes, and altering habitat structure and resource availability (see also the section "Noxious and Invasive Weeds").

Often the consequences of landscape alteration for wildlife populations and ecosystem interactions are not understood until long after they are initiated. Land use decisions in the greater Flagstaff area including the planning and layout of subdivisions, siting of transportation and utility corridors, siting of public trails, and other projects can have a significant impact on the amount and quality of habitat for wildlife. Proactive restoration efforts, such as the interagency Four Forest Restoration Initiative and efforts to restore the riparian ecosystem along reaches of the Rio de Flag through Picture Canyon and other areas, promise multiple community benefits including the improvement of wildlife habitat. Thus enactment of many of the goals and policies associated with other sections of this *Plan*, including Ecosystem Health, Noxious and Invasive Weeds, and Water, may indirectly but positively benefit Flagstaff's wildlife.

Ensuring stable and resilient populations of our native wildlife has benefits beyond the survival of individual species. Wildlife perform a wide range of ecological functions including pollination, control of pest and disease organisms, limiting populations of prey species through predation, seed dispersal, and many other functions that collectively help to maintain the integrity of our local ecosystems. In doing so they may also provide the community with indirect "ecosystem services" such as maintaining water quality and healthy soils and limiting populations of disease-spreading insects. While the contributions made by individual wildlife species to ecosystem services are likely to be indirect and are currently not well-understood, conservation which aims to maintain and enhance the full spectrum of native wildlife and the habitats on which they depend will help ensure that Flagstaff residents continue to receive these natural benefits for years to come.

As the Flagstaff region continues to prosper we will be continually challenged to weigh the needs of our population with effective conservation of wildlife habitat and our other vital natural resources. This requires maintaining functional ecosystems and intact wildlife movement corridors at the landscape scale.

Goals and Policies - Wildlife

***GOAL* Goal E&C.64.:** Protect indigenous and diverse wildlife populations, localized and larger-scale wildlife habitats, ecosystem processes, and wildlife movement areas throughout the planning area.

> ***Policy E&C.64.1.*** Encourage local development to protect, conserve, and when possible enhance and restore wildlife habitat.
>
> ***Policy E&C.64.2.*** Protect *, conserve, and when possible enhance and restore wildlife habitat on public land.
>
> ***Policy E&C.64.3.*** **P**rotect* sensitive and uncommon habitats such as ephemeral wetlands, riparian habitats, springs and seeps, rare plant communities, and open prairie ecosystems including the physical elements such as water sources and soil types on which they depend.
>
> ***Policy E&C.64. 4.*** Protect* populations of rare and sensitive animal species and their habitats, including threatened and endangered species and species of special conservation concern.
>
> ***Policy E&C.64.5.*** Conserve and manage important wildlife movement corridors for a broad range of species.
>
> ***Policy E&C.64.6.*** Support the control and removal of terrestrial and aquatic exotic and invasive plants and animals.
>
> ***Policy E&C.64.7.*** Support the development of watchable wildlife recreation opportunities.

Policy E&C.6.8. Maintain and restore important wildlife corridors throughout the planning area to allow wildlife to find suitable habitat in the face of climate change by moving along vegetational and elevational gradients.

e. Environmentally Sensitive Lands

Environmentally-sensitive lands in the Flagstaff region include floodplains, riparian areas, wetlands, seeps and springs, and steep slopes. These areas contain critical resources and require special consideration in the development design and review process. Floodplains, riparian areas, and wetlands not only provide for the discharge of floodwaters and the recharge of aquifers, but also provide important habitat for plants and animals, wildlife movement corridors, and seasonal habitat for numerous bird species. Watercourses of all types act as magnets for human settlement, recreation, and other activities. Seeps and springs provide essential water sources for natural ecosystems, as well as human communities. Steep slopes and ridgelines can be environmentally-sensitive in the sense that they often have unstable, highly erodible soils; they contain a wide range of vegetation types; and they provide habitat for a diversity of bird and wildlife species – at the same time, prominent slopes and ridgelines can be attractive to property owners as building sites with spectacular views. Considering the rarity of these types of environmentally-sensitive lands and their high environmental values, it is important to ensure a balance between environmental and human needs when development decisions may impinge upon such areas.

Environmentally -sensitive lands provide a myriad of environmental values and ecosystem services, while at the same time they attract a wide range of human activities and uses. The rarity of these areas and their environmental richness and biological diversity, however, indicate the importance of their conservation.

Goals and Policies - Environmentally Sensitive Lands

Goal E&C.5E&C.7.: Preserve and enhance the natural qualities of environmentally -sensitive lands.

Policy E&C.5E&C.7.1. The City and County encourage the preservation and restoration of natural wetlands, floodplains, riparian areas, seeps and springs, distinctive landscape features, and other environmentally-sensitive lands.

Policy E&C.5E&C.7.2. Development projects shall be designed to minimize the alteration of natural landforms and maximize conservation of distinctive natural features.

Policy E&C.5E&C.7. 3. Development proposals and other land management activities shall assess and minimize potential adverse impacts to environmental sensitive lands.

Policy E&C.5E&C.7. 4. The City and County favor the use of all available mechanisms for the preservation of environmentally-sensitive lands, including but not limited to public acquisition, conservation easements, transfer of development rights, or cluster development with open space designations.

~~***Policy E&C.5.6.*** Integrated conservation design practices, such as open space dedication, conservation subdivisions, and cluster development are encouraged for new developments in order to conserve sensitive and unique natural areas.~~

~~***Policy E&C.5.7:*** Any proposed development in environmentally sensitive areas shall enhance community involvement process (larger notification area, for example).~~

f. Soils

The geology of Coconino County has directly affected the formation of various soils due, in part, to the composition of bedrock materials, topography, geologic structures, and the influence of topography on climatic patterns. Soils in the area vary widely in type and character, ranging in composition from coarse-grained, well-drained materials to expansive fine-grained soils. Site development requirements differ accordingly.

Soils with high expansive potential can heave if the water content of the soil increases. Typical moisture sources that initiate this type of movement are rainfall, snow melt and excess landscape watering. This movement can result in drywall cracking, warped windows and doors, and eventually structural distress. Water leaks from utilities can cause extreme damage in these types of soils. Conventional shallow spread footings and slabs-on-grade are often not suitable for use on expansive soil sites. More specialized foundation systems and/or site preparation procedures could be required. Post-tensioned slab-on-ground or drilled pier and grade beam foundation systems are some of the typical solutions. Other possible site preparation treatments for this type of condition include removal of the clay soils and replacement with low expansive engineered fill material, or lime stabilization of the site soils.

Other considerations include areas with collapsible soils and areas of high groundwater. High groundwater can create substantial limitations for conventional septic systems. The areas with limitations are generally dispersed throughout the planning area. A site specific geotechnical evaluation is required to identify limitations and provide detailed design parameters.

Goals and Policies - Soils

Goal E&C.86: Protect soils through conservation practices.

Policy E&C.68.1. County Policy: In areas of shallow or poor soils where standard on-site wastewater systems are not feasible, very low density development, integrated conservation design, a centralized treatment facility and/or technologically advanced environmentally sensitive systems shall be preferred.

Policy E&C.68.2. Construction projects shall employ strategies to minimize disturbed area, soil compaction, soil erosion and destruction of vegetation

Policy E&C.68.3. Best management practices should be used when using prescribed burns in order to conserve soil resources.

g. Water Quality

Water quality is an overarching environmental concern which relates to the quality of drinking water supplies; the quality of surface waters necessary to sustain healthy ecosystems including wildlife, aquatic life, and plant life; and, the contaminants that are generated by development, land uses, and other human activity which contribute to the pollution of both surface water and groundwater. Historically, the Flagstaff region has enjoyed generally excellent water quality for surface waters including rivers, streams, creeks, lakes, and reservoirs. The same is true for groundwater, due in large part to the depth to the local aquifers, making them less vulnerable to pollution. However, with growth come threats. Protecting and improving the quality of the region's surface water and groundwater resources is vital to both human and environmental health.

***GOAL* Goal E&C.79.:** Protect, preserve, and improve the quality of surface water and groundwater in the region for human health and environmental sustainability.

Policy E&C.79.1. The City of Flagstaff and other surrounding municipal regional wastewater treatment systems should explore the feasibility of additional or alternative treatment technologies and closely monitor the research on the potential impacts to human health and our regional water supplies.

Policy E&C.79.2. Recognizing the increasing concern about water quality, seek methods to divert contaminants from the waste stream.”

Policy E&C.79.3. The City of Flagstaff and its regional partners shall iImplement best management practices to protect and maintain surface waters and their contributing watersheds.

Policy E&C.7.4. The City of Flagstaff and Coconino County Public Works Departments shall identify and implement best management practices with respect to road maintenance and snow removal that eliminates, or minimizes to the extent possible, the potential for illicit discharge of contaminants into waterways, and provides appropriate mitigation measures when discharges cannot be entirely avoided.

Policy E&C.79.5. The City and County should eEncourage Low Impact Development strategies.

Policy E&C.7.6. The City of Flagstaff and Coconino County shall work with regional partners in educating agricultural users in practices that eliminate or reduce the potential for contaminant migration.

Policy E&C.79.7. The City and County will have water quality data available and accessible to the public.
(NOTE: In addition, the CAC desires to "… to keep this idea as part of the larger conversation of ‘communication’ and ‘transparent government processes’."

Policy E&C.9.8. Protect and restore the region's watersheds.

Policy E&C.9.9. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources, emphasize conservation and rainwater harvesting, and minimize the energy-intensive transport and pumping of water.

h. Air Quality

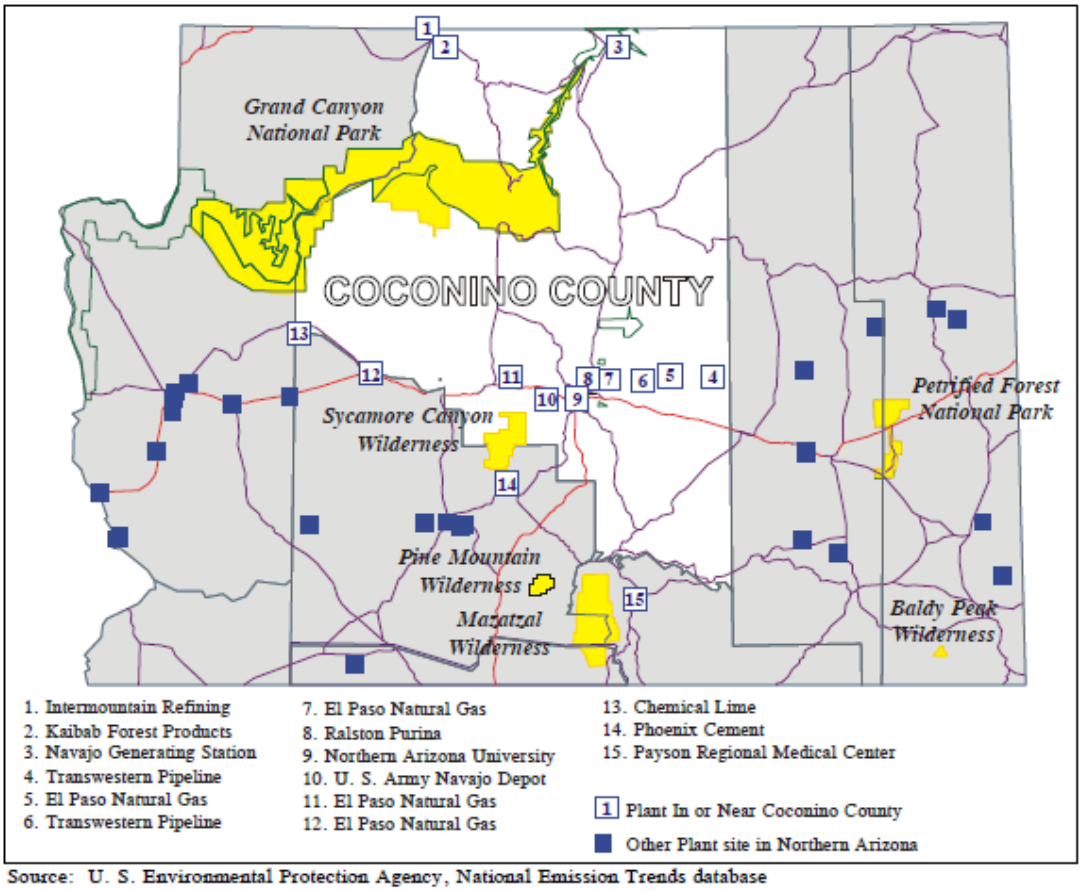
The excellent air quality found within Flagstaff region not only benefits the community with clean air to breathe, but also with a thriving, healthy ecological environment, as well as a popular tourist attraction. In general, our community desires to balance protection of the environment with progress. Therefore, effective land use planning and proactive measures are critical to maintaining our air quality in the future. New development and industry should be planned so that it does not create a violation of the National Ambient Air Quality Standards.

During the past decade, Flagstaff’s region realized growth that increased air pollution-generating activities, such as on- and off- road vehicle useemissions; rail traffic; residential, commercial and industrial development; and, wood-burning fireplaces. Not only do air pollutants affect our ecosystem’s

health, they also affect our visual, aesthetic quality due to the occasional, short-term problem of urban haze or "brown cloud" which obscures views of the mountains and canyons.

In addition to growth impacts, upwind stationary sources such as electrical power plants, mining operations, and other industries emit air pollutants that may affect our region. More than a dozen facilities operate within or adjacent to Coconino County that produce significant amounts of carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOC), sulfur dioxide (SO2), particulate matter (PM10 and PM2.5), or ammonia (NH3).

FIGURE 1. LOCATIONS OF INDUSTRIES EMITTING CO, NOx, VOC, SO_2, PM_{10}, $PM_{2.5}$, OR NH IN OR NEAR COCONINO COUNTY



Source: U. S. Environmental Protection Agency, National Emission Trends database

The Environmental Protection Agency (EPA) sets the National Ambient Air Quality Standards (NAAQS) standards for six pollutants: ozone, particulate matter (PM 2.5 & PM 10) carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. The air in Coconino County is healthy to breathe, according to monitoring data collected by the Arizona Department of Environmental Quality, the National Park Service, and the Salt River Project. Violations of the national ambient air quality standards have not occurred in Coconino County. However, on some days regional haze causes perceptible reductions in visibility.

Beginning in August 2011, stricter EPA standards were put into effect, as well as the Arizona State Implementations Plan in December 2013. The potential impact is that Coconino County will be the responsible agency for any nonattainment air quality issues which may initiate restrictions and limitations (e.g. reduction or elimination of burn permits and, potentially vehicle emissions testing.). Over the years,

city and county policy-makers realized the benefits of a clean-air environment and have been proactive to minimize potential impacts with regulation and the goal to attract non-polluting industry to the region. The following goals and policies continue build upon these efforts and direction.

Goals and Policies - Air Quality

Goal E&C.810.: Proactively improve and maintain the region's air quality for continued compliance with National Air Ambience Quality Standards.

Policy E&C.810.1. Engage public agencies concerned with the improvement of air quality, and implement state and regional plans and programs to attain overall federal air quality standards and in particular ozone, particulate matter and carbon monoxide on a long-term basis.

Policy E&C.810.2. Pursue reduction of total emissions of high priority pollutants from commercial and industrial sources and area-wide smoke emissions.

Policy E&C.810.3. Improve air quality by reducing vehicular emissions.

Policy E&C.810.4. Encourage strategies and partnerships to mitigate dust.

Policy E&C.810.5. Improve and maintain air quality through non-polluting industry and commercial enterprises.

Policy E&C.810.6. Seek feasible alternatives to reduce the smoke produced through prescribed burns and slash piles while continuing efforts to return fire to its natural role in the ecosystem.

i. Dark Skies

Flagstaff has become one of the few deep space research sites in the world, and is home to the Lowell Observatory, the U.S. Naval Observatory's Flagstaff Station, the National Undergraduate Observatory, and the Navy Prototype Optical Interferometer (NPOI). In July 2012, the Discovery Channel Telescope was commissioned as Lowell Observatory's flagship research telescope, -the 5th largest telescope in the continental U.S. and one of the most technologically advanced. With this cutting-edge telescope, and with Discovery Channel as a partner, Lowell Observatory will continue to contribute substantially to tourism in the area.

Our success in observatory and planetary sciences is attributed to the region's vanguard approach to protecting Dark Skies with the passing of Ordinance 400 in 1958 that banned advertising search lights that threatened the night sky. In 1989, Flagstaff and Coconino County strengthened its commitment to dark skies and the planetary industry by passing land development codes that restricted the amount of light (per acre) in outdoor lighting installations as well as establishing light district codes and standards. On October 24, 2001 the City of Flagstaff was recognized as the first International Dark Sky City for its pioneering work in the development and implementation of lighting codes that balance the need for preserving Flagstaff's dark sky resources with the need for safe lighting practices.

To remain one of the premier astronomical sites in the world and to be astronomically productive, the region must control artificial light and air pollution while recognizing the need for outdoor lighting for a safe environment in urban centers. This will require not only the continued enforcement and improvement

of local, modern lighting codes as lighting technologies emerge and evolve, but as development begins to spread into the areas near the observatories, thoughtful analysis and consideration of impacts upon the observatories need to be addressed. To allow for the continued pursuit of astronomical research and the enjoyment of the nighttime visual environment, the detrimental effects of light pollution should be minimized while conserving energy and resources.

Goals and Policies - Dark Skies

Goal E&C.911.: Preserve Dark Skies as a natural resource and as an important economic benefit and element of community character.

> ***Policy E&C.911.1.*** Consider Evaluate the impacts on the dark skies at local observatory sites of all lighting regulation changes, land-use designations or changes, and proposed transportation developments within the region.
>
> ***Policy E&C.911.2.*** Prevent light trespass.

j. Natural Quiet

Just footsteps from Flagstaff's urban core, one leaves the commotion of the city and can simply walk into forested serenity or vast open spaces. This convenient and quick access to nature is one of the many reasons people live and visit Flagstaff. As development occurs on the urban fringe and visitor/recreation traffic increases, maintaining natural quiet, that is, the absence of human-generated sound becomes difficult. Future development should address noise issues through land use and site planning that appropriately locates intensive land uses, and includes buffers between uses and highway corridors.

Goals and Polieis - Natural Quiet

Goal E&C.120: Maintain areas of natural quiet and reduce noise pollution.

> ***Policy E&C.120.1.*** Establish location appropriate sound management tools with measurable criteria.
>
> ***Policy E&C.120.2.*** Evaluate land uses and transportation proposals to their potential noise impacts.

B. Open Space Element

1. Introduction
2. Relationship to Vision and Guiding Principles
3. Rural Open Space
4. Urban Open Space
5. Goals and Policies

1. Introduction

To many Flagstaff area residents, Oopen Sspace is a defining feature of Flagstaff's character and attraction because it protects environmental quality and biodiversity health, supports tourism, and protects historic and cultural resources. Open Sspace functions as a land resource, recreational destination, and transportation corridor. It also provides a system of control over development patterns. The area encompassed by the *Regional Plan* holds an enormously diverse variety of open space lands from high-elevation wetland meadows to regionally significant geologic formations. Planning for open space can ensure preservation of these important resources.

Open Sspace lands are a complex mosaic of undeveloped or minimally developed lands with a wide variety of qualities, values and purposes affecting all other elements of the Regional Plan. Open Space may protect:

- Ecological networks
- Wildlife habitats and corridors
- Riparian areas and wetlands
- Historical, cultural and archeological sites

Open Sspace may offer:

- SceneryScenic opportunities
- Opportunities for outdoor enjoyment and passive recreation, including but not limited to fishing, picnicking, hiking and wildlife watching
- Sustainable agriculture

Open Sspace may serve as:

- Linkages between features
- Buffers for neighborhoods and highways
- Buffers for areas of high cultural and ecological value
- Spatial definition of urban areas

The *Regional Plan* identifies open space lands for current and future public or permitted private use, and specifies tools to acquire and conserve open space. The framework used for types and uses of Open Space is the *Flagstaff Area Open Spaces and Greenways Plan* (OSGWP), which was adopted in 1998 as an interagency effort to provide guidance in protecting and preserving existing open spaces in the Flagstaff region. Participating agencies included the City of Flagstaff, Coconino County, Arizona State Land Department, Arizona Game and Fish Department, Coconino National Forest, and the National Park Service, as well as numerous citizens and local organizations interested in preserving the character of the community. Among other things, OSGW classifies open space into a hierarchy of five open space categories. The five categories are briefly summarized below.

OSGWP Open Space Categories:

1. Primitive – exhibits natural conditions with little evidence of current human activities; many unique and significant features, e.g. highest mountains, deepest canyons; helps define a sense of place; key wildlife habitat; restricted non-motorized access; very wild; wilderness areas.

2. Semi-primitive – some evidence of past human activities, but substantially natural-appearing conditions; key or high quality wildlife habitat; restricted access/primitive roads & trails, high clearance vehicles; scenic vistas and prominent landscape features.

3. Multiple-use/Conservation – appear natural but show some evidence of past human activities; forests & grasslands; high quality wildlife habitat; often accessible by two-wheel drive vehicles; economic uses include wood products, grazing, outfitting; variety of recreational uses; moderate to high levels of use.

4. Neighborwoods – open spaces near residential areas; easily accessible for after-work recreational activities, e.g. hiking, biking, horseback riding; highly accessible; high level of use; many social trails; recreational use by default rather than planned management.

5. Cultural/Historical/Recreational – highly modified by human facilities; developed recreation sites; combination of natural and modified landscapes; examples are Arizona Snowbowl and Fort Tuthill County Park; highly accessible to all modes of travel; high visitor use. This also includes less-disturbed cultural resources, such as Picture Canyon and Elden Homestead site and grave.

A collaborative open space planning group may consider the spatial relationships of these open space categories, as proximity and edge effects affect the quality of the more natural open space categories. The open space planning group will want to develop an assessment process in which priorities for restoration of natural conditions and species can be established.

The first task of the Open Space element of this *Regional Plan* is to address where open space should be preserved, thus defining where sustainable urban expansion can occur. Two open space plans have been developed for the Flagstaff region, the Rural Open Spaces Plan *(map xx),* and the Urban Open Spaces Plan *(map xx)*. The *Regional Plan* incorporates the relevant goals and objectives of these plans in order to develop a consistent, integrated, and balanced open space and trails system given the limited percentage of private lands available for development. Future development must balance preservation of important Open Space lands for use as wildlife corridors and riparian waterways, while allowing appropriate urban development.

As required by Arizona Revised Statutes, this ~~'~~discussion of open space element~~'~~ includes:

a) A~~a~~ comprehensive inventory of open space areas, recreational resources and designated points of access to open space areas and resources; *See Natural Environment Map – Existing Conditions*

b) An analysis of forecasted needs, [WHERE IS THIS?] policies for managing and protecting open space areas and resources and implementation strategies to acquire additional open space areas and further establish recreational resources; and

c) Policies and implementation strategies designed to promote a regional system of integrated open space and recreational resources and consideration of any existing regional open space plans.

2. Relationship to Vision and Guiding Principles

Open Sspace preservation is consistent with the adopted Guiding Principles pertaining to sustainability, healthy ecosystems, smart growth and quality development, a vibrant and resilient economy, sense of place and community character, and partnerships. We desire thriving communities and viable economies that exist in harmony with our unique natural environment. The long-term health and viability of our open spaces and natural landscapes are essential to achieving the future envisioned by this plan. When planning for the region, the community must indicate the 'green infrastructure' first, and then weave the urban fabric around and through this.

The Arizona Game and Fish Department is proactive in developing and implementing the Arizona State Wildlife Action Plan (2005-2015), the Coconino County Wildlife Linkages Report (March 2011)[2] and the Interagency Management Plan for Gunnison's Prairie Dogs[3]. These plans were developed on the premise that the most effective way to conserve rare, declining and common wildlife is to restore and conserve healthy areas to live. Consequently, the action plan focuses on habitat types and riparian systems. The wildlife corridors, habitat areas and watchable wildlife sites, as established by the Arizona Game and Fish Department, is an important layer within the Regional Plan open space planning maps.

3. Rural Open Spaces

In 1997, the City of Flagstaff, Coconino County, the U.S. Forest Service, the National Park Service, Arizona Game and Fish Department, and the Arizona State Land Department entered into a memorandum of understanding in which these public agencies agreed to consider to using the *Greater Flagstaff Area Open Spaces and Greenways Plan (OSGWP)* in their land use management practices. The plan encompasses a study area of 578,000 acres that includes the FMPO, and makes recommendations for agencies to consider during their own planning. The plan, adopted by the City of Flagstaff and Coconino County in 1998, has become a key component of the region-wide growth management process in determining growth boundaries. This Plan continues to refer to the *OSGWP*, with the primary goal to maintain Flagstaff's quality of life by finding ways to balance development with the retention of open spaces and natural areas. Specific values and objectives include the following:

- Promote an open space green belt that connects rural and urban open spaces
- Link trails
- Contain and direct growth and development
- Develop non-motorized transportation corridors
- Support recreational opportunities
- Protect the area's scenic quality
- Provide wildlife movement corridors
- Preserve wildlife habitat
- Foster good water and air quality
- Safeguard people and property through flood control

Since the adoption of the *OSGWP*, Arizona has adopted the Arizona Preserve Initiative, which is designed to encourage the preservation of select parcels of State Trust Land in and around urban areas for open space to benefit future generations. The law lays out a process by which State Trust Lands can be leased for up to 50 years or sold for conservation purposes. Leases and sSales of State Trust lands must both occur at a public auction. In 2001/2002 both the City and Coconino County submitted applications to petition the State Land Department to reclassify certain State Trust Lands within the FMPO boundary at Walnut Canyon, Picture Canyon, Observatory Mesa, Old Growth Forest, Rogers Lake, and Ft. Tuthill for eventual acquisition through the Arizona Preserve Initiative. These are identified on the Green Spaces Inventory maps. http://www.flagstaff.az.gov/index.aspx?NID=2035&ART=6107&admin=1 In 2010, Rogers Lake was acquired by Coconino County Parks and Recreation through this process. In 2012, the City successfully petitioned to reclassiry Picture Canyon as suitable for conservation purposes.

4. Urban Open Space

Urban Oopen Sspace encourages appropriate and controlled integration of public and significant private open space within the city limits into a continuous, linked system. Within the system are areas of different uses and densities which support and are supported by this 'green infrastructure' system of open spaces, trails, parks and greenways. Specific objectives for Uurban Oopen Sspaces include:

- Preservation of significant natural areas characterized by unusual terrain, scenic vistas, unique geologic formations, dense or unique vegetation, or wildlife habitat.
- The greenbelt principle; that is, the use of linear open space to define and control urban development.
- Preservation of open space for recreational use such as hiking, skiing, bicycling, nature studies, and other similar uses.
- Utilization of open space lands to prevent encroachment into floodplains.
- Utilization of open space lands for retention of aesthetic and recreational values of such land in proximity to and within the city.
- Preservation of open space lands for future land use needs.
- Provision for a maximum of open space for common use, which simultaneously compensates in open space for compact building development.
- Utilization of open space lands as non-motorized transportation corridors between various land uses.
- Preservation of a 'soft edge' to the city.Provide preservation of a buffer between urban development and national forest.
- Preservation of wildlife corridors.

The *Natural Environment Map – Concentration of Natural Resources* identifies open space lands that fit the above functions, in addition to existing and proposed parks and schools that fit in as supplementary components to the whole system. Portions of the city's significant hillsides and drainage ways are designated, including those of Observatory Mesa (Mars Hill), McMillan Mesa, the base of Mt. Elden and other foothills to the north; and the Rio de Flag, Bow and Arrow, Sinclair, and Switzer Canyon washes. In most cases involving drainage ways, the open space areas reflect, at a minimum, the 100-year floodplain boundary, although change or reduction of the 100-year floodplain, either through engineering applications or more definitive flood data, may alter the amount of land designated as open space. In hillside areas, the width of the open space is conceptual, the intent being to retain as much as possible of the designated area in a natural state, yet acknowledging current resource protection regulations. A separate category designates storm detention areas with open space and park opportunities. Other areas included as open space include cemeteries, golf courses, interstate medians, as well as other miscellaneous areas that serve as critical buffers or links in the system.

National Forest and State Trust lands form a forested open space system that, for the most part, surrounds the city. The National Forest lands are open to the public for public use, while State Trust Lands are not open for public use. Yet, all of these lands 'look' like open space land. In all instances, the intention of this plan is to retain and/or create a system of pedestrian access to these public lands surrounding the city within 15 minutes of any given neighborhood. The Flagstaff Urban Trails System addresses this recommendation by providing access through trail corridors obtained by a series of implementation measures such as acquisitions or easements. These corridors are linked to corridors in the Rural Open Spaces Plan by either showing the continuation of these urban designations outside of the city limits or indicating an extension whose alignment has yet to be determined. Because conflicts might arise among the different functions of these corridors, a balance between the needs of people and wildlife will need to be achieved. Implementation of the Urban Open Spaces Plan will require that a multitude of approaches be further developed through this Regional Land Use Plan in conjunction with the Rural Open Spaces Plan and the *OSGWP*.

5. Goals and Policies

Goal OS.1. The region will have a system of open lands, such as natural areas, wildlife corridors and habitat areas, trails, and greenways to support the natural environment that sustains our quality of life, cultural heritage, and ecosystem health.

Policy OS.1.1. Establish a Conservation Land System formed of stakeholders (federal, state, city, county, non-profit, and interested citizens) to inventory, map, update and manage the region's "green infrastructure" including open space planning, acquisition, conservation, protection and long-term management and maintenance."Form and use the appropriate Stake Holders Group (federal, state, city, county, non-profit and interested citizens) for coordinated open space planning, acquisition, conservation and protection.

Policy OS.1.2. A Green Infrastructure[4] will facilitate non-motorized connectivity, preserves natural lands and priority open lands, and promotes opportunities for people to interact with nature.Preserve natural lands and priority open lands as opportunities for non-motorized connectivity and for people to interact with nature.

Policy OS.1.3. Open Sspaces may serve as natural environment buffer zones to protect scenic views and roadways, to separate disparate uses, and by separating private development from public lands, scenic by-ways and wildlife habitats.

Policy OS.1.4. Recognize the importance and protect, where feasible, the natural aspects of open spaces.

Policy OS.1.5: Establish a *Conservation Land System* to inventory, map, and manage the region's "green infrastructure".

[4] Green Infrastructure – A clearly articulated map in which open space, parks, recreation, trails, environmental conservation areas, wildlife corridors and habitats and water ways are overlaid so that the inter-relation is known as the region's 'green infrastructure'.

C. Water Resources Element

1. Introduction
2. Relationship to Vision and Guiding Principles
3. Regional Water Planning
    a. Regulatory Framework
    b. County Areas
4. Goals and Policies
    a. Water Sources
    b. Water Demand

1. Introduction

Addressing water resources on a regional basis is challenging and complex. Although the entire regional plan area relies generally on the same resources (groundwater and surface water), the management and delivery of the water involves a number of different systems. The City of Flagstaff is the primary water provider within the region, serving most property within the City's jurisdictional boundary and also to water haulers (commercial and individuals) who transport the water to homes and businesses within the unincorporated areas of the County. Coconino County is not a water provider, but there are a variety of private water systems serving some of the outlying county communities and subdivisions, as well as small wells serving individual homes. As a natural resource, water knows no jurisdictional boundaries; the commodity of water, however, has been relegated to jurisdictions for regulatory and delivery purposes.

The statutory requirement for the Water Element for the City's Comprehensive Plan is to identify the following items:

a. Known legally and physically available surface water, groundwater, and effluent supplies;
b. The demand for water that will result from future growth projected in the general plan, added to existing uses, and;
c. An analysis of how the demand for water that will result from future growth projected in the general plan will be served by the identified water supplies, or a plan to obtain additional necessary water supplies.

The City's Water Resources Sustainability Study (Spring 2011) and the Utilities Masterplan (date here) address the supply and demand issues. While the statutory requirements address the commodity of water to serve human needs, the City and County both recognize the need to address the resource in a natural systems sense as well. This element will address water resources available to the region including the regulatory framework for water resources, and the current efforts to address water resource issues through a regional partnership.

2. Relationship to Vision and Guiding Principles

Water resources are integral to the future of the greater Flagstaff region, for both humans and the environment. Developing a sustainable water budget includes assessing the needs of current and future residents and businesses as well as environmental needs. This is consistent with the Vision seeking stewardship of the natural environment. The goals and policies support the guiding principles including, but not limited to, accountability and responsibility, smart growth and quality development, regional partnerships, and healthy ecosystems.

~~3.~~ Regional Water Planning

The Coconino Plateau Water Advisory Council (CPWAC) is a partnership of 28 entities, including Coconino County and the City of Flagstaff. The CPWAC was formed under the State's Rural Watershed Initiative to facilitate and implement sound water resource management and conservation strategies on the Coconino Plateau. The CPWAC mission is *"To ensure an adequate long-term supply of water is available to meet the current and future reasonable needs while preserving the health of the environment on the Coconino Plateau.."* Strategic initiatives of the CPWAC include working with the Bureau of Reclamation to project current and projected water use and water sources, pursuing federal authorization for a feasibility study to identify alternatives to meet projected demands, developing a regional water ethic, and identifying a sustainable water budget.

~~a.~~ Regulatory Framework

Historically, water has been deemed a resource of the State, and authority over groundwater and surface water is currently under the jurisdiction of the Arizona Department of Water Resources (ADWR). ADWR recognizes groundwater, surface water, reclaimed water, and the Colorado River as water sources.

Water Management Programs administered by ADWR have generally been developed as consumer protection programs to address growing concerns about Arizona's limited water supplies. The 1980 Groundwater Management Act created Active Management Areas (AMAs) which operate under the Assured Water Supply (AWS) Program, and have a management goal of Safe Yield which is defined as the long-term balance between groundwater withdrawals and the amount of water naturally and artificially recharged into the aquifers. The Assured Water Supply program is mandatory, and requires that a 100-year water supply must be demonstrated before a subdivision can be approved by the platting authority, such as a City or County. A 100-year supply is based upon 5 criteria: the water must be (1) continuously, (2) legally, and (3) physically available; (4) the water provider must demonstrate the financial capability to construct and maintain treatment and delivery facilities; and (5) the water must be of sufficient water quality to meet State and Federal standards. It is the responsibility of the ADWR to determine whether these criteria have been met.

Although no part of Coconino County is in an AMA, the City and County participate in a voluntary program enacted by state law in 2007, which authorized cities, towns, and counties located outside of Active Management Areas to require an adequate water supply determination from ADWR prior to the approval of a new subdivision (i.e., Mandatory Water Adequacy Rules). These mandatory rules, however, do not apply to lot splits or major commercial/industrial developments that are not associated with a subdivision, and such development may proceed without demonstrating that a 100 year water supply exists.

The City of Flagstaff was deemed to have a Designation of Water Adequacy back in 1973, although it was not based on hydrologic information. Many subdivisions in Coconino County have been unable to obtain a Designation of Water Adequacy, primarily due to the great depths of groundwater on the Coconino Plateau. If groundwater levels are projected to decline below 1,200 feet after 100-years of providing water to that subdivision, then the water supply is not deemed to be adequate. Many wells in the County, including the Flagstaff region, are already at levels greater than 1,200 feet, typically over 1500-2000 feet.
The State is giving special consideration to the groundwater aquifers on the Coconino Plateau in this region, however, and has developed hydrologic guidelines that would better accommodate the local hydrology in developing new rules for physical availability.

b. County Areas

County residents who are not part of the eCity's water distribution system obtain water in a variety of ways: public community water systems, owner cooperatives, Domestic Water Improvement Districts, shared wells, individual wells, and hauled water. The County has no regulatory authority over the operation of these systems, and they fall under a variety of agencies for review. The following is a list of the unincorporated areas which are outside the City of Flagstaff's water service area.

Bellemont: Flagstaff Meadows (Utility Source, LLC) and Bellemont Water Company-includes water distribution systems for the subdivision and also for the industrial area; standpipe sales to water haulers is also available in this area (Flagstaff Meadows Subdivision has a 100-year adequacy designation). Camp Navajo has its own water system.

Doney Park, Timberline-Fernwood: Doney Park Water (an owner cooperative) provides water to a majority of area residents and businesses. They also maintain standpipe sales for water haulers. DPW has calculated their service abilities based on existing county zoning.

Fort Valley: Many residents have individual wells. The Majestic View Domestic Water Improvement District serves two subdivisions. Some residents rely on hauled water.

Kachina Village: Kachina Village Improvement District **(**KVID) provides water (and wastewater) service to the subdivision. KVID has constructed wetlands for their wastewater system and also sells reclaimed water to neighboring Forest Highlands for use on their golf course.

Mountainaire: Ponderosa Utility is a private water company serving the Mountainaire Subdivision and areas along Old Munds Highway east of I-17 including the Highland Meadows Subdivision.

Flagstaff Ranch: Flagstaff Ranch Water Company serves the commercial and industrial area just west of the City boundary between Route 66 and I-40, and Flagstaff Ranch Golf Club and Westwood Estates located south of I-40.

Forest Highlands: Forest Highlands Water Company serves this private residential golf course community. They also purchase reclaimed water from KVID for use on their golf courses.

Heckethorn: Flagstaff Heckethorn Water Company serves about 44 customers in the Heckethorn area located off of Lake Mary Road.

Mountain Dell: Mountain Dell Water, Inc. serves about 80 residential customers in a small county island north of Fort Tuthill.

West Village: West Village Water Company serves a mix of residences and businesses and standpipe for sales in a county island area in west Flagstaff north of Route 66.

Forest Dale: A County island off Butler Avenue where residents rely on hauled water.

Pine Del: This County subdivision located southeast of Fort Tuthill is served by the City of Flagstaff water system.

4. Goals and Policies

a. Water Sources

1) *Surface Water*

The City has two primary surface water supplies, the Inner Basin and Upper Lake Mary, which are significant sources of renewable water. Both of these supplies play an important role in the City's water development history dating back to the 1890s and 1940s, respectively. However, these supplies are often subject to the impacts from drought, and have been unreliable at times in the past. In 2009, these renewable surface water sources made up 38% (4,006 AFacre-feet) of the City's total water deliveries to its customers, where. 1 acre-foot is roughly the amount of water used by four families over one year. None of the unincorporated areas within the Regional Plan boundary rely on surface water for domestic supply.

2) *Groundwater*

Due to historical impacts of drought, the City searched for a more reliable water supply in the 1950s and started developing wells. Over the past 60 years the City has increasingly relied upon groundwater as its primary water supply. While this supply has been very reliable over time, it is extremely expensive due to the great depths at which the regional aquifer exists on the Coconino Plateau, and some well fields have experienced significant water level declines over the last 25 years. In 2009, groundwater made up 42% (4,393 AFacre-feet) of the City's total water deliveries to its customers.

The wells providing service to the unincorporated county areas rely primarily on the same aquifer, although there have been some new wells developed which draw from the deeper, Redwall aquifer. Others, particularly individual residential wells, draw from shallow, perched aquifers which are not considered reliable.

3) *Reclaimed Water*

The City began treating its wastewater in the mid-1980s to a quality sufficient to reuse or recycle. This "reclaimed water" was first directly delivered to golf courses for irrigation. The unused remaining treated reclaimed water was then discharged into the Rio de Flag, thereby recharging the groundwater aquifer. In the mid-1990s the City constructed its second water reclamation facility and ramped up its water reuse program; it now directly serves over 60 customers. Additionally, the City has recharged nearly 97,000 AF acre-feet back to the aquifer via the Rio de Flag since the mid-1980s. In 2009, directly delivered reclaimed water made up 20% (2,141 AFacre-feet) of the City's total water deliveries while recharging approximately 3,744 AF acre-feet via discharge into the Rio de Flag.

Most of the unincorporated areas of the County rely on individual septic systems rather than community wastewater treatment, and thus reclaimed water is not widely available. Nonetheless, over the past 20 years major developments have been required to incorporate reclaimed systems into their design when a community wastewater system is developed. There are two golf course communities outside the city limits, and both were required to incorporate reuse for watering. However, insufficient wastewater is generated to rely solely on reclaimed water for this purpose. In areas of the County without reclaimed systems, many residents rely on other means of water conservation and reuse such as roof-collection harvesting and gray water systems. \

Water harvesting is the practice of utilizing local precipitation (i.e. rain and snow) close to where it falls. The harvested water can be utilized for daily water needs as well as supporting a healthy plant community. The plant community includes a wide spectrum of values such as native plants that stabilize fragile soil cover, prevent erosion and provide biodiversity needs for wildlife to supporting local food production efforts and landscaped areas. Flagstaff is located in a high alpine arid region receiving only 22 inches of precipitation a year. As a water stressed area Flagstaff relies primarily on surface water reservoirs and groundwater resources for domestic and potable water supply. Water harvesting provides a sustainable and low-cost solution to addressing water scarcity and increased future water demands. Through both the storage and capture of precipitation in tanks or cisterns (i.e. active water harvesting), as well as utilizing basic landscape design techniques to keep water on-site such as basins, swales, berms etc. (i.e. passive water harvesting) it is possible to achieve a variety of community benefits while lessening the impact on critical water supplies. The benefits of water harvesting include: less impact on local surface water and groundwater supplies, costly infrastructure, lower water bills (precipitation is free) , inexpensive to build, low maintenance, and increased landscape productivity and native habitat. In our Flagstaff community these benefits help to address future growth challenges while enhancing our efficiency of local water resource use and serving as a viable model across the country.

Future Water Resources

The City of Flagstaff is exploring several water supply options to meet future water demands that are outlined in detail in the Water Resources Master Plan. These include locally derived water conservation strategies, new groundwater supply wells, advanced wastewater treatment with recharge and recovery. In addition, Flagstaff along with the US Bureau of Reclamation (Reclamation), is looking at the feasibility of importing supplies from the City's Red Gap Ranch.

Both the City and the County participate in the Coconino Plateau Water Advisory Council working group, who completed a more regional in scope North Central Arizona Water Supply Appraisal Study in 2006. In response to the conclusions of that study, Federal funds have been granted to Reclamation under the Rural Water Supply Program, and feasibility level studies are ongoing for two supply alternatives identified in that regional report. Reclamation is currently investigating the feasibility of the proposed Western Navajo Pipeline that would bring water from Lake Powell to tribes and other stakeholders in northern Arizona in the event of a Navajo-Hopi Indian Water Rights Settlement.

Goal WR.1. Maintain a sustainable water budget incorporating regional hydrology, ecosystem needs, and social and economic well-being.

~~**Policy:**~~

Policy WR1.1. Participate in and support regional processes to develop a sustainable water budget.

Policy WR1.2. Seek opportunities to partner with adjacent landowners and managers to improve water yield and hydrologic processes on these lands. PARKING LOT

Goal WR.2. The City manages a coordinated system of water, wastewater, and reclaimed water utility service facilities and resources and identifies funding to pay for new resources.

~~**Policies:**~~

Policy WR.2.1: Develop and adopt an integrated water master plan that addresses water resources, water production and its distribution, wastewater collection and its treatment, and reclaimed water treatment and its distribution.

Policy WR.2.2: Maintain and/or develop facilities to provide reliable, safe and cost effective water, wastewater and reclaimed water services.

b. Water Demand

The CPWAC, in conjunction with the Bureau of Reclamation, completed the "North Central Arizona Water Supply Study" (NCAWSS) in 2006, which determined that based on the assumption of projected water use and current water sources there would be unmet demands for the region by 2050. The shortfall is 9,652 Aacre- Ffeet per year for the Regional Plan Study Area: 8,027 acre–feet for the City, and 1,625 acre–feet for the unincorporated areas. One Acre Foot (AF) is roughly the amount of water used by four families over one year. This shortfall exists even after increasing conservation measures by an additional 20%.

1) *Measuring Demand*

Water demand is generally related to needs associated with current and projected uses. One way the City estimates its long-term or build-out water demands is by combining existing utility billing records for various land uses, and applying those to the undeveloped land uses as designated in the Regional Plan.

In the unincorporated areas within the Regional Plan boundaries, the ability to project demand can be based on best available information. In those areas that are served by public water systems, supply and demand has generally been assessed and managed by the operators. In areas that are served by individual or shared wells, the data is not available, and the same is true for areas that rely on hauled water. Generally, residents and businesses relying on hauled water implement the most conservation measures to offset demands. Water hauled from the City of Flagstaff system is typically around one (1) percent of the City's overall water demand.

The 2006 North Central Arizona Water Supply Study Report of Findings made projections for future demands within the region based on population estimates and maintaining the current Gallons Per Capita per Day (GPCD) water usage. Projection of the shortfall by 2050 did not anticipate any substantial change in type of business or industry which the region attracts. The addition of a major water-consuming use would skew the results of this study. The study did address demands being offset by increased conservation (20%), the result still being unmet demands using current supply sources.

2) *Managing Demand*

While the ADWR water management programs have attempted to address the relationship between growth and water resources, there has not been a mechanism to truly address this outside of AMAs. Although the potential to adopt a mandatory water adequacy program related to subdivisions addresses a part of this relationship, a substantial amount of development does not go through the subdivision process and could not be considered through such a program. The City of Flagstaff has reduced potable water consumption by 40% through strict water conservation requirements, particularly tied to watering and car washing. Some have expressed concern that these requirements are so strict that they limit the ability to maintain other sustainable practices, such as home vegetable gardensurban agriculture, and that special consideration should be given to those usesthat use.

The County has adopted a Sustainable Building Program which is voluntary, but provides suggestions for accelerated water conservation measures beyond what codes currently require. The County's Landscape Ordinance and the City's Zoning Code use is based on principles of Xxeriscape and requires appropriate low water consumptive and native vegetation.

The County and City both allow gray water and rainwater harvesting systems. A Conservation Ordinance that applies to all new development, commercial and residential, could be an effective approach to managing the development/water connection.

Goal WR.3. Satisfy current and future human water demands and the needs of the natural environment through sustainable and renewable water resources and strategic conservation measures.

Policies

Policy WR.3.1. The City, County, and all regional partners shall will work together to address regional human and environmental water needs.

Policy WR3.2. Low-water consuming businesses and industries shall will be favored over water intensive uses.

Policy WR3.3. Integrate sound water conservation and reuse systems into new and updated public facilities.

Policy WR.3.4. Use reclaimed water and rainwater harvesting wherever appropriate.

WR.3.5: Encourage and educate water users to practice water conservation by installing high-efficiency low-flow plumbing fixtures, repairing leaks promptly, harvesting rainwater, planting native and drought-tolerant landscaping, and utilizing gray water systems.

WR.3.6: Adopt a water conservation ordinance that includes standards for plumbing fixtures, appliances, gray water, and rainwater harvesting.

Policy WR.3.7. Encourage private well owners to install meters to understand how much water is used as well as alert property owners to possible leaks.

City-Specific Policies

Policy WR.3.8. The cCity shall will estimate calculate the volume of local water resources it has available and make periodic updates as appropriate.

Policy WR.3.9. The City shall will implement a water management program that creates a linkage between new growth and a minimum 100 year water supply.

Policy WR.3.10. The City shall will identify adequate funding sources to pay for new resources to ensure a long-term renewable water supply.

Goal WR.4. Avoid leap-frog developmenturban sprawl by logically enhancing and extending public water, wastewater, and reclaimed water services including their treatment, distribution, and collection systems in both urbanized and newly developed areas of the City.

Policies

Policy WR.4.1. The *Regional Plan* Lland Uuses shall will guide the Integrated Water Master Plan to better plan for the necessary infrastructure sizing and location to accommodate planned growth and resource management.

Policy WR.4.2. The City shall will maintain a financially stable utility to provide reliable, high quality utility services.

Policy WR.4.3. Developments requiring city-level public utility services shall will be located within the Urban Growth Boundary.

D. Energy Element

1. Introduction
2. Relationship to Vision and Guiding Principles
3. Goals and Policies
    a. Efficient Use of Energy
    b. Renewable Energy

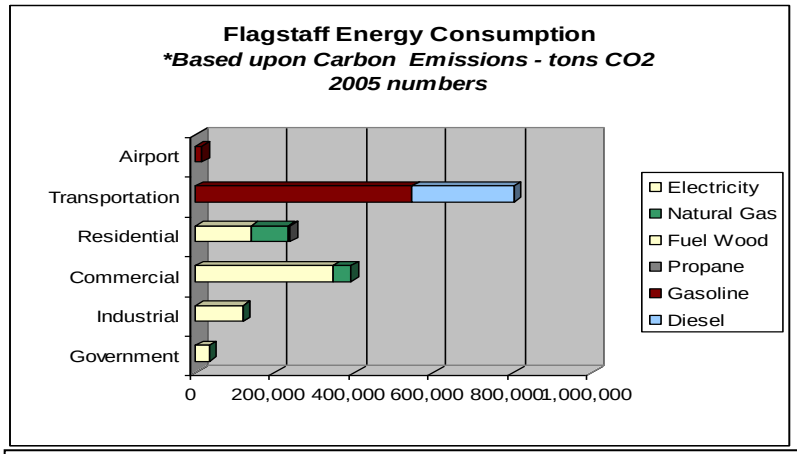
1. Introduction

Energy has a direct impact on the community's economic development interest, public health and safety, air quality and environment. It is essential that we polan for the energy resources upon which we depend, how they get to us, how we can cost-effectively manage their use, and how we can respond when the supply of vital energy resources suddenly change. investing in energy efficiency, renewable energy and efficient building standards will reduce impacts on health and the environment, increase reliability of our energy supply, reduce water use and keep dollars in the local economy. Energy management entails making sound land use, transportation and infrastructure decisions as well as promoting gains in energy efficiency and encouraging the development of renewable energy sources.

How the region's land uses are designed plays a major role in energy conservation and efficiency. For example, compact development leads to driving less and walking more, smart site design takes advantage of solar gain, and green building techniques use less energy to heat and cool buildings. both Regional Plan policies and the City's Zoning Code play a role in teh urban form of our community and both encourage efficient land use or "smart growth" principles.

Traditional energy consumption can be reduced by making better land use and transportation decisions within the Region as well as by encouraging the efficient use of energy and development of renewable energy sources. The benefits of long-term energy sustainability include improvements in our local economy, reliable and secure energy supplies, reduced dependence on imported energy sources, and positive environmental impacts.

The *Regional Plan* seeks to increase energy efficiency in building technologies as well as in transportation and land use. While total energy demand is likely to increase in the next 20 years, the community may actually reduce its overall energy consumption through improved technology and conservation. Strategies such as turning off computers and lights are the simplest way to a neutral or net reduction in energy consumption.



~~The *Regional Plan* also seeks to increase production of renewable energy, both at the individual and commercial scale, because the majority of energy used in the Flagstaff Region comes from non-renewable sources. These include electricity generated from coal and nuclear power plants, natural gas and propane for heating and cooking, and oil and gasoline for motor vehicles. Outside of transportation, the primary consumers are commercial/industrial and residential users, with the former consuming nearly 70% of all energy within the Region.~~[5]

~~*Insert graphics displaying total energy used in FMPO area: electricity, natural gas, etc.*~~

~~*Source: Greenhouse Gas Emissions Management Report (2008) – Flagstaff Sustainability Program*~~
~~*Note: Carbon Emissions are a proxy for energy used*~~

2~~.~~ Relationship to Regional Plan Vision and~~&~~ Guiding Principles

Energy supply is an important component of a successful community. Decreasing energy consumption, increasing energy efficiency and the use of renewable energy further the vision for *"intellectual, environmental and economic vitality"* by encouraging the development of new products and technologies locally to increase efficiency, reducing the community's reliance on non-renewable supplies, and maintaining a consistent energy supply through diversification. The following goals and policies address many of the primary Guiding Principles of this plan. At the forefront is the principle of sustainability, which includes and enhances the principles of healthy ecosystems, environmental protection, smart growth and quality development, and creating a vibrant economy.

~~3.~~ Goals and Policies

~~a.~~ Efficient Use of Energy

Long-term energy planning requires the City and County to prepare for future energy-intensive initiatives and build resiliency to rising energy costs. Increasing energy efficiency and providing opportunities for enhanced energy performance throughout the region will build energy reliability while managing increased energy demand and reducing energy use in the region, which supports increased affordability, economic vitality, and decreased energy utility costs.

The City and County will set a positive example for the region by developing strong internal energy efficiency policies and programming. Reducing energy use will reduce operational expenditures.

Both the City and County have been proactive in developing programs and codes to promote the energy efficiency in new buildings and the retrofit of existing structures. Directing energy efficient changes onto

[5] ~~Source cited here~~

the region's approximately 26,000 housing units[6] and approximately 3,200 businesses[7] could affect and upgrade approximately 20-30% of our built environment. Focusing on housing only, about 4,000 homes were built after 1994[8], when building codes began to regulate minimum insulation standards. The homes built before this may or may not have insulation. 'Basic efficiency upgrades' are assumed as sealing ducts, adding weather stripping, increasing or adding insulation, insulating the water heater and hot water pipes, adding a programmable thermostat and changing the HVAC filter. This is estimated to save a homeowner 15-25% in energy costs.[9]

Decreasing the amount of energy used by promoting the wise use of energy is the most economical solution to reduce climate change, promote energy independence, and increase economic vitality. Both the City and County have been proactive in developing programs and codes to promote the energy efficiency in new buildings and the retrofit of existing structures. As the region's population increases, there will be greater demands for energy, which is why our public and private planning decisions should focus on conservation and efficiency.

The Region's programs and codes promote energy conservation and efficiency through education and outreach. The Sustainable Building Program Checklist[10], which certifies "sustainable" construction projects, requires standards above the International Energy Code baselines. This program also supplies research on the latest technologies and provides fact sheets on weatherization, insulation, efficient appliances, and annotated lists of local, state, and federal incentives for energy efficiency. Energy efficiency education is incorporated into many sustainable building programs at both Coconino Community College[11] and Northern Arizona University[12]. The Flagstaff Unified School System has recognized energy efficiency in school buildings as a cost savings as well as a component of K-12 energy education.[13]

Continual effort to ensure energy efficient buildings, whether new or retrofit, is one of the most effective cost savings a home or building owner can realize. With funding through the Federal Recovery Act of 2009, through the Department of Energy, the City of Flagstaff's Sustainability Program has partnered with the County's Sustainable Building Program and Coconino County Community Services to promote residential energy efficiency retrofits throughout the region (also refer to the Flagstaff Zoning Code, Section 10-30.70 "Residential Sustainable Building Standards" for examples). Both City and County buildings have gone through rigorous energy evaluations and efficiency retrofits. For the City, this has resulted in a 42% annual savings in natural gas, electric and water, which is more than $335,000 annually. APS also offers weatherization programs for their customers.[14] Northern Arizona University has incorporated energy efficiency through its 'green construction' and sustainability initiatives.[15]

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[6] Census 2000 with projected growth
[7] http://www.city-data.com/business/econ-Flagstaff-Arizona.html
[8] City of Flagstaff Building Permit records
[9] Building Official / local architectural estimates
[10] http://www.coconino.az.gov/comdev.aspx?id=148
[11] Note CCC programs here
[12] Note NAU programs here
[13] Note FUSD programs here
[14] www.acs.com/_____
[15] http://www.green.nau.edu/buildings.html

Directing energy efficient changes onto the region's approximately 26,000 housing units[16] and approximately 3,200 businesses[17] could affect and upgrade approximately 20-30% of our built environment. Focusing on housing only, about 4000 homes were built after 1994[18], when building codes began to regulate minimum insulation standards. The homes built before this may or may not have insulation. 'Basic efficiency upgrades' are assumed as sealing ducts, adding weather stripping, increasing or adding insulation, insulating the water heater and hot water pipes, adding a programmable thermostat and changing the HVAC filter. This is estimated to save a homeowner 15-25% in energy costs.[19]

How the Region's land uses are designed plays a major role in energy conservation and efficiency. For example, compact development leads to driving less and walking more, smart site design takes advantage of solar gain, and green building techniques use less energy to heat and cool buildings. Both Regional Plan policies and the City's Zoning Code play a role in the urban form of our community and both encourage efficient land use or 'smart growth' principles.

Flagstaff Total housing units	**26,162**	
YEAR STRUCTURE BUILT		
Built 2005 or later	1,153	4%
Built 2000 to 2004	4,129	16%
Built 1990 to 1999	5,072	19%
Built 1980 to 1989	5,882	22%
Built 1970 to 1979	4,672	18%
Built 1960 to 1969	2,075	8%
Built 1950 to 1959	1,937	7%
Built 1940 to 1949	507	2%
Built 1939 or earlier	735	3%

** Source: Census.gov*

One of the greatest uses of energy in the Flagstaff Region is for transportation. Single-occupant vehicles are a significant user of energy for transportation, and represent an opportunity to improve overall energy efficiency. Transportation energy efficiency can be achieved by strengthening use of travel alternatives such as public transit, bicycling, and walking, and decreasing the population's auto dependency through smarter development patterns. These are individual choices, yet the urban form can greatly influence the choices people make.

Energy conservation and efficiency is also the best way to reduce costs for utility providers and their customers. APS considers energy conservation and efficiency to be part of their 'power portfolio' and has specific goals to increase energy efficiency.

Goal E.1: Increase Energy EfficiencyReduce total and per capita non-renewable energy use through efficiency and conservation.

Policies:

Policy E.1.1. Identify and pursue cost-effective energy efficiency options in the context efficiency options in the context of long-term planning.

Education

Policy E.1.21. Develop land use regulations that promote land use patterns that increase energy efficiency in the building and transportation sectors.

Policy E.1.3. Promote and encourage innovative building practices through instruction Develop and implement education and outreach opportunities focused on efficient building materials and methodology with thepractices in collaboration of government,with the public sector and

[16] Census 2000 with projected growth
[17] http://www.city-data.com/business/econ-Flagstaff-Arizona.html
[18] City of Flagstaff Building Permit records
[19] Building Official / local architectural estimates

educational institutions (Flagstaff Unified School District, Northern Arizona University, Coconino Community College, and community partners).

Policy E.1.42. Support workforce training for the installation and maintenance of energy efficient technologies.

Policy E.1.5. Develop and implement educational programming to ensure individual, family and business preparedness for short and long-term energy outages.

E.1.3: Empower all community members to make smarter energy choices through education and incentives.

Building

Policy E.1.6. Promote Adopt requirements for energy efficient technologies and design in all new and retrofit buildings for residential, commercial and industrial projects.

Policy E.1.7. Support policies and programming that reduce electricity, natural gas, and wtaer consumpton to conserve natural resources and reduce financial costs.

Policy E.1.8. Incorporate energy conservation and renewable energy systems in zoning and building codes.

Policy E.1.9. Develop standards and guidelines to guide builders, architects and developers to ensure optimal building water use and energy performance and standards.

Policy E.1.10. Incentivize energy efficiency/renewable energy technologies in construction projects.

Policy E.1.11. Encourage energy efficiency and conservation in the public, commercial and residential sectors through policies that promote more efficient lighting, better insulation, and increased use of alternative energy for generation of electricity.

Policy E.1.12. Identify financing mechanisms to support water and energy efficiency improvements in public ,residential, commercial and industrial sectors.

Transportation

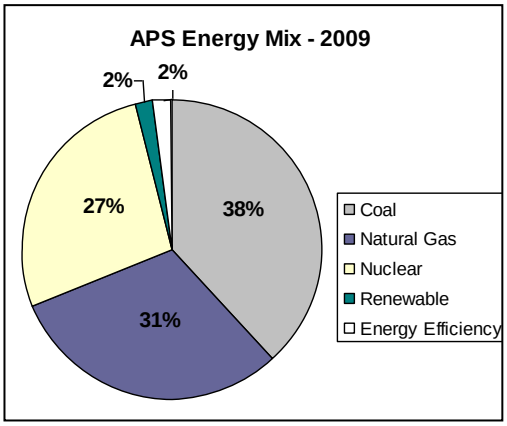
Policy E.1.135. Promote and encourage the expansion and use of energy efficient and multi-modal modes of transportation to reduce vehicle miles traveled.

a. Public transportation
b. Bicycles (Flagstaff Urban Trail System; bike lanes; bicycle parking)
c. Pedestrians (sidewalk grid, crosswalks, street planting strips and medians, underpasses)

Policy E.1.146. Promote and encourageDevelop policies and programs that incentivize the use of fuel efficient vehicles and vehicles that use renewable fuels and/or electricity.

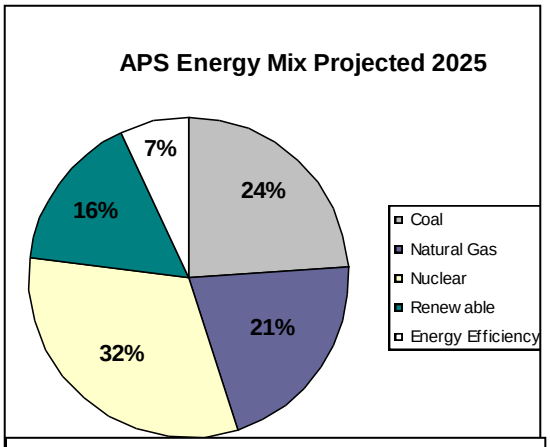
~~b.~~ Renewable Energy

At the small and large scale, the Flagstaff ~~R~~region should increase its use of passive solar, photovoltaic panels, solar hot water, solar thermal generators, wind turbines, biomass, and geothermal energy. Northern Arizona has the greatest solar gain capacity in the state because of elevation.[20] The region's wind resources are deemed adequate for residential wind projects.[21] Another renewable fuel already used extensively is wood for home heating. This resource is also being explored for biomass energy production, especially with the availability of a large volume of trees from forest thinning projects. The Forest Service is currently working on methods to ~~clear~~ obtain clearance on the necessary environmental analysis to allow for long term, large scale thinning contracts that could allow for expansion of this type of energy source. The Greater Flagstaff Forests Partnership (GFFP) has ascertained that there is adequate forest fuel available on a long-term basis for supplying a new 5 megawatt (MW) biomass power plant.[22]



Arizona's Energy Future: APS Resource Plan 2009 through 2025

The Region may have an abundance of these raw resources, and APS is extending transmission systems to areas with photovoltaic and wind potential, yet the inadequacy of the existing energy grid is a significant challenge to large scale renewable energy generation. Current renewable energy production for APS is 2%; their goal being 16% by 2025. This is in line with the community's goal to tap into and use more renewable energy.[23] There are ongoing discussions about a biomass facility for the Bellemont Area.



Community's goals of overall energy mix here

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Small scale wind and solar facilities are already permitted uses within the Region. Since 2005, approximately 260 photovoltaic systems (each producing approximately 2-5 Kw), 74 solar water heaters, 28 turbines, 16 passive solar sunrooms and one geothermal system have been installed in the Region[24].

Northern Arizona University (NAU) has mapped optimal commercial wind turbine locations, and is in the process of mapping residential. Large scale wind production, 100 MW, has

[20] NAU Solar studies website:
[21] NAU Wind energy studies website
[22] *Preliminary Feasibility Assessment For A Biomass Power Plant in Northern Arizona*: Greater Flagstaff Forests Partnership Prepared by: TSS Consultants November 11, 2002 Final Report
[23] http://www.aps.com/_files/various/ResourceAlt/Resource_Plan_-_Presentation_sFinal.pdf

[24] City of Flagstaff and Coconino County Building Permits records

been installed in Coconino County, yet is unlikely to be built within the region; most small scale wind turbines are located in the Doney Park area, which has been identified through studies as having a significant wind resource. NAU is currently installing MET towers (measuring the wind) to calculate wind energy generation potential at residential levels.

Community members are pursuing renewable energy projects for several reasons, including: 1) to reduce reliance on corporate providers; 2) to have an impact on greenhouse gas reduction; 3) to take advantage of local, state and federal tax incentives; and 4) to provide energy to those who live 'off the grid' and rely on renewable energy. Even though Flagstaff is urban, the region is rural. The Flagstaff Region is also home to a local manufacturer of small wind energy systems, which is both a community resource and asset. Large scale wind and solar projects are likely to be developed in the County, where there are large tracts of land with adequate wind resources. The locations for these facilities are outside of the Regional Plan boundaries in the more remote areas, yet they are possible suppliers to properties within the plan boundary. While the generation may be outside of the planning area, transmission lines could come through this area.

Goal E.2. Expand production and use of renewable energy.

Policies:

Policy E.2.1. Promote renewable energy sources over non-renewable energy sources for all land usesthat reduce demand upon fossil fuels and other forms of generation that produce waste.

Policy E.2.2. Preserve opportunities for development of renewable energy resources in the planning process.

Policy E.2.3. Integrate feasible renewable energy requirements into development and building standards.

Policy E.2.4. Develop City and County renewable energy pilot programs to showcase and educate the public and development community about the feasibility and benefits of renewable energy.

Policy E.2.5. E.2.4 Pursue, promote and reward small-scale renewable energy production and use on the local level at individual residential, commercial and industrial parcels.

Policy E.2.6.2. Pursue, promote, and support utility scale renewable energy production such as biomass facilities, solar electricity, wind power, waste-to-energy and other alternative energy technologies.

E.2.3 Promote education in both the public and private sector so that renewable energy production and use is incorporated into everyday learning. [Move to strategies]

E.2.4 Pursue, promote and reward small scale renewable energy production and use on the local level at individual residential, commercial and industrial parcels.

E.25. Support workforce training for renewable energy installation and maintenance.

E.2.6 Encourage and support expansion and development of transmission grid infrastructure which supports renewable energy production.

BUILT ENVIRONMENT

VI. Community Character

Introduction

Community Character is the combination of qualities and assets which establish the unique sense of place and promotes a high quality of life for its residents and visitors. The unique character of the human-built environment and distinctive aspects of the natural environment define the physical character of Flagstaff. Social activities, cultural and artistic offerings, and the unique people who live, work and play here also contribute to the Flagstaff area's community character. This plan recognizes the role of community character and promotes human activities that maintain and enhance the sense of place.

Contributions to a high quality of life are made by **preserving the natural environment and heritage resources**, **creating compact, walkable neighborhoods**, **enhancing the city's gateways, corridors and activity centers** as a means to economic vitality, and **support for the arts and sciences**. Preserving and revitalizing distinctive areas enhances the greater region's character, celebrates the cultures that have established our unique sense of place, and promotes a stable, vibrant quality of life for residents and visitors.

Drawing on the Design Traditions of Flagstaff in preservation, redevelopment and new development efforts promotes a strong sense of place, and will maintain the unique Flagstaff character, having a tremendous influence on the community's overall appearance and future character. Without excluding social activities and the character of the citizens, this section discusses community character in terms of scenic resources, heritage resources, community design, and arts, science, and education.

Design Traditions of Western Development in Flagstaff

The design traditions of western development in Flagstaff generally can be discussed in the context of the following eras:

Pre-Route 66 (<1926)

Prior to the construction of Route 66, Flagstaff's buildings were assembled from locally-produced materials dominated by malpais stone, Moenkopi sandstone, Kaibab limestone, wood planks and timber. With the exception of downtown, most structures were simple and practical, featuring a main gable roof on a rectangular plan, and modest in size. In the downtown area, historic structures were constructed of local materials and imported midwestern façade designs popular in that era. Other community design influences of this period included the imported farmhouse, Victorian, craftsman home designs, the railroad industry and National Park architecture, which combined native materials and architecture to create visually appealing and contextual structures.

Examples Include: [Photographs]

Early Route 66 (1926-1945)

In the early years of Route 66, community design was heavily influenced by the burgeoning tourism industry. Early traveler-induced developments, such as motels, were simple, practical, and built from local materials. The development of the mother-road itself, Route 66, stimulated subsequent growth and development along its edges, and indicated the start of an important change in the community character, from a more downtown 'node' to corridor development.

Examples Include: [Photographs]

Late Route 66 (1945-1967)

Following World War II, Flagstaff saw many significant influences on community character, including: the post-war housing boom; a notable growth of tourism; dominance of the automobile; and, expanded use of imported building materials and designs. Residential development included a mix of the design traditions of Flagstaff, such as simple structures along gridded streets with sidewalks and street trees; and post-war production housing development featuring whole-neighborhood developments with un-gridded streets, repeated home design and a shift to imported materials, such as stucco, tile roofing and metal windows. In addition, large multi-family structures were introduced along with the development pattern of: wide streets; auto-oriented, strip commercial buildings; and the introduction of 'modern' materials such as CMU block.

As the tourism industry grew, Flagstaff expanded from the small, central downtown outward to include motels, service stations, and diner lined highways which included imported architecture and materials, standardized building designs, and automobile serving facilities. Notable for this period, was the introduction of the large, eye-catching, commercial signage to capture the attention of the auto-oriented society. This era resulted in the decline of the historic downtown's economic vitality as commercial activity dispersed and impacted the overall community character.

Examples Include: [Photographs]

Interstate 40 (1967-2001)

With the introduction of the interstate highway system, specifically I-17 and I-40, auto-oriented commercial enterprises sprouted in areas adjacent to these new corridors. These sites were suburban in character and devoid of pedestrian-friendly amenities, such as plazas, trees and street furniture. Although new zoning regulations required the installation of landscaping, it remained suburban in character. Architecturally, the shift was complete – away from the design traditions of Flagstaff (e.g., simple designs, local materials, human-scale buildings and streets) to that of imported, non-descript, replicated design and materials.

As Flagstaff's last lumber mill and window plant closed, imported materials became the norm, even though the region is surrounded with natural building materials such as timber and stone. However, the latter half of this era saw an increase in community interest regarding our historic resources and neighborhoods. Downtown revitalization efforts began in 1992, introducing the Heritage Preservation program and sparking an economic boom in the community. These efforts reflected a cognizance of the importance of preserving a 'sense of place' through building, landscape, street, road and signage designs.

Examples Include: [Photographs]

Design Review Years (2001 to present)

In 2001, Flagstaff introduced design controls through the Land Development Code. Some of these basic principles included pedestrian-friendly site design, characterized by building-forward site layout, human scale buildings, and a preference for local materials. These regulations currently apply to non-residential and multi-family developments only. Design Guidelines were also introduced within the Zoning Code in 2001, and are primarily voluntary. Development during this period generally continues to follow the

auto-oriented, highway patterns of development, with an incremental trend toward the design traditions of Flagstaff. Beginning in 2001, the City dedicated public funds to 'community beautification', leading to the removal of billboards, the construction of a significant urban trail system, municipal landscaping, pedestrian amenities and public art.

Examples Include: [Photographs]

Relationship to Vision and Guiding Principles

The purpose of this chapter is to guide efforts to **preserve**, **restore** and **enhance** the region's extraordinary cultural and ecological composition through careful integration of the natural and built environments. The community envisions a region where stewardship of the unique characteristics of our ecosystem, communities and neighborhoods plays an important role in every development project. The region can and should achieve an environmentally, socially, and economically sustainable community through the application of quality design and development, and the preservation of our unique sense of place. The key to success rests upon the accountability of private and public partners working collaboratively toward this goal.

Community Character Goals and Policies

Scenic Resources and Natural Setting

Residents and visitors alike consider the enveloping forest eco-system as a defining trait of the community, often cited as the principle attraction. It is one of the leading resources of our lifestyles, providing a backdrop for living in harmony with nature, recreational opportunities, and a variety of economic activities ranging from harvesting forest products to eco-tourism. It also serves an essential role in defining the community character.

Mid to late-twentieth century development in Flagstaff, which included forest clear-cutting for harvesting and development, established some of the most character-free developments and places in Flagstaff. On the other hand, areas where community development and the natural setting are well integrated are some of the most distinctive, attractive, and desirable parts of the city. It is not enough to simply preserve and be surrounded by this resource - it is necessary for the built and natural environment to coexist spatially and visually. This is done through preservation and access of urban open space, on-site resource protection, the use of native materials in site and building designs, and the use of native plant materials, for example. A part of the solution is designing the community, at all scales, to preserve and enhance natural features such as trees, slopes, rock outcroppings, and flood plains. However, equally important is the preservation and enhancement of viewsheds and scenic vistas to, within, and from the urbanized areas. Scenic resources take into account community gateways, gateway corridors, vistas and viewsheds.

Community Gateways and Corridors

Gateways are the first impressions people have as they enter the region, and thus warrant special design considerations to reflect community pride and local design traditions. The region has gateway points, corridors and communities, all requiring attention to give the desired 'impression' to those entering and leaving the area. Yet, the initial 'impression' needs to be reflected in the overall aesthetics of the community, too. In 2009, the community recognized the importance of gateways by investing in three unique "Flagstaff" signs, installed along I-17, Highway 180 and Highway 89N. These signs are celebrated as reflecting the region's character, but additional investments are necessary for the gateway

areas as a whole, including the buildings, signage and landscaping one sees. The community has identified the following Gateway Points, corridors and communities– *see Map xx.*

Gateway Points

- I-17 at the Milton Road Merger
- Milton Road at BNSF Underpass (entering Historic Downtown)
- Highway 180 at Cheshire Neighborhood (sign exists)
- Highway 89 at City Limits (sign exists)

Gateway Corridors include arterial roadways that provide access into Flagstaff; these will require Corridor Plans:

- I-17 to Milton Road
- 1-40
- Highway 89
- Highway 180 (Fort Valley Road)
- Route 66

Gateway Communities include:

- Kachina Village (as experienced from I-17),
- Mountainaire (I-17)
- Doney Park Hwy 89)
- Fort Valley (Hwy 180)
- Bellemont (I-40)
- La Plaza Vieja neighborhood in the west and Cosnino Neighborhood to the east (Amtrak corridor)

Vistas and Viewsheds

Natural scenic beauty supports a number of important community elements, including the natural environment, quality of life and character, and local economies. The Flagstaff Region is known for its scenic vistas, which contain relatively large natural areas. Communities and their residents come to love these landscapes, and often take them for granted. Without proactive measures, however, roads, housing, and commercial buildings can threaten the pristine nature of these areas and diminish many of their positive benefits. This Plan promotes a variety of strategies to protect scenic viewsheds through the management of *the amount and character of development.*, including regulating the type and intensity of development, design requirements, landscaping, location standards for telecommunication towers, placement of utility infrastructure, scenic (conservation) easements, sign standards, and specific transportation designs.

Photo 20: Fort Valley Neighborhood – policies to protect scenic resources are needed. *Photo by John Aber, 2009.*

Goals and Policies - Scenic Resources and Natural Setting

Goal CC.1. The built environment shall reflect and respect the region's natural setting and dramatic views.
***NOTE: Open Space policy "preserve rural character" was moved to Community Character element.*

> ***Policy CC.1.1***. Preserve the natural character of the region through planning and design to maintain views to significant landmarks, retain sloping landforms, rock outcroppings, water courses, flood plains and conserve large stands of ponderosa pine.
>
> ***Suggested New Policy CC.1.2.*** Continue to define, and further develop the community character, by incorporating the natural setting into the built environment at all design scales.
>
> ***Policy CC.1.3.*** Protect the region's topographical features, mountains, canyons and forested settings from development.
>
> ***Policy CC.1.4.*** Identify, protect and enhance gateway points and corridors
>
> ***Policy CC.1.5.*** Development patterns will be designed to maintain the open character of rural areas, protect open lands, and protect and maintain sensitive environmental areas.
>
> ***Policy CC.1.6.*** Encourage cluster development to preserve open space, viewsheds and scenic vistas.

Heritage Preservation

Preserving the region's heritage, in the way of design, building traditions, and cultural preservation, enhances the quality of life in the Flagstaff area. Our region's cultural and historic resources must be preserved, protected, and enhanced. Following federal guidelines, 'Heritage Preservation' is the preservation of both Cultural Resources (pre-historic) and Historic Resources.

Native Americans have lived in the Flagstaff area for thousands of years. The first people of the area were hunters and gatherers who moved around the region. Around 500 BC, maize agriculture was introduced to the Southwest and farming began, producing settlements and then large villages of the Northern Sinagua and Cohonina tribes. These historic villages are recognized by the remains of pit house architecture and stone field houses – precursors of the pueblo villages. The earliest settlement sites occurred northeast of Flagstaff, with later settlements along the base of the San Francisco Mountains, Mount Elden, and the Walnut Canyon area, where both dry-farming and floodwater farming could be practiced. Sunset Crater erupted approximately 1064 AD, and the human settlements shifted, using small masonry field houses, and pueblos villages became minor population centers. After 1400 AD, the villages were abandoned, and populations moved northeast to contribute to the emerging Hopi villages. The remnants of this pre-historic culture are most evident in **Walnut Canyon National Monument** and surrounding areas, **Picture Canyon Conservation Area**, and **Wupatki National Monument**.

Flagstaff hosts a rich array of historic resources, which reflect more than 100 years of settlement and growth, providing tangible witness to the development of the railroad, transcontinental highways, logging and building-stone industries, local and county government, livestock and agriculture, science, higher education, and business in Flagstaff and northern Arizona. These resources contribute to a strong sense of

place and community identity, and attract visitors to the community through their aesthetic charm and significance.

For cultural and historic resources to serve as meaningful focal points within the community, it is necessary to preserve archeological sites, historic sites, and historic buildings of significance; restore elements of the Route 66 corridor, scenic corridors, and gateways; and emulate historic architecture and design in new development.

Cultural Preservation

Cultural resources are quite varied and are best described using the national standard. Properties listed in the National Register of Historic Places include "districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture."

Archeological sites in the Flagstaff region date human occupation to as early as 450 AD. These sites are located in areas where crops were once grown, and have yielded pottery and other evidence of civilization. Other sites exist in the forest where remains of "alcove houses" have been identified – a building form unique to this area. There are numerous settlement-era historic resources related to ranching, logging, sawmill, mining, military and railroad activities. Sixteen archaeological sites have been documented within a one mile radius of the Milton Road/University Drive intersection.

a. There are many culturally significant sites located within the regional planning area. Some of these sites are considered sacred because of their importance to historical or traditional events associated with regional Native American tribes. Many cultural sites have been documented with the State Historic Preservation Office in conjunction with projects that use federal monies or occur on federal or state owned lands. Although it is uncommon to require a developer to perform archeological studies in the County, the work has been performed on sites that warrant evaluation. Archeological resources are often hidden from view, but many lasting visual remnants remain throughout the region including petroglyphs, pottery shards and burial sites. Many of these locations are often held in confidence to protect them from desecration.

Historic Preservation

The City of Flagstaff is a Certified Local Government (CLG), which makes the City eligible for financial and technical assistance in historic preservation efforts under the National Historic Preservation Act. The City's Zoning Code requires cultural resource impact studies and impact mitigation strategies for new development. The Zoning Code further requires that the City appoint a Historic Preservation Officer to work in conjunction with the Historic Preservation Commission to conduct reviews of property for historic significance, create historic property inventories, help in forming and maintaining landmark and historic district, review new developments for historic compatibility, conduct public education and outreach, provide documents, resources and guidelines on historic preservation, and administer an annually funded Historic Facades and Signs Grant Program. Program staff works with the State Historic Preservation Office (SHPO) and the Heritage Preservation Commission (HPC) on heritage preservation efforts.[25]

More than 650 resources from the historic period (1880-1945) are inventoried in systematic surveys, many of which are included in several National Register Historic Districts (See Map 21: Historic

[25] For more details regarding Historic Preservation programs and efforts, see: http://www.flagstaff.az.gov/index.aspx?nid=901

Properties & Districts).[26] The official **National Register Historic Districts** include: Flagstaff Townsite Historic Residential District, Railroad Addition Historic District, North End Historic Residential District, and Flagstaff Southside Historic District. The three **local Historic Districts** include: Downtown Historic District, Townsite Historic District, and Landmarks District, which is a floating overlay district applicable to qualifying locations within the city. The local Historic Overlay Districts contain over 300 individual properties. One prime example of a property needing preservation efforts is the Basque Pelota Court, circa 1926, located in the Historic Southside neighborhood and is the last such court remaining in Arizona and one of only fourteen known to exist. Beginning in the early 1870's, Basque sheepherders were the first to graze stock in the region and they settled in this neighborhood. The court is partially dilapidated and will be gone if future efforts are not made to preserve this important piece of our history.

Outside the city limits, Heritage Preservation efforts have primarily been completed by land management agencies such as the U.S. Forest Service, the Arizona State Land Department, the National Park Service and local Native American tribes. Coconino County is not a Certified Local Government, and is not required to be such to recognize historic structures or seek their protection. The County does not have dedicated historic preservation staff, so individuals and small groups who focus on specific properties or local landmarks undertake most of the efforts occurring on private lands.

Historic trails are unique resources that mark the travels of early explorers and settlers in the area. Over time, many of these original corridors were transformed into wagon routes, recreation trails, ranching roads, highways or train corridors. Although there are no national Historic Trails within the regional planning area to date, among the more interesting trails are the Beale Wagon Road and the Grand Canyon stagecoach line. The original Beale Wagon Road was a military road connecting Arizona's Fort Defiance and southern California. The stagecoach line was initiated by a private company to take tourists from Flagstaff to the Grand Canyon.

Policies - Heritage Preservation

Goal CC.2. Preserve, restore and rehabilitate heritage resources to better appreciate this culture.

> ***Policy CC.2.1.*** Actively locate and identify and preserve historical, archeological, and cultural resources as aspects of our society for future generations to retain, understand and enjoy their cultural identity.
>
> ***Suggested Policy CC 2.2.*** Formally recognize heritage resources through designation as local landmarks and historic districts.
> *Suggested Policy CC2.3* - Fully mitigate development impacts on heritage resources.
>
> ***Policy CC.2.3.*** Support restoration and rehabilitation of historic housing, buildings, and structures and neighborhoods.
>
> ***Suggested Policy CC 2.4.*** Provide incentives for heritage preservation.

[26] These district nominations and surveys (undertaken between 1980 and 2010) are available to the public at Cline Library Special Collections and Archives, at the Flagstaff Coconino County Public Library, and at the City of Flagstaff.

Community Design

The physical character of Flagstaff is defined by its built environment and natural setting. Places recognized in Flagstaff, the remarkable places, are those areas where the patterns of development have preserved and restored, enhanced, and emulated the best of the built environment and the natural setting. Fundamental components of community design include preserving and restoring our heritage resources, and integrating historical design aesthetics in contextual new development. The design of **neighborhoods**, **landscape**, **urban spaces**, **streetscapes and transportation systems**, **infrastructure**, **urban forestry**, **site design**, **parking**, and **architecture** all contribute to the overall community character.

The Flagstaff Region's environmental beauty is complemented by indigenous development and local design traditions that respect the area's amazing scenic vistas through the preservation of viewsheds and use of natural materials and colors, dark-sky compliant lighting, and signage and landscaping that harmonize with the natural surroundings. The establishment of quality community design through contextual development and redevelopment can shape community character, open up economic opportunities, and improve livability for all residents. Physical character is important to our residents and plays an important part in attracting a highly-skilled workforce and visitors from around the world.

The Flagstaff region encompasses walkable urban, drivable suburban and rural areas, all developed based upon the historic design traditions of Flagstaff. [Need to define urban, suburban and rural in a sidebar. Also define infrastructure as referring to road, water, sewer, power, data, housing, green infrastructure, and public art.] The concentration and density of development plays an enormous role in shaping the future community. Residents desire new development and redevelopment that conserves land, energy, and natural resources, as well as supports accessible multi-modal transportation options. Challenges which future decision makers must address to ensure positive community character include removing overhead utility lines from viewsheds, properly placing utility boxes and dumpsters with site planning, integrating parking, solar panels, wind turbines and rainwater harvesting into the urban context, and improving building and public space maintenance.

Walkable-scale developments can achieve many community goals, from increased public transit use to economic development opportunities. These are further discussed as the six main goals in the Land Use Element of the *Regional Plan*. Concentrated development, however, must be designed and built with respect for Flagstaff's character. To encourage high-quality, attractive, and marketable development, the City and County will need to invest in upgrading existing infrastructure to appropriately increase density in existing developed areas, as well as to ensure compatible design.

Finally, it is important to note that the fields of physical development involved in establishing and maintaining the character of the community include planning, urban design, engineering, architecture, and landscape architecture. The character of the community is principally influenced by the design of neighborhoods, transportation systems (notably streets, structures, and automobile parking), infrastructure components, urban forestry, public facilities and amenities, and individual building sites. Like the whole, the contribution of an individual building site to the overall community character is influenced by remnant natural features, the placement of buildings and automobile parking, infrastructure components, pedestrian systems, signage, open space, architecture, landscape architecture, and lighting.

Neighborhoods

The built patterns of development today are and primarily in response to various transportation influences. Earliest neighborhoods grew the railroad in the 1800's, creating a hearty downtown that remains the community center. The coming of the automobile brought commercial development along

corridors and suburban residential neighborhoods. East Flagstaff, once unincorporated County, developed its own "downtown" with a more auto-oriented suburban design, but that remains an activity center for the city as Fourth Street. With easy access by car, the surrounding rural areas have changed from more agricultural and forestry uses to a more ranchette residential character.

Many residents celebrate the historic neighborhoods, those of the pre-Route 66 era, in which walkability, front porches, and street trees are pointed to as 'favorite characteristics'. Future neighborhood design can very well emulate the characteristics of these existing places, using Traditional Neighborhood Design as the basis, whether that be in the walkable urban or drivable suburban context.

Goals for the functioning, health, and appearance of the Flagstaff community depend on arranging the parts of new developments more along the lines of a traditional walkable town. This means confronting and balancing the tendency for disconnected developments dominated by traffic, parking lots, and garages.

Landscape

Beautiful natural areas are the most distinctive aspect of the Flagstaff Region's character, being unique to both Arizona and the United States. These natural features attract visitors, residents, and businesses to this region, in addition to providing indirect and direct employment opportunities for many. The region is known for its outdoor lifestyle, miles of trails, outdoor recreation opportunities, wildlife watching, and access to open space, parks, and forests. In addition to preserving natural, native landscaped areas, new development should emulate the natural environment in new landscaping, both as "site repair" or simply for the aesthetic value. The landscaping choices for a site should respond to its location within the rural to urban spectrum, with the most natural occurring in the rural areas and the most developed occurring in the urban areas.

Because preservation of uninterrupted landscapes is a priority for our community, development should be focused within designated growth areas. The promotion of infill development is key to maintaining the rural-to-urban character of the region. Natural landscape features may also be maintained through the use of regulations that protect viewsheds, large tree stands, meadows and wooded areas. *Define wooded areas*

Urban Design

Urban design is the discipline through which planning and architecture can create or renew a sense of local pride and identity. It has great potential for enhancing the visual image and quality of neighborhoods by providing a three-dimensional physical form to policies described in the regional plan. It focuses on design of the public realm, which is created by both public spaces and the buildings that define them. Urban design views these spaces holistically and is concerned with bringing together the different disciplines responsible for the components of cities into a unified vision.

Urban design is key for the success of various areas, including downtowns, campuses, corridors, neighborhoods, mixed-use developments, and special districts. Issues to be considered include existing development, proposed development, utility infrastructure, streets framework, and sustainable development principles. Urban design plans require interdisciplinary collaboration among urban designers, architects, landscape architects, planners, civil and environmental engineers, and market analysts.

Urban design is the arrangement and design of buildings, public spaces, transport systems, services and amenities which give form, shape, and character to a community. The use of architecture, landscape architecture, and city planning to develop a functional and attractive community framework is important in planning for the region's future. This can also connect people and places, both smartly and efficiently through place-making, environmental stewardship, social equity and economic viability. The Flagstaff Region uses natural environmental beauty as a key to this framework. The challenge for the community is to build public spaces, streetscapes, and buildings which reflect, support, and blend with this natural beauty.

The City and County use Area Plans, Neighborhood Plans, and Area Specific Plans to create design standards based on community input. The County implements Design Review Overlay Zones corresponding to area plan boundaries, and the City currently uses Historic District Overlay zones corresponding to Historic District boundaries. Both the City and the County also regulate the scale and intensity of development through their respective Zoning Codes by establishing minimum standards for the development of land, including the size of lots, landscaping, building placement, outdoor signs, and lighting. Many of these standards focus on assuring safe and efficient use of land; however, they also influence the design and character of development.

Understanding and promoting the different desired characteristics of urban, suburban and rural neighborhoods and activity centers as reflections of the surrounding natural landscape is important in maintaining the diverse community desired by residents and visitors. Promoting and maintaining concentrated development in or near the city core and activity centers is one means of preserving optimal open space throughout the community.

Streetscapes and Transportation Systems

Although streets are primarily used to move vehicles, bicycles, and people from one place to another, they can also frame the region's amazing views, and street edges may serve as centers of commerce, outdoor eating places, hubs of activity and people watching, and spaces for public art. Designing and constructing "complete streets" that enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities , can provide a memorable experience for visitors and residents alike(refer to the National Complete Streets Coalition page at www.smartgrowthamerica.org/complete-streets). Auto-dominated designs solutions threaten the character of this community, and complete streets should become the normal design solution for all new and remodeled streets. Whether it's a main corridor traveled by millions of people every year, such as Milton Road, Route 66, and Fort Valley Road, or local neighborhood streets, complete streets provide streetscapes which enhance the character of our community, thus improving the experience and property values for all.

Infrastructure

Public infrastructure – roads, water and sewer lines, power lines and boxes, street lights and switch boxes, stormwater collection and various components of these types of infrastructure can have great effects on overall community character aesthetically and sustainably. The community partners can choose to plan for and implement shared spaces, guidelines for aesthetically pleasing placement of boxes, screening, and underground utilities, for example. A collective 'urban infrastructure plan' for water, sewer, power, telephone, cable, data, roads, and trails, working collaboratively with the community vision for growth, could greatly improve the views, viewsheds and site design characteristics in the region. The term 'green infrastructure' is a term which indicates the whole system of water, sewer, stormwater and power is re-thought for tomorrow's generation, as a tool for a sustainable and resilient community. http://www.greeninfrastructuredesign.org/

Urban Forestry

The trees within the developed areas of the community are typically planted as an accompaniment to the development. There are some stands of old growth ponderosa pine, yet the idea of the 'urban forest' is that of street, public plaza and landscaped trees with maintenance, arborists, and forethought into design, shading and overall landscape aesthetics. Many communities develop an urban forestry program, with an city-wide tree inventory and plan for replacing trees and the maintenance for a healthy urban forest.

Parking

Parking is an essential element in regards to urban design and traffic circulation. Parking should be developed which reflects the context of each site. Walkable urban areas use street parking, shared parking lots, and parking structures. Drivable suburban and rural parking lots feature landscaping and enhance the beauty of a site, and allow for a reduction in storm-water runoff.

Parking requirements need to reflect the desired density and intensity of the place-type, while respecting the need of residents, visitors and shoppers.

Site Design and Architecture

Sites and buildings are the backdrop of the public realm, and they have a vital role in defining the character of the community. Community Character is represented in sites and buildings by employing the region's design traditions, and using local materials with compatible colors and architectural details. Achieving contextualism with vernacular development [27]is a challenge for architects and other building designers to meet new needs that fit within traditional design concepts. Through community vision and civic pride, the public and private sectors can both contribute to a contextually sensitive and emphatically beautiful place to live, work, and play.

When determining design decisions about any development site, be careful not move too hastily through crucial considerations which address the suitability and limitations of a piece of land for development in the first place - such as geology, hydrology, ecology, the availability of streets, utilities, and a system to handle storm water flow. These considerations should be assessed before designing a site plan.

Goals and Policies - Community Design

Goal CC.3. Public and private design solutions as new and remodeled buildings, public spaces, and landscaping will preserve, restore, enhance and reflect the design traditions of Flagstaff[KS2].

> ***Suggested Policy CC 3.1.*** Neighborhood design is respectful of traditional development patterns and enhances the overall community image.
>
> ***Policy CC.3.2.*** Promote ~~quality~~ context sensitive design and development for all projects to enhance a positive image and identity for the Region.

[27] Vernacular development - definition

Suggested Policy CC 3.3. Streetscape design is context sensitive, and transportation systems reflect the desired land use. *See Transportation section this is probably redundant.*

Policy CC3.2. Utilities and infrastructure should be contextual and considered as part of the overall design aesthetics.
Policy CC3.3. Develop urban infrastructure which supports revitalization and redevelopment. [Round 1 of editing suggested moving this to Public Facilities - is this still the case?]

Suggested Policy CC 3.4. Appropriate design solutions respect, fit around and within, the unique aspects of the natural environment.

Suggested Policy CC 3.5. Appropriate design solutions balance the interface of the natural and built environments with the most urbanized core activity areas being the most built and the least urbanized periphery areas being the most natural.

Suggested Policy. Design streets and parking lots that de-emphasize automobile facilities and enhance the surrounding environmental beauty.

Suggested Policy. Maintain and enhance existing buildings and blend well-designed new buildings into existing neighborhoods.

Arts, Science and Education

The Arts, Sciences and Education are an integral part of social and economic fabric of the community. *As the location of one of three public universities in Arizona, a hub of night sky research and archeological research, and home to many Native American artists, the Flagstaff Region has a wide range of educational, scientific, and cultural organizations, resources, attractions, and activities that are a source of community pride and enrichment.* A great number of artists, scientists and educators choose to live here because of these opportunities. Without coordination, preservation and promotion, however, arts, science and educational activities and resources can easily be lost through indifference or unintended development decisions or policies.

A number of cultural and business organizations work to promote partnerships among local arts and cultural organizations, as well as helping the community recognize that the arts are representative of the Region's diversity, creativity and vitality. As a culturally rich community, the holistic planning of events and activities between art, science and educational venues will develop more rewarding opportunities for all. By supporting outstanding venues, smart circulation and parking options, and well-planned connectivity, the City and County can promote and encourage these partnerships. In addition, this Plan supports integration of culturally reflective art into public and private commercial projects. *Refer to this in Community Design*

The goals and policies of the Arts, Science and Education Section are intended to guide development, land use, and transportation decisions which support future cultural, scientific, and educational needs of the community. Future challenges in the Flagstaff Region require maximizing the community's cultural, scientific, and educational potential by coordinating with various community groups, businesses, agencies, and citizens.

Goal CC.3. Support and promote art, science and education resources for all to experience.

Policy CC.3.1. Provide first class arts, research and educational facilities.

Policy CC.3.2. Coordinate educational master plans (NAU, CCC, FUSD and Charter Schools) with regional planning efforts.

Policy CC.3.3. Integrate art into public and private development projects.
Policy CC.3.4. Complete sidewalks and FUTS connections for all schools, community college and university campuses.

Policy CC.3.5. Promote and expand scientific research as a key component to the Flagstaff Region's character.

VI. Community Character

A. Introduction
B. Relationship to Vision and Guiding Principles
C. Community Character Goals and Policies
1. **Community Design**
a. Landscape
b. Urban Design
c. Streetscapes
d. Building & Site Design
e. Goals & Policies
2. **Scenic Resources**
b. Gateways and Corridors
c. Vistas and Viewsheds
d. Goals & Policies
3. **Arts, Science & Education**
4. **Heritage Preservation**
a. Historic Preservation
b. Cultural Preservation
c. Goals & Policies

A. Introduction

Community Character is the combination of qualities and assets that make a community unique and establish a sense of place for its residents and visitors. Distinctive aspects of the natural environment and the unique character of the human-built environment define the physical character of Flagstaff. Social activities, cultural and artistic offerings, and the unique people who live, work and play here also contribute to the Flagstaff area's community character.

The Flagstaff Region is a mix of rural, suburban and urban areas, each with its own values and unique features. From the historic downtown and neighborhood areas to the newer suburban, auto-oriented developments and growing rural communities, the Flagstaff area's neighborhoods are vital to the character of the region. Existing activity centers, as well as the potential of future urban, suburban and rural activity centers, can enhance the unique and character-defining aesthetics of the region.

Preserving and enhancing the region's community character is important to our residents and visitors. Tools to accomplish these goals include: preserving the region's natural, historic, scenic and cultural

resources; defining community gateways and scenic corridors;; and nurturing artistic and educational opportunities.

Preserving and revitalizing distinctive areas enhances the greater region's character, celebrates the cultures that have established our unique sense of place, and promotes a stable, vibrant quality of life for residents and visitors. It is important that preservation and restoration efforts are well-balanced with new growth and redevelopment throughout the region, as they will have a tremendous influence on the community's overall appearance and future character.

B. Relationship to Vision and Guiding Principles

The purpose of this chapter is to guide efforts to preserve, restore and enhance the region's extraordinary cultural and ecological composition through careful integration of the natural and built environments. The community envisions a region where stewardship of the unique characteristics of our ecosystem, communities and neighborhoods plays an important role in every development project. The region can and should achieve an environmentally, socially, and economically sustainable community through the application of quality design and development, and the preservation of our unique sense of place. The key to success rests upon the accountability of private and public partners working collaboratively toward this goal.

C. Goals and Policies

1. Community Design

The Flagstaff Region's environmental beauty is complemented by local design traditions that respect the area's amazing scenic vistas through the preservation of viewsheds and use of natural materials and colors, dark-sky compliant lighting, and signage and landscaping that harmonize with the natural surroundings. The establishment of quality community design through contextual development and redevelopment can shape community character, open up economic opportunities, and improve livability for all residents. Physical character is important to our residents and plays an important part in attracting a highly-skilled workforce and visitors from around the world. Fundamental components of community design include preserving and restoring our heritage resources, and integrating historical design aesthetics in contextual new development. Four major areas of design criteria are Landscape, Urban Design, Streetscapes, and Building and Site Design, all of which emphasize the integration of development into specific contexts.(See City of Flagstaff Zoning Code, Architectural Character, pp. 30.60-14 and 15)..

The Flagstaff region encompasses urban, suburban and rural areas, and the concentration/density of development plays an enormous role in shaping the future of the community. Residents desire new development and redevelopment that conserves land, energy, and natural resources, as well as supports accessible multi-modal transportation options for a diverse population. Challenges which future decision makers must address to ensure positive community character include removing overhead utility lines from viewsheds, properly placing utility boxes and dumpsters with site planning, integrating parking in a positive manner into the urban context, and, improving building and public space maintenance.

Walkable-scale developments can achieve many community goals, from increased public transit use to economic development opportunities. Concentrated development, however, must be designed and built with respect for Flagstaff's character. To encourage high-quality, attractive, and marketable development,

~~the City and County will need to invest in upgrading existing infrastructure to appropriately increase density in existing urban areas, as well as to ensure compatible design.~~

Photo 1: Francis Short Pond, winter 2010. Photo by CVB Flagstaff.

Photo 2: AZ Central Credit Union, Woodlands Village Blvd. 2011. Photo by City Staff.

Photo 3: Downtown Flagstaff, 2009. Photo by Keiji Images

~~Beautiful natural areas are the most distinctive aspect of the Flagstaff Region's character, being unique to both Arizona and the United States. These natural features attract visitors, residents, and businesses to this region, in addition to providing indirect and direct employment opportunities for many. The region is known for its outdoor lifestyle, miles of trails, outdoor recreation opportunities, wildlife watching, and access to open space, parks, and forests. In addition to preserving natural, native vegetation areas, new development should emulate the natural environment in new landscaping, both as "site repair" or simply for the aesthetic value. The landscaping choices for a site should respond to its location within the rural to urban spectrum, with the most natural occurring in the rural areas and the most developed occurring in the urban areas.~~

~~Because preservation of uninterrupted landscapes is a priority for our community, development should be focused within designated growth areas. The promotion of infill development is key to maintaining the rural-to-urban character of the region. Landscape features may also be maintained through the use of regulations that protect viewsheds, large tree stands, meadows and wooded areas.~~

Photo 4: Viewshed along Cedar Avenue on McMillan Mesa. This landscape is vital to the Flagstaff Region's community

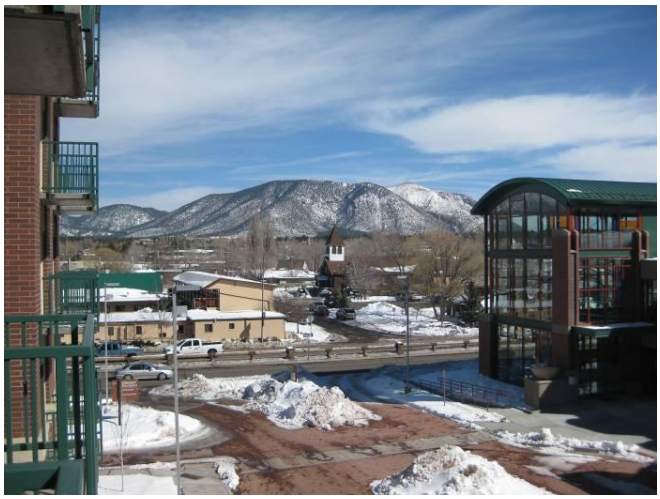

Photo 5: High Country Conference Center and Drury Hotel frame a view. New development must be cognizant and respectful of viewsheds and the surrounding landscape.

~~b. Urban Design~~

~~Urban design is the arrangement and design of buildings, public spaces, transport systems, services and amenities which give form, shape, and character to a community. The use of architecture, landscape architecture, and city planning to develop a functional and attractive community framework is important in planning for the region's future. This can also connect people and places, both smartly and efficiently through place-making, environmental stewardship, social equity and economic viability. The Flagstaff Region uses natural environmental beauty as a key to this framework. The challenge for the community is to build public spaces, streetscapes, and buildings which reflect, support, and blend with this natural beauty.~~

~~The City and County use Area Plans, Neighborhood Plans, and Area Specific Plans to create design standards based on community input. The County implements Design Review Overlay Zones corresponding to area plan boundaries, and the City currently uses Historic District Overlay zones corresponding to Historic District boundaries. Both the City and the County also regulate the scale and intensity of development through their respective Zoning Codes by establishing minimum standards for the development of land, including the size of lots, landscaping, building placement, outdoor signs, and lighting. Many of these standards focus on assuring safe and efficient use of land; however, they also influence the design and character of development.~~

~~Understanding and promoting the different desired characteristics of urban, suburban and rural neighborhoods and activity centers as reflections of the surrounding natural landscape is important in maintaining the diverse community desired by residents and visitors. Promoting and maintaining concentrated development in or near the city core and activity centers is one means of preserving optimal open space throughout the community.~~

Photo 6: Historic Downtown neighborhood, 2009. Photo by Keiji

Photo 7: Downtown Flagstaff urban form, winter 2008. Photo by localnewsinitiative.org

Photo 8: Heritage Square public space for socializing. Photo by Deborah Soltesz.

Photo 9: Street trees within historic neighborhoods are a favorite character-

Photo 10: Contextual design of the public realm is important; above is a FUTS trail

Photo 11: Rural character is manifested through open spaces, appropriate fencing and road

~~C. Streetscapes~~

~~Although streets are primarily used to move automobiles, bicycles, and people from one place to another, they can also frame the region's amazing views, and street verges may serve as centers of commerce, outdoor eating places, hubs of activity and people watching, and spaces for public art. Designing and constructing "complete streets" that enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities , can provide a memorable experience for visitors and residents alike. Auto-dominated designs solutions threaten the character of this community, and complete streets should become the normal design solution for all new and remodeled streets. Whether it's a main corridor traveled by millions of people every year, such as Milton Road, Route 66, and Fort Valley Road, or local neighborhood streets, complete streets provide streetscapes which enhance the character of our community, thus improving the experience and property values for all.~~

Photo 12: Milton Road looking north. The built environment does not reflect the beauty of the natural environment. Photo by City staff, 2009.

Image 13: Diagram of 'Complete Street', with opportunities for all transportation modes: pedestrians, bicyclists, bus riders and automobiles. www.localmotion.org

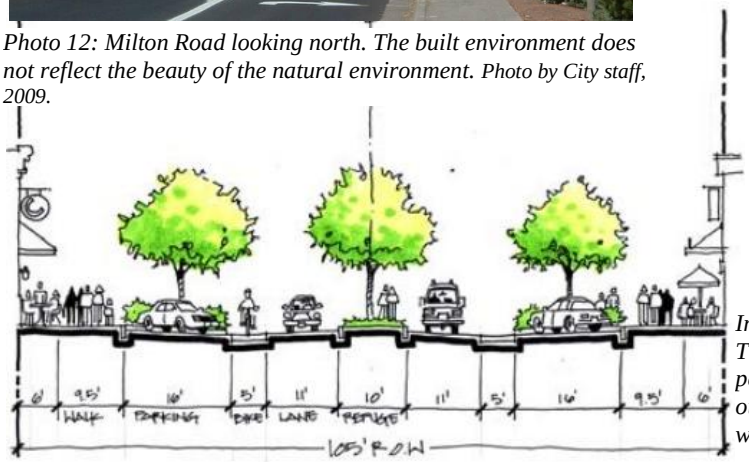

Image 14: Cross-section of a 'Complete Street' example. This allows for travel at safe speeds, space for pedestrians, bicyclists, parking, landscaping, and outdoor amenity space. Example from Clawson, MI. www.m-bike.org

~~d. Building & Site Design~~

~~Sites and buildings are the backdrop of the public realm, and they have a vital role in defining the character of the community. Community Character is represented in sites and buildings by employing the region's design traditions, and using local materials with compatible colors and architectural details. Achieving contextualism with vernacular development is a challenge for architects and other building designers to meet new needs that fit within traditional design concepts. Through community vision and civic pride, the public and private sectors can both contribute to a contextually sensitive and emphatically beautiful place to live, work, and play.~~

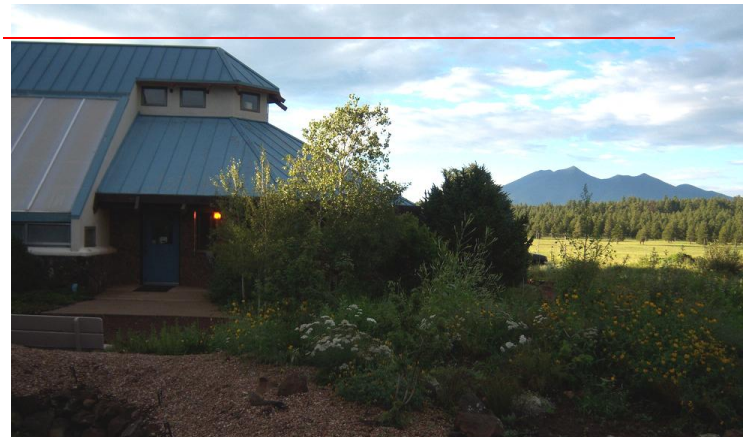

Photo 15: Building at Arboretum of Flagstaff, is reflective of the landscape in scale and materials.. Photo by Deborah Soltesz, 2010.

Photo 16: Historic home with appropriate modern addition respects vernacular architectural language and materials. Photos by City staff, 2009.

Photo 17: Historic downtown buildings follow historic site design standards. Photos by City staff, 2009.

Photo 18: Historic Southside downtown building remodeled reflects historic site design standards with modern needs. Photos by Michael Marquess, 2010.

e. Goals and Policies

Goal CC.1. New and remodeled buildings, public spaces, and landscaping will reflect the design traditions of Flagstaff.

> ***Policy CC.1.1.*** Promote quality design and development for all projects to enhance a positive image and identity for the Region.
>
> ***Policy CC1.2.*** Utilities and infrastructure should be considered as part of the overall design aesthetics. .
> ***4.***
>
> ***Policy CC1.3.*** Develop urban infrastructure which supports revitalization and redevelopment.

2. Scenic Resources

a. Community Gateways and Corridors

Gateways are the first impressions people have as they enter the region, and thus warrant special design considerations to reflect community pride and local design traditions. The region has gateway points, corridors and communities, all requiring attention to give the desired 'impression' to those entering and leaving the area. Yet, the initial 'impression' needs to be reflected in the overall aesthetics of the community, too. In 2009, the community recognized the importance of gateways by investing in three unique "Flagstaff" signs, installed along I-17, Highway 180 and Highway 89N. These signs are celebrated as reflecting the region's character, but additional investments are necessary for the gateway areas as a whole, including the buildings, signage and landscaping one sees. The community has identified the following Gateway Points, corridors and communities – *see Map xx.*

Gateway Points

- I-17 at the Milton Road Merger
- Milton Road at BNSF Underpass (entering Historic Downtown)
- Highway 180 at Cheshire Neighborhood (sign exists)
- Highway 89 at City Limits (sign exists)

Gateway Corridors include arterial roadways that provide access into Flagstaff; these will require Corridor Plans:

- I-17 to Milton Road
- 1-40
- Highway 89
- Highway 180 (Fort Valley Road)
- Route 66

Photo 19: Series of three Gateway Signs installed in 2009.

Gateway Communities include:

- Kachina Village (as experienced from I-17),
- Mountainaire (I-17)
- Doney Park Hwy 89)
- Fort Valley (Hwy 180)

- Bellemont (I-40)
- La Plaza Vieja neighborhood in the west and Cosnino Neighborhood to the east (Amtrak corridor)

b. Vistas and Viewsheds

Natural scenic beauty supports a number of important community elements, including the natural environment, quality of life and character, and local economies. The Flagstaff Region is known for its scenic vistas, which contain relatively large natural areas. Communities and their residents come to love these landscapes, and often take them for granted. Without proactive measures, however, roads, housing, and commercial buildings can threaten the pristine nature of these areas and diminish many of their positive benefits. This Plan promotes a variety of strategies to protect scenic viewsheds through the management of the amount and character of development., including regulating the type and intensity of development, design requirements, landscaping, location standards for telecommunication towers, placement of utility infrastructure, scenic (conservation) easements, sign standards, and specific transportation designs.

Photo 20: Fort Valley Neighborhood – policies to protect scenic resources are needed. Photo by John Aber, 2009.

c. Goals and Policies

Goal CC.2. The built environment shall reflect and respect the region's natural setting and dramatic views.

***NOTE: Open Space policy "preserve rural character" was moved to Community Character element.*

Policy CC.2.1. Preserve the natural character of the region through planning and design to maintain views to significant landmarks, retain sloping landforms, and conserve stands of ponderosa pine.

Policy CC.2.2. Protect the region's topographical features, mountains, canyons and forested settings from development.

Policy CC.2.3. Identify, Protect and enhance Gateway points and corridors

Policy CC.2.4. Development patterns will be designed to maintain the open character of rural areas, protect open lands, and protect and maintain sensitive environmental areas.

Policy CC.2.5. Encourage Cluster Development

3. Arts, Science and Education

The Arts, Sciences and Education are an integral part of social and economic fabric of the community. As the location of one of three public universities in Arizona, a hub of night sky research and archeological research, and home to many Native American artists, the Flagstaff Region has a wide range of educational, scientific, and cultural organizations, resources, attractions, and activities that are a source of community pride and enrichment. A great number of artists, scientists and educators choose to live here because of these opportunities. Without coordination, preservation and promotion, however, arts, science and educational activities and resources can easily be lost through indifference or unintended development decisions or policies.

A number of cultural and business organizations work to promote partnerships among local arts and cultural organizations, as well as helping the community recognize that the arts are representative of the Region's diversity, creativity and vitality. As a culturally rich community, the holistic planning of events and activities between art, science and educational venues will develop more rewarding opportunities for all. By supporting outstanding venues, smart circulation and parking options, and well-planned connectivity, the City and County can promote and encourage these partnerships. In addition, this Plan supports integration of culturally reflective art into public and private commercial projects.

The goals and policies of the Arts, Science and Education Section are intended to guide development, land use, and transportation decisions which support future cultural, scientific, and educational needs of the community. Future challenges in the Flagstaff Region require maximizing the community's cultural, scientific, and educational potential by coordinating with various community groups, businesses, agencies, and citizens.

Goal CC.3. Support and promote art, science and education resources for all to experience.

Policy CC.3.1. Provide first class arts, research and educational facilities.

Policy CC.3.2. Coordinate educational master plans (NAU, CCC, FUSD and Charter Schools) with regional planning efforts.

Policy CC.3.3. Integrate art into public and private development projects.

Policy CC.3.4. Complete sidewalks and FUTS connections for all schools, community college and university campuses.

Policy CC.3.5. Promote and expand scientific research as a key component to the Flagstaff Region's character.

4. Heritage Preservation

Preserving the region's historic resources and including heritage, in the way of design, building traditions, and cultural preservation, enhances the quality of life in the Flagstaff area. Our region's cultural and historic resources must be preserved, protected, and enhanced. Flagstaff hosts a number of historic buildings which greatly contribute to a strong sense of place and community identity, and attract visitors to the community through their aesthetic charm and significance. This rich array of historic resources, which reflect more than 100 years of settlement and growth, provides tangible witness to the development of the railroad, transcontinental highways, logging and building stone industries, local and county government, livestock and agriculture, science, higher education, and business in Flagstaff and northern Arizona.

More than 650 resources from the historic period (1880-1945) are inventoried in systematic surveys, many of which are included in several National Register Historic Districts (See Map 21: Historic Properties & Districts).[28] The official National Register Historic Districts include: Townsite, Railroad Addition, North End and Southside. Three local Historic Districts include: Downtown Historic District, Townsite Historic District, and Landmarks District, which is a floating overlay district applicable to qualifying locations within the city. The local Historic Overlay Districts contain over 300 individual properties.
For cultural and historic resources to serve as meaningful focal points within the community, it is necessary to preserve archeological sites, historic sites, and historic buildings of significance; restore elements of the Route 66 corridor, scenic corridors, and gateways; and emulate historic architecture and design in new development.
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a. Historic Preservation:

The City of Flagstaff is a Certified Local Government (CLG), which makes the City eligible for financial and technical assistance in historic preservation efforts under the National Historic Preservation Act. The City's Zoning Code requires cultural resource impact studies and impact mitigation strategies for new development. The Zoning Code further requires that the City appoint a Historic Preservation Officer to work in conjunction with the Historic Preservation Commission to conduct reviews of property for historic significance, create historic property inventories, help in forming and maintaining landmark and historic district, review new developments for historic compatibility, conduct public education and outreach, provide documents, resources and guidelines on historic preservation, and administer an annually funded Historic Facades and Signs Grant Program. Program staff works with the State Historic Preservation Office (SHPO) and the Heritage Preservation Commission (HPC) on heritage preservation

[28] These district nominations and surveys (undertaken between 1980 and 2010) are available to the public at Cline Library Special Collections and Archives at Northern Arizona University, at the Flagstaff Coconino County Public Library, and at the City of Flagstaff.

efforts.[29]

Outside the city limits, Heritage Preservation efforts have primarily been completed by land management agencies such as the U.S. Forest Service, the Arizona State Land Department, the National Park Service and local Native American tribes. Coconino County is not a Certified Local Government, and is not required to be such to recognize historic structures or seek their protection. The County does not have dedicated historic preservation staff, so individuals and small groups who focus on specific properties or local landmarks undertake most of the efforts occurring on private lands.

Historic trails are a unique resource that evidence the travels of early explorers and settlers in the area. Over time, many of these original corridors were transformed into wagon routes, recreation trails, ranching roads, highways or train corridors. Although there are no national Historic Trails within the regional planning area to date, among the more interesting trails are the Beale Wagon Road and the Grand Canyon stagecoach line. The original Beale Wagon Road was a military road connecting Arizona's Fort Defiance and southern California. The stagecoach line was initiated by a private company to take tourists from Flagstaff to the Grand Canyon.

b. Cultural Preservation:

. . . . . . Cultural resources are quite varied and are best described using the national standard. Properties listed in the National Register of Historic Places include "districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture."

Archeological sites in the Flagstaff region date human occupation to as early as 450 AD. These sites are located in areas where crops were once grown, and have yielded pottery and other evidence of civilization. Other sites exist in the forest where remains of "alcove houses" have been identified – a building form unique to this area. There are numerous settlement-era historic resources related to ranching, logging, sawmill, mining, military and railroad activities. Sixteen archaeological sites have been documented within a one mile radius of the Milton Road/University Drive intersection. One example, the Basque Pelota Court, circa 1926, is located in the Historic Southside neighborhood and is the last such court remaining in Arizona and one of only fourteen known to exist. Beginning in the early 1870's, Basque sheepherders were the first to graze stock in the region and they settled in this neighborhood. The court is not, however, officially recognized as a historic site by the City of Flagstaff.

There are many culturally significant sites located within the regional planning area. Some of these sites are considered sacred because of their importance to historical or traditional events associated with regional Native American tribes. Many cultural sites have been documented with the State Historic Preservation Office in conjunction with projects that use federal monies or occur on federal or state owned lands. Although it is uncommon to require a developer to perform archeological studies in the County, the work has been performed on sites that warrant evaluation. Archeological resources are often hidden from view, but many lasting visual remnants remain throughout the region including petroglyphs, pottery shards and burial sites. Many of these locations are often held in confidence to protect them from desecration.

c. Heritage Preservation Goals & Policies

Goal CC.4. Preserve heritage resources

[29] For more details regarding Historic Preservation programs and efforts, see: http://www.flagstaff.az.gov/index.aspx?nid=901

Policy CC.4.1. Identify and preserve historical, archeological, and cultural resources.

Policy CC.4.2. Support restoration and rehabilitation of historic housing, buildings, and structures and neighborhoods. *Editor's note: repetitive with Policy CC.4.1?*

1. VII. Land Use and Growth Areas

[Under development]

VIII. Cost of Development

Introduction

Development itself is viewed as a community economic indicator. A resilient community has a balanced approach to development, in able to respond to outside changes, use financing systems effectively, and compete in this global market. Difficult challenges include meeting the rising demand of services with increasingly limited budgets, understanding and utilizing all of the funding and financing mechanisms available to build and upgrade infrastructure, and being prepared or willing to take risks.
Current policy is that development pays for itself. As such, there is need for infrastructure maintenance, upgrades and expansion; as well as a need for calculated and prudent partnerships to build community infrastructure.

Funding and Financing Mechanisms

State law requires municipalities to identify various funding and financing mechanisms that may be used to finance additional public services and infrastructure necessary, beneficial, and useful to serve new development, as well as bearing a fair and proportional relationship to the burden imposed upon the community by new development, including redevelopment. To accomplish this, the City will identify the necessary public infrastructure (based on impact reports prepared by developers and approved by the City) and services needed to serve a new development or redevelopment project, the cost of that infrastructure and services, the development's fair share of those costs, and the funding and financing mechanisms available to pay the costs. The Developer and the City will work together to find the balance of funding and financing mechanisms that best suits the project.

The City has available the following mechanisms:

a. **Bonding –** Voter Approved municipal bonds are securities that are issued for the purpose of financing the infrastructure needs of the issuing municipality. Bonds bear interest at either a fixed or variable rate of interest, which can be subject to a cap known as the maximum legal limit. The issuer of a municipal bond receives a cash payment at the time of issuance in exchange for a promise to repay the investors who provide the cash payment (the **bond holder**) over time. Repayment periods can be as short as a few months to 20, 30, or 40 years. The issuer typically uses proceeds from a bond sale to pay for capital projects it cannot pay for immediately with funds on hand. *Definitions to Glossary – just a simple explanation of how this supports building infrastructure here.*

b. **Dedications and Exactions –** As growth and prosperity of a community depend upon timely provision of public facilities, such as adequate utilities, roads, transit, public open space and parks; a development proposal will be asked to contribute their fair share towards these public facilities. A community can impose a variety of dedications and exactions on development to ensure the provision of public facilities related back to the impacts the proposed development has on the systems. The dedications may be site specific (such as turn lanes) or off-site specific (such as increased water or sewer capacity needed to serve the development).

Dedications are the transfer of property interests from private to public ownership for a public purpose. The transfer may be of fee simple interest (development transfers the title of ownership for the land dedicated for public purpose) or of a less than fee simple

interest (development dedicates the right to use the land dedicated), including an easement. Dedications are usually land or the right to use land, such as easements for utilities, infrastructure, or FUTS trails; or on-site land dedicated within a development for flood plains, a public park, fire station or school location if such facilities are outlined as needed in the Regional Plan.

An **exaction** is the process to obtain a dedication for the greater good. It is a property law concept where a condition for development is imposed on a parcel of land that requires the developer to mitigate anticipated negative impacts of the development. Exactions are similar to impact fees, which are direct payments to local governments instead of conditions on development. Exactions must have a real nexus to the proposed development, and may be based upon direct or partial need.

Direct need – through an analysis, if 100% of the development causes the need for a particular public improvement, the construction of this improvement becomes a condition of development. The developer must provide the improvement needed to solely serve the development, such as a right-turn lane into the proposed development.

Partial need – the development causes a percentage of need for a particular public facility, for example, 20% of a larger intersection near but not within the proposed development. The percentage of the cost of this facility will be exacted from the development as a proportional share of a future public improvement that will support growth within an area.

c. Development Fees - Development impact fees are one-time charges applied to offset the additional public-service costs of new development. They are usually applied at the time a building permit is issued and are dedicated to provision of additional services, such as water and sewer systems, roads, schools, libraries, and parks and recreation facilities, made necessary by the presence of new residents in the area. The funds collected cannot be used for operation, maintenance, repair, alteration, or replacement of existing capital facilities and cannot just be added to general revenue. Currently, the City of Flagstaff's Development Impact Fee, as of 11/19/12 – is for Fire and Police capital only.

d. In Lieu of Fees - In Lieu of fees are dollars collected from developers when, for a variety of reasons, dedications are impractical. They are different from impact fees and are not as flexible because the expenditure of those funds is for a particular use. For example, houses in several new developments may pay a fee for the future construction of a regional park in lieu of the developer(s) constructing the park at the time of development.

e. Municipal Facility Construction – The City or County's paying for and managing the construction of needed municipal facilities, such as a public works yard, courthouse, or fire house.

f. Service Privatization – Services, such as water, sewer and fire protection provided in the city limits for a fee; within County areas where a 'district' has been formed; or private, individual resources, such as an individual water well or sewer septic system.

g. Special Taxing Districts - Special districts provide specialized services to persons living within the designated geographic area which is taxed, such as shared public improvements, landscaping, marketing, parking, etc. Special districts perform many functions including

airports, water ports, highways, mass transit, parking facilities, fire protection, libraries, parks, cemeteries, hospitals, irrigation, conservation, sewerage, solid waste, stadiums, water supply, electric power, and gas utility. The earliest known general law in England authorizing special purpose authorities was the Statute of Sewers of 1532.

Funding for private development, public development, or public/private partnership development to consider:

Public and private development entities may consider many other forms of financing, and may work together to develop a financing package which works for each unique situation. There are numerous types of financing to consider for infrastructure projects, and the following list is not exhaustive, but some tools which may be considered include:

1. Improvement Districts
    a. Community Investment Districts
    b. Community Improvement Districts
    c. Business Improvement Districts
    d. Community Facilities Districts
    e. Economic Development Districts

2. Industrial Development Authority (IDA) bonds
    a. Industrial Revenue Bonds;.

3. Public-Private Partnerships (P3)

4. Private Sources – financing, investment

5. Transportation Infrastructure Finance and Innovation Act (TIFIA)

6. Railroad Rehabilitation and Improvement Financing Program (RRIF)

7. Public Sources
    a. Bonds and Other Forms of Debt Financing
    b. Capital Improvement Plan (CIP)
    c. Federal Highway Funds
    d. Designation as a High Priority Project in future Transportation Appropriation
    e. Non-Highway Public Financing
    f. Tax Exempt Bonds
    g. Taxable Bonds
    h. Bond Guaranty Program

8. Authorization legislation *Editor's Note: will need to elaborate how State Law can enable localities further financing mechanisms, such as Tax-Increment Financing.*

9. National Highway System (NHS)

10. Grants:
    a. Surface Transportation Program (STP)
    b. STP Transportation Enhancements Program
    c. Congestion Mitigation and Air Quality (CMAQ)
    d. Bridge Replacement and Rehabilitation Program

11. Federal Financing Programs:
    a. Economic Incentive Zones - AZ Commerce
    b. Enterprise Zone
    c. Empowerment Zone and Enterprise Community
    d. Foreign Trade Zone

12. Capital Development Corporation

13. Community Development Corporation

14. Credit Enhancements

15. State Infrastructure Banks

Goals and Policies

Goal CD.1. Better utilize the City and County financial systems[30] to provide for needed infrastructure development and rehabilitation, including maintenance and enhancement of existing infrastructure[31].

Policy CD.1.1. The City will provide a regular analysis of fiscal alternatives to apply as funding mechanisms for needed infrastructure development and rehabilitation.

Policy CD.1.2. The City and County will be dedicated to working collaboratively with private and non-profit economic development groups to provide for the most efficient and effective use of public and private development dollars.

Policy CD.1.3. The City will analyze the feasibility of expanding development fees, which may enable future development to provide for adequate off-site improvements and facilities which the development effects.

Policy CD.1.4. Regional economic development partners will develop cost-benefit analysis protocol when the public is expected to invest.

Strategies:

* Use NAU risk analysis expertise available.
* Look at examples from other communities.
* Existing policy – development pays full cost of development. Review level of subsidy acceptable to this community to incentivize redevelopment / infill.

Regional Economic Development Partners - The following organizations pay for various development projects in many ways, and collaboration between public and quasi-public entities may be the best way to accomplish mutual goals in the future:

[30] "Financial System" – How public revenues and expenditures are managed, including planning for future needs.
[31] "Infrastructure" – includes but is not limited to: sewer lines, water lines, reclaimed water lines, roads, intersections, sidewalks, FUTS, landscaping in the right-of-way, gateways, and in some cases may include utilities such as electric power, data, natural gas, cable television and telephone.

City of Flagstaff
Coconino County
Sustainable Economic Development Initiative (SEDI)
Economic Collaborative of Northern Arizona (ECoNA)
Northern Arizona University (NAU)
Coconino Community College (CCC)

New Policy CD.1.5. New development pays for a fair and proportional share of public facilities, services and infrastructure.

New Policy CD.1.6. Redevelopment will rely on private/public partnerships in order to succeed.

B. Cost of Development Element

1. **Introduction**
2. **Relationship to Vision and Guiding Principles**
3. **Financing Mechanisms**
4. **Goals and Policies**

1. Introduction

A resilient community is able to respond to outside changes and use financing systems effectively. Difficult challenges include meeting the rising demand of services with increasingly limited budgets, understanding and utilizing all of the funding mechanisms available to build and upgrade infrastructure, and being prepared or willing to take risks.

2. Relationship to Vision and Guiding Principles

3. Financing Mechanisms

State law requires municipalities to identify various financing mechanisms that may lawfully and will be used to finance additional public services and infrastructure necessary, beneficial, and useful to serve new development, as well as bearing a reasonable relationship to the burden imposed upon the community by new development. To accomplish this, the City will identify the necessary public infrastructure and services needed to serve a new development, the cost of that infrastructure and services, the development's fair share of those costs, and the financing mechanisms available to pay those costs. The Developer and the City will work together to find the balance of financing mechanisms that best suits the project.

The City has available the following mechanisms:

a. Bonding

b. Special Taxing Districts

c. Development Fees

d. In Lieu Fees

e. Municipal Facility Construction

f. Dedications and Exactions

g. Service Privatization

There are numerous types of financing to consider for infrastructure projects:

1. Improvement Districts
    a. Community Investment Districts
    b. Community Improvement Districts
    c. Business Improvement Districts
    d. Community Facilities Districts
    e. Economic Development Districts
2. Industrial Development Authority (IDA) bonds
    a. Industrial Revenue Bonds;.
3. Public-Private Partnerships; IP3
4. Transportation Infrastructure Finance and Innovation Act (TIFIA)
5. Railroad Rehabilitation and Improvement Financing Program (RRIF)
6. Private Sources – financing, investment
7. Public Sources –
    a. Bonds and Other Forms of Debt Financing
    b. Capital Improvement Plan (CIP)
    c. Federal Highway Funds
    d. Designation as a High Priority Project in future Transportation Appropriation
    e. Non-Highway Public Financing
    f. Tax Exempt Bonds
    g. Taxable Bonds
    h. Bond Guaranty Program

8. Critical Nature of Facility Design *Editor's Note: is this a financing mechanism?*
9. Authorization legislation *Editor's Note: will need to elaborate how State Law can enable localities further financing mechanisms, such as Tax Increment Financing.*
10. National Highway System (NHS)
11. Surface Transportation Program (STP)
12. STP Transportation Enhancements Program
13. Congestion Mitigation and Air Quality (CMAQ)

14. Bridge Replacement and Rehabilitation Program
15. Federal Financing Programs
16. Economic Incentive Zones*
17. Enterprise Zone*
18. Empowerment Zone and Enterprise Community*
19. Foreign Trade Zone
20. Improvement District
21. Capital Development Corporation
22. Community Development Corporation
23. Credit Enhancements
24. State Infrastructure Banks
25.

4. Goals and Policies

Cost of Development Goal CD.1 – Better utilize the municipal financial system[32] to provide for needed infrastructure development and rehabilitation, including maintenance and enhancement of existing infrastructure[33].

Policy CD.1.1 – Municipal governments will provide a regular analysis of fiscal alternatives to apply as funding mechanisms for needed infrastructure development and rehabilitation.

Policy CD.1.2 – Municipal governments will be dedicated to working collaboratively with private and non-profit economic development groups to provide for the most efficient and effective use of development dollars. *See Appendix 3 for available financing mechanisms.*

Policy CD.1.3 – Municipal governments will analyze the feasibility of an updated development fee schedule, which may enable future development to provide for adequate off-site improvements and facilities which the development effects.

Policy CD.1.4 – The Regional economic development partners will develop a risk-analysis protocol to promote compatible projects.

[32] "Financial System" – How public revenues and expenditures are managed, including planning for future needs.
[33] "Infrastructure" – includes but is not limited to: sewer lines, water lines, reclaim water lines, roads, intersections, sidewalks, FUTS, landscaping in the right-of-way, gateways, and in some cases may include power, data, gas and cable.

IX. Transportation

Introduction

Because transportation right-of-way is the most heavily used and experienced public space; because network design influences whether an area can be urban, suburban or rural; and because streetscapes strongly contribute to community character - future land use patterns and transportation systems must be planned together. The transportation element addresses the every-day need to move about the community. Successful implementation supports commuting, deliveries, emergency services, tourism and more. The primary goals of the regional transportation system are to improve the mobility of people and goods, provide choices to enhance the quality of life, provide infrastructure to support economic development, protect the natural environment and sustain public support for transportation planning efforts. In order to meet these goals, this element promotes safety; context sensitive solutions; environmental responsibility; the integration and connectivity of transportation systems; efficient system management and operation; and improvements to existing intermodal transportation systems.

Flagstaff Area Mobility Trends and Conditions

Flagstaff is nationally recognized for its walking, bicycling and transit systems; and journey-to-work data and a local trip diary survey show our region is above national averages for using these travel modes. Capitalizing and building on these successes is important, because within the complex relationships between transportation and land use is the simple concept that how and where we live influences how we travel. Put another way, travel choice options and investments depend on land use and community character. Research locally and nationwide indicates that neighborhoods integrating housing, shops, employment and other uses in a compact, well-designed way can increase personal mobility while reducing vehicle congestion. Alternatively, jobs and housing located far apart and connected only by highways or freeways result in long commutes by car.

Managing our region's transportation supply and demand through a variety of means is critical for many reasons. First, the average length of local trips has been increasing. This will continue while residential development occurs at locations removed from commercial areas. These longer trips can't effectively be served by transit or other modes. The trend will reverse or slow as more urban-type redevelopment and infill occur. Second, daily vehicle trips will grow faster than population due to increases in daily travel by visitors and tourists. Flagstaff will continue to serve as the primary economic center for a growing north-central Arizona region. There will also be increases in through-traffic on the state highways, including truck traffic. These "external" trips are largely beyond regional control, impact regional infrastructure, and aren't likely to use other modes of travel.

Finally, we can influence the supply of new or wider roads, better road connectivity, bicycle and pedestrian facilities, and hours of transit service. Shifting travelers from cars to transit, bicycle and pedestrian modes improves overall system performance. Providing for this shift does not face the same cost and constructability challenges as building new roads or widening existing roads in light of the challenges posed by terrain, interstates 17 and 40, the railroad and existing development patterns. Another national movement to consider would be adopting **Complete Street Guidelines**, which are streets designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easier to cross the street, walk to shops, and bicycle to work or school. Creating Complete Streets means transportation agencies must change their approach to community roads. By adopting a Complete Streets policy, communities direct their

transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users.
The following tables (charts?) illustrate regional trends in transportation mode share and how a different levels and types of transportation service affect how much time we'll spend in traffic in the future.

Percent mode share by area				
	Flagstaff	Outlying	Core	All FMPO
Single occupancy vehicles	55.1	67.7	52.3	57.1
Multi occupancy vehicles	19.8	26.6	18.7	21.1
Transit	2.7	0.0	1.0	2.1
Bicycle	9.0	0.6	11.1	7.1
Walking	13.3	5.0	16.8	12.4
Total	100.0	100.0	100.0	100.0

Source: Trip Diary Survey of Community Travel Patterns 2006

Transportation Maps

The Transportation Element includes a map illustrating major road corridors and levels of transit, bicycle and pedestrian services based on area-type context. Urban areas will require higher levels of these services than suburban or rural areas.

Goals and Policies

Goals in this element first speak to over-arching concerns including general mobility, safety, quality of design and sensitivity to the environment. Individual modes are then addressed starting with pedestrians - the smallest scale – and growing to rail and air.

The Region's transportation system strives to improve **mobility and access** for people and goods by providing efficient, effective, convenient, accessible, and safe transportation options. The focus is on moving people; and integrating convenient mode choices into more compact and urban future development ensures necessary linkages between our urban, suburban and rural areas. Economic development, community character and environmental and health objectives will be advanced with a multi-modal system inclusive of roads and streets, transit routes, bicycle lanes, trails and sidewalks.

Goal T1. Improve mobility and access throughout the region.

> ***Policy T1.1.*** Integrate a balanced, multimodal, regional transportation system.
>
> ***Policy T1.2.*** Apply ***Complete Street Guidelines***[34] to accommodate all appropriate modes of travel in transportation improvement projects.

[34] Complete Street Guidelines: http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/complete-streets-faq

Policy T1.3. Transportation system priorities within the urban areas of the City are, in order, people, bicycles, transit and cars.

Policy T1.4. Provide a continuous system with convenient transfer from one mode to another.

Policy T1.5. Manage the operation and interaction of all modal systems for efficiency, effectiveness, safety, and to best mitigate traffic congestion.

Policy T1.6. Provide and promote strategies[35] that increase use of alternate modes of travel and manage demand for vehicular travel to reduce peak period demand.

Policy T1.7. Coordinate transportation and other public infrastructure investments efficiently to effectively achieve land use and economic goals.

Policy T1.8. Development will provide for on-site, publicly-owned transportation improvements.

Policy T1.9. Funding policy for operations, maintenance and capital improvements?

Development of a **safe and efficient multimodal transportation system** is a priority. Safety- real and perceived – influences mode choice and defines, in part, quality of life. Personal and societal costs due to transportation-related fatalities and injuries are real and significant. Crashes – even fender-benders – contribute significantly to congestion. Strategies from engineering to education are needed to improve safety. Efficiencies can be gained in many ways. While this element recognizes that private automobiles will be the primary mode of trips in the foreseeable future, the percentage of work trips made by single-occupancy vehicles will be reduced through facility improvements and incentive programs that will increase the share of trips using public transit, car and van pools, bicycles and walking. Increased high-speed internet capacity will also allow for the tele-commuting and home-business crowd, thus reducing road congestion. Efforts will continue to be made to minimize the duration and severity of peak hour traffic congestion.

Goal T2. Improve transportation safety and efficiency for all modes.

Policy T2.1. Infrastructure design will provide safe and efficient movement of vehicles, bicycles and pedestrians.

Strategies: through smart growth, design, engineering, education, enforcement, encouragement and evaluation.

Policy T2.2. New technologies will be considered in new and retrofitted transportation infrastructure.

Policy T2.3. Provide safety programs and infrastructure to protect the most vulnerable travelers, including youth, elderly, mobility impaired[36] pedestrians and bicyclists.

Policy T2.4. Dedicated transit ways will be considered where appropriate.

Environmental Considerations: The Flagstaff regional transportation system supports the other plan elements to enhance the character of our community and **lessen our impact to our natural**

[35] Glossary – full spectrum of 'Travel Demand Strategies'
[36] Mobility-impaired includes hearing and sight-impaired persons.

surroundings. Trekking or trucking, transportation can define how we interact with or environment - our ability to see it, access it, use it, protect it. Transportation defines space in our built environment. In our natural environment, transportation communicates how we respect the land. Our choice of transportation affects our air and water.

Goal T3. Provide transportation infrastructure which is conducive to conservation, preservation and development goals to avoid, minimize or mitigate impacts to the natural and built context.

> ***Policy T3.1.*** Design and assess transportation improvement plans, projects and strategies to minimize impacts to air quality and maintain the region's current air quality.
>
> ***Policy T3.2.*** Promote transportation systems which use less fossil fuel.
>
> ***Policy T3.3.*** Couple ~~t~~ransportation investments with desired land use patterns to enhance and protect the quality and livability of neighborhoods, activity centers and community places.
>
> ***Policy T3.4.*** Actively manage parking, including cost and supply, to support land use, transportation and economic development goals.
>
> ***Policy T3.5.*** Design transportation infrastructure that implements eco-system based design strategies to manage stormwater and minimize adverse environmental impacts.
>
> ***Policy T3.6.*** Seek to minimize noise, vibration, dust, and light impacts of transportation projects on nearby land uses.
>
> ***Policy T3.7.*** Design transportation infrastructure to mitigate impacts to plants, animals, their habitats and linkages between them.
>
> ***Policy T3.8.*** Promote transportation options such as increased public transit and more bike lanes that will reduce congestion, fuel consumption, and overall carbon emissions and promote walkable community design.

The Flagstaff region will pursue **quality transportation system design** to positively affect our development patterns, physical character, and economic viability. A well-designed street is a joy to travel whether on foot or behind the wheel of a car. Whether road signs or street trees, medians or traffic lights, designers and engineers have a full set of tools to deliver safe, efficient and enjoyable travel options. Engineering and design standards can be set for all modes appropriate to their urban, suburban and rural setting. This will achieve expected levels of service and contextual design respectful of the region's unique environmental and cultural heritage, landscape and viewsheds.

Goal T4. Quality Design: Promote transportation infrastructure and services that enhance the quality of life of the communities within the region.

> ***Policy T4.1.*** Promote context sensitive solutions (CSS) supportive of planned land uses and desired community character elements in all transportation investments.
>
> ***Policy T4.2.*** Design all gateway corridors, streets, roads and highways to safely and attractively accommodate all transportation users with contextual landscaping and appropriate architectural features.

Policy T4.3. Design transportation facilities and infrastructure with sensitivity to historic and prehistoric sites and buildings, and which incorporate elements that complement our landscapes and views.

Transit plays multiple and emerging roles in the region. It provides basic mobility for transit-dependent individuals. For example, thousands of NAU faculty, staff and students rely on transit as a cost effective means of getting to and across campus. Even now – and more so in the future – transit will play a central role in general mobility, congestion management and economic development. The region can undertake desirable urban development by maximizing the use of urban parcels with appropriate densities and linking new land development with transit, which reduces land consumption in non-urbanized areas, reduces the number of auto trips and vehicle miles traveled as well as reduce air pollution.

Goal T5. Public Transit Infrastructure and Services: Support Northern Arizona Intergovernmental Transportation Authority (NAIPTA) in providing high-quality, safe, convenient, accessible public transportation system, where feasible, serving as an attractive alternative to single-occupant vehicles.

Policy T5.1. Implement the 5-year transit master planning goals and objectives to continuously improve service, awareness and ridership.

Policy T5.2. Provide public transit centers that are effectively distributed throughout the region to increase access to public transit.

Policy T5.3. Support public transit system design that encourages frequent and convenient access points, and that integrates various transportation modes into the transit services, such as bus systems, park-and-ride lots for cars and bicycles, and bus, railroad and airline terminal facilities.

Policy T5.4. Support mobility services for seniors and persons with mobility needs.

Policy T5.5. Incorporate adopted plans and policies for non-motorized and public transportation in the permitting process for all development or land use proposals, including provisions for efficient access and mobility, and convenient links between pedestrian, bicycle and transit facilities.

Policy T5.6. Enhance public transit options and route designs that allow for options to live well without a car.

Policy T5.7. Coordinate with NAIPTA to establish rural transit service within the MPO that is consistent with county land use plans, based on funding availability, cost effectiveness, location of major trip generators, distance between generators, and the needs of transit-dependent individuals.[37]

Bicycles: Our region enjoys a well-deserved reputation as a great place for bicycling. Bicycles are an excellent choice for trips of less than three miles which, depending on one's location, can deliver you to the doorstep of most good, services, and businesses in the City. The Flagstaff Urban Trail System and growing miles of bike lanes allow for even longer trips. The region will continue to invest in on-road and trail facilities for bicyclists and will seek to improve the on-site experience by encouraging employers and business to support better parking, change-rooms and other facilities. In Davis, California 19% of employees bike to work. Flagstaff is at 6% and climbing.

[37] Transit dependant individuals: Those who can only get around via public transit, who do not own a car or cannot drive.

Goal T6. Bicycle Infrastructure: Provide for bicycling as a safe and efficient means of transportation and recreation.

> ***Policy T6.1.*** Develop recognition of bicycling as a legitimate and beneficial form of transportation.
>
> ***Policy T6.2.*** Establish and maintain a comprehensive, consistent and highly connected system of bikeways and FUTS trails.
>
> ***Policy T6.3.*** Educate bicyclists and motorists about bicyclist safety through education programs, targeted enforcement and detailed crash analysis.
>
> ***Policy T6.4.*** Develop bikeways and bicycle infrastructure that serve the needs of full range of bicyclist experience, including sufficient bike racks.
>
> ***Policy T6.5.*** Provide short and long-term bicycle parking where bicyclists want to go.
>
> ***Policy T6.6.*** Ensure that policies to increase bicycling and meet the needs of bicyclists are fully integrated into all relevant plans, policies, studies, strategies and regulations.

Virtually everyone begins and ends each trip as a **pedestrian**. Making the region walkable makes sense. It is important for our individual and community health. The economy depends on it – most purchases occur on foot. It is the intent of the region to make walking safe, convenient, and comfortable and for more of us, the mode of choice.

Goal T7. Pedestrian Infrastructure: Increase the use of pedestrian infrastructure, including the urban trail system (FUTS), as a critical element of a safe and livable community.

> ***Policy T7.1.*** Provide accessible pedestrian infrastructure with all public and private street construction and reconstruction.
>
> ***Policy T7.2.*** Develop a program for the installation of pedestrian infrastructure in already developed urban areas where they do not currently exist.
>
> ***Policy T7.3.*** Improve pedestrian visibility and safety and raise awareness of the benefits of walking.
>
> ***Policy T7.4.*** Identify specific pedestrian mobility and accessibility challenges and develop measures for implementation of necessary improvements.
>
> ***Policy T7.5.*** Design streets with continuous pedestrian infrastructure of sufficient width to provide safe accessible use and opportunities for shelter.
>
> **Strategy:** Allow for a full-range of pedestrian uses within the context.

Automobiles are likely to continue to be the dominant form of transportation in the region – especially for longer trips. Road and streets will be more effectively designed into the areas they serve. As parts of the region urbanize, reliability will become more important than speed. In urban activity centers levels of service for pedestrians, bicycles and transit will take precedence over service for cars. *Describe arterials, collectors, neighborhood streets in relationship to overall goals and policies below.*

Place Types and Corridors

Successful places require successful corridors. With Flagstaff's terrain, railroads and interstates, the corridors need clear expectations to establish the "sense of place" and service the expected land use patterns. The desired "sense of place" for the region, our centers and neighborhoods will be more successfully achieved when the function and role of our corridors is sensitively applied.

Corridors in urban, suburban and rural places will serve similar yet unique functions and roles. The Regional Plan deals directly with the regional travel and circulation functions and sets general expectations for access corridors. The classes should be understood as a sliding scale with circumstances dictating how purely a road can serve its function.

Corridors may be classified by function: regional travel, circulation and access. Listed below are some of the modal facilities associated with each.

- **Regional travel –** facilitates long-distance travel across and between regions.
  - Freeways
  - Major arterials
  - Dedicated express bus lanes
  - Passenger and Freight Rail
- **Circulation –** provides for movement between neighborhoods and non-residential uses
  - Minor arterials
  - Urban thoroughfares
  - Major collectors
  - Minor collectors
  - Fixed transit routes
  - Multimodal trails
- **Access** – local access to adjacent land uses
  - Locals – commercial and residential, neighborhood streets
  - Sidewalks, crosswalks, pedestrian connections

Corridors of all functions serve many roles, and these roles may be understood as:

- **Carrier** of goods and people – how many, how far, what kind, what means
- **Connector** of activities – how active, what scale, what purpose, relationships
- **Space and Shelter** for activities within the public realm – how often, vulnerable, duration, solitude
- **Symbol** for the understanding of place – identity, purpose, behaviors as it applies to specific roads or corridors, not to classes of corridors.
- **Builder** of city and place– conversely, corridors may be perceived as destroyers

Freeway:
Freeways serve **regional travel** as a high-capacity **carrier** for automobile and truck modes and provide **space and shelter** via rest areas and truck stops. They accommodate high-speed, long trips that **connect** the region to the state and nation. Freeways **build** regional economies, but can destroy landscapes, cities and neighborhoods if improperly planned. Freeways require large rights-of-way (up to 300 ft. or more),

are designed with full access control and are intended to carry a large percentage of trucks. Adjacent land uses may include commercial areas, open space, public lands, industrial sites and certain institutional sites. Residential property will not abut Freeways unless separated by adequate buffering.
Photo example here

Major Arterial:
Major Arterials serve **regional travel** on relatively high-capacity roadways as a **carrier** for predominantly cars, transit, trucks and bicycles. Pedestrians will find passage along these arterials and special attention is given to pedestrian crossings**. Space and shelter** is found at bus stops, pedestrian waiting areas at intersections and mid-block crossings. Key **connections** are to major regional centers of activity and to extra regional destinations like other cities. As in the case of Route 66, this major arterial is symbolic of "the mother road" - regional identity and pride. Throughput capacity provided by strong access management will be emphasized over direct property access. Adjacent land uses include highway and regional commercial areas, open space, public lands, industrial sites and institutional sites. Residential property will not abut Major Arterials unless separated by adequate buffering.
Photo example here

Minor Arterial:
Minor Arterials serve **circulation** and some travel functions within and between different areas of the region. Activity centers will often be located along a Minor Arterial or at the intersection with another Minor Arterial or a Major Collector. All modes are **carried** on minor arterials with increasing emphasis on the bicycle and pedestrian modes. **Space and shelter** become more pedestrian in scale, more frequent and generous. A minor arterial like Lake Mary Road might **symbolize** the "Great Outdoors." **Connections** between residential and commercial areas, regional parks and major institutions are often made by minor arterials. Access management remains important, but may be balanced with other needs such as _____. Adjacent land uses include residential and commercial areas, open space, public lands, industrial sites and institutional sites.
Photo example here

Thoroughfare:
Thoroughfares are unique components of the urban network. They synthesize **circulation, access** and, to a lesser extent, **travel** functions and the roles they serve are more balanced and at a uniformly high level. All modes are **carried** with special emphasis on the pedestrian, transit and bicycle modes. **Space and shelter** are vital components to thoroughfares as a wide-range of face-to-face interactions will take place here.
Photo example here

Major Collector:
Major Collectors serve **circulation** by collecting traffic from Minor Collectors and Local streets in an area and deliver it to Major or Minor Arterials. Bicycles and pedestrians are prevalent and all modes **carried.** These roadways are generally contained entirely within a recognizable area and **connect** adjoining neighborhoods with each other. Adjacent land uses include residential areas, commercial areas, open space, public lands, industrial sites and institutional sites. Moderate access management is expected with limited direct access being acceptable.
Photo example here

Minor Collector:
Minor Collectors collect traffic from Local streets and deliver it to Major Collectors or Minor Arterials. They serve as **carriers** for pedestrian, bicycle and cars with lesser roles for transit and trucks. **Connections** are made between smaller neighborhoods and parks and occasional convenience centers.

Through trips are discouraged as **space and shelter** activities have increased including promenading, recreational walking and exercise. Adjacent land uses include residential and commercial areas, open space, public lands, industrial sites and institutional sites.
Photo example here

Connector / Commercial Local / Residential Local (Neighborhood Street)/ Alley:
These minor roads provide direct vehicle, bicycle and pedestrian **access** to individual commercial and residential properties, providing no route continuity beyond the areas they serve. Alleys provide secondary access to the rear of residential or commercial properties and may also be used to provide access to parking garages and surface parking lots. They **carry** pedestrians, bicycles and cars and in commercial areas some streets will provide access to trucks. In residential areas the street surface may be used for **space and shelter** impromptu recreational activities, visiting, and car-washing. As place **builders** these streets are vital in creating an attractive setting, efficient access, safe operations, and strong internal circulation.
Photo example here

URBAN	**Level of Service**									
	Automobiles		**Transit**		**Bicycle**		**Pedestrian**		**Truck**	
	Activity Center	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**
Freeways	n/a	M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	M
Arterials	L	M	H	M	M	H	H	M	L	M
Collectors	M	M	M	M	H	M	H	H	L	M
Thorough-fares	L	M	H	M	M	H	H	H	L	M

SUB-URBAN	**Level of Service**									
	Automobiles		**Transit**		**Bicycle**		**Pedestrian**		**Truck**	
	Activity Center	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**
Freeways	n/a	M	n/a	n/a	n/a	n/a	n/a	n/a	n/a	M
Arterials	M	M	H	M	H	H	M	M	M	M
Collectors	M	M	M	L	H	H	H	H	L	M
Thorough-fares	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

RURAL	**Level of Service**									
	Automobiles		**Transit**		**Bicycle**		**Pedestrian**		**Truck**	
	Activity Center	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**	**Activity Center**	**General**

Freeways	n/a	H	n/a	n/a	n/a	n/a	n/a	n/a	n/a	H
Arterials	H	H	L	L	H	M	L	L	H	H
Collectors	H	H	n/a	n/a	H	M	M	M	M	M
Thorough-fares	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

H = High, M = Medium, L = Low please replace with symbols

Goal T8. Automobile and Truck Infrastructure: Establish a functional, safe, and aesthetic hierarchy of roads and streets.

> ***Policy T8.1.*** Promote efficient transportation connectivity to major trade corridors, employment centers and special districts that enhances the region's standing as a major economic hub.
>
> ***Policy T8.2.*** Maintain the road and street classification system that is based on context, function, type, use, and visual quality.
>
> ***Policy T8.3.*** Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain quality of life.
>
> ***Policy T8.4.*** Protect rights-of-way for future transportation corridors.
>
> ***Policy T8.5.*** Support area economic vitality by improving intersection design for freight movements. .

The economics of air travel in the Southwest and freight movements across the nation may position **passenger rail and rail freight** to increase share of travel. BNSF and Amtrak are integral parts of our history and community fabric and can become more important part of our economy. The region will position itself to take better advantage of this important mode of travel.

Goal T9. Rail Freight and Passenger Rail: Strengthen and support rail service opportunities for the region's businesses and travelers.

> ***Policy T9.1.*** Seamlessly integrate passenger rail with other travel modes including improvements to the downtown passenger rail station and surroundings.
>
> ***Policy T9.2.*** Promote Amtrak service and support opportunities for interregional passenger rail service.
>
> ***Policy T9.3.*** Promote development of rail spurs and an intermodal freight facility or facilities as needed to support viable economic growth.
>
> ***Policy T9.4.*** Increase the number of grade-separated railroad crossings.

Air travel ties our region to the nation and globe more quickly than any other mode of travel. "Face time" is important to all relationships – business relations included. Improving and expanding service to and

from Flagstaff Pulliam Airport connects our region to larger hubs of air travel. 55,000* people travel to and from this small airport annually.**Check number*

Goal T10. Air Service: Strengthen and expand the role of Flagstaff Pulliam Airport as the dominant hub for passenger, air freight, public safety and other services in Northern Arizona.

> ***Policy T10.1.*** Maintain and expand Flagstaff Pulliam Airport as an important link to the national air transportation system.
>
> ***Policy T10.2.*** Improve multimodal access and service to and from the airport including transit, bicycle and parking services.
>
> ***Policy T10.3.*** Seek opportunities to expand destinations and frequency of regional air service throughout the Southwest and West.
>
> ***Policy T10.4.*** Plan and manage transportation infrastructure to discourage land uses incompatible with the airport and flight zones.

Transportation is central to the lives of our citizens. Residents and visitors pay for its construction and operation. That construction and operation is often disruptive. Therefore, an **open planning process, inclusive design process and effective communications** are essential.

Goal T11. Public Support: Build and sustain public support for the implementation of transportation planning goals and objectives, including the financial underpinnings of the plan, by actively seeking meaningful community involvement.

> ***Policy T11.1.*** Maintain the credibility of the regional transportation planning process through the application of professional standards in the collection and analysis of data and in the dissemination of information to the public.
>
> ***Policy T11.2.*** Approach public involvement proactively throughout regional transportation planning, publically subsidized transportation events, prioritization and programming processes, including open access to communications, meetings, and documents related to the plan.
>
> ***Policy T11.3.*** Include and involve all segments of population, including those potentially under-represented such as the elderly, low-income, and minorities (see Title VI of the Civil Rights Act of 1964 and Executive Order 12898 Environmental Justice)
>
> ***Policy T11.4.*** Promote effective intergovernmental relations through agreed upon procedures to consult, cooperate and coordinate transportation related activities and decisions, including regional efforts to secure funding for the improvement of transportation services, infrastructure and facilities.
>
> ***Policy T11.5.*** Attempt to equitably distribute the burdens and benefits of transportation investments to all segments of the community.

Acronyms:
ADA: Americans with Disabilities Act
ADOT: Arizona Department of Transportation
A.R.S.: Arizona Revised Statutes
CAC: Citizens Advisory Committee (for the Regional Plan update)

CSS: Context Sensitive Solution
ESRI: Environmental Systems Research Institute
FMPO: Flagstaff Metropolitan Planning Organization
FUTS: Flagstaff Urban Trails System
LOS: Level of Service
NAIPTA: Northern Arizona Intergovernmental Public Transportation Authority
RLUTP: Flagstaff Regional Land Use and Transportation Plan
RTP: Flagstaff Metropolitan Planning Organization Flagstaff Pathways 2030 Regional Transportation Plan
SWOT: Strengths, Weaknesses, Opportunities and Threats (Method of Analysis)

Circulation & Bicycle Elements

1. Introduction

2. Flagstaff Area Mobility Trends and Conditions

3. Transportation Element Maps

4. Goals and Policies

1. Introduction

The transportation element addresses every day commutes, deliveries, emergencies, and tourism. The primary goals of the regional transportation system are to improve the mobility of people and goods, provide choices to enhance the quality of life, provide infrastructure to support economic development, and to protect the natural environment and sustain public support for transportation planning efforts. The factors considered in the development of a comprehensive transportation and circulation plan include the economic viability of the area, the safe design of the transportation system, the urban design context of the system and its component parts, and mobility needs and options for people and freight. In order to meet these goals, the plan promotes: context-sensitive solutions, environmental responsibility, safety, the integration and connectivity of transportation systems, efficient system management and operation, and the preservation of existing intermodal transportation systems.

Development of a safe and efficient multimodal transportation system is a priority. Implementation of uniform design and construction standards will minimize traffic accident rates. While this element recognizes that private automobiles will be the primary mode for the vast majority of trips in the foreseeable future, the Plan proposes to reduce the percentage of work trips made by single-occupancy vehicles through facility improvements and incentive programs that will increase the share of work trips using public transit, car and van pools, bicycles, and walking. In addition, the Plan recommends continued efforts to minimize the duration and severity of peak hour traffic congestion.

Future land use patterns and transportation systems will be planned in a coordinated, continuous, and comprehensive manner to reduce vehicle miles and facilitate transportation alternatives, thereby protecting air quality. Attractive design of the region's travel ways and assurance of recreation and scenic linkages will characterize the region's transportation system. In general, capital improvement programs will support attainment of environmental goals consistent with lifestyle expectations of citizens. New roadway design will be sensitive to the built and natural environment. Citizen participation will be a significant part of the decision-making process in order to preserve neighborhoods, promote public support for future improvements, and minimize adverse impacts on the environment and the natural terrain.

2. Flagstaff Area Mobility Trends and Conditions

Within the complex relationships between transportation and land use is the simple concept that how and where we live influences how we travel. Jobs and housing located far apart and connected only by highways or freeways result in long commutes by car. Shops or employment located close to housing encourages walking, biking, and transit use in addition to driving. Research locally and nationwide indicates that neighborhoods integrating housing, shops, offices, and educational and recreational opportunities in a compact, well-designed way can increase personal mobility while reducing vehicle congestion. Such land use strategies are not meant to force drivers from their cars, nor to negatively impact existing stable neighborhoods. Rather, applied at strategic locations and thoughtfully over time, these strategies are intended to maximize personal travel choices and mobility, reduce the need to always drive long distances for every trip, and to provide the region with as many transportation options as possible to address new growth over time.

Projected population growth will bring with it increasing traffic to the Flagstaff area. Daily travel is expected to grow to 3.8 million daily vehicle miles of travel (VMT) by 2020, an 84 percent increase over 1997. However, population growth will account for only about 65 percent of the growth in VMT, with the rest attributable to other causes.

First, the average length of local trips has been increasing. This will continue as residential development occurs at locations removed from commercial areas. Second, daily vehicle trips will likely grow faster than population due to increases in daily travel by visitors and tourists. Also predicted are

increases in through-traffic on the state highways, including truck traffic. Finally, Flagstaff will continue to serve as the primary economic center for a growing north-central Arizona region.

Over ninety percent of daily person trips in the Flagstaff area are by private motor vehicles (PMVs). In the winter, fewer than 10 percent of daily trips are via public transit, walking, or bicycling. In the summer, the percentage increases only to about 12 percent. The Flagstaff region proposes to follow the lead of many larger cities in the mountainous west to work aggressively to reduce "auto dependency" and enable "alternative modes" such as public transit, walking, bicycling that account for more than twenty-five percent of daily travel in some cities.

The table below provides an estimate of the potential impact of modal shift programs in Flagstaff, including adequate investment in transit and pedestrian and bicycle infrastructure. This conservative estimate is based on cities of comparable demographics and climate and with levels of facilities and services that Flagstaff may achieve within the planning period. Supporting transportation demand management programs (e.g., employer transportation coordinator networks) would be needed to attain these increases.

Table 4: Potential Modal Shifts—Flagstaff Region (by 2020)

Percent of Daily Person Trips	Summer/Fair		Winter/Inclement	
	Now	Potential	Now	Potential
Pedestrian	10%	15%	8%	14%
Bicycle	2%	6%	1%	2%
Public Transit	< 1%	3%	1%	4%
"Alternative Modes"	12%	24%	10%	20%

3. Transportation Element Maps

The Transportation Element includes several systems maps: a Roadway System Plan, a Public Transit System Plan, and Non-Motorized System Plans for trails and bikeways. It also includes two administrative maps: Truck Route Plan and Roadway Categorization Plan. These maps describe the locations of existing and future facility locations needed to support the land use and economy related plan elements.

The Truck Routes map positively identifies where trucks are to operate for cross and through town trips. The *Regional Plan* policies direct the City and County to develop regulations for specifying how trucks may make deliveries (i.e., make use of the shortest route in and out of a residential area, during certain hours in certain zones). The map will guide investment and design decisions so that trucks may operate in the Flagstaff region safely and efficiently.

The Roadway Categorization Plan (RCP) map is a further delineation of the Roadway System Plan. The System Plan defines major roadways. The RCP distinguishes major arterials from minor arterials and goes further to denote minor collectors, commercial local streets, and a special category of street called a connector. Four roadway categories in the RCP system are not mapped for purposes of clarity: Residential Local Streets, Narrow Residential Local Streets, Connector Streets, and Alleys. Connectors are more often local streets that need to be built to allow low-speed, non-through trip connections between neighborhoods. The RCP will be the basis for guiding design decisions, traffic calming implementation, and landscaping, among other things.

In establishing the criteria for category designation, special attention was given to the role different types of roads play in defining the region's role in the state, the district's role in the region, and the neighborhood's role in the district. Similarly, transportation is interwoven throughout all of the *Regional Plan* elements. This will help in remembering that transportation is a means to an end – a higher quality of life – and not an end in itself.

4. Goals and Policies

Goal T.1

Improve the mobility of people and goods throughout the region by providing efficient, effective, convenient, accessible, and safe transportation options for travel to employment, education, medical, tourist attractions and other desired destinations. The transportation system will be supportive of desired land use patterns and functional, attractive urban design.

Policy T.1.1

Integrate a balanced multimodal, regional transportation system that offers attractive choices among modes for the efficient movement of people and goods, including automobile, truck, public transit, bicycle, pedestrian, rail and aviation.

Policy T.1.2

Promote convenient multimodal access to public places having high concentrations of trips, including activity centers, schools, parks, recreation areas, monuments, historic sites and tourist attractions.

Policy T.1.3

Accommodate all modes of travel in transportation improvement projects, as appropriate and in context with area type, through the provision of bicycle lanes, sidewalks and FUTS trails.

Policy T.1.4

Provide a continuous system of functional segments and points of convenient transfer from one mode to another.

Policy T.1.5

Manage the operation and interaction of all modal systems for efficiency, effectiveness, safety, and to best mitigate traffic congestion.

Policy T.1.6

Provide and promote travel demand strategies and incentives to more fully utilize alternate modes of travel and to reduce peak period demand, including car pooling, flexible hours and other travel reduction techniques.

Policy T.1.7

Develop a complete, all-mode transportation system that is universally accessible.

Policy T.1.8

Accommodate a full range of trip purposes within the transportation system.

Policy T.1.9

Identify and pursue funding mechanisms for ongoing maintenance of existing transportation investments and for future improvements needed to maintain mobility within the transportation system.

Policy T.1.10

Develop and adopt measures requiring on-site improvements for both public and private projects.

Policy T.1.11

Promote investments in the transportation systems that complement investments in other public infrastructure and utilities and promote a beneficial impact on the region's economic vitality.

Policy T.1.12
Invest in transportation infrastructure that promotes the implementation of the goals and objectives of adopted land use plans and development policies.

GoalT.2
Plan, design, construct and operate transportation infrastructure and services to reduce crash frequency and severity, and associated hazards.

Policy T.2.1

Improve transportation safety for all modes through engineering, education, enforcement, encouragement and evaluation.

Policy T.2.2

Provide safety programs and infrastructure to protect the most vulnerable travelers, including our youth, elderly, mobility impaired, pedestrians and bicyclists.

Goal T.3

Provide transportation systems infrastructure in a way that balances conservation, preservation and development goals to avoid, minimize or mitigate impacts to the natural and built context.

Policy T.3.1
Design and assess transportation improvement plans and projects to comply with air quality standards, and develop and implement strategies to maintain clean air standards.

Policy T.3.2

Reduce energy expenditures associated with transportation.

Policy T.3.3
Promote transportation investments that will enhance and protect the quality and livability of neighborhoods and community places.

Policy T.3.4
Review and revise parking and other terminal regulations to provide for their use as flexible tools to achieve other overall regional plan policies.

~~Policy T.3.5~~

~~Design transportation infrastructure that implements eco-system based design strategies to manage stormwater and minimize adverse environmental impacts.~~

~~Policy T.3.6~~

~~Seek to minimize noise, vibration, dust, and light impacts of transportation projects on nearby land uses.~~

~~Policy T.3.7~~

~~Design transportation infrastructure to mitigate impacts to plants, animals, their habitats and linkages between them.~~

~~Goal T.4~~

~~Design regional road, public transit and other modal systems, and their component parts, with a level of service and connectivity appropriate to the context of their built and natural environment. Promote transportation infrastructure and services that enhance the quality of life of the communities within the region.~~

~~Policy T.4.1~~

~~Promote context sensitive solutions (CSS) supportive of planned land uses and desired community character elements in all transportation investments.~~

~~Policy T.4.2~~

~~Design all streets, roads and highways to safely and attractively accommodate all transportation users, including drivers, bus riders, pedestrians and bicyclists.~~

~~Policy T.4.3~~

~~Design gateways and corridors with aesthetic and architectural features reflecting the region's unique heritage and landscapes.~~

~~Policy T.4.4~~

~~Design transportation facilities and infrastructure with sensitivity to historic and prehistoric sites and buildings, and which incorporate elements that complement our landscapes and views.~~

~~Policy T.4.5~~

~~Design well-landscaped, attractive transportation facilities and infrastructure.~~

Goal T.5

Promote an effective, well-planned system of roadways that establishes a functional, safe, and aesthetic hierarchy of streets while incorporating the latest advanced technologies.

Policy T.5.1

Promote efficient transportation connectivity to major trade corridors and special districts, which enhance the region's standing as a major economic hub.

Policy T.5.2

Provide for a road and street classification system that is based on context, function, type, use, and visual quality.

Policy T.5.3

Integrate vehicular circulation within neighborhoods.

Policy T.5.4

Design streets with continuous pedestrian infrastructure of sufficient width to provide safe accessible use and opportunities for shelter.

Policy T.5.5

Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain the quality of life in the neighborhoods.

Policy T.5.6

Identify rights-of-way for transportation corridors to be addressed in a future Roads and Streets Master Plan.

Policy T.5.7

Support area economic vitality by improving roadway geometrics for freight movements.

Goal T.6

Provide a public transit system that is readily accessible, convenient, efficient, safe and desirable to an increasing proportion of persons in the region.

Policy T.6.1
Encourage optimal availability and utilization of public transit facilities and services through the 5-year transit master planning process.

Policy T.6.2
Provide public transit centers that are effectively distributed throughout the region to increase the availability of public transit.

Policy T.6.3
Develop multiuse corridors of sufficient land use intensity and diversity to support high capacity transit. **[Move to Land Use Element per working group direction?]**

Policy T.6.4
Provide convenient public transit connections at urban activity centers.

Policy T.6.5
Support mobility services for older adults and mobility impaired persons.

Policy T.6.6
Include public transit planning as an integral part of the development process.

Goal T.7

Plan for bikeways and bicycle infrastructure that provide for the safe and efficient means of transportation and recreation throughout the region.

Policy T.7.1
Develop recognition of bicycling as a legitimate and beneficial form of transportation.

Policy T.7.2
Establish and maintain a comprehensive, consistent system of bikeways and FUTS trails that seamlessly connect neighborhoods, shopping, employment, schools, parks, open space, and public transit hubs.

~~Policy T.7.3~~
~~Educate bicyclists and motorists about bicyclist safety through education programs, targeted enforcement and detailed crash analysis.~~

~~Policy T.7.4~~
~~Develop bikeways and bicycle infrastructure that serve the needs of advanced, basic and beginner bicyclists.~~

~~Policy T.7.5~~
~~Provide short and long term bicycle parking at all places where bicyclists want to go, including commercial areas, employment centers, multi-family developments, schools and institutions, recreational facilities and transit facilities.~~

~~Policy T.7.6~~
~~Ensure that policies to increase bicycling and meet the needs of bicyclists are fully integrated into all relevant City plans, policies, studies, strategies and regulations.~~

~~Goal T.8~~
~~Plan and encourage the use of pedestrian infrastructure, including the urban trail system (FUTS), as a critical element of a safe and livable community to meet the transportation and recreational needs of the community.~~

~~Policy T.8.1~~
~~Provide accessible pedestrian infrastructure with all street construction and reconstruction; all private residential, commercial, and industrial development; and all public development in the urban area.~~

~~Policy T.8.2~~
~~Develop a program for the installation of pedestrian infrastructure in already developed urban areas where they do not currently exist.~~

Policy T.8.3
Design pedestrian infrastructure that is accessible, direct, safe, comfortable, aesthetically pleasing and continuous.

Policy T.8.4
Improve pedestrian visibility and safety and raise awareness of the benefits of walking.

Policy T.8.5
Identify specific pedestrian mobility and accessibility challenges and develop measures for implementation of necessary improvements.

Goal T.9

Strengthen and support rail service opportunities for the region's businesses and travelers.

Policy T.9.1
Seamlessly integrate passenger rail with other travel modes including improvements to the downtown passenger rail station and surroundings.

Policy T.9.2
Promote Amtrak service and enhance opportunities for interregional passenger rail service.

Policy T9.3

Promote development of rail spurs and an intermodal freight facility or facilities as needed to support viable economic growth.

Policy T.9.4

Protect opportunities and design transportation infrastructure to facilitate intermodal freight transfers where appropriate.

Goal T.10
Strengthen and expand the role of Flagstaff Pulliam Airport as the dominant hub for passenger, air freight and other services in Northern Arizona.

Policy T.10.1
Maintain and expand Flagstaff Pulliam Airport as an important link to the national air transportation system.

Policy T.10.2
Improve multimodal access and service to and from the airport including transit, bicycle and parking services.

Policy T.10.3

Seek opportunities to expand destinations and frequency of regional air service throughout the west and southwest.

Policy T.10.4

Plan and manage transportation infrastructure to discourage land uses incompatible with the airport and flight zones.

Goal T.11

Build and sustain public support for the implementation of transportation planning goals and objectives, including the financial underpinnings of the plan, by actively seeking meaningful community involvement.

Policy T.11.1
Maintain the credibility of the regional transportation planning process through the application of professional standards in the collection and analysis of data and in the dissemination of information to the public.

Policy T.11.2
Approach public involvement proactively throughout regional transportation planning, prioritization and programming processes, including open access to communications, meetings, and documents related to the plan.

Policy T.11.3
Include and involve all segments of population, including those groups protected under Title VI of the

Civil Rights Act of 1964 and Executive Order 12898 Environmental Justice provisions, including future amendments to those provisions.

Policy T.11.4

Promote effective intergovernmental relations through agreed upon procedures to consult, cooperate and coordinate transportation related activities and decisions, including regional efforts to secure funding for the improvement of transportation services, infrastructure and facilities.

Policy T.11.5

Attempt to equitably distribute the burdens and benefits of transportation investments to all segments of the community.

X. Public Buildings, Public Services and Facilities, and Safety

Introduction

Planning for and protecting critical infrastructure while promoting community resilience are important considerations in the timing, location and pattern of development. Extreme weather events are making it increasingly important for communities to plan and be prepared to protect citizens and key infrastructure investments. Emergency and disaster preparedness considerations should factor into long-term plans involving land use and the development of transportation and water infrastructure. Infrastructure investments for purposes of these elements include police, fire, emergency services, sewage, solid waste, drainage and stormwater, local utilities, rights of way, easements and public facilities including schools, public safety buildings, libraries, civic centers, and other public buildings.

It is also essential in to incorporate of State and Federal government services, and local public service providers, considerations as a means to collaboratively coordinate public safety, capital improvements, public access, transportation, and the potential for shared facilities. Well-planned infrastructure, public facilities and services, and, safety and emergency response are the keys to community civic pride and accessibility. When integrated into the principles of sustainability, including fiscal responsibility, resiliency and respect for both Flagstaff design traditions and the natural world around us, this chapter provides a comprehensive guide for today and the future.

Arizona state law outlines the 'Public Services & Facilities' to include the general plans for policies, fire, emergency services, sewage, refuse disposal, drainage, local utilities, rights-of-way, easements and faculties for them. 'Public Buildings' is to include showing the locations of civic and community centers, public schools, libraries, police and fire stations and other public buildings. The 'Safety' element is to outline how the protection of the community from natural and artificial hazards, evacuation routes, peak load water supply requirements, minimum road widths according to function, clearances around structures and geologic hazard mapping will be accomplished.

Public Buildings, Facilities, and Services

Relationship to Guiding Principles

The purpose of the combined elements of Public Buildings and Public Services and Facilities is to plan for and improve public facilities and services to ensure the safety and welfare of existing and growing populations. Current and future facilities shall be equitably located throughout the community while re-enforcing Flagstaff's unique sense of place with nature, architecture and cultural diversity. Through coordinated efforts with landowners, government agencies and utility providers, identifying lands to protect and lands suitable for development will create orderly growth and efficient land use patterns.

Resiliency Planning and Capital Improvements Coordination in Facilities, Infrastructure Systems and Services

The Southwest is a region marked by rapidly changing socioeconomic and climate systems. At the same time much of the region has been in the grip of a drought that has persisted for more than a decade—exacerbated by rising temperatures, increased precipitation intensity, snowpack reductions and other climate-related changes. The City of Flagstaff and Coconino County are on the front lines of managing

these impacts associated with natural hazards. Prioritizing protection and preparedness, the City and County can improve local service delivery and organizational capacity to achieve near-term results; to demonstrate the capability of practical, cost-effective, economy-enhancing resilient and sustainable solutions.

A commitment to resiliency planning in Capital Improvements, Public Infrastructure, Facilities and Services will help the region better respond to the impacts of weather and climate by complementing response and relief efforts with preparedness and prevention measures. Infrastructure investments and development will affect the region in the long-term, and public resources will need to work to increase the resiliency of the region to the future effects of climate. The City of Flagstaff Resiliency and Preparedness Study (2012) introduces a vision and path to create resilient public resources and services. Resiliency is built through awareness of how changes in climate conditions can impact the community's critical resources and in turn, the region's priorities. Preparing now for our infrastructure investments to be more resilient to these changes is fiscally responsible, while inaction now can lead to higher costs in the future.

Focusing on strengthening public infrastructure investments, the City and County will need critical functions to be resilient to climate and other disruptions, and be far better integrated with other sectors. Infrastructure and public investments today aimed at building community resilience will help protect the region's natural and built resources and the prosperity they provide. By understanding the vulnerability and risk that the City and County face, actions can be identified that will reduce adverse impacts to public infrastructure and services.
The City and County have the opportunity to manage natural and built infrastructure and services to reduce the adverse impacts of a changing climate on government operations. Moreover, the City and County can explore comprehensive strategies to address multiple vulnerabilities. Supporting regional collaborations and adopting a policy that enhances internal preparedness initiatives are possible ways for the City and County to increase its capacity to respond across multiple infrastructure, services and facilities.

Goal PF.1. All government operations and services will work to prepare for the impacts of natural and human-caused hazards.

Planning

> ***Policy PF 1.1.*** Consider climate resiliency and preparedness in community planning and development to be better prepared for changing conditions.

Operational

> ***Policy PF.1.2.*** Ensure all government operations support community resiliency by allocating public resources necessary for the city and county to prepare and adapt for natural and human-caused hazards.
>
> ***Policy PF.1.3.*** Support evidence-based, ongoing assessment of the region's vulnerability and risk to changes in local climate. Incorporate future climate projections into emergency operations and hazard mitigation planning efforts.
>
> ***Policy PF.1.4.*** Build, sustain and leverage partnerships with local and regional stakeholders to ensure collective investment, efficient action and shared responsibility in the building of local resiliency.

Community Engagement and Education

Policy PF. 1. Support proactive communication and education aimed at both residents and governmental operations as a means to build individual, organizational and community resiliency to weather related impacts and climate disasters.

Locating Public Buildings and Facilities

The City of Flagstaff and Coconino County are committed to providing a high standard of public facilities, infrastructure and services. This is evident throughout our community with well-maintained facilities, streets and parks; water, sewer, reclaimed water utility and environmental services; and, appropriately located community buildings that enhance and reinforce commitment to community and local identity. The Flagstaff and Coconino County, the approach to locate buildings, facilities differs between the City and County jurisdictions.

City of Flagstaff

The City of Flagstaff's approach is be space efficient by consolidating administration, public works and services under "one roof" as much as possible. The City's established guiding principles to building and facility locations include:

- Location, Perception and Image – Promotes Stability of City
- Site Consolidations – Enhances City Services
- Adaptability and Functionality – Provides Efficient Use of Assets
- Economic Business Factors - Justifies Operational Benefits Investment
- Sustainable building practices and proper maintenance to ensure optimal health, efficiency and production.

Coconino County

Coconino County's approach focuses on customer service and the concept of "one-stop shops" with six campuses in the greater Flagstaff area that consolidate related services in existing buildings and some new construction. The County's established guiding principles to building and facility locations include:

- Efficiency
- Environmentally and Culturally Sound
- Governance
- Sustainable building practices and proper maintenance to ensure optimal health, efficiency and production.

Other Public Facilities

The term "public service provider" includes not only the City of Flagstaff and Coconino County, but also all entities (public or private) with infrastructure which may serve not only the City and County, but also a population which extends beyond the jurisdictional boundaries. State, Federal, educational institutions and utility companies design, install, and maintain facilities across the region. While not directly responsible for the provision of these services, the City and County have an important role in coordinating with utility entities in the planning and coordination of future public facilities and services.

Airport - The Flagstaff Pulliam Airport is located four miles south of downtown and serves as the only regional airport in Northern Arizona. The airport property occupies 795 acres, which is mostly used for aviation and support facilities. The growth of the Flagstaff region is expected to continue to drive an increase of air traffic demand and quantity, requiring multi-modal transportation connections. Ensuring safety and minimizing land use conflicts is a concern for both the airport and the community. The potential for business park growth is substantial around the airport, and a specific area plan will address land use planning, zoning, and building regulations which encourages appropriate development mutually compatible with airport operations and noise, and which also protects public investment and addresses community concerns.

The **Flagstaff Municipal Court** and Coconino **County Superior Court** are both located in downtown Flagstaff. There is an identified need to replace the Municipal Court facilities; the Superior Court is housed in an historic structure that has received considerable renovations.

The **Cinder Lake Landfill** is a 343 acre municipal solid waste landfill providing disposal services to the City of Flagstaff and Coconino County. The City has operated the landfill since the late 1960s under a special use permit from the U.S. Forest Service. In March 1999 the City purchased the landfill property (175 acres) plus an additional 168 acres from the Forest Service. The landfill is expected to have a useful life of approximately forty years. With the existing recycling program in place, the life expectancy of the facility could be extended approximately four to ten years. Federal and state regulations make it challenging to successfully site new landfill facilities. Therefore it remains a top priority to explore efficient and realistic methods of extending the useful life of the facility.

Woody Mountain material landfill is operated through a conditional use permit from the U.S. Forest Service. The site provides alternative disposal options for customers disposing of inert material (concrete, rock, and soil) and thereby helps to extend the life of Cinder Lake Landfill.

Recycling: The Materials Recovery Facility (MRF) located at 1800 Butler Avenue, was built in 1998 as a full-scale recycling program in Flagstaff. The facility is 30,000 square feet and handles 80 tons per day with two shifts. Curbside recycling began in Flagstaff in 1998, and materials to be recycled include aluminum, steel, newspapers, office paper, cardboard, magazines, boxboard, and number 1 through 7 hard plastics. Curbside containers are emptied by a collection truck weekly and provided to residents and businesses. In 2011, curb side glass recycling service was added. Glass is ground up and used as part of the alternative daily cover mix on the landfill to prevent additional pollution.

City Reclamation & Wastewater Treatment Plants produce high quality Class A+ reclaimed water at both of the City's wastewater treatment plants – Rio de Flag and Wildcat Hill. Treated effluent from the Wildcat Hill Wastewater Treatment Plant primarily supplies irrigation water to golf courses and recreational areas on the East side of Flagstaff. Treated effluent from the Rio de Flag Water Reclamation Plant supplies most public schools and parks, cemeteries, public landscapes, and residences. Both plants are interconnected to the reclaimed system to provide a more reliable level of service and redundancy. Reclaimed water is one of the most significant water conservation tools the City has. Over 2,000 acre-feet of reclaimed water is directly used each year for irrigation. New customers continue to come on line. *See Water Resources Element and Water Resources Masterplan for additional information.*

The Flagstaff Unified **School District, various charter schools, Coconino Community College and Northern Arizona University** all play important roles in educating the community, providing thousands of jobs, and the facilities themselves serve as community centers for the neighborhoods in which they reside.

The **Flagstaff Coconino County Public Library** has two facilities – one downtown and one east side location on Fourth Street. These shared facilities are highly used and utilize one bookmobile for rural locations.

Public Infrastructure includes roads, potable water, reclaimed water, sewer, and stormwater collection system. Many people consider the parks and recreation facilities, public transit buses, sidewalks, the Flagstaff Urban Trail System (FUTS) and public housing also public infrastructure. These systems are paid for by development and public monies to supply the community and provide a community good. Private infrastructure includes natural gas, power, data, and telephone service. All of these infrastructure systems require capital investment as well as operation and maintenance.

Goals and Policies

Goal PF.2. Sustainable and equitable public facilities, services and infrastructure systems will be provided in an efficient and effective manner serving all population areas and demographics.

> ***Policy PF.2.1.*** Prioritize infrastructure upgrades to encourage redevelopment and infill and meet land use goals.
>
> > **Strategy PF.2.1.1.** Use the Capital Improvements Program to fulfill the vision of the Regional Plan.
>
> ***Policy PF.2.2.*** New Developments shall pay its fair share toward the cost of additional capital improvements, infrastructure and public service needs created by the development. *See Cost of Development Element.*
>
> ***Polcy PF.2.3.*** Encourage the integration of service location to provide accessible service. Provide accessible public facilities and services in strategic locations.
>
> ***Policy PF.2.4.*** Support Enhanced Civic Design[38] for all public facilities.
>
> ***Policy PF.2.5.*** Cooperative and coordinated planning between government jurisdictions, agencies, educational institutions, non-profit and private service providers shall be pursued.
>
> > **Strategies** – shared resources, efficiency of space and infrastructure, etc.

Public Safety

Emergency Preparedness

Emergency Management

Law Enforcement

The mission of the Flagstaff Police Department is to protect and preserve life, property, public order, and the rights of the individual by providing exemplary service through the establishment of a partnership of shared responsibility, support, and trust with law abiding members of the community. We accomplish our

[38] Enhanced Civic Design:

mission through prevention of crime and disorder using community policing programs, data driven decision making, and intelligence led policing and other proactive tactics meant to suppress crime and apprehend criminal offenders.

The Flagstaff Police Department is comprised of 117 sworn officers and 52 civilians. The Department is comprised of the patrol division, criminal investigations, community relations, and support services. We maintain a regional SWAT team, an explosives response team, as well as a hostage negotiations team. The Department will remain committed to performance policing allocating resources for crime prevention as opposed to responding to it after it has occurred; evidence based management system; proactive on the homeland security and hometown security; and will remain flexible and responsive to evolving legislation, climate changes, and modern police concepts and methods.

Fire

The Flagstaff Fire Department is a highly professional organization made up of 90 dedicated professionals dispersed among six strategically located fire stations, a wildland fire management station, and fire administration. The Flagstaff Fire Department and the region's partnering fire agencies and districts are committed to protecting life, property and community resources through preparation, prevention, response, and mitigation.

Preparation Training is vital to providing quality service in a changing community. The regional fire training facility allows for the Flagstaff Fire Department to train our new recruits, train in many different situations within our organization as well as with surrounding fire districts, law enforcement agencies, EMS, and educational institutions.
Prevention Protecting life and property through prevention efforts is achieved through code enforcement, public education efforts, fire investigations, and the developmental process.
Response Effective emergency and fire services require that personnel arrive quickly to save lives or property. As the region grows geographically, longer travel distances will be required while population growth will increase the number of calls for service. The region should continue to focus considerable effort in areas that can improve fire service response time.
Mitigation Wildfire and post fire flooding present the number one risk to the greater Flagstaff community. Three factors influence the spread of wildfire: fuel, weather, and topography. Of these, the Flagstaff Fire Department and its partnering agencies can manage the fuel. Properly planned forest treatments have a significant effect on slowing and decreasing fire severity and subsequent flooding. Through public awareness efforts and enforcement we can help reduce the threat of human caused fires.–.

Goal PF.3. Ensure the provision of high quality emergency response and public safety services including law enforcement, fire, medical and ambulance transport service.

> ***Policy PF.3.1.*** Maintain high quality, effectiveness and efficiency in law enforcement, fire and emergency services to the extent that is consistent with governmental operations, plans, public policies, population served and monies available.
>
> ***Policy PF.3.2.*** City of Flagstaff and **rural** fire **districts will** be located within the **optimal** response time **for** new and existing development.
>
> ***Policy PF.3.3.*** Law enforcement facilities (i.e. Main and sub-stations) will be located within the prescribed response time goals and service needs of the community

Policy PF 3.4. Maintain emergency management operations to protect life and property during disaster events in natural hazard areas and human build environments.

Policy PF 3.5. Support coordination of public safety and emergency management operations through mutual aid agreements.

XI. Public Buildings, Public Services and Facilities, and Safety Elements

A. Introduction
B. Public Buildings, Facilities, and Services Element
5. Relationship to Guiding Principles
6. Resiliency Planning and Capital Improvements Coordination in Facilities, Infrastructure Systems and Services
7. Locating Public Buildings and Facilities
8. Goals and Policies

C. Safety Element
4. Relationship to Guiding Principles
5. Emergency Preparedness
6. Goals and Policies

A. Introduction

The provision of sustainable, strategic and adequate response of public facilities and services along with phasing of infrastructure improvements are important considerations in the timing, location, and pattern of development. Identifying existing and future facilities and services for the City and County allows for orderly and planned development as the area grows. It is also essential in a sustainable planning effort to include the perspectives of State and Federal government services and local utility providers to coordinate capital improvements, access, transportation, and the potential for shared facilities.

Intertwined with facility and service planning and development is safety and emergency responsiveness. As communities develop, it is critical to consider facilities, equipment, supplies and procedures for a timely response to natural and human emergencies. Development, constant review and modification of preventative and responsive measures and procedures addressing potential hazards and situations are essential to the community's well-being.

Well-planned infrastructure, public facilities and services, and, safety and emergency response are the keys to community civic pride and accessibility. When added to the concepts of sustainability, fiscal responsibility, and respect for both Flagstaff design traditions and the natural world around us, this chapter provides a comprehensive guide for today and the future.

B. Public Buildings, Facilities, and Services

1. Relationship to Guiding Principles

The purpose of the combined elements of Public Buildings and Public Services and Facilities is to plan for and improve public facilities and services to ensure the safety and welfare of existing and growing populations. Current and future facilities shall be equitably located throughout the community while re-enforcing Flagstaff's unique sense of place with nature, architecture and cultural diversity. Through coordinated efforts with landowners, government agencies and utility providers, identifying lands to protect and lands suitable for development will create orderly growth and efficient land use patterns.

2. Resiliency Planning and Capital Improvements Coordination in Facilities, Infrastructure Systems and Services

The Southwest is a region marked by rapidly changing socioeconomic and climate systems. At the same time much of the region has been in the grip of a drought that has persisted for more than a decade – exacerbated by soaring temperatures, increased precipitation intensity, snowpack reductions and other climate-related changes. In recent years, Flagstaff has experienced record warming, severe winter storms, record low moisture, catastrophic wildfires and subsequent flooding events. The City of Flagstaff and Coconino County are on the front lines of managing these impacts associated with natural hazards. Prioritizing protection and preparedness, the City and County can improve local service delivery and organizational capacity to achieve near-term results; to demonstrate the capability of practical, cost-effective, economy-enhancing resilient and sustainable solutions. The City and County are committed to reducing risk from natural hazards and increasing resilience and protection within governmental operations. Preparing the City and County for the impacts of natural and human hazards will position the region for continued prosperity. In addition to protecting the region's resources, focusing on resiliency and preparedness in existing and future municipal policies and operations can contribute to the development of public buildings, facilities, services and safety elements of the Regional Plan.

Many growing Arizona communities, including the Flagstaff region, face challenges of growing populations and their associated demands upon existing facilities, infrastructure systems and need for services. Often, construction of new facilities/infrastructure and provision of services to meet the demands of these developing areas and growing populations lag. Coordinating the investments of the Capital Improvements Plan (CIP) through the goals and policies established in the Regional Plan, Area Plans, Neighborhood Plans and functional master plans can best allocate scarce resources and guide development to appropriate, serviceable areas. Determining needs, defining the service areas, identifying

site locations, sizing and designing facilities, and phasing construction are all important steps toward achieving a fiscally equitable balance of development.

To help plan for additional public facilities in a manner that the City and County can provide, this Plan limits serviceable areas through the Urban and Rural Growth Boundaries. The lands contained within the Urban Growth Boundary Area contains sufficient land to meet the residential, industrial, commercial, institutional, and recreational needs of the community for the next 30 years and more. The primary purpose of the growth boundaries are: to limit sprawl; help protect open spaces and agricultural lands; and, establish predictability as to where development could occur. The Urban Growth Boundary (UGB) assures that growth occurs in areas where the City can efficiently provide services. The UGB was partly based on utility constraints, limiting water service to areas below 7,000 feet in elevation and conveyance of sewer by gravity flow. Urban Growth Boundaries are considered an effective tool by creating more certainty in the decision-making process, making it clear to government officials, real estate developers, financial institutions, property owners, and residents where development may occur.

The Rural Growth Boundary's purpose is to keep county regional communities from growing together and to continue to provide access to adjacent public lands. It is expected that containing growth within a boundary area means less environmental damage from sprawl. By fostering predictable growth and areas for growth and by protecting valuable open space lands, development can be better managed.

3. Locating Public Buildings and Facilities

The City of Flagstaff and Coconino County are committed to providing a high standard of public facilities, infrastructure and services. This is evident throughout our community with well-maintained facilities, streets and parks; water, sewer, reclaimed water utility and environmental services; and, appropriately located community buildings that enhance and reinforce commitment to community and local identity. Although the civic pride is equal in the City of the Flagstaff and Coconino County, the approach to locating buildings, facilities differs between the two jurisdictions. The City of Flagstaff's approach is to consolidate administration, public works and services under "one roof" as much as possible whereas the Coconino County envisions locating multiple campuses based on function and populations it serves.

a) City Consolidation: In October 2007, the City of Flagstaff commissioned a *Space Plan Study* that examines the use and management of City of Flagstaff's portfolio to create a 10-year Space Plan. The study examined the approximately 90 existing buildings of which approximately 60 are maintenance-use-oriented, and 30 buildings used for administration and services. The study analyzed existing buildings and facilities and projects the needs for the next ten years and focuses on customer service by ideally locating and relocating services 'under one roof'. The City's four established guiding principles to facility/building location are the following:

1) Location, Perception, and Image - Promotes Stability of City (30%)

- Reflects a solid, financially secure organization that spends funds wisely and plans for future growth

- Reflects the unique City of Flagstaff community service character with up-to-date functionality that continues to evolve to meet the needs of today and into the future
- Supports frequent use by residents based on being located with convenient access to high usage service needs

2) Site Consolidations- Enhances City Services (19%)
- Emphasizes City service culture with clear identification of the different governmental service access points
- Departmental functions located and organized to reinforce City strategies and communications

3) Adaptability and Functionality - Provides Efficient Use of Assets (27%)
- Establishes a functional working environment that supports operational efficiencies
- Integrates assets and office space requirements to be adaptable and flexible to changing needs

4) Economic Business Factors – Justifies Operational Benefits Investment (24%)
- Affordable plan with strong cost/benefit justification
- Investment reinforces the other Guiding Principles and appears reasonable to City Residents/Citizens/Stakeholders"

(Source: City of Flagstaff Space Planning Project September 2nd, 2008 pages 5-17 to 5-18)

b) County – Campus Approach: The *Coconino County Facilities Master Plan* focuses on customer service and the concept of "one-stop shops" with six campuses in the greater Flagstaff area that consolidate related services in existing buildings and some new construction. The plan is designed to be built-out within ten years from the start of capital funding. Below are the mission, goals and guiding principles of the County plan, including the associated importance weighting of each principle:

Mission: "Provide Coconino County citizens and staff with facilities that promote the delivery of quality services."

Goal:

1. Align facility improvements and investments with:
   - County's future development and growth
   - Critical needs
   - Funding strategies
   - Environmental responsibility
2. Annually track Master Plan progress, criteria, and implementation. Update and report as needed. (A "Communication Strategy" to keep citizens and employees informed in an ongoing fashion shall be required)

Guiding Principles

1. Efficiency (42%)
   - For the internal and external customer

- ~~Includes flexibility, accessibility and reliability in the solution~~
- ~~Appropriately positions the County to serve customer population~~
- ~~Maximizes staff and space utilization~~

~~2. Environmentally and Culturally Sound (31%)~~

- ~~Meets the present needs without compromising the ability of future generations to meet their needs~~
- ~~Harmonious with natural and built environment~~
- ~~Acknowledges the diverse cultures of Coconino County~~
- ~~Promotes designs that encourage customer engagement~~

~~3. Governance (27%)~~

- ~~Prudent investment of tax dollars~~
- ~~Meets long- and short-term financial strategies~~
- ~~Aligns with the Board of Supervisors strategic vision~~

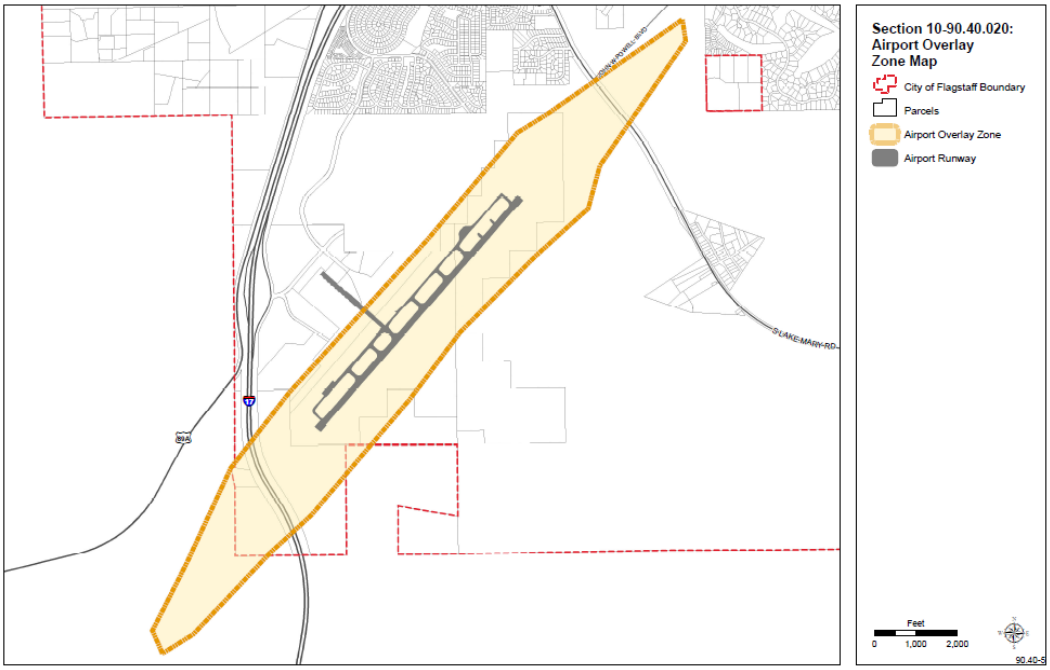
~~*(Source: Coconino County Facilities Master Plan, July 10, 2009, Pages 3-20 – 3-22)*~~

~~c) Pulliam Airport~~

~~The Flagstaff Pulliam Airport, a commercial and general aviation airport, is located four miles south of downtown and serves the regional business and tourist need as the only regional airport in Northern Arizona. The airport property occupies 795 acres, which is mostly used for aviation and support facilities. Pulliam Airport is designed with a single, hard surface 8,800 feet long runway. The growth of the Flagstaff region is expected to continue to drive an increase of air traffic demand and quantity. The growth in air traffic will necessitate connections to all forms of multi-modal transportation.~~

~~Ensuring safety, well-functioning airport operations, and minimizing land use conflicts is a concern for both the airport and the community. Local governments are responsible for land use planning, zoning, and building regulations to encourage development that is compatible with present and projected airport noise levels, ensure that land uses in the airport area are mutually compatible with the operation of the airport and that any public investment in the airport is protected, and to regulate land uses within designated existing or projected airport impact areas by providing height restrictions which will assure safe, unobstructed access for all aircraft which enter and exit Pulliam Airport. *(Coffman Associates, Inc. September 2005) (2012 City of Flagstaff Zoning Code-10-40-50.030.A.1, 1a and 1b)*~~

~~The map below displays the Airport Overlay. To ensure the safety of airplane approach, Resolution 1775 secures an aviation easement, which prohibits any object to protrude above the approach of light planes. Map XXX, Airport~~



Overlay Zone Map, shown below generally depicts this area which may have implications upon future development.

d) Flagstaff Municipal Court

The Flagstaff Municipal Court building, dating from ____, will be relocated to a new building, possibly in conjunction with a parking garage.

e) Coconino County Facilities and Services

1. Executive-Board of Supervisors and County Manager
2. Statutory Offices
3. Administration
4. Parks and Recreation
5. Health and Community Services
6. Judicial
7. Public Works/Roads/Solid Waste
   Flood Control

f) Utility Service Providers – identification, service

With a limited land supply constrained by State and Federal forest surrounding the city along with population increase, the demand for development expansion increases, therefore the strategic location of facilities throughout the community is to maximize limited resources. The term "public service provider" includes not only the City of Flagstaff, but also all entities (public or private) with infrastructure which may serve not only the City of Flagstaff, but also a population which extends beyond the city's boundaries. Utility companies providing telephone, natural gas, and electric services design, install, and maintain facilities across the region. While not directly responsible for the provision of these services, the

City and County have an important role in coordinating with utility entities in the planning of future utility services.

Information to add:

(1) Public/private description
(2) Service difference between county/city
(3) City requirement to be serviced by city water/sewer (importance to land development and facility capacity)
(a) Service
1. Public
a. Water
b. Sewer
2. Private –
a. Water districts
b. Electric
c. Gas
d. Telephone
e. Cable
f. Fiber Optic

(a) Service maps/plans – identify existing/future trunk lines (if possible)

- Water - cross-reference with Water Element. Is this necessary to repeat?
- Trunk lines
- Districts
- Plants
- Tanks
- Pump stations
- Well heads
- Waste water
- Lines
- Treatment facilities
- Gas/electric (doubtful, APS has't been forthcoming)
- Communications

g.) Materials Recovery Facility (MRF)

The MRF, located at 1800 Butler Avenue, was built in 1998 through a public-private partnership between the City of Flagstaff and Norton Environmental, Inc. to bring a full-scale recycling program to Flagstaff and throughout Coconino County. The facility is 30,000 square feet and utilizes a mixture of manual and automated sorting stations. The facility was designed to handle 80 tons per day with two shifts.

Curbside recycling began in Flagstaff in 1998, and in its first year, more than 5,150 tons (or 10,300,000 pounds) of recyclable materials were collected. In 2011, the facility processed more than 8,250 tons (or 15,500,000 pounds). Much of the program's success is due to its convenient and simple nature. The City provides curbside containers in which participants can place their recyclables without separating them. Materials to be recycled include aluminum, steel, newspapers, office paper, cardboard, magazines, boxboard, and number 1 through 7 hard plastics.

Curbside containers are emptied by a collection truck weekly. This service is provided to residents and businesses alike.

In 2011, the City and MRF expanded the glass collection initiative to include curbside collection in a separate container. For an additional cost, residents have the option to receive glass pick up on the same week as bulky item pick-up. Glass is not recycled by the MRF – it is ground up and used as part of the alternative daily cover mix on the landfill to prevent additional pollution.

h.) Cinder Lake

The Cinder Lake Landfill is a 343 acre municipal solid waste landfill providing disposal services to the City of Flagstaff and Coconino County. The City has operated the landfill since the late 1960s under a special use permit from the U.S. Forest Service. In March 1999 the City purchased the landfill property (175 acres) plus an additional 168 acres from the Forest Service.

The landfill is expected to have a useful life of approximately forty years. With the existing recycling program in place, the life expectancy of the facility could be extended approximately four to ten years. Federal and state regulations make it challenging to successfully site new landfill facilities. Therefore it remains a top priority to explore efficient and realistic methods of extending the useful life of the facility.

The operation will likely experience soil deficiencies by the year 2035. Therefore landfill engineering staff has been successful at integrating an aggregate of alternative daily cover materials such as grinded green waste (tree stumps and branches), grinded lumber, and paper pulp millings from SCA Tissue.

Recent monitoring of landfill gas (methane) at Cinder Lake Landfill indicates that a viable source of fuel is available for development. Therefore landfill staff is currently undergoing a comprehensive study to examine which local and regional markets could feasibly utilize the gas as an alternative fuel source.

The City also operates an inert material landfill, located on Woody Mountain Road, south of West Route 66. It is operated through a conditional use permit from the U.S. Forest Service. The site provides alternative disposal options for customers disposing of inert material (concrete, rock, and soil) and thereby helps to extend the life of Cinder Lake Landfill.

i.) Flagstaff City-Coconino County Public Library

There is one main public library and one eastside branch public library within the City of Flagstaff. The Flagstaff City-Coconino County Public Library (main) is located in the downtown area at 300 West Aspen Avenue and the East Flagstaff Community Library (branch) is located at 3000 N 4th, Suite 5. In FY11, there were over 775,000 visits collectively to the Flagstaff public libraries, and over 1, 000,000 items were circulated.

The main library has a collection of over 228,000 volumes and subscribes to over 540 magazines and newspapers. Circulation statistics continue to increase, along with patron and tourist visits. The library continues to grow electronically also. Besides offering computer classes and instruction, the library offers hundreds of online electronic resources for users via the library's website, including but not limited to, online business, legal, health, auto, home & hobby resources, encyclopedias, magazines, newspapers, language learning, occupation practice tests,

resume and skill-set help, along with downloadable audio and e-books. The main library provides over 100 computers for public access, and over 70 at the eastside branch. Since expanding into the CCC building over 5 years ago, the branch library has grown exponentially in volumes, computers, circulation and visitation. We expect the need for a larger space within the next 10 years. Visitation of more than 25,000 in one month is not unusual and on the increase at this branch.

The library also provides library services within the Coconino County Correctional Facility, as well as operating two bookmobiles. The PALS (Preschoolers Acquiring Literacy Skills) bookmobile visits local schools and preschools to encourage the development of literacy skills in young children. The County bookmobile provides library services and materials to many rural communities throughout Northern Arizona.

4. Goals and Policies

Goal PF.1: Sustainable and equitable public facilities, services and infrastructure systems will be provided in an efficient and effective manner serving all levels of population.

Policy PF.1.1. Provide fiscal balance between provision of service to new areas and renovating service in existing neighborhoods

Policy PF.1.2. Tailor service delivery programs based on local area requirements.

Policy PF.1.3. New Developments shall pay their fair share toward the cost of additional capital improvements, infrastructure and public service needs created by the development.

Policy PF.1.4. Implement Capital Improvements Program to fulfill the vision of the Regional Plan

Policy PF.1.5. Encourage the integration of service location to provide more accessible service.

Policy PF.1.6. Support Enhanced Civic Design for all public facilities.

Goal PF.2: Regional coordination in planning and implementing facilities and infrastructure systems between public agencies, non profits and private providers will be a priority.

Policy PF.2.1. Cooperative planning between government jurisdictions, agencies, educational institutions, non-profit and private service providers shall be pursued.

Goal PF.4: All government operations will work to prepare for natural and human-caused hazards.

Policy PF.4.1: Incorporate resiliency and preparedness principles into current and future infrastructure development needs.

Policy PF.4.2: Allocate public resources necessary to prepare and adapt the City and County physical design and operations for natural and human-caused hazards.

Policy PF.4.3: Integrate resource scarcity; and climate-related risk and uncertainty into all public planning efforts.

Policy PF.4.4: Institutionalize resiliency by integrating a review structure that applies preparedness principles to all governmental decisions and operations.

Policy PF.4.5: Maintain measures to protect life and property in natural hazard areas and human built environments

C. Public Safety Element

1. Relationship to Vision and Guiding Principles

[Needs text]

2. Emergency Preparedness (update/edit)

[Needs text]

1. Description of and mapping of known Hazardous Areas
   a. Natural
      i. Fire
      ii. Geological
      iii. Flood
      iv. Climate?
   b. Manmade
      i. Building/structure
      ii. Engineering;
      iii. Hazardous materials
2. Response to Hazardous Areas/Manmade
   a. Code
      i. Zoning
      ii. Engineering
      iii. Enforcement
   b. Fire/police

3. Fire Protection System

a. Emergency Operations

~~i. Emergency Medical Services~~

~~1. Basic and Advanced Life Support~~

~~2. Public Assists~~

~~ii. Fires~~

~~1. Residential/Commercial/Vehicles~~
~~2. Wildland~~

~~iii. Special Operations~~

~~1. Hazardous Materials~~
~~2. Technical Rescue~~
~~3. Homeland Security~~

~~iv. Emergency Management~~

~~1. Emergency Operations Center~~

~~b. Fire Prevention~~

~~i. Code Enforcement~~

~~1. New Construction~~

~~2. Existing Occupancies~~

~~3. Permitting/Plans Review~~

~~iii. Public Education~~

~~1. Injury Prevention~~
~~2. Fire Prevention~~
~~3. Public Information Officers/Social Media~~

~~iv. Fuel Management~~

~~1. Vegetation management~~

~~2. Prescribed fire~~

~~3. Code Enforcement/Fire Wise Construction~~

~~v. Fire Investigation~~

~~1. Cause and Origin~~

~~2. Arson Investigation/Prosecution~~

~~d. Training & Safety~~

~~i. Regional Fire Training Facility~~

~~ii. Recruit Training~~

~~iii. Company Level Training~~

~~iv. Driver Training~~

~~v. Accident Review Board~~

~~vi. Compliance with Nationally Recognized Safety Standards and OSHA Mandates~~

~~e. Support Services~~

i. Facility Maintenance

ii. Alarm Center/911

iii. Radio and Data Communications

iv. Apparatus Repairs/ Replacement Program

v. Partnering Agencies

vi. Mutual Aid Agreements

a. Police and Sheriff

3. Goals and Policies

Goal PS.1: Ensure the provision of adequate emergency response and public safety services including police, fire, medical and ambulance transport service.

Policy PF.3.1: Maintain high quality and efficiency in police, fire and emergency services to the extent that is consistent with operational policies and City and County resources as directed by elected officials.

Policy PF.3.2: City of Flagstaff and Coconino County District fire stations shall be located within the prescribed response time from new and existing development as determined by the Flagstaff Fire Department's "Community Fire Protection Analysis" and the Ponderosa Fire Advisory Council.

Policy PF.3.3: City of Flagstaff police facilities (i.e. Main and sub-stations) to be located within the prescribed response time goals and service needs of the community.

PEOPLE

XI. Neighborhoods, Housing and Urban Conservation

Introduction

Neighborhoods are the backbone of every community – places where people live, play, go to school, work and interact. Flagstaff neighborhoods are unique with eclectic styles, personalities, cultural heritage and social needs. Central to Flagstaff's **urban** neighborhoods is a pedestrian experience through interconnections of local businesses, homes, and schools, places of worship, transit, and parks in a compact, walkable land use pattern. The city and county **suburban** neighborhoods encompass typical residential development with larger homes and yards, primarily accessed by the automobile. The county's **rural** neighborhoods are more typically low-density 'ranchettes' with barns, animals and open space. This variety of neighborhood types is important to the Region's character, vitality, quality of life, and affordability.

Each neighborhood is unique, sharing a desire to preserve its individuality and diverse culture, while contributing to the character of the region as a whole. A healthy neighborhood works to maintain and enhance safety and community pride with well-maintained homes and businesses, active neighbors and healthy residents. In the Community Values Survey, 2010, the public identified some of the community's favorite urban neighborhoods to emulate in future development and redevelopment. Included were the historic Townsite, Downtown, Southside, North End and Coconino Estates. These neighborhoods exhibit timeless qualities of mature street trees, front porches and active neighbors.

Although 'enhancing neighborhoods' appears as a good overall objective and fosters pride of place, it also raises concerns of gentrification and affordability. One example of this balancing act will be the Southside neighborhood after the Rio de Flag flood control project is complete. With the threat of potential flooding eliminated, the neighborhood will be ripe for redevelopment and infill development that could push-out its long time residents and businesses. In an effort to manage potential transformation and preservation, the neighborhood created "The Southside 2005 Plan" to guide its future.

Neighborhood Plans & County Area Plans are plans for a defined neighborhood or area of the city or county. These are typically developed with the involvement of residents, and serve as an amendment to the city or county general comprehensive plan, identifying challenges, opportunities and the vision for that particular neighborhood. Adopted City of Flagstaff neighborhood plans include "The Southside 2005 Plan" and "La Plaza Vieja Neighborhood Plan." Adopted Area Plans for communities within the Coconino County region include[39] Kachina Village, Fort Valley, Bellemont, Doney Park, Timberline - Fernwood, and Mountainaire.

Housing - As a community priority, **creating more housing and neighborhood diversity for a wide range of households** is paramount to a resilient Flagstaff**.** Neighborhoods with a central 'node' of activity where people can gather, eat and shop , woven with pedestrian connections, open space and variety of housing types is the framework of healthy, vibrant communities. The Regional Plan identifies existing and potential 'activity centers' through which to cultivate walkable neighborhoods, efficient transit connections and economic opportunities. These are considered appropriate locations for sensitively-designed higher density residential and mixed-use development, either as infill or as redevelopment *(see map, page XX)*.

The City of Flagstaff functions under a five-year *Consolidated Plan* and an annual update with investment strategies specific U.S. Department of Housing and Urban Development (HUD) funds. The

[39] http://www.coconino.az.gov/comdev.aspx?id=21698 to access all Coconino County Area Plans

five-year *Consolidated Plan* contains a description of community needs, goals, and priorities in the areas of affordable housing, human services, public facilities, and other programs designed to improve the quality of life for low- and moderate-income residents of the community. This Housing Element is intended to provide long-term guidance for meeting the region's housing needs for all economic sectors, and works in concert with Flagstaff's *Consolidated Plan.*
The three primary elements of the housing market that impact supply and demand are:

1. **Variety** - the types of housing that are available.
2. **Quality** - most often defined by age, unit value and whether the unit has complete plumbing or kitchen facilities.
3. **Affordability** - defined by the percentage of household income that must be spent for housing costs.

Everyone goes home after a day at school or work, and housing, as an element of community infrastructure, needs to be available to all segments of our population. A complete range of choices is necessary within a community, from homeless housing to rental units to home ownership. The housing choices should be tailored to meet the demographic needs of our particular community. For example, if our population is 25-30% students, does that percentage of our housing market meet that demand?

The policies in the Housing Element focus on providing safe, decent housing for the well-being of individuals, families, neighborhoods and the community as a whole.

Urban Conservation is the idea of revitalizing, remodeling and fixing-up, which can be done at the home, street, block or neighborhood level. Urban conservation is a way to add new vigor to an under-served neighborhood with investment, jobs and opportunities for residents. Urban conservation is accomplished by rehabilitation of buildings, streets and public spaces; redevelopment of underutilized and dilapidated sites; as well as infill on vacant lots with sensitive buildings. Design solutions that are context-sensitive restore a sense of walkability using human-scale buildings, roads and signage, and respect the culture of the neighborhood in which conservation efforts are made. The Flagstaff community wishes to employ the urban conservation tools of revitalization, redevelopment and infill within some residential and commercial neighborhoods to incentivize walkable neighborhoods with increased yet appropriate density and pleasing aesthetics. The goal and policies in this section refer specifically to how rehabilitation, redevelopment and infill can affect neighborhoods and the housing stock. *See Economic Development "Redevelopment and Infill", as well as Land Use "Revitalization" for urban conservation further tools and goals*.

Relationship to Vision and Guiding Principles

Healthy neighborhoods and safe and efficient housing is paramount to the vitality of our community. Neighborhoods and housing have great impacts on the community character, sense of place, safety, academic attainment, social equity and opportunity to all citizens and will only change with everyone acting as a community to address this issue.

Background and Trends

Safe and decent housing is the backbone to a strong, healthy and resilient community. Flagstaff's growing population will require an increased emphasis on housing choices in the future. The region's housing framework can be defined by:

1) A limited supply of land due to being surrounded by publically owned lands;
2) Approximately 40% of Flagstaff's households are by definition low- to moderate-income (City of Flagstaff FY 2011-2015 HUD Consolidated Plan, p. 12);
3) Flagstaff is experiencing a consistent but modest rate of population growth;
4) Student populations at Northern Arizona University will continue to grow; and
5) Housing needs for the elderly will increase tremendously over the next several decades as the baby boom generation[40] moves into the retirement years.

Illustration:
% of single-family vs. % multi-family
Compare to existing demographics

As a tourist-driven university mountain town with seasonal weather, housing in the Flagstaff region has a higher cost and value than comparable housing in other Arizona communities. The local housing cost is 37.4% higher than the national average.[41] Land identified for residential development is both privately and publically held (i.e. State Trust lands). Future housing needs will focus on revitalization, infill and preservation opportunities; yet new neighborhood development is possible. *See land supply, Land Use Section.*

Population Growth

Population trends are important indicators of future housing needs. Local growing population sectors include the elderly, students, single-parent households, and nonfamily households. These community members need a variety of housing options within close proximity of jobs, schools and play.
Figure 1, below, provides projected student populations for Northern Arizona University. NAU students currently make up approximately 25% of our population, and are projected to be 30% of our population by 2050. Such increased demand for student housing may impact cost and availability of housing in the region.

NAU Enrollment table here

Affordability

Government programs define "cost burden" as paying more than 30% of gross household income for total housing cost (rent or mortgage and utilities). People paying more than that have little remaining to pay for the essentials – clothing, food, transportation and child care. Higher income households may choose to pay more for housing. As an economic development factor, housing plays an important part in major employer and workforce location decisions. Flagstaff renters versus home-owners are about 50/50, which is typical of a university mountain town. It has been estimated that second homes make up approximately 16% of the total housing stock in Flagstaff, which impacts local housing market.

Cost of housing table here
Housing / Job nexus table here
Second home owners table here

[40] Define baby-boom generation here
[41] http://www.flagstaffchamber.com/economic-development/cost-of-living/

Neighborhood Conservation Efforts

Community conservation, rehabilitation, redevelopment and preservation efforts all support the goal of PRESERVING SENSE OF PLACE. Most people cherish certain things about their neighborhood, but everyone has issues they would like to change to make their home, neighborhood and local community more appealing, feel safer and in cases of commercial areas, attract more businesses and allow local businesses to thrive. These goals take effort and investment, and do not just "happen".

Current efforts in neighborhood conservation and rehabilitation have focused on commercial areas where business opportunities are prime, such as Milton Road and Butler Avenue. Fourth Street has seen planning for corridor improvements, and Community Development Block Grant funds for housing repair and affordability are primarily spent in the historic neighborhoods of Sunnyside, Southside, and La Plaza Vieja. Rehabilitation efforts focusing on residential energy efficiency has proven worthwhile in the Flagstaff area climate, and has seen significant investment in the past five years.

Urban Conservation Toolbox

- **Historic Preservation** – *Repair and restore historic structures*
- **Revitalization** – *Repair existing to make safe and pleasant*
- **Redevelopment** – *New development replacing outdated and underutilized existing*
- **Brownfield redevelopment** – *Clean up and re-build on Brownfield sites*
- **Infill** – *New buildings on vacant lots within city service boundaries*

The following policies support addressing the **Key Challenges and Opportunities for the Future:**

- **Need for diversity**
  - Fostering mixed-use, mixed-income neighborhoods with a range of housing and transportation choices for our diverse population, in which residents can afford to live.
  - Encouraging the development of affordable housing in neighborhoods throughout the region, so that affordable housing is not segregated to only a few specific neighborhoods.
  - Multi-generational housing is a growing sector, fulfilling the needs of both the younger and older generations.

- **Community expectations**
  - Balancing new development and redevelopment in lower-income and historic neighborhoods, while maintaining the essential character of those neighborhoods.
  - Creating community buy-in for higher density housing development and redevelopment within the city to provide more affordable housing choices.
  - Public education provided to address the "Not In My Backyard" sentiment regarding affordable housing, increased density and redevelopment.
  - The region needs affordable housing to make community sustainability and economic development work.
  - Low maintenance on rentals is unacceptable.

- **County's role in housing**
  - Address housing growth at the periphery and outside City limits; respond by planning for how people get to work and school from these residential neighborhoods, as well as affordable housing and maintained rental concerns.

- **Who provides housing**
  - The community provides affordable housing as a comprehensive solution

- **Housing for non-market residents**
  - Provide affordable housing options to special needs populations.
  - Address the needs for the homelessness and those who are at risk of becoming homeless.
  - Providing housing to individuals who have been incarcerated.
  - Address the housing needs of students in our community.
  - Multi-family rental units are needed for the demographic shifts.
  - Addressing the external market demand for housing in our community, which drives prices higher than our local wages can support.

Goals and Policies

Goal NH.1.~~CC.5~~ The Flagstaff region will foster and maintain healthy and diverse neighborhoods, from urban to suburban to rural**.**

Policy NH.1.1.~~CC.5.1~~ Preserve and enhance existing neighborhoods.

Strategies:

- Develop and implement a Property Maintenance Ordinance.

- Encourage the establishment and use of Neighborhood Associations as grass-roots organizations to accomplish common neighborhood goals.

- Allow and use neighborhood police substations as applicable.

Policy NH 1.2.~~CC.5.2~~ Changes to existing neighborhoods should respect traditions, identifiable styles, proportions, streetscapes, relationships between buildings, yards and roadways; and use historically appropriate and compatible building and structural materials.

Policy NH 1.3.~~CC.5.4~~ Interconnect existing and new neighborhoods through patterns of development, with streets, sidewalks, and trails.

Suggested NEW Policy NH 1.4. Urban and Suburban neighborhoods will foster 'nodes' which serve as central points of activities, services, increased densities and transit connections.

Suggested NEW Policy NH 1.5. Use traditional neighborhood design (TND) standards for new and revitalized neighborhoods, implementing the Smart Code in conjunction with neighborhood plans, specific plans or master plans.

Suggested NEW Policy NH 1.6. Future growth outward needs to consider areas as new complete neighborhoods, interconnected with other neighborhoods, and providing parks, civic spaces, a variety of housing types, and protection of sensitive natural and cultural features.

Goal NH.2.~~CC.6~~ Downtown Flagstaff will serve as the primary focal point of the community character.

Suggested NEW Policy NH 2.1. The City encourages the rehabilitation of historic downtown structures and contextual new structures as office, retail, entertainment and residential space to reinvigorate the area as a destination of culture, shopping, government, and the arts.

Policy NH 2.2.~~CC.6.1~~ Future downtown development and contiguous development shall respect the established intensity of the historic core, historical architecture and urban design, and allow increases in intensity and density outside the historic core.

Suggested NEW Policy NH 2.3. New structures in the downtown and Southside neighborhoods should continue the tradition of multi-story, multi-use buildings with the reintroduction of a stable, mixed-income residential population.

Goal NH.3 ~~1~~. A variety of housing types at different price points is available, to ensure housing opportunity for all economic sectors.

Policy NH.3.1. Provide a variety of housing types throughout the City and region, including purchase and rental options, to expand the choices available to meet the financial and lifestyle needs of our diverse population.

Policy NH.3.2. Promote accessory dwelling units, where appropriate.

Policy NH.3.3. Increase the availability of affordable housing for very low-income persons, through innovative and effective funding mechanisms.

Strategy: Encourage public/private partnerships for the development of affordable housing.

Policy NH.3.4. Allow a variety of housing types, including rental and ownership opportunities for singles, students, families with and without children, seniors, persons with disabilities, and multi-generational families, in various zoning districts.

Policy NH.3.5. Reuse former brownfields, vacant buildings and commercial buildings to provide new mixed-use and/or housing options.

Policy NH.3.6. Encourage affordable housing.

Strategy: Utilize city and county-owned land for affordable housing development, where appropriate.

Strategy: City and county will employ local regulations, policies and programs to meet the housing needs of low- and moderate-income households.

Policy NH.3.7. Provide incentives for residential infill development and redevelopment. *(left in this section; to be reevaluated after land use is determined to see if redundant)*

Policy NH.3.8. Continue incentives for affordable housing.

Strategy: Ensure planning and permitting process are fair and expeditious.

Strategy: Fund the City's incentive policy fund, to be used to offset City fees associated with affordable housing development.

Goal NH.4 ~~2~~. Ensure housing is decent, safe and sanitary.

Policy NH.4.1. Expand the availability of affordable housing throughout the region by preserving existing housing, including housing for very low-income persons.
(definition of very low-income persons and other income definitions to be included in regional plan glossary)

Policy NH.4.2. Eliminate substandard housing units by conserving and rehabilitating existing housing stock.

Policy NH.4.3. Address accessibility issues and other housing barriers to persons with disabilities or special needs.

Policy NH.4.4. Encourage green practices in housing construction and rehabilitation that support durable, healthy, and energy-efficient homes.

Policy NH.4.5. Renovate the existing housing stock to reduce utility and maintenance costs for owners and occupants, conserve energy.

Policy NH.4.6. Housing development should consider and integrate public transportation when possible, to help reduce a household's transportation costs and minimize impact on the community's roads and transportation system.

Policy NH.4.7. Enforce compliance with fair housing laws.

Goal NH.5 ~~3~~. Eliminate homelessness.

Policy NH.5.1. Provide adequate resources for families with children experiencing homelessness.

Policy NH.5.2. Provide adequate resources for individuals experiencing homeless.

Policy NH.5.3. Support and expand programs that prevent homelessness.

Strategy: Fund eviction prevention programs.

Strategy: Fund housing rehabilitation programs.

Policy NH.5.4. Ensure transitional housing resources are available to populations experiencing homelessness.

Strategy: Support "Housing First" model to provide permanent housing.

Strategy: Expand permanent supportive housing resources in our community.

Goal NH.6. Urban conservation efforts of revitalization, redevelopment, and infill shall be compatible with and enhance the overall community character. *(re-worded from earlier "Revitalization and redevelopment of the urban core shall be compatible with and enhance community character".*

Policy NH.6.1. Promote quality redevelopment and infill development which is contextual surrounding development and neighborhoods.

New Suggested Policy NH 6.2. Use urban conservation tools to revitalize existing underutilized activity centers to their potential. (highest and best use?)

Put into an Appendix but refer to:

Existing PROGRAMS which promote: 1) home ownership; 2) provide assistance for improving the appearance of neighborhoods; 3) promote maintenance of both commercial and residential buildings in neighborhoods, and; 4) provide the safety and security of neighborhoods:

Various neighborhood safety and social programs are operated by Coconino County Health Services, Flagstaff United School District (FUSD), the Police Block Watch Program, the City's Sustainability Program's community gardens, and Community Design's Beautification community grants, all of which are means to successful neighborhood preservation and revitalization efforts.

Elimination of sub-standard dwelling units

- City of Flagstaff Housing Rehabilitation Program
- Coconino County Housing Rehabilitation Services and CREC
- Rebuilding Together
- BOTHANDS Acquisition-Rehabilitation Program
- NACOG Housing Rehabilitation Program
- Churches
- Code Enforcement *[Zoning, Building, Fire, Environmental, Stormwater]*

Improvement to housing quality, variety and affordability

Quality:

- Programs above (for elimination of sub-standard dwelling units)
- Design guidelines
- Market demands

Variety:

- Market demand
- Zoning which allows for and encourages mixed-income housing and mixed-use buildings

Affordability:

Homeless

- Flagstaff Shelter Services
- Sunshine Rescue Mission
- Hope Cottage
- Open Inn
- Alternative Center
- Northland Family Help Center and HALO House
- Sharon Manor
- Catholic Charities Family Shelter
- Catholic Charities
- The Guidance Center

- PATH Day Program and Outreach
- Coconino County Community Services
- Faith-based

Transitional
- Catholic Charities – Cedar Rose
- Sharon Manor
- Sunshine Rescue Mission
- The Guidance Center – Intake Triage Unit

Rental
- Market Rate
- City of Flagstaff Housing Authority
  - Section 8 Vouchers
  - Public Housing

- Flagstaff Housing Corporation
- Low Income Housing Tax Credit Projects (Timber Trails, Pinehurst, Mountain Side Village)
- The Ridge at Clear Creek
- NAU
- Private Developers
- Hozhoni and other Group Home providers
- Eviction Prevention
  - Coconino County Community Services
  - St. Vincent De Paul
  - Catholic Charities

Homebuyer
- Market Rate
- Down Payment and Closing Cost Assistance
  - BOTHANDS
  - NACOG
  - Individual Development Accounts
- BOTHANDS Inc.
- Habitat for Humanity of Northern Arizona
- Youth Build
- City of Flagstaff Ownership Programs
- Private Developers
- Foreclosure Assistance
  - BOTHANDS – Counseling
  - Coconino County Community Services - Prevention

Provision of adequate sites for housing
- Designated Regional Plan Land Use categories for residential, density and intensity
- Appropriate and adequate zoning for residential and mixed-use
- Function of market

Improve appearance of buildings
- Historic Preservation – guidelines and incentives

- City of Flagstaff Façade Improvement Program *(historic commercial buildings)*
- HOA's
- Market demands and neighborhood pressure
- Code enforcement

Promote maintenance of buildings

- HOA's
- Code enforcement

VII. Neighborhoods

A. Neighborhood Preservation & Revitalization Element
5. Introduction
6. Relationship to Vision and Guiding Principles
7. Neighborhood Plans & County Area Plans
8. Goals & Policies

B. Housing Element
1. Introduction
2. Relationship to Vision and Guiding Principles
3. Background
   c. Population Growth and Future Housing Needs
   d. Affordability
4. Goals and Policies

C. Conservation, Rehabilitation & Redevelopment Element
4. Introduction
5. Relationship to Vision and Guiding Principles
6. Goals and Policies

A. Neighborhood Preservation & Revitalization Element

1. Introduction

Neighborhoods are the backbone of every community – places where people live, play, go to school, work and interact. Flagstaff neighborhoods are unique and complete with eclectic styles, personalities, cultural heritage and social needs. Central to Flagstaff's **urban** neighborhoods is a pedestrian experience through interconnections of local businesses, homes, and schools, places of worship, transit, and parks in a compact, walkable land use pattern. The city and county **suburban** neighborhoods encompass typical residential development with larger homes and yards, primarily accessed by the automobile. The county's **rural** neighborhoods are more typically low-density

'ranchettes' with barns, animals and open space. This variety of neighborhood types is important to the Region's character, vitality, quality of life, and affordability.

Each neighborhood is unique, sharing a desire to **preserve** its individuality and diverse culture, while contributing to the character of the region as a whole. A healthy neighborhood works to maintain and enhance safety and community pride with well-maintained homes and businesses, active neighbors and healthy residents. In the Community Values Survey, 2010, the public identified some of the community's favorite urban neighborhoods to **emulate** in future development and redevelopment. Included were the historic Townsite, Downtown, Southside and Coconino Estates. These neighborhoods exhibit timeless qualities of mature street trees, front porches and active neighbors. Neighborhoods identified as "…needing attention while respecting cultural heritage…" were La Plaza Vieja, Sunnyside, Lower Greenlaw and mobile home parks. The attention sought primarily involved maintenance and turning vacant buildings and underutilized sites into neighborhood assets.

Although 'enhancing neighborhoods' appears as a good overall objective and fosters pride of place, it also raises concerns among residents, including gentrification and affordability. One example of this balancing act will be the Southside neighborhood after the Rio de Flag flood control project is complete. With the threat of potential flooding eliminated, the neighborhood will be ripe for redevelopment and infill development that could push out its long time residents and businesses. In an effort to manage potential transformation and preservation, the neighborhood created "The Southside 2005 Plan" to guide its future.

Editor Note: Neighborhoods
The statute requires this element to include:
1. Identify city PROGRAMS that promote home ownership, provide assistance for improving the appearance of neighborhoods, promote maintenance of both commercial and residential buildings in neighborhoods, and
2. Identify city PROGRAMS that provide for the safety and security of neighborhoods.
I don't see any of this material in the current draft, so I recommend adding some – perhaps by moving the Housing Element here? Discussion of the Property Maintenance Ordinance? Discussion of Neighborhood watch and neighborhood police substations?

2. Relationship to Vision and Guiding Principles

3. Neighborhood Plans & County Area Plans

Neighborhood Plans and County Area Plans are special plans for a defined neighborhood or area of the city or county. These are typically developed with the involvement of residents of the area for which the plan has been prepared. They serve as an amendment or adjunct to the city or county general comprehensive plan. Adopted City of Flagstaff neighborhood plans include "The Southside 2005 Plan" and "La Plaza Vieja Neighborhood Plan." Adopted Area Plans for communities within the Coconino

County region include[42] Kachina Village, Fort Valley, Bellemont, Doney Park, Timberline-Fernwood, and Mountainaire.

Each of the Neighborhood and Area Plans are unique unto themselves. However, general community sentiment, ascertained through public open houses and focus groups, identified positive community character elements, specifically for neighborhoods to continue as: promoting the design traditions of Flagstaff through the use of natural materials, colors, front porches and street trees; using and improving existing infrastructure to appropriately increase density and revitalization in existing neighborhoods which have identified themselves as desiring this; extending and connecting the pedestrian grid, especially crosswalks along busy roads; incorporating parks, open space, high-altitude landscaping and public art into public projects; and maintaining the rural character of the county communities.

The public processes described above also identified challenges to community character within neighborhoods, predominantly as: absentee landlords; commercial 'strip' shopping centers within neighborhoods; lack of investment from the public and private sectors; as well as public education and resources on how to properly repair, remodel and preserve existing homes and buildings.

Various neighborhood safety and social programs are operated by Coconino County Health Services, Flagstaff United School District (FUSD), the Police Block Watch Program, the City's Sustainability Program's community gardens, and Community Design's Beautification community grants, all of which are means to successful neighborhood preservation and revitalization efforts.

4. Goals & Policies

Goal CC.5 – The Flagstaff region will foster and maintain healthy and diverse neighborhoods, from urban to suburban to rural.

Policy CC.5.1 – Preserve and Enhance Existing Neighborhoods

Policy CC.5.2 – Changes to neighborhoods should respect traditions, identifiable styles, proportions, streetscapes, relationships between buildings, yards and roadways; and use historically appropriate and compatible building and structural materials for the historic districts.

Policy CC.5.4 – Interconnect neighborhoods through streets, sidewalk patterns, and/or trails.

GOAL CC.6 – Downtown Flagstaff will serve as the primary focal point of the community character.

[42] http://www.coconino.az.gov/comdev.aspx?id=21698 to access all Coconino County Area Plans

Policy CC.6.1 – Future Downtown Development and contiguous development shall respect the established intensity of the historic core, historical architecture and urban design, and allow increases in intensity and density outside the historic core.

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B. Housing Element

3. Introduction

In 1990, the federal government adopted the National Affordable Housing Act, creating new federal housing programs and consolidated planning and reporting requirements for several programs which are administered by the U.S. Department of Housing and Urban Development (HUD). Beginning in 1995, cities, counties, and states were required to develop a five-year *Consolidated Plan* and update it each year with an annual strategy for investing specific HUD funds. The five-year *Consolidated Plan* contains a description of community needs, goals, and priorities in the areas of affordable housing, human services, public facilities, and other programs designed to improve the quality of life for low- and moderate-income residents of the community. The basic premises that led to the *Consolidated Plan* also form the basis for most of the policies in the Housing Element of the *Regional Plan*. While the *Consolidated Plan* is updated annually, the Housing Element is intended to provide long-term guidance for meeting the region's housing needs for all economic sectors. *Editor's Note: he housing element also needs to include "standards and programs for the elimination of substandard dwelling conditions and for the improvement of housing quality . . .*

A high priority of residents is creating more housing and neighborhood diversity for a wide range of households. The Regional Plan promotes neighborhoods that are made up of land use patterns combining a mix of land uses and a variety of housing types. These patterns ensure that commercial areas are accessible by pedestrians and bicyclists, include common areas and activity centers where people can gather, and make open space an integral component. The Regional Plan identifies several areas in the city as appropriate locations for sensitively-designed higher density residential and mixed-use development, either as infill or as redevelopment *(see map, page XX).*

Apartments are should be convenient to employment centers, shopping and recreation. Add credit.

The housing market consists of homeowners and renters and the units they occupy. In addition to tenure and occupancy, the three primary elements of the housing market that impact supply and demand are:

1. **Variety** - the types of housing that are available.
2. **Quality** - most often defined by age, unit value, and whether the unit has complete plumbing or kitchen facilities.
3. **Affordability** - defined by the percentage of household income that must be spent for housing costs.

A variety of housing types is necessary to meet the diverse housing needs and desires of both owners and renters. Opportunities for movement within a housing market or housing choice are defined by variety. At the same time, housing variety is driven by many factors, including demand for certain types of housing and amenities by households who can afford the desired type and amenities, public policy such as zoning and building requirements, the availability and cost of infrastructure, community character (e.g. rural v. urban), builder experience, and the cost of land and construction.

Single-family homes offer privacy and open space. Add credit.

The policies in the Housing Element focus on supporting effective programs that develop and/or maintain housing in the community, and on enlisting diverse funding sources to promote an adequate supply of affordable, decent, safe, and sanitary housing. Implementation of the goals and policies in this element will expand housing opportunities and encourage development that benefits the entire region. Providing safe, decent housing that is not overcrowded and will not overburden a household financially is critical for the well-being of individuals, families, neighborhoods and the community as a whole.

Townhomes conserve natural open space and offer a more carefree lifestyle. Add credit.

2. Relationship to Vision and Guiding Principles

The Housing Element promotes a variety of housing types, including an adequate supply of safe, decent, affordable housing for a wide range of households, and therefore acts as a steward for the social and economic vitality for today's citizens and future generations. It also encourages infill, redevelopment and the establishment of mixed-use development in providing housing options. These are all important factors in promoting environmental, economic and social sustainability, in addition to smart growth practices. By addressing the need for quality, affordable housing, the Housing Element also benefits community health, social equity, and opportunity. It is also clear that the availability of decent, affordable housing has economic impacts in our community as business expansion, retention and attraction are often influenced by the housing choice employees have in a community.

3. Background

Providing safe, decent housing that is not overcrowded and will not overburden a household financially is critical for the well-being of individuals, families, neighborhoods, and the community as a whole. Flagstaff's growing population will require an increased emphasis on affordable housing in the future. Future factors will increase the demand for affordable housing:

1) A limited supply of land due to being surrounded by publicly owned lands;
2) Approximately 40% of Flagstaff's households are by definition low- to moderate-income (City of Flagstaff FY 2011-2015 HUD Consolidated Plan, p. 12);
3) Flagstaff is experiencing a consistent but modest rate of population growth;
4) Student populations at Northern Arizona University will continue to grow; and
5) Housing needs for the elderly will increase tremendously over the next several decades as the baby boom generation moves into the retirement years.

In general, housing in the Flagstaff region has a higher cost and market value than comparable housing in other Arizona communities. This is largely due to the moderate climate, recreational opportunities, community amenities, and the quality of life offered in the region. Flagstaff is also home to Northern Arizona University with its increasing student population, and an attractive destination for the second home ownership market. While this is beneficial for property and resale values, it makes provision of housing for the full spectrum of Flagstaff's citizens, our service workers, seniors on limited incomes, and citizens with special social or physical needs, more difficult.

In addition, land identified for residential development is becoming increasingly limited. The Flagstaff area has a relatively finite amount of developable private land, with more than two-thirds of the area's approximately 48,000 acres of private land already developed. In addition, there are limited opportunities to expand development and build additional housing units. Not only is Flagstaff surrounded largely by publicly-owned land, but the local community desire is to minimize sprawl and focus on infill/redevelopment. Now and in the future, the region will need to focus attention on the revitalization and preservation of mature housing neighborhoods, seek creative infill development strategies, and encourage a diversity of housing that accommodates a variety of income levels, households, and socioeconomic needs.

a. Population Growth and Future Housing Needs

Population trends are important indicators of future housing needs. Some important population trends include increases over time in target subpopulations, including the elderly, homeless, single-parent households, and nonfamily households. These growing population segments, which have historically needed lower-cost homes, show the need for a variety of affordable housing options. Steadily increasing student populations at Northern Arizona University and a burgeoning second home market have also contributed to unique housing conditions in the Flagstaff Region.

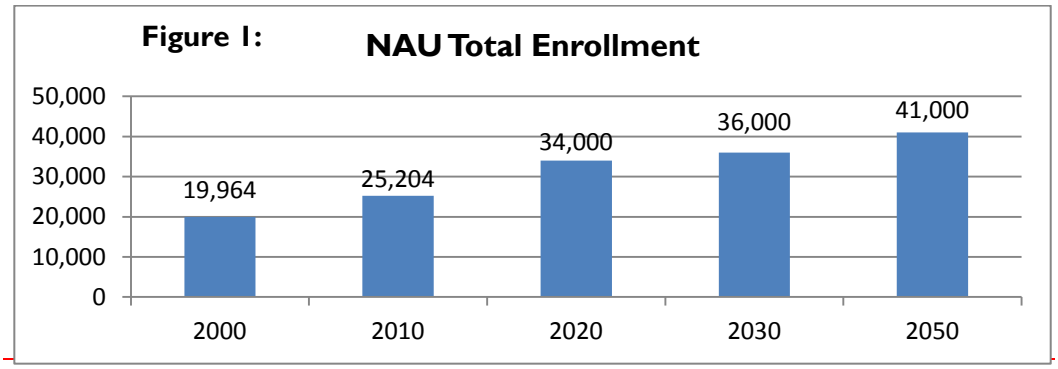
~~The inter-dependence of the housing market and population growth is readily recognized – without population growth additional housing units are not needed. Flagstaff has been a place of in-migration for several decades, growing by 7,280 people (16%) during the 1990's and by 12,976 people (24.5%) from 2000 to 2010. Growth during the past decade was fueled primarily by low mortgage rates and liberal financing terms, retirement of baby boomers, and investment in second homes. The following table provides population data for Flagstaff, Coconino County, the State of Arizona and the United States between 2000 and 2010, along with population projections for the region out to the year 2050.~~

~~Table 1: Population Projection by Area~~

~~Year~~	~~City of Flagstaff~~	~~% Change~~	~~Coconino County w/in FMPO~~	~~% Change~~	~~FMPO Total~~	~~% Change~~	~~State of Arizona~~	~~% Change~~	~~U.S.~~	~~% Change~~
~~**2000**~~	~~52,894~~		~~14,709~~		~~67,603~~		~~5,130,607~~		~~281,424,602~~	
~~**2010**~~	~~65,870~~	~~24.5%~~	~~22,528~~	~~53.2%~~	~~88,398~~	~~23.52%~~	~~6,392,017~~	~~24.6%~~	~~308,745,538~~	~~9.7%~~
~~**2020**~~	~~77,500~~	~~17.7%~~	~~26,350~~	~~17.0%~~	~~103,850~~	~~14.88%~~	~~NA~~	~~NA~~	~~NA~~	~~NA~~
~~**2030**~~	~~87,000~~	~~12.3%~~	~~29,600~~	~~12.3%~~	~~116,600~~	~~10.93%~~	~~NA~~	~~NA~~	~~NA~~	~~NA~~
~~**2050**~~	~~106,000~~	~~21.8%~~	~~36,000~~	~~21.6%~~	~~142,000~~	~~17.89%~~	~~NA~~	~~NA~~	~~NA~~	~~NA~~

~~*Source: Rural Policy Institute*~~

~~Figure 1, below, provides projected student populations for Northern Arizona University. In 2010, NAU reached an all-time high enrollment of 25,204 students university-wide, with a record 17,529 students attending the Flagstaff campus (nau.edu). Such increases in student populations will add increasing demand for housing units and student housing in Flagstaff, which may further impact cost and availability of housing in the region.~~



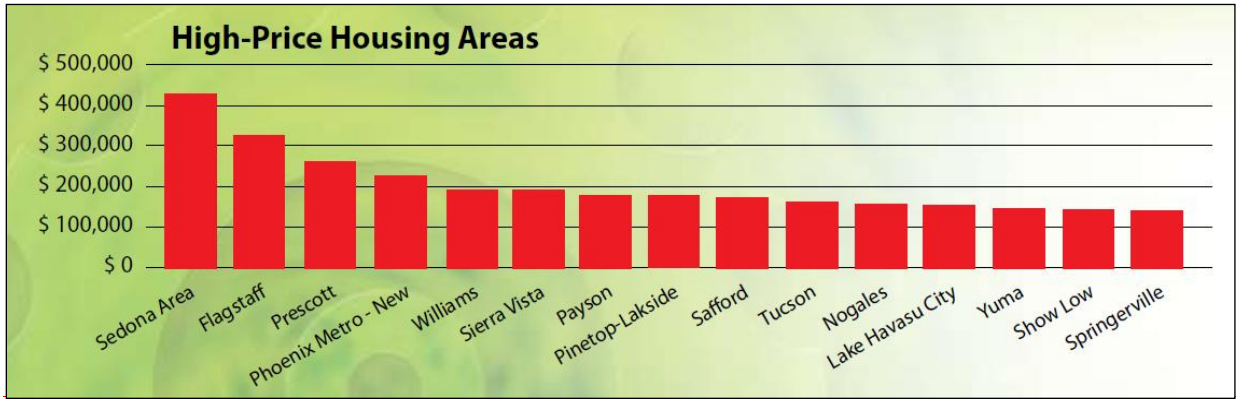
Source: NAU Planning & Institutional Research

~~b. Affordability~~

~~Government programs define "cost burden" as paying more than 30% of gross household income for total housing cost (rent or mortgage and utilities); however, this definition is more appropriate to moderate income households than to lower or higher income households. Simply stated, lower-income households burdened by housing costs may have little remaining to pay for the essentials—clothing, food, transportation and child care, while higher income households may choose to pay more for housing. Housing cost burden also has costs to the community and economic development: when housing costs are too high or the quality of construction is poor, employers have difficulty attracting and retaining qualified labor. For major employers, housing affordability is often a factor in location decisions.~~

~~According to a 2010 cost-of-living report compiled by the Council for Community and Economic Research, the Flagstaff composite cost of living index was 114.8, or 14.8% higher than the national average. The composite index reflects pricing in six categories: housing, groceries, utilities, transportation, health care and miscellaneous goods and services. This report indicated that housing is the main factor influencing the higher cost of living in Flagstaff, with a composite cost of living index for housing of 148.9%, or 48.9% higher than the national average. This further demonstrates the need for affordable housing policies and programs. Figure 2, below, shows a housing cost comparison between Arizona cities. Note that Flagstaff is only second to the Sedona area in terms of housing price.~~

Figure 2: Housing Cost Comparison among Arizona Cities



Source: Arizona Department of Housing, "2009: Arizona's Housing Market …a glance."

~~Approximately half of the households in Flagstaff rent their homes, and the proportion of renters and owners has not changed significantly since 1990. Renting is most common among lower income households, whose housing choices are limited. In 2008, there were an estimated 10,908 renter households in Flagstaff. As shown in Table 2, Flagstaff has a higher proportion of renters and a lower homeownership rate than the State of Arizona and the U.S. average; however, this is common in cities with a major university.~~

Table 2: Tenure, 1990-2007 Housing and Community Sustainability Nexus Study			
% of Households	**1990**	**2000**	**2007**
Flagstaff			
Owners	50%	48%	51%
Renters	50%	52%	49%
Total	**100%**	**100%**	**100%**
Arizona			
Owners	64%	68%	—
Renters	36%	32%	—
USA			
Owners	64%	66%	—
Renters	36%	34%	—

Source: Housing and Community Sustainability Nexus Study, February 14, 2008

It has been estimated that second homes make up approximately 16% of the total housing stock in Flagstaff (Housing and Community Sustainability Nexus Study, February 14, 2008). The impacts of these seasonal and recreational units are significant. The average household income of second homeowners in Flagstaff is $280,000 per year, compared to an average of $59,350 for the year-round population (City of Flagstaff 2011 Analysis of Impediments to Fair Housing Choice). Given the higher income of seasonal occupants, it follows that demand from second home owners has played a significant role in the local housing market.

The following policies support standards and programs for the elimination of substandard dwelling conditions; improvement of housing quality, variety, and affordability; and provision of identification, analysis, and forecasts of current and future housing needs to promote adequate sites for housing. This element makes equal provision for the housing needs of all segments of the community, regardless of race, color, creed, or economic level.

4. Goals & Policies

Goal H.1: Promote housing opportunity for all economic sectors of the population to ensure a variety of types and price points.

Policy H.1.1: Further and advance the establishment of home ownership and affordable rental opportunities for all economic sectors.

Policy H.1.2: Encourage accessory dwelling units.

Goal H.2: Provide a variety of types of quality housing and related services to ensure affordable housing options along the housing continuum – from homelessness to homeownership.

Policy H.2.1: Seek opportunities for and eliminate barriers to adaptive reuse for affordable housing.

Policy H.2.2: Support on-going funding for community housing non-profit organizations which provide housing services, further the development of housing stock and promote innovative solutions to attainable housing needs for clients along the housing continuum – from homelessness to homeownership.

Policy H.2.3: Maintain and expand governmental relationships to increase resources for the development of affordable housing.

Goal H.3: Further housing that is decent, safe and sanitary.

Policy H.3.1: Eliminate substandard housing units by conserving and upgrading the existing housing stock.

Policy H.3.2: Preserve, enhance, and revitalize existing neighborhoods.

Policy H.3.3: Provide incentives for residential infill development and redevelopment.

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C. Conservation, Rehabilitation, and Redevelopment Element

1. Introduction

The role of redevelopment and infill is integral to the quality of life for those living in and travelling to the City of Flagstaff and the surrounding region. Redevelopment and infill efforts contribute directly to ideas that have consistently emerged from public outreach efforts over the last twenty years. Some of those ideas include using land efficiently, developing economic opportunities, providing multi-modal transportation networks, promoting activity centers, and preserving open spaces. A previous public outreach process developed the Vision 2020, precursor to the 2001 Regional Plan. Vision 2020 promoted infill as a means to provide affordable housing for a variety of income levels, and recommended blending various development models, such as clustering, mixed-use development, and infill that reflects existing neighborhood attributes. The critical and dynamic nature of redevelopment and infill tools requires a policy that allows federal, state and local tools that are developed over time to be implemented by the City of Flagstaff and Coconino County.

The intent of this Element is to provide a policy framework on which quality and well-designed redevelopment and infill projects grow and enhance the community. Effective policies require vision and flexibility that respond to change; implementing a policy that respects and embodies the values of the community is the goal of this document. Land use patterns and transportation networks complement each other to meet that same goal. As such, redevelopment and infill projects should seek to improve the relationships between land use and transportation as well as to the underlying zoning categories.

Revitalization is one of the goals of a redevelopment and infill program. Revitalization enlivens and preserves the unique character and distinct culture of a neighborhood. Design solutions that are context-sensitive restore a sense of walkability using human-scale buildings, roads, and signage. Blending design traditions of the region with new ideas and the design themes of adjacent developments strengthens the sense of community and identity. From the public open houses and focus groups, the community has identified the following priorities:

Revitalization should occur at the neighborhood as well as regional scale, and should relate to aesthetic treatment of the existing developed area. Revitalization, as defined by the Flagstaff community, should include:

- Repairing what is already in place,
- Adding new vigor to buildings, streets, and neighborhoods with remodeling, fixing-up, and adding-on,
- Keeping and building human scale streets and buildings,
- Addressing needed neighborhood retail, bus stops, social spaces, green spaces, sidewalks, crosswalks, and public art with quality urban design and materials,

- Creating safe streets, and

- Preserving community integrity, character, and livability.

Redevelopment and infill may inspire new development, which should keep the character of the surrounding community, employ modern technology with respect for context, maintain and promote a sense of place, and promote infill over sprawl and walkability over auto-oriented design. Redevelopment is an important tool to encourage a portion of the area's growth into established, yet underutilized, urban core areas with existing infrastructure. This growth inward helps reduce the amount of outward growth, or new development in undeveloped areas, and can also help encourage further conservation efforts. The community desires to establish a healthy balance of redevelopment and new development.

Redevelopment and infill are encouraged throughout the developed urbanized areas within the FMPO boundary by implementing the most recent legislative tools or financial advancements as policy guidelines. From that standpoint, redevelopment areas have been designated for the city that consists of corridors, various neighborhoods, and contiguous areas as indicated on the ***Map xx***. The map articulates higher volume road types, aged or at-capacity infrastructures, commercial corridors and residential neighborhoods, and identifies likely and desired areas for redevelopment and infill. More detailed planning will be required as these areas resume or begin more active roles within the community, fulfilling the *Regional Plan* goals of a more compact, connected, and walkable community of neighborhoods. Ideally, more detailed planning will not only produce specific area and neighborhood plans, but will also use the most effective tools for encouraging and implementing redevelopment and infill projects. Redevelopment and infill contribute to mixed-use, sustainable, multi-modal neighborhoods and activity centers along with regional automobile-oriented developments which meet the needs of neighboring residents and a larger regional community.

Editor's Note: This element must include a discussion of PLANS AND PROGRAMS FOR the elimination of slum and blight (I see no discussion of slum or blight) and community redevelopment ("housing sites, business and industrial sites and public building sites)

Current government programs, staff and tools being used to promote these revitalization and redevelopment efforts are:

a. Staff: The City of Flagstaff has dedicated staff to an evolving redevelopment program, which is part of the Economic Vitality Division. The County currently is not involved in active redevelopment programs or projects.

b. Programs

- Brownfield Program – this program works with property owners to mitigate 'brownfield' issues, which include contaminated soils, second-hand materials, and unlicensed and inoperable vehicles. This is a voluntary program through the City's Redevelopment Program.

c. Projects

- Downtown Management Plan – is an ongoing effort to deal with parking maintenance and marketing in our downtown area.

- **Redevelopment Plan Update** - *Redevelopment staff is analyzing the 1992 Flagstaff Redevelopment Area Designation and Redevelopment Area Plan*. *Should City Council elect to move forward, the community will be engaged in a broad outreach effort to update the Redevelopment Plan.*

- East Flagstaff Strategic Plan for Economic Community Development (January 2001) Field Paoli Development Strategies – Downtown – East Gateway

- The Sunnyside Neighborhood Association Revitalization Strategy (2006)

- Flagstaff Redevelopment Area Designation and Redevelopment Area Plan (1992)

- Fourth Street Corridor Study – North

- Fourth Street Corridor Walkability Audit

- Route 66 Streetscape Design Proposal *(2009)*

2. Relationship to Vision and Guiding Principles

3. Goals and Policies

Goal CC.7 – Revitalization and Redevelopment of the urban core shall be compatible with and enhance the overall community character.

Policy CC.7.1 – Promote Quality Infill Development which is contextual with surrounding development.

Policy CC.7.2 – Promote Identified Redevelopment Areas

~~VIII. – Development / Transportation / Growth~~

~~A. Land Use and Growth Areas Element~~

~~B. Cost of Development~~

~~C. Circulation and Bicycle Elements~~

~~A. Land Use and Growth Areas Element~~

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C.

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XII. Economic Development

Introduction

The Flagstaff region will continue to build a robust and resilient economy which is concurrently independent and globally connected. By continuing to be adaptable and supportive with targeted investments, the region will be able to increase business diversity and opportunities, supply local needs, increase exports and build a broad tax base. The region will encourage and warrant investments and net job creation for diverse industry sectors. Understanding that the purpose of economic development is to improve overall community prosperity, the region's residents and businesses support collaborative economic development activities.

Flagstaff serves as the economic hub of Northern Arizona, providing goods and services for region. With over 8,000 businesses[43] (over 20% which are service related) that employ over 72,000 people, as well as over 4 million visitors annually, the top employment industries are government, education, science and research, healthcare and healthcare product manufacturing, tourism, transportation, and utilities. Over 5,000 people commute to Flagstaff daily to work from southern outlying communities. *Pie chart here*

Significant regional economic development partners[44] continue to identify opportunities and help focus community efforts to diversify and strengthen all employment.

Flagstaff recognizes the biggest **opportunities** for job prosperity are within the current growth sectors of: bioscience, astronomical sciences, earth and life sciences[45], advanced manufacturing, innovation and technology, software and digital, forest restoration and forest products, professional services, construction services, health care and medical services, engineering and architectural services, alternative energy production[46], outdoor recreation, agriculture and regional food, telecommunications, as well as the expansion of knowledge-based, creative and cottage industries, as well as emerging and future sectors and technologies. Growth potential is seen in industrial / logistical warehousing and multi-modal transportation facilities. The current transportation links of major interstate, rail and air routes puts the Flagstaff region central to huge metro markets.

The Flagstaff region provides global, national and regional entrepreneurs with the lifestyle premium of quick access to vast open spaces with a diverse social and community culture for leisure, art and recreation pursuits. Due to its geographically remote location, the region requires economic security and self-sufficiency in the way of: a responsive education system to effectively train a workforce for future needs; industrial land served by infrastructure; efficient communication and high-speed internet; a culture of healthy idea-exchange; accessible housing options; efficient transportation; and protection of the existing high-quality of life.

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[43] Source: Bureau of Labor Statistics – *NAU Rural Policy Institute, 2010; City of Flagstaff Business Licenses.*

[44] Regional Economic Development Partners include, but are not limited to: City of Flagstaff Economic Vitality; Coconino Community College; Economic Collaborative of Northern Arizona (ECoNA); Flagstaff Chamber of Commerce; Northern Arizona University; Northern Arizona Builders Association; Northern Arizona Board of Realtors; Sustainable Economic Development Initiative (SEDI); as well as all for-profit and non-profit development and community development groups.

[45] Source: Northern Arizona University Rural Policy Institute: Location Quotient / Economic Trends.

[46] Alternative Energy Production – wind farms and commercial solar energy production; http://www.realazcorridor.com/ ; http://www.ses.nau.edu/pdf/SmithAzPolicy.pdf ; Coconino County's Alt. Energy Production growth----.

This element is focusing on these **THREE priority areas of public investment:**

1) Maintaining and expanding **infrastructure** to support and promote economic development
2) **Concentrating development** for higher efficiencies, and
3) Maintaining and enhancing our **community's image**.

What is the role of the Regional Plan in community Economic Development?

The Regional Plan provides the community VISION which encourages business and job creation by guiding the use and conservation of community resources, and gives direction for sound public investment which supports economic growth. This vision is articulated in words and maps

Relationship to Vision and Guiding Principles

The region's economic resilience is promoted by the entrepreneurial, intellectual, environmental, and social vitality[47] of its citizens. Increased job opportunities, job diversity and an increase in the 'livability index' is the result of smart growth through quality development, preserving this unique sense of place, and celebrating the innovative spirit. The following goals and policies are intended to promote a year-round resilient economy.

Goals and Policies

Responsive Government

A responsive government is one that goes beyond providing basic services; it understands the community vision and develops policies and procedures to create a healthy and sustainable business environment. Good government processes lead to transparency and consistent decision making. This is attractive to the businesses of tomorrow looking for a particular quality of life. Governing agencies can collaborate with regional economic development partners and use available economic development tools to identify ways to advance targeted investments in infrastructure, private investment, create jobs and better planned new development. This leads to overall increased community prosperity.

The Economic Development element takes into account that the future may hold a declining, steady-state, or growing economy, and that the Flagstaff region does not work or act alone, but influences and is influenced by this greater context of the global community.

Goal ED.1. Transparent, expeditious and predictable government processes will create a healthy environment for business.

> ***Policy ED.1.1.*** The City and County government bodies are committed to maintaining and establishing new public-private partnerships to spur economic development.
>
> ***Policy ED. 1.2.*** Steadily improve access to easily understandable public information.

[47] Social vitality is the 'invigoration' or 'continued and increased activity' of the citizens, cultural activities and civic engagement (such as voting). Similar to 'community vitality' – the overall well-being of the residents.

Policy ED. 1.3. The City and County will provide an accurate and up-to-date procedural guide for business development.

Policy ED 1.4. Use economic best practices to promote quality and fiscally sound projects.

Policy ED. 1.5. Local governments and the surrounding sovereign tribal nations are encouraged to collaborate on mutually beneficial economic development initiatives.

Policy ED 1.6. The region will work towards developing a redundant telecommunications system.

Education and Workforce Training

Flagstaff can brag of its highly educated population *(39.4% hold university degrees; compared to the national average of 24.4%)*[48] and responsiveness to workforce training. Tomorrow's workforce will focus on research / development and innovative thinking. Therefore, regional efforts for education and training should provide for the full range jobs, including all service industries, vocational training, high-tech, customer service, innovative thinking, and creative problem-solvers. A well-established labor force is essential in attracting a new business, as it is a primary factor in determining a new business location as well as a local business' ability to expand. A well-trained, well-compensated, and diversified labor force contributes to a healthy local economy and positive community image; as well as helping to contribute to the needs of duel income families. *See Appendix J – Workforce Continuum and largest employers.*

As quality employers and employees demand high-quality K-12 / Pre-school through university education for their children and future workforce, the region's educational institutions can incorporate **S**cience and **T**echnology interpreted through **E**ngineering and the **A**rts, all based in **M**athematical elements (STEAM). High quality educational opportunities at all levels are essential to sustain a healthy, diverse economy through the Science, Technology, Engineering and Mathematics (STEM) Initiative, and support Flagstaff as America's first STEM community.[49]

Goal ED.2. Support and encourage an excellent educational system which promotes critical thinking and job training programs at all levels.

Policy ED.2.1. As industry sectors emerge and grow, regional workforce development partners will take a proactive role by preparing the local labor force for current and future workforce needs.

Policy ED 2.5. Support collaborative workforce training efforts between Coconino Community College, Northern Arizona University, and regional economic development partners with the regional employer's needs. *See Appendix H – Workforce Training Resources*

Policy ED.2.2. Encourage efforts to provide a full range of high-quality educational opportunities for all residents and for life-long learning.

Policy ED.2.3. Promote the success of pre-school through university education including science and technology, the liberal arts, and entrepreneurship.

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[48] 2010 Census

[49] Insert Mayors Proclamation language here. 2012

Policy ED.2.4. Promote Science, Technology, Engineering and Mathematics Education at all levels.

Business Retention, Expansion and Entrepreneurship

The Flagstaff region is home to businesses with healthy national and international markets, providing thousands of jobs to the community. Equally important, over 55% of the region's businesses are independent owner-operated businesses [cite source]. 25% of all households have the propensity of building a home-based business and this is growing. Flagstaff's diverse businesses are essential to the region's economy, providing jobs for economic stability, opportunities for youth, and opportunities for innovation and research. Small businesses are often the output of great entrepreneurial ideas, retaining and expanding these innovation companies is paramount to Flagstaff's economic health and resilience. Manufacturing, healthcare, education, tourism, research and development, arts and culture, as well as forestry, agriculture and utilities all contribute to the economic health of the region. *See Appendix I – Employment and Wages to compare industry sectors.*

Goal ED.3. The regional economic development partners will support the start-up, retention and expansion of existing business enterprises.

Policy ED.3.1. Regional economic development partners will continue proactive programs to foster the retention and expansion of existing enterprises and home-based businesses in the community.

Policy ED.3.2. Support and promote the diversification and specialization of the tourism sector, with heritage-, agri-, eco-, and adventure-tourism.

Policy ED.3.3. Strengthen the arts, culture and education sectors as important economic drivers in the community.

Policy ED.3.4. Support plans, programs, and capital expenditures to stimulate the investment of private capital in the existing commercial areas for all industry sectors.

Policy ED.3.5. Take advantage of federal, state and local incentives available for business retention and expansion efforts.

Policy ED.3.6. Advocate the economic sustainability and growth of businesses with opportunities for transitional commercial space, leased space and property ownership.

Policy ED3.7. Foster entrepreneurialism and start-up businesses in sectors which demonstrate considerable growth potential with incubator programs.

Policy ED 3.8. Support and encourage regional agriculture.

Policy ED 3.9. ~~Protect existing business and industrial areas from encroachment of incompatible or non-complimentary uses that would threaten their viability or ability to continue to operate~~. Protect existing business and industrial areas from encroachment and allow for expansion.

Business Attraction

The Flagstaff region emphasizes a diverse local economy, welcoming all industry sectors to help create a strong economic base. Strategic recruitment of targeted industry sectors will expand and diversify the economic base, benefiting the community as a whole. Economic development partners will work together to develop and manage a strong, singular marketing message. Public private partnerships are needed to invest in the necessary infrastructure. Attraction efforts should focus on high-skill, high-wage and low-impact jobs as evidenced in Flagstaff's current growth sectors and emerging technologies.

Goal ED.4. Support efforts to recruit new businesses and industries compatible to the region.

> ***Policy ED.4.1.*** Publicize all developable property, with property owner's consent, within the region with an understanding of infrastructure needs and applicable Zoning Code standards.
>
> ***Policy ED.4.2.*** Land use and development within the (Urban Service Boundary / Urban Growth Boundary) will promote variety and flexibility in development options.
>
> ***Policy ED.4.3.*** Facilitate regional economic development by participating in cooperative ventures throughout the Northern Arizona region.
>
> ***Policy ED.4.4.*** Identify and support community resources which assist new businesses, such as workforce development, marketing, building processes, venture capital, financing, and management. *See Appendix H.e – Community Business Support Services*
>
> ***Policy ED.4.5.*** In an effort to promote the sustainability of resources, the City will encourage all new and expanded commercial and industrial development to be energy and water efficient.
>
> ***Policy ED.4.6.*** Develop Specific Area Plans for targeted industrial / business park land, which has been identified as major employment centers in the Regional Plan.
>
> ***Policy ED 4.7.*** Prioritize attraction of companies which contribute to low-impact and livable wage jobs.

Community Character

Visitors, employees and businesses are attracted to a community which values its surrounding natural beauty, unique cultural heritage, and built environment. The image presented by a community can determine the location decision of a new or relocating business. Existing businesses are more likely to expand and reinvest in a community with a positive self-image and a strong sense of civic pride. Cities which invest in beautiful streets, public spaces, architecture and maintaining the natural and built environment foster and encourage private investment.

Goal ED.5. Flagstaff will continue to promote and enhance its unique sense of place as an economic development driver.

> ***Policy ED5.1.*** Support planning, design and development that positively contributes to the community image with flexibility and creativity.
>
> ***Policy ED5.2.*** Coordinate and manage community branding to effectively position the region for global marketing.

Policy ED5.3. Leverage the region's assets of history, culture, natural environment, educational and scientific facilities as an economic development tool.

Policy ED5.4. Invest in attractive community gateways, main corridors and public spaces to draw the business and workforce the region desires.

Coordinating policies – *Community Character Element*

Activity Centers

Designated activity centers for industrial, industrial park, Business Park, intermodal facilities, mixed-use, collaborative business incubators, and employment centers **will focus public investment for needed infrastructure and connectivity**. Understanding how the activity center currently exists, what the potential market supports, what the potential density might be, and what infrastructure is needed to make this happen will help the stakeholders, decision-makers, developers, and businesses work in concert to collaboratively invest in the region's concentrated centers of activity. Within the region there are both rural and urban centers which are suitable for different levels of activity and have different levels of services available.

Goal ED.6. Promote the continued physical and economic viability of the region's commercial districts by focusing investment on existing and new activity centers.

Policy ED.6.1. The local municipalities will promote higher density development in targeted areas where economically viable and desired by the public.

Strategies:
- Re-zone (pre-zone) activity center for minimum height, address urban form and parking issues.
- Utilize Capital Improvement Program to upgrade infrastructure to desired density needs.

Policy ED.6.2. Endorse efficiency of infrastructure with compact development within targeted activity centers.

See Activity Center Types in land use section.

Activity Centers identified as needing infrastructure and possibly redevelopment to reach potential:

Regional Centers:

URBAN

- Historic Downtown - *investment in appearance, cleanliness, etc. – Business Improvement District*
- Flagstaff Central District – *same as above*
- Fourth Street Activity Corridor – *strategies from ED 6.1 & land assemblage for redevelopment*

SUBURBAN

- Milton Road (University Center) – *strategies from ED 6.1 & land assemblage for redevelopment*
- Butler Avenue: Sawmill to Little America –*Specific Area Plan*
- Flagstaff Mall and Auto mall –*Specific Area Plan*

Neighborhood Centers:

URBAN

- Fourth Street, 7th to Cedar –*Specific Area Plan & strategies from ED 6.1*
- Humphrey's Basha's Center (connected to FMC) - *Specific Area Plan & strategies from ED 6.1*

SUBURBAN

- Woodlands Village / Wal Mart plaza - *Specific Area Plan*
- Cedar Safeway Shopping Center - *Specific Area Plan*
- Butler / Fourth - *Specific Area Plan – part of larger planning efforts*

RURAL

- 89A / Silver Saddle - *part of County Area Plan*
- Townsend Winono / Slayton Ranch Rd - *part of County Area Plan*
- Ft. Valley Road / Peakview - *part of County Area Plan*
- Kachina - *part of County Area Plan*

Employment Centers:

- Airport Business Park –*Specific Area Plan & strategies from ED 6.1*
- FMC Medical Campus –*Specific Area Plan*
- Ft. Valley Cultural Corridor –*Specific Area Plan*
- Innovation Mesa –*Specific Area Plan exists and in progress*
- Northern Arizona University – *NAU Masterplan exists and in progress*
- Bellemont –*Specific Area Plan*

Redevelopment and Infill

Redevelopment provides one of the greatest opportunities for the Flagstaff area to increase density appropriately in the desired locations, but it must be achieved with sensitivity to the natural and built surroundings. Sensitive, contextual redevelopment is key to preserving districts, neighborhoods, and community character; achieving increased development opportunities, economic stability, and tax base; reducing blight, infrastructure expenses, and sprawl; and assuring an overall sense of pride, diversity, and identity within the urban area. Major redevelopment projects can restore economic viability to vacant and underutilized areas of the community. Conservation and rehabilitation of existing neighborhoods and commercial centers also focus growth inward, acting as a catalyst for protecting open space on the periphery of the urban areas.

Goal ED.7. Promote redevelopment and infill as a well established means to accomplish a variety of community economic, planning, and environmental goals.

Policy ED.7.1. Maintain and upgrade existing infrastructure, invest in infrastructure, to make redevelopment and infill an attractive, financially more viable, development option.

Policy ED.7.2. Establish flexibility in development standards and processes to assist developers in overcoming challenges posed by redevelopment and infill sites.

Policy ED.7.3. Consider creative policy and planning tools (such as transfer of develop rights or transfer of development obligations) as a means to incentivize redevelopment and infill.

Policy ED.7.4. Encourage in and invest in voluntary land assemblage in an effort to create better utilization and opportunities for development.

Policy ED.7.5. Provide public education regarding the sustainability and beneficial economics of redevelopment and infill.

IX. Economic Development

A. Introduction

1. Existing Conditions
2. Global Context
3. Trends

B. Relationship to Regional Plan Vision and Guiding Principles

C. Goals and Policies

1. Community Image
2. Business Retention, Expansion and Development
3. Business Attraction
4. Education and Workforce Training
5. Economic Cluster Areas – 'Activity Centers'
6. Redevelopment and Infill
7. Responsive Government

A. Introduction

The Flagstaff region must develop an economically robust and resilient community to sustain, thrive, and plan for growth in both prosperous and inclement times as well as to grow diverse local businesses and industry to supply our regional needs and export demands and, by doing so, to increase our overall community well-being. The Flagstaff region plans to remain a vibrant community by building upon our existing resources and strengths, being adaptable to on-going changes, and using targeted investments to spur economic development.

1. Existing Conditions

The Flagstaff region includes 3,300 businesses[50] that employ over 40,000 people. The top four employment industries are Government (local, state and federal government employees) (23.2% of the employees within the FMPO region), Education and Healthcare services (13.9%), and Leisure and

[50] Source: Bureau of Labor Statistics – *NAU Rural Policy Institute, 2010*

Hospitality (14.9%) followed by Trade, Transportation and Utilities (11.9%).[51] The top employers are Northern Arizona University, Flagstaff Medical Center, and government – Federal, State of Arizona, Coconino County, and City of Flagstaff. As the public sector provides the community with critical services and significant employment opportunities, decline in this sector's employment has a significant impact on the private sector as well.

The **regional economic development partners**, working together to provide job generation and workforce training are: the Economic Collaborative of Northern Arizona (ECoNA), Sustainable Economic Development Initiative (SEDI), The Northern Arizona Center for Entrepreneurship and Technology (NACET), Coconino Community College Corporate and Community Learning: Small Business Development Center (SBDC), Coconino County Career Center, Northern Arizona University, and the Flagstaff Chamber of Commerce.

The **principal constraints** in attracting new businesses include the proximity to large urban economies, the high cost of housing, the limited supply of land and buildings with infrastructure available for commercial / industrial uses, and the limited number of jobs to attract two members of a working household.

On the other hand, the Flagstaff region's ability to adapt to those challenges is the attribute that will increase economic opportunities. As research and development ventures continue to grow and thrive with the existing highly-educated workforce, the region will attract more related industries and amenities for those high paying wage industries. Technology infrastructure can make global access-to-market for intellectual products almost instantaneous, overcoming the distance from market obstacle. The science industries continue to thrive with the diverse medical, earth science, bio-tech, and astronomy-oriented businesses in the area. With such central growth, job diversity will continue to grow, providing greater opportunity for dual income households. The Flagstaff region provides global, national and regional entrepreneurs with the lifestyle premium of quick access to vast open spaces with a diverse social and community culture for leisure, art and recreation pursuits.

Flagstaff's unique opportunities and constraints call for nurturing the entrepreneurial spirit, enabling small-to-medium-sized businesses to grow, and understanding that resource protection and economic growth work hand-in-hand. Natural resources serve multiple roles in this community: lending to an aesthetic and healthy quality of life, generating outdoor recreation as a main tourist draw, and providing raw materials for development. The economic landscape is truly based upon the natural landscape, the outdoor life-style, and how the built environment, urban form, and cultural amenities complement our sense of place.

2. Global Context

As the world continues to adapt to the global economic shift, one thing is very sure – nobody can predict the future economy, the emergence of paradigm-shifting technologies, or the impulsiveness of regional and global politics. These global variables influence the local economy greatly, and are a consideration in any resilient economic plan. Each section within the Economic Development element takes into account that the future context may be a declining, a steady-state, or a growing economy, and

[51] Ibid

that the Flagstaff region does not work or act alone, but influences and is influenced by this greater context of the global community.

3. Trends

Given the current allocation of resources and our present requests for land and space, the future economic growth for the region appears to be on a course for commerce concentrations in earth and life sciences[52], such as research, development and manufacturing of scientific / medical products, alternative energy production[53], outdoor lifestyle recreation, telecommunications and tele-commuting, and home-based and small businesses. Growth potential in industrial / logistical warehousing is foreseen at the Airport Business Park, a future Bellemont Business Park, and Innovation Mesa.

To support community economic security with this type of economic growth requires a responsive education system to effectively train the workforce, industrial land served by infrastructure, efficient communication and high-speed internet, a culture of healthy ideas-exchange, accessible housing options, efficient transportation, and protection of the existing high-quality of life.

To provide the Flagstaff community with a resilient and sustainable economic base, Economic Development policies must provide for adaptable approaches to development. The consolidation of hundreds of public comments has ascertained that the **THREE priority areas of public investment focus are:**

1) Maintaining and expanding **infrastructure** to support and promote strategically located activity and employment centers,

2) Concentrating development for higher efficiencies, and

3) Maintaining and enhancing our **community's image**

B. Relationship to Vision and Guiding Principles

The region's economic resilience is promoted by the entrepreneurial, intellectual, environmental, and social vitality of its citizens. Increased job opportunities and an increase in the 'livability index' is the result of smart growth through quality development, preserving this unique sense of place, and celebrating the innovative spirit. The Flagstaff region:

- Focuses on community economic stability by supporting the people who provide jobs, workforce, business development, entrepreneurial ideas and solutions.
- Embraces sustainability by providing triple bottom line practices[54] in the industrial, manufacturing, and retail sectors.

[52] Source: Northern Arizona University Rural Policy Institute: Location Quotient / Economic Trends.
[53] Alternative Energy Production – wind farms and commercial solar energy production; http://www.realazcorridor.com/ ; http://www.ses.nau.edu/pdf/SmithAzPolicy.pdf ; Coconino County's Alt. Energy Production growth ---.
[54] "Triple Bottom Line": Profit, People and Planet - http://www.economist.com/node/14301663

- Supports Smart Growth with a plan that creates economic activity centers to reduce automobile commuting time and by promoting local synergies between co-located businesses.
- Nurtures healthy economies and ecosystems by preserving our sense of place.
- Supports business growth with alternative modes of transportation, such as the public transit Mountain Line, to help reduce auto dependence, expand workforce mobility, and increase the community's overall connectivity.

C. Goals and Policies

1. Community Image

The Flagstaff region's natural environment, cultural heritage, seasonal weather, and opportunities for outdoor recreation and activities are the main draw for tourists, companies, and entrepreneurs. Visitors and businesses are attracted to a community which values its surrounding natural beauty, appreciates its unique cultural heritage, and maintains its built environment. The image presented by a community can determine the location decision of a new or relocating business. Existing businesses are more likely to expand and reinvest in a community with a positive self-image and a strong sense of civic pride, confidence, and well-being.

Research has defined "quality of place" as one of the most important factor in personal fulfillment. Four factors influence this quality: walkable and mixed-use community design, the value a community places on the arts, the integration of the built and natural environments, and the degree to which a community values its history.[55] The prevailing community value is that Flagstaff embraces and supports high-quality design and development while also using flexibility and creativity to achieve this.

ED Goal ED.1 – Maintain authenticity[56] while enhancing the community image.

Policy ED1.1 – Recognize the connectivity between quality of life[57] and economic development.

Policy ED.1.2 – Promote and provide incentives for quality redevelopment and infill projects.

Policy ED.1.3 – Understand the importance of and coordinate community branding.

Policy ED.1.4 – Emphasize air and water quality, and alternative energy development as essential to the economic health of the region.

2. Business Retention, Expansion & Entrepreneurship

[55] Congress for New Urbanism conference, 2012. Keynote address: Richard Florida
[56] "Authenticity" – retaining a sense of place; maintaining unique community character.
[57] "Quality of life" – why people and businesses locate here, why tourists visit and spend money.

Over 55% of the region's businesses are employee-owned small businesses that employ 4 people or fewer. Small businesses are essential to the region's economy, providing diverse jobs for economic stability, first job opportunities for community youth, and opportunities for innovation and research. Small businesses are often the output of great entrepreneurial ideas or scientific research. It is important to focus retention and expansion efforts on industries providing high-quality jobs, from small start-ups to established local businesses with international clients. Since small businesses face greater risks, assistance and support can help to assure long-term success.

Regional economic development partners, including county and municipal governments, Economic Collaborative of Northern Arizona (ECoNA), the Chamber of Commerce, the Northern Arizona Center for Entrepreneurship and Technology, and education institutions will continue proactive programs to foster the retention and expansion of existing enterprises in the community. Flagstaff's strong entrepreneurial spirit lends itself to developing a diverse range of businesses, promoting a more resilient economy.

Goal ED.2 – The regional economic development partners will support the start-up, retention and expansion of existing small and micro-business enterprises.

Policy ED.2.1 – Support the growth and diversification of small businesses.

Policy ED.2.2 – Support and promote all viable economic engines, including arts and cultural amenities.

Policy ED.2.2 – Support and promote the diversification and specialization of the tourism sector.

Policy ED.2.3 – Support the education sector as an important economic driver in the community.

Policy ED.2.4 – Support plans, programs, and capital expenditures to stimulate the investment of private capital in the existing commercial areas.

ED Goal ED.3 – The city will support the retention and expansion of compatible businesses.

Policy ED.3.1 – Promote the expansion of existing production companies in all industry sectors.

Policy ED.3.2 – Utilize current local, county, state, and federal incentives for business retention and expansion efforts.

Policy ED.3.3 – Advocate the stability of business owners as property owners.

3. Business Attraction

Strategic recruitment of business is critical to the region's economic future. Targeted industry sectors should reflect the economic, environmental, and social characteristics desired in our community

image. An expanded and diversified economic base will benefit the community by providing greater stability to the economy and a wider variety of jobs, which in turn will assist in the reduction of unemployment and underemployment.

The Flagstaff region desires a healthy economy with opportunities for quality development, diverse employment of various economic levels, low-water use and high-wage industries, and responsible businesses that contribute to the fiscal stability of the Flagstaff economy. Efforts to attract and assist development of new businesses should be continued to ensure the economic welfare of the community. Business attraction requires all economic development partners expand cooperative efforts to safeguard and enhance the region's reputation.

In seeking to strategically recruit businesses, the region must do more than boast a beautiful environment. Preparing currently zoned industrial and business park acreage with appropriate infrastructure could greatly increase the region's ability to diversify the economy with additional high-wage jobs. This Plan promotes targeted investment in the near future to provide the infrastructure for employment growth in identified activity centers. *See Activity Centers, subsection e*.

Goal ED.4 – Support efforts to recruit new businesses and industries compatible to the region.

Policy ED.4.1 – Utilize current inventory software, to understand all developable property within the region, along with knowledge of all infrastructure needs, zoning and challenges.

Policy ED.4.3 – Land use and development within the (Urban Service Boundary / Urban Growth Boundary) will promote variety and flexibility in development options.

Policy ED.4.4 – Facilitate regional economic development by participating in cooperative ventures throughout the Northern Arizona region.

Policy ED.4.5: In an effort to promote the sustainability of resources, the City will encourage all new and expanded commercial and industrial development to be energy and water efficient.

Policy ED.4.6 – Identify and support community resources which assist new businesses, such as marketing, building processes, venture capital, financing, and management.

Policy ED.4.7 – Develop Specific Area Plans for targeted industrial / business park land, which has been identified as major employment centers in the Regional Plan.

4. Education and Workforce Training

Flagstaff's population has a large portion of university degrees *(39.4% compared to the national average of 24.4%).*[58] Jobs, education, and training form a critical component of the region's economic

[58] 2010 Census

development strategy. A well-established labor force is essential in attracting a new business, as it is a primary factor in determining a new business location. It is also a pertinent to business retention and expansion. Quality employees also demand high-quality K-12 education for their children.

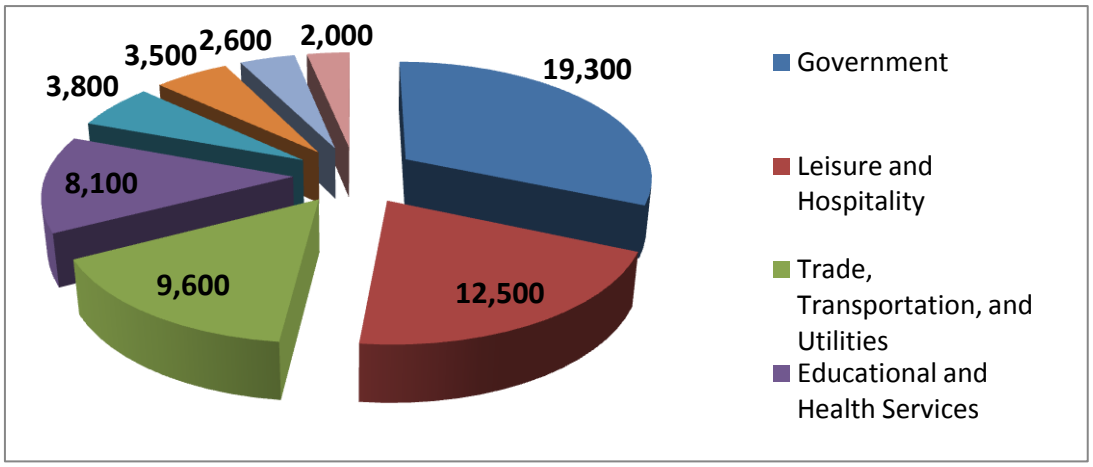
A well-trained, well-compensated, and diversified labor force contributes to a healthy local economy and positive community image which, in turn, attracts additional new job opportunities. High quality educational opportunities at all levels are essential to attract new business and sustain a healthy, diverse economy, as well as to enhance the quality of life. The workforce of tomorrow will have a focus on research and development, as well as innovative thinking. Regional efforts should provide adequate training and education for the entire continuum throughout the region (all service industries, vocational training, high-tech, customer service, innovative thinking, and creative problem-solvers).

Coconino County Labor Distribution

Labor Distribution remains within the body of this report as the region, in its rural character, must remain acutely aware of those industry sectors already existing and capable of expansion, and those which the region would like to attract.

Unlike urban areas, rural regions rarely exist at equilibrium in terms of the supply and demand of labor. For this reason workforce development entities must align approaches to create a healthy labor pool that may be used to attract capital to the area. Workforce development will work closely with regional economic development entities to ensure a viable labor force for existing and expanding businesses, business attraction in higher wage and environmentally appropriate industry sectors, and applicable workforce development educational programs that remain proactive and at least 2 years ahead of demand.

Graph __: Number of jobs within sectors for Coconino County



Goal ED.5 – Support and encourage an excellent educational system which promotes critical thinking and job training programs at all levels.*

Policy ED.5.1 – As industry sectors emerge and grow, regional workforce development partners will take a proactive role by preparing the local labor force for current and future workforce needs.

Policy ED.5.2 – Encourage efforts to provide a full range of high-quality educational opportunities for all residents and for life-long learning.

Policy ED.5.3 – Promote the success of post-secondary education including science & technology, the liberal arts, and entrepreneurship.

Policy ED.5.4 – Promote STEM Education at all levels.

5. Activity Centers

Designated activity centers for industrial, industrial park, business park, intermodal facilities, mixed-use, and employment centers will focus public investment for needed infrastructure and connectivity. Understanding how the activity center currently exists, what the potential market supports, what the potential density might be, and what infrastructure is needed to make this happen will help the stakeholders, decision-makers, developers, and businesses work in concert to collaboratively invest in the region's concentrated centers of activity. Within the region there are both rural and urban activity centers which are suitable for different levels of activity and have different levels of services available.

Activity Centers needing infrastructure (and possibly redevelopment) to reach potential:

Urban Center- Historic Downtown – See Community Character, Downtown Goals and Policies –

Employment Centers:

- Airport Business Park
- Innovation Mesa
- FMC Medical Campus Expansion

Regional Centers:

- Milton Road (University Center) – redevelopment needs – retail and residential
- Fourth Street Activity Corridor – civic, education, healthcare, retail and residential
- Butler Avenue – tourism, retail / restaurant, industry / jobs

Neighborhood Centers:

- Woodlands Village / Wal Mart plaza
- Cedar Safeway Shopping Center
- Basha's Shopping Center N. Humphrey's (connected to FMC Employment Center)

Rural Centers (not served by municipal utilities):

- Cheshire / Ft. Valley Road
- 89A / Silver Saddle

ED Goal ED.6 – Promote the continued physical and economic viability of the region's commercial districts by focusing investment on activity centers.

Policy ED.6.1 – The local municipalities will promote higher density development in targeted areas where economically viable and desired by the public.

Policy ED.6.2 – Endorse efficiency of infrastructure with compact development within targeted activity centers.

Insert Activity Center Map here…

6. Redevelopment and Infill

Redevelopment provides one of the greatest opportunities for the Flagstaff area to increase density appropriately in the desired locations, but it must be achieved with sensitivity to the natural and cultural surroundings. Community conservation and redevelopment are key elements in achieving economic stability; expanding the city's tax base; and assuring an overall sense of pride, diversity, and identity within the urban area. Major redevelopment projects can restore economic viability to vacant and underutilized areas of the community. Conservation and rehabilitation of existing neighborhoods and commercial centers also focus growth inward, acting as a catalyst for protecting open space on the periphery of the urban areas.

ED Goal ED.7 - Foster redevelopment while maintaining the community image.

ED.7.1 - Promote the continued physical and economic viability of the city's neighborhoods and commercial districts through infrastructure maintenance and incentives for development.

ED.7.2 - Address the special needs of areas that are experiencing blight or potentially hazardous conditions to assure the health, safety, and welfare of local residents.

ED.7.3 - The municipal governments will apply "full cost life-cycle accounting" in the cost-benefit analysis of redevelopment projects.

ED.7.3 - Big Box development proposals will consider feasibility in future re-use.

7. Responsive Government

An effective government is one that provides basic needs and services to residents and industries alike. A responsive government is one that understands the needs and wishes of the community and modifies policies and procedures to create a healthy environment for business and protect the region's quality of life. Governing agencies can collaborate with regional economic development partners to identify ways to encourage private investment, create jobs, and increase community wealth. Organized efforts to target investments and infrastructure upgrades can result in increased private business investments, job growth, expanded educational opportunities, a transparent public process, and better planned new development.

A responsive government is essential to the creation of a resilient economy that includes democratic values in the sustainable development process. Given the complexity of finite natural resources and diverse community demands, the region will need to become increasingly competitive to achieve its economic development objective of a resilient economy. The variety of private and public economic development agencies and organizations in the region must improve coordination to address existing and future needs. The City of Flagstaff and Coconino County are committed to providing a streamlined process and a culture of "helpfulness" to ensure the steady progression of economic development in the area. Additional attention to economic development tools, including state legislative changes, will be necessary to create a flexible and proactive environment for business opportunities.

A significant factor in any community's economic development is the ability of its government to respond quickly and appropriately to the needs and desires of its citizens, particularly as we advance into an era of social and environmental stress. With emerging new technologies, regional government has the increased potential to respond to individual citizens, neighborhood associations, businesses, schools, universities, and others in a timely and effective manner. A highly responsive government is attractive to the businesses of tomorrow looking for a particular quality of life. Tangible results include increased private business investments, infrastructure investments, job growth, expanded educational opportunities, better planned new development, less traffic, and better air quality.

Goal ED.8 – Government processes will create a healthy environment for business.

Policy ED.8.1 – Municipal government is committed to maintaining and establishing new public-private partnerships to spur economic development.

Policy ED. 8.2 – The public will have access to public information and easy to understand government processes.

Policy ED. 8.3 – Municipal government will facilitate the development process by providing an accurate and up to date procedural guide for development, available on-line and in print form.

Policy ED. 8.4 - City and County departments will work collaboratively and maintain communications on a regular basis.

X. XIII. Recreation Element

A. Introduction

B. Relationship to Vision and Guiding Principles

C. Background Information and Existing Conditions

D. Development of Recreation Areas

E. Goals & Policies

A. Introduction

The Flagstaff Region boasts one of the best 'quality of life' communities in the nation, in part due to the abundant indoor and outdoor recreational opportunities available to residents and visitors alike, all of which are extremely productive to the community's public health. The Flagstaff region has numerous public and private recreational facilities, including City and County parks and recreational facilities, Arizona State Parks, federal forest land, school playgrounds and playfields, golf courses, private neighborhood parks, and a privately-run ski area on federal land. In addition, the region has, and is developing, a regional trail system, bicycle routes, and many local, state, and federal roadways are scenic drives. Parks, recreational opportunities, and open space are vital parts of the community's 'green infrastructure' as well as the social infrastructure that helps define the unique character of the region. Support for recreation improvements, park redevelopment, and new park development projects for the City and County, respectively is demonstrated in the Coconino County's *Organizational Master Plan* (2009) and the City of Flagstaff's (2011) adopted comprehensive *Parks and Recreation Organizational Master Plan* (2012). These policy documents provide key priorities and recommended strategies for investing citizen approved tax-revenues.

In addition to developed recreational facilities, the region has significant open space available for recreational purposes. Where designated on the "open space" systems maps, it is the intent to plan for open space with conservation values compatible with active parks and trails while protecting land. Where parks/recreation facilities are proposed adjacent to or within open space land, the facility design will be sensitive to the open space values. The resulting design will be harmonious, well-organized, and constructed with consideration to how the park and open space will best function. Parks/recreation areas may provide gateways onto open space and vice versa.

As an important indicator of the region's quality of life, parks and recreation facilities and opportunities will continue to grow and be maintained with community support for optimal services. The capital improvements, programs, and services to continue to the level expected by the population will most likely require creative financing and partnerships.

B. Relationship to Vision and Guiding Principles

As well as promoting a healthy quality of life, urban and rural recreation opportunities are a means to promote active stewardship of the natural and built environment and citizen vitality. High-quality parks and recreation facilities can be built and maintained in a sustainable fashion which supports a healthy ecosystem, enhances a resilient, year-round economy, preserves a unique sense of place, and provides social opportunity for all citizens and visitors.

~~C.~~ Background Information and Existing Conditions

The following is a summary of existing parks and recreation facilities within the region:

City of Flagstaff Parks and~~&~~ Recreational Facilities

As the population of Flagstaff has grown, so has the desire to enhance both the quantity and quality of recreation opportunities within the community. Through the 2011 *Parks and Recreation Organizational Master Plan* process, public opinion stressed quality and maintenance of facilities, as well as increased arts and cultural opportunities. The Flagstaff Urban Trail System (FUTS) is a ~~publicly-funded~~ fundamental part of the 'green infrastructure,' one fully supported by the community, that weaves together the city and county parks, recreational facilities, open spaces, and federal recreational lands.

City of Flagstaff Parks and Recreation Facilities*	
Neighborhood Parks Acreage	**Community Parks**
Arroyo Park *8 acres*	Bushmaster Park *20 acres*
Bow and Arrow Park *3 acres*	Foxglenn Park** *28.3 acres*
Cheshire Park *4.4 acres*	McPherson Park *40.3 acres*
Coconino Park *.25 acres*	
Colton Park *.75 acres*	**City-Wide Regional Parks**
Guadalupe Park *.75 acres*	Buffalo Park *215 acres*
Heritage Square *.25 acres*	Continental Park *105 acres*
Joel Montalvo Park *2.1 acres*	Thorpe Park** *219 acres*
McMillan Mesa Park** *2.5 acres*	
Mobile Haven Park *1.8 acres*	
Old Town Springs Park *.2 acres*	**Recreation Facilities**
Plaza Vieja Park *.25 acres*	Aquaplex – *recreation, exercise and leisure pool* **
Ponderosa Park *2.5 acres*	~~Cogdill Recreation Center~~
Smokerise Park *.75 acres*	Thorpe Park Community & Senior Center **
University Highlands Park *.9 acres*	Flagstaff Recreation Center
Mountain View Park *1.3 acres*	Jay Lively Ice Rink **
Wheeler Park *2.5 acres*	BMX Bicycle Park **
Community Partnership Recreation Facilities	
Murdock Recreation Center	
FUSD Playing Fields** *(Killip, Christensen, Sechrist, MEMS and Thomas – 18 acres of turf and 3 BB Courts)*	
Cogdill Recreation Center	

* These facilities total approximately ~~712~~ 709 acres and 53 miles of Flagstaff Urban Trail System.
** New / additional / updated park or recreational facility added since the 2001 Regional Plan.

Coconino County Parks and~~&~~ Recreational Facilities

Coconino County has worked hard, and the public has agreed to help pay for, enhanced outdoor recreational opportunities. The 2009 Parks and Recreation Organizational Masterplan highlights maintained and improved existing facilities, upgrades to increase capacity, a focus on large parks devoted to natural areas, open spaces, corridor trails, passive recreation, nature education/adventure camps, and special events. As local county communities agree to participate in fundraising, operation, and facility development, additional parks will be added.

Coconino County Parks and Recreation Facilities within FMPO Boundaries	
Community Parks	**City-Wide Regional Parks**
Peaks View Park *27 acres*	Fort Tuthill *413 acres*
Raymond Park *12.5 acres*	Pumphouse County Natural Area *115.2 acres*
Sawmill Multi-cultural Art & Nature Center *2 acres*	Rogers Lake Natural Area *2,250 acres*
	Recreation Facilities
	Fort Tuthill
	- *Fairgrounds, racetrack, equestrian facilities*
	- *Amphitheater, campground, Military museum*

*** http://www.fs.fed.us/r3/coconino/recreation/index.shtml

Arizona State Parks

Riordan Mansion State Historic Park is located within the City of Flagstarr and is the only operating State Park facility within the Regional planning district. This historic structure of exemplary Northern Arizona architecture, circa 1904, provides tours and event space.~~, and is located within the City of Flagstaff.~~

Coconino National Forest

The ~~National ‘~~Flagstaff Ranger District ~~‘~~offers ~~ample~~ numerous recreation opportunities within the Flagstaff Region, including campgrounds, cabins, hiking and horseback riding trails, wilderness areas with ~~amazing~~ remarkable geological features, scenic drives, water play and various snowplay opportunities. National Forest land surrounding the urban community is vulnerable to short term closures due to fire danger, wildfires and seasonal road closures from heavy snow or exceedingly wet weather.

Coconino National Forest Recreation Facilities within FMPO Boundaries***	
National Parks	**Wilderness Area**
Sunset Crater	Kachina Peaks
Wuapatki	
Walnut Canyon	
Campgrounds	**Special Activities**
Bonito	Elden Pueblo – archaeological site
Little Elden	Lava River Cave
Lockett Meadow	Cinder Hills OHV Area
O’Leary	
Ashurst Lake	**Boating / Fishing**
Canyon Vista	Ashurst Lake
Dairy Springs	Lower and Upper Lake Mary
Kinnikinick	Marshall Lake
Lakeview	Mormon Lake *(just outside FMPO Boundary)*
Pinegrove	
Scenic Drives	**Snowplay Opportunities**
Around the Peaks Loop *44 miles*	Flagstaff Nordic Center
Schultz Pass Road *26 miles*	Snowbowl Ski Area
Snowbowl Road *15 miles*	Peakview
	Wing Mountain
	Kendrick Snowmobile Trail System *(just outside FMPO*

	Boundary)
	Mormon Lake Ski Touring / Snowmobile Trail System *(just outside FMPO Boundary)*

D. Development of Recreation Areas

As the region's population grows, recreational opportunities must increase to maintain or improve recreational levels of service (LOS). Measurable standards to ascertain whether or not recreational levels of service are being met are determined by a combined matrix of acreage, amenities, quality of facilities and demand. Playgrounds, sport fields and courts, ramadas, restrooms, and other amenities need to be provided relative to the population. Open space, hiking, camping, boating, and snowplay opportunities are available within the region, and help provide the region's high quality of life as well as economic potential. Each jurisdiction within the region establishes its own desired level of service. Careful consideration and planning must ensure that existing and future park acreages provide a full range of amenities, and that all jurisdictions complement and enhance each other. The separate jurisdiction's Mmaster plans guide the number of parks, type of parks, and location of parks by land availability, funding resources, development patterns, existing development, and identified deficiencies within a given area. As indicated on the (*Map xx*), park expansion is shown both in existing developed areas, where growth patterns continue to infill and create demand, and in undeveloped areas where growth and the need for park facilities is projected.

Coconino County Parks and Recreation Organizational Masterplan: In 2009, Coconino County Board of Supervisors approved the Coconino County Parks and Recreation Department's Organization Master Plan, which "establishes goals, policies, and strategies to reposition the department to provide a wider range of outdoor programs and services to a wider range of citizens. Goals to be addressed through 2019 are facility management, repair and replacement; financial and budgetary management; strategic growth; and new programs and facilities."
Three fundamental directions were established in the Master Plan process:
1) Maintain and improve existing facilities, including capital repair and replacement, and upgrades to expand capacity or generate additional revenues for parks;
2) Focus on large parks devoted to natural areas, open spaces, corridor trails, passive recreation, nature education/adventure camps, and special events; and
3) develop additional county parks in local communities that agree to participate in fund raising, operation, and facility maintenance."[59]

City of Flagstaff Parks and Recreation Organizational Masterplan: The City of Flagstaff is in the process of updating athe 1996 *Long-range Master Plan for Parks, Recreation and Open Space* (1996). The objectives of this Masterplanning effort are: to represent the community; represent Flagstaff's unique character; be fiscally sound; forward-thinking; accessible; integrated with other plans and planning efforts; and to be sustainable. The approach is to view the Parks, Recreation and Open Space Masterplan as 'Green Infrastructure'; use benchmarking standards; have a focused program appropriate to the Flagstaff community; build and operate with smart financing mechanisms; and to keep an accessible, open and inclusive process. *AECOM, Leslie Dornfeld, AICP, Project Manager.*

Snowplay: An on-going discussion with the private and public sector, snow-play is a major outdoor recreation amenity to residents and visitors as well as an economic income source for the community. Collaborative efforts between the County, City, National Forest and private recreation providers have produced a number of initiatives. For example, the potential for 'ski-buses' for school-age students,

[59] http://www.coconino.az.gov/parks.aspx?id=15334

Northern Arizona University students and possibly one for visitors in a park-and-ride situation would alleviate certain existing snow-play traffic congestion along Humphrey's Street and Ft. Valley Road. In addition to the existing Wing Mountain, Crowley Pit, Peak View and Walker Lake, all north of the City of Flagstaff, other non-skiing snow play options have been developed: Fort Tuthill County Park established a snow-play area in 2010 that includes a 'kiddie' sled hill, cross-country ski trail, snowshoe trail, and open space for passive snow play. It is located southwest of the City limits off of Highway I-17. There are two other central locations are being considered within the City of Flagstaff. These options are to provide safe places for families to park, sled, snow-shoe, build snow-men, and cross-country ski within established trails. Snow play areas also need to include rest-rooms, trash and recycling cans, and refreshment amenities. To include the objective of combined resources, allowing for multi-season use and increased capacity, would only further many other Regional Plan goals. See Map *xx* for existing and potential future snow-play areas.

E. Goals and& Policies

Goal Rec.1. The region will have a healthy system of convenient and accessible parks, recreation facilities, and trails.

> ***Policy Rec.1.1.*** Active and passive recreational sites shall be integrated and within walking distance throughout the region to promote a healthy community for all city and county residents and visitors.
>
> ***Policy Rec.1.2.*** Promote partnerships to offer parks, recreation facilities and resources with public and private entities.
>
> ***Policy Rec.1.3.*** New or updated public facilities will include parks, open space and/or recreational opportunities where feasible.
>
> ***Policy Rec.1.4.*** Incorporate sustainable building and maintenance technologies and Universal Design into parks and recreation facilities.

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XII. Monitoring & Implementation

A. Annual Review

B. Community Indicators

C. Implementation Priorities

1. Short vs. Long-term Action Needs
   (Coordinate with STRATEGIES SECTION)

2. Collaboration

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Appendix A - GLOSSARY

Activity Centers*:*

ADA: Americans with Disabilities Act

ADOT: Arizona Department of Transportation

Activity Center: An area within a community characterized by mixed land uses, high density, and compact, traditional development patterns, typically resulting in a high level of activity.

Administrative facilities: are those typically thought of office space. Typically, it will house offices, conference rooms, training rooms, reception areas, copy and break areas, filing, storage and workstations. Administrative space is approximately 60-70% offices/workstations and 30-40% common/support space.

Adequate Public Facilities: the public facilities and services necessary to maintain adopted level of service standards in specific geographic areas for various facilities, such as but not limited to streets, park and recreation facilities, water and sewer service, storm drainage, and fire and police protection.

Airport: An area of land or water that is designed or set aside for the landing and taking off of aircraft, including those for private use and those used by ultra-light aircraft.

Airport, Municipal: The City of Flagstaff's Pulliam Municipal Airport.

Airspace Height: Height limits in the Airport Overlay (AO) District. As set forth in this Ordinance, the elevation data shall

Alternative Mode:

Appropriate Locations (for land uses): areas that are determined to be appropriate for a particular type of land use or activity, as typically measured by compatibility of land use; appropriate levels of impact, such as may result from noise, lighting, or other environmental effects;

Appropriate Urban Design

Approach Surface: An area longitudinally centered on the extended runway centerline and extending outward from each end of the primary surface. An approach surface is designated for each runway based upon the type of approach available or planned for at the runway end. The inner edge of the approach surface is the same width as the primary surface and expands uniformly to a width for each runway in compliance with the Airport Master Plan clear zone drawings**.**

A.R.S.: Arizona Revised Statutes

Area Type: The character of an area related to its pattern of development – urban, suburban or rural.

Arterial Street: A larger road or highway purposed to carry longer trips across the region and to other regions.

Building: A roofed structed built, maintained, or intended to be used for the shelter or enclosure of persons, animals, or property of any kind. The term is inclusive of any part thereof. Where independent units with sepreate entrances are dived by party walls, each unit is a building.

CAC: Citizens Advisory Committee (for the Regional Plan update)

Civic: Not-for-profit or governmental activies dedicated to arts, culture, education, recreation, government, transit and municipal parking.

Civic Building: A building operated by governmental or not-for-profit organizations and limited to Civic related uses.

Civic Space: An outdoor area dedicated for civic activities.

Collector Street: A street purposed with collecting traffic from surrounding local roads, often within a neighborhood or district, and delivering to an arterial street.

Community Facilities: Public or privately owned facilities used by the public, i.e. streets, schools, libraries, parks; also facilities owned by nonprofit private agencies, i.e. churches, safe houses, and neighborhood associations.

Commuter [Bus] Route: A fixed bus route running only during peak commuter times, usually in the morning and evening.

Compact Development: Development that takes place within a defined, concentrated or central area, sometimes designated by an urban growth boundary.

Compatible Design: See 'Contextual development' below

Complete Streets: Streets, roadways and highways that are designed to safely and attractively accommodate all transportation users: drivers, bus riders, pedestrians and bicyclists. Travelers of all ages and abilities can safely move along and across a complete street.

Conservation Land System is a process of identifying areas of biological, cultural, and historical significance that are most important for conservation. This can include habitat for wildlife species of concern, sensitive plant communities, riparian areas, archaeological sites, working ranchlands, etc. Conservation can be achieved through a variety of means, including acquisition, conservation easement, transfer of development rights, conservation-based ordinances and guidelines, and intergovernmental agreements. *(From Regional Plan Environmental Conservation Element DRAFT, 2011)*

Conical Surface: The area extending outward from the periphery of the horizontal surface for a distance of 4, 000 feet. Height limitations for structurs in the conical surface area are 150 feet above airport height at the inner boundary and increase one foot vertically for every 20 feet horizontally to a height of 350 feet above airport height at the outer boundary.

Context: refers to the significant development, or resources, of the property itself, the surrounding properties, and the neighborhood. Development is contextual if designed to complement the surrounding significant visual and physical characteristics, is cohesive and visually unobtrusive in terms of scale, texture, and continuity, and if it maintains the overall patterns of development. Compatibility utilizes the basic design principles of composition, rhythm, emphasis, transition, simplicity, and balance of the design with the surrounding environment.

Context or (contextual development) refers to the significant development, or resources, of the property itself, the surrounding properties, and the neighborhood. Development is contextual if designed to complement the surrounding significant visual and physical characteristics, is cohesive and visually unobtrusive in terms of scale, texture, and continuity, and if it maintains the overall patterns of development. Compatibility utilizes the basic design principles of composition, rhythm, emphasis, transition, simplicity, and balance of the design with the surrounding environment.

Context: The nature of the surrounding environment including its development patterns, density, landscaping, history, residential, commercial or undeveloped character and other aspects to be respected.

Context Sensitive Solution (CSS): A way of designing and building transportation facilities and infrastructure to seamlessly reflect and minimize impacts to adjacent land uses and environmentally-sensitive areas. A CSS project complements its physical and natural setting while maintaining safety and mobility.

CSS: Context Sensitive Solution

Cultural Resource is an aspect of a cultural system that is valued by or significantly representative or informative of a culture, and generally refers to archeological resources and the histories surrounding these cultures.

Density: The amount of development within a given area, usually expressed in dwelling units, population or employment per acre or square mile.

Design Standards: standards and regulations pertaining to the physical development of site including requirements pertaining to yards, heights, lot area, fences, walls, landscaping area, access, parking, signs, setbacks, and other physical requirements.

Design Traditions of Flagstaff: – A term that generally refers to the built architectural and engineering works that predate World War II, that were vernacular, small scale, simple in form, practical, and built from locally available materials - even in Downtown where the builders were emulating the facades of other regions. Buildings of this era are generally dominated by masonry construction (including its inherent historic proportions and details), limited concrete, wood and heavy timber, and ironworks. The level of design refinement tended towards more rustic in the outlying areas and more formal closer to downtown. Outside influences included farmhouse, Victorian, and Craftsman home designs, Midwestern downtowns, the railroad industry, and parkitecture. Notably this term does not refer to specific architectural styles, but rather to more timeless ways of building that are equally applicable to new architecture and engineering. See page 4 for overall aesthic contributions, and pages 18 and 19 for the reference of different design 'eras'. Also see 'context'.

Design Traditions of Flagstaff – A term that generally refers to the built architectural and engineering works that predate World War II, that were vernacular, small scale, simple in form, practical, and built from locally available materials - even in Downtown where the builders were emulating the facades of other regions. Buildings of this era are generally dominated by masonry construction (including its inherent historic proportions and details), limited concrete, wood and heavy timber, and ironworks. The level of design refinement tended towards more rustic in the outlying areas and more formal closer to downtown. Outside influences included farmhouse, Victorian, and Craftsman home designs, Midwestern downtowns, the railroad industry, and parkitecture. Notably this term does not refer to specific architectural styles, but rather to more timeless ways of building that are equally applicable to new architecture and engineering.

Disaster Preparedness Shelter: Structure(s) used during such instances where there is an imminent loss to sleeping areas identified through a declaration of threat, disaster, or emergency by means of a natural disaster, or other identified community threat. The shelter may or may not have food preparation or shower facilities.

Employment Centers:

Emergency Services: Services to the public for emergencies and related buildings or garages (e.g., ambulance, fire, police and rescue).

Emergency Shelter: A type of homeless shelter that provides temporary housing on a first-come, first-served basis where clients must leave in the morning and have no guaranteed bed for the next night OR provide beds for a specific period of time, regardless of whether or not clients leave the building. Facilities that provide temporary shelter during extremely cold weather (such as churches) are also included.

ESRI: Environmental Systems Research Institute

Floodplain: Any areas in a watercourse that have been or may be covered partially or wholly by floodwater from a one hundred-year flood. For the purposes of this Zoning Code, floodplain areas shall be considered as one of the following types:

1. Urban Floodplains: Delineated floodplain areas that are located indeveloped urban areas of the City.

2. Rural Floodplains: Delineated floodplain areas that are essentially open space and natural land uses and are unsuitable for urban development purposes due to poor natural soil conditions and periodic flood inundation.

FMPO: Flagstaff Metropolitan Planning Organization

FUTS: Flagstaff Urban Trails System

Governmental Service and Maintenance Facilities: Facilities that support the maintenance and servicing activities of governmental owned land, property and buildings.

Government Offices: Includes governmental office buildings and grounds.

Green: A civic space type for unstructured recreation that may be spatially defined by landscaping rather than building frontages.

Heritage Resources as an inclusive term of 'cultural' and 'historic' resources *(see below)*, enveloping historic buildings, a historic building's setting, as well as paleontological and archeological resources, including all of the cultures of aboriginal peoples and western civilization, and includes natural features and landscapes of significant uniqueness to an area. The term is more consistent with international standards and definitions. In the United States, the term "Heritage Resource" is technically interchangeable with the term "Cultural Resource.

Historic Development includes buildings, roads, signage, lighting and landscaping.

Historic Resources alone technically refers specifically to western culture and specifically to buildings.

Hospital: An institution, place, building, or agency, public or private, whether organized for profit or not, devoted primarily to the maintenance and operation of facilities for the diagnosis and treatment or care of two or more unrelated persons admitted for overnight stay or longer in order to obtain medical treatment, including obstetric, psychiatric, and nursing care of illness, disease, injury, infirmity, or deformity. The term "hospital" also includes:

1. Any facility which is devoted primarily to providing psychiatric and related services and programs for the diagnosis and treatment or care of two or more unrelated persons suffering from emotional or nervous illness;

2. All places where pregnant women are received, cared for, or treated during delivery, irrespective of the number of patients received; and

3. General and specialized hospitals, tuberculosis sanitaria, maternity homes, lying-in-homes, and homes for unwed mothers in which aid is given during delivery.

Human Caused Hazards: Hazards resulting from human developments or activities - such as faulty construction; poor site layout; improper location of land uses; airport approaches or high noise areas; overpumping of ground water; or use, storage, or disposal of explosive, flammable, toxic, or other dangerous materials or crime - may pose a threat to life and property and may necessitate costly public improvements.

Infill: the development of new housing or other uses on vacant lands and scattered vacant sites within or close to already built up areas.

Infill: New buildings on vacant parcels within city service boundaries and surrounded by existing development.

Infill Development: Development that occurs on vacant parcels that are surrounded by existing Development.

Infrastructure: [Define.]

Invasive Species: An invasive species is one that spreads and establishes over large areas and persists. Some native plants can be considered invasive in certain circumstances. The national Invasive Species Council defines invasive species as a species that is: (1) non-native (or alien) to the ecosystem under consideration; and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

Local Street: Local streets serve immediate access to property and are designed to discourage longer trips through a neighborhood.

LOS: Level of Service

Meeting Facilities, Public and Private: A facility for public or private meetings, including community centers; civic and private auditoriums; Grange halls; lodges or fraternal associations; union halls; dance, martial arts, and music studios; meeting halls for clubs and other membership organizations; and similar facilities. Also includes functionality related internal facilities such as kitchens, multi-purpose rooms and storage. Does not include conference and meeting rooms accessory and incidental to another primary use that are typically used only by on-site employees and clients and occupy less floor area on the site than the offices they support. Does not include commercial entertainment facilities or convention.

Meeting Hall: See "Meeting Facilities, Public and Private."

Mixed Use Development: A diverse and complimentary set of uses within close proximity to each other through vertical integration and/or smaller lot sizes.

Mobility: The degree to which people and goods may move safely, efficiently, and effectively between origins and destinations.

Mode: A means of travel such as pedestrian, bicycle, transit, or truck.

Mountain Link: Direct, high-frequency transit service between Woodlands Village, the NAU Campus and Downtown Flagstaff.

Multimodal: Travel or transportation systems characterized by more than one means or mode of Transport.

NAIPTA: Northern Arizona Intergovernmental Public Transportation Authority

Natural Caused Hazards: Hazards resulting from natural events, such as flooding, subsidence, earth faults, unstable slopes or soils, severe climatic conditions (e.g. drought, snow, rain, wind) that present a threat to life and property and may necessitate costly public improvements.

Neighborhood Centers –

Noxious Weeds: "Noxious weed" is a legal term applied to plants regulated by state and federal laws. Arizona Administrative Codes (AZ Department of Agriculture) define noxious weed as "any species of plant that is detrimental or destructive and difficult to control or eradicate and includes plant organisms found injurious to any domesticated, cultivated, native or wild plant."

Obstruction: Any structure or tree which exceeds permissible height limitations or is otherwise hazardous to the landing or taking off of aircraft.

Offices: Premises available for the transaction of general business and services including but not limited to professional, management, financial, legal, health, social, or government offices, but excluding retail, artisan, and manufacturing uses

Outdoor Public Use, General: Outdoor recreational uses include public areas for active recreational activities including, but not limited to, jogging, cycling, tot lots, playing fields, playgrounds, outdoor swimming pools, and tennis courts. Also included are recreational uses such as arboretums, nature areas, wildlife sanctuaries, picnic areas, recreation-oriented parks and other open spaces such as youth recreation camps.

Paratransit:

Plaza: A civic space type designed for civic purposes and commercial activities in the more urban areas, generally paved and spatially defined by building frontages.

Public Parks or Recreation Facilities: Outdoor recreation facilities that are open to the public for passive and active recreational activity, such as pedestrian activities, hiking, and jogging; or serve as an historical, cultural or archeological attraction; playgrounds; ball parks; and allowing organized competitive activities.

Public Sanitary Sewer: Includes sanitary sewer systems other than individual on-site systems approved by the State or County and maintained by a public or private agency authorized to operate such systems.

Public Services: Government or public services, utilities and their facilities necessary to provide services for urban development. Public services include public and private utility company facilities and all government-owned facilities except offices, landfills or mining facilities.

Public Services, Major: Services for the public that include water treatment facility, wastewater treatment facility and other services that provide major public infrastructure services for urban development.

Public Services, Minor: Services for the public that include utility substations, pumping stations and other transmission and distribution facilities.

Redevelopment: The removal of existing development and replacement with newer structures that may contribute to the transformation of the area type.

Regional Centers -

Revitalize: Repairing what is already in place, adding new vigor, remodeling and preserving.

Redevelop: New development replacing outdated and underutilized development.

Resiliency:

RLUTP: Flagstaff Regional Land Use and Transportation Plan

RTP: Flagstaff Metropolitan Planning Organization Flagstaff Pathways 2030 Regional Transportation Plan

Runway Clear Zone: A trapezoidal area at ground level, under the control of the airport authorities, for the purpose of protecting the safety of approaches and keeping the area clear of the congregation of people. The runway clear zone is the same width as the primary surface and begins at the end of the primary surface and is centered upon the extended runway centerline. The length and width are determined in compliance with the Airport Master Plan clear zone drawings.

Rural Centers -

Rural Growth Boundary: the line on a map that is used to mark lands in unincorporated areas of the county that are suitable for rural development, as well as lands to be preserved as open lands.

School: A public institution established for the purposes of offering instruction to pupils in programs for preschool children with disabilities, kindergarten programs or any combination of grades one through 12. Does not include preschools and child day care facilities (see "Day Care").

School, Charter: A public school established by contract with a district governing board, the state board of education or the state board for charter schools to provide learning that will improve pupil achievement.

School, Private: A nonpublic institution where instruction is imparted.

School, Public: Includes elementary, middle, junior high, and high schools that operate under the local school district.

Services: are anything from a fire station to a fleet shop because of the large equipment and storage involved. . Facilities in this category typically have larger space requirements because there is large equipment and/or storage involved. Heating and cooling, interior finishes, and circulation areas required for services are unique and must be addressed to be functional. Service space is defined as 15-25% offices/workstations and 75-85% common and support areas.

Small Area Plans: special area plans for a defined neighborhood or area of the city or county, typically developed with the involvement of residents of the area for which the plan has been prepared, that serve as an amendment or adjunct to the city or county general or comprehensive plan.

Stormwater Regulations: The City of Flagstaff *Stormwater Management Design Manual and LID Manual*.

Sustainability: Living and managing activities in a manner that balances social, economic, and environmental considerations to meet Flagstaff's current needs and those of future generations. A

sustainable Flagstaff is a community where the social wellbeing of current and future citizens is supported by a vibrant economy and a self-renewing healthy environment.

Structures and Objects – The broad category of "structures and objects" is designed to allow communities to recognize things that do not fall under the distinction of districts, sites and buildings, but are still important to the community because of their associated history, engineering or cultural significance.

SWOT: Strengths, Weaknesses, Opportunities and Threats (Method of Analysis)

TDM:

Transect: A sample strip of land, from the center of a region to the edge, used to examine or define development patterns.

Universal Design: [Add definition.]

Urban Center (downtown) -

Urban Growth Boundary: the line on a map that is used to mark the separation of urbanizable land from rural land and within which urban growth should be encouraged and contained and outside of which urban development should not occur.

Vernacular development refers to the tradition of design resulting in simple small structures or borrowed architectural design, such as mid-western style storefronts and craftsman bungalows, built with local materials.

Appendix B - ~~Strategies~~Comprehensive List of Goals, Policies and Strategies

[This appendix will become a comprehensive list of all goals, policies, and associated strategies in table format.]

The following strategies are a compilation of ideas from the community and the Citizen Advisory Committee on HOW to implement policy. This list is unedited and has not been endorsed by any official body or subjected to legal review. Strategies are NOT policy, and as such will not be adopted as policy language. This appendix can be used as a check list in which government and non-government agencies, non-profit organizations, educational organizations and citizens in general can develop implementation plans. This appendix may also be updated on a regular basis for the life of the Regional Plan, as organizations, structures, budgets and technology change.

It is recommended that this list of all suggested strategies related to each element is ultimately reviewed closely and condensed by combining like strategies, eliminating duplications, and organizing the complete list into categories. Instead of a list of hundreds of strategies, it may be boiled down to a number of meaningful strategic tools which implement multiple policies.

Environment & Conservation:

Climate Change and Adaptation

- Promote management strategies such as the Four Forests Restoration Initiative to increase the resiliency of our ecosystems to the effects of climate change, including thinning and other restoration techniques for our ponderosa pine forests to reduce their vulnerability to catastrophic wildfire and insect pest outbreaks while maintaining natural diversity of plants and animals.

Eco-System Health:

- Promote and contribute to widespread environmental education efforts through the public schools and beyond to build awareness of local ecological settings and issues, including how to adapt to life in a fire adapted ecosystem.
- Promote forest restoration efforts on non-federally administered lands to complement ongoing restoration efforts on the national forests of the region, while participating in the Four Forest Restoration Initiative collaborative process.
- Promote responsible recreation, tourism ventures and other uses of national forest system lands which are sustainable and of value to the local community.

Noxious Weeds:

- Develop a list of noxious and invasive weeds present in the Flagstaff region and prioritize threat level and management approach, i.e. eradicate, control, or manage.
- Develop criteria for evaluating weed management plans associated with development projects.
- Develop a set of "best practices" for capital improvement projects and private development projects.
- Continue operations of County burn tank in support of weed control operations.
- Coordinate interagency weed control operations to promote synergistic efforts, i.e. publish schedules of operations.
- Continue active participation by the City and County in the San Francisco Peaks Weed Management Area.
- Consider adoption of a weed abatement ordinance by the City and County.

- encourage the use of integrated weed management and organic practices to manage with the least possible hazard to the environment.
- **To support Policy E&C.3.1:** The City and County will cooperate with the San Francisco Peaks Weed Management Area (SFPWMA) to inventory, eradicate, and control invasive non-native weeds, including those required for compliance with federal and state regulations; prevent establishment of new infestations through public awareness and education; and restore disturbed areas with native species.

Wildlife:

- Update maps of wildlife movement corridors and species and habitat distributions included in this plan on an ongoing basis as new research data become available from sources such as federal, state and local agencies, Northern Arizona University's GRAIL laboratory, and local biologists. (CAC Minutes 11-18-10 & Tish Bogan-Ozmun email dated 4-02-12)
- Encourage developers to avoid or minimize impacts to Gunnison's prairie dog colonies whenever possible and encourage the humane relocation of prairie dogs to suitable habitat when necessary. Promote public awareness of the positive "keystone" role of prairie dogs in grassland ecosystems and consider the development of a mitigation policy to obtain suitable habitat for prairie dog translocation with financial support from project developers. (CAC Minutes 11-18-10 & Tish Bogan-Ozmun email dated 4-02-12)

Water Quality

- Identify and implement best management practices with respect to road maintenance and snow removal that eliminates, or minimizes to the extent possible, the potential for illicit discharge of contaminants into waterways, and provides appropriate mitigation measures when discharges cannot be entirely avoided.
- Educate agricultural users in practices that eliminate or reduce the potential for contaminant migration.
- Need to add strategies that detail types of watershed and aquifer management.

Open Space:

Policy OS 1.1

a. Use the guiding documents of the Greater Flagstaff Area Open Spaces and Greenways Plan, the City of Flagstaff Urban Open Spaces Plan, and the City's Long Range Master Plan for Parks, Recreation and Open Space, and County Area Plans which have Open Space Objectives as the framework for the inter-agency group.
b. Form the inter-agency institutional framework group.
c. Use Inter-agency planning and acquisition for collaborative buying power. Ownership, operation and maintenance should center in a single entity.

Policy OS 1.2

a. The inventory, criteria and objectives should be used as part of an open spaces management program to acquire, protect, and manage properties and their resources and values.
b. Map proposed open space 'connections', 'priority open lands' and 'Neighborwoods'.
c. Priority open lands to consider as collaborative efforts for preservation will include Picture Canyon and Walnut Canyon.
d. The FUTS Masterplan is one means of connection by open space and trails.

e. Identify tools and clearly articulate legal means to acquire and maintain connections, priority open lands and neighborwoods.
f. All subdivision applications be assessed for open space and recreational amenities (parks, open space and trails) within walking distance of project; either provided within subdivision or already in close proximity.
g. Permit recreational use of regional open space lands where it is consistent with the Land Use Plan and other policies.

Policy OS 1.3

a. Open Space buffers can be used to protect the character of major corridors.
b. Open Space buffers can be used to separate disparate uses such as residential areas, commercial areas and highways.
c. Identify and give examples of 'scenic views' and 'scenic roadways' to protect, such as Fort Valley Corridor's views, ridgelines, and 'green' setbacks.

Policy OS 1.4

a. Municipal and county owned open space parcels should be inventoried and classified as to specific natural quality they exhibit.
b. Development of municipal and county owned undeveloped parcels must consider preservation of its natural qualities.
c. Open spaces preserved in the process of the development of undeveloped lands should consider preservation of its special natural qualities as listed in the Open Space Goal statement.
d.

Policy OS 1.5

a. Clearly map and articulate the 'green infrastructure' as a means to establish a Conservation Land System.
b. Use the (inter-agency) Open Space Stakeholders Group to inventory and prioritize all open spaces, including Federal lands, public and privately held, in the planning area. The Stakeholders Group will ascertain the values to prioritize, along with scientific data, and provide a comprehensive implementation tool kit.
c. Utilize implementation tools through local, state and federal jurisdictions.

Water

WR.1:

- Integrate and apply the latest global best practices for water conservation technologies and reclaim water use into the 'sustainable water budget'.
- Use an assertive public education campaign to push residential and commercial water conservation.

WR.2:

- Maintenance and upgrades to water reclaim and wastewater facilities will incorporate new technologies as feasible, with efficiency, water and energy conservation of utmost concern.

WR.3:

- Use Regional water resource planning consortium to scientifically define 'regional human and environmental water needs'.
- Regional Economic Development consortiums work with Industrial Development Authority to promote and maintain economic growth with commercial low-water 'users', promoting and assisting commercial establishments to incorporate water-harvesting, water-conservation and gray-water systems into business plans, establishing fiscal and environmental sustainability.
- Development and remodeling of all public facilities set the public example by installing water-harvesting, water-conservation and gray-water systems.
- Develop an impactful public education campaign on what are 'Water Harvesting' and 'Water Conservation' by continuing existing Low-Impact Design campaign.
- Locally capture any federal incentive funds to develop water-harvesting, water-conservation, gray-water systems, and water meters; in turn making incentives available to local residents and businesses to incorporate these building technologies.
- Water Conservation Ordinance?
- Publish and make widely known the actual costs of producing and supplying water to residential and commercial users, as well as the actual cost to each user if not subsidized.
- Water management program?
- Adequate funding source?

WR.4:

- Promote compact development through:
    - Concentrating growth with using or tying into existing infrastructure.
    - Infill Incentive Districts must address utility upgrades by cost-share and/or public investments.
    - Public infrastructure, public/private financing and minimum density standards directed at Regional Plan identified Activity Centers.
    - Focus on Redevelopment, particularly for commercial centers with minimum densities promoting appropriate height and walkability, using existing utilities.

Energy

Community Indicators (or measures & progress) – how will we know if we are successful?

Ex: Increase Energy Efficiency by _____% by 2020; define what this means (energy use per capita) & how it is measured (APS)

Ex: Increase Public Transit ridership by ____% by 2020; (NAIPTA)

Ex: ____% increase of consumer change from traditional vehicles to hybrid or electric vehicles. (ADOT)

Community Indicators (or measures & progress) – how will we know if we are successful?

Ex: A biomass energy production facility has been successfully built in the region by 2020.

Ex: Individual green energy purchase has increased from ____%(currently) to _____% by 2020.

Proposed Strategies

1. Build upon our energy efficient retrofit program and develop an extensive efficiency upgrade program for existing buildings and the widest possible audience.
2. Promote the publication of energy costs for all structures on MLS listings.[60]
3. Reward innovative land use and energy efficient planning techniques.
   d. Development clustering, building orientation, multiple use facilities, and appropriate building material for construction.
   e. Provide economic incentives to shift to higher efficiencies. – What does it take to cause a market shift? Development and innovation is a partnership and a balancing act. Relationship to Economic Development.

Promote Fuel efficient vehicles:

a. Promote the installation of hybrid vehicle re-fueling stations in convenient and accessible locations.
b. Encourage the installation of hybrid vehicle re-fueling stations in cooperative arrangements with other Arizona municipalities.
c. Promote the installation of super-compact parking spaces in the highest value locations.

Strategy for Goal E.1: Reduce total and per capita non-renewable energy use through efficiency and conservation:

Education

- Increase awareness of the substantial energy involved in water production, delivery and treatment, and opportunities to reduce consumption.

Strategies for Goal E.2: Expand production and use of renewable energy.

Policy E.2.4. Develop city and County renewable energy pilot programs to showcase and educate the public and development community about the feasibility and benefits of renewable energy.

- Promote education in both the public and private sector so that renewable energy production and use is incorporated into everyday learning.
- Support workforce training for renewable energy innovation, development, installation and maintenance.

Recreation:

Rec.1.1

- Meet or exceed the need for additional active and passive recreational areas and programs as growth occurs as identified in the City and County Parks, Recreation and Open Space Masterplans.

Rec.1.2

- Continue to maximize recreational partnerships by coordinating FUSD playgrounds and playing fields to be available to the public during non-school hours.
- Continue to maximize recreational partnerships by coordinating public and private snow-play facilities for far-reaching planning, shared resources and infrastructure needs.

Rec.1.3

- Incorporate usable public recreation or 'green space' with all public facilities.

[60] Site another community example of this

- Consider shared public recreation resources for all public facility projects.

Rec.1.4

- Use reclaim water for all irrigation needs at parks and recreation facilities.
- Sustainable building practices, such as using long-lasting building practices, contextual and recycled materials, siting the building for natural solar gain, incorporating photo voltaic systems, wind turbines, water reclamation and greywater systems, will all contribute to a high-quality parks and recreation system, help maintain the unique community character and set an example for the rest of o-ur building community.
- All playground, park amenities and recreation facilities will

Housing:

1. City and county shall seek opportunities to address substandard units, including rentals.
2. With city/county land disposition, consideration will be given for the purposes of furthering affordable housing.

Community Character

Community Design/ CC.1:

Suggested Strategies:

- Enhanced public realm design to set the example and improve overall community character
- Public buildings to be centrally located, highly visible, and of quality design, permanence, community identity and sensitive to local climate.
- Promote using local materials and/ or materials sensitive to this climate and context
- Regulate / prohibit 'temporary' buildings and porta-potties to promote a positive image.
- Quality Streetscape Design with street furniture, dark-sky compliant lighting, low-water landscaping as the standard
- Respect existing neighborhood character and context for new or infill development as identified in neighborhood / area plans
- Give examples of quality design within community; examples of how to SCREEN DUMPSTERS; examples of positive landscaping and signage.
- Define 'compatible'
- Define 'contextual'
- Develop a streetscape design plan
- Zoning Code and Engineering Standards refine and define Streetscape Design Plan.
- The public sector must comply with standards and set the example.
- Set annual goal of how many 'complete streets' grace the region.
- All new development shall adopt complete street design standards
- Develop Coordinated Corridor Plans for major arterials.
- Develop coordinated Corridor Plans, including right-of-way, land use, transit and economic planning, for Milton Road, Route 66, Fort Valley Road and Highway 89A.
- Develop a 'Community Utilities Plan' which will identify and coordinate all existing and potential future needs for utilities. Prioritize undergrounding of existing infrastructure for improved appearance of neighborhood and communities' viewsheds and increased reliability of electric, phone and cable systems during inclement weather. The

undergrounding and/or screening of utilities could be in combination with streetscape improvements, FUTS infrastructure, and other road connections.

- Using community priorities and various funding mechanisms, the City shall plan to relocate and/or underground utility boxes and lines.
- All utilities will be located within site plan development, to coordinate all utilities and services in an aesthetically pleasing manner; in which both utility efficiency and community character play equal roles.

Scenic Resources, CC.2:

Policy CC.2.1 –

- Inventory views to see and where to see them from – use identified landmarks from Vision 2020
- Develop 'viewsheds to maintain' map
- Zoning Code to maintain this
- Hillside / ridgeline ordinances

Policy CC.2.2—

- Develop 'Environmental Features to protect' map
- Regulatory (Zoning Code) to establish criteria (i.e. setbacks, slopes, etc.)
- Open Space Plan (County & City) to incorporate RP map
- Conservation Land System– see 'Open Space Element' for details
- Conservation Easements – see 'Open Space Element' for details of funding and tax incentives

Policy CC.2.3—

- Establish gateways into the community with landscape and design elements.
- Coordinate gateways and corridor designs with inter-agencies (ADOT)
- Develop landscape standards and examples to frame gateway viewsheds.

Policy CC.2.4—

- Subdivision development will utilize cluster development, shared open space and the preservation or development of neighborwoods. Site planning to follow viewshed identification.

Policy CC.2.5—

- Develop visual examples of successful cluster development with shared open space, agricultural space and recreational space to encourage future subdivision (suburban or rural) design.

Art, Science, Education - CC.3

Policy CC.3.1—

- Develop Area Plan for 'Cultural Hub' of Fort Valley Road.
  The community has identified the need to improve the much-loved Coconino Center for the Arts, possibly developing a 'cultural center' along Fort Valley Road connecting the center with the Pioneer Museum, Museum of Northern Arizona and Flagstaff Arts and Leadership Academy (FALA). An area plan would help design those connections and shared spaces.

- Develop an 'Arts District' within the downtown area - Create an Art Space program to encourage artists to use and conserve existing buildings
- Develop event space / festival area within proximity of downtown
- Shared venues –
    - The Community has identified the need for an arts incubator program to support artists and galleries in developing business plans, successful business models and efficient marketing programs. Explore opportunities for a shared studio and retail gallery space for use alongside an incubator program.
    - Explore opportunities to accommodate current or emerging cultural arts programs within existing and new facilities by working with community groups for sharing of performance and exhibit space and considering the potential for new facilities.
- Support existing and encourage more cultural events, festivals, and activities in the City. The City shall encourage and support bringing more art and cultural events, festivals, activities, and performances to the City.
- Map all educational facilities (see public facilities element)
- Invest in first class educational facilities.

Policy CC.3.2—

- Ensure appropriate land for expansion, access to transit and FUTS, opportunities for shared facilities, and integration culturally into the community.

Policy CC.3.3—

- Understand that public art is also part of the architecture, landscape and design; it does not have to be a statue.
- Percent for art for public art
- Coordinate public and private spaces with innovative design
- Promote art and cultural curriculum within educational opportunities- Students who have access to quality opportunities to participate in the arts demonstrate improved performance in math, science, and technology – thus better equipping them to compete in a global workforce.

Policy CC.3.4—

- Sidewalk completion plan and program
- Measure increased # of school kids and college kids walking and biking to school

Policy CC.3.5—

- Protect dark skies
- Protect and enhance science research land uses and 'clusters' (USGS/ Science Park; Lowell Observatory Mesa; etc.) (This possibly under Economic Development Element)

Heritage Preservation, CC.4:

- establishment of an archeological sensitivity map (a portion of which is underway);
- the establishment of additional local historic district(s);
- updating historic resource inventories;
- a public education component in understanding the value of heritage preservation and training in preservation technology; and,

- collaboration and cooperation in valuing historic resources as important as private property rights

Policy CC.4.1—

- Complete archeological sensitivity map
- This item is federally mandated, but importance is underscored by remaining a policy

Policy CC.4.2—

- Publicize the benefits of existing National and Historic Districts and adaptive re-use of historic buildings
- Public Education campaign on heritage preservation value
- Public Education campaign involving preservation technologies and resources

Neighborhood Preservation:

CC.5

Policy CC.5.1—

- Create Neighborhood Plans and Area Plans;
- Support Neighborhood and Area Plans with regulatory techniques.
- Assist neighborhood organizations with resources and collaborative enhancement efforts.
- General public education: Historic Preservation and home maintenance 'workshops'.
- Collaborate with residents to stabilize, protect and improve historic districts and neighborhoods while maintaining affordable options. Involve residents in the process of planning and obtaining financial and technical assistance for the protection, stabilization, affordability and viability of their neighborhoods.

Policy CC.5.2—

- Create Historic Overlay District, when appropriate, to protect historical urban fabric;
- Infill and /or redevelopment projects must be contextual of the surrounding neighborhood and landscape.
- Implement a general public education campaign for basic preservation achievement and appropriate remodeling techniques for the average homeowner.

Policy CC.5.4

- Through transportation planning efforts, ensure new and existing areas are served by an interconnected network of streets, bicycle paths, Flagstaff Urban Trail System (FUTS), pedestrian and transit routes within and between neighborhoods.
- In particular, direct walkway and bikeway routes to schools, parks and community facilities shall be provided.
- Develop urban sidewalk plan to establish a complete pedestrian grid, built and maintained in appropriate phases.
- Secure mechanisms (i.e. redevelopment programs, bonding, infrastructure and streetscape improvements, grants, etc.) to retrofit older neighborhood streets as 'complete' with sidewalks, landscaping, and bike lanes, if appropriate.
- Secure mechanisms to retrofit older subdivisions as a connected grid.
- Equestrian neighborhoods should have trails which provide access to the National Forest.

CC.6: Neighborhood Preservation

- Downtown Management Plan – as a public/private partnership promotes the following strategies:
    - Appropriate parking management strategies, facilities and structures shall complement and enhance the community character.
    - A designated funding source for enhanced maintenance and management of the downtown area will be established.
- Future development and redevelopment projects should be developed as part of a community design charrette and respect the design traditions of Flagstaff.
- Building and urban design will be guided by the established historic overlay district.
- Define "density" and "intensity".

CC.7 Redevelopment

Tools available for revitalization / redevelopment efforts:

- Economic Development Plan – Strategic Planning
- Government Property Lease Excise Tax (GPLET)
- Industrial Incentives
- Infill Incentive Districts (ARS >>>)
- Infrastructure Investment & Construction - upgrades / replacement program (Capital Improvement Program)
- Land Acquisition / Land Bank / Preparation
- Neighborhood Economic Development Strategies
- Property Maintenance Ordinance (PMO)
- Public/Private Partnerships
- Special Districts (Taxing or Assessment)
- Transfer of Development Rights / Transfer of Obligation
- Designate Infill Incentive Areas; with regulatory framework and allowed incentives.
- Develop Infill Area Plans in order to promote quality, mixed-use walkable neighborhoods.
- Develop Community-Based Infill Incentive Program: develop neighborhood infill programs that provide residents with the opportunity to gain familiarity with and provide input on urban design, existing development, compatibility, scale, landscaping and land use patterns.
- Develop infill incentives, which can help stabilize and revitalize existing older neighborhoods.
- Develop Detailed Area Plans for Identified Redevelopment Areas, considering infrastructure needs, community-desired goals and marketability.
- Provide diverse incentives to foster reinvestment: regulatory and financial.
- Prepare Design Standards: Adopt compatibility standards to ensure that new development fits within existing neighborhoods in terms of scale, design, etc. Adopt flexible zoning standards to encourage infill and redevelopment.
- Apply Fiscal Impact Considerations: develop partnerships and financing mechanisms to help achieve redevelopment objectives.

Cost of Development

CD.1.1

- Implement appropriate funding mechanisms
- Provide annual analysis of current and possible funding mechanisms to determine effectiveness of programs
- Research and have on hand, the knowledge of all financial mechanisms available for municipal (see Appendix _____)

CD.1.2

- Research and develop public/private partnerships

CD.1.3

- Balance "Development pays for itself" with "incentivizing appropriate and desired development".

CD.1.4

- Risk-analysis will include a review of all possible funding mechanisms; bonding capacity; the potential for phased development; life-cycle cost analysis and market analysis.

Metrics:

1. Have economic development professionals completed the annual analysis of fiscal incentives?
2. Number and type of collaborations among public, private and non-profit entities.
3. Has an analysis of the fee-schedule been completed for this year?
4. Has every project of scale involved a risk analysis as identified in strategies?

Economic Development:

- High-speed internet and telecommunications region-wide
- Develop Airport Business Park and and Innovation Mesa with infrastructure
- A Belmont Business Park, located in Coconino County, would need privately funded and maintained infrastructure
- Expand infrastructure for activity centers identified as redevelopment areas
- Increase business incubator resources and incubator space (science, small business and arts)
- Improve transportation systems – system efficiencies, road connections, walkability, transit and complete FUTS
- Improve gateway corridors
- Identify commercial properties for development
- Identify properties and incentives for redevelopment and infill
- These investments will provide the community with the 'biggest bang for the public buck' and set the stage for suitable job growth.

ED 1.1:

- Viewsheds protected by design. See Community Character Policy_____
- Walkability See Circulation Policy_____
- Community character. See Community Character Policies_____
- Biodiversity. See Environment and Conservation Policy_____

- Promote and preserve Flagstaff's cultural heritage including its archaeology, architecture, and array of cultural traditions. See Community Character Policy_____
- Promote safe, distinctive, and well-maintained neighborhoods. See Community Character Policy_____
- Improve gateway and gateway corridor aesthetics. See Community Character Policy_____
- Continue to invest in Recreation and Outdoor activities. See Recreation Policy_____

ED 1.4:

- Provide resources for renewable energy development and accessibility. See Energy Policy_____
- Protect natural resources and support recreational amenities to strengthen Flagstaff's quality of life. See Environment and Conservation Policy_____

***Metrics: all need thresholds to be determined; you will see duplicates throughout the policy goals, this simply reflects the connectivity among economic, social, and environmental issues in community development; these metrics are intended to be run on an annual basis.

Metrics:

1. The percentage of native species used in a new commercial, industrial, or residential site for landscaping.
2. Is the aesthetic orientation of the construction according to Design Review Guidelines?
3. Ratio of mixed use development project to non-mixed use projects?
4. Ration of infill projects to available land for infill?
5. Ratio of brownfield projects to available brownfield projects?
6. Number of cross-marketed campaigns sponsored by the CVB
7. Sustainability of water efficiency (refer to guidelines for water efficiency)
8. Sustainability of materials and resources (refer to guidelines for materials)
9. Sustainability of energy and atmosphere (refer to guidelines for energy and air)
10. The percentage of native species used in landscaping of the newly constructed retail building.

ED 2.1

- Continue to support emerging technology incubation (NACET)
- Continue to promote incubation of local businesses (economic gardening) with incubator space and business coaching through public/private partnership ventures
- Allow various incubator spaces to develop, in promotion of various sectors (research and development; manufacturing; service; arts & culture; tourism businesses, especially outdoor sports, sports, heritage and cultural tourism).
- Foster / provide multiple opportunities for small business education, growth, job training, technology accessibility and workforce training through community collaboration
- Increase access and awareness of business assistance centers
- Leverage capital expenditures with private investments and grants for necessary infrastructure and communications
- Facilitate co-marketing
- Community coordination and participate in revolving loan funds and microloans

- Consult ALL small businesses to evaluate and streamline government procedures, evaluate policies and regulations, and re-evaluate current tax code
- Maintain business ombudsman at municipal government level, offering advice and clarifications for small businesses, as well as helping to navigate government procedures.
- Encourage the use of and coordination of community resources which allow community members to increase risk-taking, economic gardening and the growth of cottage industries (i.e. zoning to allow; less-than-market rents for start-ups; affordable insurance / health-care; child-care; micro-loans; etc.)

ED 2.2

- Utilize an economic impact analysis of all regional economic sectors including the arts, cultural, science and archeological sectors.
- Promote the development of an ARTS INCUBATOR / ARTS DISTRICT
- Continue to support the coordination and marketing of the arts community
  - See Community Character Policy_____ ARTS
- Understand how AUTHENTICITY promotes the arts / local artists establish authenticity
- Understand the potential impact and plan for future tourism needs – Eco-tourism; Heritage-tourism; Agri-Tourism, and Cultural Tourism, as well as convention and education development. See Community Character Policy_____ Heritage preservation
- Coordinate and support local BRANDING (i.e. "Buy Local"; Shared Events & promos)
- Regional planning and coordination for snowplay – understanding the possibility for shared resources and larger infrastructure and transportation needs

ED 2.4:

- Continue to maintain and enhance the urban environment balanced with Historic Preservation
- Promote destination place-making
- Foster coordination and collaboration between municipal government, small businesses and non-profits to enhance and ease the use of parking, events, and marketing.

ED 3.1:

- Foster the production of exports in the region, nationally and internationally.
- Foster a collaborative network of intellectual property and the transfer of technology in the region to local business ventures.
- Understand and promote available LAND with appropriate land use and zoning categories for growth and expansion purposes (i.e. industrial, light-industrial and business park)
- Utilize all infrastructure development financing mechanisms to ensure desired Activity Centers (industrial, light industrial and Business Park) are supported with adequate infrastructure. See Activity Centers section, p. __
- Maintain a business ombudsman office at municipal government level, offering advice, clarifications, advocacy, support and connect with community resources for all businesses.
- Provide adequate consultation and approachability to maintain and expand all employers of the region. This could be in relation to land, labor, or buildings.

ED 3.2

- Establish an annual analysis to determine how needs can be met more pro-actively.

ED 3.3

Metrics:

1. Total number of incubator spaces: total number rented
2. Number of incubator spaces per industry sector
3. Quality of service provided by ombudsman
4. Has a revolving loan fund for entrepreneurial activity been designed?
5. Has an arts incubator been created?
6. Number of CVB events or materials created around the arts.
7. Monies budgeted to CVB ratio to return on investment though BBB tax dollars

   (as the number becomes smaller, budget allocations decrease: uses exiting threshold for BBB returns)
8. Quality of service provided by an events liaison.

ED 4.1

- Continue to use http://FlagstaffProspector.com ; develop / utilize a more precise tool to comprehend more necessary data (infrastructure, zoning, topography, tax rates, etc.)
- Re-evaluate the use of data sources – use all available and viable.
- Apply existing business attraction "score sheet" for public, private and non-profits to use collaboratively.
- Continue to promote a streamlined development processes
- Encourage affordable, energy-efficient and good-looking rental options for business start-ups (how can a community do this – it is private property issues?)
- Continue to grow and target recruitment efforts and resources on small- to mid-sized corporate headquarters and regional office operations and on knowledge intensive industries. See Responsive Government section, p. __

ED 4.3

- Governmental protocol and processes will remain flexible to working with contingent and unforeseen circumstances that may arise during the development process.
- Permitting processes will be re-evaluated to determine efficiencies that may be created.

ED 4.4

- Work collaboratively with regional economic development partners.
- Bring workforce development entities and engineering and planning teams together with business attraction teams to create a holistic package.

ED 4.6:

- Create ombudsman office for business owners and developers in navigating the development process
- Once a prospect demonstrates interest, key Economic Development Staff works with City Management/Deputy Manager and Department Directors to prioritize the movement of the project- this step must have the support of the community

and demonstrates the Region's competitiveness in attracting/maintaining jobs and capital investment.

- Foster a culture of positive customer service among government and quasi-government employees to offer alternatives and advise throughout the development process and beyond.
- Address logistical and environmental parameters of development at the inception of the process.

ED 4.7:

- Specific Area Plans will provide an overall plan for future development, redevelopment, right-of-way needs, traffic enhancements, optimal building footprint potential and infrastructure needs. The plan can address potential costs and funding mechanisms (see Cost of Development sub-section).
- Target, build infrastructure for and market Industrial / Business Parks.
- Analyze the value of municipal / public support for business attraction; do the benefits outweigh the costs.
- 690 acres of industrial zoned land – what are the obstacles for development?

Metrics:

1. Number of businesses attracted per annum the fit the desired characteristics.
2. Number of business researched that fit the desired characteristics per annum.
3. Number of internal processes streamlined.
4. Number of internal processes slated for streamlining.
5. Deficiency in dollars of per month for a mortgage payment on a single-family home at the median wage of a company.
6. Deficiency in dollars per month for a mortgage payment on a median priced town-home at the median wage of a company.
7. Deficiency in dollars per month for a mortgage payment on a condominium at the median wage of a company.
8. Can this median wage make a mortgage payment on an affordable home?
9. Number and occasion of meetings with local non-profits
10. Was the municipal permit process reviewed and streamlined?
11. Number and quality of complaints received per annum.
12. Total square footage utilized per project: total amount of area remaining within UGB
13. Amount of access points to pedestrian and bicycle routes per commercial or industrial development
14. Sustainability of water efficiency
15. Sustainability of materials and resources
16. Sustainability of energy and atmosphere
17. The percentage of native species used in landscaping of the newly constructed retail building.
18. Has the economic development department consulted the community development department on all projects at the beginning?
19. Has the economic development department brought in the appropriate deputy city managers or city manager to facilitate fiscally and socially profitable project?

ED 5.1

- Advocate for the expansion of state workforce development training funds

- Coordinate the provision of workforce training and education; address the gaps and needs, as well as eliminating duplication; including basic business practices and customer service. See Table___.
- Promote coordination of the personnel needs of new and existing business with skills training programs to ensure a stable, productive labor force.
- Work in a coordinated effort with the local Workforce Investment Board, community associations, non-profits, educational organizations and economic development groups to advance workforce development program design and implementation together for long-term success.
- Promoting the development of a regional trade school, workforce training center, and/or advancement of community college workforce education.

ED 5.2

- Incentivize excellence in public education
- Support and promote life-long learning in all areas, including reading and literacy, the sciences, math, histories (local, regional, national, ancient civilization), humanities, culture, art, social sciences and creative thinking – within K-12, the community college and at the university level.
- Continue development and expansion of public library services.
- STEM Education

ED 5.4

- Science, technology, engineering and mathematics (STEM) – the workforce of tomorrow. Needed in PK-12, community college and university.

ED 6.1

- Develop a 'Specific Area Plan' for each designated Activity Center, which addresses in detail, circulation and connectivity, land use, public spaces, density and intensity, infrastructure, and aesthetics.
- Re-zone (bulk zone) as necessary

ED 6.2

- Efficient use of government (public) resources & delivery of service
- Less expensive infrastructure costs – Understand costs of redevelopment vs. Greenfield development
- Engineering standards – one for redevelopment / one for green-field development.

Metrics:

1. Ratio the number of development projects produced in identified targeted areas to number of projects produced in non-targeted areas.
2. Have development officials offered a cost-benefit analysis to all possible developers of redevelopment?
3. Amount of infrastructure produced for targeted areas per annum (ratio of infrastructure developed to total needed)

ED 7.1

- Annually review local policy incentives for development to determine what adjustments are needed, and to develop new incentives for development
- Develop safety and maintenance programs for the urban environment and public spaces

- Support an increased maintenance program of existing road infrastructure to improve the status of existing thoroughfares heavily utilized by residents, businesses, and tourists".

ED 7.3

Strategies:

- Large footprint retail space will consider potential future re-use in relation to site design and building design. The intent of this strategy is in being able to more aggressively market large empty spaces when their original use has reached its life-cycle end.

Metrics:

1. Ratio the number of redevelopment projects to total possible redevelopment project areas
2. Ratio number of redevelopment projects to green field projects
3. Total number of infrastructure improvements per annum
4. Number of infrastructure improvements in low to moderate income areas
5. Have development entities included life-cycle accounting in the cost-benefit analysis for new projects?
6. Do Big-Box plans (electrical and structurally) include variety for future use?

ED 8.2

- All public information and processes are available on-line
- Internet access is available at libraries and neighborhood centers

ED 8.3

- Business Ombudsman office located at the city to help navigate development and business processes.
- The city and county will provide an annual review of the development process to determine if efficiencies can be created.
- The city and county will run annual review, determining progress towards goals and further budgetary allocations. This report will be available to the public as an annual resource.

ED 8.4

- Economic vitality, engineers, planners, and policy makers will communicate on an on-going basis, regularly informing each other of interpretations and adjustments to development projects.
- Existing rules and regulations will be reviewed for flexibility for a project that contributes to the fiscal, social and environmental health of the community.

Metrics:

1. Have economic development officials performed an annual analysis of possible public/private/non-profit partnerships?
2. Number and type of public/private/non-profit partnerships created
3. Creation of an on-line public review process for all development projects (see Appendix 4)
4. Is internet accessible at all public sites?

5. Have development officials performed an annual analysis of the review process to determine efficiencies?
6. Does the annual budgetary allocation reflect the goals and strategies of the regional plan?
7. Has a new process of inclusivity among economic development professionals, engineers, planners, and policy experts been developed?
8. Is a process of inclusivity followed for all development projects?
9. Number of contingent policy responses to projects that contribute to the fiscal, social and environmental health of the community.

Public Facilities

PF.1

1. Consider on-going operations and maintenance costs
2. City and county maintenance yards will be of sufficient size and capability to maintain all service vehicles in a safe and efficient manner.
3. The city maintenance yard will be located in an environmentally safe location and appropriate to the neighborhood.
4. Buildings and facilities will be maintained to insure durability, functionality, and safety.
5. Create functional plans for Facilities

PF.2

1. Master plans, area plans, functional plans and capital improvements shall be coordinated.
2. Utilize the Regional Plan's maps and plans, master plans, functional plans and environmental analysis to identify primary and secondary impacts to service extensions, siting and the timing of capital projects.
3. Coordinate capital improvements with utility providers for shared improvements opportunities during construction
4. Schedule and stage public works project to reduce inconvenience to the public, residents and business
5. Seek opportunities to share facilities and recreation fields to avoid redundancy

PF.3 (Police)

1. Provide effective, visible police presence in the community, timely, appropriate response to calls for service and appropriate involvement in the resolution of community problems.
2. Provide timely, relevant information to both officers and citizens.
3. Plan and prepare for the future police service needs of the communIty.
4. Pursue sustainable alternative means of funding, volunteer services, and alternate resources to improve police services.
5. Enhance the police department's knowledge of the public's perception and expectation of law enforcement services.
6. Emphasize the role of law abiding community members, governmental agencies and the private sector in the development of successful crime prevention efforts.
7. Promote excellence is police service by providing employees an environment conducive to personal satisfaction and professional enrichment.

8. Promote the safe and orderly movement of traffic on city streets through the use of safety engineering, education and enforcement.
9. Promote a safe environment for the community's youth while investing in their healthy growth and development through involvement with parents, schools, and youth activities.
10. Pursue the reduction of the overall narcotic problem through participation with the community in education and intensified enforcement programs.
11. Encourage an interactive process within the community to address and solve problems of crime, public safety, disorder, substance abuse and quality of life.
12. Encourage and support continued research and the use of new concepts and technological improvements.
13. Encourage crime prevention through the development and use of specific design criteria, standards codes, regulations and development standards such as "cepted" guidelines.
14. Continue to conduct police facility planning studies to determine where and when new facilities will be required and what level of supporting equipment or property will be needed.
15. Continue to educate the public on issues of personal safety and crime prevention by emphasizing that all citizens need to play a part in crime prevention, in partnership with their police, in order for it to be effective.

PF.4

1. Update internal review procedures to take into account design, economic, environment and climate elements when planning for new development and supporting existing development.
2. Incorporate efficient and renewable energy processes and technologies into existing and future City and County operations.
3. Identify opportunities to reduce the incremental water and energy use as a result of population growth.
4. Research opportunities to update and offset engineering design standards to ensure enhanced preparedness for weather related impacts.
5. Apply defensible property principles to City and County facilities and infrastructure.
6. Pursue opportunities to finance ongoing forest and watershed restoration measures aimed at protecting community resources.
7. Identify the critical key infrastructure that needs to have redundant back up power.
8. Support evidence-based, ongoing assessment of the region's vulnerability and risk to changes in local climate.
9. Effectively manage emergencies and ensure public health and safety.
10. Integrate resiliency efforts into water resource management and infrastructure planning policies.
11. Incorporate resiliency and uncertainty into the region's economic development and master planning efforts.
12. Integrate resiliency goals into long-term capital improvement plans, including public infrastructure and facility projects.

13. Ensure climate variability and resiliency efforts are integrated into the role of the public EOC.
14. Integrate resource scarcity into public energy management.
15. Incorporate future climate projections into emergency response and hazard mitigation planning efforts.
16. Ensure adequate water resources and protect watershed health to meet our organizational and community needs.
17. Provide land use planning and decisions that are sustainable under uncertain future scenarios.
18. Develop criteria for the City and County master planning efforts that support resiliency and preparedness.
19. Integrate resiliency into public capital improvement project budgets by identifying operations and maintenance plans that counter weather impacts.
20. Identify efforts that support resiliency during the City and County budget review process, including program accomplishments, initiatives and performance measures.
21. Support evidence-based, ongoing assessment of the region's vulnerability and risk to changes in local climate. Plan for the impacts of natural and human-caused hazards.
22. Address Hazardous Materials Disposal and Reduction. Develop plans, programs, and incentives for the safe disposal and reduction of hazardous materials
23. Incorporate future climate projections into emergency response and hazard mitigation planning efforts.
24. Pursue opportunities to finance ongoing forest and watershed restoration measures aimed at protecting community resources.
25. Effectively manage emergencies and ensure public health and safety.
26. Support FireWise programming in vulnerable and at risk neighborhoods.
27. Incorporate future climate projections into emergency response and hazard mitigation planning efforts.
28. Ensure adequate water resources and protect watershed health to meet our

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Appendix C - Bibliography

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Appendix D – Open Space

Open Space History, Coordinated Planning and Tools

Open space has been defined and promoted as a community-wide priority from Vision 2020 *(1997)*, the main impetus for the Flagstaff Area Open Spaces and Greenways Plan *(1998)*, as well as public policies implemented through the Flagstaff Area Regional Land Use and Transportation Plan *(2001)*. A number of preservation and acquisition efforts have culminated in thousands of acres being put into open space conservation. The following plans and implementation tools highlight an inter-agency institutional framework already at work in environmental and open space planning efforts. This inter-agency framework includes the City of Flagstaff, Coconino County, Arizona Game and Fish, Arizona State Land Department, US Fish and Wildlife Services, US Forest Service, National Park Service as well as Lowell and the Naval Observatories and Camp Navajo. Future open space planning would benefit from a specific collaborative effort with these agencies along with non-governmental groups to determine open space for acquisition and management.

There are many local, state and federal initiatives working concurrently to protect and preserve open space, such as the City of Flagstaff and Coconino County's open space acquisition programs, the Arizona Preserve Initiative, Federal and State wildlife protection programs and a growing use of land protection incentives, such as conservation easements. Residents of the Flagstaff Region have a history of clearly articulating their desire to promote a healthy and sustainable community – environmentally, socially and fiscally – through the preservation of open space. The sections below outline the various open space planning efforts currently being practiced/implemented in the Flagstaff Region.

Flagstaff Area Open Spaces and Greenways Plan (OSGWP), Implementation 1998 – 2010

Some of the OSGWP accomplishments include the expansion of Fort Tuthill County Park with an acquisition of State Trust Land; the preservation of the Dry Lake caldera and conveyance of the land to the Forest Service; the County acquisition and preservation of rare wetlands at Kachina Village; and most recently, the County acquisition of State Trust Lands at Rogers Lake. Significant progress has been made toward the preservation of Picture Canyon, and a joint U.S. Forest Service and National Park Service study is underway to determine future management options for the greater Walnut Canyon area. The City and County have both developed funding mechanisms to support the acquisition and development of parks, trails, and open space projects. All of the agencies involved in developing the OSGW Plan, including the City of Flagstaff, Coconino County, Arizona State Land Department, Arizona Game and Fish, US Fish and Wildlife Service, Coconino National Forest, and the National Park Service, continue to work together to accomplish the goals and objectives of the OSGW Plan.[61]

Given the fact that the city has the potential for rapid growth, and that some public land close-in to the urbanized areas of the city may eventually transfer to private ownership, it becomes apparent that much of the city's perceived open space is only temporary in nature. The development process of infilling inevitably leads to pressures on what is perceived as open space within the urbanized areas. In many cases, vacant by-passed lands inside the city are considered and perceived as open space by city residents

[61] *To resource the full plan, please see:* Flagstaff Area Open Spaces and Greenways Plan *(1998) and OSGW* MAPS

and travelers simply because they have not yet been developed. Under this tenuous set of circumstances, it is imperative that the City continue with the programs of preserving quality open space within the urban areas of the city, building upon the framework established by the Open Spaces and Greenways Plan through Regional Plan policies.

Coconino County Comprehensive Plan

Coconino County's Comprehensive Plan is a conservation-based planning document built upon a conservation framework and ecological principles. "The principles and guidelines in this framework are based on the premise that humans are integral components of the ecosystem and that we play a crucial role in shaping our environments. Since we are a part of nature and our actions affect the health and vitality of ecosystems, we are responsible for proper stewardship of natural areas." "Humans have the ability to understand these ecosystems through science and to apply this understanding to protect the natural world. Ultimately, humans reap the rewards of conservation actions. "See *page 84/85.* The Coconino County Comprehensive Plan will be coordinated with the updated Regional Plan policies with an amendment. Coordinated open space planning between the County and City is considered a priority, and will simplify the amendment process.

Arizona Game and Fish (AZGFD)

The Arizona Game and Fish Department is proactive in developing and implementing the Arizona State Wildlife Action Plan (2005-2015), the Coconino County Wildlife Linkages Report (March 2011)[62] and the Interagency Management Plan for Gunnison's Prairie Dogs[63]. These plans were developed on the premise that the most effective way to conserve rare, declining and common wildlife is to restore and conserve healthy areas to live. Consequently, the action plan focuses on habitat types and riparian systems. The wildlife corridors, habitat areas and watchable wildlife sites, as established by the Arizona Game and Fish Department, is an important layer within the Regional Plan open space planning maps.

Coconino National Forest Land and Resource Management Plan

This plan is required by the National Forest Management Act of 1976 and takes into consideration all lands administered by the US Forest Service within the Regional Plan's boundaries, including such popular areas as the Snowbowl area and the Lake Mary Ecosystem. The plan considers, among a number of environmental concerns, wildlife habitat and riparian waterways.[64] The existing plan, signed in 1987 and amended many times since, is currently undergoing comprehensive revision with finalization of a new plan anticipated in late 2012. The Coconino National Forest Land and Resource Management Plan should be coordinated with Regional Plan open space and recreation planning policies.

Naval Observatory Station Flagstaff Integrated Natural Resources Management Plan

[62] http://www.flagstaff.az.gov/DocumentView.aspx?DID=13448
[63] http://www.fs.fed.us/r3/asnf/plan-revision/other-info/G-Prairie-Dog-Interagency-Mgmt-Plan-2007.pdf
[64] Gist, J. *Wildlife Quick Reference Guide for the Flagstaff Regional Planning Area*. March 2009. AZ Game & Fish.

Established in 1955 a few miles west of Flagstaff, Arizona, the Flagstaff station is the US Naval Observatory's[65] dark-sky site for optical and near-infrared astronomy. As a federal management plan, this document requires input and concurrence from the US Fish and Wildlife Services and the Arizona Game & Fish Department.[66] The needs of the Observatory's, both Naval and Lowell, are highly respected in open space planning.

Tools for Open Space Planning, Acquisition and Conservation

A number of different tools can be used to pro-actively implement the Urban and Rural Open Space Plans within the Regional Plan. The following outlines existing and potential tools for accomplishing this.

1. **Conservation easements:** Conservation easements offer a powerful tool to legally protect land from development; and are used throughout the United States to permanently shield land from subdivision and development. The use of conservation easements has successfully protected millions of acres of wildlife habitat, working agriculture lands and open space, keeping land in an open condition that has shown to provide significant public benefits. A conservation easement is a voluntary, legally binding agreement that limits certain types of uses, including subdivision and prevents development from taking place on a piece of property now and in the future, while protecting the property's ecological services and open-space values. Conservation easements can be held by a private non-profit land trust or a governmental agency. Conservation easements can be purchased or private landowners can donate the value of the conservation easement to a qualified organization in return for benefits with respect to income and estate taxes; some states offer state tax credits to further incentivize land conservation.[67]

2. **Open Space Acquisitions** - Coconino County: In 2002 voters of Coconino County approved the **Coconino Parks & Open Space Tax (CPOS)** that is funded with a 1/8 of 1 cent sales tax. Collection of these revenues will continue until the fund reaches $33 million. The voters overwhelmingly supported this ballot measure that costs approximately $1.63/month per person to support the acquisition of open space, redevelop existing County parks and develop new parks—all considered open space for this plan. Since 2002, over 2300 acres of open space has been acquired for County Natural Area Parks at Pumphouse and Rogers Lake. In addition, new park development has been completed at Louise Yellowman County Park in Tuba City, Sawmill Multicultural & Nature County Park in Flagstaff, and for The Pine Mountain Amphitheater at Ft. Tuthill County Park along with redevelopment of Raymond County Park at Kachina Village. Several park projects and two open space projects located on State Trust Lands remain to be completed; the Old Growth Forest adjacent to the U.S. Naval Observatory and on Observatory Mesa both of which are within the FMPO boundary for this plan. In order to engage in future open space acquisitions consideration should be given to a reauthorization of the CPOS tax requiring voter support and approval by 2014.

3. Open Space Acquisitions - City of Flagstaff: In 2004, Flagstaff voters authorized spending up to **$7.6 million on a bond issue** for "Neighborhood Open Space and FUTS Land Acquisition" over a 10-year period (2004-2014). To date, $2.4 million has been allocated by the City. The Open Space Commission identifies and recommends land acquisition to City Council, and submitted an "Open

[65] http://www.nofs.navy.mil/
[66] Gist, J. *Wildlife Quick Reference Guide for the Flagstaff Regional Planning Area*. March 2009. AZ Game & Fish.
[67] http://www.conservationtaxcenter.org ; http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/

Space Acquisition" plan to City Council in 2008. The first two parcels acquired were additional Thorpe Park land and 20 acres around Hoffman Tank, an identified wildlife corridor. Reauthorization of bond financing for open space acquisition would require voter approval in 2014. The Open Space Commission list of criteria for Open Space (2010) has been articulated as:

a. Protection of natural / cultural resources
    i. Protect Viewsheds
    ii. Wildlife Corridors
    iii. Riparian Areas
b. Accessibility for all residents (open space available within a 10-15 minute walk)
c. Educational access – opportunities for schools, neighborhoods, residents and visitors
d. Contain and shape development
e. Buffers to protect existing and important open spaces and neighborhoods
f. Connectivity – of people, wildlife and places
g. Ease of acquisition

4. **Conservation financing:** The financing mechanisms mentioned above, a parks and open space sales tax and a municipal bond for acquisition funds, are two ways to finance public investment in open space. Other financing mechanisms to consider are Arizona Growing Smarter Grants, Development Impact Fees, and/or Infrastructure Financing District. A number of financing opportunities may need to be combined to acquire, preserve and manage the desired open space and trail system.

5. **Purchase of Development Rights:** The ownership of land may be considered to be the possession of a "bundle of rights" associated with that land. These rights include the right to possess, use, modify, develop, lease, or sell the land. Mineral rights constitute one of the items in the bundle with which most people are aware. If the mineral rights have been separated from the remaining items in the bundle, the owner is prohibited from drilling for oil or from mining the land. The right to develop a piece of land for residential, commercial, or industrial purposes is also a right within the bundle. The purchase of development rights involves the voluntary sale of that right while leaving all the remaining rights as before. The purchase may be made by a non-profit land trust or local government, which makes an offer to a landowner to buy the development rights on the parcel. Once an agreement is made, a permanent deed restriction is places on the property which restricts the type of activities that may take place on the land in perpetuity. In this way, the parcel remains as agricultural or as open (green) space forever.

6. **Transfer of Development Rights (TDR):** Arizona State law allows development rights to be transferred between land parcels in certain conditions. The development rights, as discussed above, are transferred FROM a parcel in which development is NOT desired, to a parcel in which development is desired and will increase the development rights on the RECEIVING end. TDR works as follows: developers in urban "receiving" areas buy development rights to land in rural "sending" areas; the transfer of rights allows the developers to increase the density of their developments. Development of the "sending" land is prohibited through an easement granted to the local government, but the landowner retains ownership, including the right to use the land for such open space purposes as farming and forestry.

7. **Zoning:** Once a parcel is purchased, traded or donated for open space in the City, a zoning change to PLF status needs to recognize the new designation. **PLF:** The Public Lands Forest (PLF) Zone applies to areas of the City designated as National Forest, state, county, and municipal permanent open space/preserve lands. This Zone is intended to promote the management and preservation of habitat types which are part of the unique environment characteristics of the City.

8. **Green Infrastructure** – A clearly articulated map in which open space, parks, recreation, trails, environmental conservation areas, wildlife corridors and habitats and water ways are overlaid so that the inter-relation is known as the region's 'green infrastructure'. This could also be the pre-cursor to a 'Conservation Land System'.

9. **Conservation Land System (CLS)** -is a set of lands managed or set aside for conservation purposes. A CLS can use a Science Technical Advisory Team to identify areas of biological, cultural, and historical significance that are most important for conservation. This can include habitat for wildlife species of concern, sensitive plant communities, riparian areas, archaeological sites, and working farms and ranches. Conservation can be achieved through a variety of means including acquisition, conservation easement, transfer of development rights, conservation-based ordinances and guidelines, and intergovernmental agreements. A CLS can benefit private land owners by providing options when a land owner has elected to sell their property. Pima County has a CLS that they have adopted into their regional plan and it guides land use and open space acquisition for the county.[68]

10. **Acquisition and preservation by community partners:** Cooperation among partners including government agencies and non-profits such as Grand Canyon Trust; Central Arizona Land Trust; Friends of Walnut Canyon; Picture Canyon Core Group; Friends of Coconino County Parks, Friends of the Rio, Friends of Flagstaff's Future, Habitat Harmony, and Friends of Northern Arizona Forests can result in effective conservation measures and maximum optimization of all conservation options. A Land Trust to management conservation lands currently does not exist in the Northern Arizona Region. The Diablo Trust exists to protect and collaborate efforts with existing ranch lands; a Central Arizona Land Trust exists, and could possibly be called upon to advise or even act as an interim manager, if the community so decides.[69]

Stakeholders and Implementation Stakeholders:

There are many stakeholders interested in and committed to open space planning, acquisition, management and preservation, for various reasons. This list is not exhaustive, and highlights the partnership potential in the Flagstaff Region.

U.S. Forest Service

National Park Service

Federal Emergency Management Agency

Arizona State Land Department

Arizona Game & Fish

Flagstaff Metropolitan Planning Organization (FUTS, LOOP and AZ Trails)

Coconino County *(Parks and Recreation Commission)*

City of Flagstaff *(Open Space Commission)*

Friends of the Rio

Friends of Walnut Canyon

[68] http://www.sonorandesert.org/learning-more/conservation-land-system
[69] http://www.centralazlandtrust.org/

Picture Canyon Core Group

Conservation Study Forum

Habitat Harmony *(Watchable Wildlife Areas)*

Appendix E – Natural Resources / Environment

Making the Most of Your Development Site in the Flagstaff Area

Please See Natural Environment Map(s) – Existing Conditions and Concentration of Natural Resources.

(Natural Environment Map – Existing Conditions and Concentration of Natural Resources)
This map …
- is a tool for designing projects that take full advantage of your land's natural amenities;
- identifies features that enhance property value when incorporated into project design;
- offers suggestions for protecting natural features while keeping costs to a minimum;
- illustrates where City of Flagstaff Zoning Code resource protection requirements apply;
- illustrates where Regional Plan resource protection standards apply throughout the FMPO;
- assists in swift evaluation of a site's potential for development.

Save money and time by designing a light rather than a heavy footprint, building to grade rather than grading to build, and preserving vegetation instead of establishing new plantings. Avoid human-wildlife conflicts and enhance the value of your property with a practical approach to results that are pleasing to the eye.

Water Resources

Watersheds
-Description: A watershed is an area drained by a particular network of streams and channels.
- Importance: Conservation of watersheds is essential to securing a safe and adequate water supply for the community. Healthy watersheds allow both infiltration of rain and snowmelt and a functioning system for seasonal runoff.
- Guidelines: Avoid compaction of soil. Maintain existing natural courses of streams and runoff. Minimize artificial channelization. Create a firewise landscape while conserving established vegetation as appropriate (also see Riparian Areas, Forest, and Grassy Openings below).

Floodplains
- Description: Floodplains are areas subject to seasonal flooding.
- Importance: Floodplains provide natural flood and erosion control, natural water filtering, habitat for plant and animal communities, and places for recreation and scientific study.
- Guidelines: Floodplains are protected by state and federal regulations. Also see City of Flagstaff Zoning Code 10-50.90.040.

Topography and Geology

Steep Slopes and Erosion Hazard
- Description: Natural topography protects developed areas from flooding and erosion. It has an attractive, harmonious appearance and is critical in supporting healthy plant and animal communities including wildlife linkages. The map illustrates slopes protected by the Zoning Code as well as areas with potential erosion hazard based on steepness and soils.
Importance: Modification of steep slopes alters the drainage pattern of land in unpredictable ways that can result in flooding and other damage to property. Removal of vegetation from slopes leads to soil instability and undesirable changes in the chemical and physical properties of the soil. Plant and animal communities are very different on south-facing slopes than on north-facing slopes; therefore conserving topography conserves biodiversity.

Guidelines: Conserve natural topography: build to grade rather than grade to build. Steep slopes of 17% or more are protected by the Flagstaff Zoning Code 10-50.90.050. Note to planners: please see Nat White's comments on standards for slope protection at the end of this document.

Geologic Faults
- Description: The Flagstaff area lies within the seismically active Northern Arizona Seismic Belt.
- Importance: On average, an earthquake is felt in the community each year. The occurrence of these historical earthquakes indicates about a 50% chance of a magnitude 6.0 or larger earthquake occurring during the next 30 years within the NASB. This is considered the Maximum Probable Earthquake (MPE) for the Flagstaff community.
- Guidelines: Consider the proximity of known faults in site planning and structural design. For local technical information, consult the Arizona Earthquake Information Center http://www.cefns.nau.edu/Orgs/aeic/index.html

Soils formed from Limestone, Cinders and Ash, and Dacite
- Description: These soils sustain a number of plants designated as species of concern by the US Forest Service.
- Importance: Plants are the basis of the food chain. Uncommon plants play an important role in sustaining biodiversity through interactions with other plants and animals including as hosts and nectar sources for invertebrates and birds. Their occurrence makes an area exceptional and can be considered a natural amenity.
Guidelines: Consider consulting with Coconino National Forest or the Flagstaff Chapter of the Arizona Native Plant Society to identify and conserve plant species of concern on your property.

Plants and Animals

Riparian Areas including springs, seeps, wetlands, and floodplains
- Description: Riparian areas sustain plants and animals that require more moisture than those of surrounding areas. Within the FMPO, many riparian areas coincide with floodplains. Riparian areas potentially extend 1,000 feet from named watercourses, seeps, springs, and floodplains.
- Importance: Riparian areas are rare and vital habitats for unique plants as well as resident and migratory animals. They have a radiating influence critical to the survival of resident and surrounding invertebrates, amphibians, birds, and mammals. They are the most productive and ecologically diverse habitats in Arizona. They help recharge the aquifer and reduce flooding, runoff, and erosion. Many also serve as wildlife linkages.
- Guidelines: Avoid fragmenting riparian areas with roads, trails, or buildings. Provide a buffer of vegetation for 100 feet or more around the area. Prevent pesticides and other chemicals from reaching the area. Expect and allow natural fluctuations in water levels. Minimize channelization and allow for natural movement of water over the landscape during flood events.

Forest — Stand Mean DBH
- Description: The natural structure of a healthy ponderosa pine forest consists of clusters of trees with interlocking canopies surrounded by open grassy areas. This structure is most likely to occur where there are very large trees as indicated on the map, but the possibility of fostering healthy forest structure should be explored on all property. Note: In a healthy pinyon-juniper woodland, individual trees are spaced apart with a mix of shrubs and grasses between them.
Importance: The natural structure of these two forest types has evolved over thousands of years. Maintaining or restoring natural forest structure results in healthy plant and animal communities, reduces the risk of fire or disease, and enhances the attractiveness and value of property.

Guidelines: Avoid compaction of soil and conserve understory plants. On property with ponderosas, thin as necessary to maintain or restore clusters of pines of uneven ages surrounded by grassy openings. Note to planners: The Zoning Code 10-50.90.060 needs to be updated on this issue. See * below.

Grassy Openings
- Description: Areas dominated by grasses and forbs rather than trees.
- Importance: Grassy openings are a key part of the natural structure of local plant and animal communities. Many have been lost to forest encroachment as well as development, reducing the habitat for grassland species including pronghorns, prairie dogs, invertebrates, and many birds including ground-nesting species and raptors such as hawks, harriers, kestrels, and owls.
Guidelines: Avoid compaction of soil. Preserve open grassy areas as much as possible.

Wildlife
General Guidelines: The Arizona Game and Fish Department offers a number of tools for planning development that conserves resources and avoids conflicts with wildlife. Download a pdf of "Wildlife Friendly Guidelines" at http://www.azgfd.gov/w_c/wildlifeplanning.shtml

Wildlife Linkages
Description: Wildlife linkages are natural movement corridors used by wildlife as they travel from one habitat to another on a seasonal or more frequent basis.
Importance: The Flagstaff area is famous for its abundant wildlife that lives and moves across the region without regard for city limits or property lines. Linkages ensure thriving wildlife populations through ecological functions including gene flow, predator-prey interactions, and migration. Linkages provide an exciting connection to nature treasured by residents and visitors alike. Disruption of linkages can result in property damage as wildlife attempts to follow ancient routes, and can endanger drivers when wildlife crosses roads.
Guidelines: Identify wildlife linkages and avoid disrupting them with roads, walls, fences, or pavement. Where these must be built, consult Arizona Game and Fish for advice.

Prairie Dog Colonies
Description: Gunnison's prairie dogs form colonies of burrows in local grasslands.
Importance: Prairie dogs are considered a keystone species in short-grass prairie communities. They are a Species of Greatest Conservation Need in Arizona. Gunnison's prairie dogs are on the US Fish and Wildlife Service candidate list for protection within its montane range.
Guidelines: Consider preserving prairie dog colonies as a watchable wildlife amenity. Alternatively, consult the Arizona Game and Fish Department for assistance in relocating the colony to a suitable location.

Northern Arizona Audubon Bird Sanctuaries
Description: Northern Arizona Audubon Bird Sanctuaries are certified as regionally important bird habitats and exceptional birdwatching opportunities. The purpose of the designation is to increase public interest in birds and awareness of the natural values of these special areas.
Importance: The sanctuaries are accessible to the public and have one or more of the following attributes: a regionally high number of birds; a regionally high diversity of bird species; one or more regionally noteworthy species regularly or seasonally present. The sanctuaries are public amenities that potentially enhance property values in their surroundings.
Guidelines: Northern Arizona Audubon Bird Sanctuaries are included on the map to promote awareness of these natural amenities, which are an integral asset to our community character.

References and Resources

For Builders, Developers, and Homeowners:

* The City of Flagstaff Zoning Code[70] prescribes Resource Protection Standards 50.90-110—50.90.020 to achieve the following goals:

1. Preserve significant natural resources characterized by unusual terrain, scenic vistas, unique geologic formations, and native vegetation;
2. Preserve and enhance the natural environment's, visual character and aesthetic qualities of the City for its citizens' and visitors' enjoyment;
3. Preserve and enhance the character and value of all properties;
4. Preserve wildlife corridors and habitat;
5. Prevent encroachment into floodplains;
6. Manage healthy and sustainable forests to reduce fire risk;
7. Promote and improve the quality of the environment by enhancing air quality, reducing the amount and rate of storm water runoff, improving storm water runoff quality, and increasing the capacity for groundwater recharge; and
8. Establish regulations for the preservation and protection of natural resources before, during, and after the construction and completion of a new development.

* Northern Arizona Earthquake Information Center: http://www.cefns.nau.edu/Orgs/aeic/

* The Arizona Game and Fish Department offers a number of tools for planning development that conserves resources and avoids conflicts with wildlife. Download a pdf of "Wildlife Friendly Guidelines" at http://www.azgfd.gov/w_c/wildlifeplanning.shtml

* Information on Wildlife Linkages: http://www.azdot.gov/inside_adot/OES/AZ_WildLife_Linkages/PDF/assessment/arizona_wildlife_linkages_assessment.pdf

* Community Character, Social Health, and Conservation: http://www.nwf.org/News-and-Magazines/National-Wildlife/Gardening/Archives/2012/Healing-Gardens.aspx

* Natural Beauty and Human Satisfaction: http://discovermagazine.com/1999/nov/featnatural

For Planners:

* Survey of Local Government Green Building Incentive Programs for Private Development:http://digitalcommons.law.uga.edu/cgi/viewcontent.cgi?article=1010&context=landuse&sei-redir=1&referer=http%3A%2F%2Fwww.google.com%2Furl%3Fsa=t%26rct=j%26q=incentives private land building guidelines%26source=web%26cd=6%26ved=0CF0QFjAF%26url=http%3A%2F%2F

Appendix F – Heritage Resources – 'Eras'

Over the past century, the human-built form of the Flagstaff region has evolved into five approximate development eras, as follows:

Pre-Route 66 (<1926)

Prior to the construction of Route 66, Flagstaff's buildings were assembled from locally-produced materials dominated by malpais stone, Moenkopi sandstone, Kaibab limestone, wood planks and timber. With the exception of downtown, most structures were simple and practical, featuring a main gable roof on a rectangular plan, and modest in size. In the downtown area, historic structures were constructed of local materials and imported midwestern façade designs popular in that era. Other community design influences of this period included the imported farmhouse, Victorian, craftsman home designs, the railroad industry and National Park architecture, which combined native materials and architecture to create visually appealing and contextual structures.

Examples Include: [Photographs]

Early Route 66 (1926-1945)

In the early years of Route 66, community design was heavily influenced by the burgeoning tourism industry. Early traveler-induced developments, such as motels, were simple, practical, and built from local materials. The development of the mother-road itself, Route 66, stimulated subsequent growth and development along its edges, and indicated the start of an important change in the community character, from a more downtown 'node' to corridor development.

Examples Include: [Photographs]

Late Route 66 (1945-1967)

Following World War II, Flagstaff saw many significant influences on community character, including: the post-war housing boom; a notable growth of tourism; dominance of the automobile; and, expanded use of imported building materials and designs. Residential development included a mix of the design traditions of Flagstaff, such as simple structures along gridded streets with sidewalks and street trees; and post-war production housing development featuring whole-neighborhood developments with un-gridded streets, repeated home design and a shift to imported materials, such as stucco, tile roofing and metal windows. In addition, large multi-family structures were introduced along with the development pattern of: wide streets; auto-oriented, strip commercial buildings; and the introduction of 'modern' materials such as CMU block.

As the tourism industry grew, Flagstaff expanded from the small, central downtown outward to include motels, service stations, and diner lined highways which included imported architecture and materials, standardized building designs, and automobile serving facilities. Notable for this period, was the introduction of the large, eye-catching, commercial signage to capture the attention of the auto-

oriented society. This era resulted in the decline of the historic downtown's economic vitality as commercial activity dispersed and impacted the overall community character.

Examples Include: [Photographs]

Interstate 40 (1967-2001)

With the introduction of the interstate highway system, specifically I-17 and I-40, auto-oriented commercial enterprises sprouted in areas adjacent to these new corridors. These sites were suburban in character and devoid of pedestrian-friendly amenities, such as plazas, trees and street furniture. Although new zoning regulations required the installation of landscaping, it remained suburban in character. Architecturally, the shift was complete – away from the design traditions of Flagstaff (e.g., simple designs, local materials, human-scale buildings and streets) to that of imported, non-descript, replicated design and materials.

As Flagstaff's last lumber mill and window plant closed, imported materials became the norm, even though the region is surrounded with natural building materials such as timber and stone. However, the latter half of this era saw an increase in community interest regarding our historic resources and neighborhoods. Downtown revitalization efforts began in 1992, introducing the Heritage Preservation program and sparking an economic boom in the community. These efforts reflected a cognizance of the importance of preserving a 'sense of place' through building, landscape, street, road and signage designs.

Examples Include: [Photographs]

Design Review Years (2001 to present)

In 2001, Flagstaff introduced design controls through the Land Development Code. Some of these basic principles included pedestrian-friendly site design, characterized by building-forward site layout, human scale buildings, and a preference for local materials. These regulations currently apply to non-residential and multi-family developments only. Design Guidelines were also introduced within the Zoning Code in 2001, and are primarily voluntary. Development during this period generally continues to follow the auto-oriented, highway patterns of development, with an incremental trend toward the design traditions of Flagstaff. Beginning in 2001, the City dedicated public funds to 'community beautification', leading to the removal of billboards, the construction of a significant urban trail system, municipal landscaping, pedestrian amenities and public art.

Examples Include: [Photographs]

Appendix F~~G~~ – Arts, Sciences, and Education Resources

The following are existing resources exemplifying the rich cultural amenities in the community:

The Arts is a growing part of the community character and in many ways is associated with a greater cross section of the community,. Artistic resources include: Flagstaff Cultural Partners – *non-profit organization;* Coconino Center for the Arts – *performing arts center;* First Friday Art Walk – *downtown monthly event*; Flagstaff Artists Coalition – *Open Studios;* City of Flagstaff 'Beautification and Public Art Commission'; Northern Arizona University Audrey Auditorium – *Audrey Auditorium performing arts center, Beasley Gallery and world-renowned ceramics program*; Museum of Northern Arizona – *art exhibits*; the Doris Harper-White Community Theater; and, many diverse Events and Festivals, such as the annual Route 66 Festival.

Science has remained a key character-defining element since 1892, with Lowell Observatory; the Naval Observatory; Museum of Northern Arizona; United States Geological Survey Campus; Northern Arizona Center for Entrepreneurship and Technology – *a scientific research business incubator*; Coconino Community College, *which specializes in green technologies training;* and, current research at Northern Arizona University. The archeological resources of surrounding historical sites and ruins provide research and tourism opportunities.

Education resources include: Flagstaff Unified School District, charter and private schools (Montessori, Peak, Mountain School, Northland Preparatory Academy, St. Pius Catholic School, BASIS, Flagstaff Arts and Leadership Academy) which serve the primary and secondary needs of the community. Coconino Community College has two campuses within the Flagstaff region and offers 65 certificates, degrees and transfer programs. Northern Arizona University offers Over 230 undergraduate and graduate degrees, and continues to have an economic, cultural, and physical impact on the character of Flagstaff. There are two public libraries and one Senior Center. Within the city, there are various neighborhood Centers, including the Murdoch Center, Flagstaff and Cogdill Recreational Facilities, and the Aquaplex, which all offer classes and lessons for people of all ages.

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Appendix GH – Workforce Training Resources

EDUCATION FACILITIES

a. The Flagstaff Unified School District No. 1
   i. Map reference
   ii. Area description
   iii. General enrollment figures
   iv. Table: Capacity by School
b. Northern Arizona University
   v. Location and acreage
   vi. Enrollment and trend
c. Coconino Community College
   vii. Enrollment
   viii. Campus locations
      1. Flagstaff (4th street)
      2. Paige
      3. Expansion near I-40 (current Location)
   ix. Commuter student
d. Private Charter Schools
   x. General enrollment figure
   xi. Number of schools
e. Workforce training

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a. The Flagstaff Unified School District No. 1

As one of the systems plans, the Public Education Facilities Plan (Map XX) provides vital facilities and services that support the land uses and patterns as projected on the Land Use City and Regional Plans.

The Flagstaff Unified School District (FUSD) encompasses approximately 4,400 square miles that includes the City of Flagstaff and extends northeast to Gray Mountain, south past Stoneman Lake, east past Sunset Crater, and west to Bellemont. The district maintains and operates 12 elementary schools, 2 middle schools, 3 high schools, and one alternative school. One school in the Flagstaff Metropolitan Planning Organization (FMPO), Cromer Elementary School, is outside of the city limits. Leupp Elementary and Middle Schools are outside the FMPO.

Student enrollment has been fluctuating slightly in Flagstaff since the mid-1990s with some years showing minor increases and others decreases. The decreases range from 1.1% in 1999–2000 to 2.5% in 1997–98. A modest increase of 0.5% was shown in 1998–99. The decline in enrollment has been attributed to the fact that general population growth from 1990–1995 occurred in families with head of household age 45 and above.

Table 12: Public Schools

Elementary Schools Total Capacity	
Christensen	620
Cromer (outside city limits)	805
DeMiguel	805
Killip	560
Kinsey	652
Knoles	652
LEUPP Public School	
Marshall Elementary Magnet School (Arts &Sciences)	680
Project New Start	
Puente de Hozho Bilingual Magnet School	
Sechrist	652
Thomas	524
Subtotal	**6,793**
Middle Schools	
Flagstaff	900
Alpine Leadership Academy-Mt. Elden	1,100
Sinagua Middle school	
Subtotal	2,000
High Schools	
Coconino	1,600
Flagstaff	1,600
Subtotal	4,400

Although overall district enrollment figures are down slightly, some schools are experiencing growth. The district currently has no plans to construct any new schools but is watching the enrollment on the West Side. Additionally, some consideration has been given to acquiring property near Doney Park for a middle school. Additionally, the district may review and revise school boundaries to alleviate overcrowding.

Private and Charter Schools

There are 10 elementary, 4 elementary/middle and 3 high school level private and charter schools in the Flagstaff area. Charter schools are public schools that are not part of the FUSD but are funded by the state. The emergence of charter schools has also contributed to the drop in FUSD enrollment. In 1999, there was reported to be 1,100 students in grades K–12 in the 7 Flagstaff charter schools. By comparison,

there are about 11,000 students in the Flagstaff Unified School District. The continued growth of charter schools in the Flagstaff area mirrors a statewide trend: between 1996 and 1998, the state's charter school student population doubled.

Higher Education

b. Northern Arizona State University (NAU)

Northern Arizona University is a comprehensive public university located in the heart of Flagstaff. NAU, governed by the Arizona Board of Regents, comprises 730 acres at its Flagstaff campus. Approximately 384 acres are fully developed with the remainder, undeveloped, in primarily ponderosa pine. Interstate Highway 40 traverses the southern portion of campus and physically separates approximately 220 of the acres.

At the Flagstaff campus, the total number of students (head count) rose from 14,241 in 1990 to 14,675 in 1998. Statewide programs at rural campuses have increased from 2,753 to 5,265 during the same time period. Although the school has no immediate plans for expansion into undeveloped areas, a partnership with Coconino Community College has led to dedication of 40 acres for a new college campus. An infill strategy continues to dominate the plans for any new facilities.

c. Coconino Community College

Coconino Community College (CCC) is a multi-campus institution with an enrollment of approximately 3,500 students per semester countywide. There are two campuses in Flagstaff including the Lone Tree campus and the Fourth Street campus.

Approximately 2,600 students attend classes each semester in Flagstaff. There is also a 15,000 square foot facility in Page. The college currently supports a commuting student population and is not intended to become a residential facility or to develop athletic programs.

d. ??

e. Workforce Training

	Type of Training
Chamber of Commerce	Skills for Success: This Flagstaff Chamber of Commerce signature workforce development initiative partners Chamber members with middle- and high-school classrooms to teach students the life, or "soft," skills that are necessary to be successful in the workplace. Flagstaff teachers and school counselors have told the Chamber how these interactions with businesses create "light bulb" moments. Students learn that they do not have to leave Flagstaff after high school or college in order to have meaningful careers. Businesses commit to meeting with their classroom at least twice. One of the meetings is a field trip to the business, so the students can see first-hand the work being done by the business or organization. Blue Cross Blue Shield of Arizona is the title sponsor of this vital initiative. For more information, contact the Flagstaff Chamber at 928.774.4505. Chamber Internship Program: 2012 is the first year of the internship program, which helps match students to businesses willing to hire high school students. Funding is provided by the Career Center of Coconino County. It is the goal of the initiative to facilitate eight internships this year. Chamber Café: This luncheon roundtable series focused on sharing business knowledge – Chamber member to Chamber member. Topics include: social media, traditional advertising, web design, SEOs, business accounting, human resources and investing. A great way to enjoy lunch, and enrich your

	business while learning from peer Chamber members. Recent Chamber Cafe's have included the following: • Facebook for Business • Twitter Basics • Ask the Expert: Human Resource Essentials • Survive & Thrive This Year & Beyond • Social Media 101 • Learn How to Access SBA Loan Programs • Marketing: How to Grow When It's Slow SCORE Counseling – the Chamber has teamed with SCORE to provide free and confidential advice on key business goals and challenges. SCORE volunteers, successful entrepreneurs who want to share their knowledge and clients, met with business owners and managers for one-hour sessions. Workplace Safety Seminars: Through its partnership with SCF Arizona, the Chamber provides a workers; compensation insurance pool for members. As part of this, it hosts several free safety seminars to foster safe work environments. YES Week – Young Entrepreneurial Scholars week is a summer opportunity for incoming high school sophomores, juniors and seniors to explore the world of entrepreneurship. The program is in partnership with the Northern Arizona Center for Entrepreneurship and Technology. STEM Club – The Chamber has partnered with the Mount Elden Middle School STEM (Science, Technology, Engineering, Math) Club and arranges for tours of STEM related businesses, such as Lowell Observatory, the veterinary clinic of Second Chance Center for Animals, the solar array at APS, and TGen North. Manufacturing Roundtables – The Chamber inaugurated the Manufacturing Roundtables in 2011 to bring local employers together to learn about changes in their business sector, discuss challenges and strategize on ways to address them.
Coconino Community College	CCC Small Business Development Center: Free one-on-one confidential counseling Business Resource Library SBA Loan Application Process Business Basics Business Plan Writing Beginning Quickbooks Advanced Quickbooks Introduction to Internet Marketing Social Media Marketing Intellectual Property Rights SBA Exporting Seminar Small Business Accounting –Cash flow statements, P&L, Balance Sheets Statistical database for start-up businesses Community & Corporate Learning and Career & Technical Education Divisions: **Local and regional labor analysis throughout the year using sector strategy approach Alternative Energy & Water: Photovoltaic System Design & Installation Advanced Photovoltaic System Design Photovoltaic System Maintenance Alternative Energy AAS Green Building Certificate

Weatherization Techniques
Energy Auditing
Water Distribution (Operator Exams Level I & II)
Waste Water Management
Utility Management
LEED Certification – all levels

Health Care and Allied Health:

EEO/FLSA
SQL
Spanish for Healthcare Providers
CPR Certification
EMT Certification
Pre Health Careers AAS
Certified Nursing Assistant (CNA)
Nursing
Medical Assistant
Medical Coding & Billing
Direct Care Worker Certification (non-medical home aid)
Caregiving Certificate

Manufacturing:

Solid Works –Basic & Advanced
Anatomy & Physiology for Medical Device Manufacturers
Entry Level Manufacturing Certificate
Safety Standards (In collaboration with ADOSH)

1. Understand types of PPE and PPE selection
2. Basics of hazard assessment and communication
3. Lock out/tag out
4. OSHA 10
5. OSHA 30
6. OSHA Record Keeping
7. OSHA Small Business
8. OSHA Arc Flash and electrical safety
9. Ergonomics

Quality Systems

10. Six Sigma
11. ISO 9001
12. ISO 14001

Control Systems

13. Enterprise Resource Planning (ERP)
14. Manufacturing Resource Planning (MRP)

Inventory Control
Lean Manufacturing

Job Skills Toolbox:

Microsoft Office; Beginning and Advanced: word, publisher, power point, excel, outlook
Patents 101
Marketing 10: Finding the Real You
Public Relations: Get You Message Out
Write about your work with style, purpose, and professionalism
Writing for the media –four levels
How to get Published
How to write Children's Books

	Adult & Youth Work Readiness} Resume Writing, Career skills search, Networking Testing Services: OPM, DANTES, Distance Testing, GED, all Pearson View industry tests Adult Basic Education ProTrain} 600 on-line certifications Supervisor Academy/Leadership Academy: Liability for Supervisors; Effective Delegation of Work; Communication in the Workplace; Giving Constructive Feedback; Meeting and Facilitation; Conflict Resolution; Creating a Positive Work Culture; Employee Relations; Financial Accountability; Performance Metrics; Time Management; Team Relationship Building, Sexual Harassment & Domestic Violence
FUSD	Industrial Arts Programs –Duel Enrollment in Coconino Community College: Machining Welding Construction Trades Robotics CAVIAT –industry to education liaison
Coconino County Career Center	Long term career exploration Short term career counseling Resume Writing Manufacturing- Lean Manufacturing Caregiving AZ Workforce Connection Programs Youth Programs WIA funding for tuition vouchers **Must apply for all programs and be poverty level and unemployed
NACET	Business Engagement Program Facility Leasing Mentor Program Student Business Program Incubator Program Core Lab Services Solid Works (in collaboration with Coconino Community College SBDC) Student Research Teams Seminars: America Invents Act, A Practical Guide to Outsourcing, Trade Secrets –A Case Study, Executive Speaker Series, International Marketing and exporting, Corporate Law and Intellectual Property Rights, YouTube Marketing
NAU	Center for Business Outreach: Computer Classes Rural Policy Institute Bioscience Degree Programs Engineering Degree Programs
SEDI	Northern Arizona Workforce Training Demand Study Northern Arizona Workforce Training Center EE&R Team –alternative energy education for primary and secondary schooling
ECoNA	Facilitator among workforce development entities
City	Sponsor collaborative training for local companies through the community college
Future Plans: Workforce Training Center	No Business Plan completed as of yet, also demand has yet to be proven for continual training facility

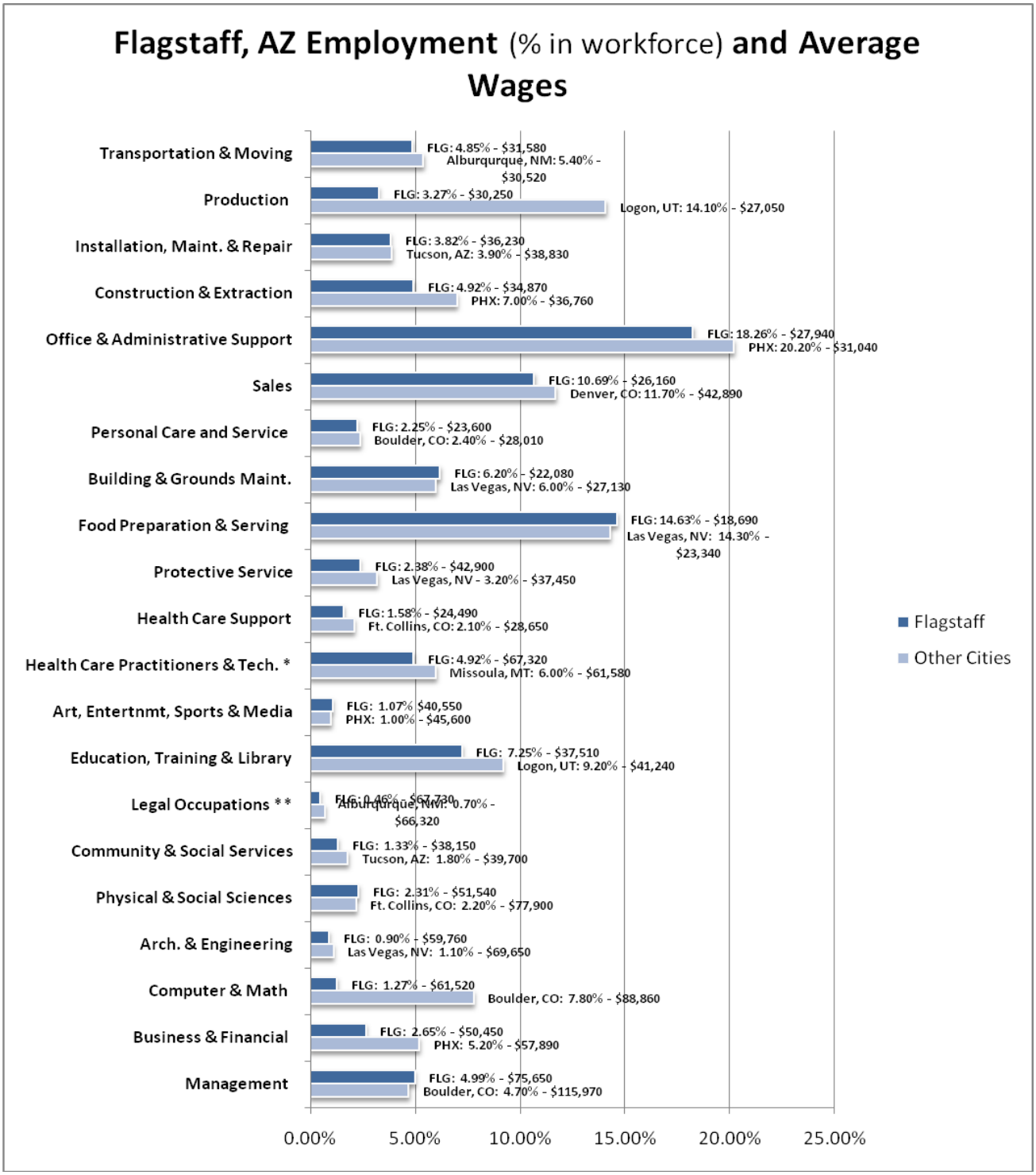
***Note Educational Opportunities promoted within educational system at all levels need to include, for the workforce the region desires:**

- Liberal Arts Education
- Professional Education
- STEM Initiative
- Communication Skills
- Vocational Education – for…
- Add more here with very brief description…

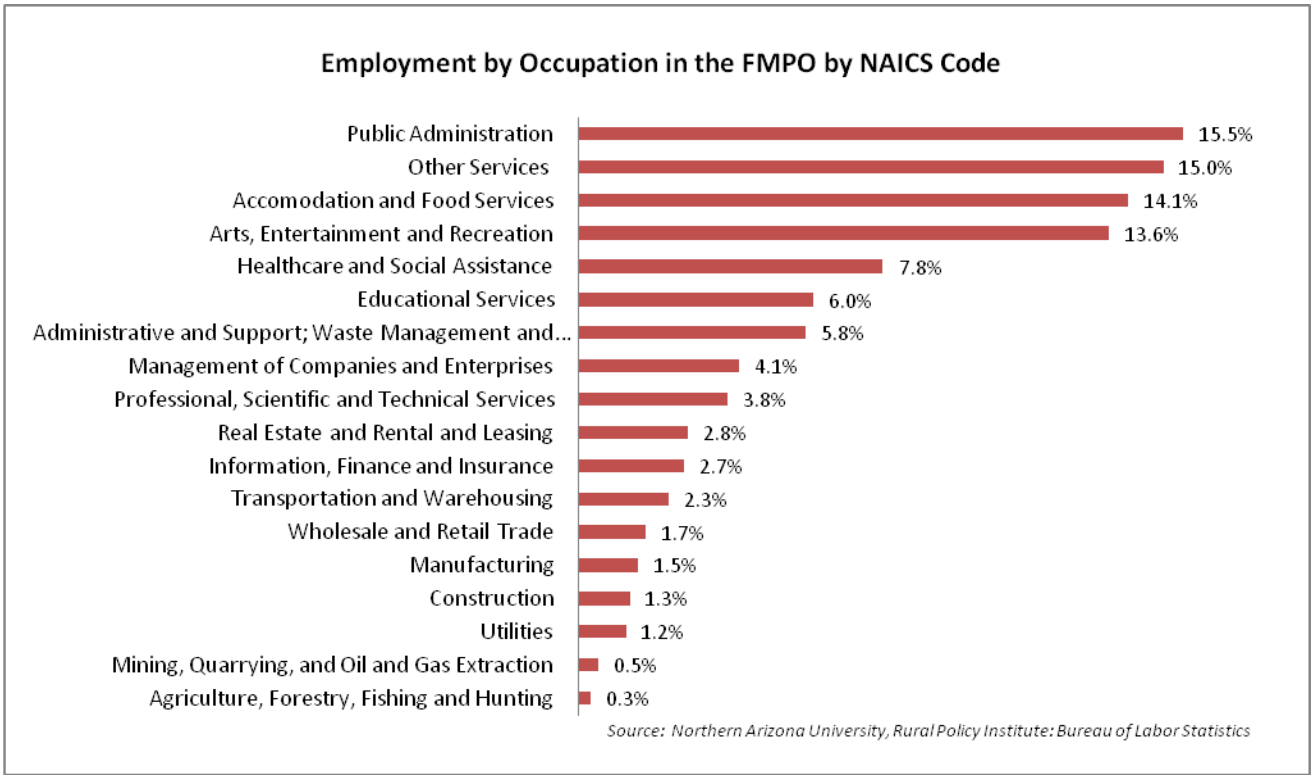
Metrics:

1. Number of duplicated programs among workforce development entities per annum
2. Number of collaborations among workforce development programs per annum
3. Ratio of federally or state funded programs that use the community college training to those programs run with public funds that do not use the community college training
4. Number of STEM programs throughout the community

Appendix H~~I~~ – Employment and Wages



Northern Arizona University's student population is currently 25% of the city's population; its academic resources to complement those of Coconino Community College, Flagstaff Unified School District and charter schools in producing a highly-educated workforce. Flagstaff Medical Center serves as the regional trauma and medical service for the large metro-area, and is supported by a large medical service sector. WL Gore & Associates is the largest private employer and is a leading researcher, designer and manufacturer of advanced medical products. Other large private employers include manufacturers Nestle Purina and SCA Tissue. There are several high-tech firms with a range of 10 to 50 employees. Of all businesses within the FMPO, 73% have 9 employees or less, which is consistent with the percentage of American small locally-owned businesses nationwide[71]. The presence of many small scale businesses also exemplifies the vitality of the region's creative class of entrepreneurs and the need for small-business resources and development support services.



[71] Source:

Appendix I~~J~~ – Workforce Continuum

Workforce Continuum

Non High School Diploma/GED- Fast food, Retail, Gas Station, Public services (garbage, USPS), Food service (waitress, fast food cook), Theater Usher, Grocery Store, Janitorial, Laborer
GED Program: Flagstaff Unified School District (Killip); Coconino Community College

High School Diploma/GED- Cashier, Administrative Assistant, Line cook/chef, Human Resources Assistant, Therapist aide, Travel Agent, Home care aide, Dental assistant, Pharmacy Technician, Medical Secretaries, Air traffic controller, Retail manager, Sales representative
Coconino High School; Flagstaff High School; Northland Prep Academy; Flagstaff Arts & Leadership

Trade School- Plumber, Electrician, Automotive Repair, Paralegal, Information Technology, Construction, Home Inspector, Machine operator, Telecommunications, Welder
Coconino Community College; CURRENTLY NO TRADE SCHOOL

Specialized Training- Massage Therapist, Tourism/Recreation, Pilot, Bartender, Cosmetologist (hair, nails, etc.), Criminal justice (corrections officer, security guard), Culinary, Private Investigation, Military
Flagstaff College America; Empire Beauty School; Coconino Community College

Community College Certificate- Accountant, Finance, Chiropractor, Environmental Technician, Language (translator, teacher), Transport/Logistics (rail, bus), Security, Radiologist, Software engineer
Coconino Community College

Community College Degree- Nursing, Computer Technician, Dental Hygienist, veterinary, Fitness trainer, science technician, legal assistant, sound engineer, flight attendant, desktop publisher
Coconino Community College

University, Bachelors- Elementary Teacher, Politician, Engineer (Biomedical, environmental, computer, etc), Network/Data Analyst, Financial (banker, accountant, investor), athletic trainer, survey researcher, market research analyst, registered nurse, community planner
Northern Arizona University

University, Masters- Post/secondary Teacher, Business management, veterinary, anthropologist/archaeologist, environmental specialist, psychology (therapist, research), journalist, lawyer, pharmacist, administrative specialist
Northern Arizona University

University, Doctorate- Doctor (dental, psychiatric, etc), medical scientists, biochemists, biophysicist, college professor, attorney
Northern Arizona University

Flagstaff's largest employers hire from all categories:

Manufacturing
-*Gore**
-Nestle/Purina
-Southwest Windpower

Research
-Lowell Observatory
-Naval Observatory
-*United States Geologic Survey**

Public
-Flagstaff Unified School District
-United States Forest Service
-Grand Canyon Trust
-AZ Department of Transportation
-*Northern Arizona University*
-Coconino Community College
-*Coconino County**
-BNSF Rail
-Pulliam Airport
-*City of Flagstaff**
-*Flagstaff Medical Center**

Appendix JK – Financing Infrastructure

1. Improvement Districts – ARS Title 48
    a. Community Investment Districts; example from DC
    b. Community Improvement District
    c. Business Improvement District
    d. Community Facilities District
    e. Economic Development Districts
2. Industrial Development Authority (IDA) bonds – ARS 35-701
    a. Industrial Revenue Bonds; *PHX IDA provides bond financing for educational facilities and community and economic development projects, including manufacturing and affordable housing*.
3. Public-Private Partnerships; IP3
4. Transportation Infrastructure Finance and Innovation Act (TIFIA):
5. Railroad Rehabilitation and Improvement Financing Program (RRIF):
6. Private Sources – financing, investment
    a. Citibank;
    b. Goldman Sachs;
    c. UBS;
    d. Merrill Lynch;
    e. RBC Dain Rauscher;
    f. JP Morgan-Chase;
    g. Morgan Guarantee;

h. Lehman Brothers; and
i. First Southwest Securities

7. Public Sources –
   a. Bonds and Other Forms of Debt Financing
   b. Capital Improvement Plan (CIP)
   c. Federal Highway Funds
   d. Designation as a High Priority Project in future Transportation Appropriation
   e. Non-Highway Public Financing
   f. Tax Exempt Bonds
   g. Taxable Bonds
   h. Bond Guaranty Program

8. Critical Nature of Facility Design
9. Authorization legislation
10. National Highway System (NHS)
11. Surface Transportation Program (STP)
12. STP Transportation Enhancements Program
13. Congestion Mitigation and Air Quality (CMAQ)
14. Bridge Replacement and Rehabilitation Program
15. Federal Financing Programs
16. Economic Incentive Zones*
17. Enterprise Zone*
18. Empowerment Zone and Enterprise Community*
19. Foreign Trade Zone
20. Improvement District
21. Capital Development Corporation
22. Community Development Corporation
23. Credit Enhancements
24. State Infrastructure Banks

Example of Capital Structures Matrix

Policy Goal → Type of Capital ↓	**Affordable Housing**	**Open Space**	**Infill Development**	**Environmentally Appropriate Commercial Design**	**Livable Wages/ Diverse Employment**	**Community Design**
Built						
Human						
Social						
Natural						